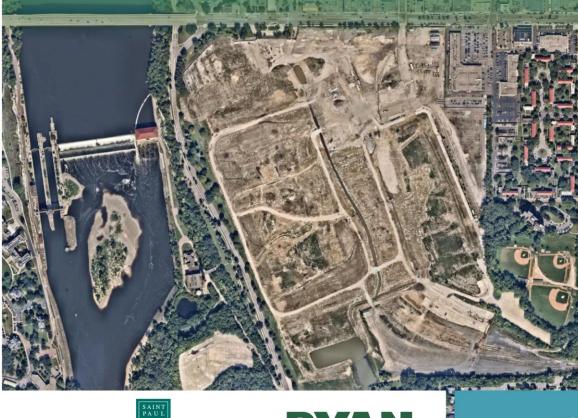


FINAL ALTERNATIVE URBAN AREAWIDE REVIEW (AUAR)

OCTOBER 2019



Prepared by Kimley »Horn



Prepared for



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Final Alternative Urban Areawide Review

This Alternative Urban Areawide Review (AUAR) follows the format of an Environmental Assessment Worksheet (EAW) (July 2013 version). Where the AUAR guidance provided by the Minnesota Environmental Quality Board (EQB) indicates that an AUAR response should differ notably from what is required for an EAW, the guidance is noted in *italics*.

1. Project Title

Ford Site

2. Proposer

Proposer: Ryan Companies US, Inc. (Ryan) Contact Person: Tony Barranco Title: Senior Vice President of Real Estate Development Address: 533 South Third Street, Suite 100 City, State, ZIP: Minneapolis, MN 55415 Phone: 612-492-4339 Email: tony.barranco@ryancompanies.com

3. RGU

RGU: City of Saint Paul Contact Person: Menaka Mohan Title: Ford Site City Planner Address: 25 W 4th Street City, State, ZIP: Saint Paul, MN 55102 Phone: 651-266-6093 Email: FordSitePlanning@ci.stpaul.mn.us Website: stpaul.gov/Ford-auar

4. Reason for EAW Preparation

AUAR Guidance: Not applicable to an AUAR.

5. Project Location

County: Ramsey City/Township: Saint Paul PLS Location (¼, ¼, Section, Township, Range): NE ¼ and SE ¼ of Section 17, Township 28N, Range 23W Watershed (81 major watershed scale): Mississippi River – Twin Cities Tax Parcel Number: 123-172823130002, 123-172823110092, 123-172823410001, 123-172823410002 At a minimum, attach each of the following to the AUAR:

- US Geological Survey 7.5 minute, 1:24,000 scale map indicating project boundaries • (see Figure 1)
- Map depicting the boundaries of the AUAR and any subdistricts used in the AUAR analysis (see Figure 2 and Figure 3)
- Cover type map as required for Item 7 (see Figure 5)

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• Land use and planning and zoning maps as required in conjunction with Item 9 (see Figure 3)



Figure 1: USGS Map

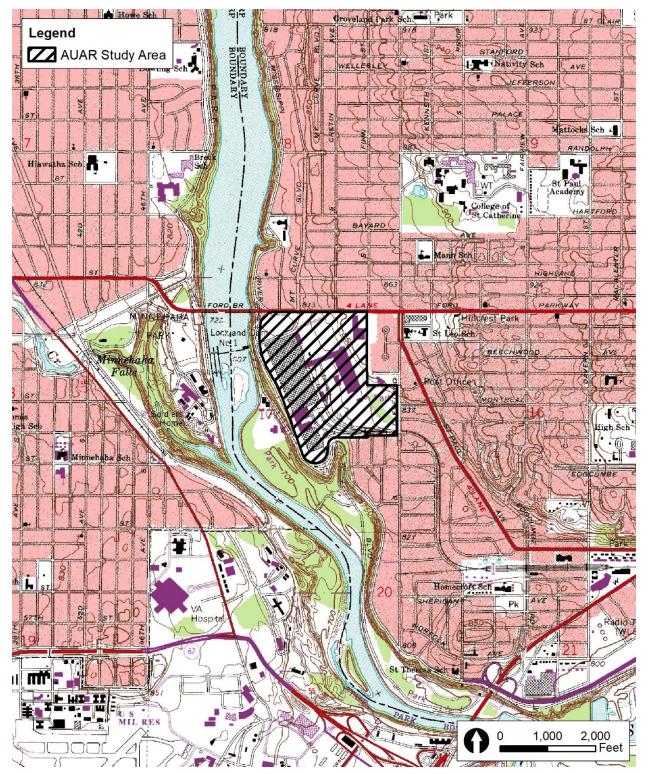




Figure 2: AUAR Study Area





Figure 3: Ford Site Zoning and Public Realm Master Plan Zoning Map



6. Project Description

AUAR Guidance: Instead of the information called for on the EAW form, the description section of an AUAR should include the following elements for each major development scenario included:

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- Anticipated types and intensity (density) of residential and commercial/warehouse/light industrial development throughout the AUAR area
- Infrastructure planned to serve development (roads, sewers, water, stormwater system, etc.). Roadways intended primarily to serve as adjoining land uses within an AUAR area are normally expected to be reviewed as part of an AUAR. More "arterial" types of roadways that would cross an AUAR area are an optional inclusion in the AUAR analysis; if they are included, a more intensive level of review, generally including an analysis of alternative routes, is necessary.
- Information about the anticipated staging of various developments, to the extent known, and of the infrastructure, and how the infrastructure staging will influence the development schedule

The AUAR study area encompasses four parcels totaling approximately 139 acres, all of which are covered in the *Ford Site Zoning and Public Realm Master Plan* (Ford MP) adopted by the Saint Paul City Council on September 27, 2017 and amended on April 10, 2019. The four parcels, shown on Figure 2, include:

- One 122-acre parcel referred to as the Ford Site
- One 4-acre parcel referred to as the Burg & Wolfson (Lunds & Byerlys) property
- Two parcels totaling 13 acres referred to as the Canadian Pacific Railway property

Ryan Companies US, Inc. (Ryan) is proposing to redevelop the 122-acre Ford Site, which is the location of a former Ford Motor Company assembly plant (see Figure 2). The proposed development would include residential, retail/service, office/employment, and civic/institutional land uses. The Burg & Wolfson (Lunds & Byerlys) property and Canadian Pacific Railway property are also included in the Ford MP, but there are currently no development proposals for those properties.

Two development scenarios were evaluated in the AUAR as outlined in Table 1. These scenarios and the study area are consistent with the Ford MP. The Ryan Development Scenario represents the density of the development proposed by Ryan on the Ford Site (illustrated in Figure 4). The Master Plan Maximum Development Scenario represents the maximum density allowed under the current regulating documents on all four parcels within the study area.

Land Use	Ryan Development Scenario	Master Plan Maximum Development Scenario	
Residential (dwelling units)	3,800	4,000	
Retail and Service (square feet of gross floor area)	150,000	300,000	
Office and Employment (square feet of gross floor area)	265,000	450,000	
Civic and Institutional (square feet of gross floor area)	50,000	150,000	

Table 1: Development Scenarios



Figure 4: Ryan Development Scenario



The intent of the AUAR is to identify the worst-case potential impacts and the mitigation measures that may be taken to compensate for those impacts.

Ryan Development Scenario and Master Plan Maximum Development Scenario

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In both development scenarios, infrastructure improvements are proposed in the study area to serve the needs of future development. Six main access points are proposed, including Cretin Avenue, Mount Curve Boulevard, and Finn Street off Ford Parkway, Montreal Avenue and Bohland Avenue off Mississippi River Boulevard, and Montreal Avenue off Cleveland Avenue. The internal street network will follow what is outlined in the Ford MP and is shown on Figure 3 and Figure 4. Off-site roadway improvements to be considered under each scenario are discussed under Item 18: Transportation.

The site will also contain a system of wet and dry utilities (*i.e.*, water, sewers, electric, gas, telecommunications), some of which are currently located within the AUAR study area and others will be constructed along the proposed city street network. The developer,¹ in conjunction with the City, will construct the public utilities, including the roadway network needed for the proposed development. Public right-of-way drainage and utility easements will be made available for private utilities (gas, electric, and telecommunications). All utilities will be constructed underground per City ordinance. Stormwater management will be developed on site to manage run-off and provide treatment (see Item 11: Water Resources for more information).

Infrastructure improvements will be constructed consistent with City of Saint Paul requirements and all applicable standards. New watermain and sanitary sewer piping will be constructed along with stormwater piping, stormwater basins and filtration basins, public roadways, trails, and sidewalks needed for the development.

Construction of the proposed development within the AUAR study area is anticipated to start in late winter 2019 or early spring 2020 and will be ongoing for the next 10 to 15 years, subject to market conditions.

7. Cover Types

AUAR Guidance: The following information should be provided:

- A cover type map, at least at the scale of a USGS topographic map, depicting:
 - Wetlands (identified by Circular 39 type)
 - Watercourses (rivers, streams, creeks, ditches)
 - o Lakes (identify public waters status and shoreland management classification)
 - Woodlands (break down by classes where possible)
 - Grassland (identify native and old field)
 - o Cropland
 - o Current development
- An overlay map showing anticipated development in relation to the cover types. This map should also depict any "protection areas," existing or proposed, that will preserve sensitive cover types. Separate maps for each major development scenario should be generally provided.

¹ Developer refers to the entity that proposes development on the properties within the AUAR study area.

The AUAR study area is approximately 139 acres of urban land. Approximately 122 acres of the AUAR study area (excluding the Burg & Wolfson (Lunds & Byerlys) property and Canadian Pacific Railway property) were cleared of prior improvements for redevelopment. Existing cover types within the study area are summarized in Table 2 and are shown on Figure 5. For the purposes of the AUAR, the site prior to demolition of the Ford Motor Company assembly plant is considered the existing condition. The proposed development scenario is shown on Figure 6.

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Cover Type	Pre-Demolition (Existing Conditions) (acres)	Post- Demolition (2019) (acres)	Ryan Development Scenario (acres)	Master Plan Maximum Development Scenario (acres)
Impervious	118.2	37.0	105	105
Woodlands/Forested	5.9	5.9	1.1	0
Lawn and Landscaping	13.8	92.9	27.7	29.4
Wetlands	1.1	1.1	0.6	0
Stormwater Treatment/ Water Feature	0	2.1	4.6	4.6
TOTAL	139	139	139	139

Table 2.	Existing	and	Proposed	Cover	Types
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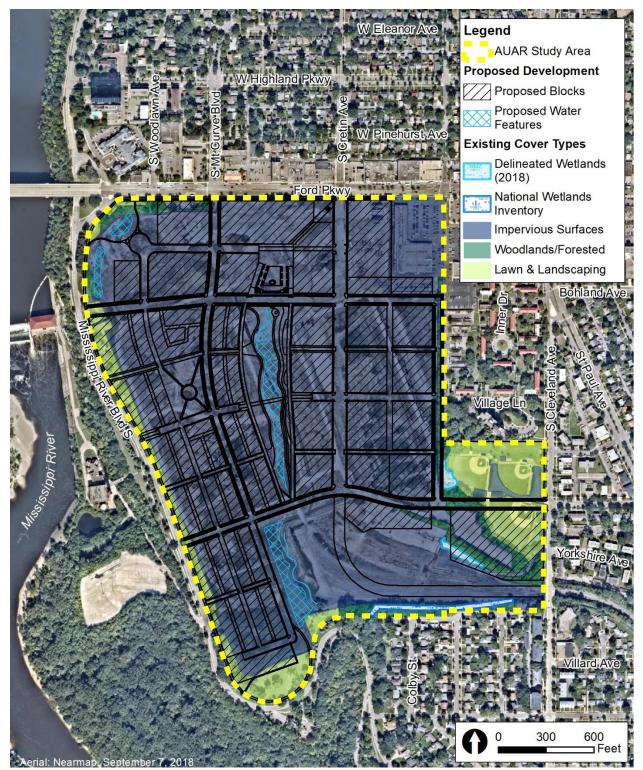
Figure 5: Existing (Pre-Demolition) Cover Types



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Figure 6: Existing Cover Types with Proposed Development Overlay





8. Permits and Approvals Required

AUAR Guidance: A listing of major approvals (including any comprehensive plan amendments and zoning amendments) and public financial assistance and infrastructure likely to be required by the anticipated types of development projects should be given for each major development scenario. This list will help orient reviewers to the framework that will protect environmental resources. The list can also serve as a starting point for the development of the implementation aspects of the mitigation plan to be developed as part of the AUAR.

Anticipated permits and approvals for both development scenarios are listed in Table 3.

Unit of Government	Type of Application	Status	
Federal			
Federal Aviation Administration	Obstruction Evaluation/Notice of Proposed Construction or Alteration (Form 7460-1)	To be applied for	
US Army Corps of Engineers	Section 404 Approval	To be applied for	
	Wetland Delineation Concurrence	To be applied for	
State			
Minnesota Department of Natural Resources	Temporary Water Appropriation Permit for Construction Dewatering	To be applied for	
Minnesota Pollution Control Agency	National Pollutant Discharge Elimination System Stormwater Permit for Construction Activities	To be applied for	
	Sanitary Sewer Extension Permit	To be applied for	
	Construction Contingency Plan Approval	To be applied for, if needed	
	Section 401 Water Quality Certification	To be applied for, if needed	
Minnesota Department of Health	Watermain Installation Permit	To be applied for	
Local			
Metropolitan Council	Sanitary Sewer Extension Permit	To be applied for	
	Sanitary Sewer Permit to Connect	To be applied for	
Capitol Region Watershed District	Permit for Stormwater Management, Erosion and Sediment Control, Wetland Management	To be applied for	
Saint Paul Regional Water	Plumbing Permits	To be applied for	
Services	Watermain Installation	To be applied for	
Ramsey County	Right-of-Way Permits	To be applied for	
	Road Access Permits	To be applied for	
City of Saint Paul	Alternative Urban Areawide Review	In process	
	Site Plan Review	To be applied for	
	Preliminary & Final Plat	To be applied for	
	Development Agreements	To be applied for	
	Sign Permits	To be applied for	
	Building Permits	To be applied for	
	Excavation and Grading Permits	To be applied for	
	Certificate of Occupancy	To be applied for	
	Ordinance Permit for Construction of Public Improvements	To be applied for	

Unit of Government	Type of Application	Status
	Right-of-Way Excavation and Obstruction Permits	To be applied for
	Sewer Utility Connection Permits	To be applied for
	Wetland Conservation Act Approval	To be applied for

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9. Land Use

a. Describe:

i. Existing land use of the site as well as areas adjacent to and near the site, including parks, trails, and prime or unique farmlands.

The AUAR study area consists of four parcels, one of which is the former location of a Ford Motor Company assembly plant. The plant operated from 1925 to 2011 and was decommissioned in 2014 and 2015, including the demolition of buildings and the removal of a majority of the slabs and subsurface structures. The majority of the study area is disturbed land with a strip of grass and trees around the edge. The Ford Little League Field, which includes three baseball fields, is in the southeast corner of the study area along Cleveland Avenue and is part of the Ford Site property. The other three parcels are adjacent to the former Ford Motor Company assembly plant and include two existing railyard parcels owned by Canadian Pacific Railway and the parcel owned by Burg & Wolfson (Lunds & Byerlys) in the northeast corner of the AUAR study area (see Figure 2).

Ford Parkway (County-State Aid Highway 42) borders the study area to the north. There is a row of commercial and office buildings on the north side of Ford Parkway and residential further to the north. The area between the AUAR study area, Ford Parkway, and Cleveland Avenue includes retail/commercial uses and multi-family residential. East of Cleveland Avenue is multi-family and single-family residential (see Figure 7).

To the west of the study area is a parcel owned by Ford Motor Company that contains a vacant steam plant, vacant wastewater treatment plant and a former waste disposal area, all of which served the assembly plant on the main parcel.

To the southwest is Hidden Falls Regional Park and to the northwest is Mississippi Gorge Regional Park, both of which are managed by the City of Saint Paul. A trail to the west of the study area is part of both the Saint Paul Grand Round and the Mississippi River Trail (see Figure 7).

Portions of the AUAR study area are located within the Mississippi National River and Recreation Area (MNRRA). The boundary of the Mississippi River Corridor Critical Area (MRCCA) is the same as the MNRRA boundary (see Figure 8 for boundary). The MNRRA boundary includes 54,000 acres of river and adjoining land along a 72-mile stretch of the Mississippi River. The purpose of MNRRA is to preserve, enhance, and protect the river corridor while providing a tool for coordinated planning and management. The MNRRA Comprehensive Management Plan (CMP) provides guidance for actions within the MNRRA boundary. The State of Minnesota also designated the Mississippi River corridor as a critical area in 1976 with State Executive Order No. 79-19. Both the Ryan Development Scenario and Master Plan Maximum Development Scenario are generally consistent with MNRRA Plan policies. One of the relevant policies of the CMP is to "provide for continued economic activity and development." The plan also states: "in downtown areas and historic districts, development will be more visible but still complement the aesthetics of the river corridor, appealing to area residents and serving as an attraction to visitors to the metropolitan area" and that "this plan recognizes the importance of economic activities and provides for the commercial use of the corridor consistent with the MNRRA legislation."

When specific building plans within the MNRRA boundary are finalized, proposed site plan(s) would be reviewed for compatibility with the MNRRA CMP and the City of Saint Paul's zoning provisions for the RC3 River Corridor Urban Open Overlay District as part of the city's site plan review.

There is no farmland within or adjacent to the study area.

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Figure 7: Parks and Trails



ii.

Planned land use as identified in comprehensive plans (if available) and any other applicable plan for land use, water, or resource management by a local, regional, state, or federal agency.

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AUAR Guidance: Water-related land use management districts should be delineated on appropriate maps, and the land use restrictions applicable in those districts should be described. If any variances or deviations from these restrictions within the AUAR area are envisioned, this should be discussed.

The Ford MP was developed specifically for this site and was adopted by the Saint Paul City Council on September 27, 2017. Amendments to the Ford MP were adopted by the City Council on April 10, 2019. The Ford MP defines minimum and maximum development for the site, and the Ryan Development Scenario would be within the range defined in the Ford MP. Figure 3 shows the anticipated land use within the study area.

A portion of the AUAR study area is within the MRCCA, which is a joint state, regional, and local program that provides coordinated planning and management for the 72-mile stretch of the Mississippi River through the seven-county metropolitan area (see Figure 8). Within the AUAR study area, the boundary of the MRCCA is the same as the City of Saint Paul's RC3 River Corridor Urban Open Overlay District. The City of Saint Paul has developed its draft MRCCA Plan as part of the City's 2040 Comprehensive Plan, which has been submitted to the Metropolitan Council for review. The City of Saint Paul is also proceeding with its review of the Minnesota Department of Natural Resources' (DNR) draft model MRCCA zoning ordinance for potential adoption by the City.

Based on the June 5, 2019 draft of the MRCCA Plan, both the Ryan Development Scenario and Master Plan Maximum Development Scenario are generally consistent with MRCCA Plan policies. One of the relevant guiding principles of the plan related to development in the MRCCA is Policy CA-1: Guide land use and development activities consistent with the management purpose of each of the MRCCA Districts. The two districts that are within the proposed development are CA-RTC River Towns and Crossings and CA-UM Urban Mixed (see Table 4 for a description of District requirements and Figure 8 for location). The land uses proposed within the CA-UM District are consistent with the intent of the District, which includes a mix of uses, including institutional, commercial, industrial, and residential areas and parks and open space. Development within the CA-RTC District is intended to provide "more intensive redevelopment in limited areas at river crossings to accommodate compact walkable development patterns and connections to the river... and minimize erosion and flow of untreated storm water in the river" (MRCCA, 2019). Consistent with the Ford MP, the scenarios propose lower building heights and less intense development within the CA-RTC District, and the proposed stormwater facilities will be designed to accommodate the new development runoff. The proposed stormwater facilities are described in Item 11: Water Resources.



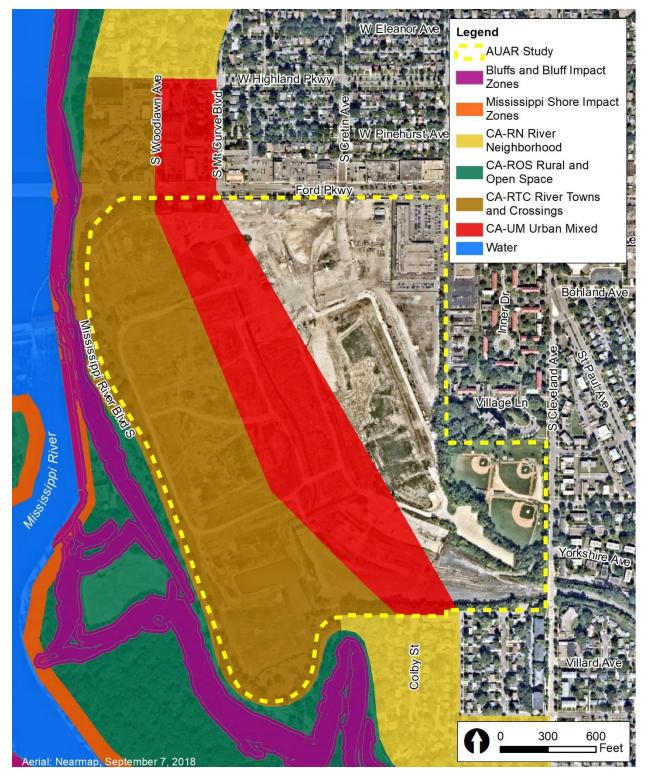
Table 4: MRCCA District Requirements

District	Description	Maximum Building Height	River Setback	Bluff Setback
CA-UM	Includes large areas of highly urbanized mixed use that are a part of the urban fabric of the river corridor, including institutional, commercial, industrial, and residential areas and parks and open space. The CA- UM district must be managed in a manner that allows for future growth and potential transition of intensely developed areas that does not negatively affect public river corridor views and that protects bluffs and floodplains. Restoring and enhancing bluff and shoreline habitat, minimizing erosion and flow of untreated storm water into the river, and providing public access to and public views of the river are priorities in the district.	65 feet ²	50 feet	40 feet
CA-RTC	Characterized by historic downtown areas and limited nodes of intense development at specific river crossings, as well as institutional campuses that predate designation of the Mississippi River and that include taller buildings. The CA-RTC district must be managed in a manner that allows continued growth and redevelopment in historic downtowns and more intensive redevelopment in limited areas at river crossings to accommodate compact walkable development patterns and connections to the river. Minimizing erosion and the flow of untreated storm water into the river, providing public access to and public views of the river, and restoring natural vegetation in riparian areas and tree canopy are priorities in the district.	48 feet ²	75 feet	40 feet

² Provided tiering of structures away from the Mississippi River and from blufflines is given priority, with lower structure heights closer to the river and blufflines, and that structure design and placement minimize interference with public river corridor views.



Figure 8: MRCCA Districts



iii. Zoning, including special districts or overlays such as shoreland, floodplain, wild and scenic rivers, critical area, agricultural preserves, etc.

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The study area was previously zoned as light industrial and was rezoned as part of the Ford MP and related amendments to the city zoning code. The study area now contains six zoning districts identified in the adopted Ford MP as summarized in Table 5 and shown in Figure 3.

Table 5: Zoning District Summary

Zoning District	Description	Land Uses/Building Types	Building Heights	Floor Area Ratio
F1: River Residential	High quality design and residential form that is compatible with the look of Mississippi River Boulevard	Residential mix of single-family homes, multi-unit homes, and carriage houses	20 feet minimum 48 feet maximum	0.25 - 1.5
F2: Residential Mixed Low	Primarily residential with few business uses; lower density	Residential mix of primarily townhouses with some small multi- family	30 feet minimum 55 feet maximum	1.0 - 2.0
F3: Residential Mixed Mid	Primarily residential with some business uses; medium density	Predominantly multi- family residential, with limited retail, service, and office	30 feet minimum 65 feet maximum	1.0 - 4.0
F4: Residential Mixed High	Mix of residential and business uses; high density	Predominantly multi- family residential, with limited retail, service, and office	48 feet minimum 75 feet maximum	3.0 - 6.0
F5: Business Mixed	Primarily retail, office, and service with some multi-family residential	Primarily retail, service, and office with some multi-family	40 feet minimum 65 or 75 feet maximum	2.0 - 4.0
F6: Gateway	Attractive gateways into site, focused on employment with some retail, service, and housing	Office, institutional, retail, and service, mixed-use residential and multi-family residential	30 feet minimum 65 feet maximum	1.0 - 3.0

The dimensional standards for building heights stated in the Ford MP and underlying zoning districts (F2 Residential Mixed Low, F3 Residential Mixed Mid, F5 Business Mixed, and F6 Gateway) potentially exceed the MRCCA requirements related to building heights. The MRCCA Plan states that for this area: "Saint Paul will need to a strike a balance between the economic and social benefits of redevelopment and the natural, cultural and recreational resources of the Mississippi River. The City may pursue flexibility in building height and/or district designation in the MRCCA ordinance." Within the AUAR study area, the underlying zoning districts (F2 Residential Mixed Low, F3 Residential Mixed Mid, F5 Business Mixed, and F6 Gateway) allow building heights 7-17 feet taller than those generally permitted in the CA-RTC and CA-UM districts. The City of Saint Paul's RC3 River Corridor Urban Open Overlay District currently limits development to 40 feet in height within the same boundary as the CA-RTC and CA-UM districts.

No proposed development is within the MRCCA Shore Impact Zone or Bluff Impact Zone (see Figure 8). Structure setbacks from the Bluff Impact Zone is 40-100 feet from the top of bluff/bluffline. The Shore Impact Zone is identified as lands located between the ordinary highwater level of public waters and a line parallel to it at a setback of 50 percent of the requirement MRCCA district structure. The AUAR study area is 60 feet away from the closest point of both the

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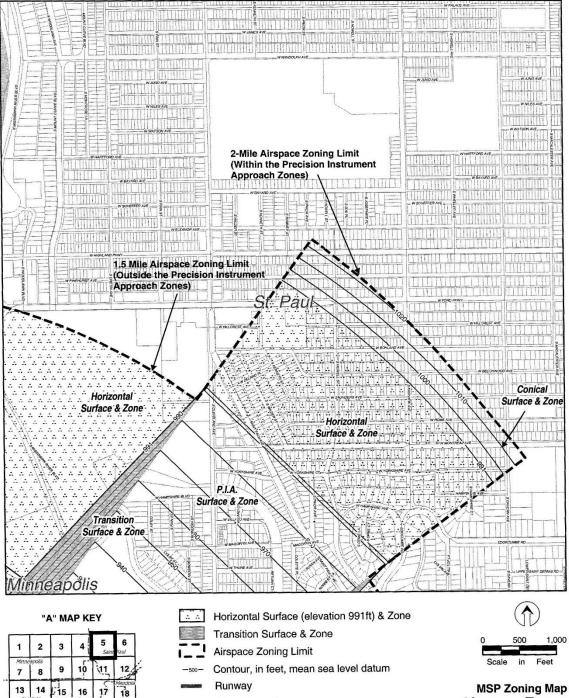
Bluff and Shore Impact Zone.

The majority of the western half of the AUAR study area is within the Minneapolis-Saint Paul International (MSP) Airport Horizontal Surface Zone, which has a maximum building height of 110 feet. Both development scenarios would be consistent with this building height limit in all zoning districts (see Table 5). A portion of the AUAR study area by the Canadian Pacific Railway property is within Safety Zone B for the MSP Airport (see Figure 9). Land use safety zones are intended to restrict land uses that may be hazardous to the operational safety of aircraft using the airport and to protect the safety and property of people on the ground in the area near the airport. Within the boundaries of Safety Zone B, the following land uses are not allowed: churches, hospitals, schools, theaters, stadiums, hotels, motels, trailer courts, campgrounds, other places of frequent public or semi-public assembly, and ponds.

The proposed Ryan Development Scenario was sent to the Metropolitan Airports Commission (MAC) for review. The provided response from MAC concluded that the developer must file an aeronautical study (Form 7460-1) with the Federal Aviation Administration (FAA) for the proposed development (including all construction equipment and solar installations) to ensure that it will not have an adverse impact on the MSP Airport (see Appendix A for correspondence). The MSP Joint Airport Zoning Board ordinances and has coordinated with the Metropolitan Airports Commission regarding the proposed development (see correspondence included in Appendix A). According to the Minneapolis St. Paul Internal Airport (MSP) 2018 Noise Contour Report, the AUAR study area is not within the 2018 actual noise contours from the airport. No airport noise mitigation is anticipated.



Figure 9: MSP Airspace Zones³



Airport boundary

Lots

P.I.A.

Municipal boundary

Precision Instrument Approach

MSP Zoning Map Airspace Zones

Plate A-5

April 29, 2004

26 27

.28 29 30

19-20-21-22 23 24

25



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AUAR Guidance: The extent of conversion of existing farmlands anticipated in the AUAR should be described. If any farmland will be preserved by special protection programs, this should be discussed.

If development of the AUAR will interfere or change the use of any existing designated parks, recreation areas, or trails, this should be described in the AUAR. The RGU may also want to discuss under this item any proposed parks, recreation areas, or trails to be developed in conjunction with development of the AUAR area.

The AUAR must include a statement of certification from the RGU that its comprehensive plan complies with the requirements set out at Minnesota Rules, part 4410.3610, subpart 1. The AUAR document should discuss the proposed AUAR area development in the context of the comprehensive plan. If this has not been done as part of the responses to Items 6, 9, 11, 18, and others, it must be addressed here; a brief synopsis should be presented here if the material has been presented in detail under other items. Necessary amendments to comprehensive plan elements to allow for any of the development scenarios should be noted. If there are any management plans of any other local, state, or federal agencies applicable to the AUAR area, the document must discuss the compatibility of the plan with the various development scenarios studied, with emphasis on any incompatible elements.

Ryan Development Scenario and Master Plan Maximum Development Scenario

Both development scenarios are consistent with the adopted Ford MP. The proposed parks and trails included in the Ryan Development Scenario are compatible with adjacent land uses and make connections into the city and regional trail network. Existing bikeways adjacent to the site include an enhanced shared lane along Ford Parkway and an off-street path and bike lane along Mississippi River Boulevard. Several planned roads include protected bike lanes that connect the AUAR study area to these existing bike facilities via Mount Curve Boulevard, Bohland Avenue, Cretin Avenue, and Montreal Avenue.

c. Identify measures incorporated into the proposed project to mitigate any potential incompatibility as discussed in Item 9b above.

Ryan Development Scenario and Master Plan Maximum Development Scenario

Both development scenarios are compatible with the Ford MP and the planned land use in the project vicinity.

10. Geology, Soils, and Topography/Land Forms

a. Geology – Describe the geology underlying the project area and identify and map any susceptible geologic features such as sinkholes, shallow limestone formations, unconfined/shallow aquifers, or karst conditions. Discuss any limitations of these features

³ Source: *Minneapolis-St. Paul International Airport (Wold-Chamberlain Field) Zoning Ordinance*. Available at https://www.metroairports.org/Metroairports/media/Media/Documents/ordinances/JAZB Ordinance 2004.pdf.

for the project and any effects the project could have on these features. Identify any project designs or mitigation measures to address effects to geologic features.

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AUAR Guidance: A map should be included to show any groundwater hazards identified.

The following sources were consulted for this section: geotechnical reports, Ramsey County Geologic Atlas (geologic atlas), Minnesota Well Index, and the Ramsey County Soil Survey.

The AUAR study area is underlain by stream sediment and hillside sediment. These deposits range from sand and gravel with some fine sediment (clay and silt) to angular bedrock fragments with fine sediments. The upper layer of sediment within the AUAR study area is fill material as a result of previous construction activities within the area. The fill materials range in depth from 0 to 22 feet below ground surface (bgs) and consist of silty sand, clayey sand, poorly-graded sand, and crushed concrete and limestone.

Bedrock is encountered at varying depths across the AUAR study area, ranging in depth from approximately 4 feet bgs on the western half to 22 feet bgs on the eastern half. Bedrock is comprised of the Decorah Shale underlain by the Platteville Limestone/Dolostone, Glenwood Shale, and St. Peter Sandstone formations. The AUAR study area sits on the river bluff, which is approximately 100 feet above the Mississippi River and adjacent parkland.

The uppermost aquifer is the St. Peter Sandstone formation, and groundwater is present at approximately 100 to 115 feet below the surface. Perched groundwater is present in the unconsolidated overburden at shallow depths; however, the lateral extent is discontinuous.

Based on the geologic atlas and preliminary geotechnical investigation that has occurred on the 122-acre parcel, there are no known sinkholes, unconfined/shallow aquifers, or karst conditions located within the AUAR study area. Additional information regarding the tunnels on the site is included in Section 20. Other Potential Environmental Effects.

b. Soils and Topography – Describe the soils on the site, giving NRCS (SCS) classifications and descriptions, including limitations of soils. Describe topography, any special site conditions relating to erosion potential, soil stability, or other soil limitations, such as steep slopes or highly permeable soils. Provide estimated volume and acreage of soil excavation and/or grading. Discuss impacts from project activities (distinguish between construction and operational activities) related to soils and topography. Identify measures during and after project construction to address soil limitations including stabilization, soil corrections, or other measures. Erosion/sedimentation control related to stormwater runoff should be addressed in response to Item 11.b.ii.

AUAR Guidance: The number of acres to be graded and number of cubic yards of soil to be moved need not be given; instead, a general discussion of the likely earthmoving needs for development of the area should be given, with an emphasis on unusual or problem areas. In discussing mitigation measures, both the standard requirements of the local ordinances and any special measures that would be added for AUAR purposes should be included. A standard soils map for the area should be included.

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, the area is comprised of eight different soil types. The erosion hazard rating included in Table 6 indicates the hazard of soil loss from off-road areas after disturbance activities that expose the soil surface.

Within the AUAR study area, most of the soils are either not rated or have a "slight" rating, meaning that erosion is unlikely under ordinary climatic conditions. One soil type, the Doreton – Rock outcrop complex, which is approximately 1 percent of the overall study area, has a moderate rating. The soils information is included in Table 6 and Figure 10.

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Table 6: Soil Types⁴

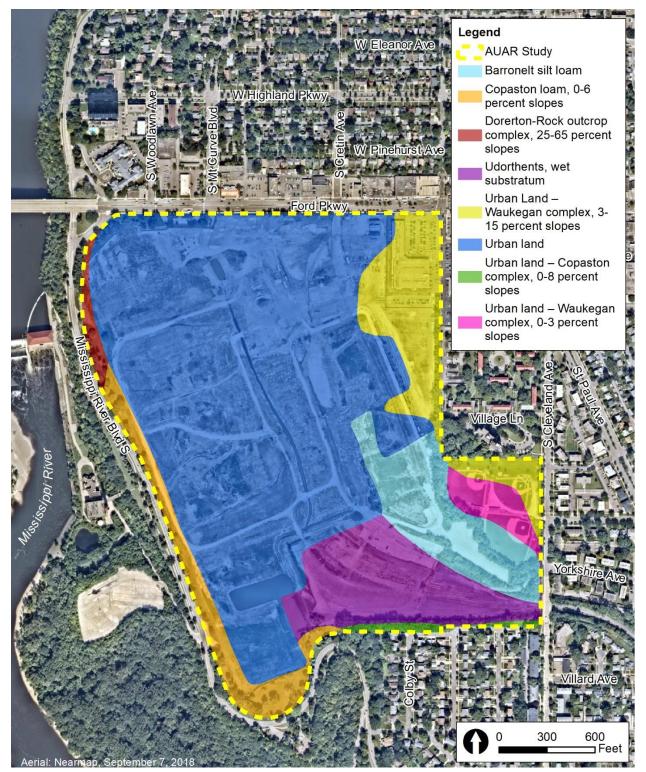
Soil Type	Map Unit Symbol	Acres within Study Area	Percent of Site	Erosion Hazard
Copaston loam, 0-6 percent slopes	100B	7.5	5.4%	Slight
Barronelt silt loam	456	12.1	8.7%	Slight
Urban land – Copaston complex, 0-8 percent slopes	852B	1.0	0.7%	Not rated
Urban land – Waukegan complex, 0-3 percent slopes	857	3.2	2.3%	Not rated
Urban Land – Waukegan complex, 3-15 percent slopes	857C	13.3	9.6%	Not rated
Udorthents, wet substratum	1027	14.9	10.8%	Not rated
Urban land	1039	85.1	61.5%	Not rated
Dorerton-Rock outcrop complex, 25-65 percent slopes	1819F	1.4	1.0%	Moderate

Geotechnical borings have been completed for the 122-acre Ford Site within the AUAR study area and found that the upper layer of soil consists of fill material. The overall site slopes from east to west with the existing surface elevations ranging from approximately 810 to 860 feet, with the highest elevations along the eastern property line. Grading activities within the site are anticipated to begin in late winter 2019 or early spring 2020. Where required, slope stabilization will be provided by means of vegetation establishment, erosion control blankets, or other standard methods of erosion and sediment control. The proposed development within the AUAR study area will require compliance with the Capitol Region Watershed District's and the City of Saint Paul's erosion and sediment control standards.

⁴ NRCS Web Soil Survey. Survey area data: Version 13, October 9, 2018.



Figure 10: Soil Types





11.Water Resources

AUAR Guidance: The information called for on the EAW form should be supplied for any of the infrastructure associated with the AUAR development scenarios, and for any development expected to physically impact any water resources. Where it is uncertain whether water resources will be impacted depending on the exact design of future development, the AUAR should cover the possible impacts through a "worst case scenario" or else prevent impacts through the provisions of the mitigation plan.

- a. Describe surface water and groundwater features on or near the site below.
 - i. Surface Water lakes, streams, wetlands, intermittent channels, and county/judicial ditches. Include any special designations such as public waters, trout stream/lake, wildlife lakes, migratory waterfowl feeding/resting lake, and outstanding resource value water. Include water quality impairments or special designations listed on the current MPCA 303d Impaired Waters List that are within one mile of the project. Include DNR Public Waters Inventory number(s), if any.

The AUAR study area is a highly disturbed urban area; however, based on the National Wetlands Inventory, updated by DNR in 2016, and a wetland delineation that was completed for the Ford Site parcel, approximately 1.14 acres of wetland are located within the AUAR study area (see Figure 11: Water ResourcesFigure 11Figure 11). The wetland delineation for the 122-acre Ford Site parcel will be submitted to the US Army Corps of Engineers and the City of Saint Paul for concurrence and approval.

There are no DNR Public Waters within the AUAR study area; however, the Mississippi River is in the vicinity of the study area's western boundary.

Historically, a creek was present within the AUAR study area and was buried (pre-1924) prior to construction on the Ford Site.

Two impaired waters on the Minnesota Pollution Control Agency's (MPCA's) Part 303d Impaired Waters List are within one mile of the study area (see Table 7).

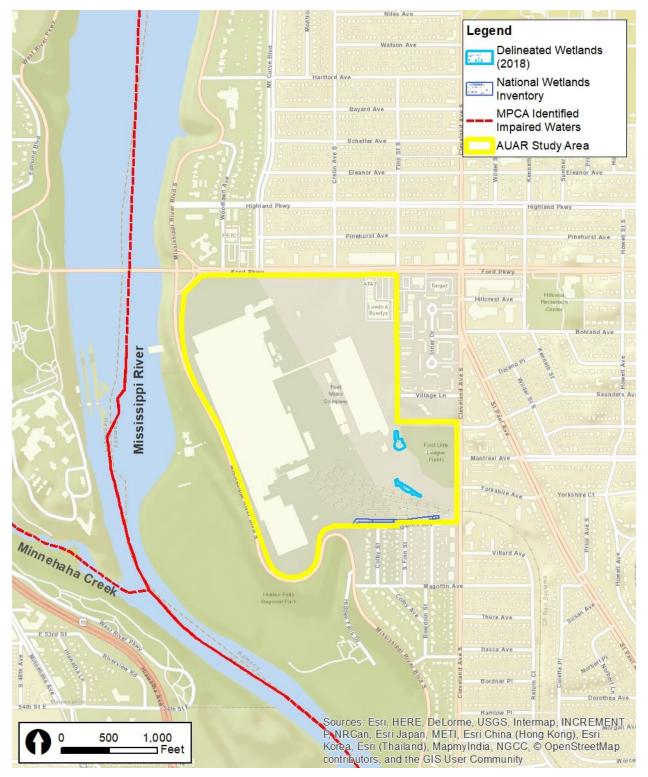
Impaired Waters	ID Number	Impairments
Mississippi River	07010206-814	Mercury, PCB, PFOS, Nutrients, Total Suspended Solids
Minnehaha Creek	07010206-539	Fecal Coliform, Chloride, Dissolved Oxygen, Fishes Bioassessments, Aquatic Macroinvertebrate Bioassessments

Table 7: Impaired Waters

Drainage from the project area flows toward Hidden Falls Regional Park.



Figure 11: Water Resources



ii.

Groundwater – aquifers, springs, and seeps. Include 1) depth to groundwater; 2) if project is within a MDH well protection area; and 3) identification of any onsite and/or nearby wells, including unique numbers and well logs, if available. If there are no wells known on site or nearby, explain the methodology used to determine this.

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The depth to groundwater within the AUAR study area is 100 to 115 feet below the surface in the St. Peter Sandstone formation (uppermost aquifer). Perched water is present in the unconsolidated overburden at shallow depths; however, the lateral extent is not continuous. Seeps can be intermittently observed off site on the face of the bluff west of Mississippi River Boulevard.

According to the Phase I Environmental Site Assessment (ESA) completed in 2018 for the 122-acre Ford Site, there are three sealed wells and 14 monitoring wells that remain on the site. These wells are identified in Table 8. There are no verified wells located within the Burg & Wolfson (Lunds & Byerlys) or Canadian Pacific Railway properties.

Unique ID	Well Type
457647	Sealed
457646	Sealed
457645	Sealed
751336	Monitoring well
751335	Monitoring well
751330	Monitoring well
751332	Monitoring well
751333	Monitoring well
751339	Monitoring well
751331	Monitoring well
751337	Monitoring well
751334	Monitoring well
756581	Monitoring well
812978	Monitoring well
812977	Monitoring well
812976	Monitoring well
812975	Monitoring well

Table 8: Wells Within the Ford Site Parcel⁵

The AUAR study area is not located within a wellhead protection area or drinking water supply management area.

In November 2018, Ford Motor Company submitted their 2018 Supplemental Groundwater Monitoring Report to the MPCA. In the report, Ford Motor Company requested permission from the MPCA to abandon the groundwater monitoring wells on the 122-acre Ford Site parcel. Ford Motor Company is currently awaiting the MPCA's response to that request. All wells will be sealed and abandoned following Minnesota Department of Health (MDH) and MPCA protocol.

⁵ Source: Terracon Consultants, Inc. Phase I Environmental Site Assessment. September 18, 2018.

b. Describe effects from project activities on water resources and measures to minimize or mitigate the effects below.

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i. Wastewater – For each of the following, describe the sources, quantities, and composition of all sanitary, municipal/domestic, and industrial wastewaters projected or treated at the site.

AUAR Guidance: Observe the following points of guidance in an AUAR:

- Only domestic wastewater should be considered in an AUAR—industrial wastewater would be coming from industrial uses that are excluded from review through an AUAR process
- Wastewater flows should be estimated by land use subareas of the AUAR area; the basis of flow estimates should be explained
- The major sewer system features should be shown on a map and the expected flows should be identified
- If not explained under Item 6, the expected staging of the sewer system construction should be described
- The relationship of the sewer system extension to the RGU's comprehensive sewer plan and (for metro area AUARs) to Metropolitan Council regional systems plans, including MUSA expansions, should be discussed. For non-metro area AUARs, the AUAR must discuss the capacity of the RGU's wastewater treatment system compared to the flows from the AUAR area; any necessary improvements should be described.
- If on-site systems will serve part of the AUAR, the guidance in the February 2000 edition of the EAW Guidelines on page 16 regarding item 18b under Residential development should be followed.
- 1) If the wastewater discharge is to a publicly owned treatment facility, identify any pretreatment measures and the ability of the facility to handle the added water and waste loadings, including any effects on, or required expansion of, municipal wastewater infrastructure.

Existing sanitary sewers to serve the AUAR study area are located along Ford Parkway and Mississippi River Boulevard. These convey wastewater via city sanitary sewers to the Metropolitan Council interceptor system and eventually to the Metropolitan Wastewater Treatment Plant. The Metropolitan Council Wastewater Treatment Plant is an advanced secondary treatment plant with ultraviolet disinfection. The plant currently treats approximately 178 million gallons per day (GPD), with a total capacity of up to 314 million GPD according to the Metropolitan Council Environmental Services (MCES) Plant Inflow Summary Report for the period ending September 30, 2014. Thus, the existing plant has excess capacity (greater than 40 percent unused).



Ryan Development Scenario

Based on the MCES Sewer Availability Charge (SAC) program, the estimated daily flow for the Ryan Development Scenario is 0.586 million gallons per day (MGD). Based on a Ten States Standards peaking factor of 2.955, the estimated peak flow generated is 0.072 MGD (less than 1 percent of existing capacity). No land uses that would generate wastewater requiring pretreatment are anticipated. The proposed development scenario is consistent with the City's planned sanitary sewer usage as identified in the 2040 Comprehensive Plan. The City of Saint Paul Sewer Utility Division has confirmed that the regional treatment facility and the wastewater collection system have sufficient long-term capacity to handle the additional wastewater flow generated by the Ryan Development Scenario.

Master Plan Maximum Development Scenario

Based on the MCES SAC program, the estimated daily flow for the Master Plan Maximum Development Scenario is 0.669 MGD. Based on a Ten States Standards peaking factor of 2.934, the estimated peak flow generated is 0.082 MGD (less than 1 percent of existing capacity). No land uses that would generate wastewater requiring pretreatment are anticipated. The proposed development scenario is consistent with the City's planned sanitary sewer usage as identified in the 2040 Comprehensive Plan. The City of Saint Paul Sewer Utility Division has confirmed that the regional treatment facility and the wastewater collection system have sufficient long-term capacity to handle the additional wastewater flow generated by the Master Plan Maximum Development Scenario.

2) If the wastewater discharge is to a subsurface sewage treatment system (SSTS), describe the system used, the design flow, and suitability of site conditions for such a system.

Not applicable.

3) If the wastewater discharge is to surface water, identify the wastewater treatment methods, discharge points, and proposed effluent limitations to mitigation impacts. Discuss any effects to surface or groundwater from wastewater discharges.

Not applicable.

Stormwater – Describe the quantity and quality of stormwater runoff at the site prior to and post construction. Include the routes and receiving water bodies for runoff from the site (major downstream water bodies as well as the immediate receiving waters). Discuss any environmental effects from stormwater discharges. Describe stormwater pollution prevention plans including temporary and permanent runoff controls and potential BMP site locations to manage or treat stormwater runoff. Identify specific erosion control, sedimentation control, or stabilization measures to address soil limitations during and after project construction.

AUAR Guidance: For an AUAR the following additional guidance should be followed in addition to that in EAW Guidelines:

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- It is expected that an AUAR will have a detailed analysis of stormwater issues
- A map of the proposed stormwater management system and of the water bodies that will receive stormwater should be provided
- The description of the stormwater systems would identify on-site and "regional" detention ponding and also indicate whether the various ponds will be new water bodies or converted existing ponds or wetlands. Where on-site ponds will be used but have not yet been designed, the discussion should indicate the design standards that will be followed.
- If present in or adjoining the AUAR area, the following types of water bodies must be given special analyses:
 - Lakes: Within the Twin Cities metro area, a nutrient budget analysis must be prepared for any "priority lake" identified by the Metropolitan Council. Outside of the metro area, lakes needing a nutrient budget analysis must be determined by consultation with the MPCA and DNR staffs.
 - Trout streams: If stormwater discharges will enter or affect a trout stream, an evaluation of the impacts on the chemical composition and temperature regime of the stream and the consequent impacts on the trout population (and other species of concern) must be included.

A network of below grade pipes remains today conveying stormwater runoff to Hidden Falls. The existing AUAR study area is divided into three main drainage areas with three discharge points from the Ford Site parcel. The existing storm sewer network in the AUAR study area vicinity eventually outfalls into Hidden Falls and the Mississippi River. The existing drainage areas are shown in Appendix B. The existing impervious areas total 118.3 acres within the AUAR study area. The AUAR study area currently has no treatment for stormwater runoff into the existing system.

Ryan Development Scenario and Master Plan Maximum Development Scenario

Both development scenarios will treat the stormwater on site and will comply with City and Capitol Region Watershed District rules and requirements for water quality, volume and rate control, and erosion control.

As required by the Capitol Region Watershed District and the City, the quantity and rate of stormwater runoff from the 2-, 10-, and 100-year rainfall events using the volume of 1.1-inch of runoff over the impervious of the site be retained on site. If infiltration of stormwater is not practical due to existing site conditions, filtration of stormwater will be used. The required runoff volume shall be multiplied by a factor of 1.82 (55 percent filtration credit). The incorporation of iron-enhanced sand into the filtration medium reduces the factor to 1.25 (80 percent filtration credit). The proposed development scenarios will also be required to incorporate effective non-point source pollution reduction best management practices (BMPs) to achieve 90 percent total suspended solids removal from the runoff generated by 2.5-inch rainfall event.

The National Pollutant Discharge Elimination System (NPDES) Stormwater Permit requires treatment of 1-inch of runoff for the new impervious area since more than one acre of disturbance will occur. This falls within the more stringent Capitol Region Watershed District Rule C Stormwater Management requirements.

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Infrastructure will be built within the AUAR study area to convey stormwater to stormwater management areas to help achieve the appropriate water quality treatment. The proposed impervious surfaces for both development scenarios will be about 75 percent of the total acreage, which is about 105 acres.

For both development scenarios, the primary method of treatment will be retention ponds and sand filtration basins used for improving water quality.

Ryan Development Scenario

The AUAR study area has been divided into two proposed main drainage areas, both of which are located on the 122-acre Ford Site parcel. The proposed drainage areas are shown in Figure 12. The proposed stormwater management for the 122-acre Ford Site is also included in Appendix B. This shows the central stormwater retention feature along with filtration areas and other stormwater management areas located in the northwest corner of the AUAR study area. The central stormwater feature will discharge into the same outfall structure within the study area and ultimately into Hidden Falls Creek and to the Mississippi River. The northwest drainage area will ultimately discharge into the existing system. The new system will provide pretreatment and rate and volume control to improve water quality of runoff leaving the site and to prevent further sedimentation and erosion issues within Hidden Falls Creek.

The proposed stormwater management BMPs will be designed to comply with all City and Capitol Region Watershed District standards and with all maintenance/monitoring requirements of the City and watershed district.

Temporary erosion and sediment control measures will be implemented during construction. These could include any of the following: vegetative restoration, stormwater inlet protection, construction entrance protection, silt fence, temporary sediment basins, or bio-rolls.

Master Plan Maximum Development Scenario

Under the Master Plan Maximum Development Scenario, stormwater management on the 122-acre Ford Site would be as described above. However, the stormwater management system as described above for the 122-acre Ford Site is not designed to accommodate stormwater from the Burg & Wolfson (Lunds & Byerlys) or Canadian Pacific Railway properties. Development on these properties will be required to meet the same regulatory requirements identified above. FORD SITE A 21st Century Community

ALTERNATIVE URBAN AREAWIDE REVIEW (AUAR)

Figure 12: Ryan Development Scenario Proposed Drainage Areas



iii.

Water Appropriation – Describe if the project proposes to appropriate surface or groundwater (including dewatering). Describe the source, quantity, duration, use, and purpose of the water use and if a DNR water appropriation permit is required. Describe any well abandonment. If connecting to an existing municipal water supply, identify the wells to be used as a water source and any effects on, or required expansion of, municipal water infrastructure. Discuss environmental effects from water appropriation, including an assessment of the water resources available for appropriation. Identify any measures to avoid, minimize, or mitigate environmental effects from the water appropriation.

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AUAR Guidance: If the area requires new water supply wells, specific information about that appropriation and its potential impacts on groundwater levels should be given; if groundwater levels would be affected, any impacts resulting on other resources should be addressed.

Construction dewatering may be required for the development of the AUAR study area. Construction activities associated with dewatering will include discharging into temporary sedimentation basins to reduce the rate of water discharged from the site, as well as discharging to temporary stormwater BMPs. Any temporary dewatering will require a DNR Temporary Water Appropriations General Permit 1997-0005 if less than 50 million gallons per year and less than one year in duration. It is anticipated that the temporary dewatering would only occur during utility installation and potential construction of building footings.

The water supply will be obtained from the municipal water supply system operated by Saint Paul Regional Water Services (SPRWS). SPRWS obtains water from the Mississippi River, which is filtered through a chain of lakes and drawn into the treatment plant from Vadnais Lake. The system also has 10 water supply wells, which obtain water from the Prairie du Chien and Jordan aquifers. These wells are typically only used for emergency backup or are run at limited volumes to help control temperature and odor from the surface water intakes. By only running the wells at these limited times, SPRWS is reducing the potential impact to the available groundwater supplies, relying instead on the available surface water supplies.

The AUAR study area does not currently have watermain infrastructure within the Ford Site to serve the needs of the proposed redevelopment. The Ford assembly plant infrastructure was removed during site demolition. Installation of additional public watermain within the study area will be required. The SPRWS distribution system has a 12-inch watermain on Mount Curve Boulevard at Ford Parkway and a 16-inch watermain on Cleveland Avenue South at Montreal Avenue that can be used for connection points to serve the study area. Water and fire service will be provided within the new roadway right-of-way within the AUAR study area.

Ryan Development Scenario

The Ryan Development Scenario would require 663,800 gallons per day. SPRWS infrastructure has existing capacity to supply this development scenario.

Master Plan Maximum Development Scenario

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The Master Plan Maximum Development Scenario would require 746,600 gallons per day. SPRWS infrastructure has the existing capacity to supply this development scenario.

iv. Surface Waters

1) Wetlands – Describe any anticipated physical effects or alterations to wetland features, such as draining, filling, permanent inundation, dredging, and vegetative removal. Discuss direct and indirect environmental effects from physical modification of wetlands, including the anticipated effects that any proposed wetland alterations may have to the host watershed. Identify measures to avoid (e.g., available alternatives that were considered), minimize, or mitigate environmental effects to wetlands. Discuss whether any required compensatory wetland mitigation for unavoidable wetland impacts will occur in the same minor or major watershed and identify those probable locations.

Ryan Development Scenario and Master Plan Maximum Development Scenario

Given the location of the wetlands within the AUAR study area and the proposed development scenarios, wetland impacts may be unavoidable. Considering only portions of the AUAR study area have been formally delineated, exact wetland impacts are not known at this time. As a mass grading plan is created and development of the site commences, wetland impacts will be avoided and minimized to the extent practicable. The project would be required to comply with all federal, state, and local wetland requirements including wetland mitigation requirements.

Wetland impacts will be replaced at a minimum of a 2:1 replacement ratio with wetland replacement in accordance with Capitol Region Watershed District requirements. Wetland buffers are also required by the watershed district. The wetland buffers will be unmanicured vegetative ground cover at a minimum of 25-feet around the wetlands located within the AUAR study area. The wetland buffers will be incorporated into site design, which will be reviewed by the watershed district.

2) Other surface waters – Describe any anticipated physical effects or alterations to surface water features (lakes, streams, ponds, intermittent channels, county/judicial ditches) such as draining, filling, permanent inundation, dredging, diking, stream diversion, impoundment, aquatic plant removal, and riparian alteration. Discuss direct and indirect environmental effects from physical modification of water features. Identify measures to avoid, minimize, or mitigate environmental effects to surface water features, including in-water Best Management Practices that are proposed to avoid or minimize turbidity/sedimentation while physically altering the water features. Discuss how the project will change the number or type of watercraft on any water body, including current and projected watercraft usage.

AUAR Guidance: Water surface use need only be addressed if the AUAR area would include or adjoin recreational water bodies.

Ryan Development Scenario and Master Plan Maximum Development Scenario

No additional surface water features have been identified within the AUAR study area.

12. Contamination/Hazardous Materials/Wastes

a. Pre-project Site Conditions – Describe existing contamination or potential environmental hazards on or in close proximity to the project site, such as soil or groundwater contamination, abandoned dumps, closed landfills, existing or abandoned storage tanks, and hazardous liquid or gas pipelines. Discuss any potential environmental effects from pre-project site conditions that would be caused or exacerbated by project construction and operation. Identify measures to avoid, minimize, or mitigate adverse effects from existing contamination or potential environmental hazards. Include development of a Contingency Plan or Response Action Plan.

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Ford Motor Company and its environmental consultant Arcadis conducted environmental remediation activities across the site beginning in 2013. Prior to the site cleanup, soil and groundwater contaminates were found in the study area. The most prominent soil contaminants included lead, arsenic, petroleum, and paint solvents, while those found in lesser quantities included chlorinated solvents and wood preservation chemicals. A small volume of surficial soil that contained a concentration of arsenic slightly above typical background levels was removed from one baseball field in 2008. While the soil did not pose a risk to human health or the environment, Ford elected to remove the soil as a precautionary measure. Information regarding the remediation activities on the ball field is included in Appendix A. Ford completed its remediation activities in January 2019, and the MPCA issued a Certificate of Completion for the site on May 15, 2019. The Certification of Completion is included in Appendix A.

The main shallow groundwater contaminants found included petroleum and solvents, which have since been cleaned up during the excavation of contaminated soils. Deep groundwater contamination was identified along the western property boundary and in two monitoring wells. The contaminants included trichloroethene, nickel, cobalt, copper, zinc, aluminum, and thallium. It has been determined that the groundwater contamination does not pose a risk to people or the Mississippi River.⁶

The Burg & Wolfson (Lunds & Byerlys) property is fully developed, and any redevelopment may require coordination with the MPCA. During the Ford Site remediation efforts, 23,000 cubic yards of impacted soil was remediated on the Canadian Pacific Railway property near the rail yards on the Ford Site parcel. Any redevelopment of the property will require additional coordination with the MPCA.

 b. Project Related Generation/Storage of Solid Wastes – Describe solid wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from solid waste handling, storage, and

⁶ Additional information on the history and cleanup of the 122-acre Ford Site parcel can be found at <u>https://www.pca.state.mn.us/waste/saint-paul-ford-site</u>.



disposal. Identify measures to avoid, minimize, or mitigate adverse effects from the generation/storage of solid waste including source reduction and recycling.

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AUAR Guidance: Generally, only the estimated total quantity of municipal solid waste generated and information about any recycling or source separation programs of the RGU need to be included.

Ryan Development Scenario and Master Plan Maximum Development Scenario

Construction of either development scenario would generate construction-related waste materials such as wood, packaging, excess materials, and other wastes, which would be either recycled or disposed in the proper facilities.

Toxic or hazardous substances may be used during project construction and operations (e.g., petroleum products, hydraulic fluid, and chemical products such as sealants).

Products will be kept in their original containers unless they cannot be resealed. Original labels and Material Safety Data Sheets will be retained on site and accessible. If surplus product must be disposed of, the recommendations of the manufacturer or local or state guidelines will be followed.

According to the 2018 Ramsey County Solid Waste Management Master Plan, Ramsey County will ensure compliance with applicable laws, rules, and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes, section 473.811.

Recycling for residential units and commercial buildings in the AUAR study area will be conducted in accordance with the 2016 Recycling Law (Minnesota Statutes Chapter 115A, Section 115A.151 and Section 115A.552). Furthermore, City Leg. Code § 357.09 requires mandatory source separation and curbside pick-up within the City.

The proposed development would generate new demands on solid waste management and sanitation services provided in the project area. The US Environmental Protection Agency's (EPA) 2011 report titled *Municipal Solid Waste in the United States* was consulted as a basis for estimating municipal solid waste (MSW) generation for the proposed development. It is estimated that 4.4 pounds of MSW will be generated per person per day. An average household occupancy of 2.61 was applied to the estimated residential units based on US Census Bureau 2008-2012 data, and traffic analysis was referenced with a factor of 1.59 applied to the trips generated based on US Department of Energy Vehicle Occupancy Rates for 2010. The resulting range of MSW generated per year based upon the Ryan Development Scenario and the Master Plan Maximum Development Scenario is 43,640 tons and 45,940 tons, respectively. Per EPA document AP-42, Vol, I Ch 2.4: Municipal Solid Waste Landfills, it is estimated that the non-residential (commercial/industrial) waste stream will range from 7,200 to 13,900 tons per year under the Ryan Development Scenario and the Master Plan Maximum Development Scenario and the Master Plan Maximum Development Scenario, respectively.

c. Project Related Use/Storage of Hazardous Materials – Describe chemicals/hazardous materials used/stored during construction and/or operation of the project including method of storage. Indicate the number, location, and size of any above or below ground tanks to store petroleum or other materials. Discuss potential environmental effects from accidental spills or releases of hazardous materials. Identify measures to avoid, minimize,



or mitigate adverse effects from the use/storage of chemicals/hazardous materials including source reduction and recycling. Include development of a spill prevention plan.

AUAR Guidance: Not required for an AUAR. Potential locations of storage tanks associated with commercial uses in the AUAR should be identified (e.g., gasoline tanks at service stations).

Ryan Development Scenario and Master Plan Maximum Development Scenario

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No underground or above ground storage tanks have been identified for the proposed development scenarios. Diesel fuel tanks may be needed for emergency generators for the commercial, office, and residential buildings. The actual location of these tanks will be determined as design progresses, and the location and use of storage thanks will be in compliance with all state and local rules and regulations.

d. Project Related Generation/Storage of Hazardous Wastes – Describe hazardous wastes generated/stored during construction and/or operation of the project. Indicate method of disposal. Discuss potential environmental effects from hazardous waste handling, storage, and disposal. Identify measures to avoid, minimize, or mitigate adverse effects from the generation/storage of hazardous wastes including source reduction and recycling.

AUAR Guidance: Not required for an AUAR.

13. Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)

a. Describe fish and wildlife resources as well as habitats and vegetation on or near the site.

AUAR Guidance: The description of fish and wildlife resources should be related to the habitat types depicted on the cover types map. Any differences in impacts between development scenarios should be highlighted in the discussion.

The current site provides no fish habitat as there are no above ground streams, rivers, lakes, or ponds located within the AUAR study area. Minimal wildlife habitat is located within the AUAR study area due to the prior extent of impervious surfaces and minimal natural vegetation. Currently the majority of the AUAR study area is fenced with limited access and is covered by impervious surfaces and minimal vegetation. Wildlife that can be found within the study area are song birds, mammals or other wildlife that have adapted to the highly-disturbed urban environment. No native plant communities or sites of biodiversity have been identified within the AUAR study area.

The AUAR study area is within the Mississippi Flyway Zone and the Mississippi River Corridor is used by numerous migratory birds in the spring and fall.

Existing and proposed cover types are shown in Figure 5 and Table 2.

b. Describe rare features such as state-listed (endangered, threatened, or special concern) species, native plant communities, Minnesota County Biological Survey Sites of Biodiversity Significance, and other sensitive ecological resources on or within close proximity to the site. Provide the license agreement number (LA-843) and/or correspondence number (ERDB) from which the data were obtained, and attach the



Natural Heritage letter from the DNR. Indicate if any additional habitat or species survey work has been conducted within the site and describe results.

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AUAR Guidance: For an AUAR, prior consultation with the DNR Division of Ecological Resources for information about reports of rare plant and animal species in the vicinity is required. Include the reference numbers called for on the EAW form in the AUAR and include the DNR's response letter. If such consultation indicates the need, an on-site habitat survey for rare species in the appropriate portions of the AUAR area is required. Areas of on-site surveys should be depicted on a map, as should any "protection zones" established as a result.

Based on a review of the state-listed threatened, endangered, and special concern species, there are 22 species within one mile of the AUAR study area.⁷ The majority of these species are found within the Mississippi River or Minnehaha Creek. The only records identified in proximity to the AUAR study area include two mussel species (mucket and black sandshell) and the blue sucker, which are found in the Mississippi River. The DNR reviewed the identified species and noted the mussels within the river. The DNR correspondence letter is included in Appendix A.

The rusty-patched bumble bee, a federally-listed species, was identified by the DNR in their correspondence. The AUAR study area is located within the high potential zone for the rusty-patched bumble bee. Rusty-patched bumble bees prefer grasslands with flowering plants from April through October, underground and abandoned rodent cavities or clumps of grasses above ground as nesting sites, and undisturbed soil for hibernating queens to overwinter.

c. Discuss how the identified fish, wildlife, plant communities, rare features, and ecosystems may be affected by the project. Include a discussion on introduction and spread of invasive species from the project construction and operation. Separately discuss effects to known threatened and endangered species.

Ryan Development Scenario and Master Plan Maximum Development Scenario

No adverse impacts are anticipated to state-listed or federally-listed species. The AUAR study area is highly disturbed with a lack of bumble bee or other native wildlife habitat. Species currently using the AUAR study area are adapted to a highly disturbed urban environment, and minimal impacts are anticipated to those species.

Invasive species will be controlled on site during construction, and turf grass and other native landscape plants will be used within the AUAR study area to provide some additional habitat for song birds, small mammals, and insects including any rusty-patched bumble bees in the AUAR study area.

d. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to fish, wildlife, plant communities, and sensitive ecological resources.

Ryan Development Scenario and Master Plan Maximum Development Scenario

Scattered trees and woodland areas are found along the perimeter of the AUAR study area. Negligible suitable rusty-patched bumble bee habitat is located within the AUAR study area due

⁷ Data were provided by the Division of Ecological and Water Resources, Minnesota Department of Natural Resources, and were current as of 7/2017. These data are not based on an exhaustive inventory of the state. The lack of data for any geographic area shall not be construed to mean that no significant features are present.

to the highly disturbed nature of the area. The proposed development plans include areas of native landscaping and green space that will provide suitable habitat for bees and other pollinators. The proposed central stormwater management system, green space, and boulevard areas (boulevard trees) will provide additional areas for wildlife inhabiting this part of Saint Paul. The proposed development scenarios will follow the landscape and green space guidelines outlined in the Ford MP.

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To protect the listed mussels in the river, the DNR recommends effective erosion prevention and sediment control practices be incorporated into any stormwater management plan and also must be implemented and maintained near the river.

Wildlife friendly erosion control methods will be utilized within the study area to minimize impacts to wildlife using the site during construction.

14. Historic Properties

Describe any historic structures, archeological sites, and/or traditional cultural properties on or in close proximity to the site. Include 1) historic designations; 2) known artifact areas; and 3) architectural features. Attach letter received from the Minnesota State Historic Preservation Office (SHPO). Discuss any anticipated effects to historic properties during project construction and operation. Identify measures that will be taken to avoid, minimize, or mitigate adverse effects to historic properties.

AUAR Guidance: For an AUAR, contact with the State Historic Preservation Office and State Archeologist is required to determine whether there are areas of potential impacts to these resources. If any exist, an appropriate site survey of high probability areas is needed to address the issue in more detail. The mitigation plan must include mitigation for any impacts identified.

Ryan Development Scenario and Master Plan Maximum Development Scenario

A historical survey report was completed for the majority of the AUAR study area in 2007 (see Appendix C). The Ford Twin Cities Assembly Plant ("Ford Site") was constructed in 1924. The Ford Site contained several buildings including the main assembly building, which was located within the AUAR study area. Due to multiple changes including additions to the main assembly building, the 2007 historical survey report found that the Ford Site was not considered eligible for listing on the National Register of Historic Places (NRHP).

Most of the AUAR study area is highly disturbed due to the previous development of the Ford Site Assembly Plant, development of Burg & Wolfson (Lunds & Byerlys) property, and the soil remediation activities within the 122-acre Ford Site parcel and within a portion of the Canadian Pacific Railway property. A large portion of the 122-acre Ford Site is characterized by shallow depth to bedrock with limited fill or topsoil cover. Pursuant to the terms of the Ford Plant Demolition Master Site Plan ("MSP") dated December 28, 2012 (Site Plan 12-210553), Ford Motor Company demolished the Assembly Plant and removed building slabs, foundations, and utilities. Subgrade demolition and abandonment was completed generally to an excavation depth of six feet. Several large areas of the site included demolition and abandonment to depths greater than six feet, including removal and demolition of foundations, designated underground utilities, basements, pits, and tunnels. Due to the highly disturbed nature of the site, no archaeological resources are anticipated within the 122-acre Ford Site parcel. The only areas of the AUAR study area that contain undisturbed or minimally disturbed soils are located on the Canadian Pacific Railway property. There are currently no development proposals for the 13-acre Canadian Pacific Railway property. An archaeological survey will be required prior to development of the Canadian Pacific Railway property.

The Minnesota State Historic Preservation Office (SHPO) noted that site 21RAK (Rumtown) may be located within in the AUAR study area. Historical maps locate the Rumtown site generally south of the Hidden Falls outfall.⁸ There are currently no development proposals for the area south of the Hidden Falls outfall.

SHPO further noted that the following properties are within proximity of the AUAR study area:

• Minnesota Soldiers Home Historic District - listed in the NRHP

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- Minnehaha Historic District listed in the NRHP
- Bridge No. 3575 (Ford Parkway Bridge) listed in the NRHP
- Ford Hydroelectric Facilities eligible for listing in the NRHP
- Lock & Dam No. 1 (Ford Dam) eligible for listing in the NRHP

The three sites noted as being listed in the NRHP are outside of the study area for the project. The Minnesota Soldier's Home District and the Minnehaha Historic District are both located across the Mississippi River Gorge from the study area. The River Gorge and its riverine vegetation provide a substantial physical and visual barrier between the project area and these historic districts. The Ford MP and the City's official controls further regulate building setbacks and heights within the western edge of the AUAR study area closest to the river bluff. Because of these physical barriers, regulatory controls, and the relative distances between these districts and project, no adverse impacts are reasonably foreseeable.

The Ford Parkway Bridge is similarly buffered from the project area on the Minneapolis side of the Mississippi River. The design elements and land use plan for the AUAR study area and the proposed Ryan Development Scenario provide for a visual, auditory, and atmospheric buffer between the bridge and the development on the Saint Paul side of the Mississippi River.

The Ford Dam and Hydroelectric Facilities are not NRHP-listed properties and are located lower in elevation, and shielded by, the bluff line and vegetation beyond the western edge of the AUAR study area. There are currently no development proposals for the Ford Dam and Hydroelectric Facilities.

The SHPO letter is included in Appendix A.

15. Visual

Describe any scenic views or vistas on or near the project site. Describe any project related visual effects such as vapor plumes or glare from intense lights. Discuss the potential visual effects from the project. Identify any measures to avoid, minimize, or mitigate visual effects.

⁸ Henning, Barbara J., Historical Study Former U.S. Bureau of Mines Property Twin Cities Research Center, Rivercrest Associates, October 2002, Figure 3 (R. Ames Colby. Topographical View of a Portion of the Military Reserve, Embracing Fort Snelling, Ca. October and November 1839).

AUAR Guidance: Any impacts on scenic views and vistas present in the AUAR should be addressed. This would include both direct physical impacts and impacts on visual quality or integrity. EAW Guidelines contains a list of possible scenic resources.

ALTERNATIVE URBAN

AREAWIDE REVIEW (AUAR)

If any non-routine visual impacts would occur from the anticipated development, this should be discussed here along with appropriate mitigation.

Ryan Development Scenario and Master Plan Maximum Development Scenario

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The City of Saint Paul's 2030 Comprehensive Plan identifies significant public views in the city; none are located within the AUAR study area. The map of significant public views was updated in conjunction with the MRCCA Plan and the 2040 Comprehensive Plan. The Public River Corridor Views (PRCV) identified in the MRCCA Plan are located on public property, including parks and trails, historic properties, and bridge overlooks. Views toward bluffs from the opposite side of the shore are also noted. The closest PRCV to the AUAR study area is View #5 - Ford Dam Overlook; however, the view direction is towards the Mississippi River (away from the AUAR study area). Other PRCVs near the AUAR study area such as View #4 – Hartford Avenue Overlook would not have a direct view of the proposed development as existing trees, physical features and proposed vegetation would block the view of the AUAR study area from this location. Considering the set back of development from the bluff (east of Mississippi Boulevard), views from the Mississippi River Gorge Regional Park, Minnehaha Regional Park Wabun Picnic Area, Minnehaha Creek Confluence, and Fort Snelling Historic Site will be minimal.

The relevant policies related to visual impacts from the MRCCA Plan include:

- Policy CA-11: Protect and minimize impacts to PRCVs from public development activities.
- Policy CA-13: Support shorter buildings closer to the river's edge and taller buildings as distance from the river increases in order to maximize views of and from the river, and preserve visual access to the river as a public good.

Neither of the proposed scenarios are located in the view range of PRCV and, therefore, will not have an impact on any identified significant public views, which is consistent with Policy CA-11. Additionally, the proposed building heights and setback are consistent with the requirements of the MRCCA Districts and Ford MP zoning. The proposed building heights are lower (20-48 feet) along the Mississippi River front and gradually increase in height farther into the study area, which supports Policy CA-13.

The site lighting for the proposed development scenarios will be consistent with the lighting requirements identified in the Ford MP. All exterior lights will be LED "warm-white" or LED filtered light to minimize blue emission and will not include direct upward lighting or lighting aimed at structures to minimize visual impacts. A specific lighting plan will be developed and submitted to the City of Saint Paul during the site planning review and approval.

In a comment letter received from SHPO during the Scoping EAW comment period, the following records were provided that indicate the presence of historic properties within the AUAR study area vicinity; however, these properties are not located within the AUAR study area:

 Minnesota Soldiers Home Historic District – listed in the NRHP. Roughly bounded by Minnehaha Avenue, Mississippi River, and Godfrey Parkway in Minneapolis. Minnehaha Historic District – listed in the NRHP. Generally bounded by Nawadaha Boulevard, 39th Avenue South, 49th Street, Hiawatha Avenue, Minnehaha Avenue, Minnehaha Creek, and the Mississippi River in Minneapolis

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- Bridge No. 3575 (Intercity, or Ford Parkway, Bridge) listed in the NRHP. Located northwest of the AUAR study area and stretches across the Mississippi River.
- Ford Hydroelectric Facilities eligible for listing in the NRHP. Located directly west of the AUAR study area on Mississippi River Boulevard.
- Lock & Dam No. 1 (Ford Dam) eligible for listing in the NRHP. Located directly west of the AUAR study area in the Mississippi River.

Visual impacts are not anticipated to affect any of these historic properties or districts as both development scenarios are not located in proximity to the resources that would affect views to or from these resources.

16. Air

a. Stationary Source Emissions – Describe the type, sources, quantities, and compositions of any emissions from stationary sources such as boilers or exhaust stacks. Include any hazardous air pollutants, criteria pollutants, and any greenhouse gases. Discuss effects to air quality including any sensitive receptors, human health, or applicable regulatory criteria. Include a discussion of any methods used to assess the project's effect on air quality and the results of that assessment. Identify pollution control equipment and other measures that will be taken to avoid, minimize, or mitigate adverse effects from stationary source emissions.

AUAR Guidance: This item is not applicable to an AUAR. Any stationary air emissions source large enough to merit environmental review requires individual review.

 b. Vehicle Emissions – Describe the effect of the project's traffic generation on air emissions. Discuss the project's vehicle-related emissions effect on air quality. Identify measures (e.g., traffic operational improvements, diesel idling minimization plan) that will be taken to minimize or mitigate vehicle-related emissions.

AUAR Guidance: Although the MPCA no longer issues Indirect Source Permits, traffic-related air quality may still be an issue if the analysis in Item 18 indicates that development would cause or worsen traffic congestion. The general guidance from the EAW form should still be followed. Questions about the details of air quality analysis should be directed to MPCA staff.

Ryan Development Scenario and Master Plan Maximum Development Scenario

Motorized vehicles affect air quality by emitting airborne pollutants. Changes in traffic volumes, travel patterns, and roadway locations affect air quality by altering the number of vehicles in an area and possible congestion. The air quality impacts from the proposed development scenarios are analyzed by addressing criteria pollutants, a group of common air pollutants regulated by the EPA on the basis of criteria (information on health and/or environmental effects of pollution). The criteria pollutants identified by the EPA are ozone, particulate matter, carbon monoxide, nitrogen dioxide, lead, and sulfur dioxide. Potential impacts resulting from these pollutants are assessed by comparing projected concentrations to National Ambient Air Quality Standards (NAAQS).

In addition to the criteria air pollutants, the EPA also regulates a category of pollutants known as mobile source air toxics (MSATs), which are generated by emissions from mobile sources. A qualitative evaluation of MSATs has been performed for this project, as documented below. The scope and methods of the analysis performed were developed in collaboration with the Minnesota Department of Transportation (MnDOT), MPCA, and the Federal Highway Administration (FHWA).

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Conformity

The project area is designated by the EPA as in attainment (or complying) with the NAAQS for all air pollutants. While the project area is in attainment with the carbon monoxide (CO) NAAQS, part of the project area was formerly a nonattainment area for CO and is currently a "maintenance" area for this pollutant. Therefore, Transportation Conformity rules (40 CFR 93, Subpart A) apply only to vehicle emissions of CO in the AUAR study area.

CO evaluation is performed by evaluating the worst-operating (hot spot) intersections in the AUAR study area. The EPA has approved a screening method to determine which intersections need hot-spot analysis. The hot-spot screening method uses a traffic volume threshold of 82,300 entering vehicles per day. None of the intersections within the AUAR study area meet this threshold of vehicles per day. Therefore, no hot-spot analysis or screening procedure was needed nor completed.

Improvements in vehicle technology and in motor fuel regulations continue to result in reductions in vehicle emission rates. The EPA MOVES 2010b emissions model estimates that emission rates will continue to decline from existing rates through year 2040. Consequently, year 2040 vehicle-related CO concentrations in the project area are likely to be lower than existing concentrations even considering the increase in development-related and background traffic.

On November 8, 2010, the EPA approved a limited maintenance plan request for the Twin Cities maintenance area. Under a limited maintenance plan, the EPA has determined that there is no requirement for project emissions over the maintenance period and that "an emission budget may be treated as essentially non-constraining for the length of the maintenance period. The reason is that it is unreasonable to expect that our maintenance area will experience so much growth within this period that a violation of CO National Ambient Air Quality Standard (NAAQS) would result."⁹

Air Toxics

Controlling air toxic emissions became a national priority with the passage of the Clean Air Act Amendments (CAAA) of 1990, whereby Congress mandated that the EPA regulate 188 air toxics, also known as hazardous air pollutants. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007) and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS).¹⁰ In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics

⁹ US Environmental Protection Agency, Limited Maintenance Plan Option for Nonclassifiable CO Nonattainment Areas (October 6, 1995)

¹⁰ US Environmental Protection Agency, Limited Risk Information System; available at http://www.epa.gov/iris/

Assessment (NATA).¹¹ These are acrolein, benzene, 1,3-butidiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these the priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules. The 2007 EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines.

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A qualitative analysis provides a basis for identifying and comparing the potential differences among MSAT emissions. The AUAR study area is currently meeting all NAAQS for the criteria air pollutants. For the foreseeable future the trend of lower per vehicle emissions is expected to at least offset growth in vehicle volumes. Therefore, the AUAR study area is expected to continue meeting NAAQS, without or with implementation of the development scenarios. Based on the proposed volumes, the proposed development scenarios do not exceed thresholds that would require a quantitative MSAT analysis; therefore, the project is not expected to adversely affect air quality.

c. Dust and Odors – Describe sources, characteristics, duration, quantities, and intensity of dust and odors generated during project construction and operation. (Fugitive dust may be discussed under Item 16a). Discuss the effect of dust and odors in the vicinity of the project including nearby sensitive receptors and quality of life. Identify measures that will be taken to minimize or mitigate the effects of dust and odors.

AUAR Guidance: Dust and odors need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any dust control ordinances in effect.

Ryan Development Scenario and Master Plan Maximum Development Scenario

The proposed development will generate temporary fugitive dust emissions during construction. These emissions will be controlled by watering, sprinkling, or calcium chloride application, as appropriate or as prevailing weather and soil conditions dictate. In accordance with Saint Paul City Ordinances (Section 221.02), during construction of the proposed development contractors will maintain streets, alleys, sidewalks, or other public places adjacent to construction, demolition, or building sites free from dust, litter, or other matter originating from their construction, demolition, or building sites, including that effected by erosion and landslides. Dust emissions are not anticipated during operations as all ground surfaces will either be impervious or vegetated.

17.Noise

Describe sources, characteristics, duration, quantities, and intensity of noise generated during project construction and operation. Discuss the effect of noise in the vicinity of the project including 1) existing noise levels/sources in the area; 2) nearby sensitive receptors; 3) conformance to state noise standards; and 4) quality of life. Identify measures that will be taken to minimize or mitigate the effects of noise.

¹¹ US Environmental Protection Agency, Technical Air Pollution Resources; available at <u>http://www.epa.gov/ttn/atw/nata1999/</u>

AREAWIDE REVIEW (AUAR)

ALTERNATIVE URBAN

AUAR Guidance: Construction noise need not be addressed in an AUAR, unless there is some unusual reason to do so. The RGU might want to discuss as part of the mitigation plan, however, any construction noise ordinances in effect.

If the area will include or adjoin major noise sources, a noise analysis is needed to determine if any noise levels in excess of standards would occur, and if so, to identify appropriate mitigation measures. With respect to traffic-generated noise, the noise analysis should be based on the traffic analysis of Item 18.

Ryan Development Scenario and Master Plan Maximum Development Scenario

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As stated in the AUAR guidelines, construction noise need not be addressed unless there is some unusual reason to do so. No unusual circumstances have been identified that would necessitate a detailed noise analysis. It should also be noted that full and limited access county roads are exempt from State noise standards.¹² Construction activities (i.e., blasting, pile-driving, crushing, and grading activities) will be conducted in compliance with the City of Saint Paul Noise regulations to minimize noise levels and nighttime construction activities.13

A sound increase of 3 dBA is barely noticeable by the human ear, a 5-dBA increase is clearly noticeable, and a 10-dBA increase is heard as twice as loud. For example, if the sound energy is doubled (i.e., the amount of traffic doubles), there is a 3 dBA increase in noise, which is just barely noticeable to most people. On the other hand, if traffic increases by a factor of 10, the resulting sound level will increase by about 10 dBA and be heard as twice as loud.

Traffic volumes in the project area are either on roadways that do not have receivers that are sensitive to noise, or, the traffic level increases attributable to the project are well below the amount that would generate a sound increase that could be noticeable. The AUAR study area will be developed such that any land use activities that are sensitive (i.e., residential units) to noise will have sufficient setbacks from existing noise sources to thereby reduce the potential for noise impacts. These details will be determined as the development proceeds.

The change in traffic noise levels is not anticipated to be readily perceptible. Permits related to construction noise will be obtained prior to the start of construction.

18. Transportation

a. Describe traffic-related aspects of project construction and operation. Include 1) existing and proposed additional parking spaces; 2) estimated total average daily traffic generated; 3) estimated maximum peak hour traffic generated and time of occurrence; 4) source of trip generation rates used in the estimates; and 5) availability of transit and/or other alternative transportation modes.

The Ford Site, as a large-scale industrial development, acted as a barrier to public movement within the Highland neighborhood, elongating trips in order to circulate around the site and contributing to congestion at its periphery. The redevelopment of the property will remove this

¹² Minnesota Statutes, section 116.07, subdivision 2a(3) ¹³ Chapter 239:

https://library.municode.com/mn/st. paul/codes/code of ordinances?nodeId=PTIILECO_TITXXVIIIMIOF_CH293NO RE

barrier and integrate the site into the area transportation network, ensuring access for all modes of transportation.

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The redevelopment of the Ford Site parcel is expected to take approximately 10 to 15 years, depending on market conditions, and currently there are no proposals for redevelopment of the Canadian Pacific Railway or Burg & Wolfson (Lunds & Byerlys) properties. Therefore, for purposes of developing traffic forecasts and evaluating future conditions, a horizon year of 2040 was used. Traffic forecasts were developed for three future conditions, including year 2040 no-build; year 2040 Ryan Development Scenario; and year 2040 Master Plan Maximum Build Scenario. Due to the extended timeline of development, it is anticipated that traffic patterns and volume will incrementally change and be spread out over a number of years as development occurs, affording the ongoing opportunity for data collection and modification of the transportation networks over time.

1. Parking

There are currently no existing parking spaces on the Ford Site parcel or the Canadian Pacific Railway property. There are approximately 250 existing parking spaces on the Burg & Wolfson (Lunds & Byerlys) property.

Redevelopment of any portion of the AUAR study area will require provision of vehicular and bicycle parking spaces in compliance with the City's zoning and Ford MP requirements.

Ryan Development Scenario

The Ryan Development Scenario would include approximately 5,890 off-street vehicular parking spaces and approximately 3,700 bicycle parking spaces. On-street parking is planned along the proposed public roadways within the Ford Site parcel in accordance with the Ford MP. The amount of on-street parking will be reviewed as part of the developer's infrastructure design and City permitting process.

Under the Ryan Development Scenario, vehicular parking on the Burg & Wolfson (Lunds & Byerlys) property and the Canadian Pacific Railway properties would not change from the existing conditions as identified above.

Master Plan Maximum Development Scenario

The Master Plan Maximum Development Scenario would provide vehicular parking spaces and bicycle parking spaces similar to the Ryan Development Scenario plus required parking spaces for the Burg & Wolfson (Lunds & Byerlys) and Canadian Pacific Railway properties.

2. Trip Generation

Trip generation estimates were calculated using the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition, and account for multi-use trip reductions based on a combination of the internal capture rate methodology in the ITE Trip Generation Handbook and the Traffic Generated by Mixed-Use Developments – Thirteen-Region Study Using Consistent Measures of Built Environment (2015). In addition, trip reductions were applied to the estimates to account for various characteristics of the AUAR study area and surrounding area, including the existing level of transit service, the existing and proposed walking/bicycling facilities and environment, jobs and diverse housing options, including the amount of affordable housing described in the Ford MP, and anticipated Travel Demand Management (TDM) Programs. These various reductions were identified leveraging data from multiple resources and case-studies locally and throughout the country, each of which are documented within the appendix of the Ford Site AUAR Transportation Analysis (see Appendix D).

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Ryan Development Scenario

Average Daily Traffic Volume

Based on the results of the traffic analysis, the Ryan Development Scenario is anticipated to generate approximately 21,790 vehicular trips per day; 4,490 transit trips per day; and 5,470 pedestrian/bicyclist trips per day. These trips represent the total external trip generation by transportation mode, as summarized in Table 9.

Peak Hour Traffic Volume

Based on the results of the traffic analysis, the Ryan Development Scenario is anticipated to generate approximately 1,440 a.m. peak hour and 1,850 p.m. peak hour vehicular trips. The proposed development is also anticipated to generate approximately 300 a.m. peak hour and 380 p.m. peak hour transit trips, as well as 360 a.m. peak hour and 470 p.m. peak hour pedestrian/ bicyclist trips. The a.m. peak hour represents a typical weekday from 7:30 a.m. to 8:30 a.m., while the p.m. peak hour represents a typical weekday from 4:45 p.m. to 5:45 p.m. These trips represent the total external trip generation by transportation mode, as summarized in Table 9.

Master Plan Maximum Development Scenario

Average Daily Traffic Volume

Based on the results of the traffic analysis, the Master Plan Maximum Development Scenario is anticipated to generate approximately 27,570 vehicular trips per day; 5,930 transit trips per day; and 7,230 pedestrian/bicyclist trips per day. These trips represent the total external trip generation by transportation mode, as summarized in Table 9.

Peak Hour Traffic Volume

Based on the results of the traffic analysis, the Master Plan Maximum Development Scenario is anticipated to generate approximately 1,770 a.m. peak hour and 2,360 p.m. peak hour vehicular trips. The development is also anticipated to generate approximately 380 a.m. peak hour and 510 p.m. peak hour transit trips, as well as 460 a.m. peak hour and 620 p.m. peak hour pedestrian/bicyclist trips. The a.m. peak hour represents a typical weekday from 7:30 a.m. to 8:30 a.m., while the p.m. peak hour represents a typical weekday from 4:45 p.m. to 5:45 p.m. These trips represent the total external trip generation by transportation mode, as summarized in Table 9.

Transportation Mode	A.M. Peak Hour External Trips	P.M. Peak Hour External Trips	Weekday Daily External Trips	
Ryan Development Sce	nario			
Vehicular Trips	1,440	1,850	21,790	
Transit Trips	300	380	4,490	
Walk/Bike Trips	360	470	5,470	

Table 9: External Trip Generation Summary by Transportation Mode

Transportation Mode	A.M. Peak Hour External Trips	P.M. Peak Hour External Trips	Weekday Daily External Trips	
Master Plan Maximum Development Scenario				
Vehicular Trips	1,770	2,360	27,570	
Transit Trips	380	510	5,930	
Walk/Bike Trips	460	620	7,230	

3. Availability of Transit and/or Other Transportation Modes

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Ryan Development Scenario and Master Plan Maximum Development Scenario

Transit Service

The AUAR study area is served by existing transit routes with varying frequencies and destinations (see Table 10). The A Line arterial bus rapid transit (BRT) includes enhanced transit service such as limited stop service, high customer amenity stations, and transit signal priority. Transit stops are located at nearly every block along Ford Parkway and Cleveland Avenue, which border the AUAR study area. There is also an existing on-street layover area along Kenneth Street, south of Ford Parkway. Existing transit service serving the area surround the AUAR study area is also depicted in Figure 13.

Cretin Avenue is one of the main north-south roadways planned on the Ford Site. Redevelopment of the Ford Site will extend Cretin Avenue south from Ford Parkway and connect it to the planned extension of Montreal Avenue. Within the Ford MP, space has been allocated on each side of the Cretin Avenue extension for future enhanced transit service, including the potential for dedicated transit lanes. The Ford MP also envisions the potential for a multi-modal shared transportation corridor south of the Montreal Avenue extension and connecting the Cretin Avenue extension through the Canadian Pacific Railway Properties.

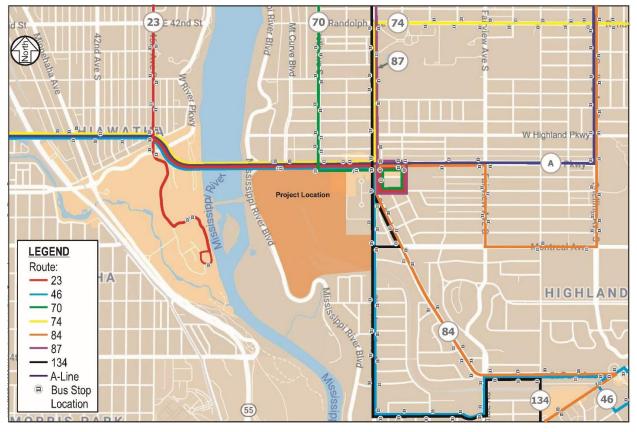
			Weeko	lay			Saturday	1		Sunday	
Route	AM Peak	Midday	PM Peak	Evening	Span	Midday	Evening	Span	Midday	Evening	Span
23	60	60	30-60	60	7a-8p	20-40	60	8a-8p	60	60-90	8a-8p
46	30	30	30	30-60	6a-11p	30	60	7а-р	30	60	8a-8p
54	15	15	13	15-30	3a-1a	15	15-30	3a-1a	20	20-30	3a-1a
70	30	60	30	NA	6a-7p	NA	NA	NA	NA	NA	NA
74	15	15-20	15	30	5a-1a	20	30	5a-1a	30	30	5a-12a
83	30	30	30	30-60	6a-10p	30	30-60	7a-10p	30	30-60	7a-10p
84	30	30	30	30	5a-9p	30	NA	6a-8p	30	NA	9a-8p
87	20	30	20	30-60	4a-12p	30	60	6a-12p	30	60	6a-12p
134	15	NA	15	NA	6a-7p	NA	NA	NA	NA	NA	NA
A Line	10	10	10	15	4a-1a	10	15-30	4a-1a	10	15-30	4a-1a

 Table 10: Existing Transit Service Serving the AUAR Study Area¹⁴

¹⁴ Source: Draft Saint Paul Highland Park Transit Service Study, Metro Transit, June 2019.







Bicycle and Pedestrian Facilities

A summary of the existing bicycle and pedestrian facilities and sidewalk gaps¹⁵ in the existing network are shown in Figure 14 and Figure 15. By resolution, the City of Saint Paul formally adopted a sidewalk infill policy in 2017 providing for the construction of sidewalks on both sides of every street as part of street construction projects. The City's adopted Pedestrian Plan (adopted June 5, 2019) reiterates the sidewalk in-fill policy and further requires private property owners to install sidewalk adjacent to all streets abutting properties undergoing site redevelopment. It is therefore expected that these gaps will be in-filled over time.

¹⁵ A gap is identified where there are either no sidewalk facilities, or a sidewalk is only present on one side of an existing roadway.



Figure 14: Existing Sidewalk Network

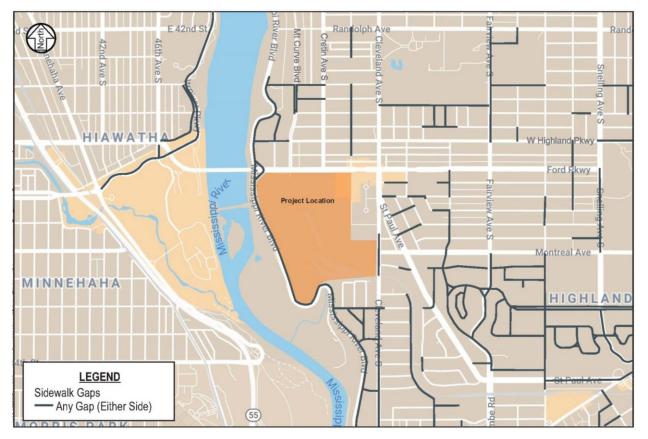
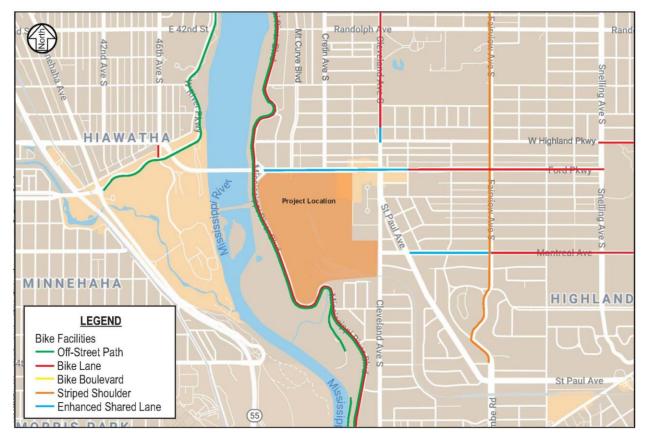




Figure 15: Existing Bicycle Facilities



The Metropolitan Council also established the Regional Bicycle Transportation Network (RBTN) in January 2015, which coincides with the City of Saint Paul Bicycle Plan. The City of Saint Paul Bicycle Plan identifies the existing and planned bicycle facilities, including several bikeway priorities serving the AUAR study area. A summary of the existing and planned facilities is summarized in Table 11.

Table 11: Existing and Planned Bicycle Facilities

Roadway	Existing Facility	Planned Facility (per Saint Paul Bicycle Plan)
Ford Parkway	Bike lanes (east of Kenneth/Howell)	Enhanced shared/in-street lanes
Cleveland Avenue	Bike lanes (north of Eleanor Avenue)	Enhanced shared/in-street lanes
Saint Paul Avenue	None	In-street lanes
Edgcumbe Road	None	In-street lanes
Highland Parkway	None	Enhanced shared lanes
Montreal Avenue	Bike lanes (east of Fairview); enhanced shared lanes (west of Fairview)	Enhanced shared/in-street lanes
Mississippi River Boulevard	Bike lane (southbound); shared use path	Off-street path/in-street lanes
Fairview Avenue	Striped shoulders	In-street lanes

b. Discuss the effect on traffic congestion on affected roads and describe any traffic improvements necessary. The analysis must discuss the project's impact on the regional transportation system. If the peak hour traffic generated exceeds 250 vehicles or the total daily trips exceeds 2,500, a traffic impact study must be prepared as part of the EAW. Use the format and procedures described in the Minnesota Department of Transportation's Access Management Manual, Chapter 5 (available at:

http://www.dot.state.mn.us/accessmanagement/resources.html) or a similar local guidance.

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AUAR Guidance: For AUAR reviews, a detailed traffic analysis will be needed, conforming to the MnDOT guidance as listed on the EAW form. The results of the traffic analysis must be used in the response to Items 16 and 17.

In accordance with EQB guidance, an independent traffic analysis was completed. The results of the study can be found in Appendix D. Based on the detailed findings of the Ford Site AUAR Transportation Analysis, the area transportation network is expected to be able to support redevelopment within the AUAR study area. The AUAR Transportation Analysis also identifies certain traffic improvements that may be implemented over time to address future traffic impacts that could occur as a result of development within the AUAR study area (see Item 18c). The AUAR Transportation Analysis covers key traffic metrics for both motorized and non-motorized modes. Metrics for motorized modes include intersection level of service (LOS) and length of queuing. For non-motorized modes, metrics include an analysis of gaps in the existing bicycle and pedestrian facility networks and availability of transit within the existing transportation network.

As part of the Ford Site AUAR Transportation Analysis, a regional planning-level review was completed to understand potential impacts associated with a wider geographic area, including MN TH 55 (Hiawatha Avenue) to the west, MN TH 5 (7th Street) to the south, MN Highway 51 (Snelling Avenue/Montreal Avenue) to the east, Cretin Avenue near Marshall Avenue (County Road 35), and Saint Paul Avenue near MN TH 5 (7th Street). This review focused on the existing travel patterns and also assessed development-related assumed traffic volumes for the identified segments surrounding the AUAR study area during the a.m. and p.m. peak hours. Stakeholders including MnDOT, Metro Transit, Hennepin County, Ramsey County, Minneapolis, and Saint Paul were engaged with the existing condition and the assumptions for the future traffic projections.

The primary regional roadways within the area and their anticipated future average daily traffic volumes under each scenario are summarized in Table 12, along with the estimated roadway capacities. Due to the gradual phasing of development within the AUAR study area, it is anticipated these changes will occur incrementally and be spread out over a number of years. Although traffic volumes on these roadways are anticipated to increase at full build-out, they are within or below the estimated capacity of the roadway facilities. The central location of the AUAR study area further mitigates the impact to any one particular roadway because development related traffic volumes are dispersed relatively evenly to the west, east, north, and south.

Table 12: Regional Roadway Traffic Volume Changes

	Average Daily Traffic Volume (vehicles per day)					
Roadway	Existing	Year 2040 Ryan Development Scenario	Year 2040 Master Plan Maximum Development	Estimated Roadway Capacity		
MN TH 55 (Hiawatha Avenue)	17,400	21,400	22,250	30,000 to 36,000		
MN TH 5 (7 th Street) at MN River Bridge	56,000	63,400	64,500	55,000 to 70,000		
MN TH 51 (Snelling Avenue)	15,600	18,100	18,600	18,000 to 22,000		
MN TH 51 (Montreal Avenue)	11,800	14,500	15,100	12,000 to 17,000		
Cretin Avenue north of Summit Avenue	15,100	18,100	18,700	18,000 to 22,000		
Saint Paul Avenue east of Edgcumbe	3,600	4,450	4,600	30,000 to 36,000		
CR 46 (Edgcumbe Road)	16,600	20,500	21,300	30,000 to 36,000		

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As development occurs within the AUAR study area and larger regional area, further review, planning, and development of the regional transportation network is expected to occur. More information on the planning-level analysis is included in the Ford Site AUAR Transportation Analysis (see Appendix D).

Based on the results of the transportation analysis, intersection levels of service were identified for existing conditions and the proposed development scenarios, including the no-build scenario. LOS A indicates the best traffic operation and LOS F indicates an intersection where demand exceeds capacity. Overall intersection levels of service at LOS A through D are considered acceptable within the Twin Cities Metropolitan Area, although lower levels of service may be accepted during limited periods of time or for specific movements. It is common in urban areas for intersections to operate at LOS E or LOS F for short periods of time.

Based on the results of the study and the estimated traffic generated by the proposed development scenarios within the AUAR study area, a limited number of intersections may operate at less than LOS D; none of the intersections are anticipated to operate below LOS E. More detailed information on the traffic analysis is included in Appendix D.

c. Identify measures that will be taken to minimize or mitigate project related transportation effects.

Ryan Development Scenario and Master Plan Maximum Development Scenario

The AUAR Transportation Analysis identified certain traffic improvements that could be implemented over time to address future potential traffic impacts for each scenario (*i.e.*, year 2040 No Build, year 2040 Ryan Development Scenario, and year 2040 Master Plan Maximum Development Scenario). These improvements may be implemented to address either an

intersection capacity issue (*i.e.*, extended LOS E or LOS F) or a queuing issue (*i.e.*, greater than 600 feet). The intent is to have an overall intersection level of service of LOS D or reduced periods of time with levels of service at LOS E or LOS F, including typical queues of traffic less than 600 feet during the a.m. and p.m. peak hours. It is important to recognize that traffic improvement measures identified for one mode of transportation may impact another mode of transportation; therefore, potential improvements or actions that have been identified for consideration are intended to provide discretion and engineering judgement to the responsible stakeholders and decision makers with respect to balancing the needs of the various modes of travel. These considerations have been outlined in the AUAR Transportation Analysis.

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Table 13 summarizes the potential traffic improvements identified in the AUAR Transportation Analysis for consideration to mitigate anticipated traffic impacts in the Ryan Development Scenario and 2040 Master Plan Maximum Development Scenario. Consideration of the identified traffic improvements is contingent upon the feasibility of each proposed improvement, including the potential for impacts to other modes of transportation, and the level and phasing of development that occurs over the extended period of time it is anticipated to complete redevelopment within the AUAR study area.



Table 13: Summary of Transportation Issues and Mitigation

Issue	Traffic Improvement	2040 Ryan Development Scenario	2040 Master Plan Maximum Development Scenario		
Ford Parkway/Mount Curve Boul	evard				
Side-street delays	1) Signalize/turn lane improvements	X	X		
Ford Parkway/Cretin Avenue					
Southbound queues	 Modify signal timing and phasing Extend eastbound and westbound left-turn lanes Restrict parking to Pinehurst/Highland and restripe segment 	x	x		
	4) Construct southbound right turn lane	N/A	X		
Ford Parkway/Cleveland Avenue					
Intersection operations and queues	 Extend eastbound left turn lane Remove parking and provide a southbound right turn lane 	X	x		
Ford Parkway/Fairview Avenue					
Left turn operations and queues	1) Provide left turn signal phasing	X	X		
Intersection operations and	2) Construct southbound right turn lane	X	X		
queues	3) Implement TDM strategies and refine land use guidance ¹⁶	N/A	X		
Cleveland Avenue/Montreal Aver	nue				
Travel pattern changes	 Switch side-street stop control to north/south approach or install all-way stop control Construct intersection for potential future signal¹⁶ 	х	x		
Saint Paul Avenue/Montreal Avenue					
Intersection operations and queues	1) Install traffic signal/turn lanes or hybrid roundabout	X	X		
Cretin Avenue/Randolph Avenue					
Intersection queues	1) Provide northbound/southbound left turn lanes	X	X		

¹⁶ For the Maximum Development Scenario, relocating density to the southern portion of study area could impact timing of the potential signal at the Cleveland Avenue/Montreal Avenue intersection

Based on the traffic improvement measures identified above, the intersections identified in Table 13 would function at LOS D or higher or have queues less than 600 feet. Resulting intersection level of service are summarized in Table 14 and Table 15.

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Table 14: Intersection Capacity Analysis with Traffic Improvements for the A.M. Peak Hour

Intersection	2040 Ryan Development Scenario	2040 Master Plan Maximum Development Scenario
46 th Street/46 th Avenue	В	В
Ford Parkway/Ford Parkway Ramps ¹⁷	A/A	A/A
Ford Parkway/Woodlawn Avenue ¹⁷	A/A	A/A
Ford Parkway/Mount Curve Boulevard	A	A
Ford Parkway/Cretin Avenue	В	В
Ford Parkway/Finn Street	В	В
Ford Parkway/Cleveland Avenue	С	С
Ford Parkway/Kenneth Street	A	A
Ford Parkway/Fairview Avenue	С	С
Cleveland Avenue/Highland Parkway	A	A
Cleveland Ave/Saint Paul Avenue/Bohland Avenue ¹⁷	A/C	A/C
Saint Paul Avenue/Montreal Avenue ¹⁸	В	В
Saint Paul Avenue/Edgcumbe Road	С	С
Montreal Avenue/Cleveland Avenue ¹⁷	A/B	A/B
Montreal Avenue/Fairview Avenue	В	В
Mississippi River Boulevard/Ford Parkway North ¹⁷	A/A	A/A
Mississippi River Boulevard/South Ford Parkway South ¹⁷	A/A	A/A
Mississippi River Boulevard/Bohland Avenue ¹⁷	A/A	A/A
Mississippi River Boulevard/Montreal Avenue ¹⁷	A/A	A/A
Mount Curve Boulevard/Highland Parkway18	A	A
Cretin Avenue/Randolph Avenue	В	В
Cretin Avenue/Highland Parkway ¹⁷	A/B	A/B

Table 15: Intersection Capacity Analysis with Traffic Improvements for the P.M. Peak Hour

Intersection	2040 Ryan Development Scenario	2040 Master Plan Maximum Development Scenario
46 th Street/46 th Avenue	С	С
Ford Parkway/Ford Parkway Ramps ¹⁷	A/A	A/B
Ford Parkway/Woodlawn Avenue ¹⁷	A/C	A/C

¹⁷ Indicates an unsignalized intersection with side-street stop control where the overall LOS is shown followed by the worst-case approach LOS. ¹⁸ Indicates an unsignalized intersection with all-way stop control.



Intersection	2040 Ryan Development Scenario	2040 Master Plan Maximum Development Scenario
Ford Parkway/Mount Curve Boulevard	В	В
Ford Parkway/Cretin Avenue	С	D
Ford Parkway/Finn Street	В	В
Ford Parkway/Cleveland Avenue	D	D
Ford Parkway/Kenneth Street	В	В
Ford Parkway/Fairview Avenue	D	E
Cleveland Avenue/Highland Parkway	В	В
Cleveland Avenue/Saint Paul Avenue/Bohland Avenue ¹⁷	A/C	A/C
Saint Paul Avenue/Montreal Avenue ¹⁸	В	С
Saint Paul Avenue/Edgcumbe Road	С	С
Montreal Avenue/Cleveland Avenue ¹⁷	A/C	A/D
Montreal Avenue/Fairview Avenue	С	C
Mississippi River Boulevard/Ford Parkway North ¹⁷	A/A	A/A
Mississippi River Boulevard/South Ford Parkway South ¹⁷	A/A	A/A
Mississippi River Boulevard/Bohland Avenue ¹⁷	A/A	A/A
Mississippi River Boulevard/Montreal Avenue ¹⁷	A/A	A/A
Mount Curve Boulevard/Highland Parkway18	A	A
Cretin Avenue/Randolph Avenue	В	В
Cretin Avenue/Highland Parkway ¹⁷	A/C	A/E

19. Cumulative Potential Effects

AUAR Guidance: Because the AUAR process by its nature is intended to deal with cumulative potential effects from all future developments within the AUAR area, it is presumed that the responses to all items on the EAW form automatically encompass the impacts from all anticipated developments within the AUAR area.

However, the total impact on the environment with respect to any of the items on the EAW form may also be influenced by past, present, and reasonably foreseeable future projects outside of the AUAR area. The cumulative potential effect descriptions may be provided as part of the responses to other appropriate EAW items, or in response to this item.

a. Describe the geographic scales and timeframes of the project related environmental effects that could combine with other environmental effects resulting in cumulative potential effects.

Cumulative effects are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or persons undertakes such actions." The geographic areas considered for cumulative effects are those areas adjacent to the AUAR study area, and the timeframe considered includes projects that would be constructed in the reasonably foreseeable foreseeable future.

b. Describe any reasonably foreseeable future projects (for which a basis of expectation has been laid) that may interact with environmental effects of the proposed project within the geographic scales and timeframes identified above.

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No reasonably foreseeable future projects that may interact with the environmental effects of the Ford Site have been identified other than the Burg & Wolfson (Lunds & Byerlys) and Canadian Pacific Railway properties, which are included in the AUAR study area and analyses.

c. Discuss the nature of the cumulative potential effects and summarize any other available information relevant to determining whether there is potential for significant environmental effects due to these cumulative effects.

Because no reasonably foreseeable future projects have been identified, there is no known potential for cumulative effects. Impacts from future developments adjacent to the study area will be addressed via the regulatory permitting and approval processes and will be individually mitigated to ensure minimal cumulative impacts occur.

20. Other Potential Environmental Effects

If the project may cause any additional environmental effects not addressed by Items 1 to 19, describe the effects here, discuss the how the environment will be affected, and identify measures that will be taken to minimize and mitigate these effects.

Various mined spaces/utility tunnels are located over 75 feet below the ground surface under the AUAR study area and have been sealed.¹⁹ Seven documented tunnel systems were constructed in the subsurface below the former Ford Assembly Plant at various depths and configurations. The majority of tunnels are less than 10 feet in width and / or height, although larger tunnels were documented for sand mining. Based on information provided by Ford, a shallow oil tunnel was completely removed and backfilled. Additionally, the steam tunnel was demolished and removed down to the bottom slab of the tunnel. The bottom slab of the steam tunnel was punctured to provide drainage and the tunnel area was backfilled and compacted with acceptable fill material. The remaining tunnels were bulk-headed at the entrances and left in existing condition. The southwest end (entrance) of the sand tunnel was noted that it had collapsed; however, it was also noted that the collapse was likely intentional.

Based on the depths of the existing tunnels, the presence of largely intact (Platteville) limestone bedrock above the sandstone, and the findings of the previous tunnel evaluation report from 2012, the potential for settlement issues and geotechnical risks to the proposed development related to the existing tunnels is minimal. The preliminary site development plan and potential building loads will have negligible effect on the stability and long-term integrity of the existing tunnels Developers of individual blocks will be advised of the tunnels and the need to mitigate any issues that may result from their construction techniques and design.

¹⁹ Source: Application for Site Plan Review. Available at <u>http://stpdocs.stpaul.gov/web/TCAP/Title%20Sheet%20Thru%20Section%20I.pdf</u>.



Final Mitigation Plan

This Mitigation Plan is submitted as part of the Final AUAR to provide reviewers and regulators with an understanding of the actions that are advisable, recommended, or necessary to protect the environment and minimize potential impacts by the proposed development scenarios. This Final Mitigation Plan was revised and updated based on comments received during the Draft AUAR comment period. Responses to the comments are included in Appendices E and F and copies of the comment letters are included in Appendices G and H.

This Mitigation Plan is intended to satisfy the AUAR rules that require the preparation of a mitigation plan that specifies measures or procedures that will be used to avoid, minimize, or mitigate the potential impacts of development within the AUAR study area. Although mitigation strategies are discussed throughout the AUAR document, this plan will be formally adopted by the RGU as their action plan to prevent potentially significant environmental impacts.

The primary mechanism for mitigation of environmental impacts is the effective use of ordinances, rules, and regulations. The plan does not modify the regulatory agencies' responsibilities for implementing their respective regulatory programs nor create additional regulatory requirements. The plan specifies the legal and institutional arrangements that will assure that the adopted mitigation measures are implemented.

There were no impacts or mitigation strategies identified in Item 15; therefore, this area is not included in the Mitigation Plan. The remaining AUAR items have identified regulatory requirements and/or mitigation measures that reduce the level of potential impact of development within the study area. The plan is formatted consistent with the sections of the AUAR for ease of reference.



8. Permits and Approvals Required

Table 16: Anticipated	Permits an	d Approvals
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Unit of Government	Type of Application	Status
Federal		
Federal Aviation Administration	Obstruction Evaluation/Notice of Proposed Construction or Alteration (Form 7460-1)	To be applied for
US Army Corps of Engineers	Section 404 Approval	To be applied for
	Wetland Delineation Concurrence	To be applied for
State		
Minnesota Department of Natural Resources	Temporary Water Appropriation Permit for Construction Dewatering	To be applied for
Minnesota Pollution Control Agency	National Pollutant Discharge Elimination System Stormwater Permit for Construction Activities	To be applied for
	Sanitary Sewer Extension Permit	To be applied for
	Construction Contingency Plan Approval	To be applied for, if needed
	Section 401 Water Quality Certification	To be applied for, if needed
Minnesota Department of Health	Watermain Installation Permit	To be applied for
Local	_	
Metropolitan Council	Sanitary Sewer Extension Permit	To be applied for
	Sanitary Sewer Permit to Connect	To be applied for
Capitol Region Watershed	Permit for Stormwater Management, Erosion and	To be applied for
District	Sediment Control, Wetland Management	
Saint Paul Regional Water	Plumbing Permits	To be applied for
Services	Watermain Installation	To be applied for
Ramsey County	Right-of-Way Permits	To be applied for
	Road Access Permits	To be applied for
City of Saint Paul	Alternative Urban Areawide Review	In process
	Site Plan Review	To be applied for
	Preliminary & Final Plat	To be applied for
	Development Agreements	To be applied for
	Sign Permits	To be applied for
	Building Permits	To be applied for
	Excavation and Grading Permits	To be applied for
	Certificate of Occupancy	To be applied for
	Ordinance Permit for Construction of Public	To be applied for
	Improvements Right-of-Way Excavation and Obstruction Permits	To be applied for
	Sewer Utility Connection Permits	To be applied for
	Wetland Conservation Act Approval	To be applied for

9. Land Use

Ryan Development Scenario and Master Plan Maximum Development Scenario

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Potential Impacts

- The dimensional standards for building heights stated in the Ford MP and underlying zoning districts (F2 Residential Mixed Low, F3 Residential Mixed Mid, F5 Business Mixed, and F6 Gateway) potentially exceed the MRCCA requirements related to building heights; however, the City of Saint Paul's RC3 River Corridor Urban Open Overlay District currently limits development to 40 feet in height within the same boundary as the CA-RTC and CA-UM districts.
- A portion of the AUAR study area is within the MSP airport restriction zones.

Mitigation Strategies

 Any zoning inconsistencies for either development scenario, such as floor area ratio or building height, will be addressed through the City's variance and/or conditional use permit process.

How Mitigation Will be Applied and Assured

- Mitigation will be regulated through the City's development review process. Proposed site plans must address relevant mitigation measures prior to final approval by the City.
- The developer²⁰ must submit an aeronautical study (Form 7460-1) with the FAA for the proposed development within the airport restriction zones.

Involvement by Other Agencies (if applicable)

• The developer will coordinate with the Metropolitan Airports Commission to ensure uses are compatible with the Minneapolis-St. Paul Airport.

10. Geology, Soils, and Topography/Land Forms

Ryan Development Scenario and Master Plan Maximum Development Scenario

Potential Impacts

 Asphalt and concrete crushing and grading activities within the study area are anticipated to begin in early spring of 2020. These construction activities will involve moving soil and/or excavation and have potential to cause erosion and sedimentation impacts to surface waters.

Mitigation Strategies

• Where required, slope stabilization will be provided by means of vegetation establishment, erosion control blankets, or other standard methods of erosion and sediment control.

How Mitigation Will be Applied and Assured

• The proposed development within the AUAR study area will require compliance with the Capitol Region Watershed District's and the City of Saint Paul's erosion and sediment control standards.

²⁰ Developer refers to the entity that proposes development on the properties within the AUAR study area.

• The developer must acquire an NPDES General Stormwater Permit for construction activity from the MPCA prior to initiating earthwork.

ALTERNATIVE URBAN

AREAWIDE REVIEW (AUAR)

Involvement by Other Agencies (if applicable)

• The developer will apply for an Erosion Control Permit through the Capitol Region Watershed District and the City of Saint Paul.

11. Water Resources

Ryan Development Scenario and Master Plan Maximum Development Scenario

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Potential Impacts

- The quantity, quality, and discharge rate of stormwater runoff in the post-development conditions will be designed to improve water quality of runoff leaving the site and to prevent further sedimentation and erosion issues within Hidden Falls Creek.
- Temporary dewatering may be required for construction or on an intermittent basis with either development scenario.
- Wetlands may be impacted as a result of either the Master Plan Maximum Development Scenario or the Ryan Development Scenario due to building footprints and/or roadway configurations.
- Sanitary sewer and watermain extensions will be needed within the AUAR study area.
- Groundwater monitoring wells abandonment has been requested from the MPCA by Ford Motor Company.

Mitigation Strategies

- Infrastructure will be built within the AUAR study area to convey stormwater to stormwater management areas to help achieve the appropriate water quality treatment.
- Stormwater will be conveyed by means of an underground storm sewer to constructed stormwater management areas. Conveyance systems will be designed in accordance with acceptable industry standards and in conformance with jurisdictional requirements.
- Wetland impacts will be minimized and avoided to the extent practicable as a mass grading plan and specific development plans are created.
- Wetland impacts will be replaced at a minimum of a 2:1 replacement ratio with wetland replacement occurring within Capitol Region Watershed District standards.
- At minimum, a 25-foot unmanicured vegetative buffer is required around all wetlands located within the AUAR study area. The wetland buffers will be incorporated into site design.
- Construction activities associated with dewatering will include discharging into temporary sedimentation basins to reduce the rate of water discharged from the site, as well as discharging to temporary stormwater BMPs.
- Groundwater monitoring wells will be abandoned prior to construction within the AUAR study area per MPCA and MDH well sealing requirements.

How Mitigation Will be Applied and Assured

• The primary method of stormwater treatment will be through the use of retention ponds and sand filtration basins for the removal of total phosphorus and total suspended solids.

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- Maintenance and monitoring of the stormwater management areas will be performed by Saint Paul Public Works to ensure long term effectiveness of the facilities.
- The developer will apply for a Section 404 permit from the US Army Corps of Engineers for impacts to wetlands determined jurisdictional under Section 404 of the Clean Water Act.
- The developer will apply for a Wetland Conservation Act Replacement Plan Approval from Capitol Region Watershed District for wetland impacts.

Involvement by Other Agencies (if applicable)

- The developer will apply for a Temporary Water Appropriations General Permit 1997-005 for construction dewatering from the DNR for construction dewatering.
- The proposed development within the AUAR study area will require compliance with the standards of the Capitol Region Watershed District and the City for water quality, volume, runoff, and erosion control.
- Potential wetland mitigation would be evaluated by Capitol Region Watershed District and the US Army Corps of Engineers (if the wetlands are determined to be jurisdictional under Section 404 of the Clean Water Act).
- The developer will apply for a permit to from the MDH for a watermain installation.
- The developer will apply for a permit from the Metropolitan Council for a sewer extension and permit to connect.

12. Contamination/Hazardous Waste

Ryan Development Scenario and Master Plan Maximum Development Scenario

Potential Impacts

- Construction of either development scenario would generate construction-related waste materials such as wood, packaging, excess materials, and other wastes, which would be either recycled or disposed in the proper facilities.
- Toxic or hazardous substances may be used during project construction and operations (e.g., petroleum products, hydraulic fluid, and chemical products such as sealants).
- The proposed development would generate new demands on solid waste management and sanitation services provided in the project area.

Mitigation Strategies

• Products will be kept in their original containers unless they cannot be resealed. Original labels and Material Safety Data Sheets will be made available. Surplus materials will be properly removed from the property upon completion of use.

A Construction Contingency Plan will be developed and submitted to the MPCA to address
proper handling of any potential impacted soils or other regulated materials/wastes that may
be encountered during construction.

How Mitigation Will be Applied and Assured

• Mitigation will be regulated through the MPCA's review process.

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Involvement by Other Agencies (if applicable)

- Ramsey County will ensure compliance with applicable laws, rules, and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes, section 473.811.
- The developer will coordinate with the MPCA regarding the required plans, material handling and disposal.

13. Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)

Ryan Development Scenario and Master Plan Maximum Development Scenario

Potential Impacts

• No adverse impacts are anticipated to state-listed or federally-listed species. Species currently using the AUAR study area are adapted to a highly disturbed urban environment, and minimal impacts are anticipated to those species.

Mitigation Strategies

- Effective erosion prevention and sediment control practices will be incorporated into any stormwater management plan and also must be implemented and maintained near the Mississippi River to protect listed mussel species in the river.
- Wildlife friendly erosion control methods will be utilized within the study area to minimize impacts to wildlife using the site during construction.

How Mitigation Will be Applied and Assured

- Erosion prevention and sediment control practices will be implemented on site per the NPDES General Stormwater Permit requirements.
- The City will review proposed development within the AUAR study area in accordance with the design standards.

Involvement by Other Agencies (if applicable)

• Not applicable.

14. Historic Properties

Ryan Development Scenario and Master Plan Maximum Development Scenario

Potential Impacts

• Due to the highly disturbed nature of the site, no archaeological resources are anticipated within the 122-acre Ford Site parcel or the Burg & Wolfson (Lunds & Byerlys) property. The

only areas of the AUAR study area that contain undisturbed or minimally disturbed soils are located on the Canadian Pacific Railway properties.

Mitigation Strategies

 An archaeological survey will be required prior to development of the Canadian Pacific Railway properties.

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How Mitigation Will be Applied and Assured

• Mitigation will be regulated through the City's development review process. Proposed site plans must address relevant mitigation measures prior to final approval by the City.

Involvement by Other Agencies (if applicable)

• It is anticipated that the archaeological survey for the Canadian Pacific Railway properties will be coordinated with SHPO.

16. Air

Ryan Development Scenario and Master Plan Maximum Development Scenario

Potential Impacts

• The proposed development will generate temporary fugitive dust emissions during construction.

Mitigation Strategies

• These emissions will be controlled by sweeping, watering, sprinkling, or applying calcium chloride, as appropriate or as prevailing weather and soil conditions dictate.

How Mitigation Will be Applied and Assured

 In accordance with Saint Paul City Ordinances (Section 221.02), during construction of the proposed development contractors will maintain streets, alleys, sidewalks, or other public places adjacent to construction, demolition, or building sites free from dust, litter, or other matter originating from their construction, demolition, or building sites, including that effected by erosion and landslides.

Involvement by Other Agencies (if applicable)

• Not applicable.

17. Noise

Ryan Development Scenario and Master Plan Maximum Development Scenario

Potential Impacts

• Construction activities may result in temporarily elevated noise levels.

Mitigation Strategies

• Construction activities (i.e., blasting, pile-driving, crushing, and grading activities) will be conducted in compliance with the City of Saint Paul Noise regulations to minimize noise levels and nighttime construction activities.²¹

²¹ Chapter 239: <u>https://library.municode.com/mn/st._paul/codes/code_of_ordinances?nodeId=PTIILECO_TITXXVIII</u> <u>MIOF_CH293NORE</u>



How Mitigation Will be Applied and Assured

 Permits related to construction noise will be obtained from the City prior to the start of construction.

Involvement by Other Agencies (if applicable)

• Not applicable.

18. Transportation

Ryan Development Scenario and Master Plan Maximum Development Scenario

Potential Impacts

• Increased traffic on the regional roadway network surrounding the study area.

Mitigation Strategies *Ryan Development Scenario*

The following mitigation measures are recommended for consideration for the Ryan Development Scenario:

- Ford Parkway/Mount Curve Boulevard
 - Signalize/turn lane improvements
- Ford Parkway/Cretin Avenue
 - Modify signal timing and phasing
 - o Extend eastbound and westbound left-turn lanes
 - o Restrict parking to Pinehurst/Highland and restripe segment
- Ford Parkway/Cleveland Avenue
 - Extend eastbound left turn lane
 - o Restrict parking and provide a southbound right turn lane
- Ford Parkway/Fairview Avenue
 - Provide left turn signal phasing
 - Provide southbound right turn lane
- Cretin Avenue/Montreal Avenue
 - o Switch side-street stop control to north/south approach or install all-way stop control
 - o Construct intersection for potential future signal
- Saint Paul Avenue/Montreal Avenue
 - o Install traffic signal/turn lanes or hybrid roundabout
- Cretin Avenue/Randolph Avenue
 - Provide northbound/southbound left turn lanes

Master Plan Maximum Development Scenario

In addition to the mitigation described above, the following additional mitigation measures are recommended for consideration for the Master Plan Maximum Development Scenario:

- Ford Parkway/Cretin Avenue
 - Construct southbound right turn lane

- Ford Parkway/Fairview Avenue
 - o Implement TDM strategies and refine land use guidance

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How Mitigation Will be Applied and Assured

- Mitigation will be regulated through the City of Saint Paul development review, site plan, and permitting processes. Implementation of feasible mitigation measures will be addressed through permitting and developer agreements with the City of Saint Paul.
- As a condition of City of Saint Paul master site plan approval for redevelopment of the Ford Site under either the Ryan Development Scenario or 2040 Master Plan Maximum Development Scenario, feasible traffic improvements will be evaluated and planned for each of the following intersections in coordination with other applicable transportation authorities: Ford Parkway/Mount Curve Boulevard; Ford Parkway/Cretin Avenue; and Cleveland Avenue/Montreal Avenue. As development occurs, feasible traffic improvements will also be evaluated and planned for the following intersections under the regulatory control of the City of Saint Paul and in coordination with other applicable authorities: Ford Parkway/Cleveland Avenue; Ford Parkway/Fairview Avenue; Saint Paul Avenue/Montreal Avenue; and Cretin Avenue/Randolph Avenue.

Involvement by Other Agencies (if applicable)

• Mitigation measures will be coordinated with other applicable agencies and authorities having jurisdiction over identified transportation facilities.



Appendix A: Correspondence



Metropolitan Airports Commission

6040 28th Avenue South, Minneapolis, MN 55450 • 612-726-8100 • metroairports.org

August 24, 2018

Mr. Anthony Adams Civil Engineer Ryan A+E, Inc. 533 South 3rd Street, Suite 100 Minneapolis, MN 55415

Re: Ford Development Site – Airport Zoning Restrictions

SENT VIA EMAIL (anthony.adams@ryancompanies.com)

Dear Mr. Adams:

As requested in your email dated August 17, 2018, the Metropolitan Airports Commission (MAC) offers the following observations about airport zoning restrictions for the proposed Ford Development Site in Saint Paul, as depicted on the attached exhibit.

A portion of the development site appears to be in Safety Zone B as defined by the Minneapolis-St. Paul International Airport (Wold Chamberlain Field) Zoning Ordinance, which was adopted by the Wold-Chamberlain Field Joint Airport Zoning Board on April 29, 2004.

The MSP Airport Zoning Ordinance can be downloaded via the following website link: <u>https://metroairports.org/Metroairports/media/Media/Documents/ordinances/JAZB_Ordinance_2004.pdf</u>

Land parcels within Safety Zone B are subject to the following restrictions:

- Height restrictions (per Section IV.B of the MSP Zoning Ordinance)
- General land use restrictions (per Section V.B.1 of the MSP Zoning Ordinance)
- Specific land use restrictions (per Section V.B.3 of the MSP Zoning Ordinance) that prohibit the following uses: amphitheaters, campgrounds, churches, fuel storage tank farms and above-ground fuel tanks, gasoline stations, hospitals, nursing homes, residential uses (including low, medium, and high density residential uses), schools, stadiums, theaters, trailer courts, ponds or other uses that might attract waterfowl or other birds such as putrescible waste disposal operations, wastewater treatment facilities and associated settling ponds, and dredge spoil containment areas; provided, however, the prohibition on ponds or other uses that might attract waterfowl or other birds shall not apply to areas below an elevation of eight hundred (800) feet above mean sea level along any Bluff of either the Mississippi River or the Minnesota River.

Minneapolis-St. Paul International • Airlake • Anoka County-Blaine • Crystal • Flying Cloud • Lake Elmo • St. Paul Downtown

Mr. Anthony Adams August 24, 2018 Page 2

The MSP Zoning Ordinance provides for a Board of Adjustment, which has the power to hear and decide variances, appeals from decisions made by the zoning administrators, and any special exceptions that might exist to the MSP Zoning Ordinance. The variance application process is outlined in Section IX of the MSP Zoning Ordinance.

Regarding solar installations, the MSP Zoning Ordinance does not prohibit solar panels within Safety Zone B. However, if a particular solar installation is determined to cause glare issues for pilots or air traffic controllers, the zoning ordinance would serve as a basis to work with the property owner to mitigate the visual impairment.

Finally, please note that applicant must file an aeronautical study with the Federal Aviation Administration (FAA) for the proposed development (including all construction equipment and solar installations) to ensure that it will not have an adverse impact on Minneapolis-St. Paul International Airport.

The requirements for filing an aeronautical study with the FAA for proposed structures vary based on a number of factors: site elevation, structure height, proximity to an airport, and frequencies emitted from the structure, etc.

The FAA provides a "Notice Criteria Tool" on its Obstruction Evaluation/Airport Airspace Analysis (OE/AAA) website that can be used to determine if an aeronautical study is warranted. The OE/AAA website can be accessed via the following link: <u>https://oeaaa.faa.gov/oeaaa/external/portal.jsp</u>

Thank you for reaching out to us in a proactive manner to discuss future development on the Ford Site. If you have any questions about the items contained in this letter, please contact me at 612-726-8129 or via e-mail at <u>neil.ralston@mspmac.org</u>.

Sincerely,

NEL Robor

Neil Ralston, A.A.E. Airport Planner

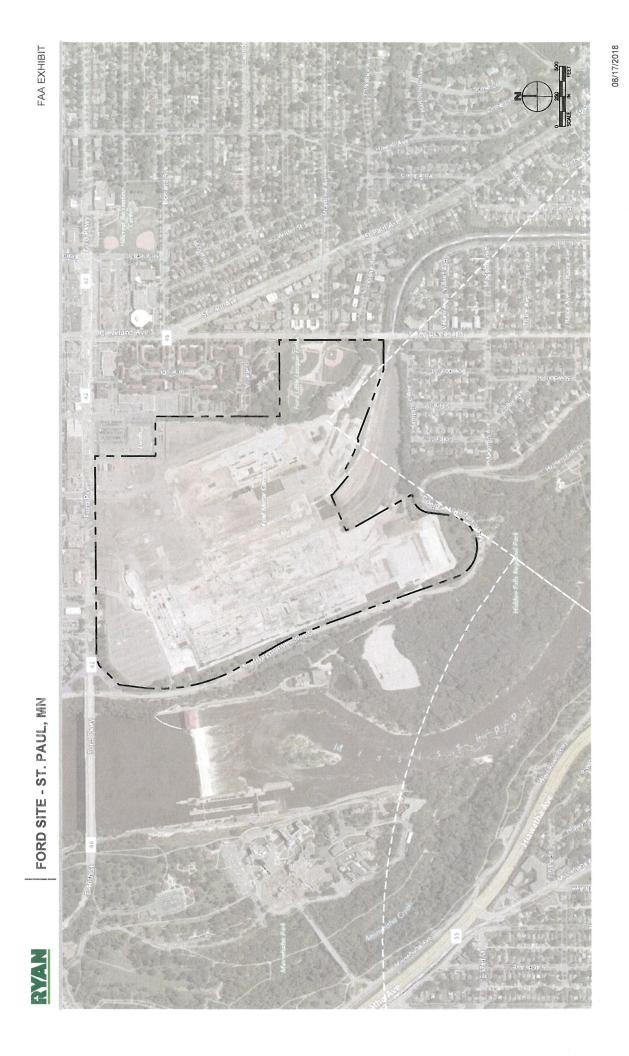
CC:

Pat Mosites, MAC

Attachment:

Ford Site exhibit

Dana Nelson, MAC



Minnesota Pollution Control Agency



520 Lafayette Road North | St. Paul, MN 55155-4194 | 651-296-6300 | 1-800-657-3864 | 651-282-5332 TTY | www.pca.state.mn.us

April 10, 2008

Ms. Barbara Rusinowski Ford Motor Company 3 Parkland Boulevard, Suite 950 PTW Dearborn, Michigan 48126

RE: Ford Twin Cities Plant
 966 S. Mississippi River Blvd., St. Paul
 MPCA Project Number VP23530
 Approval of Response Action Implementation Report – Baseball Fields

Dear Ms. Rusinowski:

The Minnesota Pollution Control Agency (MPCA) staff in the Voluntary Investigation and Cleanup (VIC) program has reviewed the "Response Action Implementation Report for the Baseball Fields – Feature 139" (Report) for the Ford Twin Cities Plant site, located at the address referenced above (the Site). The Report, dated March 13, 2008, was prepared and submitted on your behalf by Arcadis U.S., Inc.

The Report describes the removal of a small volume of surficial soil from one baseball field. The shallow excavation removed soil which contained a concentration of arsenic deemed to be slightly above typical background levels. While the soil did not pose a risk to human health or the environment, Ford Motor Company elected to remove the soil as a precautionary measure. Fill soils were imported to the Site to backfill the excavation.

The Report is hereby approved. This letter is subject to the standard disclaimers in Attachment A. If you have any questions regarding this letter, please contact me at 651-297-3080 or Amy Hadiaris, Hydrogeologist, at 651-296-8947.

Sincerely,

Varen Woman

Kären Kromar Project Manager Superfund and Emergency Response Section Remediation Division

KK/jmp

cc: Bryan Zinda, Arcadis Merritt Clapp-Smith, City of St. Paul

ATTACHMENT A STANDARD DISCLAIMERS Ford Twin Cities Plant MPCA Project Number VP23530

1. Reservation of Authorities

The MPCA Commissioner reserves the authority to take any appropriate actions with respect to any release, threatened release, or other conditions at the Site. The MPCA Commissioner also reserves the authority to take such actions if the voluntary party does not proceed in the manner described in this letter or if actions taken or omitted by the voluntary party with respect to the Site contribute to any release or threatened release, or create an imminent and substantial danger to public health and welfare.

2. No MPCA Assumption of Liability

The MPCA, its Commissioner and staff do not assume any liability for any release, threatened release or other conditions at the Site or for any actions taken or omitted by the voluntary party with regard to the release, threatened release, or other conditions at the Site, whether the actions taken or omitted are in accordance with this letter or otherwise.

3. Letter Based on Current Information

All statements, conclusions and representations in this letter are based upon information known to the MPCA Commissioner and staff at the time this letter was issued. The MPCA Commissioner and staff reserve the authority to modify or rescind any such statement, conclusion or representation and to take any appropriate action under his authority if the MPCA Commissioner or staff acquires information after issuance of this letter that provides a basis for such modification or action.

4. Disclaimer Regarding Use or Development of the Property

The MPCA, its Commissioner and staff do not warrant that the Site is suitable or appropriate for any particular use.

5. Disclaimer Regarding Investigative or Response Action at the Property

Nothing in this letter is intended to authorize any response action under Minn. Stat. § 115B.17, subd. 12.

Page 1 of 1

MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300 800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

May 15, 2019

Charles Pinter Ford Motor Company Environmental Quality Office Fairlane Plaza North 290 Town Center Drive, Suite 800 Dearborn, MI 48126

RE: Certificate of Completion Ford Twin Cities Plant 966 South Mississippi River Boulevard, St. Paul MPCA Site ID: VP23530 MPCA Billing ID: 685 PIN: 172823130002 (Main Parcel)

Dear Mr. Pinter:

The Minnesota Pollution Control Agency (MPCA) staff in the Voluntary Investigation and Cleanup (VIC) Program is pleased to send the enclosed Commissioner's Certificate of Completion of Response Actions Under the Land Recycling Act of 1992, As Amended (Certificate of Completion) for the main parcel of the Ford Twin Cities Plant site. The MPCA appreciates the cooperative effort of Ford Motor Company during the extended investigation and cleanup of the main parcel.

If you have any questions about the enclosed Certificate of Completion, please contact me at (651) 757-2402 or by email at <u>amy.hadiaris@state.mn.us</u>, or Shanna Schmitt at (651) 757-2697 or <u>shanna.schmitt@state.mn.us</u>.

Sincerely,

Amy K. Hadiaris

This document has been electronically signed. Amy K. Hadiaris Supervisor, Voluntary Investigation and Cleanup Program Remediation Division

AH:ah

Enclosure

ecc: Ryan Oesterreich, Arcadis Menaka Mohan, St. Paul PED Melanie McMahon, St. Paul Ward 3 Zack Hansen, Ramsey County Environmental Health Jon Blaha, Ryan Companies Mark Miller, Terracon

STATE OF MINNESOTA Minnesota Pollution Control Agency

Commissioner's Certificate of Completion of Response Actions Under the Land Recycling Act of 1992, As Amended

WHEREAS, Ford Motor Company has undertaken response actions pursuant to Minn. Stat. § 115B.175 (the Land Recycling Act of 1992, as amended) on the main parcel of the Ford Twin Cities Plant site, located at 966 S Mississippi River Blvd, Saint Paul and further described in a legal description in **Exhibit A** to this Certificate (the Site) and shown on the map in **Exhibit D** to this Certificate; and

WHEREAS, Ford Motor Company submitted a Voluntary Response Action Plan (comprised of the documents and reports listed as nos. 43 through 62 in **Exhibit B** of this Certificate) including an Investigation Report (comprised of the documents and reports listed as 1 through 42 in Exhibit B of this Certificate), to the Minnesota Pollution Control Agency (MPCA) under Minn. Stat. § 115B.17, subd. 14, governing review of voluntary investigation and response actions; and

WHEREAS, in accordance with Minn. Stat. §§ 115B.17 subd. 14, and 115B.175, the Commissioner of the MPCA or the Commissioner's delegate has determined that the Investigation Report adequately identified and evaluated the nature and extent of the releases and threatened releases at or from the Site; and

WHEREAS, the Commissioner or the Commissioner's delegate has approved a Voluntary Response Action Plan (comprised of documents 43 through 62 in Exhibit B of this Certificate) including the response actions determined by the Commissioner or the Commissioner's delegate to be necessary to protect public health and welfare, and the environment, from releases or threatened releases of hazardous substances, pollutants, or contaminants at or from the Site, as described in **Exhibit C** of this Certificate; and

WHEREAS, Ford Motor Company has completed the response actions set forth in the approved Voluntary Response Action Plan, including the actions necessary to carry out any reuse or development of the Site as proposed by Ryan Companies, Inc. in a manner that protects public health and welfare and the environment.

NOW, THEREFORE, pursuant to Minn. Stat. § 115B.175, subd. 5,

The Commissioner of the Minnesota Pollution Control Agency certifies under Minn. Stat. § 115b.175 (the land recycling act of 1992, as amended), that response actions have been completed as set forth in the approved voluntary response action plan for the site.

Upon issuance of this Certificate, the persons qualified for protection under Minn. Stat. § 115B.175, subd. 6a, are entitled to protection from liability under Minn. Stat. §§ 115B.01 to 115B.18, to the extent provided in the Land Recycling Act of 1992, as amended. The protection from liability provided under Minn. Stat. § 115B.175, does not apply to any person excluded from that protection under Minn. Stat § 115B.175, subd. 7.

Nothing in this Certificate or in the Land Recycling Act of 1992, as amended, affects the authority of the MPCA or the MPCA Commissioner to exercise any powers or duties under Minn. Stat §§ 115B.01 to 115B.18, or other law with respect to any release or threatened release at the Site, or the right of the MPCA or the MPCA Commissioner to seek any relief available under those sections against any person who is not entitled to protection from liability under the Land Recycling Act of 1992, as amended, with respect to such release or threatened release.

Signed and Certified this 15 day of May, 2019.

Sacher

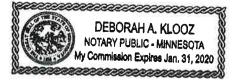
Kathryn J. Sather Division Director Remediation Division

State of Minnesota

)) ss.)

County of Ramsey

The foregoing was acknowledged before me this $\frac{1}{2}$ day of May, 2019, by Kathryn J. Sather, pursuant to delegation by Laura Bishop, Commissioner of the Minnesota Pollution Control Agency, a state agency, on behalf of the State of Minnesota.



Notary Public

My Commission Expires _/- 3/- 2020

Exhibit A

Legal Description of Main Parcel

FORD TWIN CITIES PLANT

MPCA VIC Project Number VP23530

Parcel A1 (Abstract property):

That part of Lot 1, Auditor's Subdivision No. 87, lying north of the plat of Ford Motor Company First Addition,

Except that part of said Lot 1 lying within the east 671.40 feet of the Northeast Quarter of Section 17, Township 28, Range 23, and lying north of a line drawn at right angles to the east line of said Northeast Quarter from a point on said east line distant 1530.54 feet south from the intersection of the south line of Ford Road with the east line of said Northeast Quarter,

And except that part of said Lot 1 contained within the following: Beginning at the intersection of the southerly right-of-way of Ford Parkway, as now established, with a line distant westerly 671.40 feet from and parallel with the east line of Section 17, Township 28, Range 23; thence southerly 500 feet along a line distant 671.40 feet westerly and parallel with the east line of said Section 17; thence westerly and parallel with the southerly right-of-way line of Ford Parkway, as now established, a distance of 328 feet; thence northerly along a line distant westerly 999.40 feet and parallel with the east line of said Section 17, a distance of 500 feet to the southerly right-of-way line of Ford Parkway, as now established; thence easterly along the said southerly right-of-way line of Ford Parkway, as now established, a distance of 328 feet to the point of beginning,

And except the following described parcel: All of the North half of the Southeast quarter of the Northeast quarter of Section 17, Township 28, Range 23 West of the Fourth Principal Meridian, except the East 671.40 feet thereof (being part of Lot 1, Auditor's Subdivsion No. 87),

And except the following described parcel: All that part of the Southeast quarter of the Northeast quarter of Section 17, Township 28, Range 23 lying South of a line dividing the North and South halves of the Southeast quarter of the Northeast quarter of said Section 17 except those parts of said Tract taken and condemned by the City of St. Paul, Minnesota for the widening of Cleveland Avenue, and also except from the above property that part described as follows: Beginning at a point in the East line of said Section 17 which point is 1280.54 feet south of the intersection of the present south line of the Ford Road with the said East line of said Section 17; thence West at right angles with said East line of Section 17, a distance of 671.40 feet to a point; thence North and parallel with the said East line of Section 17, a distance of 22.66 feet to a point in the North line of said South half of the Southeast quarter of the Northeast quarter of said Section 17; thence East along the North line of the South half of the Southeast quarter of the Northeast guarter of Section 17, 671.40 feet to the said East line of Section 17 aforesaid; thence South 26.34 feet to the place of beginning; also except that part described as follows: Beginning at a point in the East line of Section 17 which point is 1280.54 feet South of the intersection of the present South line of Ford Road with the said East line of Section 17; thence West at right angles with the said East line of Section 17 a distance of 671.40 feet to a point; thence South and parallel with the said East line of Section 17 a distance of 250.00 feet to a point; thence East and parallel with the first course of the land herein described 671.40 feet to a point in the said East line of Section 17; thence North along the said East line of Section 17 a distance of 250.00 feet to the point of beginning.

Parcel A2 (Certificate of Title No. 203819):

All of the North half of the Southeast quarter of the Northeast quarter of Section 17, Township 28, Range 23 West of the Fourth Principal Meridian, except the East 671.40 feet thereof, (being part of Lot 1, Auditor's Subdivision No. 87).

Parcel A3 (Certificate of Title No. 231951):

All that part of the Southeast quarter of the Northeast quarter of Section 17, Township 28, Range 23 lying South of a line dividing the North and South halves of the Southeast quarter of the Northeast quarter of said Section 17 except those parts of said Tract taken and condemned by the City of St. Paul, Minnesota for the widening of Cleveland Avenue, and also except from the above property that part described as follows: Beginning at a point in the East line of said Section 17 which point is 1280.54 feet south of the intersection of the present south line of the Ford Road with the said East line of said Section 17; thence West at right angles with said East line of Section 17, a distance of 671.40 feet to a point; thence North and parallel with the said East line of Section 17, a distance of 22.66 feet to a point in the North line of said South half of the Southeast quarter of the Northeast quarter of said Section 17; thence East along the North line of the South half of the Southeast guarter of the Northeast guarter of Section 17, 671.40 feet to the said East line of Section 17 aforesaid; thence South 26.34 feet to the place of beginning; also except that part described as follows: Beginning at a point in the East line of Section 17 which point is 1280.54 feet South of the intersection of the present South line of Ford Road with the said East line of Section 17; thence West at right angles with the said East line of Section 17 a distance of 671.40 feet to a point; thence South and parallel with the said East line of Section 17 a distance of 250.00 feet to a point; thence East and parallel with the first course of the land herein described, 671.40 feet to a point in the said East line of Section 17; thence North along the said East line of Section 17 a distance of 250.00 feet to the point of beginning.

Parcel B1 (Abstract property):

Lot 2, Auditor's Subdivision No. 87,

Except that part thereof lying within the plat of Ford Motor Company First Addition,

And except the following described parcel: All of the North Half of Lot 2, Section 17, Township 28, Range 23 according to the Government Survey thereof, which is situated East of the Easterly line of the Mississippi River Boulevard Number 2 as said easterly line is determined and defined by the recorded plat of said Mississippi River Boulevard Number 2 on file and of recorded in the office of the Register of Deeds in and for said County of Ramsey and State of Minnesota,

And except the following described parcel: That part of Government Lot 2, Section 17, Township 28, Range 23, lying southerly of a line dividing the North and South halves of the Southeast Quarter of the Northeast Quarter of said Section 17 prolonged and extended in a straight line in a West direction to the Mississippi River and lying easterly and southerly of the following described line: Beginning at the intersection of a line dividing the North and South halves of the Southeast Quarter of the Northeast Quarter of said Section 17 prolonged and extended in a straight line in a West direction to the Mississippi River and the North and South halves of the Southeast Quarter of the Northeast Quarter of said Section 17 prolonged and extended in a straight line in a West direction to the Mississippi River and the westerly line of Mississippi River Blvd.; thence South 30 degrees 15 minutes 28 seconds East, assumed bearing along said westerly line a distance of 126.12 feet, thence South 60 degrees 37 minutes 58 seconds West, to the Mississippi River and there terminating; excepting however from said tract, that part taken for Mississippi River Blvd.

Parcel B2 (Certificate of Title No. 81985):

All of the North half of Lot 2 Section 17, Township 28, Range 23, according to the Government Survey thereof, which is situated East of the Easterly line of the Mississippi River Boulevard Number 2 as said Easterly line is determined and defined by the recorded plat of said Mississippi River Boulevard Number 2 on file and of record in the office of the Register of Deeds in and for said County of Ramsey and State of Minnesota.

Parcel B3 (proposed subdivision of the land on Certificate of Title No. 570430):

That part of Government Lot 2, Section 17, Township 28, Range 23, lying southerly of a line dividing the North and South halves of the Southeast Quarter of the Northeast Quarter of said Section 17 prolonged and extended in a straight line in a West direction to the Mississippi River, and lying East of the Easterly line of the Mississippi River Boulevard Number 2 as said Easterly line is determined and defined by the recorded plat of said Mississippi River Boulevard Number 2 on file and of record in the office of the County Recorder in and for said County of Ramsey and State of Minnesota.

Parcel C (Certificate of Title No. 270211):

Lot 1, Block 1, Ford Motor Company First Additiona

Parcel D (Abstract property):

That part of Lot 3, Block 1, Ford Motor Company First Addition, lying northeasterly, northerly and northwesterly of the following described line: Beginning at a point on the west line of said Lot 3; said point of beginning being located along said west line South 00 degrees 06 minutes 52 seconds West, assumed bearing, a distance of 10.58 feet from the northwest corner of said Lot 3; thence South 49 degrees 54 minutes 51 seconds East a distance of 199.01 feet; thence North 67 degrees 29 minutes 09 seconds East a distance of 61.60 feet; thence South 62 degrees 12 minutes 36 seconds East a distance of 163.97 feet; thence South 69 degrees 21 minutes 00 seconds East a distance of 18.93 feet; thence South 69 degrees 21 minutes 00 seconds East a distance of 249.70 feet to the northeast corner of said Lot 3 and there terminating

Exhibit B

Site Documents

FORD TWIN CITIES PLANT

MPCA VIC Project Number VP23530

All documents prepared by Arcadis, U.S., Inc. on behalf of Ford Motor Company

Investigation Reports

Phase I Environmental Site Assessment

- 1. Phase I Environmental Site Assessment, June 29, 2007
- 2. Initial Receptor Survey, November 1, 2010
- 3. Final Receptor Survey, July 18, 2011

Phase II Investigation Work Plans

- 4. Soil Investigation and Risk Assessment Work Plan Baseball Fields, September 7, 2007
- 5. Quarterly Groundwater Sampling Events Work Plan, December 19, 2007
- 6. Groundwater Seep & Mississippi River Sampling Work Plan, April 11, 2008
- 7. Supplemental Phase II Exterior Investigation Work Plan, May 13, 2008
- 8. North Parking Area Supplemental Phase II Exterior Investigation Work Plan, May 19, 2008
- 9. Phase II Interior Investigation Work Plan, May 28, 2010
- 10. Subsurface Investigation Work Plan Element 1, July 15, 2013
- 11. Subsurface Investigation Work Plan Element 2, June 6, 2014
- 12. Former Fill Areas A and B Investigation Work Plan, December 8, 2014
- 13. Subsurface Investigation Work Plan Element 3, July 6, 2015
- 14. Work Plan for Installation and Sampling of Bedrock Monitoring Wells, January 7, 2016
- 15. Work Plan for Site-Wide Groundwater Sampling of Monitoring Wells, May 11, 2016
- 16. Interim Groundwater Sampling Work Plan, May 4, 2018

Phase II Investigation Reports

- 17. Soil Investigation Report Baseball Fields, September 7, 2007
- 18. Initial Phase II Exterior Investigation Report, October 29, 2007
- 19. Additional Soil Investigation and Surface Soil Risk Assessment Baseball Fields, Dec. 19, 2007
- 20. December 2007 Quarterly Groundwater Sampling Event, March 24, 2008
- 21. March 2008 Quarterly Groundwater Sampling Event, June 27, 2008
- 22. September 2008 Quarterly Groundwater Sampling Event, December 31, 2008
- 23. 2009 Groundwater Sampling Event, February 18, 2010
- 24. Technical Memorandum Seep and River Sampling Events, February 22, 2011
- 25. Technical Memorandum Underground Storage Tank Sampling Event, February 28, 2011
- 26. Initial Phase II Interior Investigation Report, March 13, 2011
- 27. Supplemental Phase II Exterior Investigation Report, May 31, 2012
- 28. Summary of Underground Storage Tank (UST) Sump Sampling Events, December 4, 2012
- 29. Sampling of Propane Tank Removals, May 2, 2013
- 30. Supplemental Phase II Exterior Investigation Report, May 29, 2013
- 31. Solvent UST Removal Summary, November 12, 2013
- 32. Work Element 1 Data Summary, January 28, 2014

- 33. Data Collected from Monitoring Wells Along the Mississippi, September 2, 2014
- 34. Underground Gasoline Storage Tank Removal Report, April 10, 2015
- 35. Phase II Comprehensive Investigation Report, March 31, 2016
- 36. Comprehensive Phase II Site Investigation Report: Soil Addendum, August 8. 2016
- 37. Comprehensive Phase II Site Investigation Report: Groundwater Addendum, September 19, 2016
- Technical Memorandum Summary of Thallium Detections and Review of Fate and Transport Properties, November 30, 2017
- 39. 2017 Fourth Quarter Groundwater Sampling Summary, April 20, 2018
- 40. Technical Memorandum Main Parcel Soil Vapor Monitoring Report, October 25, 2018
- 41. Supplemental Groundwater Monitoring Report, November 12, 2018
- 42. Technical Memorandum St. Peter Sandstone Geochemistry Evaluation, November 14, 2018

Voluntary Response Action Plan

- 43. Soil Removal Work Plan Baseball Fields, January 3, 2008
- 44. Remedial Action Plan, 1A Tunnel Barrier Wall, December 14, 2009
- 45. Underground Storage Tank Removal Environmental Contingency Plan, April 9, 2013
- 46. Site-Wide Environmental Contingency Plan, July 17, 2013
- 47. Site Decommissioning Response Action Plan (SDRAP), April 1, 2015
- 48. SDRAP Addendums #1 through #63 (2015 2016)
- 49. Interim Response Action Plan Isolated Impact Areas, June 8, 2016
- 50. Interim Response Action Plan Consolidated Impact Areas, October 2016
- 51. Arsenic Addendum to the Consolidated Impact Areas Response Action Plan, June 28, 2017
- 52. Interim Response Action Plan CP Rail Property, November 2017*

Response Action Plan Implementation

- 53. Response Action Implementation Report Baseball Fields, March 13, 2008
- 54. Tunnel 1A Response Action Implementation Report, January 11, 2011
- 55. Excavation of Temporary Sediment Retention Ponds, July 11, 2014
- 56. SDRAP Implementation Report, March 31, 2016
- 57. SDRAP Addendum Implementation Report, December 19, 2018
- 58. Isolated Impact Area Response Action Implementation Report, July 23, 2018
- 59. Consolidated Impact Area Response Action Implementation Report, August 16, 2018
- 60. Technical Memorandum Additional Excavation Work Completed Outside of Approved Interim Response Action Plans, December 5, 2018
- 61. Comprehensive Response Action Implementation Report (Summary Report), March 12, 2019
- 62. Canadian Pacific Railway Response Action Implementation Report, March 12, 2019*
- * The CP Rail Property is not part of the Ford Twin Cities Plant site, but Ford Motor Company completed a soil response action on the western portion of the CP Rail Property due to a historical burn/disposal area (Area A/B) extending across the property boundary onto the CP Rail parcel. The two reports pertaining to the CP Rail property are included in the above list.

Exhibit C

Site Summary

FORD TWIN CITIES PLANT

MPCA Project Number VP23530

This Certificate of Completion applies to the 122-acre main parcel of the larger Ford Twin Cities Plant site. Construction of the original portion of the main assembly building began in 1923, with various additions completed through the 1980s. The plant was used for automobile manufacturing and assembly until the mid-1970s, when it was converted to an assembly plant for light duty trucks, using parts manufactured elsewhere. The Twin Cities Assembly Plant ceased operation in December 2011. The Site is currently vacant land with a few remaining concrete/asphalt paved areas. Ryan Companies intends to construct a mixed use residential/commercial development at the Site.

ENVIRONMENTAL INVESTIGATION

Ford Motor Company (Ford) completed several environmental investigations at the Site between 2007 and 2018. Over 1,300 soil borings were advanced at the Site, with additional soil screening and sampling taking place during decommissioning activities, as building slabs and subsurface features were removed. Soil contaminants identified at the Site include heavy metals such as lead and arsenic, volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and petroleum compounds. The most widespread VOCs detected in soil at the Site were associated with hydrocarbon solvents used in former painting operations (benzene, toluene, xylene, trimethylbenzene, etc.). Chlorinated VOCs were detected in relatively few soil samples and, with the exception of three discrete areas within the footprint of the main assembly building, were generally present at trace to low concentrations. The three discrete areas with high concentrations of tetrachloroethene (PCE) and trichloroethene (TCE) in soil were cleaned up during subsequent site-wide soil response actions.

The groundwater investigation at the Site included evaluation of shallow discontinuous perched groundwater in the unconsolidated material overlying the bedrock, perched groundwater in the Platteville Formation, and groundwater in the St. Peter aquifer, which contains the regional water table at a depth of approximately 100 feet below ground surface. Perched groundwater in the Platteville Formation flows towards the river valley and emerges from the upper portion of the bluff wall via small seeps. Groundwater in the St. Peter aquifer discharges to the Mississippi River, which is located a short distance west of the Site, across Mississippi River Boulevard. There are no drinking water receptors between the Site and the Mississippi River. This stretch of the Mississippi River is a designated Class 2 Water of the State, thus surface water quality standards for aquatic life and recreation were used to evaluate potential risk to the Mississippi River from the discharge of groundwater from the St. Peter aquifer.

Elevated concentrations of petroleum compounds (diesel range organics/gasoline range organics) and hydrocarbon VOCs (benzene, toluene, xylene, trimethylbenzene, etc.) were found in pockets of shallow perched groundwater in the unconsolidated overburden, and to a lesser extent in the Platteville Formation. Impacts to perched groundwater at the Site were dealt with by removing the impacted soil that caused the groundwater contamination. Minimal groundwater contamination was found in the St. Peter aquifer under the majority of the Site. Groundwater in the St. Peter aquifer is generally well protected from surface sources of contaminants by the overlying Decorah, Platteville, and Glenwood bedrock units.

Chlorinated VOCs are present in groundwater samples collected from three monitoring wells located along the west boundary of the Site, between the former main assembly building and Mississippi River Boulevard. In the Platteville monitoring well AMW-06, located just west of the northern portion of the former main assembly building, trichloroethene (TCE) and cis-1,2dichloroethene (cis-DCE) first appeared in 2016 after having not been detected during previous sampling events. These chlorinated VOCs have continued to be present in AMW-06 since that time. The maximum concentrations of TCE and cis-DCE in AMW-06 were, respectively, 43 micrograms per liter (μ g/l) and 720 μ g/l. The change in groundwater quality observed at AMW-06 is likely due to greater infiltration at the Site after building slabs and parking lots had been removed, but prior to completion of soil remediation. Groundwater samples collected from temporary wells during the Site investigation identified an area of TCE-impacted perched groundwater in the overburden at the north end of the former main assembly building, which is likely related to the chlorinated VOCs detected in Platteville monitoring well AMW-06 beginning in 2016.

TCE has also been detected in St. Peter monitoring wells AMW-29 and AMW-30 at concentrations up to 34 micrograms per liter (μ g/L). These two wells are located just west of the central portion of the former main assembly building. Each monitoring well is downgradient of a discrete area of TCE-impacted soil discovered within the footprint of the main assembly building. Each source area of TCE-impacted soil was excavated during subsequent response actions.

In addition to the TCE impacts in AMW-29 and AMW-30, described above, groundwater samples from these two St. Peter monitoring wells show low pH values and high concentrations of dissolved metals. The collective body of information suggests that this may be the result of a geochemical reaction caused by oxygenated water coming into contact with naturally occurring reduced metal sulfide minerals such as pyrite. The resulting oxidation of reduced metal sulfide minerals creates sulfuric acid and releases any trace metals that are commonly adsorbed or co-precipitated with the metal sulfides, such as thallium. Additionally, the low pH created by the sulfuric acid can result in additional dissolution or desorption of other metals present in the aquifer matrix. While an anthropogenic source for the metals cannot be ruled out, no metals-impacted soil was identified in this portion of the Site during decommissioning or environmental investigation activities. The pH values of groundwater in the St. Peter aquifer downgradient of AMW-29 and AMW-30 (closer to the Mississippi River) are higher, and the concentration of metals much lower, suggesting that the geochemical conditions of the aquifer return to a more typical state prior to discharging to the river. A Tier 2 surface water evaluation demonstrated that the dissolved metals detected in the St. Peter aquifer do not pose a risk to the Mississippi River.

RESPONSE ACTIONS

Soil remediation began in 2013, during removal of building slabs and other features, and continued through January 2019. Soil response actions included the excavation of impacted soil, screening and visual inspection of all excavated and exposed soil, collection of confirmation samples to ensure removal of all impacted soil, and backfilling of excavations. Approximately 440,000 cubic yards of contaminated soil was excavated from the main parcel and the adjacent Central Pacific Rail parcel and sent to a permitted landfill for disposal. Excavated areas are shown on the figure in Exhibit E. Many areas of the Site were excavated down to bedrock. Soil confirmation samples indicate that soil with contaminant concentrations exceeding residential risk-based values was successfully removed from the Site. No groundwater response actions were necessary.

POST-CLEANUP DUE DILIGENCE

In July/August of 2018, Ryan Companies conducted a post-cleanup due diligence investigation at the Site. Ryan's environmental investigation included 46 soil borings, 59 test pits, 9 temporary wells, and a geophysical survey. A low concentration of diesel range organics (DRO, 186 mg/kg) was identified in soil at one test pit location and was excavated for landfill disposal, since the concentration exceeded the MPCA's unregulated fill criteria. No other exceedances of soil cleanup criteria were identified.

SOIL VAPOR

A total of 84 soil vapor monitoring points were installed at various locations and depths across the main parcel, in a phased approach as soil response actions were completed in different areas. Fourteen locations couldn't be sampled because of subsequent saturated conditions due to localized perched water. Of the 70 sampled locations, 12 locations had VOCs at concentrations greater than the MPCA's action level of thirty-three times (33x) residential intrusion screening values (ISVs). Specific VOCs which exceeded the MPCA's residential action level include benzene, ethylbenzene, xylene, 1,2,4- and 1,3,5-trimethylbenzene, hexane, cyclohexane, dichlorodifluoromethane (CFC-12), tetrachloroethene (PCE), and vinyl chloride. In all cases, the concentration of VOCs in other soil vapor samples located between the exceedances and potential off-site receptors were less than the action level of 33x residential ISVs. Based on the site-wide screening evaluation presented in the Soil Vapor Report (Document #40 on Exhibit B), there is not an off-site vapor intrusion risk related to vapor migration from the Site.

Of the 70 sampled locations, PCE was detected at 12 locations at concentrations ranging from 7.5 to 170 μ g/m³, exceeding its residential action level of 110 μ g/m³ at two locations. Trichloroethene (TCE) was detected at five locations at concentrations ranging from 6.1 to 24 μ g/m³, all less than its residential action level of 70 μ g/m³. Vinyl chloride was detected at one sample location at a concentration of 670 μ g/m³, exceeding its action level of 110 μ g/m³.

The MPCA considers the on-site soil vapor data collected to date to be a screening level evaluation of potential vapor intrusion risk at the Site. Additional soil vapor data will be necessary as the Site is redeveloped, to help inform future building-specific vapor mitigation decisions. The additional soil vapor data will be collected by the developer, prior to construction of Site buildings, and under the oversight of the MPCA.

Exhibit D

Main Parcel

FORD TWIN CITIES PLANT

MPCA VIC Project Number VP23530

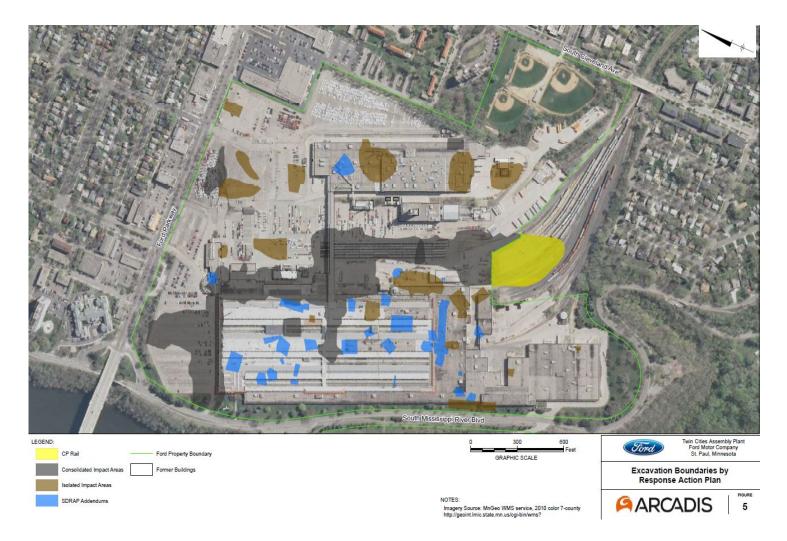


Exhibit E

Soil Excavation Areas

FORD TWIN CITIES PLANT

MPCA VIC Project Number VP23530



From:Bump, Samantha (DNR)To:Payne, AshleyCc:Horton, Becky (DNR); Parris, Leslie (DNR)Subject:RE: NHIS Review Request for the Ford Site AUARDate:Wednesday, July 17, 2019 4:08:14 PMAttachments:image003.png
image004.png
image005.png
image002.png

Hi Ashley,

I have reviewed your assessment regarding the above project. As you are aware:

- Several state-listed mussels have been documented in the Mississippi River in the vicinity of the proposed project. Given that nearby storm sewer inlets discharge to the Mississippi River and that mussels are particularly vulnerable to deterioration in water quality, especially increased siltation, it is important that effective erosion prevention and sediment control practices be incorporated into any stormwater management plan and also must be implemented and maintained near the river.
- The rusty patched bumble bee (*Bombus affinis*), a federally-listed endangered species, was documented in the vicinity of the proposed project. The rusty patched bumble bee typically occurs in grasslands and urban gardens with flowering plants from April through October. This species nests underground in abandoned rodent cavities or in clumps of grasses. Please reference the guidance at the USFWS rusty patched bumble bee website to determine if the project has the potential to impact this protected species.

Thank you for notifying us of this project, and for the opportunity to provide comments.

Have a great day, **Samantha Bump** NHIS Review Specialist | Ecological & Water Resources **Minnesota Department of Natural Resources** 500 Lafayette Road St. Paul, MN 55155 Phone: 651-259-5091 <u>Samantha.Bump@state.mn.us</u>



To: MN_NHIS, Review (DNR) <Review.NHIS@state.mn.us>Cc: Payne, Ashley <Ashley.Payne@kimley-horn.com>Subject: NHIS Review Request for the Ford Site AUAR

Hello,

Kimley-Horn is currently working on an AUAR for the Ford Site located along Ford Parkway and Mississippi River Boulevard, in the City of St. Paul, Ramsey County, MN (see attached project location map). The project is located in NE ¼ and SE ¼ of Section 17, Township 28N, Range 23W.

Project Description:

The AUAR study area encompasses four parcels totaling approximately 139 acres, all of which are covered in the *Ford Site Zoning and Public Realm Master Plan* adopted by the Saint Paul City Council on September 27, 2017 and amended on April 10, 2019. The four parcels, shown on Figure 2, include:

- One 122-acre parcel referred to as the Ford Site
- One 4-acre parcel referred to as the Burg & Wolfson (Lunds & Byerlys) property
- Two parcels totaling 13 acres referred to as the Canadian Pacific Railway property

Ryan Companies US, Inc. (Ryan) is proposing to redevelop the 122-acre Ford Site, which is the location of a former Ford Motor Company assembly plant (see Figure 2). The proposed development would include residential, retail/service, office/employment, and civic/institutional land uses. The Burg & Wolfson (Lunds and Byerlys) property and Canadian Pacific Railway property are also included in the *Ford Site Zoning and Public Realm Master Plan*, but there are currently no development proposals for those properties.

Two scenarios are proposed for evaluation in the AUAR as outlined in Table 1. These scenarios and the study area are consistent with the *Ford Site Zoning and Public Realm Master Plan*. The Ryan Development Scenario represents the density of the development proposed by Ryan on the Ford Site (illustrated in Figure 4). The Master Plan Maximum Development Scenario represents the maximum density allowed under the current comprehensive plan on all four parcels within the study area.

In reviewing the NHIS database information for Ramsey County (LA-843), numerous species have been identified within 1-mile of the AUAR study area. Most species are associated with the Mississippi River and surrounding regional park areas. Attached is a spreadsheet for those species. Based on the highly disturbed nature of the site, no species are anticipated to be found within the AUAR study area. Wildlife Friendly erosion control methods will be used on the site to minimize any potential impacts to wildlife using the site.

Kimley-Horn requests confirmation on the conclusion that no state-listed species are anticipated to be found within the Ford Site AUAR study area. Please let me know if you have any questions or would like to discuss in further detail.

Thank you! Ashley Ashley Payne, CWD Kimley-Horn | 323 South Broadway, Rochester, MN 55904 Direct: 507-216-0763 | Mobile: 507-251-6096 Celebrating 12 years as one of FORTUNE's 100 Best Companies to Work For July 11, 2019

Menaka Mohan Ford Site City Planner City of St. Paul 25 W. 4th Street, Suite 1400 St. Paul, MN 55102

RE: Ford Site Redevelopment St. Paul, Ramsey County SHPO Number: 2019-1850

Dear Menaka Mohan:

Thank you for providing our office with a copy of the Scoping Environmental Assessment Worksheet (SEAW) for the above referenced project.

Based upon information provided in the SEAW and the City of St. Paul's follow up submittal to our office (dated June 4, 2019), we understand that Ryan Companies is proposing to develop a 122-acre site which is the location of the former Ford Motor Company's Twin Cities Assembly Plant. The proposed development would include residential, retail/service, office/employment, and civic/institutional land uses.

We have reviewed the information provided under section 14. Historic Properties of the SEAW, along with the documentation included with your June 4th submittal which included the historic property evaluation report titled Ford Motor Company Twin Cities Assembly Plant: An Assessment of Significance and Eligibility, 966 South Mississippi River Boulevard, Saint Paul, Ramsey County, Minnesota (Hess, Roise and Company; November 2007).

Our comments as they pertain to adequate identification of historic properties, including archaeological resources, as well as consideration of potential effects to identified historic properties which may be caused by the proposed development project, are provided below.

Archaeology

Section 14 of the SEAW references, but does not provide documentation in support of, the opinion by the City that due to the "highly disturbed nature of the site, no archaeological resources are anticipated within the AUAR study area" and therefore an archaeological survey is not "anticipated."

State archaeological site records indicate that previously recorded site 21RAk (Rumtown) is located in the project area. Also, there are several recorded archaeological sites on both sides of the Mississippi River in the vicinity of the project. Based upon our assessment of the nature and location of the proposed project, as well as consideration of the minimal documentation provided to our office in reference to previous ground disturbance within the project area, our office recommends, as a first step, the preparation of a Phase IA literature search and archaeological assessment. This Phase IA literature search and archaeological assessment should include archival research and analysis of Sanborn Insurance maps for the project area in order to determine the history of land use, including documentation pertaining to the extent (horizontal and vertical) of previous ground disturbance, and assess the potential for both intact subsurface pre-contact archaeological and historic archaeological features. The Phase IA assessment should include a recommendation made by a qualified archaeologist, as well as one specializing in historical archaeology, as to whether further field survey is warranted prior to project implementation. We recommend that you coordinate a review of the Phase IA survey report with our office.

MINNESOTA STATE HISTORIC PRESERVATION OFFICE 50 Sherburne Avenue Administration Building 203 Saint Paul, Minnesota 55155 651-201-3287 mn.gov/admin/shpo/ mnshpo@state.mn.us AN EQUAL OPPORTUNITY AND SERVICE PROVIDER

Architecture/History Properties

Section 14 of the SEAW references the "historical survey report" a copy of which was included in your June 4th submittal. Our records indicate that we have never received or been requested by the City to review this earlier historic property evaluation for the Ford Motor Company Twin Cities Assembly Plant, which has now been demolished.

Although not mentioned in the SEAW, our records indicate the presence of several designated historic properties within the immediate project area:

- Minnesota Soldiers Home Historic District listed in the National Register of Historic Places (NRHP)
- Minnehaha Historic District listed in the NRHP
- Bridge No. 3575 (Intercity, or Ford Parkway, Bridge) listed in the NRHP
- Ford Hydroelectric Facilities eligible for listing in the NRHP
- Lock & Dam No. 1 (Ford Dam) eligible for listing in the NRHP

Although it does not appear that the above historic properties will be directly impacted by the proposed development project, we recommend that the City confirm this and also evaluate the potential for any secondary, or indirect effects, that the proposed project may cause - including visual, atmospheric, auditory, access, use, and associated traffic changes - to these historic properties.

Our records indicate that other areas surrounding the project site have not been comprehensively surveyed for the presence of historic/architectural properties. As with our recommendation above regarding a Phase IA archaeological literature review and assessment, we recommend that the City undertake and complete a similar survey, typically a Phase I reconnaissance-level survey, for historic/architectural properties 45 years or older which may be directly or indirectly affected by the proposed project.

Please note that this comment letter does not address the requirements of Section 106 of the National Historic Preservation Act of 1966 and 36 CFR § 800. If this project is considered for federal financial assistance, or requires a federal permit or license, then review and consultation with our office will need to be initiated by the lead federal agency. Be advised that comments and recommendations provided by our office for this state-level review may differ from findings and determinations made by the federal agency as part of review and consultation under Section 106.

If you have any questions regarding our review of this project or wish to consult further with our office regarding recommendations presented in this letter, please contact me at (651) 201-3290 or <u>sarah.beimers@state.mn.us</u>.

Sincerely,

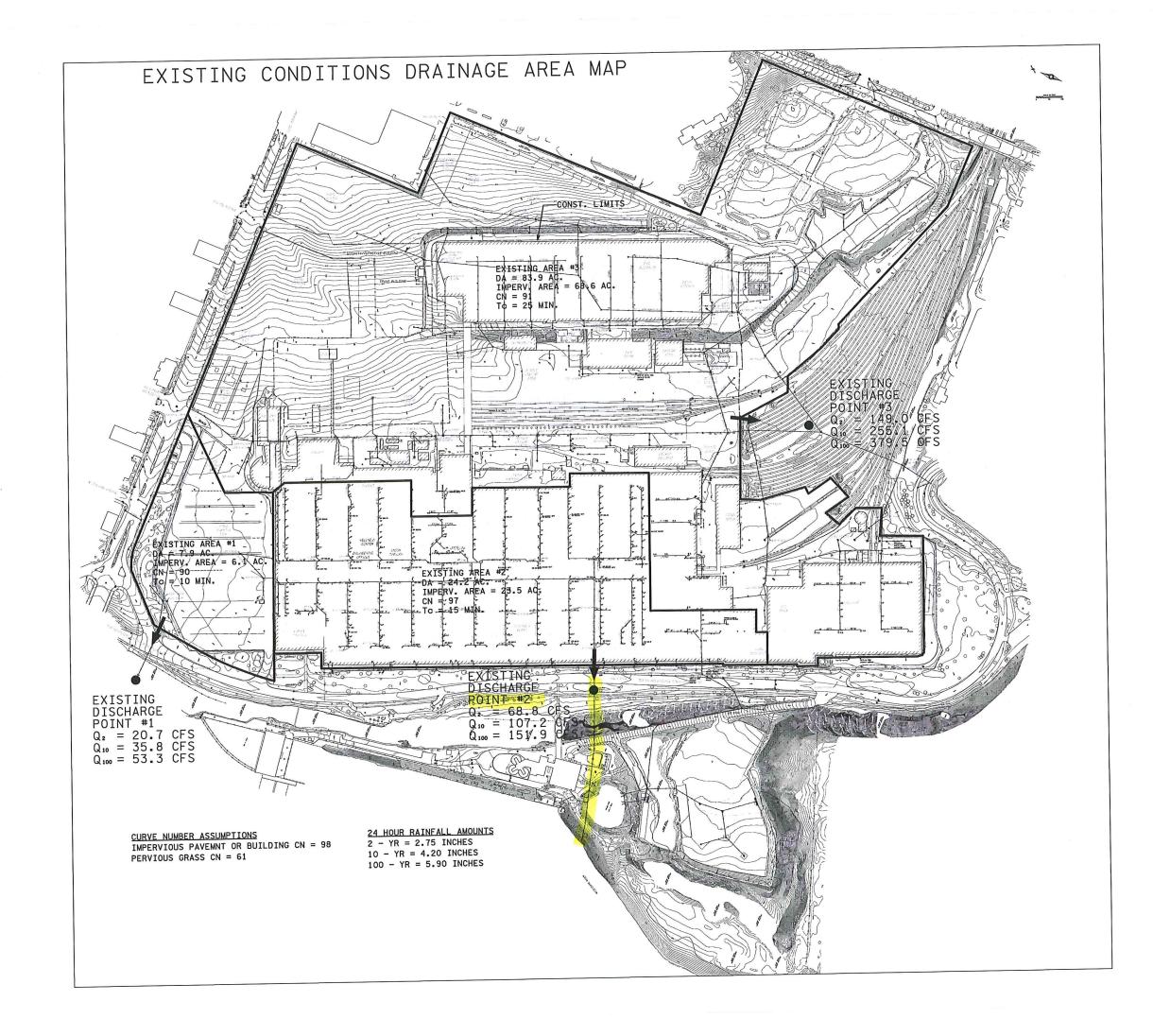
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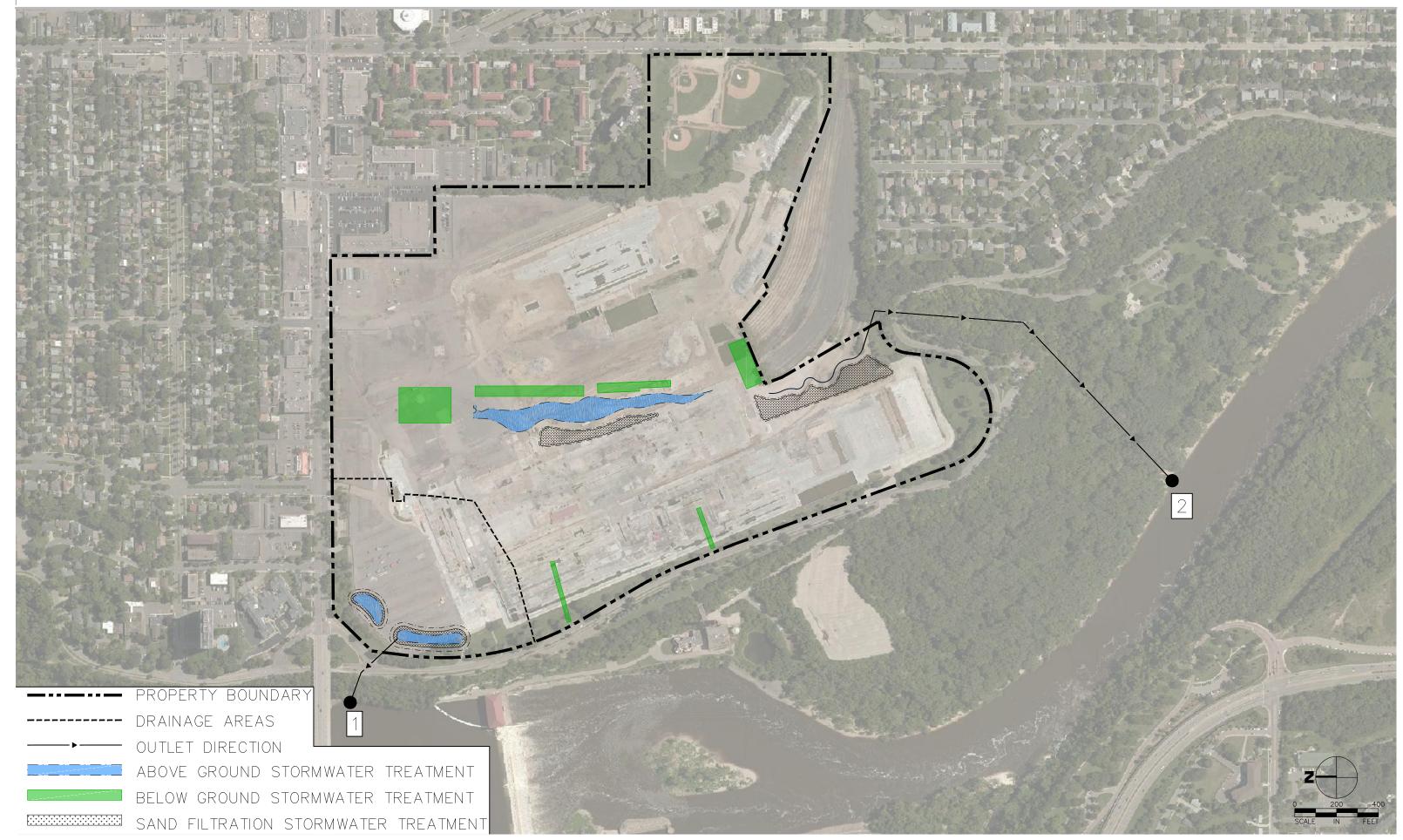
Sarah J. Beimers Environmental Review Program Manager

cc via email only: Amanda Gronhovd, Office of the State Archaeologist



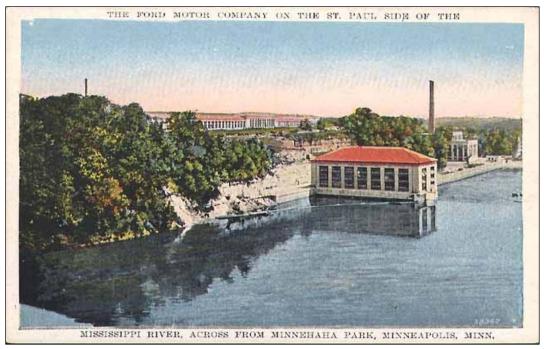
Appendix B: Stormwater Exhibits







Appendix C: Historical Survey Report



Postcard, ca. 1930 (Minnesota Historical Society)

FORD MOTOR COMPANY TWIN CITIES ASSEMBLY PLANT: AN ASSESSMENT OF SIGNIFICANCE AND ELIGIBILITY 966 South Mississippi River Boulevard Saint Paul, Ramsey County, Minnesota

PREPARED BY

ERIN HANAFIN BERG AND CHARLENE ROISE, HISTORIANS PENNY PETERSEN, RESEARCHER HESS, ROISE AND COMPANY THE FOSTER HOUSE 100 North First Street MINNEAPOLIS, MINNESOTA 55401

NOVEMBER 2007

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INTRODUCTION

In June 2007, the Ford Motor Land Development Corporation (Ford Land), the real estate arm of Ford Motor Company, retained Hess, Roise and Company to evaluate the historical significance of the Twin Cities Assembly Plant (often referred to as TCAP) at 966 South Mississippi River Boulevard in Saint Paul, Minnesota. This evaluation was triggered by the planned closure of the plant in 2009 and the pending sale of the Ford property, including the assembly plant, associated buildings, and surrounding land.

Hess Roise was familiar with the property, having evaluated the facility's hydroelectric plant in May 2001 as part of that facility's relicensing by the Federal Energy Regulatory Commission. That report concluded that the dam and the hydroelectric plant are eligible for listing in the National Register of Historic Places, with the assessment based primarily in the context of hydroelectric power development on the Mississippi River and the civic rivalry between Minneapolis and Saint Paul. While the plant was constructed by the Ford Motor Company to provide power for its branch factory, the company's association with the building's design and operation was not evaluated by the 2001 report.¹

Since the hydroelectric plant already has been determined eligible for historic designation, the current study has focused on analyzing the historical significance of the remaining buildings and structures on the property. The following report includes an illustrated narrative history of the development of the plant, laying the groundwork for evaluating the resources. The physical characteristics and integrity of the elements are summarized and the historical significance of individual resources and the property as a whole are assessed.

Charlene Roise, president of Hess Roise, served as the study's principal investigator. Erin Hanafin Berg conducted the research and fieldwork and compiled inventory and contextual information, with the assistance of Penny Petersen. This report was written by Ms. Roise and Ms. Berg. Roger Gaudette, director of asset management, and Chris Johnson, decommissioning project manager, oversaw the project for Ford Land. Brad Bystrom was the primary Ford contact at the plant.

METHODOLOGY

Assessment of the property began with interior and exterior reconnaissance fieldwork, leading to an understanding of the physical characteristics of the plant. Primary consideration was given to components that were built between 1924, when the plant was established, and 1969, when a large addition was made to the west side of the main plant. Areas that appeared to be of historical or architectural interest were noted and additional research was conducted on these resources using visual tools including historic and aerial photographs, site plans, and maps. Elements that were constructed after 1969 were assumed not to be of historical value and were not extensively researched, but their impacts on other resources were noted. Primary written sources, including

¹ Charlene K. Roise and Elizabeth A. Gales, "Response to Additional Information Request, Ford Hydroelectric Project," FERC Project No. 362 / SHPO Project No. 2000-3518, September 2003, available at the State Historic Preservation Office, Minnesota Historical Society, Saint Paul.

documents and publications from the Ford archives that were obtained by Hess Roise during previous studies, were consulted for historical and contextual details. A narrative history of the plant was drafted using this information, as well as broader studies of the development and operations of the Ford Motor Company. Digital photographs were taken of the property to assist with assessment of the site and to illustrate this report. Historic photographs were obtained from the Minnesota Historical Society, the John R. Borchert Map Library at the University of Minnesota, and historic newspapers and other publications.

After a preliminary assessment of the property's historical integrity and significance, Hess Roise consulted with Susan Roth and Dennis Gimmestad, the National Register historian and compliance officer with the State Historic Preservation Office (SHPO), to determine whether the property is eligible for listing in the National Register. Ms. Roth and Mr. Gimmestad toured the site, reviewed the materials that had been prepared by Hess Roise, and concluded that the site does not retain sufficient integrity for historic designation. Amy Spong, historic preservation specialist with the City of Saint Paul and staff to the Saint Paul Heritage Preservation Commission, also was asked to determine whether the property is integrity is insufficient for historic designation. These findings are elaborated later in this report.

CRITERIA FOR HISTORIC DESIGNATION

Properties are assessed for historical significance using the criteria of the National Register of Historic Places and applicable municipal ordinances. While mainly an honorary designation, listing in the National Register or a determination of eligibility for listing requires federally funded or permitted projects to be reviewed in terms of their impacts on historic resources, as directed by Section 106 of the National Historic Preservation Act. Designation under local landmarks laws often includes protective measures including review by the heritage preservation commission of proposed alterations and demolition.

The criteria for National Register and local landmark designation are similar, but the standards for National Register evaluation are higher and more restrictive. Established by the National Historic Preservation Act of 1966, the National Register consists of properties "significant in American history, architecture, archeology, engineering, and culture." To be considered significant, a property must meet one or more of the following criteria:

Criterion A:	be associated with events important to broad patterns of history;
Criterion B:	have a significant association with the life of an important person;
Criterion C:	represent a type, period, or method of construction; or be the work
	of a master; or express high artistic values; or
Criterion D:	yield, or be likely to yield, information important in prehistory or history.
	-

Typically, above-ground properties merit National Register designation based on the first three criteria; Criterion D is usually applied to archaeological sites. Properties can achieve significance on a local, state, or national level. A property may be individually eligible for listing or eligible as a contributing component of a historic district. In addition to significance, a property must

maintain physical integrity to be considered for the National Register, and must be over fifty years old unless it ranks as exceptionally important. The Twin Cities Ford plant was established in 1924 and readily meets the standard of age, but alterations and additions to the plant that have occurred since that time must be considered for their impacts on the integrity of the plant.

Criteria in the City of Saint Paul Legislative Code (Chapter 73) provide for the designation of areas, places, buildings, structures, or similar objects as heritage preservation sites. Properties merit designation under the following criteria:

- 1. The properties' character, interest, or value is part of the heritage or cultural characteristics of the city of Saint Paul, state of Minnesota, or the United States;
- 2. The properties' location is the site of a significant historic event;
- 3. The properties are identifiable with a person or persons who significantly contributed to the culture and development of the city of Saint Paul;
- 4. The properties exhibit a distinguished characteristic of an architectural or engineering specimen;
- 5. The properties are identifiable as the work of an architect, engineer, or master builder whose individual work has influenced the development of Saint Paul;
- 6. The properties embody elements of architectural or engineering design, detail, materials, or craftsmanship that represents a significant architectural or engineering innovation;
- 7. The properties' unique location or physical characteristic is established and familiar in the neighborhoods or communities of the city of Saint Paul.

There is no standard of age for landmark designation, and the review is generally less restrictive than for the National Register.

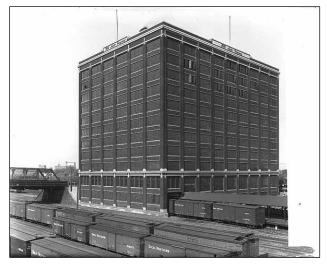
HISTORICAL CONTEXT

Ford Motor Company Branch Assembly Plants

In 1913, only one year before the Ford Motor Company completed construction of a branch plant in downtown Minneapolis, Henry Ford implemented a moving assembly line at his production facility in Highland Park, Michigan. This apparatus transferred the car through the shop, where it was put together in an orderly, continuous progression by assembly line workers, who repeatedly performed the same tasks. The moving assembly line revolutionized the automobile industry and manufacturing in general. Ford and his production engineers refined the design of the assembly line over the following years, and it was not long before the multi-level equipment employed in most of the Ford Motor Company's twenty-five U.S. branch plants—including the ten-story Minneapolis plant—was obsolete. Fewer than ten years after Ford's first assembly line was installed, the company launched a vigorous program of modernization, replacing old branch plants like the one in Minneapolis with sprawling, single-story buildings for the assembly of its popular Model "T"s.²

² Allan Nevins and Frank Ernest Hill, *Ford: Expansion and Challenge, 1915-1933* (New York: Charles Scribner's Sons, 1957), 6, 9, 255-256; Douglas Brinkley, *Wheels for the World: Henry Ford, His Company, and a Century of*

Around the same time, Henry Ford envisioned a fully integrated company where raw materials and refineries, parts production and vehicle assembly, power sources and transportation were all controlled by one entity that commanded the flow of materials and products through the entire manufacturing process. Ford acquired timber land for harvesting lumber and producing charcoal, iron mines for making steel, coal mines and hydroelectric sites for electricity, and railroads and freighters for shipping. He combined some of these components at a massive compound at the River Rouge, outside of Detroit, which was the largest integrated factory complex in the world when



The Ford Motor Company branch assembly plant at 420-428 North Fifth Street, Minneapolis, was built in 1914-1915. (Minnesota Historical Society)

completed in 1928. The Rouge plant produced everything except fully finished Fords, which were put together at the nearby Highland Park plant or branch assembly plants.³

Ford also aimed to decentralize his company's manufacturing operations. He believed that doing so would result in lower costs and higher quality products while providing valuable supplemental work for agricultural families. This practice also would distribute purchasing power to relatively remote areas of the country and fuel the desire for Ford cars, trucks, and tractors. Ford set up "village industries," small-parts factories scattered along streams and rivers where they could run on available waterpower. He built small plants at rural sites along the Rouge River, and later progressed to larger factories on the Huron River in Michigan, the Miami River in Ohio, and the Hudson River in upstate New York. Ford also appreciated river transport as an inexpensive and rational alternative to railroads, which he viewed as undependable. In the early 1920s, Ford insisted that all future manufacturing and assembly plants would be built on navigable waters.⁴

With the foundation for a hydroelectric plant already in place and barge activity thriving in nearby downtown Saint Paul, the site selected for the Twin Cities Assembly Plant readily fulfilled two of Henry Ford's expansion objectives. His personal penchant for rural conservation was also satisfied, as the scenic bluff-top location was still largely undeveloped despite its proximity to two booming cities. Ford secured 167½ acres for the assembly plant through extensive negotiations with the City of Saint Paul and its business boosters on the Greater Saint

"History of the Rouge," The Henry Ford: Ford Rouge Factory Tour, available at

http://www.thehenryford.org/rouge/history.asp; "River Rouge Plant," *Wikipedia*, available at http://en.wikipedia.org/wiki/River_Rouge_Plant.

Progress (New York: Viking Press, 2003), 151-156; Carl Hennemann, "Secrecy Marked Coming of Ford Plant to Saint Paul Thirty Years Ago," *Saint Paul Pioneer Press*, June 14, 1953.

³ Nevins and Hill, Ford: Expansion and Challenge, 200-226, 256; Brinkley, Wheels for the World, 284-287;

⁴ Nevins and Hill, *Ford: Expansion and Challenge*, 226-230, 256.

Paul Committee. Meetings were kept secret, lest Minneapolitans hear of the plans and propose a counteroffer. On January 9, 1923, the *Pioneer Press* broke the news that Ford was coming to Saint Paul with a giant manufacturing plant.⁵

According to an article celebrating the thirtieth anniversary of the announcement, "Henry Ford got everything he asked for when he decided to build his plant in Saint Paul." The federal government granted Ford a fiftyyear license to generate power and the authorization to construct a hydroelectric plant.



This photograph, published in the Saint Paul Daily News on April 26, 1923, shows Henry Ford (far left) and his son Edsel Ford (third from left) with a group of engineers inspecting the site of the planned Ford hydroelectric plant. (Minnesota Historical Society)

The Chicago, Milwaukee, and Saint Paul Railroad extended a transcontinental freight route right to the doors of the plant. The streetcar company agreed to lengthen its Randolph Avenue line from Snelling Avenue to Cleveland Avenue and then west to the Mississippi River—in the middle of winter. The Saint Paul City Council approved construction of a 1½-mile "super highway" (Saint Paul Avenue) from West Seventh Street to Cleveland Avenue. Henry Ford insisted on construction of a bridge over the Mississippi River to carry workers, dealers, and buyers. Minneapolis and Saint Paul joined together in 1927 to share the \$1.3 million cost of constructing the Intercity Bridge.⁶

When the Twin Cities Assembly Plant was completed, the Ford Motor Company boasted that it was the largest branch plant in its organization and that it had been described by architects as "the finest structure devoted to this purpose anywhere." The assembly building was one of three main components to the plant, which also included the hydroelectric plant (the company's largest nationwide, and the only one associated with an assembly plant) and a model steam-power station. The entire plant was hailed as "an outstanding example of industrial utility combined with architectural beauty," in part because of its picturesque location on the bluffs of the Mississippi River. Careful attention was given to landscaping and the layout of the grounds "to harmonize with the city's plans for the development of the parkway" along the river.⁷

⁵ Brinkley, *Wheels for the World*, 217-219; Hennemann, "Secrecy Marked Coming of Ford Plant to Saint Paul Thirty Years Ago."

⁶ Hennemann, "Secrecy Marked Coming of Ford Plant to Saint Paul Thirty Years Ago"; "Hydro Plant to Be Ready by Autumn," *Ford News*, January 15, 1924; Peggie Autin Haschle, "Ford Paved the Way for Commercial Development of Area Sixty Years Ago," *Highland Villager*, March 8, 1993. The Intercity Bridge (Bridge No. 3575, commonly known as the Ford Bridge) was listed in the National Register of Historic Places for its engineering significance in 1989.

⁷ "Work on Twin Cities Plant Well Under Way," *Ford News*, October 15, 1923; "Largest Ford Branch Plant Is Occupied at Twin Cities," *Ford News*, June 1, 1925; "Hydro Station in Operation at Saint Paul," *Ford News*,

The Twin Cities Assembly Plant was designed by Albert Kahn, who was the architect of many Ford facilities including the River Rouge plant. The main building's exterior resembled the Ford



Engineering Laboratory in Dearborn, Michigan, also designed by Kahn and completed earlier in 1924. The manufacturing and assembly building was one story in height "in keeping with the latest Ford standard practice," according to the company's internal newsletter.⁸

The exterior style of Albert Kahn's Ford Engineering Laboratory (left) was reinterpreted in his design for the Twin Cities Assembly Plant. (Federico Bucci, Albert Kahn: Architect of Ford)

Main Assembly Plant

The assembly building measured 1,400 feet long and 600 feet wide, with a total floor area of more than nineteen acres. The front and side facades were clad with buff Indiana limestone. Rectangular in plan, the building had a two-story, hipped-roof block in the center of the west facade that projected from the adjacent wall surfaces. The northwest and southwest corners also projected slightly. Fluted pilasters framed multi-light, steel-sash windows, evenly dividing the facades into seventy-two bays on the east and west and twenty-eight bays on the north and south.

The bays were crowned with a streamlined frieze and a slightly projecting cornice supported by broad dentils. Bas-relief carvings were centered over the windows on the corner blocks. The main entrance was located on the west facade near the 4,400-square-foot

The clerestories that provided natural light to the interior of the main assembly plant are evident on this 1930 photograph of the rear facade. (Minnesota Historical Society)



November 15, 1924; "Introduction" (orientation handout), typescript, [1978?], available at Ford Motor Company Twin Cities Assembly Plant.

Ford Twin Cities Assembly Plant—Assessment of Significance and Eligibility—Page 6

⁸ "Engineering Laboratory at Dearborn Completed," *Ford News*, December 1, 1924; F. A. Fairbrother, "Processes Affect Design of Automobile Factories," *Engineering News-Record* 93 (November 20, 1924): 834-836; Fay Leone Faurote, "How Ford Plans His Layout of Grounds, Buildings, and Plant," *Factory and Industrial Management* 75 (June 1928): 1196-1199.

showroom in the northwest corner, which contained large, plate-glass display windows with sixlight transoms. The building was topped with a hipped, red clay-tile roof at the perimeter and a flat roof in the center with rows of linear, M-shaped clerestories and monitors.⁹

The open interior of the plant was carefully designed to accommodate the snaking assembly line and specialty areas such as the paint shop, with little surplus space. Henry Ford stated how the interiors of his plants were planned:

Our machines are placed very close together—every foot of floor space in the factory carries, of course, the same overhead charge. . . . We measure on each job the exact amount of room that a man needs; he must not be cramped—that would be waste. But if he and his machine occupy more space than is required, that is also waste. This brings our machines closer together than in probably any other factory in the world. . . . Our factory buildings are not intended to be used as strolling parks.¹⁰

At the Twin Cities plant, Ford's fundamental principles—the economy of space and insistence upon cleanliness, lighting, and ventilation—were apparent. Exposed steel columns, beams, and trusses organized the space into large, open bays with minimal structural intrusions. To conserve

floor space for assembly equipment, lavatories and other service areas were elevated on platforms attached to the steel structure of the building. Extensive windows on the exterior walls and angled rooftop monitors flooded the plant with natural light, essential at the time due to poor output from electric lamps. The windows and clerestories could be opened mechanically to provide ventilation. A network of exposed radiator pipes near the ceiling brought hot-water heat—warmed by the steam plant—to the assembly floor.¹¹



The exposed interior structure, pipes, and ductwork can be seen in this photograph of a finished car on the assembly line along the west wall of the plant, 1935. (Minnesota Historical Society)

⁹ "Largest Ford Branch Plant Is Occupied at Twin Cities"; Benjamin M. Cowan, "The Twin Cities Plant of the Ford Motor Company," *Stone and Webster Journal* 37 (July 1925): 60-72.

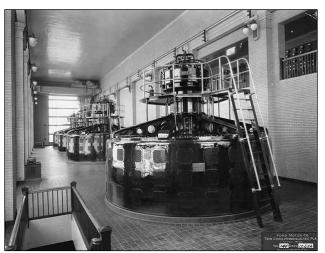
¹⁰ Federico Bucci, Albert Kahn: Architect of Ford (New York: Princeton Architectural Press, 2002), 41.

¹¹ Ibid; Cowan, "The Twin Cities Plant of the Ford Motor Company."

Hydroelectric and Steam Plants

The same economy of design appeared in the two other principal components of the complex, the hydroelectric and steam plants, which were also the work of Albert Kahn. Described shortly after its completion as "a gem of a little building," the hydroelectric plant was similar in style to the main assembly plant. The structure, which measured 160 feet long by about 74 feet wide and stood 48 feet high, was positioned at the base of the river bluff on a foundation poured when the adjacent dam was built between 1913 and 1917. (The foundation had to be modified to house Ford's vertical turbine-generator units, rather than the older horizontal units it had been designed to accommodate.) The plant's rectangular form had an exterior of buff-colored brick with a wide, limestone frieze. Vertical, multi-light windows filled each facade, separated by brick piers. Basrelief sculptures of stylized Indian heads were centered over each of the window bays. The building was capped with a red clay-tile hipped roof.

An enormous generator room that spanned the length of the building and had a thirtysix-foot high ceiling dominated the interior of the plant. Four huge generators, each twenty feet wide and rising eighteen feet above the floor level, filled the vaulted space. Three balconies overlooking half of the generator room housed electrical control equipment. The interior was finely appointed, with red and black tile floors, pressed-brick walls, enameled steel beams with exposed rivets, and polished nickel railings and trim. The large windows flooded the interior with light, aided by double sconces placed high on the capitals of the pilasters separating the windows.



Four 4,500-foot generators filled the main level of the hydroelectric plant. (Minnesota Historical Society)

The generators, each capable of 4,500-horsepower, were operated by vertical turbines located twenty-eight feet below the main level of the plant. Underground transmission lines supplied the electricity to the assembly plant. The hydroelectric plant was placed in service in July 1924. The electricity generated was sold to Northern States Power (NSP), the local utility, until the assembly plant was completed the following spring, and excess power in subsequent years was also sold to NSP.

Although the steam plant lacked the clay-tile hipped roof characteristic of the assembly and hydroelectric plants, its exterior was compatible in style to these other principal buildings. The walls were buff-colored brick, with multi-light, steel-sash windows on all sides. Like the nearby hydroelectric plant, the building also stood at the river level, but the five-story building was formed of two set-back blocks. Only the tapered, cylindrical, buff-colored brick smokestack projected above the bluff.

The five-level interior of the steam plant had walls of glazed brick with rounded corners, red tile floors, and enameled steel beams. There was an exposed staircase with enameled steel treads and

polished nickel railings in the northeast corner, and an adjacent passenger elevator with three sliding, wire-glass doors. Large multi-light windows, two rooftop skylights, and decorative wall sconces lit the vaulted interior spaces.

The steam plant also was hailed for its efficiency, with equipment arranged to maximize heat extraction for electricity generation, manufacturing purposes, and warming the assembly plant. The steam plant contained two boilers fired by pulverized coal and a 5,000-kilowatt turbo generator, with space for one more. Coal traveled underground by belt conveyor from the hopper house on the east side of the assembly plant across an enclosed bridge to the upper level of the steam plant.

Accessory Buildings, Structures, and Objects

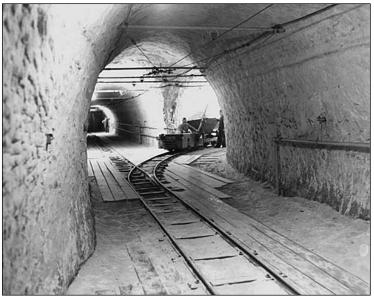
In addition to the three main buildings, the Twin Cities Assembly Plant contained several accessory buildings and structures that contributed to the operational efficiency of the



An enclosed bridge connected the steam plant to an underground conveyor that carried coal from the east side of the assembly plant. The tunnel entrance and barge dock are also shown in this 1936 photograph. (Minnesota Historical Society)

plant. A buff-colored brick, gable-roofed building on the east side pumped oils to the painting and enameling equipment near the center of the assembly floor. Another freestanding, rectangular hopper house near the east wall of the assembly plant had massive doors on the north and west facades, where coal cars deposited their loads as they were pulled through the building. Railroad spur lines approached the plant from the southeast and reached inside the assembly plant in two depressed troughs so that the car and plant floors were level. In a utility tunnel underneath the main assembly plant, a belt conveyor over one thousand feet long moved coal from the hopper house directly to the steam plant. The conveyor passed through an enclosed bridge that connected the tunnel at the edge of the bluff to equipment on the upper level of the steam plant, where the coal was pulverized before being fed to the boilers. A 650-foot wharf between the steam and hydroelectric plants was equipped for barge shipping, and underground transport tunnels extended from the base of the river bluff near the barge dock to parallel freight elevators that rose 150 feet to the main plant. A well house drew water from the Mississippi directly to the boilers of the steam plant, screening it to remove particulates and increase efficiency.¹²

¹² "Largest Ford Branch Plant Is Occupied at Twin Cities"; "New Saint Paul Steam Plant Designed for Fuel Conservation," *Ford News*, February 1, 1925; Cowan, "The Twin Cities Plant of the Ford Motor Company."



Sand for glassmaking was mined under the plant in tunnels that grew in length until operations at the glass plant ceased in 1959. This photograph dates from 1941. (Minnesota Historical Society)

Shortly after the plant was put into operation, additional tunnels were excavated for sand mines and a glass factory was set up inside the assembly plant. The glass plant was an afterthought, constructed only because the silica in the sandstone underneath the site was found to be the proper composition for glassmaking. Also, shipment of completed automobiles by tunnel and barge proved cumbersome and difficult, rendering the tunnels otherwise useless. The glass plant, the only facility of its type in the world housed within an automobile assembly plant, was used continuously from 1926 to 1932, was decommissioned for about five years during the Great Depression,

and was put back into service in 1937 with new equipment and production methods. Over approximately thirty years, the network of glass mine tunnels under the plant grew to more than three miles in length before glassmaking operations ceased at the plant in 1959.¹³

Changes at the Twin Cities Assembly Plant

As an active industrial facility, the plant has experienced numerous interior and exterior changes (see appended site plan). The assembly line in the main building has been reconfigured repeatedly for the production of different models, but the basic orientation of the line has remained constant, with the heavy body work taking place on the east half and the assembly and finish production along the west wall of the plant.

Over a period of about thirty years, the assembly building was expanded nine times, from its original size of approximately 840,000 square feet to over 1.3 million square feet. The first significant addition occurred in 1943, when a 14,000-square-foot warehouse was built on the east side of the main plant, coinciding with conversion of the plant for Pratt and Whitney aircraft engine construction during World War II. In 1961, plant manager F. O. Fason announced the first Ford-led expansion, a 40,000-square-foot addition on the southeast corner of the main plant. Governor Elmer L. Andersen welcomed the announcement, stating, "The news that Ford Motor Company has launched a program of expansion and modernization is welcome and reassuring. We hope an improvement in the Minnesota business climate will result in a further and greatly enlarged expansion of the Saint Paul operation." Andersen's wish was granted only a few months later, when construction began on a second addition—twice the size of the first—near the southwest corner of the plant. Although these improvements were used for storage and

¹³ Hennemann, "Secrecy Marked Coming of Ford Plant to Saint Paul Thirty Years Ago"; Haschle, "Ford Paved the Way for Commercial Development of Area Sixty Years Ago."

shipping and did not directly increase production capacity, they freed other areas of the plant for new assembly equipment and allowed the company "to build a better car," according to Fason.¹⁴

Fewer than eight years later, another expansion added 85,000 square feet to the west side of the plant, bringing the total area of the building to over 1.3 million square feet. The 1969 addition housed a lengthened final assembly line with extra storage along the line, touted as a first step

towards total modernization of the plant. The 1,420-foot length of the addition replaced over three-quarters of the original west facade with a solid wall of ribbed, castconcrete panels. The addition was set back from the northwest corner of the plant, contrasting with the display windows and streamlined Classical ornament of the historic showroom exterior. The sixty-foot width of the addition's north facade was smooth, limestone veneer. It contained an insert of the original bas relief carving of the plant's motto, which had been salvaged from the frieze of the center block on the west facade. The phrase, "Excellence Is Never Granted to Man But as the Reward of Labor," had been selected by Henry Ford when the plant was constructed in 1924.¹⁵



An 85,000-square-foot addition on the west side of the main assembly plant was dedicated on July 16, 1969. (Saint Paul Pioneer Press, July 17, 1969)

The solid facades of the addition, which was designed by the office of Albert Kahn, were distinctly modern in form and materials. The design epitomized the changes that were being made at the plant, in the company, and particularly in the American automobile industry, which was contending with the growing popularity of compact cars and import models. The addition also eliminated the glare and heat of the sun through the plant's original, west-facing windows (a total of 11,025 square feet of glass), which made working conditions uncomfortable.¹⁶

Ford built a 154,000-square-foot, freestanding warehouse south of the main plant in 1966, later linked to the larger building by a series of small additions. Other structures and accessory buildings were constructed along the south and east sides of the main plant in the 1970s and 1980s. In 1984, a 275,000-square-foot vehicle painting facility was erected "on the hill" to the

¹⁴ "History of Twin City [sic] Branch," typescript, May 7, 1952, available at Ford Motor Company Twin Cities Assembly Plant; "Introduction" (orientation handout), [1978?]; "Fason Announces Plans for Twin Cities Addition," *Twin Cities Ford News*, March 22, 1961; "New TC Plant Addition Puts Twenty-two Acres under Single Roof," *Twin Cities Ford News*, November 29, 1961.

¹⁵ "Expanded Ford Plant Dedicated," *Minneapolis Star*, July 17, 1969; "Ford Plant Dedicates Twin Cities Addition," *Saint Paul Pioneer Press*, July 17, 1969.

¹⁶ "Expanded Ford Plant Dedicated"; "Ford Plant Dedicates Twin Cities Addition"; Virgil W. Smith, "Ford, Here Since 1903, Expands Saint Paul Plant," *Saint Paul Pioneer Press*, January 26, 1969; "Building Windows Sprayed for Employee Comfort," *Twin Cities Ford News*, July 11, 1962; Brinkley, *Wheels for the World*, 594-597; Alton F. Doody and Ron Bingaman, *Reinventing the Wheels: Ford's Spectacular Comeback* (Cambridge, Mass.: Ballinger Publishing Company, 1988), 4-12.

east of the plant. An elevated bridge spanning the east yard of the site extended the assembly line to the main plant. Most recently, a collaboration of Ford, the United Auto Workers, and Saint Paul College built an automotive training center near the northeast corner of the main assembly building in 1999.¹⁷

The Mississippi River flooded on April 12, 1952, swamping the ground level of the steam plant and causing the plant to shut down for one week. Damaged in the flood were a 13,000-volt transformer, twenty-four electric motors, seventeen pumps, electric cabling and oil switches, and the starters on all equipment. After the floodwaters receded, earthen fill was placed in the area around the steam plant, barge dock, and tunnel entrance. This raised the entrance of the steam plant one level, and the west-facing windows on the lower section of the plant were later filled in with brick. Three sides of the screen house and the entrance to the nearby tunnels were also buried. A gas-extracting building that had been added to the south side of the steam plant in 1926 was demolished in 1962.¹⁸

Most of the historic accessory buildings and additions are extant, although in some cases they have been further expanded and are now contiguous to the assembly plant. Freestanding modular structures that are scattered around the perimeter of the main plant obscure views of the historic buildings and their original dimensions and character.

Site features such as the railroad spur lines and paved parking and storage areas have expanded over the decades. Some of the landscape features, which were important early characteristics of the property, have also been altered by maturing vegetation or the removal of landscaped areas for parking or building expansion. When the main assembly plant was first constructed, the mature trees along Ford Parkway were retained, but around 1965, a large area with grass and trees was converted to surface parking. Large trees still line the perimeter of the intersection of Ford Parkway and South Mississippi River Boulevard at the northwest



The entire length of the plant's west facade, shown above in 1936, was clearly visible from South Mississippi River Boulevard. Passersby could watch as vehicles progressed down the assembly line next to the westfacing windows. The northwest corner housing the showroom is near the center of the photograph. (Minnesota Historical Society)

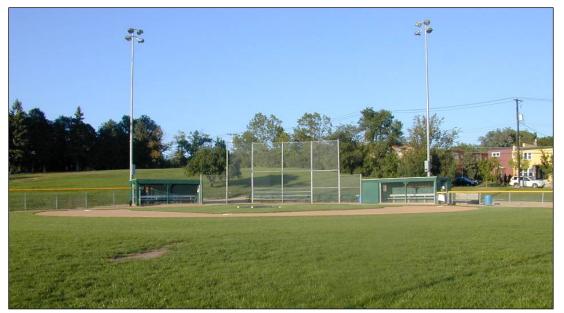
¹⁷ "Progress Report" (photograph caption), *Twin Cities Ford News*, July 15, 1966.

¹⁸ "The Year of the Big Flood," Twin Cities Ford News, April 18, 1962.

corner of the property. The open space along the west side of the assembly plant has evolved in the opposite manner. Historic photographs show that the original plantings were low and scattered, with a wide expanse of lawn affording clear views of the windowed facade. Now, there are many mature trees in this area, obscuring more of the building than was originally intended. The trees might have been planted around the time of the 1969 addition, which altered the original facade.

The Ford Motor Company property extends several hundred feet east of the assembly plant and all the way to Cleveland Avenue along its southern border. The east yard area was once occupied by an oval test track, built in 1942 for the testing of armored personnel carriers manufactured at the plant during World War II. Aerial photographs seem to indicate that Ford employees planted gardens within the track during the Depression and war years, a practice that was promoted by Henry Ford at locations throughout the country. The test track was removed in 1966 and the area leveled. The land was used for open storage until a shopping center was developed on the site in the mid-1970s. The paint plant, built in 1984, took up the remainder of the site.¹⁹

Near the intersection of Cleveland and Montreal Avenues stands a cluster of three baseball fields on property owned by Ford Motor Company. The fields have been used by the Little League organization since 1954, when the automobile company first granted the Highland Civic Association use of the site. One field was established that first season, with concrete-block dugouts, a concession stand, and wooden bleachers. Two similar fields were added in the early 1960s, and the original concession stand was replaced with a larger hipped-roof building that also housed restrooms. Two sets of dugouts, including the ones at the original field, have since been raised entirely above ground, but excavated dugouts are present at the southernmost field. The ball fields were in seasonal use until the summer of 2007, when high levels of contaminants were found in the soil and play was suspended at the site.



Ford-Highland Field was established in 1954 on Ford Motor Company property near Cleveland and Montreal Avenues. Two additional fields were constructed in the early 1960s.

¹⁹ Nevins and Hill, Ford: Expansion and Challenge, 589.

FINDINGS

Areas of Significance

The Twin Cities Assembly Plant has potential significance in two different historical contexts due to its role in the physical and economic expansion of the Ford Motor Company and its influence on the development of the Highland Park neighborhood and the cities of Saint Paul and Minneapolis.

When constructed in 1924, the Twin Cities Assembly Plant was the largest of several branch plants built by Ford at locations around the country. The company first developed branch assembly plants in the early 1910s—the downtown Minneapolis plant, built in 1914, was part of this first wave of expansion. By 1916, Ford operated twenty-eight branch factories nationwide and had fifty-one plants that produced parts and automobile components. Branch plants, which provided convenient shipping points for outlying territories, were essential to meeting the national consumer demand for Ford's single automobile, the Model "T", which revolutionized the industry with its standardization and affordability.²⁰

As Henry Ford refined production methods, the company needed to replace the earlier multistory factories, which had been constructed for stationary assembly of vehicles and could not be retrofitted with conveyors and assembly lines. Ford embarked on a second expansion phase beginning in 1921, planning facilities in Saint Paul as well as in Chicago, Memphis, Charlotte, Norfolk (Virginia), and Jacksonville, where assembly plants were under construction by 1924. At the same time, additions were made to older branch plants in Kansas City and Oklahoma City. A few years later, plants were established or expanded in cities including Philadelphia, Cleveland, Dallas, Seattle, Long Beach and Richmond (California), Edgewater (New Jersey), and Alexandria (Virginia).²¹

The designs for these single-story assembly buildings were based on the company's successful prototype in Highland Park, which began to take shape in 1909, and its immense River Rouge compound, begun in Dearborn in 1917. These suburban Detroit complexes were designed by industrial architect Albert Kahn, beginning Kahn's long association with Ford. Most of the branch plants constructed through the 1940s also were designed by Kahn, and his office continued to be employed by Ford into the 1960s.²²

Of the eight facilities built in the early to mid-1920s, only the Twin Cities and Chicago plants have been in continuous operation. The Memphis, Charlotte, and Jacksonville facilities were closed during the Great Depression and never reopened by Ford. The Oklahoma City factory was reorganized as a parts depot in 1931, which then closed in 1967. The Kansas City plant was replaced by a new facility in 1940. Many of the later branch assembly plants designed by Kahn also are no longer associated with Ford, although some still stand. Notably, the 1931 Richmond Assembly Plant in the San Francisco Bay area has been listed in the National Register and

²⁰ Nevins and Hill, Ford: Expansion and Challenge, 255.

²¹ "Six Thousand Cars Yearly to Be Added to Branch Capacity," Ford News, March 15, 1924; Bucci, Albert Kahn: Architect of Ford, 62-64; Nevins and Hill, Ford: Expansion and Challenge, 574. ²² Bucci, Albert Kahn: Architect of Ford, 38-57.

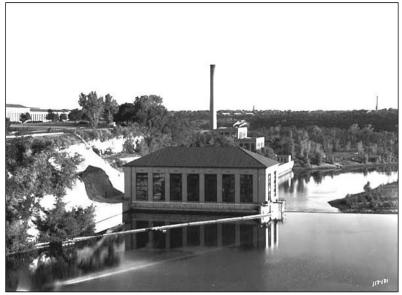
renovated to house the Rosie the Riveter National Park, interpreting home-front efforts during World War II. 23

As evidenced by the failure of so many plants, the Ford Motor Company's expansion from the 1910s through the 1930s was impulsive and uneven, guided more by Henry Ford's zeal than his business sense. During this time, the company itself was unorganized and somewhat ineffectual. In the mid-1920s, Ford's Model "T" fell out of favor with consumers and the company had difficulty maintaining its market share in competition with the variety of models produced by General Motors and Chrysler. Ford decided to scrap the Model "T" in 1926, just a short time after opening a number of new plants, including the Twin Cities Assembly Plant. The factories were closed down and retooled to produce the Model "A". Fortunately for Ford, the Model "A" was an equal success and the premature building investment left the company well positioned for production—that is, until the full effects of the Great Depression hit the automobile market in 1931. Ford shuttered dozens of plants nationwide; the Twin Cities facility was closed from 1933 to 1935.

One factor that made the Twin Cities Assembly Plant more successful than most was its hydroelectric plant, which provided an inexpensive supply of electricity during even the most economically difficult years. Although the plant was shut down for two years during the Great

Depression, it was able to continue operating the hydroelectric plant, selling the electricity to local utilities.

The Twin Cities plant might also have been favored by Henry Ford because it successfully embodied so many of his personal and business philosophies. The factory was located on a scenic site, outside of the central city. It had easy access to multiple forms of transportation, although Ford's aspirations to ship completed vehicles by barge proved cumbersome and unfruitful. It also fulfilled his fascination with hydroelectric power, which he



The Ford Hydroelectric Plant, shown above in 1936, has been in operation since it first went on-line in 1924. It still provides nearly all the electricity needed by the plant. (Minnesota Historical Society)

had pursued on a smaller scale at numerous other sites. The Twin Cities hydroelectric plant was, in fact, the largest in the Ford Company and the only one capable of supplying all of the electricity needed by its accompanying assembly plant.

²³ In addition to eight assembly plants that are listed in the National Register, several Ford plants have been documented for the Historic American Engineering Record (HAER): Ford Motor Company Long Beach Assembly Plant (HAER No. CA-82), Rosie the Riveter National Historical Park, Ford Assembly Plant (HAER No. CA-326-H), and Ford Motor Company Edgewater Assembly Plant (HAER No. NJ-53).

The Twin Cities Ford plant was important outside of the company, as well. The plant's presence fueled waves of residential and commercial development in Highland Park, as the surrounding area of Saint Paul soon became known. The neighborhood was not the only geographical entity to be named in honor of the company. The street that borders the north edge of the plant was called Edsel Avenue before its current name—Ford Parkway—was determined.

Real estate speculation was rampant following the announcement of Ford's expansion to Saint Paul, but the difficulties of the Great Depression resulted in most of the residential lots standing vacant until after World War II. Historic aerial photographs illustrate the pace of development. In the 1920s, the land surrounding the plant was mostly vacant and wooded. Few houses stood on the Minneapolis side of the river, even though the Intercity Bridge was opened in 1927. By 1930, several commercial and apartment buildings had been built in the vicinity of the plant. Within the decade, several blocks of single-family houses were constructed on both sides of the Mississippi only a short distance from the plant. The Highland Village Apartments was built by the Works Progress Administration (WPA) directly to the east of the Ford plant in the late 1930s. By 1951, the commercial area at the intersection of Ford Parkway and Cleveland Avenue was well established and blocks of single-family houses completed the neighborhood. Similar growth took place on the west side of the river, especially north of East Forty-sixth Street.



This aerial photograph from about 1926 shows the largely undeveloped areas of Saint Paul to the north and east of the Ford Twin Cities Assembly Plant and South Minneapolis on the opposite side of the Mississippi River. (Minnesota Historical Society)

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The increasing demand for water service to the area also indicates the rate of growth. The year that the Ford assembly plant was constructed, the City of Saint Paul built a tiered, underground water reservoir at Snelling Avenue and Ford Parkway. Four years later, the 200,000-gallon Highland Park water tower was completed. By 1959, residential development had grown to the extent that another reservoir and a one million-gallon water tower were needed to meet the needs of the area.²⁴

While it is not possible to directly measure the influence of Ford on the growth rate of Highland Park and South Minneapolis, the plant clearly served as an anchor to the development of these neighborhoods.



Assessment of Integrity

The Twin Cities Assembly Plant contains several buildings and

By the mid-1950s commercial areas and residential blocks were well established in the Highland Park neighborhood of Saint Paul. (Minnesota Historical Society)

other resources that date from its original period of construction. The three principal structures the main assembly building and the hydroelectric and steam plants—are present. The historic integrity of the hydroelectric plant is excellent; although the equipment has been updated, the building itself has experienced few exterior or interior alterations. The main building and steam plant, on the other hand, have had numerous alterations that compromise their historic integrity.

The main assembly building—the largest individual resource at the plant—has experienced the most change. The exterior of the building was dramatically altered in 1969 by the addition along its west facade. Multiple additions on the south side of the building and the enclosure of the window bays on the north facade also have had deleterious effects. These additions and alterations do not contribute to the significance of the building on the basis of age (they are fewer than fifty years old) and they do not appear to be of exceptional importance, as would be required to meet National Register Criteria Consideration G.

²⁴ Highland Water Tower information display, available from the Saint Paul Regional Water Services, Saint Paul, Minnesota.

Many of the assembly building's distinctive historic features do remain, such as six of the original window bays on two facades at the northwest corner of the building. These windows, which once opened to the company showroom, are largely intact, with six-light vertical transoms

over modern, six-light display windows. The transom mullions, lower rail, and outside window frames are cast iron with scrollwork motifs, but the transom glass has been replaced by insulated, painted sheet metal. Original cast-iron lamps project from the fluted pilasters between the windows.

Four more bays on the west facade retain their original dimensions and some historic characteristics. Original steel, multi-light transoms and sashes surround a modern door that replaced the original main entrance to the south of the showroom area. The remaining three openings on this facade have



The northwest corner of the plant, which was the location of the historic salesroom, is relatively intact.

modern, nine-part windows. On the north facade, the two window bays east of the corner block have steel, multi-light transoms over modern, six-part windows. The original window bay dimensions are intact along the remainder of the north facade, although in most cases the openings have been filled with painted concrete block. Many of the bays contain one or two small, fixed-pane windows.

The hipped, clay-tile roof of the original structure is intact, but not visible at present, as it sits behind the flat roof of the 1969 addition. The plank sheathing of the entire roof and the vaulted, hipped form of the original center pavilion can still be seen inside the plant.



The historic appearance of the west facade has been eclipsed by the 1969 addition (shown at right) and mature trees.

Despite the frequent reconfigurations of the assembly line, the basic structural elements of the main plant interior are intact. Distinctive features such as the exposed steel columns, beams, and trusses, elevated restrooms and service areas, and network of plumbing and heating pipes are evident. The glass in the original clerestories and monitors has been replaced with corrugated,

insulated fiberglass, but the structures themselves are unaltered.

The historic integrity of the steam plant also has been compromised by window enclosures, primarily on the entire west facade. When the site surrounding the steam plant was regraded in the 1950s to prevent future flood damage, other historic resources in the area were affected. Three facades of the screening house to the west of the steam plant were also buried, so that only the flat roof of the building is immediately visible. The nearby entrance to the glass and transport tunnels is intact but buried so that only the top two steps of the entrance wall are visible. A concrete slab with two vertical access hatches sits in front of the tunnel wall, and the exterior view gives no indication of the extensive tunnel system beyond. The tunnels were a pivotal element of the assembly plant at the time of its construction and would be critical in interpreting the history of the plant. The barge dock, which was another important feature of the site, has had no significant alterations.



The window openings on the west facade of the steam plant were enclosed following flooding in the 1950s.

The changes to the Twin Cities Assembly Plant must also be assessed within the context of the Ford organization. Since the plant initially was designed with an "economy of space," there was an obvious need for expansion as production grew over the course of the twentieth century. Inherent in Ford's conception was an idea of industrial production susceptible to continuous, necessary revisions. All continually operating Ford Motor Company assembly plants, including the one in the Twin Cities, have experienced some degree of physical change. In fact, most that have not were decommissioned by Ford only a short time after they were completed and were never given the opportunity to grow. Although no longer in use, plants built around the same time as the Twin Cities Assembly Plant might better represent the architectural characteristics of the company's mid-1920s expansion. Other plants that were earlier examples of the evolution of assembly line manufacturing, such as the facilities in downtown Louisville, Cincinnati, Omaha, and Cleveland, are listed in the National Register. Most of these buildings have been adaptively reused as commercial or residential spaces.²⁵

²⁵ Bucci, *Albert Kahn: Architect of Ford*, 42. Assembly plants buildings from the mid-1920s that appear to be relatively intact include those in Memphis, Charlotte, Alexandria, and southwest Louisville.

Although some of the changes to the main assembly building and steam plant could be reversed, restoring their historic appearance, numerous later additions to the plant would be more difficult to undo. Ultimately, the individual buildings and the site as a whole have experienced so many alterations and additions that the plant is not sufficiently intact to convey its age and importance.

The Ford-Highland Fields have no apparent significance pertaining to the Ford Motor Company or the Twin Cities Assembly Plant. Evaluating their



Window openings on the north facade of the main assembly building have been enclosed with concrete block.

potential significance in the context of recreation and sports is beyond the scope of this project. In any event, the ball fields could only be eligible for listing in the National Register under Criterion A (Recreation) if they qualified as exceptionally important under Criteria Consideration G, because their current configuration is a product of the 1960s expansion—too recent to meet the National Register's fifty-year threshold.

CONCLUSION

While the Ford Motor Company Twin Cities Assembly Plant might meet criteria for listing in the National Register of Historic Places and designation by the Saint Paul Heritage Preservation Commission, its integrity is too compromised for the property to qualify for either. The hydroelectric plant is eligible for National Register listing under Criterion A in the area of Industry, as previously determined. Further study would be needed to assess the potential for the significance of the Ford-Highland Fields under National Register Criterion A in the area of Recreation, but the fields would have to be "exceptionally important" under Criteria Consideration G because of their relatively recent vintage.

Although the plant's poor integrity disqualifies it for local or national designation, this does not negate its historical significance to the city of Saint Paul, the state of Minnesota, or the Ford Motor Company. New development on this site should incorporate references to the history of the plant and its importance to the community (for example, adapting design motifs; using salvaged materials—or even reusing structures, if feasible; acknowledging segments of the layout of the plant, such as the assembly line, and the overall facility; creating an exhibit). Prior to the plant's demolition, the entire facility should be documented for the Minnesota Historic Property Record with large-format archival photographs and a written narrative explaining the significance of the plant, including the context of the mid-1920s wave of national expansion.

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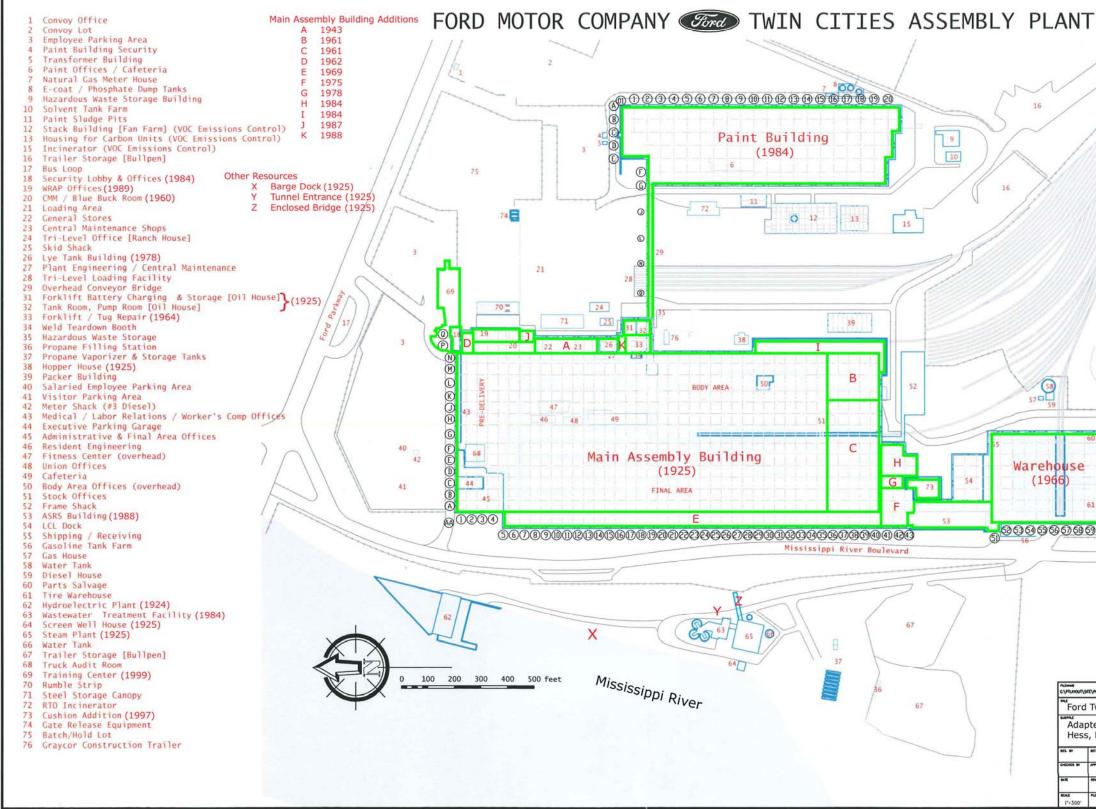
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APPENDIX



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Ford Twin Cities Assembly Plant—Assessment of Significance and Eligibility—Page 24



Appendix D: Transportation Analysis Report



Memorandum

SRF No. 11967.01

To:	Randy Newton, PE, PTOE, Traffic Engineer	I hereby certify that
	City of Saint Paul	prepared by me or supervision and tha
From:	Matt Pacyna, PE, Principal	Licensed Professiona
	Brent Clark, PE, Senior Engineer	the laws of the State of
Date:	October 15, 2019	lat to
Subject:	Ford Site AUAR Transportation Analysis	Matthew R. Pacyna, P License No : 47670

at this report was under my direct at I am a duly al Engineer under of Minnesota.

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License No.: 47670

Introduction

SRF has completed a transportation analysis for the Ford Site Alternative Urban Area-wide Review (AUAR). The Ford Site is generally bounded by Ford Parkway to the North, Mississippi River Boulevard to the West and South, and Cleveland Avenue to the East. The main objectives of this memorandum are to document the assumptions, methodology, stakeholder coordination, findings, and recommendations associated with the Ford Site AUAR Transportation Analysis. SRF has coordinated with project stakeholders throughout the analysis process to confirm and review the study scope, analysis assumptions, methodology, findings, and mitigation, including agency representatives from Saint Paul, Minneapolis, Minneapolis Park and Recreation Board, Ramsey County, Hennepin County, Minnesota Department of Transportation (MnDOT), Metro Transit, and Ryan Companies.

The AUAR transportation analysis is an independent study that reviews potential site design scenarios and identifies area transportation impacts and mitigation for all users and transportation modes. Although some issues and mitigation identified are based on key traffic metrics such as level of service and queuing, they also must consider other parts of the transportation system, such as pedestrians, bicyclists, and transit. This study recognizes that some mitigation may conflict with other transportation modal priorities and therefore are offered for consideration. The mitigation identified is intended to provide discretion to stakeholders with respect to transportation priorities and implementation. The following information summarizes the Ford Site AUAR transportation analysis process and findings.

Analysis Background

A previous study titled the Saint Paul Ford Site: Multimodal Transportation Study and Report was developed by Nelson and Nygaard and SRF Consulting Group, Inc. (SRF), dated May 2017. This study evaluated preliminary Ford Site master plan concepts, helped refine the overall Ford Site Master Plan, and identified potential transportation mitigation measures. The previous study evaluation focused on vehicular, pedestrian, and bicycle operations external to the site, focusing along Ford Parkway from the Mississippi River to Cleveland Avenue, as well as key intersections along Cleveland Avenue and Saint Paul Avenue, south of Ford Parkway. As noted earlier, the Ford Site AUAR transportation analysis is an independent study separate from this previous analysis.

Agency Coordination

SRF worked closely with area agencies to define the transportation system study area, scope of the traffic analysis, and review assumptions and findings. This agency coordination included technical representatives from:

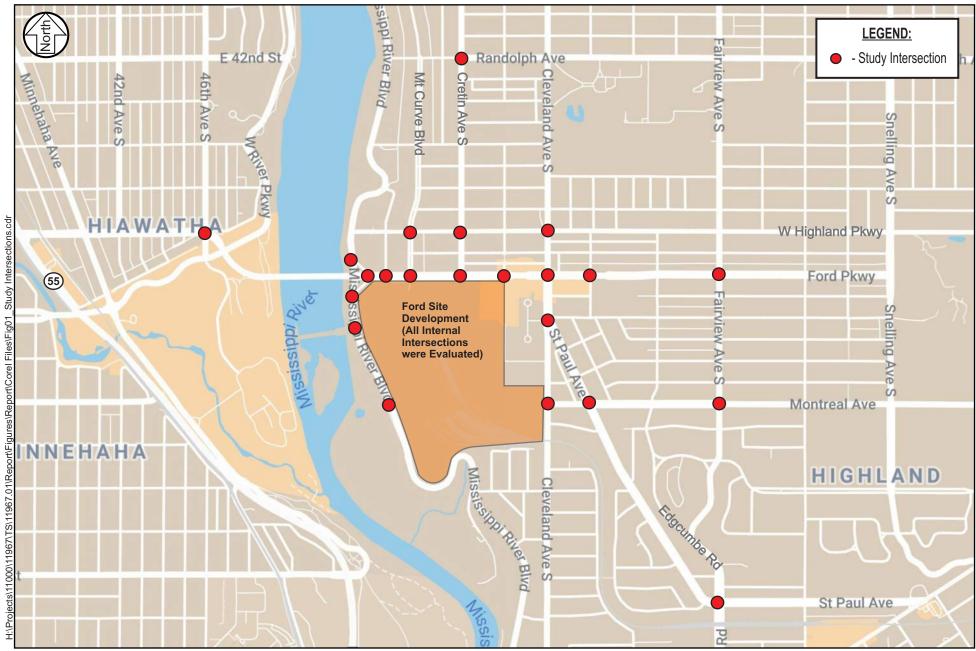
- MnDOT
- Metro Transit
- Ramsey County
- Hennepin County
- Saint Paul
- Minneapolis
- Minneapolis Park and Recreation Board
- Kimley-Horn & Associates
- Ryan Companies

Regular coordination meetings occurred weekly throughout the study process beginning in May 2019, at the formal initiation of the AUAR process. In addition, there were three agency coordination meetings to review the study scope, preliminary findings, and draft mitigation. These meetings provided each agency the opportunity to provide feedback on the study process, assumptions, and findings. The following provides a summary of the agency meetings and key goals.

- Agency Meeting 1 Traffic Analysis Scoping (September 12, 2018)
- Agency Meeting 2 Assumptions/Regional Traffic Impact Review (May 29, 2019)
- Agency Meeting 3 Preliminary Findings/Mitigation Review (June 12, 2019)

Transportation System Study Area

A map depicting the primary study intersections identified by the project team and other agencies is provided in Figure 1. Note that the internal Ford Site roadways, intersections, and connections to public roadways are included as part of the transportation system study area. Additional locations outside of the primary study intersections were reviewed from a planning-level perspective. This planning-level review considered a wider geographic area, including Minnesota (Mn) Trunk Highway (TH) 55 (Hiawatha Avenue) to the West, Mn TH 5 (7th Street) to the South, Mn TH 51 (Snelling Avenue/Montreal Avenue) to the east, Cretin Avenue near Marshall Avenue (County Road 35), and Saint Paul Avenue near MN TH 5 (7th Street). Further discussion regarding the planning-level review is provided later in this document.





Study Intersections

Ford Site AUAR Transportation Analysis City of Saint Paul

Figure 1

0011967 August 2019

Existing Conditions

The existing conditions were reviewed to establish a baseline to identify any future impacts associated with the future AUAR scenarios. The evaluation of existing conditions includes various data collection efforts, identification of current transportation characteristics (roadways, pedestrians, bicycles, and transit), and an intersection capacity analysis, which are outlined in the following sections.

Data Collection

Weekday a.m. and p.m. peak period vehicular turning movement and pedestrian and bicyclist counts were collected at the following locations in May 2019 (between May 8th and May 22nd) during typical weekday conditions (i.e. a Tuesday, Wednesday, or Thursday) while area schools and universities were still in session:

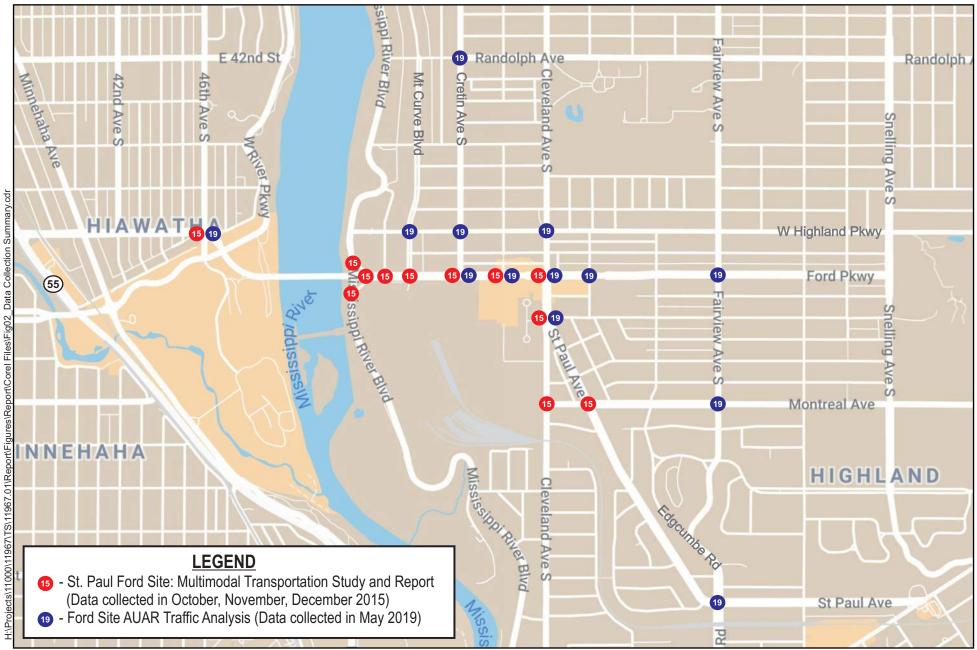
- 46th Street/46th Avenue (Minneapolis)
- Ford Parkway/Cretin Avenue
- Ford Parkway/Finn Avenue
- Ford Parkway/Cleveland Avenue
- Ford Parkway/Kenneth Street
- Ford Parkway/Fairview Avenue
- Cretin Avenue/Randolph Avenue

- St Paul Avenue/Edgcumbe Road
- Montreal Avenue/Fairview Avenue
- Highland Parkway/Mount Curve Boulevard
- Highland Parkway/Cretin Avenue
- Highland Parkway/Cleveland Avenue
- Cleveland Avenue/Saint Paul Avenue

In addition to the new data, previously collected vehicular turning movement and pedestrian counts from Fall of 2015 were reviewed, which was prior to completion of the A-Line Bus Rapid Transit service. The following study intersections were previously collected in October, November, or December of 2015 and were adjusted and balanced based on the newly collected data to reflect current year 2019 conditions.

- Mississippi River Boulevard at Ford Parkway North
- Mississippi River Boulevard at Ford Parkway South
- Ford Parkway/Mississippi River Boulevard
- Ford Parkway/Woodlawn Avenue
- Ford Parkway/Mount Curve Boulevard
- Cleveland Avenue/Montreal Avenue
- Saint Paul Avenue/Montreal Avenue

The data collected in May 2019 is generally consistent with the previous counts as area traffic volumes have been relatively stable over the past 10 to 15-years. Reviewing data sets from multiple years and different time periods, provides insight into how area traffic volumes within the study can fluctuate based on a number of factors, such as park and school activity. A data collection summary is shown in Figure 2. Historical traffic volume context with respect to Ford Site operations is provided later in this document.





Data Collection Summary

Ford Site AUAR Transportation Analysis City of Saint Paul Figure 2

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Roadway Characteristics

A field assessment was completed to identify various roadway characteristics within the transportation system study area, such as jurisdiction, functional classification, general configuration, posted speed limit, and presence of on-street parking or a bicycle facility. A summary of these roadway characteristics is shown in Table 1. Note that these are general characteristics and that there are some deviations within the area or segments of the roadways.

Roadway	Jurisdiction	Functional Classification	General Configuration	Posted Speed Limit (mph)	On-Street Parking	Ped (P) or Bike (B) Facility
Ford Parkway	County	Minor Arterial	4-/2-lane divided	30 mph	Yes	Ρ, Β
Cleveland Avenue	City/County	Minor Arterial	4-/2-lane undivided	30 mph	Yes	Ρ, Β
St Paul Avenue	County	Minor Arterial	4-lane divided	30 mph	Yes	Р
Edgcumbe Road	City/County	Minor Arterial	4-lane divided	30 mph	No	Р
Highland Parkway	City	Major Collector	2-lane divided	30 mph	Yes	Р
Montreal Avenue	City	Major Collector	2-lane divided	30 mph	Yes	Ρ, Β
Mississippi River Blvd	City	Local Road	2-lane undivided	25 mph	Yes	Ρ, Β
Mount Curve Blvd	City	Local Road	2-lane divided	30 mph	Yes	Р
Cretin Avenue	City	Minor Arterial	2-land undivided	30 mph	Yes	Р
Fairview Avenue	City	Minor Arterial	3-lane	30 mph	No	Ρ, Β

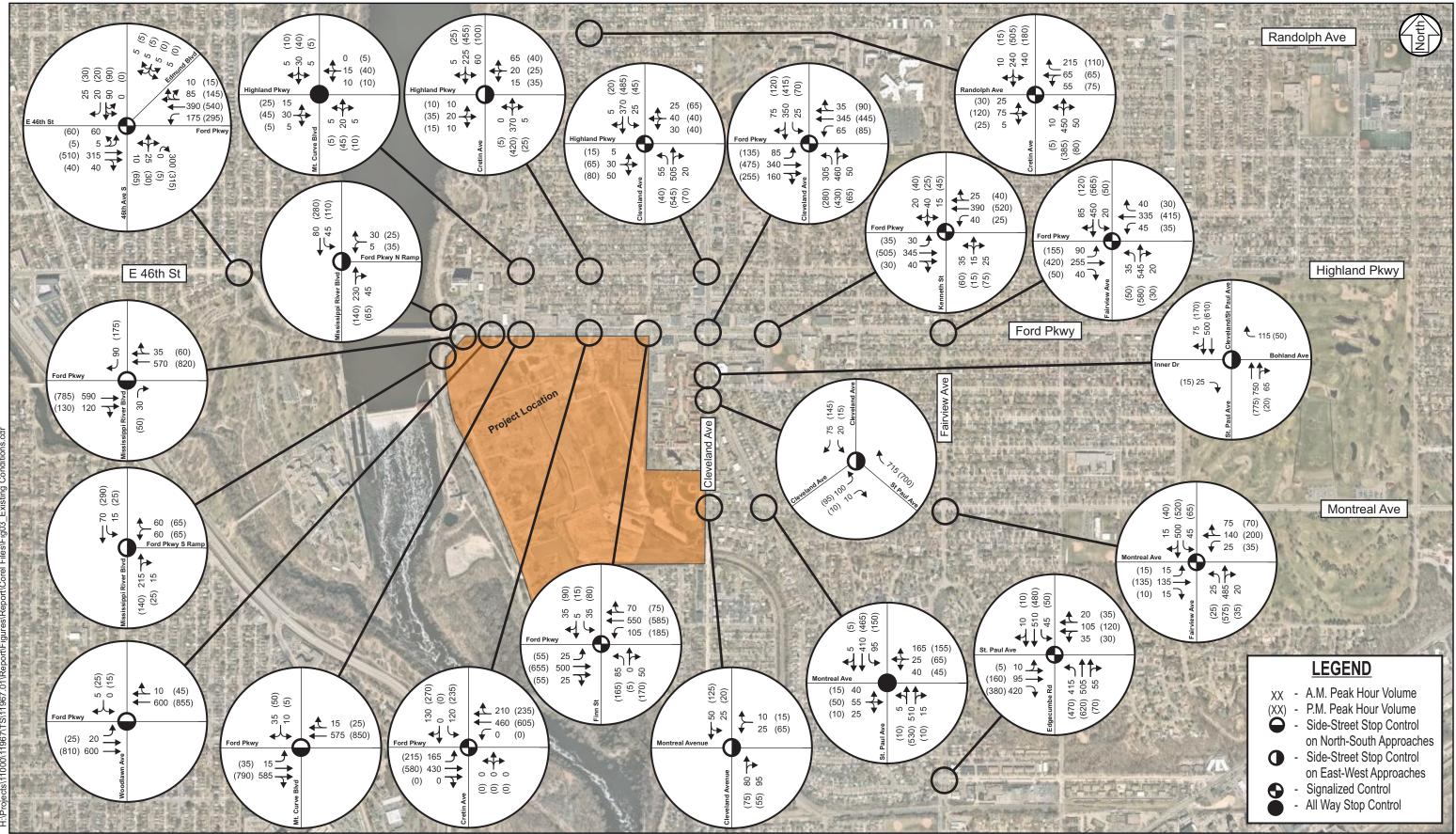
Table 1. Existing Roadway Characteristics

In addition to the general roadway characteristics, there are varying types of traffic controls within the transportation system study area. The following study intersections are signalized:

- 46th Street/46th Avenue (Minneapolis)
- Ford Parkway/Cretin Avenue
- Ford Parkway/Finn Avenue
- Ford Parkway/Cleveland Avenue
- Ford Parkway/Kenneth Street

- Ford Parkway/Fairview Avenue
- Cretin Avenue/Randolph Avenue
- St Paul Avenue/Edgcumbe Road
- Montreal Avenue/Fairview Avenue
- Cleveland Avenue/Highland Parkway

The St Paul Avenue/Montreal Avenue and Mount Curve Boulevard/Highland Parkway intersections operate under all-way stop control. The remaining study intersections are unsignalized with side-street stop control. Existing geometrics, traffic controls, and volumes are shown in Figure 3. Average daily traffic (ADT) volumes are included in the Appendix.





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Existing Conditions

Ford Site AUAR Transportation Analysis City of Saint Paul

Pedestrian and Bicycle Characteristics

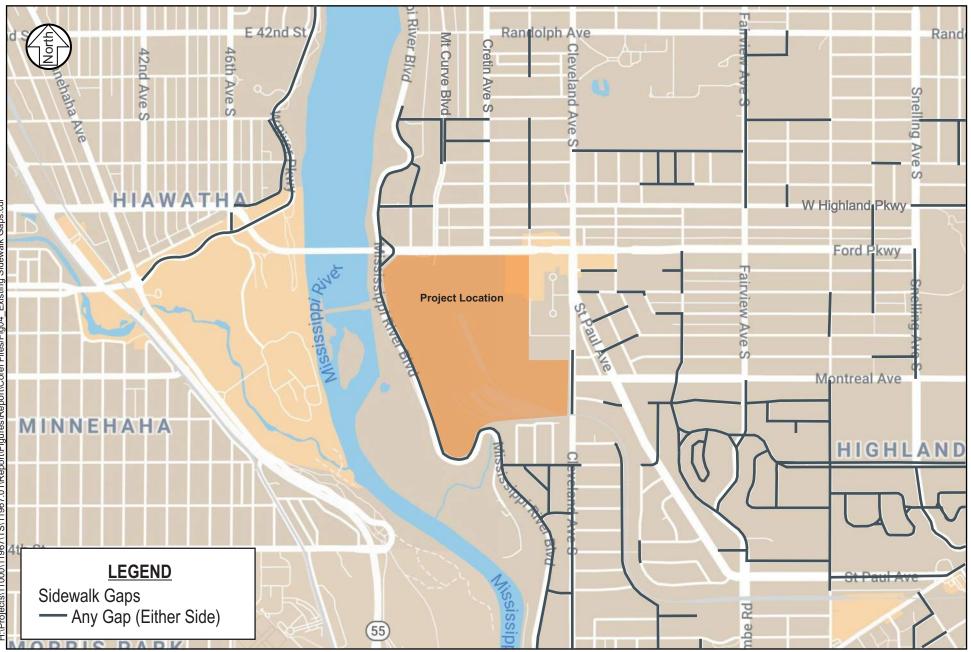
The City of Saint Paul provided their pedestrian and bicycle network database to help understand current facilities within the transportation system study area and identify potential gaps within the current system. Summaries of the existing sidewalk gaps and bicycle facilities within the transportation system study area are illustrated in Figure 4 and Figure 5, respectively. Note that pedestrian and bicycles facilities and connections internal to the Ford Site are discussed later in this document.

In general, the area surrounding the Ford Site is well served with sidewalks, with the primary exception being the neighborhood east of St Paul Avenue and south of Montreal Avenue. Although the area is generally well served by pedestrian facilities there are still a number of sidewalk gaps in the surrounding area as shown in Figure 4. The City of Saint Paul has a policy of constructing sidewalks on both sides of every street as part of street construction projects, so over time it is expected that these gaps will be filled.

From a bicycle perspective, there are facilities within the area of varying types, including off-street paths, dedicated bike lanes, bike boulevards, striped shoulders and enhanced shared lanes as shown in Figure 5. The *City of Saint Paul Bicycle Plan* identifies a bicycle facilities plan for the City including the roadways in and around the Ford Site. The Metropolitan Council also established the *Regional Bicycle Transportation Network* (RBTN) in January 2015, which coincides with the *City of Saint Paul Bicycle Plan*. Although a portion of the proposed bicycle network surrounding the Ford Site is in-place, there are other bicycle facilities planned that have yet to be implemented. A summary of the existing and planned bicycle facilities is provided in Table 2. Further discussion regarding the future pedestrian and bicycle networks and their relation to the Ford Site is provided later in this document.

Roadway	Existing Facility	Planned Facility (per Saint Paul Bicycle Plan)
Ford Parkway	Bike Lanes (east of Kenneth/Howell)	Enhanced Shared/In-Street Lanes
Cleveland Avenue	Bike Lanes (north of Eleanor Avenue)	Enhanced Shared/In-Street Lanes
St Paul Avenue	None	In-Street Lanes
Edgcumbe Road	None	In-Street Lanes
Highland Parkway	None	Enhanced Shared Lanes
Montreal Avenue	Bike Lanes (East of Fairview); Enhanced Shared Lanes (West of Fairview)	Enhanced Shared/In-Street Lanes
Mississippi River Boulevard	Bike Lane (Southbound); Shared Use Path	Off-Street Path/In-Street Lanes
Fairview Avenue	Striped Shoulders	In-Street Lanes

 Table 2.
 Existing and Planned Bicycle Facilities

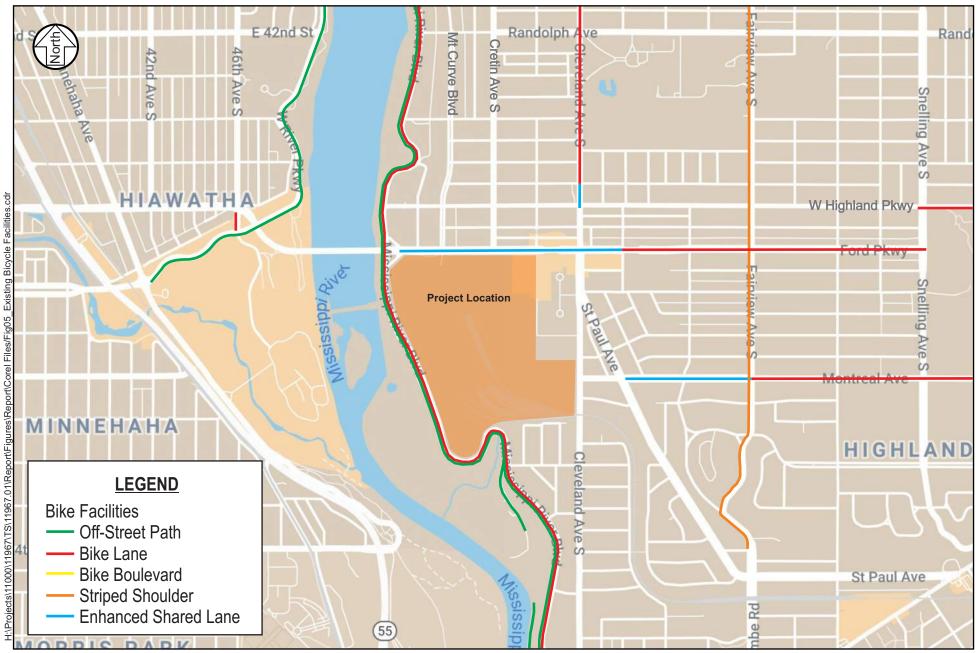




0011967 August 2019 **Existing Sidewalk Gaps**

Ford Site AUAR Transportation Analysis City of Saint Paul

Figure 4





0011967 August 2019

Existing Bicycle Facilities

Ford Site AUAR Transportation Analysis City of Saint Paul

Figure 5

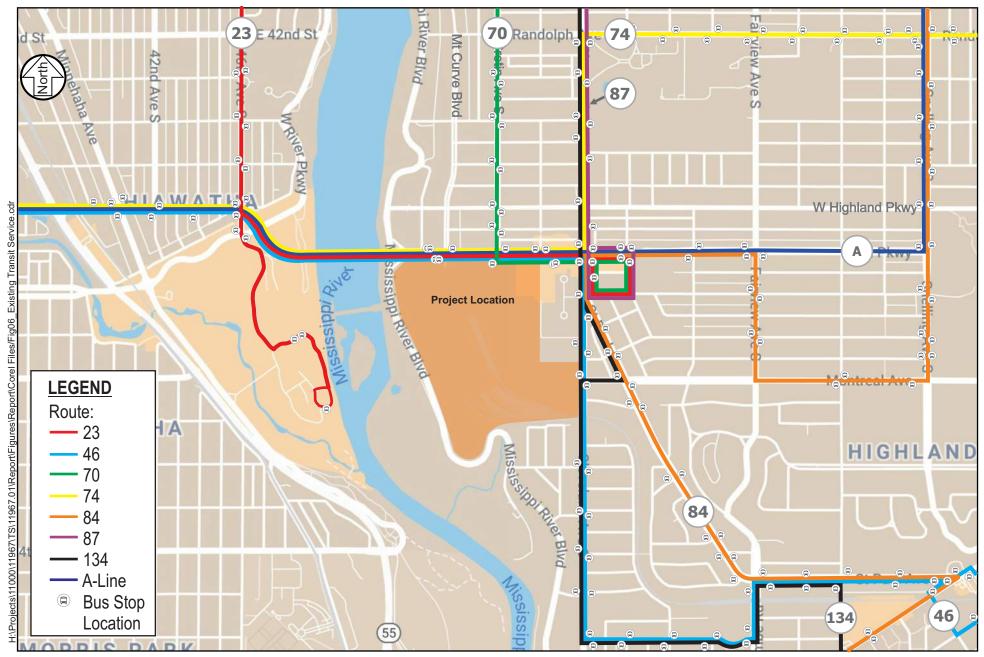
Transit Characteristics

The Ford Site is well served from existing transit, including the Metro Bus Rapid Transit (BRT) A-Line, as well as Routes 23, 46, 70, 74, 84, 87, and 134 in varying frequencies and destinations. These routes provide connectivity to other transit options throughout the Twin Cities Metropolitan Area, including the Blue Line LRT. Note that the A-Line BRT is an enhanced transit service with limited stop service, high customer amenity stations, and transit signal priority capabilities. The current transit service and future planning is summarized in the *Draft Highland Park Transit Service Study*. This study includes information on the state of the existing transit service and future considerations/route concepts. The current transit routes within the transportation system study area serving the Ford Site are illustrated in Figure 6 and summarized in Table 3. Specific ridership data is documented within the *Draft Highland Park Transit Service Study*. Note that there are transit stops nearly every block along Ford Parkway and Cleveland Avenue bordering the site. There is also an existing on-street layover area along Kenneth Street, south of Ford Parkway. Further discussion regarding future transit service is provided later in this document.

D . ()	Weekday						Saturday			Sunday	
Route	AM Peak	Midday	PM Peak	Evening	Span	Midday	Evening	Span	Midday	Evening	Span
23	60	60	30-60	60	7a-8p	20-40	60	8a-8p	60	60-90	8a-8p
46	30	30	30	30-60	6a-11p	30	60	7а-р	30	60	8a-8p
54	15	15	13	15-30	3a-1a	15	15-30	3a-1a	20	20-30	3a-1a
70	30	60	30	NA	6a-7p	NA	NA	NA	NA	NA	NA
74	15	15-20	15	30	5a-1a	20	30	5a-1a	30	30	5a-12a
83	30	30	30	30-60	6a-10p	30	30-60	7a-10p	30	30-60	7a-10p
84	30	30	30	30	5a-9p	30	NA	6a-8p	30	NA	9a-8p
87	20	30	20	30-60	4a-12p	30	60	6a-12p	30	60	6a-12p
134	15	NA	15	NA	6a-7p	NA	NA	NA	NA	NA	NA
A Line	10	10	10	15	4a-1a	10	15-30	4a-1a	10	15-30	4a-1a

 Table 3. Existing Transit Service Frequency and Span (Serving the Ford Site)

Source: Draft Saint Paul Highland Park Transit Service Study, Metro Transit, June 2019



SRF Consulting Group, Inc.

Existing Transit Service (Serving the Ford Site)

Ford Site AUAR Transportation Analysis City of Saint Paul

Figure 6

0011967 August 2019

Intersection Capacity Analysis

An intersection capacity analysis was conducted to determine how traffic is currently operating at the study intersections during typical weekday a.m. and p.m. peak hour conditions. All intersections were analyzed using Synchro/SimTraffic software, which is an industry standard. Capacity analysis results identify a Level of Service (LOS) which indicates how well an intersection is operating. Intersections are graded from LOS A through LOS F. The LOS results are based on average delay per vehicle, which corresponds to the delay threshold values shown in Table 4. LOS A indicates the best traffic operation and LOS F indicates an intersection where demand exceeds capacity. Overall intersection LOS A through D is generally considered acceptable within the Twin Cities Metropolitan Area, although longer delays for short periods of time and/or for specific movements are often considered acceptable as well. In urban areas, it is common for intersections to operate at LOS E or LOS F for short periods of time, particularly when balancing other transportation modal priorities.

LOS Designation	Signalized Intersection Average Delay/Vehicle (seconds)	Unsignalized Intersection Average Delay/Vehicle (seconds)
А	≤ 1 0	≤ 10
В	> 10 - 20	> 10 - 15
С	> 20 - 35	> 15 - 25
D	> 35 - 55	> 25 - 35
E	> 55 - 80	> 35 - 50
F	> 80	> 50

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Table 4	Level of Service Criteria for Signalized and Unsignalized Intersections
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For side-street stop-controlled intersections, special emphasis is given to providing an estimate for the level of service of the side-street approach. Traffic operations at an unsignalized intersection with side-street stop control can be described in two ways. First, consideration is given to the overall intersection level of service. This takes into account the total number of vehicles entering the intersection and the capability of the intersection to support these volumes. Second, it is important to consider the delay on the minor approach. Since the mainline does not have to stop, the majority of delay is experienced on the side-street approaches. It is typical of intersections with higher mainline traffic volumes to experience high levels of delay (poor levels of service) on the side-street approaches, but an acceptable overall intersection level of service during peak hour conditions.

Results of the existing intersection capacity analysis, shown in Table 5, indicate that except for the Ford Parkway/Cleveland Avenue intersection, all study intersections currently operate at an acceptable overall LOS D or better during the weekday a.m. and p.m. peak hours. During the p.m. peak hour, the Ford Parkway/Cleveland Avenue intersection currently operates at LOS E, which results in southbound queues that can extend beyond Pinehurst Avenue and also extend to Highland Parkway approximately 15 percent of the p.m. peak hour. There are several other issues that were identified as part of the capacity analysis, which are summarized in the following issues and mitigation section. An illustrative summary of the existing p.m. peak hour operations is shown in Figure 7, which represents the worst-case condition within the transportation system study area. Existing intersection capacity results, including with mitigation, are shown in Table 5, while detailed analysis results are shown in the Appendix.

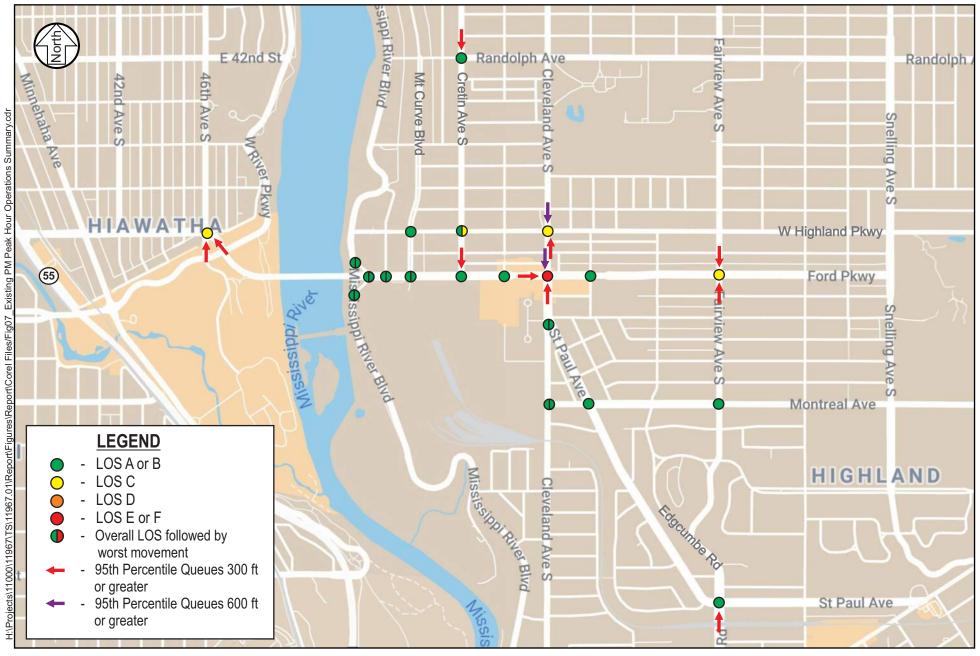
Table 5.	Existing Intersection	Capacity Analysis	(with Mitigation*)
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	A.M. Po	eak Hour	P.M. Peak Hour	
Intersection	Existing	With Mitigation	Existing	With Mitigation
46th Street/46th Avenue	B (17 sec.)	B (17 sec.)	C (23 sec.)	C (23 sec.)
Ford Parkway/Ford Parkway Ramps (1)	A/A (5 sec.)	A/A (5 sec.)	A/A (7 sec.)	A/A (7 sec.)
Ford Parkway/Woodlawn Avenue (1)	A/A (5 sec.)	A/A (5 sec.)	A/B (14 sec.)	A/B (14 sec.)
Ford Parkway/Mount Curve Boulevard (1)	A/A (8 sec.)	A/A (8 sec.)	A/A (10 sec.)	A/A (10 sec.)
Ford Parkway/Cretin Avenue	B (11 sec.)	B (11 sec.)	B (15 sec.)	B (15 sec.)
Ford Parkway/Finn Street	B (11 sec.)	B (11 sec.)	B (15 sec.)	B (15 sec.)
Ford Parkway/Cleveland Avenue	C (27 sec.)	C (24 sec.)	E (61 sec.)	D (44 sec.)
Ford Parkway/Kenneth Street	A (9 sec.)	A (9 sec.)	B (11 sec.)	B (11 sec.)
Ford Parkway/Fairview Avenue	B (18 sec.)	B (18 sec.)	C (27 sec.)	C (28 sec.)
Cleveland Avenue/Highland Parkway	A (10 sec.)	A (10 sec.)	C (28 sec.)	B (16 sec.)
Cleveland Ave/St Paul Ave/Bohland Ave (1)	A/C (23 sec.)	A/C (23 sec.)	A/C (24 sec.)	A/C (24 sec.)
St Paul Avenue/Montreal Avenue (2)	B (11 sec.)	B (11 sec.)	B (12 sec.)	B (12 sec.)
St Paul Avenue/Edgcumbe Road	B (17 sec.)	B (17 sec.)	B (19 sec.)	B (19 sec.)
Montreal Avenue/Cleveland Avenue (1)	A/A (6 sec.)	A/A (6 sec.)	A/A (7 sec.)	A/A (7 sec.)
Montreal Avenue/Fairview Avenue	B (16 sec.)	B (16 sec.)	B (16 sec.)	B (16 sec.)
Mississippi River Blvd/Ford Pkwy North (1)	A/A (4 sec.)	A/A (4 sec.)	A/A (6 sec.)	A/A (6 sec.)
Mississippi River Blvd/South Ford Pkwy South (1)	A/A (5 sec.)	A/A (5 sec.)	A/A (6 sec.)	A/A (6 sec.)
Mount Curve Boulevard/Highland Parkway (2)	A (6 sec.)	A (6 sec.)	A (6 sec.)	A (6 sec.)
Cretin Avenue/Randolph Avenue	B (13 sec.)	B (13 sec.)	B (16 sec.)	B (16 sec.)
Cretin Avenue/Highland Parkway (1)	A/A (10 sec.)	A/A (10 sec.)	A/C (16 sec.)	A/C (16 sec.)

(1) Indicates an unsignalized intersection with side-street stop control where the overall LOS is shown followed by the worst approach LOS.

(2) Indicates an unsignalized intersection with all-way stop control.

* Mitigation is summarized in Table 6.





Existing P.M. Peak Hour Operations Summary

Ford Site AUAR Transportation Analysis City of Saint Paul

0011967 August 2019 Figure 7

Issues and Mitigation

The following existing capacity and/or queuing issues were identified as part of the existing conditions analysis. Potential improvements are classified in the following categories:

- **Considerations** improvements that are expected to help the identified issue (i.e. generally acceptable overall intersection operations but there are queues that impact operations or are greater than 300 feet) but may result in impacts to right-of-way or be in conflict with access, pedestrian, bicyclist, or transit priorities.
- **Mitigation** improvements that are considered necessary, due to either an intersection capacity issue (i.e. overall LOS E or LOS F) or a queuing issue (i.e. greater than 600 feet).

The existing issues, considerations, and mitigation identified are summarized in Table 6. Note that intersection volumes and operations at the 46th Street/46th Avenue intersection can be heavily influenced by weather and park activity at Minnehaha Regional Park; operations and analysis in this report represent a typical weekday day condition.

Issue	Consideration (C) / Mitigation (M)
19900	
46th Stree	t/46th Avenue
• The northbound right-turn movement is blocked approximately 30 percent of the a.m. peak hour and 60 percent of the p.m. peak hour; this results in queues that extend to the 46th Avenue/Godfrey Parkway intersection (i.e. approximately 300 feet) all-way stop 5-10 percent of the p.m. peak hour.	 C - Provide a northbound right-turn lane to reduce queuing.
• Westbound left-turn queues extend beyond the available storage (i.e. 100 feet) 5-10 percent of the p.m. peak hour.	 C - Remove the median on the east side of the intersection to provide more westbound left-turn lane storage (~ 50 feet of additional full-width turn lane storage). C - Modify signal timing and phasing (such as a twice per cycle westbound left-turn phasing) to provide more green time for the westbound left-turn
	movement to better manage queues.
 The 5-leg intersection configuration limits the operational efficiency and creates pedestrian/ bicyclist conflicts. 	• C - Remove the northeast leg of the 5-leg intersection (i.e. the Edmund Boulevard approach) to simplify the signal timing/phasing and improve overall intersection operations.

 Table 6. Existing Issue, Consideration, and Mitigation Summary

Issue	Consideration (C) / Mitigation (M)
Ford Parkwa	y/Cretin Avenue
• When vehicles are parked along the west side of Cretin Avenue (Pinehurst Avenue and Ford Parkway), southbound queues extend to Pinehurst Avenue (i.e. approximately 300 feet) during the p.m. peak hour.	• C - Restrict on-street parking along the west side of Cretin Avenue from Ford Parkway to Pinehurst Avenue and restripe the segment to accommodate an extended southbound left-turn lane to provide adequate storage for southbound queues.
• Eastbound left-turn queues extend beyond the available storage (i.e. 100 feet) approximately five (5) percent of the p.m. peak hour.	C - Extend eastbound left-turn lane.
Ford Parkway/	Cleveland Avenue
 Operates at an overall LOS E during the p.m. peak hour. Southbound queues extend to Highland Parkway (i.e. greater than 600 feet) approximately 15 percent of the p.m. peak hour and queue beyond Pinehurst Avenue (i.e. 300 feet). Northbound queues are 300 feet or greater during the p.m. peak hour. 	• M - Remove parking on the west side of Cleveland Avenue from Ford Parkway to the alley and provide a southbound right-turn lane to reduce southbound queues and improve operations.
• Eastbound queues extend to Finn Avenue (i.e. 575 feet) approximately 5-10 percent of the p.m. peak hour and block the left-turn lane storage (i.e. 100 feet) approximately 60 percent of the p.m. peak hour.	• M - Extend the eastbound left-turn lane approximately 75 feet by removing part of the center median along Ford Parkway to provide additional turn lane storage, while maintaining the right-in/right-out access at the access 225 feet west of Cleveland Avenue (i.e. the Walgreens/ Shuler Shoes access).
Ford Parkway	/Fairview Avenue
 Northbound queues are 300 feet or greater during the a.m. peak hour, and the northbound and southbound queues are greater than 300 feet during the p.m. peak hour. Eastbound left-turn and northbound left-turn movements operate at a LOS E and LOS F during 	• C - Install left-turn signal phasing capability for all approaches to improve operations.
the p.m. peak hour, respectively.	
Cretin Avenue,	/Randolph Avenue
 Southbound queues are greater than 300 feet 	• C - Provide northbound and southbound left-turn

 Southbound queues are greater than 300 feet during the p.m. peak hour due to the lack of southbound left-turn lane storage. 	• C - Provide northbound and southbound left-turn lanes to reduce queues; this may require widening of the roadway, but not right-of-way impacts.
---	---

Issue	Consideration (C) / Mitigation (M)
Cleveland Avenue/St Paul Avenue/Bohland Avenue	
• Vehicles were observed to make prohibited movements (i.e. a southbound u-turn on St Paul Avenue and northbound right-turn at Bohland Avenue); this movement occurred 15 times during the a.m. peak hour and six (6) times in the p.m. peak hour.	 C - Reconfigure intersection and provide a traffic control change to simplify the intersection geometry.
 Vehicles making a northeast left-turn maneuver will often use the middle island as a two-stage crossing; when buses do this maneuver, they block southbound-thru traffic. 	
• The skewed intersection configuration results in difficulty for motorists to identify on-coming vehicles, which creates a potential safety issue.	
St Paul Avenue/Edgcumbe Road	
• Northbound left-turn movement extends beyond the available storage (i.e. 175 feet) approximately 15 percent of the p.m. peak hour and has queues greater than 300 feet.	 C - Provide an eastbound right-turn overlap phase to improve operations and reduce queues.

AUAR Scenarios and Assumptions

Build out of the Ford site is expected to take approximately 10 to 15 years and is dependent on market conditions. As part of the AUAR process, two future build scenarios were reviewed. The first scenario reviewed, referred to as the "Ryan Proposal", includes a mixture of Civic, Office, Retail, and Residential land uses. This scenario is consistent with Ryan Companies' current development proposal and the amended *Ford Site Zoning and Public Realm Master Plan* as approved by the City Council in April of 2019. The second scenario reviewed, referred to as "Max Build" also includes similar land uses, but at a higher density. This scenario is consistent with the highest development density permitted by the amended *Ford Site Zoning and Public Realm Master Plan* as approved by the City Council in April of 2019. A summary of the overall AUAR land use scenarios is illustrated in Table 7. Note that for analysis purposes, Civic was classified as general office space.

Ryan Proposal		Max Build		
Civic	50,000 Square Feet	Civic	150,000 Square Feet	
Employment (Office)	265,000 Square Feet	Employment (Office)	450,000 Square Feet	
Retail	150,000 Square Feet	Retail	300,000 Square Feet	
Residential	3,800 Units	Residential	4,000 Units	

Table 7. AUAR Land Use Scenarios

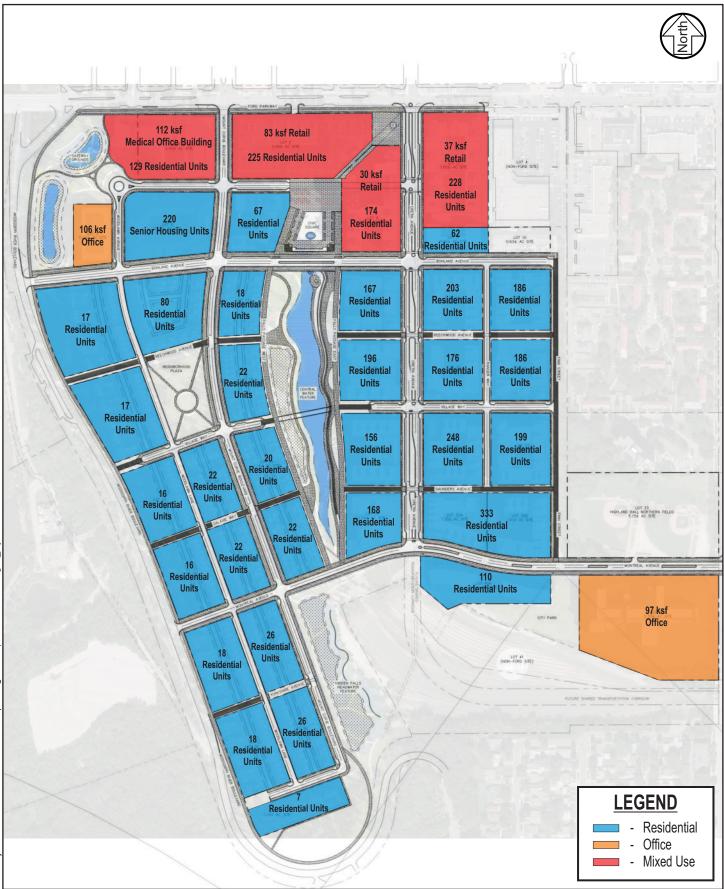
In addition to the land use scenario assumptions outlined in Table 7, the Max Build scenario includes additional redevelopment/development based on current zoning, including:

- Lund's & Byerly's Site Redevelopment: 330 Residential Units, 13,000 SF Retail
 - Note that these are assumed to be in addition to the current site land uses
- CP Rail Site Development: 55 Residential Units, 100,000 SF Office
- Partial Ford Site Ballfield Redevelopment: 115,000 SF Office

A block-by-block breakdown of the assumed land uses for the Ryan Proposal and Max Build AUAR land use scenarios is provided in Figure 8 and Figure 10, respectively.

The roadway and access assumptions used as the basis for the future intersection capacity analysis for the Ryan Proposal and Max Build AUAR scenarios is provided in Figure 8 and Figure 10, respectively. These assumptions were used to identify any potential issues and help guide future roadway configurations, traffic controls, and access. However, these are assumptions and as development occurs, each access should be reviewed on an individual basis. Note that the Max Build scenario includes the following roadway connections not included as part of the Ryan Proposal scenario:

- Extension of Finn Street from Ford Parkway to Bohland Avenue
- Extension of Saunders Avenue from Finn Street to Cleveland Avenue
- Extension of Cretin Avenue into the CP Rail Site

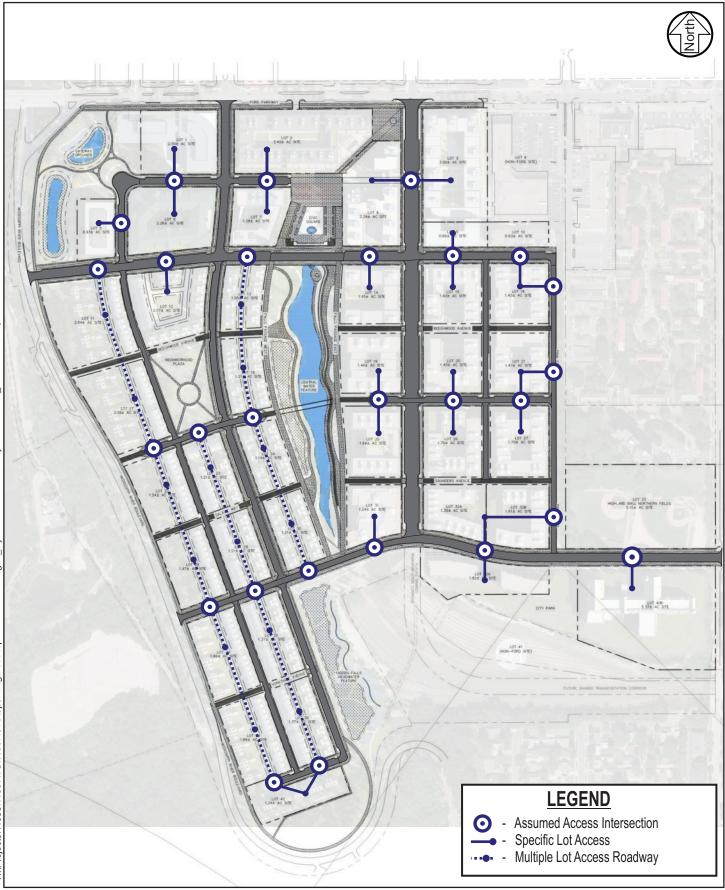


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Ryan Proposal Scenario Land Use Assumptions

Ford Site AUAR Transportation Analysis City of Saint Paul Figure 8





Ryan Proposal Scenario Roadway and Access Assumptions

Ford Site AUAR Transportation Analysis City of Saint Paul

Figure 9

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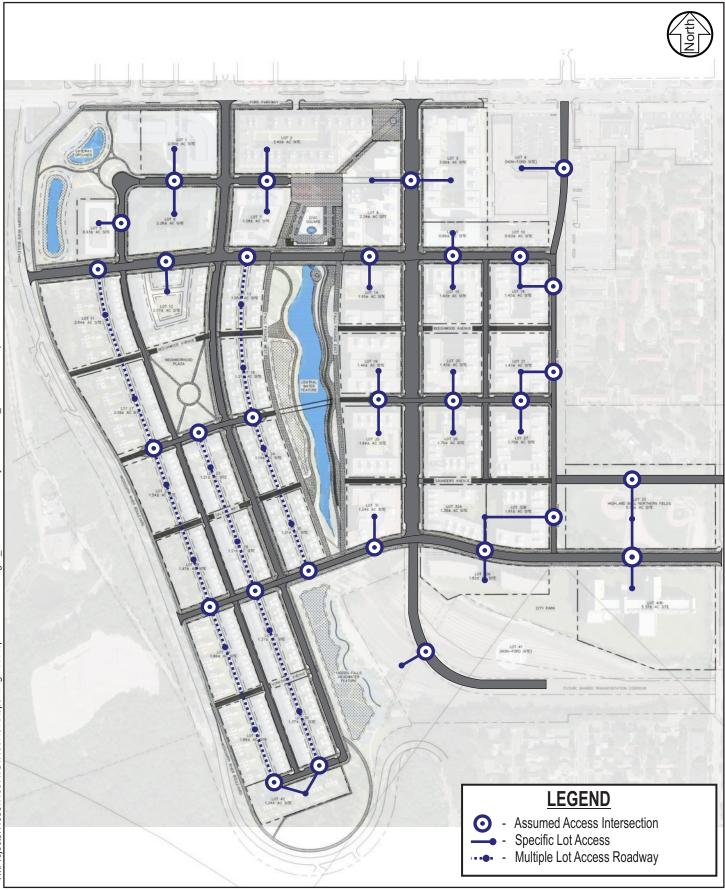




Max Build Scenario Land Use Assumptions

Ford Site AUAR Transportation Analysis City of Saint Paul Figure 10

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Max Build Scenario Roadway and Access Assumptions

Ford Site AUAR Transportation Analysis City of Saint Paul

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Traffic Forecasts

As previously mentioned, the build out of the Ford Site is expected to take approximately 10 to 15 years, depending on market conditions. For purposes of developing traffic forecasts and evaluating future conditions, a horizon year of 2040 was used. Traffic forecasts were developed for three future conditions; year 2040 no build, year 2040 Ryan Proposal, and year 2040 Max Build conditions. The following information summarizes the year 2040 traffic forecast development process.

General Background Growth

To estimate future area traffic, pedestrian, and bicycle volumes, assuming no Ford Site development, a combination of resources were reviewed, including historical average daily traffic (ADT) volumes on area roadways, the Twin Cities regional 4-step model, and previous traffic studies in the area. In general, historical ADT volumes have been flat or decreasing over the past 10 to 15-years, as illustrated in Figure 12. In addition, annual growth rates from the Twin Cities regional 4-step model were approximately one-quarter percent (0.25) or less and previous area traffic studies ranged from 0.1 to 0.5 percent growth annually, depending on the area. Therefore, an annual background growth rate of one-quarter percent (0.25) was applied to the existing intersection turning movement and pedestrian/bicyclist counts to develop year 2040 base conditions. This growth rate is consistent with historical traffic volumes, the Twin Cities regional 4-step model, and previous traffic studies assumptions in the area. Note that the Ford Plant closed in year 2011 and area traffic volumes have continued to be relatively stable since that time.

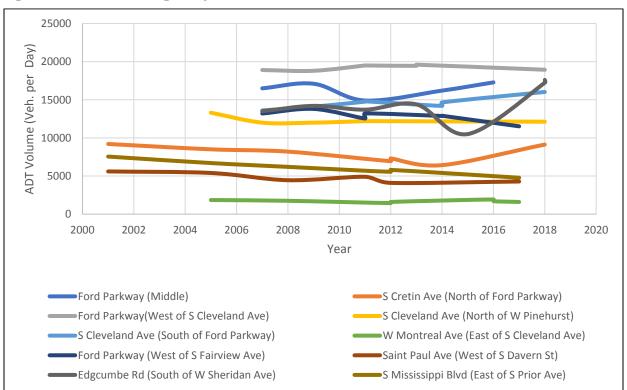


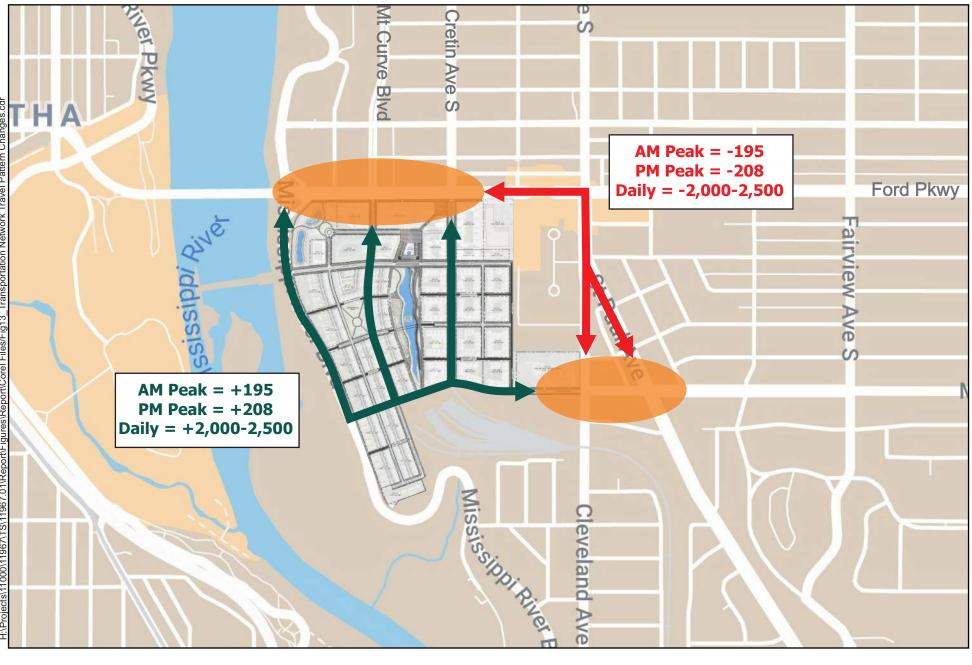
Figure 12. Historical Average Daily Traffic Volumes

Travel Pattern Changes

Under future build conditions when the public roadway system in connected through the Ford Site, including Montreal Avenue, Cretin Avenue, and Mount Curve Boulevard amongst others, area travel patterns are expected to change as motorists have new route options. Therefore, intersection turning movement counts were adjusted to reflect this expected travel pattern shift based on data provided by the Metropolitan Council's Regional Travel Demand Model and engineering judgment. In particular, the build out of the transportation network through the Ford Site is expected to reduce the traffic volume traveling through the Ford Parkway/Cleveland Avenue intersection. The following information summarizes the travel pattern changes expected as a result of the build-out of the transportation network through the Ford Site (excluding any Ford Site development traffic), which are also illustrated in Figure 13.

Note that it was assumed that 50 percent of vehicles that are currently making an eastbound rightturn or northbound left-turn at the Ford Parkway/Cleveland Avenue intersection would change their travel pattern to use Cretin Avenue and Montreal Avenue (through the Ford Site) to reach their ultimate destination. The percent of vehicles was based on the expected travel times between the two routes, which are likely to be similar and therefore traffic volumes would be expected to be evenly distributed to each route. This equates to approximately 55 eastbound right-turning vehicles and 140 northbound left-turning vehicles during the a.m. peak hour. During the p.m. peak hour, this equates to approximately 70 eastbound right-turning vehicles and 140 northbound left-turning vehicles that would be rerouted through the Ford Site. In total, it is estimated that 2,000 to 2,500 vehicles per day that would no longer travel through the Ford Parkway/Cleveland Avenue intersection, and instead route through the Ford Site transportation network.

A sensitivity test was completed to determine the operational impact of completing the transportation network through the Ford Site before the addition of any Ford Site related traffic. This sensitivity test was conducted comparing the base year 2040 traffic forecasts (before any Ford Site generated traffic) with and without the completed transportation network through the Ford Site. From an intersection capacity perspective, the Ford Parkway/Cleveland Avenue intersection operations are expected to improve from LOS E to LOS D as a result of the travel pattern changes associated with completing the transportation network through the Ford Site (i.e. less volume traveling through the Ford Parkway/Cleveland Avenue intersection due to the travel pattern changes). Queues are expected to extend to Highland Parkway approximately five (5) percent of the p.m. peak hour, as compared to between 15 and 30 percent before completion of the transportation network. This does not include any of the mitigation identified as part of the existing conditions or Ford Site development traffic other than the travel pattern changes identified. Note that under future build conditions, these travel patterns were incorporated into the year 2040 build condition traffic forecasts.



Transportation Network Travel Pattern Changes

Ford Site AUAR Transportation Analysis City of Saint Paul

Figure 13

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AUAR Scenario Trip Generation

To determine the level of traffic, walk/bike, and transit trip generation for each of the AUAR land use scenarios, a detailed trip generation estimate was developed. The trip generation estimates were developed using the *ITE Trip Generation Manual, 10th Edition* and account for multi-use trip reductions based on a combination of the internal capture rate methodology in the *ITE Trip Generation Handbook* and the *Traffic Generated by Mixed-Use Developments - Thirteen-Region Study Using Consistent Measures of Built Environment, (2015)* published by the Transportation Research Board (No. 2500). In addition, various trip reductions were applied to the trip generation estimates to account for area transit service, walking/bicyclist facilities and environment, jobs and housing balance, amount of below market rate housing, and Travel Demand Management (TDM) Programs. These various reductions were identified leveraging data from multiple resources and case-studies locally and throughout the country.

The specific land use assumptions for both the Ryan Proposal and Max Build AUAR scenarios previously outlined were also leveraged to identify the future site trip generation potential. A summary of all external trips by transportation mode is summarized in Table 8, while vehicular trip generation estimates for the Ryan Proposal and Max Build AUAR scenarios are illustrated in Table 9 and Table 10, respectively. Detailed information regarding the base trip generation estimate assumptions are provided in the Appendix, including person trips by transportation mode.

Scenario	A.M. Peak Hour External Trips	P.M. Peak Hour External Trips	Weekday Daily External Trips
Ryan Proposal			
Vehicular Trips	1,440	1,854	21,791
Transit Trips	296	382	4,486
Walk/Bike Trips	362	466	5,473
Max Build			
Vehicular Trips	1,769	2,362	27,573
Transit Trips	380	508	5,928
Walk/Bike Trips	464	620	7,232

Table 8. External Trip Generation Summary by Transportation Mode

Land Use Type (ITE Code)	Size	A.M. Peak Hour Trips		P.M. Peak Hour Trips		Weekday
	0120	In	Out	In	Out	Daily Trips
Ryan Proposal Scenario						
General Office (710)	203 KSF	203	33	37	196	1,977
Medical-Dental Office (720)	112 KSF	243	68	109	279	3,898
Retail (820)	136 KSF	79	49	249	269	5,134
Fast Casual Restaurant (930) ⁽¹⁾	6 KSF	8	4	47	38	1,891
High-Turnover Sit-Down Restaurant (932) $^{(1)}$	6 KSF	33	27	36	22	673
Coffee Shop without Drive-Thru (936) $^{(1)}$	2 KSF	103	99	36	36	1,641
Single Family Detached Housing $(210)^{(2)}$	37 DU	7	21	23	14	349
Low-Rise Multifamily Housing (220)	271 DU	29	96	96	56	1,984
Mid-Rise Multifamily Housing (221)	3,272 DU	306	872	878	561	17,800
Senior Adult Housing-Attached (252)	220 DU	15	29	31	26	814
Ryan Proposal Subtotal (Before	Reductions)	1,026	1,298	1,542	1,497	36,161
Multi-Us (16.4% AM, 17.7% PM, 18.7	e Reduction 7 % Daily) ⁽³⁾	(-168)	(-213)	(-273)	(-265)	(-6,762)
Various Reductions (25.9%)		(-222)	(-281)	(-329)	(-318)	(-7,608)
Ryan Proposal Vehicle Trips		636	804	940	914	21,791

Table 9. Ryan Proposal Scenario Trip Generation Estimate

(1) Although not stated in the AUAR land use, restaurant/coffee space is anticipated as part of the retail space and is a permitted land use as part of the Master Plan. Estimations for restaurant/coffee space is approximately 14,000 sf, which would generally equal between 4-6 restaurants and one (1) coffee shop and be less than 10 percent of all retail space

General Table Nomenclature: KSF: 1,000 square feet DU: Dwelling Units

⁽²⁾ Assumed to be one-unit residential buildings at Lots 11, 17, 22, 28, 34, 38, and 42.

⁽³⁾ Multi-use trip reductions were applied to all proposed land use trip generation estimates based on a combination of the internal capture rate methodology in the ITE Trip Generation Handbook and the Traffic Generated by Mixed-Use Developments – Thirteen-Region Study Using Consistent Measures of Built Environment, (2015).

Land Use Type (ITE Code)	Size		Peak Trips	P.M. Peak Hour Trips		Weekday
	0.20	In	Out	In	Out	Daily Trips
Max Build Scenario						
General Office (710) (1)	464 KSF	463	75	85	448	4,519
Medical-Dental Office (720)	136 KSF	295	83	132	339	4,733
Retail (820)	286 KSF	167	102	523	567	10,797
Fast Casual Restaurant (930) ⁽²⁾	6 KSF	8	4	47	38	1,891
High-Turnover Sit-Down Restaurant (932) ⁽²⁾	6 KSF	33	27	36	22	673
Coffee Shop without Drive-Thru (936) (2)	2 KSF	103	99	36	36	1,641
Single Family Detached Housing (210) $^{(3)}$	37 DU	7	21	23	14	349
Low-Rise Multifamily Housing (220)	326 DU	34	115	115	68	2,386
Mid-Rise Multifamily Housing (221)	3,417 DU	320	910	917	586	18,588
Senior Adult Housing-Attached (252)	220 DU	15	29	31	26	814
Max Build Subtotal (Before	Reductions)	1,445	1,465	1,945	2,144	46,391
Multi-Use Reduction (16.9% AM, 21.0% PM, 18.7 % Daily) ⁽⁴⁾		(-244)	(-248)	(-408)	(-450)	(-8,675)
Various Reductions (26.9%)		(-323)	(-326)	(-413)	(-456)	(-10,143)
Max Build Vehicle Trips		878	891	1,124	1,238	27,573

Table 10. Max Build Scenario Trip Generation Estimate

(1) Civic Space is analyzed as General Office.

- (2) Although not stated in the AUAR land use, restaurant/coffee space is anticipated as part of the retail space and is a permitted land use as part of the Master Plan. Estimations for restaurant/coffee space is approximately 14,000 sf, which would generally equal between 4-6 restaurants and one (1) coffee shop and be less than 10 percent of all retail space
- (3) Assumed to be one-unit residential buildings at Lots 11, 17, 22, 28, 34, 38, and 42.
- (4) Multi-use trip reductions were applied to all proposed land use trip generation estimates based on a combination of the internal capture rate methodology in the ITE Trip Generation Handbook and the *Traffic Generated by Mixed-Use Developments Thirteen-Region Study Using Consistent Measures of Built Environment, (2015).*

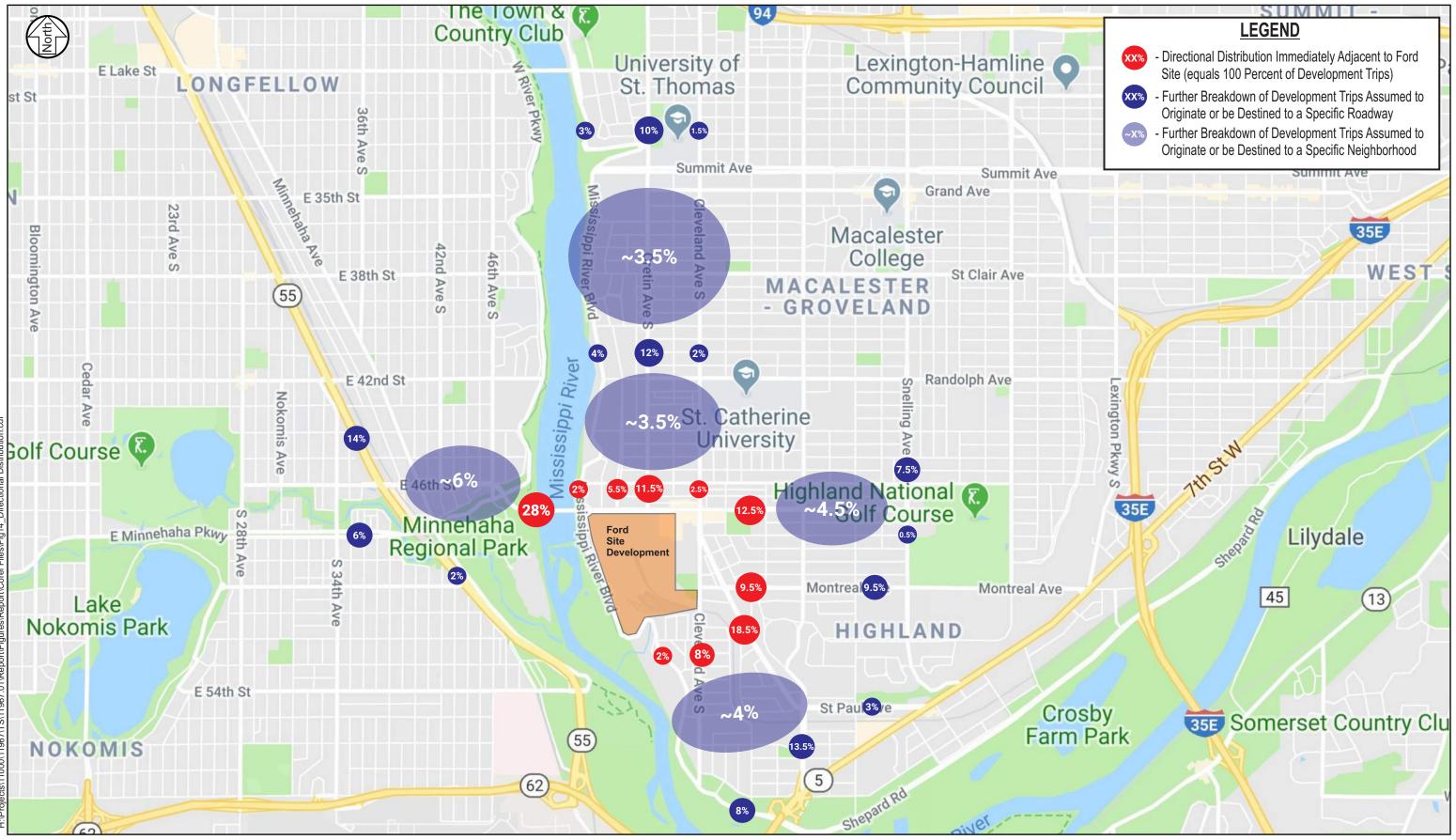
General Table Nomenclature: KSF: 1,000 square feet DU: Dwelling Units

Directional Distribution

To determine future travel patterns associated with Ford Site development vehicular trips, various resources were leveraged. These resources included the Twin Cities regional 4-step model, existing traffic volumes and intersection turning movement patterns, and engineering judgement. Based on this information, the directional distribution for Ford Site development vehicular trips was developed as illustrated in Figure 14. Note that the directional distribution was developed for areas beyond the study intersections to help with the regional planning-level review previously mentioned and discussed later in this memorandum.

The red numbers within the directional distribution figure illustrate the specific roadways immediately adjacent to the Ford Site and the corresponding percentage of development trips that are expected to use each roadway. The red numbers equate to 100 percent of the development related trips. The blue numbers represent a further breakdown of the specific roadways or neighborhoods development related trips were assumed to originate or be destined to.

The development related vehicular and walk/bike trips were distributed throughout the transportation system study area and intersections based on the distribution as well as the roadway and access assumptions previously identified. The trip routing considered development location within the site, travel time estimates, land use types, access, and the overall walking and biking environment, considering a one-half mile walking and 2-mile biking buffer area. The year 2040 no build, year 2040 Ryan Proposal, and year 2040 Max Build traffic forecasts are illustrated in Figure 15, Figure 16, and Figure 17, respectively. Note that all future traffic forecasts include the general background growth rate, while the two AUAR scenarios include the travel pattern changes associated with the build-out of the transportation network within the Ford Site in addition to development related trips.

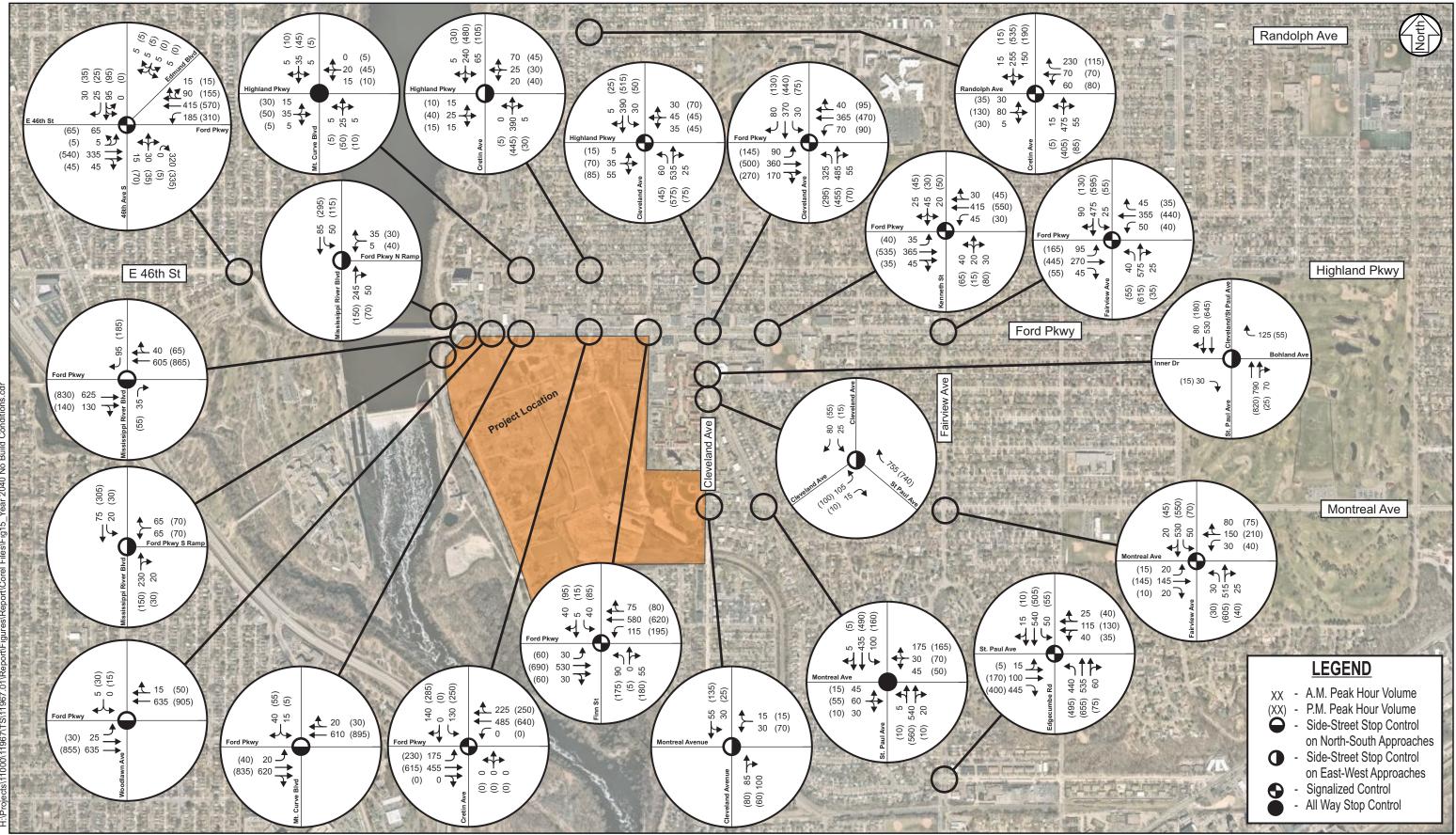




Directional Distribution Ford Site AUAR Transportation Analysis

City of Saint Paul

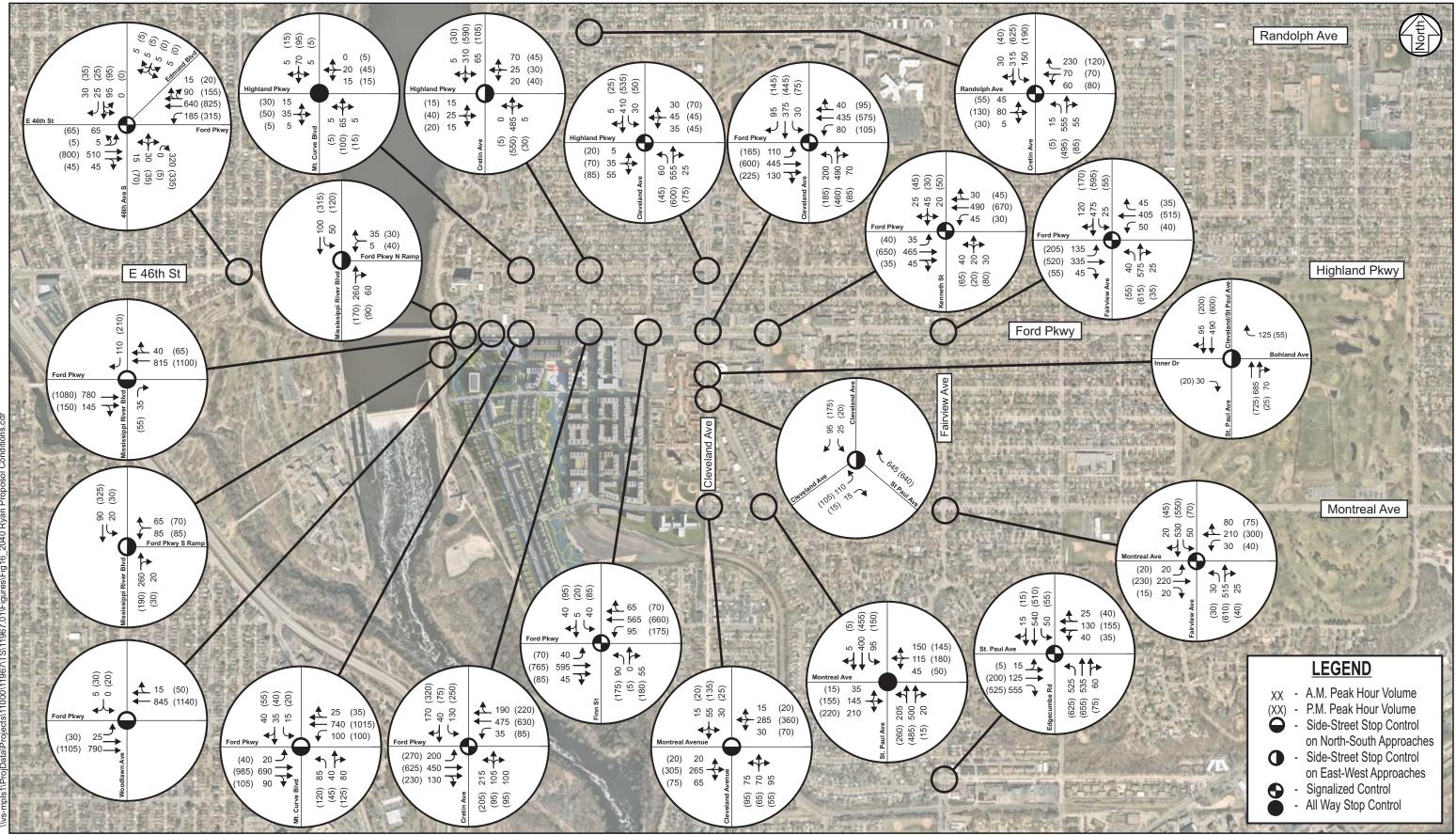
Figure 14





Year 2040 No Build Conditions

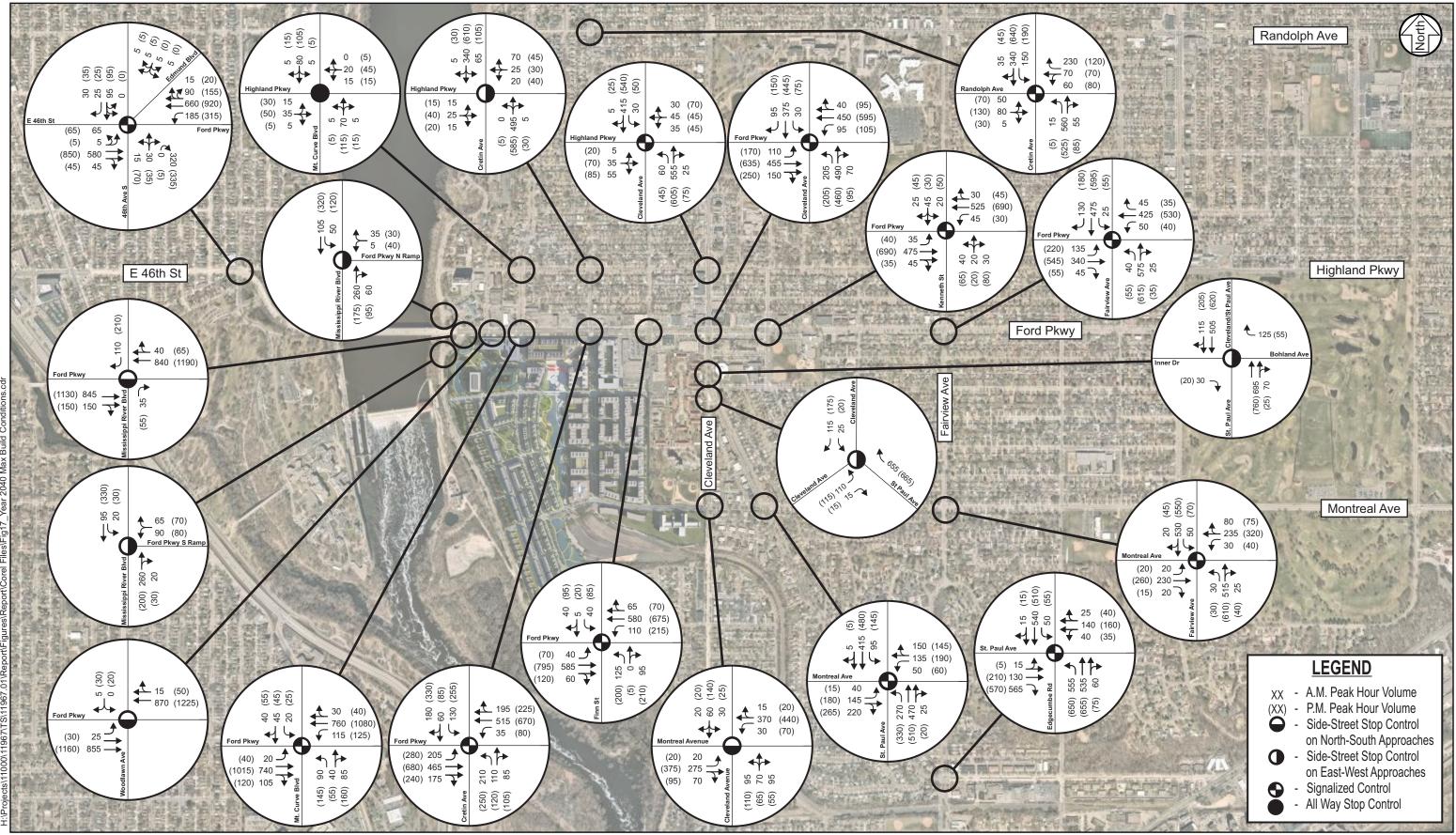
Ford Site AUAR Transportation Analysis City of Saint Paul





Year 2040 Ryan Proposal Conditions

Ford Site AUAR Transportation Analysis City of Saint Paul Figure 16





Year 2040 Max Build Conditions

Ford Site AUAR Transportation Analysis City of Saint Paul

Year 2040 No Build Conditions

Year 2040 no build conditions were reviewed to understand how the transportation system study area would be expected to operate absent of any redevelopment within the Ford Site. The following information summarizes the year 2040 no build conditions.

Assumptions

The following assumptions were included as part of the intersection capacity analysis:

- Traffic forecasts account for the annual background growth rate, which was applied to the existing peak hour intersection turning movement counts to develop the year 2040 no build conditions.
- At the Ford Parkway/Cleveland Avenue intersection, a southbound right-turn lane was included, as well as an extended eastbound left-turn lane, which were identified as mitigation under existing conditions.
- Signal timing was optimized within the transportation system study area.
- The roadway network within the Ford Site was not included as part of this analysis.

Intersection Capacity Analysis

Results of the year 2040 no build intersection capacity analysis, shown in Table 11, indicates that all study intersections are expected to operate at an acceptable overall LOS D or better during the weekday a.m. and p.m. peak hours based on the assumptions identified. However, there are a couple areas where queues are expected during the p.m. peak hour. The issues and mitigation for the year 2040 no build conditions are summarized in the following section. An illustrative summary of the year 2040 no build condition p.m. peak hour operations in shown in Figure 18, which represents the worst-case condition within the transportation system study area. Year 2040 no build condition intersection capacity results, including with mitigation, are shown in Table 11, while detailed analysis results are shown in the Appendix.

Issues and Mitigation

The following capacity and/or queuing issues were identified as part of the year 2040 no build conditions analysis. As previously noted, potential improvements are classified in the following categories:

- **Considerations** improvements that are expected to help the identified issue (i.e. generally acceptable overall intersection operations but there are queues that impact operations or are greater than 300 feet) but may result in impacts to right-of-way or be in conflict with access, pedestrian, bicyclist, or transit priorities.
- Mitigation improvements that are considered necessary, due to either an intersection capacity issue (i.e. overall LOS E or LOS F) or a queuing issue (i.e. greater than 600 feet).

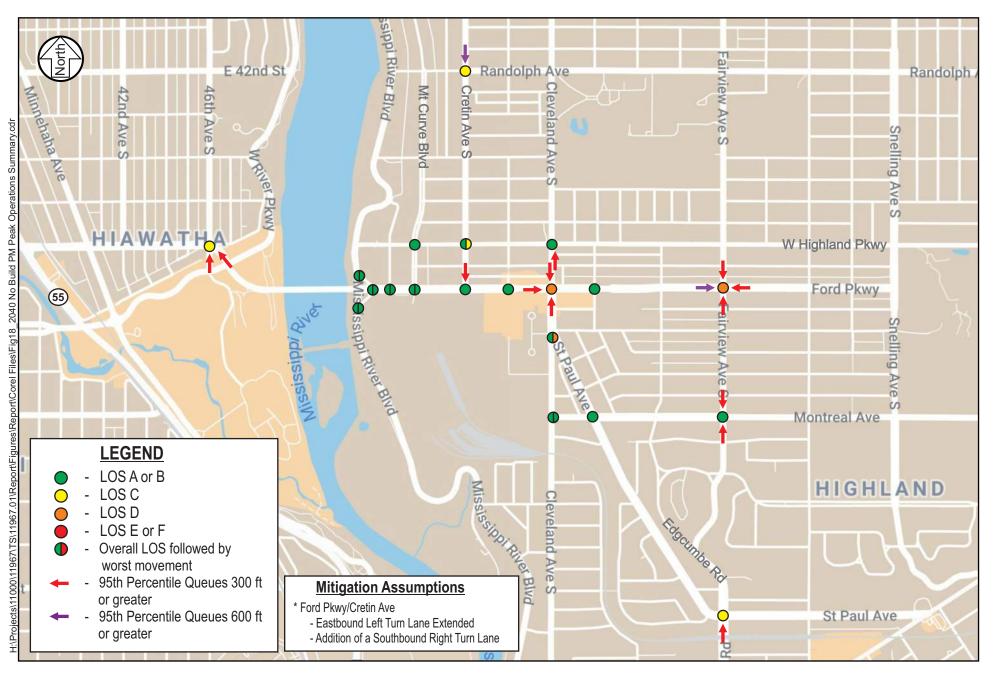
The year 2040 no build issues, considerations, and mitigation identified are summarized in Table 12, which are in addition to the previously identified items as part of the existing conditions.

	A.M. Pe	eak Hour	P.M. Peak Hour		
Intersection	Year 2040 No Build	With Mitigation	Year 2040 No Build	With Mitigation	
46th Street/46th Avenue	B (17 sec.)	B (16 sec.)	C (25 sec.)	C (25 sec.)	
Ford Parkway/Ford Parkway Ramps (1)	A/A (5 sec.)	A/A (5 sec.)	A/A (8 sec.)	A/A (8 sec.)	
Ford Parkway/Woodlawn Avenue (1)	A/A (4 sec.)	A/A (4 sec.)	A/B (14 sec.)	A/C (16 sec.)	
Ford Parkway/Mount Curve Boulevard ⁽¹⁾	A/A (9 sec.)	A/A (9 sec.)	A/B (11 sec.)	A/B (11 sec.)	
Ford Parkway/Cretin Avenue	B (11 sec.)	B (11 sec.)	B (16 sec.)	B (16 sec.)	
Ford Parkway/Finn Street	B (12 sec.)	B (12 sec.)	B (16 sec.)	B (16 sec.)	
Ford Parkway/Cleveland Avenue	C (25 sec.)	C (25 sec.)	D (39 sec.)	D (40 sec.)	
Ford Parkway/Kenneth Street	A (9 sec.)	A (9 sec.)	B (12 sec.)	B (12 sec.)	
Ford Parkway/Fairview Avenue	B (20 sec.)	B (20 sec.)	D (38 sec.)	D (47 sec.)	
Cleveland Avenue/Highland Parkway	B (11 sec.)	B (11 sec.)	B (17 sec.)	B (17 sec.)	
Cleveland Ave/St Paul Ave/Bohland Ave (1)	A/C (24 sec.)	A/C (24 sec.)	A/C (25 sec.)	A/C (25 sec.)	
St Paul Avenue/Montreal Avenue (2)	B (11 sec.)	B (11 sec.)	B (13 sec.)	B (13 sec.)	
St Paul Avenue/Edgcumbe Road	B (18 sec.)	B (18 sec.)	C (21 sec.)	C (21 sec.)	
Montreal Avenue/Cleveland Avenue (1)	A/A (7 sec.)	A/A (7 sec.)	A/A (8 sec.)	A/A (8 sec.)	
Montreal Avenue/Fairview Avenue	B (16 sec.)	B (16 sec.)	B (18 sec.)	B (18 sec.)	
Mississippi River Blvd/Ford Pkwy North (1)	A/A (4 sec)	A/A (4 sec.)	A/A (7 sec.)	A/A (7 sec.)	
Mississippi River Blvd/South Ford Pkwy South (1)	A/A (5 sec)	A/A (5 sec.)	A/A (6 sec.)	A/A (6 sec.)	
Mount Curve Boulevard/Highland Parkway ⁽²⁾	A (6 sec.)	A (6 sec.)	A (6 sec.)	A (6 sec.)	
Cretin Avenue/Randolph Avenue	B (13 sec.)	B (13 sec.)	C (21 sec.)	B (14 sec.)	
Cretin Avenue/Highland Parkway (1)	A/A (10 sec.)	A/A (10 sec.)	A/C (20 sec.)	A/C (19 sec.)	

Table 11. Year 2040 No Build Intersection Capacity Analysis (with Mitigation)

(1) Indicates an unsignalized intersection with side-street stop control where the overall LOS is shown followed by the worst approach LOS.

(2) Indicates an unsignalized intersection with all-way stop control.



2040 No Build P.M Peak Hour Operations Summary

Ford Site AUAR Transportation Analysis City of Saint Paul

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Figure 18

Issue	Consideration (C) / Mitigation (M)					
Ford Parkway/Fairview Avenue						
• Northbound queues are 300 feet or greater during the a.m. peak hour, and the northbound and southbound queues are greater than 300 feet during the p.m. peak hour.	 M - Install left-turn signal phasing capability for all approaches to improve left turn operations and balance queues. 					
• Eastbound left-turn and northbound left-turn movements are expected to operate at LOS F, with delays of 90 seconds or greater during the p.m. peak hour.						
• Eastbound queues are expected to be greater than 700 feet during the p.m. peak hour.						
Cretin Avenue,	/Randolph Avenue					
• Southbound queues are expected to be 600 feet during the p.m. peak hour.	• M - Restripe and/or widen to provide northbound and southbound left-turn lanes to reduce queues.					
Montreal Avenu	ie/Fairview Avenue					
 Northbound and southbound queues are 300 feet or greater during the a.m. and p.m. peak hours 	• C - Install left-turn signal phasing capability for all approaches to improve left turn operations and balance queues.					

Table 12. Year 2040 No Build Issue, Consideration, and Mitigation Summary

* Note that the issues, considerations, and mitigation shown are in addition to the previously identified items as part of the existing conditions.

Year 2040 Build Conditions - Ryan Proposal Scenario

Year 2040 build conditions were reviewed to understand how the transportation system study area would be expected to operate based on the Ryan Proposal development scenario. The following information summarizes the year 2040 Build Ryan Proposal conditions.

Assumptions

The following assumptions were included as part of the intersection capacity analysis:

- Traffic forecasts account for the annual background growth rate, travel pattern changes associated with the build out of the Ford Site transportation network, and the Ryan Proposal AUAR scenario trip generation.
- At the Ford Parkway/Cleveland Avenue intersection, a southbound right-turn lane was included, as well as an extended eastbound left-turn lane, which were identified as mitigation under existing conditions.
- At the Ford Parkway/Fairview Avenue intersection, left-turn signal phasing capability for all approaches was included and at the Cretin Avenue/Randolph Avenue intersection, northbound and southbound left-turn lanes were included, which were both identified as mitigation under year 2040 no build conditions.
- Signal timing was optimized within the transportation system study area.

Intersection Capacity Analysis

Results of the year 2040 Build Ryan Proposal intersection capacity analysis, shown in Table 13, indicates that the majority of the study intersections are expected to operate at an acceptable overall LOS D or better during the weekday a.m. and p.m. peak hours based on the assumptions identified. In addition, there are a couple areas where queues are expected during the p.m. peak hour. The issues and mitigation for the year 2040 Build Ryan Proposal conditions are summarized in the following section.

An illustrative summary of the year 2040 Build Ryan Proposal condition p.m. peak hour operations in shown in Figure 19, which represents the worst-case condition within the transportation system study area. Note that the future capacity analysis includes the a.m. peak hour conditions, however given the proposed development generates more traffic during the p.m. peak hour and area traffic volumes are generally higher during the p.m. peak hour, the issues and mitigation are based on the p.m. peak hour conditions. Year 2040 Build Ryan Proposal condition intersection capacity results, including with mitigation, are shown in Table 13, while detailed analysis results are shown in the Appendix.

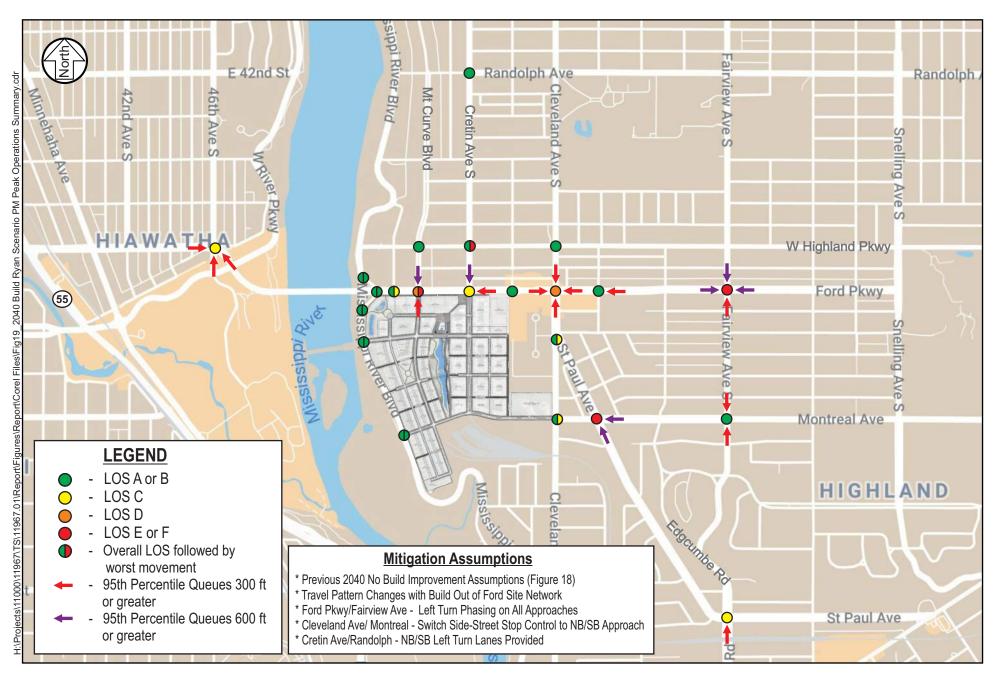
	A.M. Pe	eak Hour	P.M. Peak Hour		
Intersection	Year 2040 Ryan Build	With Mitigation	Year 2040 Ryan Build	With Mitigation	
46th Street/46th Avenue	B (17 sec.)	B (18 sec.)	C (26 sec.)	C (29 sec.)	
Ford Parkway/Ford Parkway Ramps (1)	A/A (6 sec.)	A/A (6 sec.)	A/A (10 sec)	A/A (10 sec.)	
Ford Parkway/Woodlawn Avenue (1)	A/A (4 sec.)	A/A (4 sec.)	A/C (21 sec.)	A/C (21 sec.)	
Ford Parkway/Mount Curve Boulevard ⁽¹⁾	A/D (30 sec.)	A (9 sec.)	D/F (224 sec.)	B (13 sec.)	
Ford Parkway/Cretin Avenue	B (17 sec.)	B (17 sec.)	C (30 sec.)	C (30 sec.)	
Ford Parkway/Finn Street	A (10 sec.)	B (11 sec.)	B (16 sec.)	B (17 sec.)	
Ford Parkway/Cleveland Avenue	C (22 sec.)	C (22 sec.)	D (39 sec.)	D (43 sec.)	
Ford Parkway/Kenneth Street	A (9 sec.)	A (9 sec.)	B (14 sec.)	B (14 sec.)	
Ford Parkway/Fairview Avenue	C (22 sec.)	C (27 sec.)	F (92 sec.)	D (52 sec.)	
Cleveland Avenue/Highland Parkway	A (9 sec.)	A (9 sec.)	B (14 sec.)	B (14 sec.)	
Cleveland Ave/St Paul Ave/Bohland Ave (1)	A/C (19 sec.)	A/C (19 sec.)	A/C (19 sec.)	A/C (20 sec.)	
St Paul Avenue/Montreal Avenue ⁽²⁾	C (24 sec.)	B (17 sec.)	F (65 sec.)	B (18 sec.)	
St Paul Avenue/Edgcumbe Road	C (24 sec.)	C (24 sec.)	C (24 sec.)	C (24 sec.)	
Montreal Avenue/Cleveland Avenue (1)	A/B (12 sec.)	A/B (12 sec.)	A/B (14 sec.)	A/C (17 sec.)	
Montreal Avenue/Fairview Avenue	B (18 sec.)	B (18 sec.)	B (20 sec.)	C (21 sec.)	
Mississippi River Blvd/Ford Pkwy North (1)	A/A (4 sec.)	A/A (4 sec.)	A/A (6 sec.)	A/A (6 sec.)	
Mississippi River Blvd/South Ford Pkwy South (1)	A/A (6 sec.)	A/A (6 sec.)	A/A (7 sec.)	A/A (7 sec.)	
Mississippi River Blvd/Bohland Avenue (1)	A/A (4 sec.)	A/A (4 sec.)	A/A (4 sec.)	A/A (4 sec.)	
Mississippi River Blvd/Montreal Avenue (1)	A/A (6 sec.)	A/A (6 sec.)	A/A (6 sec.)	A/A (6 sec.)	
Mount Curve Boulevard/Highland Parkway (2)	A (6 sec.)	A (6 sec.)	B (12 sec.)	A (6 sec.)	
Cretin Avenue/Randolph Avenue	B (15 sec.)	B (16 sec.)	B (16 sec.)	B (16 sec.)	
Cretin Avenue/Highland Parkway (1)	A/B (13 sec.)	A/B (13 sec.)	A/E (39 sec.)*	A/C (24 sec.)*	

Table 13. Year 2040 Ryan Proposal Build Intersection Capacity Analysis (with Mitigation)

(1) Indicates an unsignalized intersection with side-street stop control where the overall LOS is shown followed by the worst approach LOS.

(2) Indicates an unsignalized intersection with all-way stop control.

* Note that no mitigation is identified at this location; the improvement in operations is the result of the mitigation identified for the Ford Parkway/Cretin Avenue intersection, which minimizes southbound queues along Cretin Avenue from impacting Highland Parkway.



2040 Build Ryan Proposal Scenario P.M. Peak Hour Operations Summary

Ford Site AUAR Transportation Analysis City of Saint Paul Figure 19

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Issues and Mitigation

The following capacity and/or queuing issues were identified as part of the year 2040 Build Ryan Proposal conditions analysis. As previously noted, potential improvements are classified in the following categories:

- **Considerations** improvements that are expected to help the identified issue (i.e. generally acceptable overall intersection operations but there are queues that impact operations or are greater than 300 feet) but may result in impacts to right-of-way or be in conflict with access, pedestrian, bicyclist, or transit priorities.
- **Mitigation** improvements that are considered necessary, due to either an intersection capacity issue (i.e. overall LOS E or LOS F) or a queuing issue (i.e. greater than 600 feet).

The year 2040 Build Ryan Proposal issues, considerations, and mitigation identified are summarized in Table 14, which are in addition to the existing and year 2040 no build condition mitigation previously identified.

Issue	Consideration (C) / Mitigation (M)
Ford Parkway/Mo	ount Curve Boulevard
• Side-street approaches are expected to operate at LOS F, with queues of 300 feet and 600 feet in the northbound and southbound directions, respectively, during the p.m. peak hour.	 M - Install a traffic signal and construct northbound and southbound left-turn lanes to accommodate the Ford Site approach; the traffic signal should include left-turn signal phasing on all approaches. M - Extend the eastbound left-turn lane about 50 feet to accommodate turn lane queues. C - Extend the westbound left-turn lane about 50 feet to accommodate queues; this may have access impacts that need to be reviewed.
Ford Parkwa	y/Cretin Avenue
• Southbound queues are expected to extend into Highland Parkway during the p.m. peak hour and cause operational issues at the Cretin Avenue/ Highland Parkway intersection; all left-turn movements are expected to extend beyond the available storage during 20 percent or more of the p.m. peak hour, particularly when a vehicle is parked on-street.	 M - Install northbound, southbound, and westbound left-turn signal phasing (eastbound left-turn signal phasing exists today) to improve intersection operations. M - Extend the eastbound left-turn lane to maximize the storage as much as possible. M - Extend the westbound left-turn lane about 75 feet to accommodate turn lane queues. M - Restrict on-street parking along the west side of Cretin Avenue from Ford Parkway to Highland Parkway to accommodate the restripe of the segment to provide adequate storage for southbound queues. C - Construct a 150-foot southbound right-turn lane to prevent queues from extending back to Pinehurst Avenue during the p.m. peak hour.

Table 14. Year 2040 Build Ryan Proposal Issue, Consideration, and Mitigation Summary

Issue	Consideration (C) / Mitigation (M)				
Ford Parkway/Fairview Avenue					
• Intersection is expected to operate at an overall LOS F, with queues expected to be 600 feet or longer for all approaches; the southbound approach is expected to have queues greater than 1,500 feet.	• M - Construct a southbound right-turn lane to improve operations and reduce queues.				
Cleveland Avenu	ue/Montreal Avenue				
• Upon full-build out of the Ryan Proposal scenario for the Ford Site, Montreal Avenue is expected to serve more volume than Cleveland Avenue, which is opposite from current conditions.	• M - Switch the stop control from the Montreal Avenue approaches to stop control for the Cleveland Avenue approaches to better support future travel patterns or install all-way stop control.				
	• M - Construct the intersection such that a potential future traffic signal could be installed without having to reconstruct the intersection.				
St Paul Avenue	e/Montreal Avenue				
 Intersection is expected to operate at an overall LOS F, with 95th percentile queues expected to be 600 feet or longer on the westbound and northbound approaches. 	• M - Install a traffic signal or hybrid roundabout to improve operations. If a traffic signal is selected, install a northbound left-turn lane as well as left-turn lanes along the east and west approaches to reduce potential conflicts.				

* Note that the issues, considerations, and mitigation shown are in addition to the previously identified items as part of the existing and year 2040 no build conditions.

Year 2040 Build Conditions - Max Build Scenario

Year 2040 build conditions were reviewed to understand how the transportation system study area would be expected to operate based on the Max Build development scenario. The following information summarizes the year 2040 Max Build conditions.

Assumptions

The following assumptions were included as part of the intersection capacity analysis:

- Traffic forecasts account for the annual background growth rate, travel pattern changes associated with the build out of the Ford Site transportation network, and the Max Build AUAR scenario trip generation.
- At the Ford Parkway/Cleveland Avenue intersection, a southbound right-turn lane was included, as well as an extended eastbound left-turn lane, which were identified as mitigation under existing conditions.
- At the Ford Parkway/Fairview Avenue intersection, left-turn signal phasing capability for all approaches was included and at the Cretin Avenue/Randolph Avenue intersection, northbound and southbound left-turn lanes were included, which were both identified as mitigation under year 2040 no build conditions.
- The following year 2040 Build Ryan Proposal mitigation was assumed as part of the year 2040 Max Build Conditions:
 - At the Ford Parkway/Mount Curve Boulevard intersection, a traffic signal and northbound and southbound left-turn lanes was included, as well as an extended eastbound left-turn lane.
 - At the Ford Parkway/Cretin Avenue intersection, northbound, southbound, and westbound left-turn signal phasing was included, as well as extended eastbound, westbound, and southbound left-turn lanes.
 - At the Ford Parkway/Fairview Avenue intersection, a southbound right-turn lane was included in addition to the year 2040 no build mitigation identified above.
 - At the Cleveland Avenue/Montreal Avenue intersection, the Cleveland Avenue approaches were stop controlled and the Montreal Avenue approaches were uncontrolled.
 - At the St Paul Avenue/Montreal Avenue intersection, a traffic signal and a northbound leftturn lane was included.
- Signal timing was optimized within the transportation system study area.

Intersection Capacity Analysis

Results of the year 2040 Max Build intersection capacity analysis, shown in Table 15, indicate that the majority of the study intersections are expected to operate at an acceptable overall LOS D or better during the weekday a.m. and p.m. peak hours. The results also identified locations where longer queues are expected during the p.m. peak hour. The issues and mitigation for the year 2040 Max Build conditions are summarized in the following section.

An illustrative summary of the year 2040 Max Build condition p.m. peak hour operations in shown in Figure 20, which represents the worst-case condition within the transportation system study area as previously noted. Year 2040 Max Build condition intersection capacity results, including previously identified mitigation, are shown in Table 15, while detailed analysis results are shown in the Appendix.

Issues and Mitigation

The following capacity and/or queuing issues were identified as part of the year 2040 Max Build conditions analysis. As previously noted, potential improvements are classified in the following categories:

- **Considerations** improvements that are expected to help the identified issue (i.e. generally acceptable overall intersection operations but there are queues that impact operations or are greater than 300 feet) but may result in impacts to right-of-way or be in conflict with access, pedestrian, bicyclist, or transit priorities.
- **Mitigation** improvements that are considered necessary, due to either an intersection capacity issue (i.e. overall LOS E or LOS F) or a queuing issue (i.e. greater than 600 feet).

The year 2040 Max Build issues, considerations, and mitigation identified are summarized in Table 16, which are in addition to the existing, year 2040 no build, and year 2040 Ryan Proposal condition mitigation previously identified.

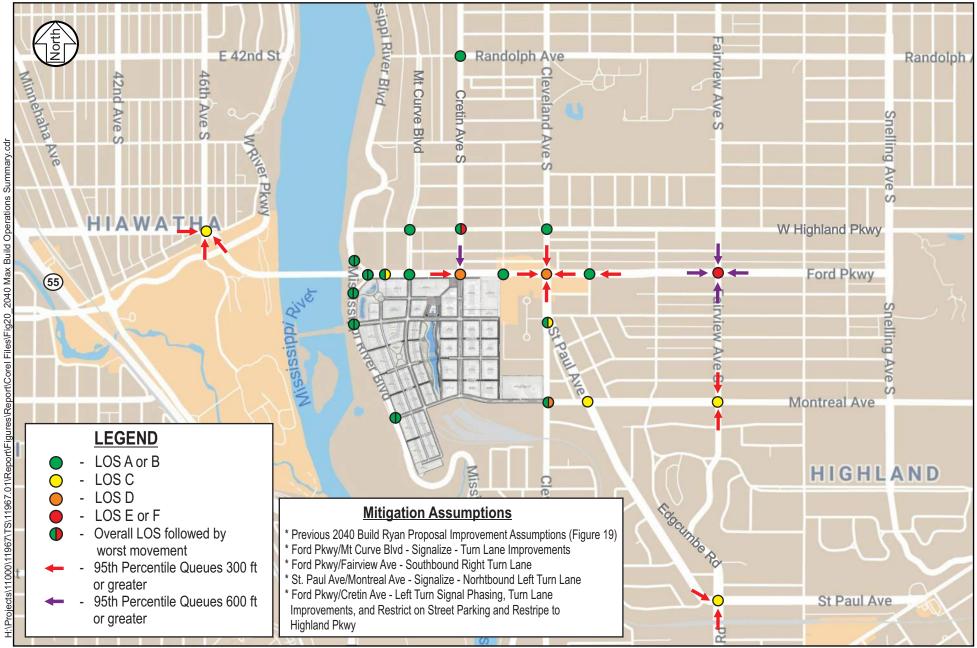
Note that the Ford Parkway/Fairview Avenue intersection with the previously identified mitigation is not expected to be able to provide acceptable intersection operations under the Max Build scenario. One potential mitigation strategy to resolve this issue is the reconstruction of Ford Parkway from Kenneth Street to Snelling Avenue as a four-lane facility. However, discussion with Saint Paul and Ramsey County staff indicated this level of mitigation is not supported at this time. Therefore, strategies aimed at reducing vehicular trips to reduce the vehicular impact along Ford Parkway (east of Kenneth Street) are recommended. Note that as part of the AUAR update process, intersections may be reevaluated depending on the level of development that has occurred to determine any necessary changes to the identified mitigation.

Table 15. Year 2040 Max Build Intersection Capacity Analysis

	A.M. Peak Hour	P.M. Peak Hour
Intersection	Year 2040 Max Build	Year 2040 Max Build
46th Street/46th Avenue	B (15 sec.)	C (31 sec.)
Ford Parkway/Ford Parkway Ramps ⁽¹⁾	A/A (6 sec.)	A/B (11 sec.)
Ford Parkway/Woodlawn Avenue (1)	A/A (5 sec.)	A/C (25 sec.)
Ford Parkway/Mount Curve Boulevard ⁽¹⁾	A (10 sec.)	B (15 sec.)
Ford Parkway/Cretin Avenue	B (18 sec.)	D (37 sec.)
Ford Parkway/Finn Street	B (13 sec.)	B (19 sec.)
Ford Parkway/Cleveland Avenue	C (23 sec.)	D (48 sec.)
Ford Parkway/Kenneth Street	A (9 sec.)	B (14 sec.)
Ford Parkway/Fairview Avenue	C (30 sec.)	E (57 sec.)
Cleveland Avenue/Highland Parkway	A (9 sec)	B (14 sec.)
Cleveland Ave/St Paul Ave/Bohland Ave $^{\scriptscriptstyle (1)}$	A/C (20 sec.)	A/C (22 sec.)
St Paul Avenue/Montreal Avenue ⁽²⁾	B (18 sec.)	C (21 sec.)
St Paul Avenue/Edgcumbe Road	C (24 sec.)	C (26 sec.)
Montreal Avenue/Cleveland Avenue (1)	A/B (14 sec.)	A/D (27 sec.)
Montreal Avenue/Fairview Avenue	B (19 sec.)	C (21 sec.)
Mississippi River Blvd/Ford Pkwy North (1)	A/A (4 sec.)	A/A (7 sec.)
Mississippi River Blvd/South Ford Pkwy South (1)	A/A (6 sec.)	A/A (7 sec.)
Mississippi River Blvd/Bohland Avenue (1)	A/A (4 sec.)	A/A (4 sec.)
Mississippi River Blvd/Montreal Avenue (1)	A/A (6 sec.)	A/A (6 sec.)
Mount Curve Boulevard/Highland Parkway ⁽²⁾	A (6 sec.)	A (6 sec.)
Cretin Avenue/Randolph Avenue	B (14 sec.)	B (16 sec.)
Cretin Avenue/Highland Parkway (1)	A/B (12 sec.)	A/E (39 sec.)

(1) Indicates an unsignalized intersection with side-street stop control where the overall LOS is shown followed by the worst approach LOS.

(2) Indicates an unsignalized intersection with all-way stop control.



2040 Max Build P.M Peak Hour Operations Summary

Ford Site AUAR Transportation Analysis City of Saint Paul Figure 20

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Issue	Consideration (C) / Mitigation (M)			
Ford Parkway/Cretin Avenue				
• The southbound shared thru-right lane is expected to operate at LOS F during the p.m. peak hour, and queues are expected to extend into Highland Parkway during the p.m. peak hour, causing operational issues at the Cretin Avenue/Highland Parkway intersection.	 M - Construct a southbound right-turn lane that is approximately 150 feet to reduce southbound queues. C - Preserve the right-of-way to provide a future 100-foot northbound right-turn lane if needed, which depends on the future extension of Finn Street into the Ford Site. 			
Ford Parkway	/Fairview Avenue			
 Intersection is expected to operate at an overall LOS E during the p.m. peak hour; all approaches are expected to have a 600-foot queue or greater. 	 M - Implement Travel Demand Management (TDM) strategies to reduce vehicular trips; example strategies that could provide benefit (i.e. a reduction in vehicular trips) not listed within the Ford Site Master Plan include: Provide indoor secure bike parking for commercial, office, and residential land uses. Require residents, employees, and customers to pay for parking. Provide a Free Transit Pass Program to residents and employees. Provide a ride/carpooling/vanpooling and/or guaranteed ride home program. M - Refine land use guidance/assumptions to move more density to the southern and southeastern portions of the site to better balance traffic volumes throughout the area and reduce traffic volume impacts to Ford Parkway (east of Kenneth Street). 			

Table 16. Year 2040 Max Build Issue, Consideration, and Mitigation Summary

* Note that the issues, considerations, and mitigation shown are in addition to the previously identified items as part of the existing, year 2040 no build, and year 2040 build Ryan Proposal conditions.

Mitigation Summary

A summary of the identified mitigation for each condition (i.e. existing, year 2040 no build, year 2040 Build Ryan Proposal, and year 2040 Max Build) is illustrated in Table 17. This table includes columns to indicate under which condition or scenario a particular mitigation is expected to be needed. Note that some mitigation is necessary based on current or future conditions, regardless of the proposed development, while others are only contingent upon the level of Ford Site development. Furthermore, the mitigation is intended to ensure overall intersection LOS D or better operations and queues less than 600 feet during the a.m. and p.m. peak hours. However, consideration should be given to accepting higher levels of delay or congestion for limited periods of time to balance and preserve other priorities, such as providing enhanced pedestrian, bicycle, and/or transit networks and environments. The mitigation identified is intended to provide discretion to stakeholders with respect to transportation priorities and implementation.

Ford Site AUAR Transportation Analysis

Table 17. Mitigation Summary

leeve	Oppoiderations and Mitigation	Condition / Scenario			
Issue	Considerations and Mitigation	Existing	2040 No Build	2040 Ryan Proposal	2040 Max Build
46th Street/46th Avenue					
WB Left Turn Queues NB Right Turn Queues	 Provide Northbound Right Turn Lane Extend Westbound Left Turn Lane Modify Signal Timing/Phasing Remove Northeast Approach (Edmund Boulevard) 	Consideration	Consideration	Consideration	Consideration
Ford Parkway/Mount Curve Boulevard					
Side Street Delays	1) Signalize/Turn Lane Improvements			Mitigation	Mitigation Assume
Side-Street Delays	2) Extend the westbound left-turn lane			Consideration	Consideration
Ford Parkway/Cretin Avenue					
SB Queues	 Modify Signal Timing and Phasing Extend eastbound and westbound left-turn lanes Restrict Parking to Pinehurst/Highland and restripe segment 	Consideration	Consideration	Mitigation	Mitigation Assume
	4) Construct Southbound Right Turn Lane			Consideration	Mitigation
NB Queues	5) Preserve the ability to add a northbound right-turn lane if the Finn Street Connection to the Ford Site is not implemented				Consideration
Ford Parkway/Cleveland Avenue					
Intersection Operations and Queues	 Extend Eastbound Left Turn Lane Remove Parking and Provide a Southbound Right Turn Lane 	Mitigation		Mitigation Assumed	
Ford Parkway/Fairview Avenue					
Left Turn Operations and Queues	1) Provide Left Turn Signal Phasing	Consideration	Mitigation	Mitigation	Assumed
	2) Construct Southbound Right Turn Lane			Mitigation	Mitigation Assume
Intersection Operations and Queues	3) Implement TDM Strategies and Refine Land Use Guidance**				Mitigation
Cleveland Avenue/Montreal Avenue					
Travel Pattern Changes	 Switch Side-Street Stop Control to North/South Approach or Install All-Way Stop Control Construct Intersection for Potential Future Signal ** 			Mitigation	Mitigation Assume
St Paul Avenue/Montreal Avenue			1		
Intersection Operations and Queues	1) Install Traffic Signal/Turn Lanes or Hybrid Roundabout			Mitigation	Mitigation Assume
St Paul Avenue/Edgcumbe Road			1	1	
Intersection Queues	1) Provide Eastbound Right Turn Overlap Phase	Consideration	Consideration	Consideration	Consideration
Cretin Avenue/Randolph Avenue					
Intersection Queues	1) Provide Northbound/Southbound Left Turn Lanes	Consideration	Mitigation	Mitigation	Assumed
Montreal Avenue/Fairview Avenue			1	1	
Intersection Queues	1) Provide Left Turn Signal Phasing		Consideration	Consideration	Consideration
Cleveland Avenue/St Paul Avenue/Bohland Aven	nue				
Illegal Movements and Potential Safety Issue	1) Reconfigure intersection and provide traffic control change	Consideration	Consideration	Consideration	Consideration

** = Land use guidance/more density in southern portion of site could impact need of a potential signal at Cleveland Avenue/Montreal Avenue intersection.

Extended Roadway Network Review

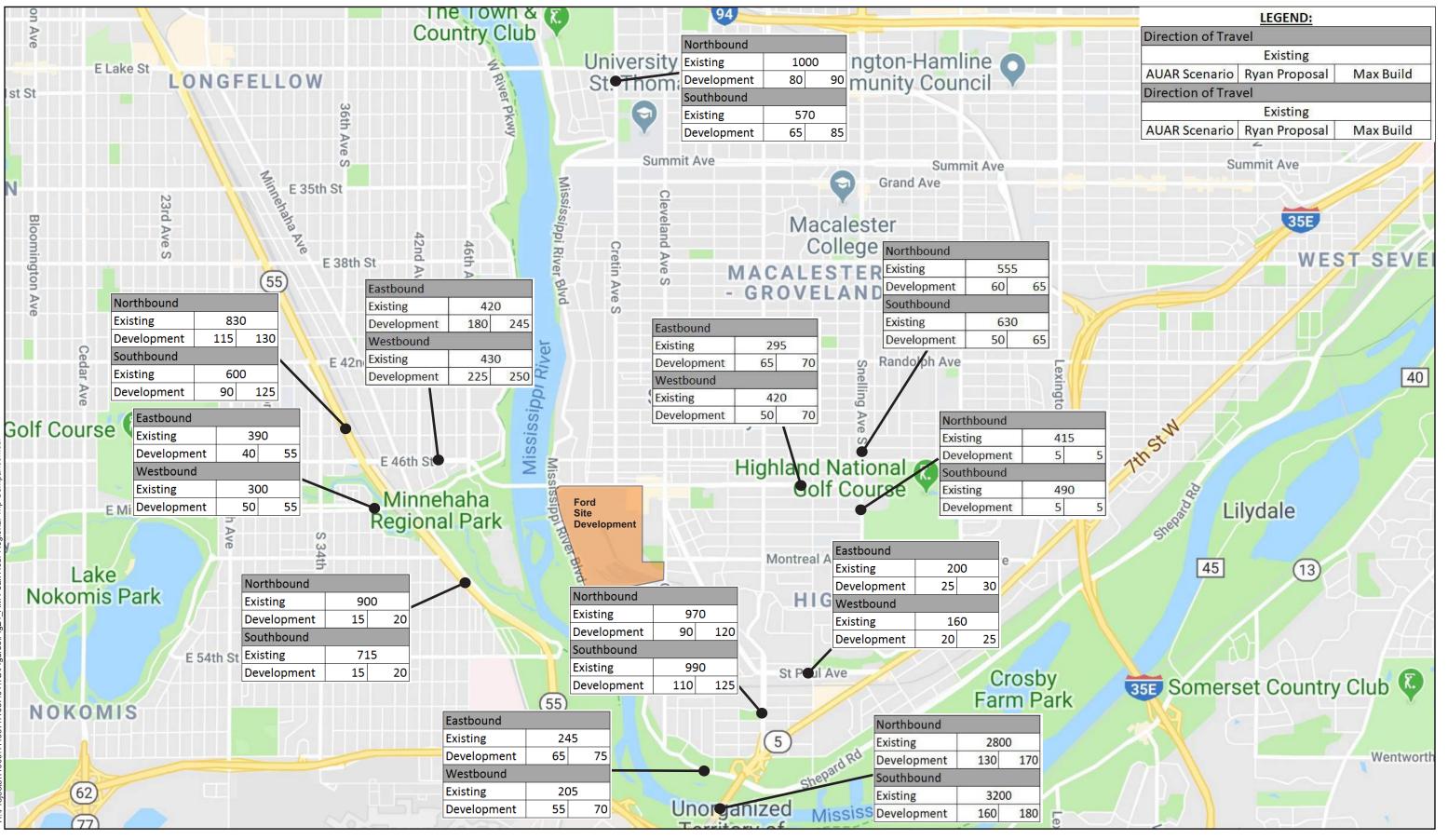
A planning-level review was completed to understand potential impacts associated with a wider geographic area, including Mn TH 55 (Hiawatha Avenue) to the West, Mn TH 5 (7th Street) to the South, Mn Highway 51 (Snelling Avenue/Montreal Avenue) to the east, Cretin Avenue near Marshall Avenue (County Road 35), and Saint Paul Avenue near Mn TH 5 (7th Street). This review focused on existing and development related traffic volume impacts for various roadway segments surrounding the Ford Site during the a.m. and p.m. peak hours. This information was shared with multiple agencies, including MnDOT, Metro Transit, Hennepin County, Ramsey County, Minneapolis, and Saint Paul representatives. A summary of the existing a.m. and p.m. peak hour volumes and development related trip impacts are illustrated in Figure 21 and Figure 22, respectively.

The primary roadways within the area and their expected future average daily traffic volumes under each scenario are summarized in Table 18, along with the estimated roadway capacities. Although traffic volumes on these roadways are expected to increase, they are within or below the estimated capacity of the roadway facilities. It is important to note that traffic volumes are expected to gradually increase as development occurs, which is expected to take approximately 10 to 15 years. Furthermore, the central location of the Ford Site lessens the impact to any one particular roadway since development related traffic volumes are dispersed relatively evenly to the west, east, north, and south.

Roadway	Average Daily Traffic Volume (vehicles per day)				
	Existing*	Year 2040 Ryan Proposal	Year 2040 Max Build	Estimated Roadway Capacity	
MN TH 55 (Hiawatha Avenue) North of 46th Avenue	17,400	21,400	22,250	30,000 to 36,000	
MN TH 5 (7th Street) At MN River Bridge	56,000	63,400	64,500	55,000 to 70,000	
MN TH 51 (Snelling Avenue) North of Ford Parkway	15,600	18,100	18,600	18,000 to 22,000	
MN TH 51 (Montreal Avenue) East of Snelling Avenue	11,800	14,500	15,100	12,000 to 17,000	
Cretin Avenue North of Summit Avenue	15,100	18,100	18,700	18,000 to 22,000	
St Paul Avenue East of Edgcumbe Road	3,600	4,450	4,600	30,000 to 36,000	
CR 46 (Edgcumbe Road) South of St Paul Avenue	16,600	20,500	21,300	30,000 to 36,000	

 Table 18. Extended Roadway Network Traffic Volume Changes

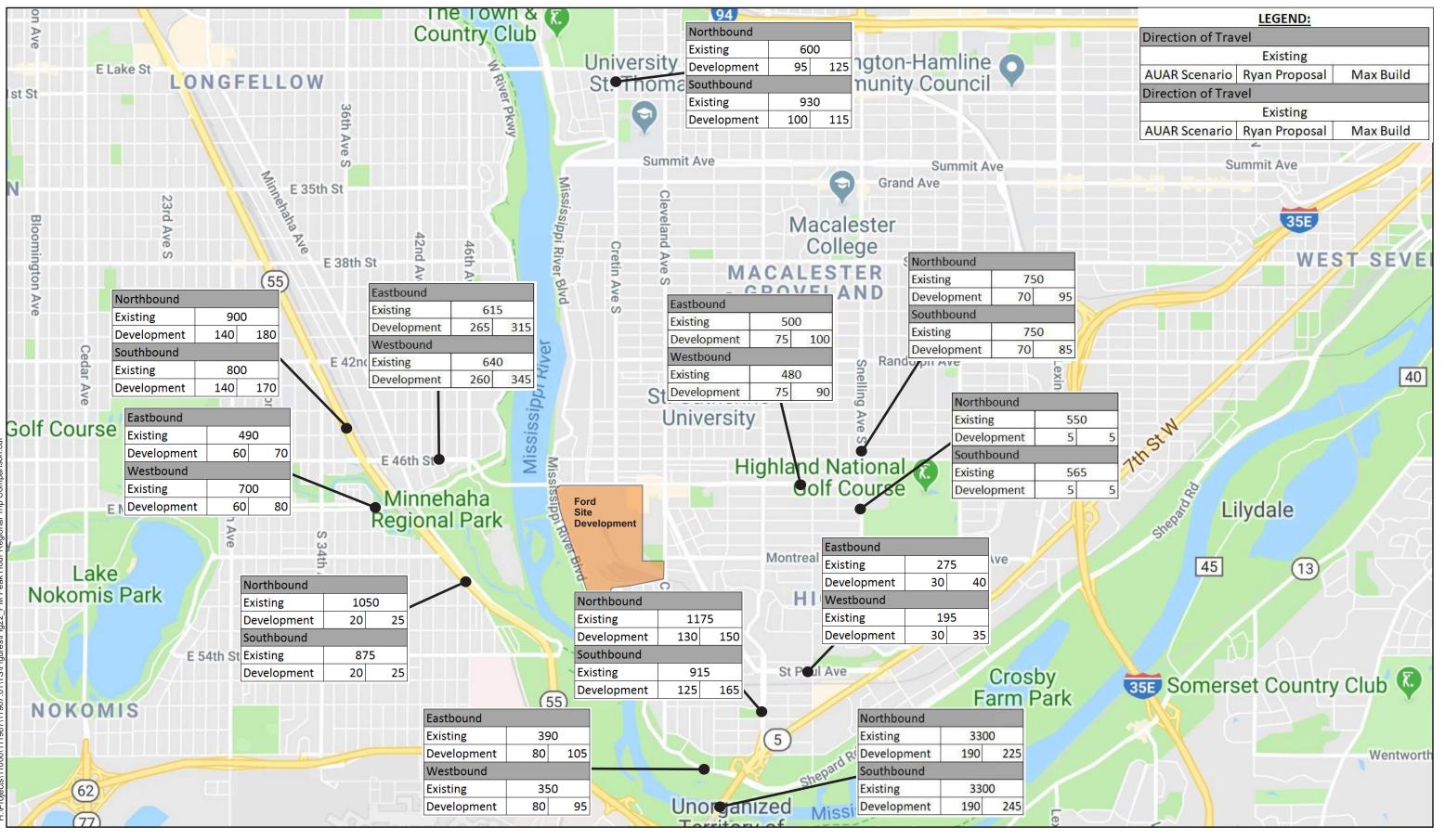
*Source: MnDOT Traffic Mapping Application; Data represents the most recent ADT information available as of June 19, 2019.





A.M. Peak Hour Regional Trip Comparison (Segments)

Ford Site AUAR Transportation Analysis City of Saint Paul





P.M. Peak Hour Regional Trip Comparison (Segments)

Ford Site AUAR Transportation Analysis City of Saint Paul

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Transportation System Study Area Roadway Network Review

The study intersections were identified based on the roadways and facilities most likely to be impacted as a result of the Ford Site redevelopment. However, it is important to note that traffic volume changes may occur on other streets near the Ford Site within the study area. A summary of the existing, year 2040 no build, year 2040 Ryan Proposal, and year 2040 Max Build average daily traffic volumes for area roadways are included in the Appendix. Select roadways adjacent to and connected to the Ford Site that are expected to experience higher levels of traffic volume increases (based on daily traffic volumes) are summarized in Table 19, along with the estimated roadway capacities. Although traffic volumes on these roadways are expected to increase, they are within the estimated capacity of the roadway facilities, which are functionally classified as collector roadways except Mount Curve Boulevard and portions of Mississippi River Boulevard, which are classified as local roadways.

Roadway	Average Daily Traffic Volume (vehicles per day)				
	Existing	Year 2040 Ryan Proposal	Year 2040 Max Build	Estimated Roadway Capacity	
Mississippi River Boulevard (North of Ford Parkway)	4,700	5,400	5,550	8,000 to 10,000	
Mount Curve Boulevard (North of Ford Parkway)	1,000	2,300	2,600	8,000 to 10,000	
Cleveland Avenue (South of Montreal Avenue)	2,300	4,200	4,600	8,000 to 10,000	
Montreal Avenue (East of St Paul Avenue)	3,200	5,500	6,000	8,000 to 10,000	

 Table 19. Transportation System Study Area Roadway Network Traffic Volume Changes

Note that traffic volumes are expected to gradually increase as development occurs, which is expected to take approximately 10 to 15 years. In general, an increase in 1,000 vehicles per day equates to an additional two (2) vehicles per minute during peak times. Although some traffic volume changes on other roadways not identified within Table 19 are expected because of the Ford Site development and associated roadway network additions, any changes are expected to be relatively minimal as they do not directly connect to the site and/or are within the realm of a typical residential street.

However, given the change in volumes on some of the roadways, improvements could be considered to manage increases in traffic volumes and/or speeds on these roadways. Potential improvements, which are consistent with City policies and practices and would likely be included as part of a future street reconstruction, include installing curb bump-outs at the Cretin Avenue/Highland Parkway intersection, along Mount Curve Boulevard (at Highland Parkway, Scheffer Avenue, and Hartford Avenue) and along Montreal Avenue (at Wilder Street and Howell Street). Note that as part of the City's 2019 mill and overlay program, curb bump-outs were constructed along Cleveland Avenue.

Internal Roadway Network Considerations

In addition to the external study intersection and roadway evaluations, the roadway network within the Ford Site was evaluated from a capacity perspective to ensure facilities are appropriately sized, provide guidance on access and traffic controls, and better understand impacts associated with other potential roadway connections such as Saunders Avenue, Village Way, and Finn Street. This evaluation was completed using Synchro/SimTraffic software and engineering judgement; focusing on future build conditions.

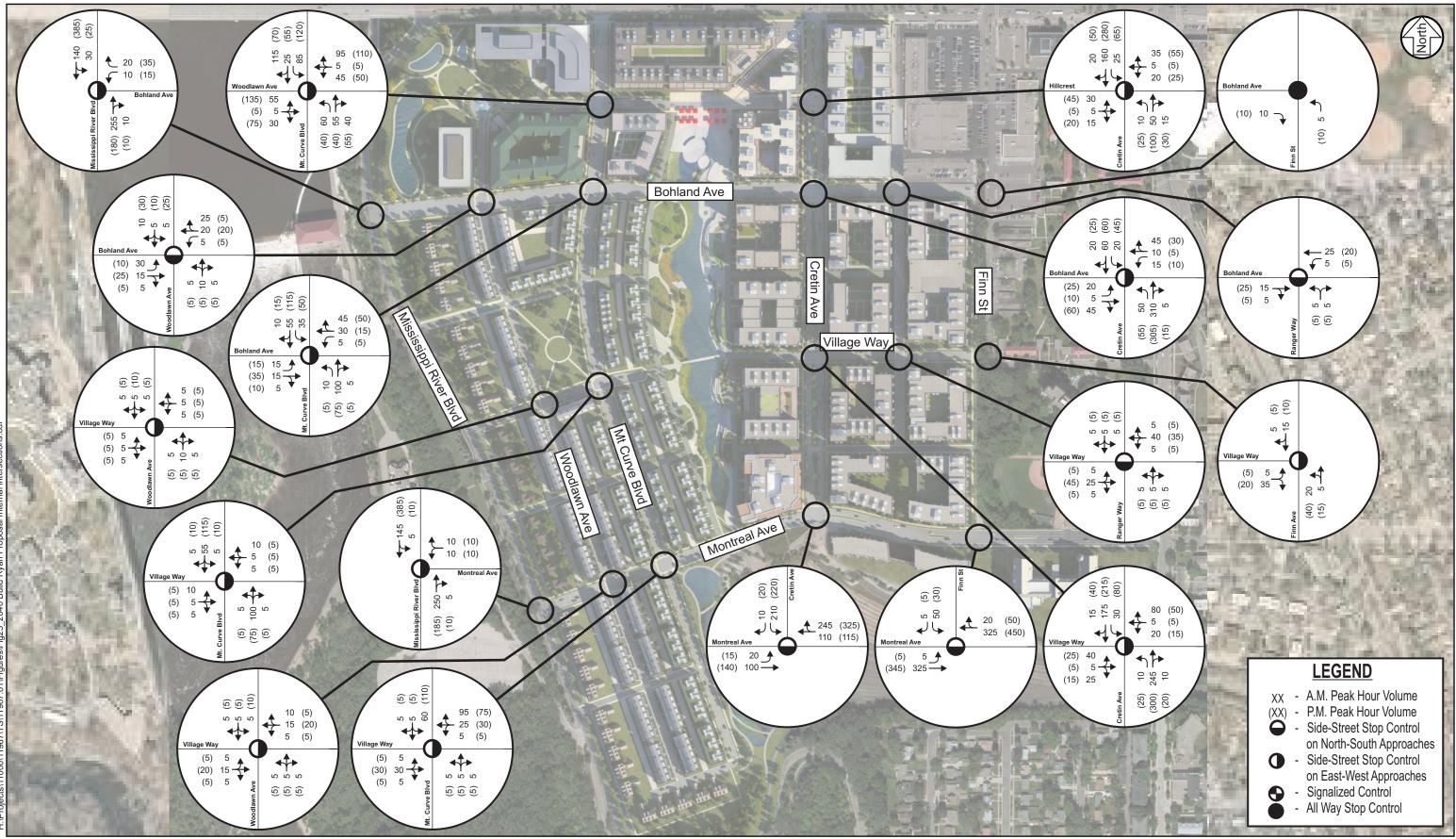
Intersection Capacity Analysis

All internal intersections were assumed to be side-street stop control for analysis purposes. Roadways were assumed to be either two-lane or three-lane two-way facilities, as described in the Ford Site Master Plan. The assumed traffic forecasts, roadway geometry, and traffic control types for the Ryan Proposal and Max Build scenarios are illustrated in Figure 23 and Figure 24, respectively. Results of the internal roadway network evaluation indicate that in general, all internal roadways and intersections are all expected to operate acceptably under future year 2040 conditions during the a.m. and p.m. peak hours. A summary of the year 2040 internal intersection capacity analysis is provided in Table 20.

	Condition			
Intersection	A.M. Pe	ak Hour	P.M. Pe	ak Hour
	Year 2040 Ryan Build	Year 2040 Max Build	Year 2040 Ryan Build	Year 2040 Max Build
Woodlawn Avenue/Bohland Avenue (1)	A/A (6 sec.)	A/A (6 sec.)	A/A (5 sec.)	A/A (6 sec.)
Woodlawn Avenue/Village Way (1)	A/A (4 sec.)	A/A (7 sec.)	A/A (5 sec.)	A/A (5 sec.)
Woodlawn Avenue/Montreal Avenue (1)	A/A (5 sec.)	A/A (6 sec.)	A/A (6 sec.)	A/A (6 sec.)
Mount Curve Boulevard/Woodlawn Avenue (1)	A/A (6 sec.)	A/A (6 sec.)	A/A (8 sec.)	A/A (9 sec.)
Mount Curve Boulevard/Bohland Avenue (1)	A/A (6 sec.)	A/A (6 sec.)	A/A (6 sec.)	A/A (6 sec.)
Mount Curve Boulevard/Village Way (1)	A/A (5 sec.)	A/A (5 sec.)	A/A (6 sec.)	A/A (5 sec.)
Mount Curve Boulevard/Montreal Avenue (1)	A/A (6 sec.)	A/A (6 sec.)	A/A (7 sec.)	A/A (6 sec.)
Cretin Avenue/Hillcrest (1)	A/A (7 sec.)	A/A (7 sec.)	A/A (9 sec.)	A/A (10 sec.)
Cretin Avenue/Bohland Avenue (1)	A/A (6 sec.)	A/A (6 sec.)	A/A (7 sec.)	A/A (8 sec.)
Cretin Avenue/Village Way (1)	A/A (7 sec.)	A/A (6 sec.)	A/A (7 sec.)	A/A (8 sec.)
Cretin Avenue/Montreal Avenue (1)	A/A (8 sec.)	A/A (9 sec.)	A/A (9 sec.)	A/B (11 sec.)
Ranger Way/Bohland Avenue (1)	A/A (1 sec.)	A/A (1 sec.)	A/A (1 sec.)	A/A (1 sec.)
Ranger Way/Village Way (1)	A/A (5 sec.)	A/A (5 sec.)	A/A (4 sec.)	A/A (2 sec.)
Finn Street/Bohland Avenue (1)	A/A (3 sec.)	A/A (6 sec.)	A/A (2 sec.)	A/A (5 sec.)
Finn Street/Village Way (1)	A/A (4 sec.)	A/A (4 sec.)	A/A (4 sec.)	A/A (5 sec.)
Finn Street/Saunders Avenue (1)	A/A (1 sec.)	A/A (1 sec.)	A/A (1 sec.)	A/A (3 sec.)
Finn Street/Montreal Avenue (1)	A/A (8 sec.)	A/A (10 sec.)	A/A (10 sec.)	A/B (12 sec.)
Cleveland Avenue/Saunders Avenue (1)	A/A (1 sec.)	A/A (2 sec.)	A/A (3 sec.)	A/A (1 sec.)

 Table 20. Internal Roadway Intersection Capacity Analysis Summary

(1) Indicates an unsignalized intersection with side-street stop control where the overall LOS is shown followed by the worst approach LOS.

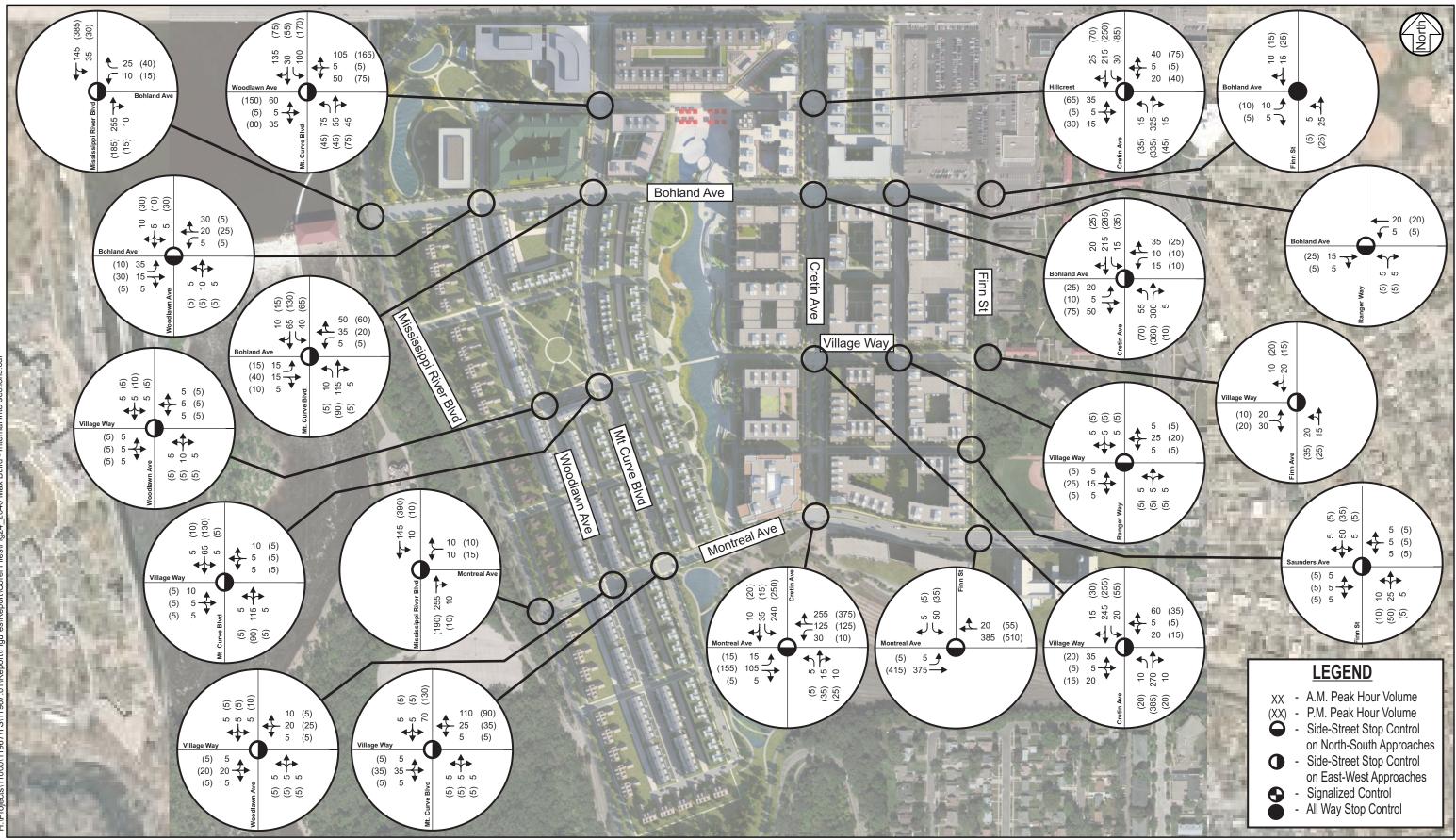




01911967 August 2019

Year 2040 Ryan Proposal Conditions - Internal Intersections

Ford Site AUAR Transportation Analysis City of Saint Paul Figure 23





01911967 August 2019

Year 2040 Max Build Conditions - Internal Intersections

Ford Site AUAR Transportation Analysis City of Saint Paul Figure 24

Access, Traffic Controls, and Connections

Based on the results of the internal roadway capacity analysis, the following information is offered for consideration:

- Private access should be limited, if possible, along the following segments to reduce potential conflicts with pedestrians and bicyclists and to ensure acceptable traffic operations are maintained (unless located across from a public roadway):
 - o Ford Parkway
 - Mount Curve Boulevard (from Ford Parkway to Bohland Avenue)
 - Cretin Avenue (from Ford Parkway to Montreal Avenue)
 - o Montreal Avenue (from Cretin Avenue to Cleveland Avenue)

Note that access will be evaluated individually for each development as there are potential constraints that may need to be considered.

- Further discussion with the project team should occur to determine how the roadways transition between a two-lane and three-lane facility at the following intersections:
 - o Mount Curve Boulevard at Bohland Avenue
 - Montreal Avenue at Cretin Avenue
- The traffic control at the Cretin Avenue/Montreal Avenue intersection is expected to operate adequately as a side-street stop control intersection; other traffic controls such as an all-way stop control or single-lane roundabout could be considered. A traffic signal is not expected to be warranted under future build condition at this location.
- A future extension of Finn Street into the Ford Site was evaluated and is expected to provide a benefit to area circulation and help balance traffic volumes at the various access points along Ford Parkway (i.e. Mount Curve Boulevard, Cretin Avenue, and Finn Street). Without a future Finn Street connection, there may be a need to construct a northbound right-turn lane at the Ford Parkway/Cretin Avenue intersection to minimize queuing along Cretin Avenue.
- The extension of Saunders Avenue and/or Village Way between Finn Street and Cleveland Avenue would provide additional circulation and access options for all modes. However, neither connection is expected to provide a significant operational benefit from an intersection capacity perspective and would not result in any change in the mitigation identified.

Ford Site Zoning and Public Realm Master Plan Transportation Network Changes

The *Ford Site Zoning and Public Realm Master Plan* identified a transportation network for the Ford Site, which was used as the basis for the roadway network assumptions included in the Ryan Proposal and Max Build AUAR scenarios. Results of the intersection capacity analysis are generally consistent with the guidance within the Ford Site Master Plan. However, the following roadway network changes are offered for City review and consideration.

- Montreal Avenue Mississippi River Boulevard to Cretin Avenue
 - Current Design a two-lane roadway with single direction, dedicated bicycle lanes next to traffic lanes. There are no on-street parking lanes. A six-foot tree-lined boulevard and six-foot sidewalks line the edges.
 - Design Consideration to provide continuity with other segments of Montreal Avenue to the east, this segment could be expanded to a two-lane facility with a median or a three-lane facility to provide route continuity with the rest of Montreal Avenue and eliminate the intersection transition issue at Cretin Avenue.
- Bohland Avenue Mississippi River Boulevard to Finn Street
 - Current Design one of the main east-west roadways on the site. Street parking is allowed on one side of the street for access to the square, retail district, and stormwater feature. There are dedicated bike lanes in each direction. A turn lane allows access to parking. A four-foot tree lined boulevard and six-foot sidewalk line the edges.
 - Design Consideration from a vehicular capacity perspective, this segment does not need to be a three-lane configuration. Removal of the center two-way left-turn lane would allow for additional on-street parking, enhancement of other facilities (i.e. bike lanes or sidewalk space), and/or a reduction in overall cross-section/right-of-way need.

Pedestrian and Bicycle Facilities

The *Saint Paul Ford Site: Multimodal Transportation Study and Report* reviewed transit service quality and pedestrian/bicyclist level of service to identify various improvements to the pedestrian and bicyclist environments, which are incorporated in the overall Ford Site Master Plan. The following information summarizes pedestrian and bicycle activity expected within the area and potential enhancements for consideration.

Based on the AUAR transportation analysis, the Ford Site is expected to generate between 5,400 and 7,200 walk/bike trips per day, depending on the AUAR build scenario. From a peak hour perspective, this equates to approximately 350 to 450 a.m. peak hour and 450 to 600 p.m. peak hour walk/bike trips to/from the Ford Site. A summary of the existing and future pedestrian and bicycle volumes during the p.m. peak hour at the key intersections entering/exiting the Ford Site is illustrated in Table 21, which were included in the future capacity analysis previously discussed. Note that some pedestrians and bicycles are expected to cross only one approach of a particular intersection, while others are expected to travel through multiple intersections.

	P.M. Peak Hour Ped/Bike Intersection Volumes				
Intersection	Existing	Year 2040 Ryan Proposal	Year 2040 Max Build		
Ford Parkway / Mount Curve Boulevard	38	245	265		
Ford Parkway / Cretin Avenue	56	255	270		
Ford Parkway / Cleveland Avenue	352	460	470		
Mississippi River Boulevard / Montreal Avenue	N/A	50	50		
Montreal Avenue / Cleveland Avenue	22	180	195		

 Table 21. Pedestrian and Bicycle Volume Changes

The Ford Site Master Plan identifies a future street network system that is designed to accommodate all modes of transportation and the expected magnitude of users of each. Based on a preliminary review of the proposed roadway crosssections, there appears to be sufficient capacity to accommodate the projected pedestrian and bicycle activity within the Ford Site transportation network.



Bicycle Considerations

The existing conditions section documented the bicycle facility network adjacent to the Ford Site. In addition, the *City of Saint Paul Bicycle Plan* and Metropolitan Council's *Regional Bicycle Transportation Network* (RBTN) identify the future vision of the bicycle network for the area surrounding and connecting to the Ford Site. This section reviews both the existing and proposed bicycle network and offers considerations for enhancements to the bicycle network. These considerations are consistent with the RBTN vision.

- Ford Parkway Bicycle Facility
 - There are existing bike lanes along Ford Parkway, east of Kenneth Street, as well as sharedbike lane accommodations from Mississippi River Boulevard to Kenneth Street. As part of the Ford Site development, a trail is planned along the south side of Ford Parkway along the limits of the Ford Site. With the projected bicycle demand from the Ford Site, connectivity to Mississippi River Boulevard, and the expected traffic volumes on Ford Parkway, consideration should be given to providing a higher level of bicycle facility on Ford Parkway between the planned trail facility and the existing bike lanes east of Kenneth Street. Consideration should also be given to how these facilities are connected to each other and the adjacent bicycle network.
- Montreal Avenue Bicycle Facility
 - o Construction of the Ford Site infrastructure will create a gap in the bicycle facility network along Montreal Avenue between Cleveland Avenue and St Paul Avenue. To facilitate bicycle access to/from the Ford Site, removing this gap should be prioritized. The existing bicycle facility on Montreal Avenue, east of St Paul Avenue, is a shared-lane facility. With the projected bicycle demand from the Ford Site, connectivity to Mississippi River Blvd, and the expected traffic volumes on Montreal Avenue, consideration should be given to providing a higher level of bicycle facility on this segment of Montreal Avenue and further to the east.
- Cleveland Avenue Bicycle Facility
 - There are bike lanes along Cleveland Avenue, north of Eleanor Avenue and a shared-bike lane accommodation between Eleanor Avenue and Highland Parkway, but there is an existing bicycle facility gap along Cleveland Avenue between Highland Parkway and Mississippi River Boulevard. The City's bicycle plan identifies Cleveland Avenue as a shared-lane facility between St Paul Avenue and Mississippi River Boulevard and in-street lanes between Eleanor Avenue and St Paul Avenue. However, with the projected bicycle demand from the Ford Site, the expected traffic volumes on Cleveland Avenue, and potential implementation of a bicycle facility along St Paul Avenue, consideration should be given to providing a higher level of bicycle facility on these roadway segments, in addition to how these facilities are connected and fit within the adjacent bicycle network.

- Mount Curve Boulevard Bicycle Facility
 - Given that Mount Curve Boulevard within the Ford Site is expected to have a bicycle facility, extending a bicycle facility along Mount Curve Boulevard, north of Ford Parkway up to Highland Parkway and/or Jefferson Avenue should be considered.
- Mississippi River Boulevard Bicycle Facility
 - There is currently an on-street bicycle lane in the southbound direction along Mississippi River Boulevard, in addition to the adjacent multi-use trail. There is no existing northbound bike lane. The existing facilities are popular, and the Ford Site is expected to increase the use of these facilities. Given the use of the corridor by pedestrians and bicycles and the current shared facility design, consideration should be given to reviewing the planned pedestrian and bicycle facilities on Mississippi River Boulevard.
- St Paul Avenue (County Road 46) Bicycle Facility
 - There are currently no bicycle facilities along St Paul Avenue. However, Ramsey County is considering implementation of a bicycle facility along St Paul Avenue as part of an upcoming mill and overlay project, which could result in the elimination of a vehicular travel lane in each direction. A bicycle facility along St Paul Avenue, which is consistent with the City's bicycle plan, would help support the Ford Site and should be considered. Additional discussion regarding potential operational impacts of this type of facility is noted later in this study.
- CP Rail Spur Bicycle Facility
 - The Ford Site is expected to create more demand for the CP Rail Spur trail shown on the *City's Planned Bicycle Network Map.* This corridor would provide an off-street trail facility separated from motor vehicles that would support the Ford Site development by providing a high-quality bicycle and pedestrian connection to area job centers, such as downtown and the West 7th Street corridor.

These enhancements to the bicycle network can help to further reduce dependence on vehicles, provide improved connectivity to existing facilities, and reduce overall vehicular impacts associated with redevelopment of the Ford Site.

Pedestrian Considerations

As discussed in the existing condition section and as shown previously in Figure 4, there are several gaps within the existing sidewalk network within the transportation system study area. Therefore, the following pedestrian facility enhancements are offered for consideration, which focus on higher priority connections and facilities in the area.

- Cleveland Avenue Sidewalk Gaps
 - There is an existing sidewalk gap along the west side of Cleveland Avenue from Saunders Avenue to south of Yorkshire Avenue, as well as from Magoffin Avenue to Mississippi River Boulevard. There is also a short sidewalk gap along the east side of Cleveland Avenue from Mississippi River Boulevard to Norfolk Avenue, which is planned for construction in 2019. Given the proximity and connectivity to the Ford Site, filling this sidewalk gap between Saunders Avenue and Yorkshire Avenue should be prioritized.

- Mount Curve Boulevard Sidewalk Gap (from Hartford Avenue to Scheffer Avenue)
 - There is an existing sidewalk gap along both sides of Mount Curve Boulevard in this area that limits accessibly on the north side of the Ford Site.
- Mississippi River Boulevard Sidewalk Gap (from 175 feet north of Hartford Avenue to the South)
 - There is an existing sidewalk gap along the east side of Mississippi River Boulevard in this area that limits accessibly to the west side of the Ford Site. However, a portion of this sidewalk gap is expected to be filled as part of the Ford Site development.
- Hartford Avenue Sidewalk Gap (from Mississippi River Boulevard to Mount Curve Boulevard)
 - There is an existing sidewalk gap along both sides of Hartford Avenue in this area that limits accessibility to the north side of the Ford Site and access to Mississippi River Boulevard.
- Magoffin Avenue Sidewalk Gap (from Mississippi River Boulevard to Colby Avenue)
 - There is an existing sidewalk gap along the north side of Magoffin Avenue in this area that limits accessibility to the south side of the Ford Site and access to Mississippi River Boulevard.
- Traffic Signal Enhancements
 - Consideration should be given to modifying the existing traffic signal infrastructure at the Ford Parkway intersections at Finn Street and Cleveland Avenue to include flashing yellow arrow left-turn capabilities. This configuration provides additional traffic signal timing opportunities for accommodating pedestrians at the intersections.

Freight

Truck activity within the Ford Site is expected to be related to deliveries serving the site, garbage/ recycling services, and school buses. There is not expected to be any businesses or uses within the Ford Site that would generate a significant amount of truck or freight activity that would warrant additional infrastructure considerations. The City is not planning any changes to the current established truck routes within the area. However, it is important to note that there will be some truck activity within the site (e.g. delivery trucks, garbage/recycling, school buses, etc.). This truck activity is expected to be directed to Cretin Avenue (between Ford Parkway to Montreal Avenue) and Montreal Avenue (between Cretin Avenue to St Paul Avenue) within the Ford Site when possible.

Freight activity should be limited during the peak traffic periods to avoid potential conflicts. This can be accomplished through communication with area package services (i.e. UPS, FedEx, etc.) and refuse haulers. If not possible, there is the potential that on-street loading areas could be identified to accommodate some freight activity. Trucks and freight activity should be limited and discouraged on all other roadways within the Ford Site, if possible, although truck activity may need to occur occasionally. Area roadways should be designed accordingly to accommodate the expected level of freight activity within the area based on the proposed development.

Transit Facilities

The Ford Site is well served from existing transit, including the Metro Bus Rapid Transit (BRT) A-Line and Routes 23, 46, 70, 74, 84, 87, and 134 in varying frequencies and destinations. Based on the AUAR transportation analysis, the Ford Site is expected to generate between 4,400 and 6,000 transit riders per day, depending on the AUAR build scenario. From a peak hour perspective, this equates to approximately 300 to 400 a.m. peak hour and 400 to 500 p.m. peak hour transit riders to/from the Ford Site. This would represent a significant increase in area transit ridership relative to the current Highland Park area ridership, which was identified within the *Draft Saint Paul Highland Park Transit Service Study*. If these levels of transit ridership are achieved, there is the potential that the capacity of area transit routes may need to be increased, such as more buses (reduced headways) and/or larger buses, to service the area, which were accounted for within the transportation analysis. However, any increase in transit use is expected to occur over time as development occurs, which would allow for corresponding changes to area transit service to accommodate demand as needed.

Preliminary discussions with Metro Transit indicate the future potential to reroute some bus routes through the Ford Site, primarily along Cretin Avenue and Montreal Avenue. However, there are no plans in place to modify the existing routes. The *Draft Saint Paul Highland Park Transit Service Study* identifies a number of future considerations for the area, and in particular for the Ford Site. This includes a potential bus layover/turnaround facility along Cretin Avenue, south of Montreal Avenue. This type of facility could replace the current on-street layover operations along Kenneth Street south of Ford Parkway and would help promote transit as an alternative transportation mode. However, because this is currently not a programmed project, the transportation analysis does not assume this type of transit facility is provided within the Ford Site.

As previously noted, Cretin Avenue is a primary north-south roadway planned within the Ford Site, extending from Ford Parkway and connecting to the planned extension of Montreal Avenue. Within the Ford Site Master Plan, space has been allocated on each side of this segment of Cretin Avenue to accommodate future enhanced transit service, including the potential for dedicated transit lanes. The Ford Site Master Plan also envisions the potential for a multi-modal shared transportation corridor south of Montreal Avenue, connecting to Cretin Avenue through the Canadian Pacific Railway Property (herein referred to as the Riverview Corridor transit spur). Note that there have been discussions regarding a future Riverview Corridor transit spur that could serve the Ford Site. However, because this is currently not a programmed project, the transportation analysis does not assume this type of transit access will be provided. If a Riverview Corridor transit spur is implemented, it would be expected to reduce the overall vehicular impact associated with the Ford Site redevelopment.

Other Considerations

St Paul Avenue Reconfiguration

Discussion with Ramsey County staff indicates they are considering implementation of a bicycle facility along St Paul Avenue (and possibly Edgcumbe Road as well), which could result in the elimination of a vehicular travel lane in each direction. Given that this is within the transportation system study area, a preliminary evaluation was conducted.

Results of this preliminary evaluation indicate that the St Paul Avenue/Montreal Avenue intersection is expected to operate at LOS C or better during the peak hours under future year 2040 build conditions. This assumes a shared thru/right-turn lane and a dedicated left-turn lane on each approach, in addition to a traffic signal. Dedicated right-turn lanes could be included to improve sidestreet operations. At the St Paul Avenue/Edgcumbe Road intersection, a reduced St Paul Avenue is not anticipated to impact operations as long as 300 feet of eastbound right-turn lane storage can be provided. A short eastbound left-turn lane should also be considered, as well as a potential eastbound right-turn overlap phase.

Based on these preliminary findings, a reconfiguration of St Paul Avenue appears feasible, although further analysis should be conducted as development occurs. Note that Ramsey County staff, which has jurisdictional authority of this segment of St Paul Avenue, is expected to continue discussions and evaluations in the future.

Highland Village Expansion

City staff identified the potential expansion of the current Highland Village development (located west of Cleveland Avenue near Bohland Avenue). There are no definitive plans, therefore this expansion was not included as part of the future operations analysis. However, a preliminary evaluation was conducted to understand potential impacts associated with this project.

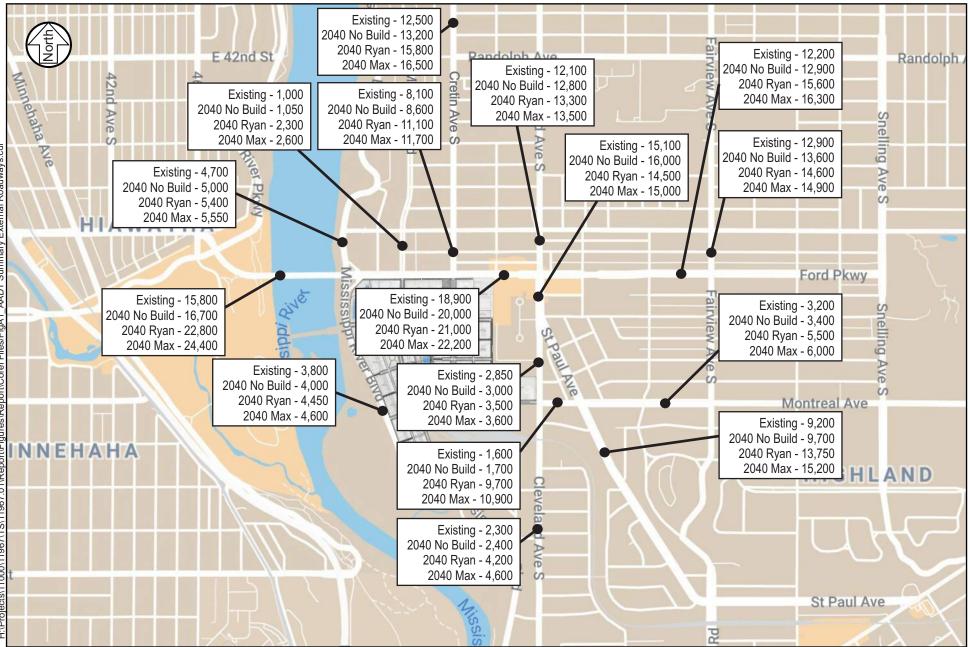
To conduct this evaluation, a trip generation estimate was conducted for the Highland Village apartment expansion, which is assumed to be between 120 and 180 multifamily residential units. For purposes of this evaluation, the Highland Village expansion is expected to generate approximately 80 a.m. peak hour, 100 p.m. peak hour, and 1,300 daily trips based on the 180 residential units. Incorporating these trips into the year 2040 Max Build analysis adds approximately 25 northbound left-turns at the St Paul Avenue/Cleveland Avenue/Bohland Avenue intersection during the a.m. and p.m. peak hours. This is a similar level of trip generation that the Max Build Ford Site trips contribute to this location.

With this additional expansion, the St Paul Avenue/Cleveland Avenue/Bohland Avenue intersection is expected to operate at an overall LOS A with side-street delays in the LOS C range during the peak hours. However, the overall intersection reconfiguration and traffic control changes previously discussed should still be considered given the current configuration.

Summary

Based on the findings within this study, the area transportation network is expected to be able to support the redevelopment of the Ford Site with the implementation of the mitigation identified for the respective AUAR scenarios. The AUAR transportation analysis also reviewed the existing and planned pedestrian, bicycle, and transit systems and presents opportunities for potential improvements to these networks. It is important to recognize that certain mitigation and enhancements may conflict with other transportation modal priorities and therefore are offered for consideration. The mitigation and enhancements identified are intended to support the redevelopment of the Ford Site and adjacent transportation system and provide discretion to stakeholders with respect to transportation priorities and implementation.

Appendix



Average Daily Traffic Volume Summary - External Roadways

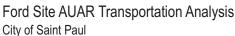
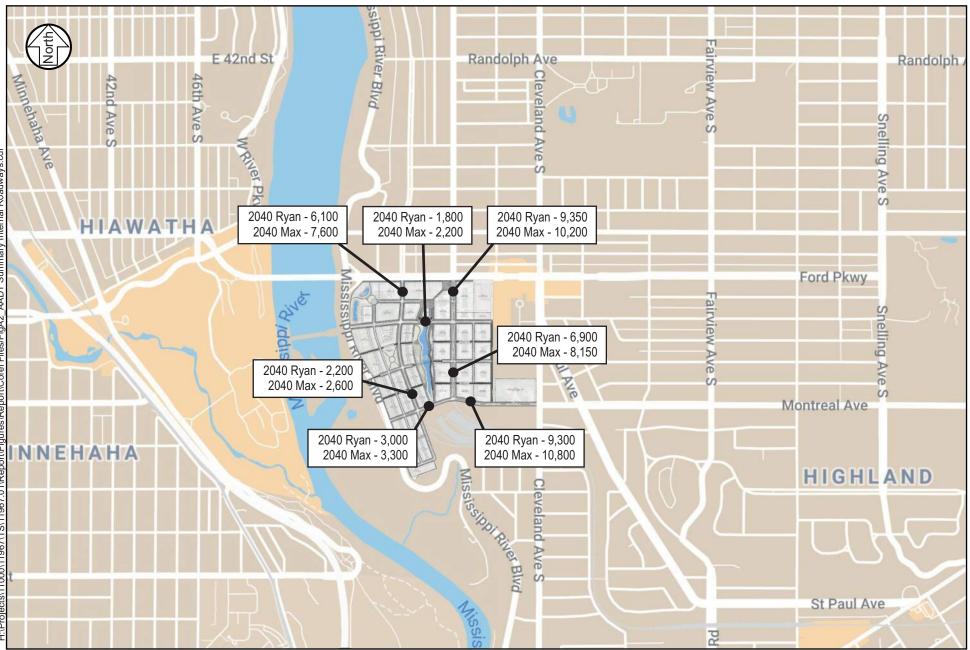


Figure A1

AADT Summary External Roadways.cdi es/FigA1_ Report/Corel Fil ort\Figu 000\11967\TS\11967.01\Re

Consulting Group, Inc.



Average Daily Traffic Volume Summary - Internal Roadways

Ford Site AUAR Traffic Analysis City of Saint Paul

Figure A2

Consulting Group, Inc.

0011967 July 2019

TRIP GENERATION ANALYSIS - Ryan Proposal Standard ITE Vehicular Trip Generation

TOTAL Vehic	le Trips	Total	Entering	Exiting
	Residential	20,947	10,473	10,473
Weekday	Non-Residential	15,214	7,607	7,607
	Total	36,160	18,080	18,080
	Residential	1,374	357	1,017
AM Peak Hour*	Non-Residential	949	669	280
	Total	2,323	1,026	1,297
	Residential	1,685	1,028	657
PM Peak Hour*	Non-Residential	1,355	514	841
	Total	3,040	1,542	1,498

Context Input	
Average vehicle occupancy for Saint Paul (4 Census block groups, 2000 data)	1.08
Vehicular Mode Split	77.7%
Transit Mode Split	10.0%
Nonmotorized (Walk/Bike) Mode Split	12.2%

Trip Gen Reduction Factors		Reduction
	Weekday	18.7%
Internal Capture Reduction	AM Peak	16.4%
	PM Peak	17.7%
		Reduct
Residential Reduction Factors combined		25.9%
Non-residential Reduction Factors combined		25.9%

Trip Gen Adjustments and Reductions

			AM		PM	
		Daily	Entering	AM Exiting	Entering	PM Exiting
ITE Vakiele Trine (Assessed	Residential	20,947	357	1,017	1,028	657
ITE Vehicle Trips (Average – of Min and Max) –	Non-Residential	15,214	669	280	514	841
	Total	36,160	1,026	1,297	1,542	1,498
	Residential	22,622	386	1,098	1,111	709
Person-Trips (Average – Vehicle Occupancy applied) –	Non-Residential	16,431	722	303	555	909
venicie Occupancy applied) -	Total	39,053	1,108	1,401	1,666	1,618
	Residential	18,392	323	918	914	584
Person Trips (with Internal –	Non-Residential	13,358	604	253	457	747
Capture) –	Total	31,750	927	1,171	1,370	1,331
	Residential	17,030	299	850	846	540
Vehicle Trips (Divide by -	Non-Residential	12,369	559	234	423	692
AVO) -	Total	29,398	858	1,085	1,269	1,232
			AM		PM	
		Daily	Entering	AM Exiting	Entering	PM Exiting
			١	With Reduction	ns	
Reduced Vehicle Trips (with	Residential	12,623	221	630	627	401
reduction factors)	Non-Residential	9,168	415	174	313	513
-	Total	21,791	636	804	940	914
		·				
TOTAL EXTERNAL V	EHICLE TRIPS	21,791	636	804	940	914
Т	otal Reduction	40%	38%	38%	39%	39%

Reduced
Keuuceu
5,473
362
466

39%

NPUTS (Redu	uction Factors) - Ryan Proposal			
Category	Factors	Input	Information	Source
	Housing units within ½ mile of the site	4,590	Measured from center of the project site	GIS, ACS 2014-2015
Jobs & Housing	Jobs within $\frac{1}{2}$ mile of the site	2,392	Measured from center of the project site	GIS, ACS 2014-2015
Balance	Jobs expected in project	1,691	Assumption of 1 employee per 275 sf of retail/office	Site Plan/Development Spreadsheet
	Proposed housing units in project	3,800		Site Plan/Development Spreadsheet
Local Serving Retail	Local retail presence (yes/no)	Yes	If there is local serving retail within walking distance or the project includes local serving retail, select "Yes"	Site Plan
Below Market Rate Housing	% of affordable housing	19%	726 Affordable Housing/3798 Total Proposed Housing Units	Site Plan/Development Spreadsheet
Transit Service	Average daily weekday buses stopped within ¼ mile	298	Bus Routes 23, 46, 70, 74, 84, and 134	Metro Transit Route Schedules
Frequency	Average daily weekday trains / rapid transit within ½ mile	216	A-Line Transit	Metro Transit Route Schedules
	Dedicated daily shuttles that serve the project	0	Currently no dedicated shuttle that serves the project	
	Mix of uses within 1/2 mile	Yes	Is there a mix of land uses within 1/2 mile of the project site for walking environment analysis	
Walking	Intersection legs per square mile	571	Determined by site plan. Intersection legs (120) on the project site covering .21 sq miles	Site Plan
Environment	% of sidewalks on both sides	80%	Does not include Woodlawn Ave or Ranger Way	Site Plan
	% of sidewalks on one side	0%		Site Plan
	Existing average block size (mile)	0.41	Existing Block Size (Ford Site as one block)	Google Map
	Future average block size (mile)	0.11	Average of 600 ft block size	Site Plan
	Additional (separate) bike lane mileage per square mile (a)	14	3 miles of in-street separate lane and off-street path on project site, covering .21 sq miles	Site Plan
	Outdoor bike parking	Yes	Required bicycle spaces per Master Plan	
	Indoor secure bike parking	No	Master Plan states the timing that indoor parking should be accessible for commerical and residential uses, but does not state a required amount of indoor bicycle parking.	
Bicycle Facilities	Indoor secure bike parking with showers/lockers/changing facilities	Yes	Master Plan States "Office and production/processing uses shall proivde 1 shower per 50 employees".	
	Bike share infrastructure (c)	Yes	Currently Lime Scooters, Previous Lime Bike Share. Assumed bike share next summer.	
	Winter maintenance of bicycle lanes/paths and sidewalks (d)	Yes	Assumption is that the bicycle facilities will be maintained in the winter.	
	Months w. average temperature below freezing in Saint Paul	3	3 months below 32F on average	http://www.areavibes.com/st.+paul-mn/weather
	Parking supply allocation	Fully dedicated	Master plan states "Shared parking facilities are allowed and encouraged, but uses sharing – facilities are not eligible for reductions to minimum parking requirementsas a result of	
Parking Supply	ITE required parking supply for the project	6,164	sharing, per 63.206 (d), since off-street parking requirements already anticipate lower	
	Project parking supply	5,890	parking space demand due to sharing" Dedicated parking is assumed and no shared	
	Shared parking supply	274	parking reductions will be applied	
	Resident daily parking price	\$ -	_	
	Employee daily parking price	\$ -		
Parking Pricing	Customer daily parking price	\$ -	Not enough data/information to assume price for parking. Assumption is all parking is free.	
	Parking unbundling from housing	No		
	Employee parking cash-out program	No		
Free Transit	Resident Free Transit Pass Program	No	Not enough data/information to assume free transit passes	
Passes	Employee Free Transit Pass Program	No		
	Car sharing/short-term car rental	Yes	Master plan ammendment states "Car share parking requirement shall be revised based on the number of residential units and stalls in non-residential areas as follows:" Car Sharing will be provided.	
	Carpooling/vanpooling	No	Assuming program exists for all uses within the site	
	Ride/carpool matching programs	No	Assuming program doesn't exist	
TDM Programs	Preferred carpool/vanpool parking	No	Assuming program exists for all uses within the site	
	Telecommuting/alternative work schedule	Yes	Assumption is that working from home capability/mobile work places are common in todays society	
	Guaranteed Ride Home	No	Assuming program doesn't exist	
	Transportation/commuter informational materials	Yes	Assumption that transit information will be provided to residents, employees, etc.	
	Dedicated employee transportation coordinator	No	Assuming program doesn't exist	

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JOBS & HOUSING I	BALANCE	Reduct
Included in analysis		Yes
Housing Units <u>within a l</u>	half mile	4,590
	Housing Units in project	3,800
Employees <u>within a hc</u>	<u>Ilf mile</u>	2,392
	Employees in project	1,691
Job/Household Ratio		0.49
IDEAL Job/Household	Ratio	1.50
	Kano	1.00
	Reduction Credit	2.88%
Calculation	Reduction Credit	
	Reduction Credit $(ABS(1.5 \times (h-e)))$	2.88%
Calculation	Reduction Credit $(ABS(1.5 \times (h-e)))$	2.88%
Calculation Trip Reduction Credit =	Reduction Credit $\frac{1 - \left(\frac{ABS(1.5 \times (h-e))}{1.5 \times (h+e)}\right) - 0}{0.25}$	2.88%
Calculation Trip Reduction Credit = Where:	Reduction Credit $\frac{1 - \left(\frac{ABS(1.5 \times (h-e))}{1.5 \times (h+e)}\right) - 0}{0.25}$	2.88%

LOCAL SERVING RETAIL	Reduct
Included in analysis	Yes
Local Serving Retail Presence	
Reduction Credit	2%

Calculation

Trip Reduction Credit =

2% (low)

5%(high)

Source: Parsons Brinckerhoff Quade & Douglas, I., Cervero, R., Howard Stein-Hudson Associates & Zupan, J., 1996. Influence of Land Use Mix and Neighborhood Design on Transit Demand, Washington, DC: TRB

National Transit Institute, 2000. Coordinating Transportation and Land Use Course Manual, New Brunswick, NJ: Rutgers University.

BELOW MARKET RATE HOUSING	Reduct	TRANSIT SERVICE FREQUENCY	
ncluded in analysis	Yes	Included in analysis	
ercent of housing units below market rate	19%	Average daily weekday buses within 1/4 mile	
Reduction Credi	1.0%	Average daily weekday trains / rapid transit within 1/2 mile	
		Dedicated daily shuttles that serve the project	
alculation		Transit Service	Index
idential Trip Reduction Credit = Where: % units that are BMR × 0.05 BMR = Belo	w Market Rate	Reduction C	Credit
urce: Holtzclaw, J. et al., 2002. Location Efficiency: Neighborhood and Socio aracteristics Determine Auto Ownership and Use – Studies in Chicago, Los ancisco. Transportation Planning and Technology, 25(1), pp. 1-27.		Calculation Tip Rate Reduction = $t \times 0.075$ Where: t = Transit service in	dex
Maximum Trip Reduction for Affordable Housing = (-0.0565 × \$41,663) × $\left(\frac{0.25}{11.915}\right)$ =5%		Transit Service Index = $\frac{b + 2 \times (r + s)}{900}$ Where:	
		b = average daily we	ekday Bu
		Notes: Transit trips should be based on bus stops located within a 1/4 mile r = average daily we and rapid transit stopping at stations within 1/2 mile.	ekday Rai
		The number of transit trips must include both directions to calculate the s = average daily we average daily buses, rapid service, shuttles, etc. (e.g., 1 northbound route A + 2 southbound route A buses = 3 bus trips)	ekday de
		A "transit trip" is one route traveling in one direction, counting as 1 trip.	

	Reduct
_	Yes
	298
_	216
_	0
<	0.81
	6.08%

aily weekday Buses stopping within ¼ mile

ily weekday Rail or rapid transit trips stopping within 1/2 mile

aily weekday dedicated Shuttle trips

WALKING ENVIRONMENT - Connect	ivity and	Reduct
Included in analysis		Yes
Mix of uses within 1/2 mile		Yes
Intersections legs per square mile		571
Sidewalk completeness		80%
Sidewalks on b	oth sides	80%
Sidewalks on	one side	0%
Existing average block si	ze (mile)	0.41
Future average block si	ze (mile)	0.11
Block Size Reduction		-73%
Walking Environme	ent Index	0.66
Reductio	on Credit	5.91%
Calculation		
Tip Rate Reduction = $9\% * \frac{i+s+b}{3}$	Where: i = Intersectio	on density
	completeness	
	size reduction	
Intersection density = intersection legs per square mile / 1300 (or 1.0, w	hichever is less) -	- including alleys
Sidewalk completeness = % streets with sidewalks on both sides + 0.5 side, Trails and walkways should be included in the inte		

BICYCLE FACILITY

Included in analysis

Additional (separate) bike lane mileage per square mile (a)

Bike parking (b)

indoor s

Indoor secure bike parking with showers/lockers/

Bike share infrastructure (c)

Winter maintenance of bicycle lanes/paths and sidewalks (d)

Months w. average temperature below fre

Additional increase

Bike Mo

Calculation

Tip Rate Reduction = bike mode share increase/2 assuming bike mode share increase shifts from transit and driving equally

Notes: (a) TRIA- Bicycle network - 1% increase in bicycle mode share for each additional mile of bike lane per square mile.

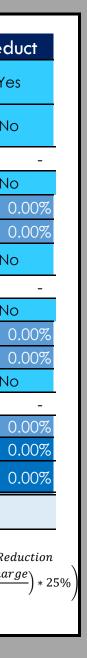
(b) Outdoor bike parking - 8.6% increase; Indoor secure bike parking - 13.8% increase; indoor with amenities - 22.4% increase SOURCE: Wardman, Tight, and Page – 2007 as summarized in Pucher, Dill, and Handy (2010) (Referenced in TCRP Report 95, Traveler Response to Transportation (c) bike share will increase bike mode share by 5~8% SOURCE: Victoria Transport Policy Institute (2008), Public Bike Systems: Automated Bike Rentals for Short Utilitarian Trips, http://www.vtpi.org/tdm/tdm126.htm. Note: this research does not state if the shift from automobile trips to bicycle trips is for commute or non-commute trips, nor does the research state at what time of day these trips occur, i.e. peak or non peak trips.

(d) Based on Tahoe's model (baseline 7 months) SOURCE: Tahoe Region Bicycle and Pedestrian Use Model, developed by LSC Transportation Consultants and Alta Planning as part of the Tahoe Basin Bicycle/Pedestrian Master Plan (2009)

Yes 14 outdoor bike parking Yes or secure bike parking No ers/changing facilities Yes Yes Yes Yes Yes Yes Action Saint Paul 3 ase in bike+walk trips* 8% Mode Share Increase 12.28% Reduction Credit 6.14%	14 outdoor bike parking
outdoor bike parking Yes or secure bike parking No ers/changing facilities Yes Yes Yes v freezing in Saint Paul 3 ase in bike+walk trips* 8% Mode Share Increase 12.28%	outdoor bike parking Yes
or secure bike parking No ers/changing facilities Yes Yes Yes v freezing in Saint Paul 3 ase in bike+walk trips* 8% Mode Share Increase 12.28%	
ers/changing facilities Yes Yes Yes Yes v freezing in Saint Paul 3 ase in bike+walk trips* 8% Mode Share Increase 12.28%	or secure bike parking No
Yes Yes v freezing in Saint Paul 3 ase in bike+walk trips* 8% Mode Share Increase 12.28%	
Yesv freezing in Saint Paul3ase in bike+walk trips*8%Mode Share Increase12.28%	ers/changing facilities Yes
w freezing in Saint Paul 3 ase in bike+walk trips* 8% Mode Share Increase 12.28%	Yes
ase in bike+walk trips* 8% Mode Share Increase 12.28%	Yes
Mode Share Increase 12.28%	w freezing in Saint Paul 3
	ase in bike+walk trips* 8%
Reduction Credit 6.14%	Node Share Increase 12.28%
	Reduction Credit 6.14%

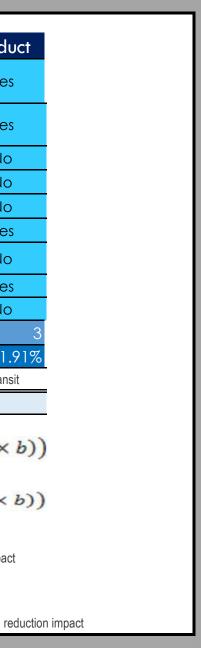
PARKING SUPPLY		Reduct
Included in analysis		Yes
Parking supply allocation		Fully dedicated
ITE required parking supply		6,164
Project parking supply		5,890
Shared parking su	pply	274
Parking supply reduction		4%
All non-parking supply redu	ction combined	
	Residential	22%
	Non-residential	22%
	Reduction Credit	
	Residential	0.00%
	Non-residential	0.00%
f "fully dedicated", credit only applied to the f "fully shared', credit applied to all land use Calculation		
Tip Rate Reduction = $p-$		arking supply reduction on-parking supply reduction combined
Note: residential counted density reduction	rom	

	R
Included in analysis	
Residents pay	
Average Daily parking price	\$
Parking unbundling	
Resident Parking Price Reduction Credit	
Resident Unbundling Bonus Credit	
Employees pay	
Daily parking price	\$
Parking cash-out	
Employee Parking Price Reduction Credit	
Employee Cash-out Bonus Credit	
Customers pay	
Daily parking price	\$
Customer Parking Price Credit	
Residential Parking Cost Reduction Credit	
Non-Residential Parking Cost Reduction Credit	
Calculation	
$\frac{Parking Pricing}{Employee and / or Custome}$ $ployee Trip Reduction = (parking pricing reduction) \times 50\% = \left(\left(\frac{daily par}{s} \right)^{1/2} \right)^{1/2}$	-



FREE TRANSIT PASSES	Reduct
Included in analysis	Yes
Resident Free Transit Pass Program	No
Employee Free Transit Pass Program	No
Free Transit Pass Reduction Credit	
Residential	0.00%
Non-residential	0.00%
Calculation	
Resident and / or Employee Trip Reduction	$n = (t) \times 25$
Where: t = Transit red	uction impact

TDM PROGRAMS	Redu
Included in analysis	Yes
Car sharing/short-term car rental	Yes
Carpooling/vanpooling	No
Ride/carpool matching programs	No
Preferred carpool/vanpool parking	No
Telecommuting/alternative work schedule	Yes
Guaranteed Ride Home	No
Transportation/commuter informational materials	Yes
Dedicated employee transportation coordinator	No
# of TDM Programs	
TDM Program Reduction Credit	1.9
Assuming that half the people that bike/walk would otherwise have driven, and the other half would have	e taken transit
Calculation	
$\frac{\text{Major TDM Program (5 or more elements)}}{\text{Employee Trip Reduction}} = (2\% + (10\% \times t) + (1))$ $\frac{\text{Minor TDM Program (3 to 4 elements)}}{\text{Employee Trip Reduction}} = (1\% + (5\% \times t) + (1))$	
Where: t = Transit red	uction impact
b = Bicycle &	pedestrian red



TRIP GENERATION ANALYSIS - Max Build Standard ITE Vehicular Trip Generation

TOTAL Vehic	Total	Entering	Exiting	
	Residential	22,138	11,069	11,069
Weekday	Non-Residential	24,254	12,127	12,127
	Total	46,392	23,196	23,196
	Residential	1,451	377	1,075
AM Peak Hour*	Non-Residential	1,460	1,069	391
	Total	2,911	1,445	1,466
	Residential	1,780	1,087	693
PM Peak Hour*	Non-Residential	2,310	859	1,450
	Total	4,090	1,946	2,144

Context Input	
Average vehicle occupancy for Saint Paul (4 Census block groups, 2000 data)	1.08
Vehicular Mode Split	77.7%
Transit Mode Split	10.0%
Nonmotorized (Walk/Bike) Mode Split	12.2%

The Gen Reduction Factors		INEVV
	Weekday	18.7%
Internal Capture Reduction	AM Peak	16.9%
	PM Peak	21.0%
		Reduct
Residential Reduction Factors combined		26.9%
Non-residential Reduction Factors combined		26.9%

Trip Gen Adjustments and Reductions

			AM		PM	
		Daily	Entering	AM Exiting	Entering	PM Exiting
	Residential	22,138	377	1,075	1,087	693
ITE Vehicle Trips (Average — of Min and Max) —	Non-Residential	24,254	1,069	391	859	1,450
	Total	46,392	1,445	1,466	1,946	2,144
Daman Trina (Auguran	Residential	23,909	407	1,161	1,174	749
Person-Trips (Average — Vehicle Occupancy applied) —	Non-Residential	26,194	1,154	422	928	1,566
venicle Occupancy applied)	Total	50,103	1,561	1,583	2,102	2,315
Porson Trins (with Internal	Residential	19,438	338	965	927	591
Person Trips (with Internal — Capture) —	Non-Residential	21,296	959	351	733	1,237
	Total	40,734	1,297	1,316	1,660	1,829
Vahiele Trine (Divide hu	Residential	17,998	313	893	858	548
Vehicle Trips (Divide by — AVO) —	Non-Residential	19,718	888	325	679	1,146
AVO) —	Total	37,716	1,201	1,218	1,537	1,693
			AM		PM	
		Daily	Entering	AM Exiting	Entering	PM Exiting
			١	With Reductio	ns	
Reduced Vehicle Trips (with	Residential	13,158	229	653	628	400
reduction factors)	Non-Residential	14,415	649	237	496	838
	Total	27,573	878	891	1,124	1,238
TOTAL EXTERNAL VE	HICLE TRIPS	27,573	878	891	1,124	1,238
Tot	al Reduction	41%	39%	39%	42%	42%

Trip Gen Outputs: Vehicular Trips		Transit Trips		Walk/Bike Trips	
	Reduct		Reduct		Reduct
		External		External	
Total External Daily Vehicular Trips	27,573	Daily Trips	5,928	Daily Trips	7,232
Total External AM Peak Vehicular Trips	1,769	External	380	External AM	464
Total External PM Peak Vehicular Trips	2,362	External	508	External PM	620

41%

INPUTS (Red	uction Factors) - Max Build			
Category	Factors	Input	Information	Source
	Housing units within $\frac{1}{2}$ mile of the site	4,590	Measured from center of the project site	GIS, ACS 2014-2015
Jobs & Housing		2,392	Measured from center of the project site	GIS, ACS 2014-2015
Balance	Jobs expected in project	2,855	Assumption of 1 employee per 275 sf of retail/office	Site Plan/Development Spreadsheet
	Proposed housing units in project	4,000		Site Plan/Development Spreadsheet
Local Serving Retail	Local retail presence (yes/no)	Yes	If there is local serving retail within walking distance or the project includes local serving retail, select "Yes"	Site Plan
Below Market Rate Housing	% of affordable housing	18%	726 Affordable Housing/4000 Total Proposed Housing Units	Site Plan/Development Spreadsheet
Transit Service	Average daily weekday buses stopped within 1/4 mile	298	Bus Routes 23, 46, 70, 74, 84, and 134	Metro Transit Route Schedules
Frequency	Average daily weekday trains / rapid transit within ½ mile	216	A-Line Transit	Metro Transit Route Schedules
	Dedicated daily shuttles that serve the project	0	Currently no dedicated shuttle that serves the project	
	Mix of uses within 1/2 mile	Yes	Is there a mix of land uses within 1/2 mile of the project site for walking environment analysis	
Walking Environment	Intersection legs per square mile	571	Determined by site plan. Intersection legs (120) on the project site covering .21 sq miles	Site Plan
	% of sidewalks on both sides	80%	Does not include Woodlawn Ave or Ranger Way	Site Plan
	% of sidewalks on one side	0%		Site Plan
	Existing average block size (mile)	0.41	Existing Block Size (Ford Site as one block)	Google Map
	Future average block size (mile)	0.11	Average of 600 ft block size	Site Plan
	Additional (separate) bike lane mileage per square mile (a)	14	3 miles of in-street separate lane and off-street path on project site, covering .21 sq miles	Site Plan
	Outdoor bike parking	Yes	Required bicycle spaces per Master Plan	
	Indoor secure bike parking	No	Master Plan states the timing that indoor parking should be accessible for commerical and residential uses, but does not state a required amount of indoor bicycle parking.	
Bicycle Facilities	^s Indoor secure bike parking with showers/lockers/changing facilities	Yes	Master Plan States "Office and production/processing uses shall proivde 1 shower per 50 employees".	
	Bike share infrastructure (c)	Yes	Currently Lime Scooters, Previous Lime Bike Share. Assumed bike share next summer.	
	Winter maintenance of bicycle lanes/paths and sidewalks (d)	Yes	Assumption is that the bicycle facilities will be maintained in the winter.	
	Months w. average temperature below freezing in Saint Paul	3	3 months below 32F on average	http://www.areavibes.com/st.+paul-mn/weather/
	Parking supply allocation	Fully dedicated	Master plan states "Shared parking facilities are allowed and encouraged, but uses sharing	
Parking Supply	ITE required parking supply for the project	6,164	facilities are not eligible for reductions to minimum parking requirementsas a result of sharing, per 63.206 (d), since off-street parking requirements already anticipate lower	
r anning coppiy	Project parking supply	5,890	parking space demand due to sharing" Dedicated parking is assumed and no shared	
	Shared parking supply	274		
	Resident daily parking price	\$-		
	Employee daily parking price	\$ -		
Parking Pricing	Customer daily parking price	\$ -	Not enough data/information to assume price for parking. Assumption is all parking is free.	
	Parking unbundling from housing	No		
	Employee parking cash-out program	No		
Free Transit	Resident Free Transit Pass Program	No	Not oncurab data/information to assume free transit passes	
Passes	Employee Free Transit Pass Program	No	Not enough data/information to assume free transit passes	
	Car sharing/short-term car rental	Yes	Master plan ammendment states "Car share parking requirement shall be revised based or the number of residential units and stalls in non-residential areas as follows:" Car Sharing will be provided.	
	Carpooling/vanpooling	No	Assuming program exists for all uses within the site	
	Ride/carpool matching programs	No	Assuming program doesn't exist	
TDM Programs	Preferred carpool/vanpool parking	No	Assuming program exists for all uses within the site	
	Telecommuting/alternative work schedule	Yes	Assumption is that working from home capability/mobile work places are common in todays society	
	Guaranteed Ride Home	No	Assuming program doesn't exist	
	Transportation/commuter informational materials	Yes	Assumption that transit information will be provided to residents, employees, etc.	
	Dedicated employee transportation coordinator	No	Assuming program doesn't exist	

JOBS & HOUSING I	BALANCE	Reduct
Included in analysis		Yes
Housing Units <u>within a</u>	half mile	4,590
	Housing Units in project	4,000
Employees <u>within a ho</u>	alf mile	2,392
	Employees in project	2,855
Job/Household Ratio		0.61
IDEAL Job/Household	Ratio	1.50
	Kullo	1.50
	Reduction Credit	3.94%
Calculation Trip Reduction Credit =	Reduction Credit $(ABS(1.5 \times (h-e)))$	3.94%
Calculation Trip Reduction Credit =	Reduction Credit $(ABS(1.5 \times (h-e)))$	3.94%
Calculation Trip Reduction Credit = Where:	Reduction Credit $\frac{1 - \left(\frac{ABS(1.5 \times (h-e))}{1.5 \times (h+e)}\right) - 0}{0.25}$	3.94%
Calculation	Reduction Credit $\frac{1 - \left(\frac{ABS(1.5 \times (h-e))}{1.5 \times (h+e)}\right) - 0}{0.25}$	3.94%

LOCAL SERVING RETAIL	Reduct
Included in analysis	Yes
Local Serving Retail Presence	Yes
Reduction Credit	2%

Calculation

Trip Reduction Credit =

2% (low)

5%(high)

Source: Parsons Brinckerhoff Quade & Douglas, I., Cervero, R., Howard Stein-Hudson Associates & Zupan, J., 1996. Influence of Land Use Mix and Neighborhood Design on Transit Demand, Washington, DC: TRB

National Transit Institute, 2000. Coordinating Transportation and Land Use Course Manual, New Brunswick, NJ: Rutgers University.

BELOW MARKET RATE HOUSING	Reduct	TRANSIT SERVICE FREQUENCY	
ncluded in analysis	Yes	Included in analysis	
ercent of housing units below market rate	18%	Average daily weekday buses within 1/4 mile	
Reduction Cred	it 0.9%	Average daily weekday trains / rapid transit within 1/2 mile	
		Dedicated daily shuttles that serve the project	
Iculation		Transit Servic	e Index
dential Trip Reduction Credit = Where:		Reduction	n Credit
% units that are BMR × 0.05 BMR = Belo	ow Market Rate		
ource: Holtzclaw, J. et al., 2002. Location Efficiency: Neighborhood and Socie		Calculation	
haracteristics Determine Auto Ownership and Use – Studies in Chicago, Los rancisco. Transportation Planning and Technology, 25(1), pp. 1-27.	Angeles and San	Tip Rate Reduction = $t \times 0.075$	
		Where: t = Transit servic	e index
Maximum Trip Reduction for Affordable Housing =		Transit Service Index = $b + 2 \times (r + s)$	
$(-0.0565 \times \$41,663) \times \left(\frac{0.25}{11,915}\right) = 5\%$		900	
		Where:	
		b = average daily	
		Notes: Transit trips should be based on bus stops located within a 1/4 mile r = average daily	-
		and rapid transit stopping at stations within 1/2 mile	-
		and rapid transit stopping at stations within 1/2 mile. The number of transit trips must include both directions to calculate the s = average daily	weekday Ra
		The number of transit trips must include both directions to calculate the s = average daily average daily buses, rapid service, shuttles, etc. (e.g., 1 northbound route A	weekday Ra
		The number of transit trips must include both directions to calculate the s = average daily	weekday Ra
		The number of transit trips must include both directions to calculate the s = average daily average daily buses, rapid service, shuttles, etc. (e.g., 1 northbound route A	weekday Ra
		The number of transit trips must include both directions to calculate the s = average daily average daily buses, rapid service, shuttles, etc. (e.g., 1 northbound route A + 2 southbound route A buses = 3 bus trips)	weekday Ra
		The number of transit trips must include both directions to calculate the s = average daily average daily buses, rapid service, shuttles, etc. (e.g., 1 northbound route A + 2 southbound route A buses = 3 bus trips)	weekday Ra

	Reduct
_	Yes
	298
_	216
_	0
<	0.81
	6.08%

aily weekday Buses stopping within 1/4 mile

aily weekday Rail or rapid transit trips stopping within 1/2 mile

aily weekday dedicated Shuttle trips

WALKING ENVIRONMENT - Connectiv	vity and Reduct
Included in analysis	Yes
Mix of uses within 1/2 mile	Yes
Intersections legs per square mile	571
Sidewalk completeness	80%
Sidewalks on bot	th sides 80%
Sidewalks on o	ne side 0%
Existing average block size	e (mile) 0.41
Future average block size	e (mile) 0.11
Block Size Reduction	-73%
Walking Environmer	nt Index 0.66
Reduction	n Credit 5.91%
Calculation	
004 *	Where: i = Intersection density
	s = Sidewalk completeness
	b = (-1)*block size reduction
Intersection density = intersection legs per square mile / 1300 (or 1.0, which	hever is less) - including alleys

BICYCLE FACILITY

Included in analysis

Additional (separate) bike lane mileage per square mile (a)

Bike parking (b)

indoor s

Indoor secure bike parking with showers/lockers/

Bike share infrastructure (c)

Winter maintenance of bicycle lanes/paths and sidewalks (d)

Months w. average temperature below fre

Additional increase

Bike Mo

Calculation

Tip Rate Reduction = bike mode share increase/2 assuming bike mode share increase shifts from transit and driving equally

Notes: (a) TRIA- Bicycle network - 1% increase in bicycle mode share for each additional mile of bike lane per square mile.

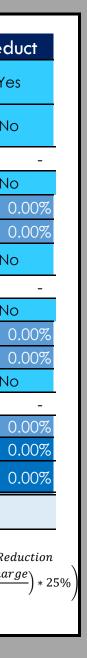
(b) Outdoor bike parking - 8.6% increase; Indoor secure bike parking - 13.8% increase; indoor with amenities - 22.4% increase SOURCE: Wardman, Tight, and Page – 2007 as summarized in Pucher, Dill, and Handy (2010) (Referenced in TCRP Report 95, Traveler Response to Transportation (c) bike share will increase bike mode share by 5~8% SOURCE: Victoria Transport Policy Institute (2008), Public Bike Systems: Automated Bike Rentals for Short Utilitarian Trips, http://www.vtpi.org/tdm/tdm126.htm. Note: this research does not state if the shift from automobile trips to bicycle trips is for commute or non-commute trips, nor does the research state at what time of day these trips occur, i.e. peak or non peak trips.

(d) Based on Tahoe's model (baseline 7 months) SOURCE: Tahoe Region Bicycle and Pedestrian Use Model, developed by LSC Transportation Consultants and Alta Planning as part of the Tahoe Basin Bicycle/Pedestrian Master Plan (2009)

	Reduct
	Yes
	14
outdoor bike parking	Yes
or secure bike parking	No
ers/changing facilities	Yes
	Yes
	Yes
v freezing in Saint Paul	3
ase in bike+walk trips*	8%
Node Share Increase	12.28%
Reduction Credit	6.14%

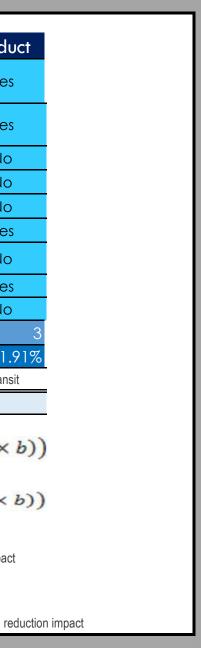
PARKING SUPPLY		Reduct
Included in analysis		Yes
Parking supply allocation		Fully dedicated
ITE required parking supply		6,164
Project parking supply		5,890
Shared parking supply		274
Parking supply reduction		4%
All non-parking supply reduction combi	ned	
Re	esidential	22%
Non-re	esidential	22%
Reducti	on Credit	
R	esidential	0.00%
Non-r	esidential	0.00%
if "fully dedicated", credit only applied to the uses with a supply l if "fully shared', credit applied to all land uses Calculation	pelow ITE	
Tip Rate Reduction = $\frac{p - (m + t + b)}{2}$		king supply reduction n-parking supply reduction combined
Note: residential counted density reduction from		

PARKING PRICING		Re
Included in analysis		
Residents pay		
Ave	age Daily parking price	\$
	Parking unbundling	
Resident	Parking Price Reduction Credit	
Re	sident Unbundling Bonus Credit	
Employees pay		
	Daily parking price	\$
	Parking cash-out	
Employee Park	ing Price Reduction Credit	
Employee	Cash-out Bonus Credit	
Customers pay		
	Daily parking price	\$
	Customer Parking Price Credit	
Residentia	I Parking Cost Reduction Credit	
Non-Residentia	I Parking Cost Reduction Credit	
Non-Residentia	I Parking Cost Reduction Credit	



FREE TRANSIT PASSES	Reduct
Included in analysis	Yes
Resident Free Transit Pass Program	No
Employee Free Transit Pass Program	No
Free Transit Pass Reduction Credit	
Residential	0.00%
Non-residential	0.00%
Calculation	
Resident and / or Employee Trip Reduction	$n = (t) \times 25$
Where: t = Transit red	uction impact

TDM PROGRAMS	Redu
Included in analysis	Yes
Car sharing/short-term car rental	Yes
Carpooling/vanpooling	No
Ride/carpool matching programs	No
Preferred carpool/vanpool parking	No
Telecommuting/alternative work schedule	Yes
Guaranteed Ride Home	No
Transportation/commuter informational materials	Yes
Dedicated employee transportation coordinator	No
# of TDM Programs	
TDM Program Reduction Credit	1.9
Assuming that half the people that bike/walk would otherwise have driven, and the other half would have	taken transit
Calculation	
$\frac{\text{Major TDM Program (5 or more elements)}}{\text{Employee Trip Reduction}} = (2\% + (10\% \times t) + (10\% \times $	
Where: t = Transit reduc	ction impact



11967.01_Ford Site Development TS

le Intersection		Eastbound		W	Westbound		N	orthbound		Southbound			Overa
10 S Ford Ramp/N Ford Ramp	& Ford A	ve (Unsigr	nalized)										
Lanes		个1	` >		\uparrow	<>			\rightarrow			\rightarrow	
SimTraffic Delay		1.	9		0.	4			4.3			4.4	1.
SimTraffic LOS		A			A	\ \			А			А	A
SimTraffic 95th Queue		8				-			47			54	
Queue Block Time (%)		0							-77			54	
Denied Entry	, ·												
20 Ford Ave & Woodlawn Ave											-		
Lanes	<i>←</i>	$\uparrow\uparrow$			\uparrow						0		
SimTraffic Delay	4.2	0.4			0.	4					-		0.
SimTraffic LOS	Α	Α			A	١					A		A
SimTraffic 95th Queue	31				7	,							
Queue Block Time (%)	1												
Denied Entry													
30 Mt Curve Blvd & Ford Ave	(Unsignal	ized)									I. I		
Lanes	(onsignan ←	↑ <u>↑</u> >			\uparrow	^ >				\leftarrow		\rightarrow	
SimTraffic Delay	5.0				1.					14.3		6.3	1.
										-			
SimTraffic LOS	A	A			A					B		A	A
SimTraffic 95th Queue	30				2	-				34		51	
Queue Block Time (%)										1		2	
Denied Entry													
40 Cretin Ave & Ford Ave (Sig	nalized	Cycle Leng	th: 80)										
Lanes	<i>←</i>	个个>			\uparrow	^>				\leftarrow		\rightarrow	
SimTraffic Delay	10.3	4.1			12	.9				32.2		5.0	10
SimTraffic LOS	В	Α			B	}				С		А	В
SimTraffic 95th Queue	96	85			19					124		85	_
Queue Block Time (%)	1				13					124		05	
	1				1:	9				T			
Denied Entry			00)										
50 Finn St & Ford Ave (Signali		-			•						•		
Lanes	\leftarrow	个1		\leftarrow	\uparrow		\leftarrow	0		<'		\rightarrow	
SimTraffic Delay	23.0	12	.0	11.6	7.	4	31.2	-		26	5.7	5.6	11
SimTraffic LOS	C	В		В	A	١	С	Α		(C	Α	В
SimTraffic 95th Queue	48	15	9	70	11	.7	97			7	0	54	
Queue Block Time (%)	1	10)							1	1		
Denied Entry													
60 Cleveland Ave & Ford Ave	(Signalize	d Cvcle I	ength: 8	0)									
Lanes		1	-	<i>~</i>	\uparrow	^>	\leftarrow	^>		\leftarrow	ተ ተ	>	
SimTraffic Delay	41.8			40.8	27		28.8	14.0		40.7			26
	41.8 D	C		40.8 D			20.0 C	B		40.7 D	C	·	20 C
SimTraffic LOS		-									-		C
SimTraffic 95th Queue	132			90	16		239	248		118			
Queue Block Time (%)	3	11	_		1						52		
Denied Entry													
61 Kenneth St & Ford Ave (Sig	nalized	Cycle Len	gth: 80)										
Lanes	\leftarrow	个1	`>	\leftarrow	\uparrow	^>		<^>			<个>		
SimTraffic Delay	9.6	5.	C	14.7	8.	4		24.8			25.0		9.
SimTraffic LOS	Α	A		В	Α	1		С			С		A
SimTraffic 95th Queue	39			52	12			84			86		
Queue Block Time (%)	33			52	4						50		
	3		,					I					
Denied Entry	 'an a !'= !	0	weath CT	<u>, </u>									
52 Fairview Ave & Ford Ave (S				1	•		,			, 1			
Lanes	<i>←</i>	<u>↑</u>	\rightarrow	\	\uparrow	\rightarrow	4	<u> </u>		~	^>		
SimTraffic Delay	30.7	15.6	8.0	23.0	15.8	7.9	35.4	19.7		33.4			18
SimTraffic LOS	C	В	А	С	В	А	D	В		С	В		В
SimTraffic 95th Queue	110	209	84	61	186	63	100	300		63	253		
Queue Block Time (%)		8			10			11			11		
Denied Entry					-								
65 Cleveland Ave & Highland	Pkwv (Sia	nalized (Cycle I en	gth: 80)				1			<u> </u>		
Lanes		↑		رامین <1		\rightarrow	÷	个>		\leftarrow	个>		
		-											10
SimTraffic Delay		3.8	8.5	33.		10.2	11.9	8.4		17.9			10.
SimTraffic LOS	(2	Α	C		В	В	А		В	A		A

Operational Analysis Results

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de	Intersection	-	Eastbound	t l	W	estboun	d	No	orthbound	Sou	thbound	Overa
	SimTraffic 95th Queue	7	9	66	96		58	65	204	41	133	
	Queue Block Time (%)	2	2	7	35		4		5		4	
	Denied Entry											
75	St Paul Ave & Montreal Av	e (All-way	/ stop)									
	Lanes	<	\uparrow	\rightarrow		<^>			<^^>	(个个>	
	SimTraffic Delay	9	.7	4.0		14.3			13.0	8.0	8.9	10.
	SimTraffic LOS	1	4	А		В			В	А	А	В
F	SimTraffic 95th Queue	4	1	25		93			99	49	89	
ŀ	Queue Block Time (%)		2									
	Denied Entry											
	Edgcumbe Rd & St Paul Av	e (Signaliz	ed Cycl	e Length:	84)				1		U	
	Lanes	<1		→ →		<^^>		\leftarrow	个个>	←	个个>	
	SimTraffic Delay		7.0	15.3		27.7		20.0	8.2	19.9	19.2	16.
	SimTraffic LOS	(2	В		С		В	А	B	В	В
	SimTraffic 95th Queue		77	141		117		217	183	71	187	
	Queue Block Time (%)		1	21				4			2	
-	Denied Entry		_									
	Cleveland Ave & Montreal	Ave (Uns	ignalized)									
-	Lanes		J		<>	()		个>	<		
-	SimTraffic Delay				6.7				1.1	0.3		1.6
-	SimTraffic LOS				A		A		A	A		A
-	SimTraffic 95th Queue				45	,	,		~	25		
-	Queue Block Time (%)									2.5		
-	Denied Entry											
	Fairview Ave & Montreal A	vo (Signa	lized Cu	cla Longt	h: 65)							
-	Lanes		112eu Cy 个			1	·>	÷	个>	←	个>	
	SimTraffic Delay	28.8	21.4	12.2	25.4		.2	19.9	9.9	23.7	14.9	15.
	SimTraffic LOS	20.0 C	C 21.4	12.2 B	23.4 C		2	19.9 B	<u> </u>	C	B	B
-	SimTraffic 95th Queue	49	116	ь 50	63		58	ь 61	208	95	261	D
-		49	34	50	05)	01	11	95	13	
-	Queue Block Time (%)		34	2			1				13	
	Denied Entry Mississippi River Blvd & N	Ford Down	n /I Incian	aliaad)								
-		Foru Kalli	p (onsign	alizeu)	1.	(个>	1	•	
-	Lanes				<> <					←	<u>↑</u>	1 -
-	SimTraffic Delay				6.3		-		1.1	2.6	0.2	1.2
	SimTraffic LOS				A	ŀ	4		A	A	A	A
-	SimTraffic 95th Queue				45					34		
-	Queue Block Time (%)											
	Denied Entry		<i></i> .							_		
130	Mississippi River Blvd & S I	-ord Kam	p (Unsigna	alized)					۸.		•	
	Lanes				<->)		<u> </u>	+	<u>↑</u>	
-	SimTraffic Delay				5.9		-		1.1	2.4	0.2	2.0
-	SimTraffic LOS				A	1	4		A	A	A	A
-	SimTraffic 95th Queue				63				2	18		
-	Queue Block Time (%)											
	Denied Entry											
-	Mt Curve Blvd & Highland	Pkwy (All)								
	Lanes		<^>		<个				<^>		<^>	
	SimTraffic Delay		5.9		7.6				5.6		5.9	5.
-	SimTraffic LOS		А		A				A		A	A
-	SimTraffic 95th Queue		47		40				44		48	
	Queue Block Time (%)								1		I	
	Denied Entry											
500	Cretin Ave & Randolph Ave	e (Signaliz		e Length:								
[Lanes		<^>		<		\rightarrow		<^>	\leftarrow	^>	
	SimTraffic Delay		26.2		28.	0	13.8		7.2	18.6	9.4	13
	SimTraffic LOS		С		С		В		А	В	А	В
		1	101		196	:	58		178	179	80	
-	SimTraffic 95th Queue		104		190	, ,	50		1/0	175	00	
	SimTraffic 95th Queue Queue Block Time (%)		104		41		28		270	16	8	

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Existing AM

Node	Intersection	Eastbound	d	V	Vestbour	d	N	lorthbour	nd	S	outhbour	nd	Overall
	Lanes	<^>			<^>			<′	`>		<^>		
	SimTraffic Delay	10.6			10.6			0	.9		1.3		2.5
	SimTraffic LOS	В			В				4		А		Α
	SimTraffic 95th Queue	47			65				3		64		
	Queue Block Time (%)												
	Denied Entry												

70: Cleveland Ave & St Paul Ave & Bohland Ave Performance by approach

71: St Paul Ave Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	14.6	2.7	0.2	2.7

72: Cleveland Ave & St Paul Ave Performance by approach

Approach	B SB A
Denied Del/Veh (s)	0.0 0.0
Total Del/Veh (s)	2 0.8 4.3

73: Cleveland Ave & Inner Drive Performance by approach

Approach	EB SB	All
Denied Del/Veh (s)	0.1 0.0	0.0
Total Del/Veh (s)	2.6 0.1	0.8

140: 46th Ave & E 46th St/Ford Pkwy Performance by approach

Approach	EB	WB	NB	SB	SW	All
Denied Del/Veh (s)	0.5	0.0	2.8	0.6	0.1	0.8
Total Del/Veh (s)	13.1	10.1	15.9	53.0	67.8	16.7

Total Zone Performance

Denied Del/Veh (s)	1.2	
Total Del/Veh (s)	768.9	

Intersection: 70: Cleveland Ave & St Paul Ave & Bohland Ave

Movement	WB	NB	SB
Directions Served	R	TR	TR
Maximum Queue (ft)	69	17	3
Average Queue (ft)	29	1	0
95th Queue (ft)	54	10	0
Link Distance (ft)	762	168	556
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 71: St Paul Ave

Movement	EB	NB
Directions Served	LR	 T
Maximum Queue (ft)	58	3
Average Queue (ft)	40	0
95th Queue (ft)	62	4
Link Distance (ft)	51	1142
Upstream Blk Time (%)	12	
Queuing Penalty (veh)	13	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 72: Cleveland Ave & St Paul Ave

Movement	NB	SB
Directions Served	R	LT
Maximum Queue (ft)	99	42
Average Queue (ft)	38	3
95th Queue (ft)	72	24
Link Distance (ft)	651	99
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 73: Cleveland Ave & Inner Drive

Movement	EB	SB
Directions Served	R	TR
Maximum Queue (ft)	39	6
Average Queue (ft)	18	0
95th Queue (ft)	42	4
Link Distance (ft)	285	58
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 140: 46th Ave & E 46th St/Ford Pkwy

EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SW	
<l< td=""><td>Т</td><td>TR</td><td>L</td><td>Т</td><td>TR></td><td>LT</td><td>></td><td>LT</td><td>R</td><td><lr></lr></td><td></td></l<>	Т	TR	L	Т	TR>	LT	>	LT	R	<lr></lr>	
99	140	132	124	137	155	302	62	262	56	51	
31	65	43	30	36	68	86	44	106	23	8	
73	125	103	78	96	133	246	59	212	61	33	
	1464	1464		1080	1080	1320		1520		627	
75			110				25		25		
1	6		0	0		33	8	60	2		
2	4		1	1		101	3	15	2		
	<l 99 31 73 75 1</l 	 <l li="" t<=""> 99 140 31 65 73 125 1464 75 1 6 1 6 </l>	<l t="" tr<br="">99 140 132 31 65 43 73 125 103 1464 1464 75 1 6</l>	<l< th=""> T TR L 99 140 132 124 31 65 43 30 73 125 103 78 1464 1464 1464 75 110 1 6 1 6 0 0</l<>	<l< th=""> T TR L T 99 140 132 124 137 31 65 43 30 36 73 125 103 78 96 1464 1464 1080 75 110 1 6 0 0 1 6 0 0 0 0</l<>	<l< th=""> T TR L T TR> 99 140 132 124 137 155 31 65 43 30 36 68 73 125 103 78 96 133 1464 1464 1080 1080 75 110 1 6 0 0 1 6 0 0 0 1</l<>	<l< th=""> T TR L T TR> LT 99 140 132 124 137 155 302 31 65 43 30 36 68 86 73 125 103 78 96 133 246 1464 1464 1080 1080 1320 75 110 1 6 0 0 33</l<>	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Zone Summary

Zone wide Queuing Penalty: 141

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le Intersection		Eastbound	W	estbound	N	orthbound	Southb	ound	Over
10 S Ford Ramp/N Ford Ra	mp & Ford A							I.	
Lanes		个个>		个个>		\rightarrow		\rightarrow	
SimTraffic Delay		2.4		0.7		5.8		7.0	2.1
SimTraffic LOS		А		А		A		А	A
SimTraffic 95th Queue		7		7		57		87	
Queue Block Time (%)		-		-		0.7			
Denied Entry									
		l'							
20 Ford Ave & Woodlawn									
Lanes	÷	$\uparrow\uparrow$		个个>			<>	0	
SimTraffic Delay	6.7	0.5		0.7			24.6	-	1.0
SimTraffic LOS	A	A		Α			C	A	A
SimTraffic 95th Queue	41			4			57		
Queue Block Time (%)	3								
Denied Entry									
30 Mt Curve Blvd & Ford A	ve (Unsignal	ized)							
Lanes	←	个个>		个个>			÷	\rightarrow	
SimTraffic Delay	8.0			1.9			29.8	8.1	1.
								_	
SimTraffic LOS	A	A		A			D 21	A	A
SimTraffic 95th Queue	44	28		3			21	51	
Queue Block Time (%)	1			1				3	
Denied Entry									
40 Cretin Ave & Ford Ave	(Signalized	Cycle Length: 110)							
Lanes	←	$\uparrow \uparrow >$		$\uparrow \uparrow >$			\leftarrow	\rightarrow	
SimTraffic Delay	18.0	6.4		13.8			43.4	9.7	14
SimTraffic LOS	В	A		В			D	А	В
SimTraffic 95th Queue	135	129		256			191	261	
Queue Block Time (%)	3			230			15	1	
		T		21			15	1	
Denied Entry									
50 Finn St & Ford Ave (Sig		-				•	•		
Lanes	÷	个个>	\leftarrow	个个>	\leftarrow	^>	<个	\rightarrow	
SimTraffic Delay	21.6	11.8	18.6	6.6	37.6	32.8	40.7	11.5	14
SimTraffic LOS	С	В	В	Α	D	С	D	В	В
SimTraffic 95th Queue	67	171	121	110	177	139	155	99	
Queue Block Time (%)	5	12					15		
Denied Entry									
60 Cleveland Ave & Ford A	ve (Signalize	d Cycle Length: 1	10)						
Lanes	<u> </u>	个个>		个个>	(^>	\leftarrow	个个>	
				44.4		23.9		75.3	60
SimTraffic Delay	87.1		42.4		46.3		72.2		60
SimTraffic LOS	F	E	D	D	D	C	E	E	E
SimTraffic 95th Queue	211		154	285	281	357	189	738	
Queue Block Time (%)						557			
	14	56		15		557	1	50	
Denied Entry				15			1	50	
Denied Entry				15			1	50	
Denied Entry			\	15 个个>		<1>>>	1		
Denied Entry 61 Kenneth St & Ford Ave Lanes	(Signalized	Cycle Length: 55)						>	11
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay	(Signalized ← 20.7	Cycle Length: 55)	20.2	<u>↑</u> ↑> 11.0		<个> 20.0	< 15.	> 7	
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic LOS	(Signalized ← 20.7 C	Cycle Length: 55) 个个> 10.3 B	20.2 C	个个> 11.0 B		<个> 20.0 B	<↑ 15. B	> 7	
Denied Entry 51 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue	(Signalized ← 20.7 C 67	Cycle Length: 55) 个个> 10.3 B 157	20.2	↑↑> 11.0 B 191		<个> 20.0	< 15.	> 7	
Denied Entry 51 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	(Signalized ← 20.7 C	Cycle Length: 55) 个个> 10.3 B 157	20.2 C	个个> 11.0 B		<个> 20.0 B	<↑ 15. B	> 7	
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	(Signalized 20.7 C 67 10	Cycle Length: 55)	20.2 C 59	↑↑> 11.0 B 191		<个> 20.0 B	<↑ 15. B	> 7	
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Av	(Signalized ← 20.7 C 67 10 ve (Signalized	Cycle Length: 55) ↑↑> 10.3 B 157 27 Cycle Length: 65	20.2 C 59	↑↑> 11.0 B 191 7		<个> 20.0 B 100	<个 15. 	> 7	
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Av Lanes	(Signalized	Cycle Length: 55) ↑↑> 10.3 B 157 27 Cycle Length: 65 ↑ →	20.2 C 59) ←			<↑> 20.0 B 100 ↑>	<↑ 15. B 95 ←	> 7 ^>	B
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Av	(Signalized ← 20.7 C 67 10 ve (Signalized	Cycle Length: 55) ↑↑> 10.3 B 157 27 Cycle Length: 65 ↑ →	20.2 C 59	↑↑> 11.0 B 191 7		<个> 20.0 B 100 个> 23.1	<个 15. 	> 7	B
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Av Lanes	(Signalized	Cycle Length: 55) ↑↑> 10.3 B 157 27 Cycle Length: 65 ↑ →	20.2 C 59) ←			<↑> 20.0 B 100 ↑>	<↑ 15. B 95 ←	> 7 ^>	27
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic UOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Av Lanes SimTraffic Delay SimTraffic LOS	(Signalized 20.7 C 67 10 ve (Signalized ← 57.5	Cycle Length: 55) ↑↑> 10.3 B 157 27 Cycle Length: 65 ↑ → 19.1 12.4 B B	20.2 C 59) ← 27.5	$\uparrow \uparrow >$ 11.0 B 191 7 $\downarrow \qquad \qquad$	← 2 110.5 F	<↑> 20.0 B 100 ↑> 23.1 C	<↑ 15. B 95 < ← 52.7	> 7 	27
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic 40S SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Av Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue	(Signalized 20.7 C 67 10 ve (Signalized ← 57.5 E 209	Cycle Length: 55) $\uparrow \uparrow >$ 10.3 B 157 27 Cycle Length: 65 \uparrow 19.1 12.4 B 280	20.2 C 59) ← 27.5 C		←	<↑> 20.0 B 100 ↑> 23.1 C 374	<↑ 15. B 95 < 52.7 D	> 7 27.4 C 438	27
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic Dolay SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Av Lanes SimTraffic Delay SimTraffic Dolay SimTraffic 95th Queue Queue Block Time (%)	(Signalized 20.7 C 67 10 ve (Signalized ← 57.5 E	Cycle Length: 55) $\uparrow \uparrow >$ 10.3 B 157 27 Cycle Length: 65 \uparrow 39.1 12.4 B 280	20.2 C 59) ← 27.5 C	$\uparrow \uparrow >$ 11.0 B 191 7 $\downarrow \qquad \qquad$	← 2 110.5 F	<↑> 20.0 B 100 ↑> 23.1 C	<↑ 15. B 95 < 52.7 D	> 7 	27
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic Dolay SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Av Lanes SimTraffic Delay SimTraffic Dolay SimTraffic 95th Queue Queue Block Time (%) Denied Entry	(Signalized 20.7 C 67 10 //////////////////////////////////	Cycle Length: 55) ↑↑> 10.3 B 157 27 19.1 12.4 B 280 104 18	20.2 C 59) ← 27.5 C 60		←	<↑> 20.0 B 100 ↑> 23.1 C 374	<↑ 15. B 95 < 52.7 D	> 7 27.4 C 438	27
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic Dolay SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Av Lanes SimTraffic Delay SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry 65 Cleveland Ave & Highla	(Signalized 20.7 C 67 10 ve (Signalized ← 57.5 E 209 2 209 2 md Pkwy (Sig	Cycle Length: 55) ↑↑> 10.3 B 157 27 Cycle Length: 65 ↑ 19.1 12.4 B 280 104 18 nalized Cycle Len	20.2 C 59 (27.5 C 60 gth: 110)	↑↑> 11.0 B 191 7 18.6 10.2 B B 230 88 19 19	←	< 20.0 B 100	<↑ 15. B 95 	> 7 27.4 C 438 28	27.
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic Dolay SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Av Lanes SimTraffic Delay SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry 65 Cleveland Ave & Highla Lanes	(Signalized 20.7 C 67 10 ve (Signalized ← 57.5 E 209 2 0 2 2 0 2 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 0 2 2 0 2 0 2 2 2 2 2 2 2 2 2 2 2 2 2	Cycle Length: 55) ↑↑> 10.3 B 157 27 Cycle Length: 65 ↑ 19.1 12.4 B 280 104 18 nalized Cycle Length ↑	20.2 C 59 (27.5 C 60 gth: 110)	$\uparrow \uparrow >$ 11.0 B 191 7 18.6 10.2 B B 230 88 19 \rightarrow	←	< 20.0 B 100 	<↑ 15. B 95 • • 52.7 D 155 • •	> 7 7 27.4 C 438 28 ↓	277 C
Denied Entry 61 Kenneth St & Ford Ave Lanes SimTraffic Delay SimTraffic Dolay SimTraffic Dolay SimTraffic Dolay SimTraffic Dolay SimTraffic 95th Queue Queue Block Time (%) Denied Entry Denied Entry 62 Fairview Ave & Ford Ave SimTraffic Delay SimTraffic Delay SimTraffic Dolay SimTraffic 95th Queue Queue Block Time (%) Denied Entry 65 Cleveland Ave & Highla	(Signalized 20.7 C 67 10 ve (Signalized ← 57.5 E 209 209 2 and Pkwy (Sig	Cycle Length: 55) ↑↑> 10.3 B 157 27 Cycle Length: 65 ↑ 19.1 12.4 B 280 104 18 nalized Cycle Len	20.2 C 59 (27.5 C 60 gth: 110)	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	←	< 20.0 B 100	<↑ 15. B 95 	> 7 27.4 C 438 28	111. B 27. C

ode	Intersection	Eastbour	nd	W	/estboun	nd	Ne	orthbound	So	uthbound	Overa
	SimTraffic 95th Queue	154	70	14	8	71	83	318	114	663	
	Queue Block Time (%)	43	13	4	6	10		19		31	
	Denied Entry										
75	St Paul Ave & Montreal Av	e (All-way stop)	1							L.	
	Lanes	<^	\rightarrow		<^>			<^^>	(个个>	
	SimTraffic Delay	9.7	3.9		18.5			13.4	9.8	8.9	11.6
	SimTraffic LOS	A	A		C			B	A	A	B
	SimTraffic 95th Queue	34			115					84	В
	· · · · · · · · · · · · · · · · · · ·	-	5		115			103	66	84	
	Queue Block Time (%)	1									
	Denied Entry										
80	Edgcumbe Rd & St Paul Av		cle Length:	: 85)							
	Lanes	<\	\rightarrow		<^^>		\leftarrow	个个>	\leftarrow	个个>	
	SimTraffic Delay	28.0	13.8		27.0		28.1	10.9	24.7	20.8	18.9
	SimTraffic LOS	С	В		С		С	В	С	С	В
	SimTraffic 95th Queue	119	132		106		257	307	67	178	
	Queue Block Time (%)	4	14				12			2	
	Denied Entry		14				12				
00	Cleveland Ave & Montreal	Avo (Uncignalizza	I)			1		<u> </u>		I	
90		Ave (Unsignalized	'/ 	1.		0		۸.			
	Lanes			<>		0		<u> </u>	<1		-
	SimTraffic Delay			7.6		-		0.8	0.3		2.1
	SimTraffic LOS			A		A		A	A		A
	SimTraffic 95th Queue			51					21		
	Queue Block Time (%)										
	Denied Entry										
100	Fairview Ave & Montreal A	ve (Signalized C	vcle Lengt	h: 66)				L.			
	Lanes	$\leftarrow \uparrow$	\rightarrow	\leftarrow	1	` >	\leftarrow	^>	←	^>	
	SimTraffic Delay	26.2 14.0		23.4).3	22.0	12.7	30.8	15.9	15.8
	SimTraffic LOS	C B	B	23.4 C		с	C	В	C	B	B
				-			-		_		В
	SimTraffic 95th Queue	45 109	-	68		69	54	256	118	265	
	Queue Block Time (%)	3:	l 1		1	1		18	1	16	
	Denied Entry										
120	Mississippi River Blvd & N	Ford Ramp (Unsig	nalized)								
	Lanes			<->		0		^>	\leftarrow	\uparrow	
	SimTraffic Delay			7.8		-		1.0	2.7	0.5	1.5
	SimTraffic LOS			А		A		А	А	А	А
	SimTraffic 95th Queue			51				2	52		
	Queue Block Time (%)										
	Denied Entry										
	Mississippi River Blvd & S I	Lard Romp (Unsig	adized)								
120		Ford Kamp (Onsig	lalizeu)	1.		0		^ `	,	•	
	Lanes			<>		0		<u> </u>	~	↑	
	SimTraffic Delay			7.3		-		1.0	2.3	0.4	1.8
	SimTraffic LOS			A	1	A		A	A	A	A
	SimTraffic 95th Queue			68					17		
	Queue Block Time (%)										
	Denied Entry										
400	Mt Curve Blvd & Highland	Pkwy (All-wav sto	p)								
-	Lanes	< <u>^></u>		1	<^>			<^>		<个>	
	SimTraffic Delay	6.1			6.8			6.1		5.8	5.7
	SimTraffic LOS	0.1 A			A			A	-	A	A
											A
	SimTraffic 95th Queue	49			46			50	-	48	
	Queue Block Time (%)	l		,		1				T	
	Denied Entry										
500	Cretin Ave & Randolph Ave	1	le Length:								
	Lanes	<^>		<′	\uparrow	\rightarrow		<^>	\leftarrow	^>	
	SimTraffic Delay	25.3		30	.9	13.3		7.5	22.5	15.8	15.9
	SimTraffic LOS	С		C	2	В		А	С	В	В
		-		-		63		167	341	70	
	SimTraffic 95th Oueue	147			9						
	SimTraffic 95th Queue	142		17				107			
	SimTraffic 95th Queue Queue Block Time (%) Denied Entry	142		4		14		107	20	20	

Existing PM

Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes	<^>	<^>	<^>	<^>	
	SimTraffic Delay	17.4	19.8	1.4	2.7	4.1
	SimTraffic LOS	С	С	А	А	А
	SimTraffic 95th Queue	62	82	32	105	
	Queue Block Time (%)					
	Denied Entry					

70: Cleveland Ave & St Paul Ave & Bohland Ave Performance by approach

71: St Paul Ave Performance by approach

72: Cleveland Ave & St Paul Ave Performance by approach

Approach	NB SB	All
Denied Del/Veh (s)	0.0 0.0	0.0
Total Del/Veh (s)	8.7 0.4	3.5

73: Cleveland Ave & Inner Drive Performance by approach

Approach	EB SB	All
Denied Del/Veh (s)	0.1 0.0	0.0
Total Del/Veh (s)	2.6 0.1	0.4

140: 46th Ave & E 46th St/Ford Pkwy Performance by approach

Approach	EB	WB	NB	SB	SW	All
Denied Del/Veh (s)	0.4	0.0	2.7	1.0	0.1	0.7
Total Del/Veh (s)	19.9	16.9	38.3	33.6	67.8	23.2

Total Zone Performance

Denied Del/Veh (s)	1.1	
Total Del/Veh (s)	1400.4	

Intersection: 70: Cleveland Ave & St Paul Ave & Bohland Ave

Movement	WB
Directions Served	R
Maximum Queue (ft)	50
Average Queue (ft)	18
95th Queue (ft)	39
Link Distance (ft)	762
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 71: St Paul Ave

Movement	EB
Directions Served	LR
Maximum Queue (ft)	59
Average Queue (ft)	42
95th Queue (ft)	62
Link Distance (ft)	51
Upstream Blk Time (%)	14
Queuing Penalty (veh)	14
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 72: Cleveland Ave & St Paul Ave

Movement	NB	SB
Directions Served	R	LT
Maximum Queue (ft)	94	44
Average Queue (ft)	40	2
95th Queue (ft)	75	21
Link Distance (ft)	651	99
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 73: Cleveland Ave & Inner Drive

Movement	EB	SB
Directions Served	R	TR
Maximum Queue (ft)	31	2
Average Queue (ft)	13	0
95th Queue (ft)	37	2
Link Distance (ft)	285	58
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 140: 46th Ave & E 46th St/Ford Pkwy

EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SW	
<	LT	TR	L	Т	TR>	LTR	>	LT	R	<lr></lr>	
141	234	216	159	237	245	536	67	185	58	26	
38	123	105	81	96	130	211	48	85	27	3	
101	200	187	161	201	224	447	58	153	66	13	
	1464	1464		1094	1094	1212		1083		272	
75			110				25		25		
0	22		5	4		56	10	52	4		
1	13		13	11		172	9	15	4		
	 141 38 101 75 	 LT LT 141 234 38 123 101 200 1464 75 0 22 	 LT TR 141 234 216 38 123 105 101 200 187 1464 1464 75 0 22 	< LT TR L 141 234 216 159 38 123 105 81 101 200 187 161 1464 1464 1464 75 110 0 22	LT TR L T 141 234 216 159 237 38 123 105 81 96 101 200 187 161 201 1464 1464 1094 1094 75 110 0 22 5 4	LT TR L T TR> 141 234 216 159 237 245 38 123 105 81 96 130 101 200 187 161 201 224 1464 1464 1094 1094 75 110 0 22 5 4	LT TR L T TR> LTR 141 234 216 159 237 245 536 38 123 105 81 96 130 211 101 200 187 161 201 224 447 1464 1464 1094 1094 1212 75 110 56 10 56	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

Zone Summary

Zone wide Queuing Penalty: 253

	ntorroation			4	14	lasthaum	A	N	orthbound		authhaund	Quaral
	Intersection		Eastboun		V	/estboun	a	N	ortnbound	3	outhbound	Overal
-	S Ford Ramp/N Ford Ramp	& Ford A		-		•	۸.					
	Lanes			<u>^></u>			<u>^></u>		\rightarrow		\rightarrow	
-	SimTraffic Delay			.0			.4			3.8	4.8	-
_	SimTraffic LOS	-		4			4		A		A	A
	SimTraffic 95th Queue			2			4			47	60	
	Queue Block Time (%)											
Ī	Denied Entry											
20	Ford Ave & Woodlawn Ave	(Unsigna	lized)									
-	Lanes	. ←	$\uparrow\uparrow$			\uparrow	^>				0	
_	SimTraffic Delay	4.6					.4				-	0.5
	SimTraffic LOS	A.0	A 0.4				Α.				A	A
	SimTraffic 95th Queue	31	~			,	٦				~	~
-												
	Queue Block Time (%)	1										
	Denied Entry											
30	Mt Curve Blvd & Ford Ave	(Unsignal	1								1	
	Lanes	\leftarrow	<u>↑</u> ↑>			\uparrow	^>			\leftarrow	\rightarrow	
5	SimTraffic Delay	6.1	0.4			1	.7			13.8	5.8	1.3
2	SimTraffic LOS	А	А				4			В	A	А
9	SimTraffic 95th Queue	28	6				3			32	50	
	Queue Block Time (%)									1	2	
-	Denied Entry											
	Cretin Ave & Ford Ave (Sigr	alized	Cycle Len	ath • 001							1	1
-	· •			511. OUJ		*	^>			,		
_	Lanes	←	<u> </u>								\rightarrow	40.0
-	SimTraffic Delay	10.0					2.2			31.7	5.3	
	SimTraffic LOS	A	A				В			С	A	В
	SimTraffic 95th Queue	83	82			19	95			118	80	1
(Queue Block Time (%)					2	.0			1		
1	Denied Entry											
50	Finn St & Ford Ave (Signaliz	zed Cyc	le Length	: 80)								
	Lanes	. ←	-	^>	\leftarrow	\uparrow	^>	\leftarrow	0	<	$\uparrow \rightarrow$	
L	SimTraffic Delay	、 19.5	11		10.6		.6	30.2	-		7.5 6.1	11.0
	SimTraffic LOS	B		3	B		.σ 4	C	А		C A	B
-	SimTraffic 95th Queue			51			22	98	Δ.		6 54	
		48			69	1.	22	98			_	
H	Queue Block Time (%)	1	T	0							1	
	Denied Entry									_		
60	Cleveland Ave & Ford Ave		-	-							1	
-	Lanes	\leftarrow		^>	\leftarrow		^>	\leftarrow	^>	\leftarrow	个个>	
	SimTraffic Delay	38.9	25	5.8	43.2	27	7.4	21.7	13.4	35.7	25.9	23.9
9	SimTraffic LOS	D	(0	D	(С	С	В	D	С	С
9	SimTraffic 95th Queue	106	20)9	87	1	78	203	258	64	194	
	Queue Block Time (%)			2			1				13	
	Denied Entry											
	Kenneth St & Ford Ave (Sig	nalized	Cycle Ler	oth 80)						-		
			1	1gtii: 60) ↑>	←	^	^>		<个>		<个>	-
-	Lanes											
-	SimTraffic Delay	9.1		.1	14.8		.3		23.8	_	23.0	8.9
-	SimTraffic LOS	A		4	В		4		С		С	A
-	SimTraffic 95th Queue	41		9	57		45		82		84	<u> </u>
•	Queue Block Time (%)	3	1	0		4	4					
	Denied Entry											
62	Fairview Ave & Ford Ave (S	ignalized	Cycle L	ength: 65)							
-	Lanes	Č ←	<i>,</i> ↑	\rightarrow		\uparrow	\rightarrow	\leftarrow	^>	÷	^>	1
_	SimTraffic Delay	28.8			20.6	15.3		38.2	19.6	32.7		18.0
-	SimTraffic LOS	C	B	A	C	B	A	D	В	C	B	B
-	SimTraffic 95th Queue	99	ь 184		63	 193		94	307	64		
-		33			63			94		04		
	Queue Block Time (%)		8			10			11	_	12	
	Denied Entry									_		<u> </u>
	Cleveland Ave & Highland I										-	I
_	Lanes		\uparrow	\rightarrow	<′	ſ	\rightarrow	\leftarrow	^>	\leftarrow	^>	1
	SimTraffic Delay	32	2.1	7.9	32	.2	10.0	12.1	7.9	14.2	6.0	9.9
9	SimTraffic LOS	(С	А	C	2	Α	В	А	В	А	Α
-					· · · · · · · · · · · · · · · · · · ·					•	•	· · · · · · · · · · · · · · · · · · ·

•					_					-		
Node	Intersection	E	astbound	ł	W	/estbound	ł	No	orthbound	Sou	thbound	Overa
	SimTraffic 95th Queue	7	4	67	96	5	62	65	195	36	140	
	Queue Block Time (%)	2	5	6	38	3	5		4		3	
	Denied Entry											
75	St Paul Ave & Montreal Av	e (All-way	stop)									
	Lanes	<		\rightarrow		<^>			<^^>	←	个个>	
	SimTraffic Delay	9.		4.2		13.9			13.0	8.5	9.1	10.7
	SimTraffic LOS	A		A		B			B	A	A	B
	SimTraffic 95th Queue	3		17		106			102	54	90	
	Queue Block Time (%)	1	-	17		100			102	54	50	
		-	L									
	Denied Entry	(0) 1										
80	Edgcumbe Rd & St Paul Av										• •	
	Lanes	<↑		\rightarrow		<^^>		\leftarrow	个个>	 ← 	个个>	
	SimTraffic Delay	27		14.7		28.1		19.7	8.0	19.9	19.0	16.4
	SimTraffic LOS	(-	В		С		В	A	В	В	В
	SimTraffic 95th Queue	15	52	137		115		225	160	67	183	
	Queue Block Time (%)	1	L	19				4			2	
	Denied Entry											
90	Cleveland Ave & Montreal	Ave (Unsi	gnalized)									
	Lanes		- '		<>	0			^>	<个		
	SimTraffic Delay				6.9	-			1.1	0.2		1.6
	SimTraffic LOS				A 0.5	A			A	A		A 1.0
	SimTraffic 95th Queue				47	~			2	25		
	Queue Block Time (%)	-			47				2	25		
	Denied Entry											
100	Fairview Ave & Montreal A								•		•	
	Lanes	\leftarrow	\uparrow	\rightarrow	\leftarrow	\uparrow		\leftarrow	^>	<i>←</i>	^>	
	SimTraffic Delay	32.4	22.7	13.2	29.0	24.		18.9	10.3	26.4	14.5	15.5
	SimTraffic LOS	С	С	В	С	C		В	В	С	В	В
	SimTraffic 95th Queue	51	128	45	57	17	2	53	236	112	255	
	Queue Block Time (%)		39	3		11	1		12		12	
	Denied Entry											
120	Mississippi River Blvd & N	Ford Ram	p (Unsign	alized)								
	Lanes				<>	0			个>	\leftarrow	\uparrow	
	SimTraffic Delay				5.3	-			1.1	2.5	0.2	1.3
	SimTraffic LOS				A	A			A	A	A	A
	SimTraffic 95th Queue				46					35		
	Queue Block Time (%)				40							
120	Denied Entry	Fauri Dama	. /11	- l' d\								
130	Mississippi River Blvd & S I	Ford Kamp	o (Unsign	alized)		0			A .		•	
	Lanes				<->	0			<u> </u>	←	<u>↑</u>	
	SimTraffic Delay				5.8	-			1.1	2.2	0.2	2.0
	SimTraffic LOS				Α	A			A	A	A	A
	SimTraffic 95th Queue				62					18		
	Queue Block Time (%)											
	Denied Entry											
400	Mt Curve Blvd & Highland	Pkwy (All-	way stop)								
	Lanes		<^>		<个	·>			<^>		<^>	
	SimTraffic Delay		5.8		7.5	5			5.7		5.8	5.4
	SimTraffic LOS		А		A				А		А	А
	SimTraffic 95th Queue	1	46		41				44		47	
	Queue Block Time (%)	1										
	Denied Entry											
500	Cretin Ave & Randolph Ave	o (Signali-	od - Ovel	o lonath.	65)						1	
500		e (Signaliz) T		e rengtu:					<u>م</u> ر		^ -	
	Lanes		<^>		<1		\rightarrow		<^>	←	<u> </u>	
			25.2		28.	8	13.8		7.7	17.7	9.6	13.3
	SimTraffic Delay											
	SimTraffic LOS		С		C		В		A	В	A	В
	SimTraffic LOS SimTraffic 95th Queue				C 19		В 57		A 188	B 165	A 81	В
	SimTraffic LOS		С			1						B
	SimTraffic LOS SimTraffic 95th Queue		С		19	1	57			165	81	B

Existing AM_With Improvements

Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes	<^>	<^>	<^>	<^>	
	SimTraffic Delay	10.3	10.9	0.9	1.1	2.4
	SimTraffic LOS	В	В	А	А	А
	SimTraffic 95th Queue	48	63		53	
	Queue Block Time (%)					
	Denied Entry					

Node	Intersection		Eastbound	1	W	/estboun	d	N	orthbound	S	outhbound	Overa
	S Ford Ramp/N Ford Ramp											
10	Lanes	A		-		\uparrow	<u>^</u>		\rightarrow	+	\rightarrow	
			2.			0.						0 24
	SimTraffic Delay			-		-	-		5.0)	6.8	-
	SimTraffic LOS		A			A			A		A	A
	SimTraffic 95th Queue		1	2		1	2		52	2	8	0
	Queue Block Time (%)											
	Denied Entry											
20	Ford Ave & Woodlawn Ave	(Unsigna	lized)									
	Lanes	\leftarrow	$\uparrow\uparrow$			\uparrow	^>			<>	0	
	SimTraffic Delay	7.3				0.				23.7	-	1.0
	SimTraffic LOS	A	A			A				C	Α	A
	SimTraffic 95th Queue	40	~~~~							56	~~~~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
						-	•			50		-
	Queue Block Time (%)	3										-
	Denied Entry											_
30	Mt Curve Blvd & Ford Ave	-	1 1								[]	
	Lanes	\leftarrow	$\uparrow \uparrow >$			\uparrow				\leftarrow	\rightarrow	
	SimTraffic Delay	7.3	0.5			2.	0			25.2	8.	2 1.7
	SimTraffic LOS	Α	А			A	4			D	A	А
	SimTraffic 95th Queue	43				3	3			24	53	2
	Queue Block Time (%)	1										2
	Denied Entry	-									· · · ·	
40	Cretin Ave & Ford Ave (Sig	nalized	Cycle Len	7th · 110)							1	
40			Cycle Lelia 个个>	5 110)		小	^>			←	\rightarrow	-
	Lanes									_		0 45 4
	SimTraffic Delay	18.5	6.6			14				43.5		
	SimTraffic LOS	В	A			_	3			D	A	В
	SimTraffic 95th Queue	139	137			26	50			187	26	1
	Queue Block Time (%)	4	1			2	2			14		
	Denied Entry											
50	Finn St & Ford Ave (Signaliz	zed Cyc	le Length:	110)								
	Lanes	\leftarrow	\uparrow	^>	\leftarrow	\uparrow	^>	\leftarrow	个>	<	$\uparrow \rightarrow$	
	SimTraffic Delay	21.1			18.6	. 7.		. 39.1	22.1	_	3.6 9.0	14.1
	SimTraffic LOS	C	E	-	B	A		D	C		D A	B
	SimTraffic 95th Queue	68	16		126	13		171	103		25 94	
		4			120	10	52	1/1	105	_	-	_
	Queue Block Time (%)	4	1	4						1	0 1	-
	Denied Entry											_
60	Cleveland Ave & Ford Ave	-	-	-							[
	Lanes	\leftarrow	\uparrow		\leftarrow	\uparrow		\leftarrow	^>	\leftarrow	↑↑>	
	SimTraffic Delay	60.5	59	.5	39.1	44	.2	25.9	24.0	24.4	25.9	44.3
	SimTraffic LOS	E	E		D	0)	С	С	С	С	D
	SimTraffic 95th Queue	273	51	.5	161	28	33	203	356	120	320	
	Queue Block Time (%)	2	3	8		1	3				16	
	Denied Entry			-			-					-
61	Kenneth St & Ford Ave (Sig	nalized	Cycle Len	oth 551							1	
01	Lanes			-	\leftarrow	小	^>		<^>	-	<个>	-
									16.3		16.6	11.7
	SimTraffic Delay	22.0			18.3		.0					11.2
	SimTraffic LOS	C	A		В		3		В		В	В
	SimTraffic 95th Queue	65	15		51	18			102		89	_
	Queue Block Time (%)	11	2	7		8	3					
	Denied Entry)							
62	Denied Entry Fairview Ave & Ford Ave (S	ignalized	Cycle Lo	ength: 65	,				۸.	÷	^>	
62	Fairview Ave & Ford Ave (S					\uparrow	\rightarrow	\leftarrow	1.>	· · ·		
62	Fairview Ave & Ford Ave (S Lanes	\leftarrow	\uparrow	\rightarrow	\leftarrow	↑ 17.9	→ 10.5	← 103.2	<u></u> 22.4			28.2
62	Fairview Ave & Ford Ave (S Lanes SimTraffic Delay	← 82.9	个 23.0	→ 15.3	← 34.5	17.9	10.5	103.2	22.4	50.0	25.2	
62	Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS	← 82.9 F	↑ 23.0 C	→ 15.3 B	← 34.5 C	17.9 B	10.5 B	103.2 F	22.4 C	50.0 D	25.2 C	28.2 C
62	Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue	← 82.9 F 272	↑ 23.0 C 476	→ 15.3	← 34.5	17.9 B 218	10.5	103.2 F 169	22.4 C 336	50.0	25.2 C 407	
62	Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	← 82.9 F	↑ 23.0 C 476	→ 15.3 B	← 34.5 C	17.9 B	10.5 B	103.2 F	22.4 C	50.0 D	25.2 C	
	Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	← 82.9 F 272 11	↑ 23.0 C 476 18	→ 15.3 B 126	← 34.5 C 59	17.9 B 218 17	10.5 B	103.2 F 169	22.4 C 336	50.0 D	25.2 C 407	
	Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	← 82.9 F 272 11 Pkwy (Sig	↑ 23.0 C 476 18 nalized	→ 15.3 B 126 Cycle Len	← 34.5 C 59 gth: 110)	17.9 B 218 17	10.5 B 93	103.2 F 169 2	22.4 C 336 15	50.0 D 133	25.2 C 407 25	
	Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Cleveland Ave & Highland I Lanes	← 82.9 F 272 11 Pkwy (Sig	↑ 23.0 C 476 18	→ 15.3 B 126	← 34.5 C 59	17.9 B 218 17	10.5 B	103.2 F 169	22.4 C 336 15 ∧>	50.0 D	25.2 C 407	
	Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Cleveland Ave & Highland	← 82.9 F 272 11 Pkwy (Sig	↑ 23.0 C 476 18 nalized	→ 15.3 B 126 Cycle Len	← 34.5 C 59 gth: 110)	17.9 B 218 17	10.5 B 93	103.2 F 169 2	22.4 C 336 15	50.0 D 133	25.2 C 407 25 ↑>	28.2 C

Intersection SimTraffic 95th Queue Queue Block Time (%) Denied Entry St Paul Ave & Montreal Ave Lanes	13 4 e (All-way	2	70 11	N 13 4		d 70 10	No 104	orthbound 331	Sou 89	ithbound 213	Overall
Queue Block Time (%) Denied Entry St Paul Ave & Montreal Ave Lanes	4 e (All-way	2	-			-	104		89	213	
Denied Entry St Paul Ave & Montreal Ave Lanes	e (All-way		11	4	9	10					
St Paul Ave & Montreal Ave Lanes		(stop)				10		18		10	
St Paul Ave & Montreal Ave Lanes		(atom)									
Lanes		SLODI						I		ł	
	<'		\rightarrow		<^>			<^^>	←	<u> </u>	
SimTraffic Dolay	9.		4.0		18.1			13.4	10.2	9.3	11.8
SimTraffic Delay SimTraffic LOS	-	-	-		C			B	B		B
	A		A		-			-		A	B
SimTraffic 95th Queue		3	6		126			106	68	91	
Queue Block Time (%)	1	L									
•											
Edgcumbe Rd & St Paul Ave	a (Signaliz	ed Cycl	e Length:	85)							
Lanes	<1	٠个	\rightarrow		<^^>		\leftarrow	个个>	\leftarrow	个个>	
SimTraffic Delay	27	.8	14.6		28.5		28.7	10.7	24.7	21.3	19.3
SimTraffic LOS	(2	В		С		С	В	С	С	В
SimTraffic 95th Queue	15	51	135		120		257	325	78	182	
	2	3									
		-	10								
	Ave (Unci	analized)									
	Ave (Unsi	gnalizeu)		1.				۸.	-		
					-	-					
'								-			2.1
					A	4					A
SimTraffic 95th Queue				46				3	22		
Queue Block Time (%)											
Denied Entry											
Fairview Ave & Montreal A	ve (Signal	lized Cy	cle Lengt	h: 66)							
Lanes	←		\rightarrow		\uparrow	·>	←	个>	←	<u></u>	
									-		15.7
											В
	-			-			-		-		
	45			07			00		110		
		33	2		1	1		18		15	
Mississippi River Blvd & N I	Ford Ram	p (Unsign	alized)								
Lanes				<>	C)		个>	÷		
SimTraffic Delay				8.4	-	-		0.9	2.8	0.5	1.5
SimTraffic LOS				А	A	A		А	А	А	А
SimTraffic 95th Queue				50				5	48		
Queue Block Time (%)											
1,											
	ord Ram) (Unsign:	alized)								-
		/011516110	anzeaj	4	0	1		小 、			
					Ľ	,			-		1.0
					-						1.9
					P	4		A		A	A
				73					15		
								1			
Denied Entry											
Mt Curve Blvd & Highland	Pkwy (All-	way stop									
Lanes		<^>			<^>			<^>		<^>	
SimTraffic Delay		6.1			7.1			6.2		6.0	5.6
											A
					50			15			
Denied Entry	(Sim - !!-		lowath	65)							
Cretin Ave & Randolph Ave	: (Signalize		e Length:		•			•			
	1	<^>		<′		\rightarrow		<^>	\leftarrow	^>	
Lanes	ļ			20	.1	12.7	1	7.8	22.4	15.7	15.9
Lanes SimTraffic Delay		26.4							-		10.0
Lanes		26.4 C		29		В		A	C	B	В
Lanes SimTraffic Delay					2				-		
Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue		С		C	5 5	В		А	С	В	
Lanes SimTraffic Delay SimTraffic LOS		С		0 16	5 5	B 65		А	C 336	В 73	
	Denied Entry Edgcumbe Rd & St Paul Ave Lanes SimTraffic Delay SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry Cleveland Ave & Montreal Lanes SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Montreal A Lanes SimTraffic Delay SimTraf	Denied Entry Edgcumbe Rd & St Paul Ave (Signaliz Lanes <↑	Denied EntryEdgcumbe Rd & St Paul Ave(Signalized CyclLanes<↑↑	Denied EntrySimpraffic DelaySimTraffic Delay 27.8 14.6SimTraffic Delay 27.8 14.6SimTraffic Delay 27.8 14.6SimTraffic Delay 27.8 14.6SimTraffic Delay 27.8 14.5Queue Block Time (%)316Denied EntryImage and the second seco	Denied EntryImage: Strain	Denied EntryImage: second secon	Denied EntryImage: Control of the system of t	Denied EntryImage: cycle Length: 85)Lanes $< \uparrow \uparrow \rightarrow$ $< \uparrow \uparrow \land$ SimTraffic Delay27.814.628.528.7SimTraffic Delay27.814.628.528.7SimTraffic Delay27.814.628.528.7Queue Block Time (%)316120257Queue Block Time (%)31612257Queue Block Time (%)316120257Queue Block Time (%)3161212Lanes $< \leftarrow >$ 011SimTraffic Delay7.8-1SimTraffic DSAA1SimTraffic DSAA1Queue Block Time (%)4611Denied Entry111Lanes $\leftarrow \uparrow \uparrow \Rightarrow$ $\leftarrow \uparrow \uparrow \Rightarrow$ \leftarrow SimTraffic Delay29.314.110.522.320.224.9SimTraffic Sth Queue45107406717666Queue Block Time (%)3321111Denied Entry111111Mississipi River Blvd & N Ford Ramp (Unsignalized)1111Lanes $\leftarrow >$ 01111SimTraffic Delay8.4-1111SimTraffic Delay8.4-1111SimTraffic Delay111111<	Denied EntryImage: Cycle Length: 85)Edgcumbe Rd & St Paul Ave (Signalized Cycle Length: 85)SimTraffic Delay 27.8 14.6 28.5 28.7 10.7 SimTraffic Osti Queue151135 120 257 325 Queue Block Time (%)316 12 Image: Cycle Length: 85) 120 Denied EntryImage: Cycle Length: 86) 12 Image: Cycle Length: 66) 12 Lanes $\leftarrow >$ 0 $\uparrow >$ $\uparrow >$ SimTraffic DelayImage: Cycle Length: 66)Image: Cycle Length: 66)Image: Cycle Length: 66)SimTraffic Delay 29.3 14.1 10.5 22.3 20.2 24.9 SimTraffic Delay 29.3 14.1 10.5 22.3 20.2 24.9 12.7 SimTraffic Delay 29.3 14.1 10.5 22.3 20.2 24.9 12.7 SimTraffic Delay 29.3 14.1 10.5 22.3 20.2 24.9 12.7 SimTraffic Seth Queue 45 107 40 67 17.6 66 259 Queue Block Time (%) 33 2 11 18 18 Denied EntryImage: Cycle Length: 50 Image: Cycle Length: 50 1.6 50 Lanes $\leftarrow \uparrow \land$ 6.2 9.5 1.6 7.7 6.9 SimTraffic Delay 29.3 14.1 10.5 22.3 20.2 24.9 12.7 SimTraffic Delay 6.8 6.7 7.7 6.9 <t< td=""><td>Denied Entry<!--</td--><td>$\begin{array}{ c c c c c c c c c c c c c c c c c c c$</td></td></t<>	Denied Entry </td <td>$\begin{array}{ c c c c c c c c c c c c c c c c c c c$</td>	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$

Existing PM_With Improvements

Node	Intersection	Eastbound	Westbou	nd	Ν	orthbour	nd	S	outhbour	nd	Overall
	Lanes	<^>	<^>			<^>			<^>		
	SimTraffic Delay	16.2	17.1			1.3			2.4		3.8
	SimTraffic LOS	С	C			Α			А		А
	SimTraffic 95th Queue	60	81			18			104		
	Queue Block Time (%)										
	Denied Entry										

le Intersection		Eastbound		W	estbound		N	orthbound		S	outhbound	2	Over
10 S Ford Ramp/N Ford Ramp	& Ford A	ve (Unsigr	alized)										
Lanes		个1	`>		$\uparrow\uparrow$	·>			\rightarrow			\rightarrow	
SimTraffic Delay		1.9	Ð		0.5				4.6			4.9	1.5
SimTraffic LOS		A			А				А			А	A
SimTraffic 95th Queue		8							46			61	
		0							40			01	
Queue Block Time (%)													
Denied Entry													
20 Ford Ave & Woodlawn Ave	e (Unsigna	lized)											
Lanes	\leftarrow	$\uparrow\uparrow$			$\uparrow\uparrow$	>					0		
SimTraffic Delay	4.7	0.4			0.4						-		0.
SimTraffic LOS	Α	Α			А						A		A
SimTraffic 95th Queue	32												
	1												
Queue Block Time (%)	1												
Denied Entry													
30 Mt Curve Blvd & Ford Ave	(Unsignal	ized)											
Lanes	\leftarrow	↑↑ >			$\uparrow\uparrow$	>				\leftarrow		\rightarrow	
SimTraffic Delay	5.0	0.4			1.7	,				14.7		6.3	1.4
SimTraffic LOS	Α	Α			А					В		А	A
SimTraffic 95th Queue	31				3					35		54	
	51				5							2	
Queue Block Time (%)											-	2	
Denied Entry	L												
40 Cretin Ave & Ford Ave (Sig	1	-	th: 80)										
Lanes	\leftarrow	$\uparrow \uparrow >$			$\uparrow\uparrow$	>				\leftarrow		\rightarrow	
SimTraffic Delay	11.2	4.0			13.3	3				31.0		5.3	10
SimTraffic LOS	В	Α			В					С		А	В
SimTraffic 95th Queue	101	92			214	1				129		84	
Queue Block Time (%)	101				21-					125		-0	
	1				21					T			
Denied Entry													
50 Finn St & Ford Ave (Signalia	zed Cyc	le Length:	80)										
Lanes	\leftarrow	个1	`>	\leftarrow	$\uparrow\uparrow$	>	\leftarrow	0		<'	\uparrow	\rightarrow	
SimTraffic Delay	23.0	12.	3	12.0	7.8	3	31.6	-		24	1.2	6.2	11.
SimTraffic LOS	С	В		В	А		С	А		(C	А	В
SimTraffic 95th Queue	51	15	7	81	131	1	103				3	54	
Queue Block Time (%)	2			01	10.	-	105				1	54	
	2	12								-	L		
Denied Entry	(a) 11			-									
60 Cleveland Ave & Ford Ave	i		-	-									
Lanes	\leftarrow	个1		\leftarrow	$\uparrow\uparrow$		\leftarrow	个>		\leftarrow	11		
SimTraffic Delay	41.1	27.	0	43.7	27.8	8	24.3	15.4	4	38.1	27.	0	25
SimTraffic LOS	D	C		D	С		С	В		D	C		C
SimTraffic 95th Queue	130	21	7	97	183	3	238	290)	70	20	8	
Queue Block Time (%)		2		5.	2		200				13		
Denied Entry		2			2						13	,	
61 Kenneth St & Ford Ave (Sig		-											
Lanes	\leftarrow	个1		\leftarrow	$\uparrow\uparrow$			<^>			<^>		
SimTraffic Delay	10.8	5.4	1	14.1	9.2			23.3			23.1		9.
SimTraffic LOS	В	A		В	А			С			С		A
5	47	78		62	154			88			81		
					5								
SimTraffic 95th Queue	л	1 12	-				I	1					
SimTraffic 95th Queue Queue Block Time (%)	4		1										
SimTraffic 95th Queue Queue Block Time (%) Denied Entry													
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S	ignalized										r		
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S Lanes	ignalized ←	\uparrow	\rightarrow	\leftarrow	\uparrow	\rightarrow	÷	个>		÷	个:		
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S	ignalized	\uparrow			↑ 16.7	→ 8.5	← 45.7	个> 20.8		← 37.9			19
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S Lanes	ignalized ←	\uparrow	\rightarrow	\leftarrow					8			6	
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS	ignalized ← 34.7 C	↑ 15.3 B	→ 8.4 A	← 23.9 C	16.7 B	8.5 A	45.7 D	20.8 C	8	37.9 D	18. B	6	
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue	ignalized ← 34.7	↑ 15.3 B 197	→ 8.4	← 23.9	16.7 B 203	8.5	45.7	20.8 C 311	8 L	37.9	18. B 28	6 8	
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	ignalized ← 34.7 C	↑ 15.3 B	→ 8.4 A	← 23.9 C	16.7 B	8.5 A	45.7 D	20.8 C	8 L	37.9 D	18. B	6 8	
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	ignalized ← 34.7 C 118	↑ 15.3 B 197 9	→ 8.4 A 95	← 23.9 C 65	16.7 B 203	8.5 A	45.7 D	20.8 C 311	8 L	37.9 D	18. B 28	6 8	
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	ignalized ← 34.7 C 118 Pkwy (Sig	↑ 15.3 B 197 9 nalized	→ 8.4 A 95 Cycle Len	← 23.9 C 65 gth: 80)	16.7 B 203 12	8.5 A 90	45.7 D 110	20.8 C 311 13	8	37.9 D 51	18. B 28 14	6 8 I	
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry 65 Cleveland Ave & Highland I Lanes	ignalized ← 34.7 C 118	↑ 15.3 B 197 9 nalized	→ 8.4 A 95	← 23.9 C 65	16.7 B 203 12	8.5 A	45.7 D	20.8 C 311	8	37.9 D	18. B 28	6 8 I	
SimTraffic 95th Queue Queue Block Time (%) Denied Entry 62 Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry 65 Cleveland Ave & Highland	ignalized ← 34.7 C 118 Pkwy (Sig	↑ 15.3 B 197 9 nalized	→ 8.4 A 95 Cycle Len	← 23.9 C 65 gth: 80)	16.7 B 203 12	8.5 A 90	45.7 D 110	20.8 C 311 13	8	37.9 D 51	18. B 28 14	6 8 1 >	19. B

Node	Intersection	E	astbound	ł	W	/estbour	nd	N	orthbound	So	uthbound	Overall
	SimTraffic 95th Queue	7	9	67	10	5	60	89	219	45	154	
	Queue Block Time (%)	24		7	38		4		6		5	
	Denied Entry					-						
	St Paul Ave & Montreal Av	e (All-wav	stop)									
	Lanes	</td <td></td> <td>\rightarrow</td> <td></td> <td><个></td> <td></td> <td></td> <td><^^></td> <td>←</td> <td>个个></td> <td></td>		\rightarrow		<个>			<^^>	←	个个>	
	SimTraffic Delay	9.		4.1		14.4			13.7	8.6	9.3	11.1
	SimTraffic LOS	Д		A		 B			В	A	A	B
	SimTraffic 95th Queue	4		32		101			103	51	93	0
	Queue Block Time (%)	1		52		101			105	51	55	
	Denied Entry		-									
	Edgcumbe Rd & St Paul Av	o (Signalia		o Longth	. 04)							
	Lanes				. 64)	<^^>		÷	个个>	←	个个>	
	SimTraffic Delay	26				26.5		26.7	9.1	23.6	21.4	107
	SimTraffic LOS	20		15.8 B		20.5 C				23.0 C	21.4 C	18.7 B
		19		_		120		C	A 282	_	198	В
	SimTraffic 95th Queue			142		120		256	282	68		
	Queue Block Time (%)	1	-	22				11			4	
	Denied Entry											
90	Cleveland Ave & Montreal	Ave (Unsi	gnalized)				_		•			
	Lanes				<> ₹>		0		<u> </u>	<1		
	SimTraffic Delay				7.2		-		1.2	0.3	•	1.6
	SimTraffic LOS				A		A		A	A 20		A
	SimTraffic 95th Queue				46					29		
	Queue Block Time (%)						1					
	Denied Entry											
100	Fairview Ave & Montreal A		-									
	Lanes	\leftarrow	\uparrow	\rightarrow	\leftarrow		`>	\leftarrow	个>	\leftarrow	^>	
	SimTraffic Delay	33.0	22.5	12.4	28.0		2.1	21.5	12.3	26.9	14.7	16.1
	SimTraffic LOS	С	С	В	С		С	С	В	C	В	В
	SimTraffic 95th Queue	46	130	49	70	1	68	79	251	93	267	
	Queue Block Time (%)		39	3		1	LO		14		12	
	Denied Entry											
120	Mississippi River Blvd & N	Ford Ram	p (Unsign	alized)								
	Lanes				<>		0		^>	\leftarrow	\uparrow	
	SimTraffic Delay				7.4		-		1.2	2.9	0.2	1.4
	SimTraffic LOS				А		A		А	А	A	А
	SimTraffic 95th Queue				47				2	36		
	Queue Block Time (%)											
	Denied Entry											
130	Mississippi River Blvd & S I	Ford Ramp) (Unsign	alized)								
	Lanes				<>		0		个>	\leftarrow	\uparrow	
	SimTraffic Delay				6.4		-		1.2	2.2	0.2	2.2
	SimTraffic LOS				А		A		А	А	A	А
	SimTraffic 95th Queue				67					14		
	Queue Block Time (%)											
	Denied Entry											
	Mt Curve Blvd & Highland	Pkwv (All-	way ston)			1		1		I	
100	Lanes		<	1	<1	`>			<个>		<^>	
	SimTraffic Delay		5.9		7.4				5.4		5.8	5.6
	SimTraffic LOS		A		A				A		A	A
	SimTraffic 95th Queue		46		42				45		49	~
	Queue Block Time (%)		40		42	-			75	-	J	
	Denied Entry Cretin Ave & Randolph Ave) Signali-	ad - Ovel	longth	65)		1					
500		e (Signalize	-	e Length:	1	N			<u></u>		<u>۸</u> ،	
	Lanes		<^>		<1		\rightarrow		<^>	← 10.2	<u></u> ^>	107
	SimTraffic Delay		24.3 C		29		15.1		7.7	19.3	9.8	13.7
			(¹		C		В		A	В	A	В
	SimTraffic LOS					-			400	100		
	SimTraffic 95th Queue		113		21		58		182	180	79	
							58 31		182	180 18	79 8	

2040 AM No Build

Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes	<^>	<^>	<^>	<^>	
	SimTraffic Delay	10.7	11.8	1.0	1.2	2.7
	SimTraffic LOS	В	В	A	А	Α
	SimTraffic 95th Queue	52	68	2	63	
	Queue Block Time (%)					
	Denied Entry					

70: Cleveland Ave & St Paul Ave & Bohland Ave Performance by approach

71: St Paul Ave Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	15.7	2.7	0.3	2.9

72: Cleveland Ave & St Paul Ave Performance by approach

Approach	NB SB	All
Denied Del/Veh (s)	0.0 0.0	0.0
Total Del/Veh (s)	8.6 1.3	4.7

73: Cleveland Ave & Inner Drive Performance by approach

Approach	EB SB	All
Denied Del/Veh (s)	Veh (s) 0.1 0.0	0.0
Total Del/Veh (s)		0.8

140: 46th Ave & E 46th St/Ford Pkwy Performance by approach

Approach	EB	WB	NB	SB	SW	All
Denied Del/Veh (s)	0.5	0.0	0.0	0.9	0.1	0.2
Total Del/Veh (s)	13.8	10.1	18.1	56.9	70.8	17.6

Total Zone Performance

Denied Del/Veh (s)	0.5	
Total Del/Veh (s)	751.2	

Intersection: 70: Cleveland Ave & St Paul Ave & Bohland Ave

Movement	WB	NB	SB
Directions Served	R	TR	TR
Maximum Queue (ft)	75	18	6
Average Queue (ft)	32	1	0
95th Queue (ft)	61	9	6
Link Distance (ft)	762	168	556
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 71: St Paul Ave

Movement	EB
Directions Served	LR
Maximum Queue (ft)	59
Average Queue (ft)	44
95th Queue (ft)	63
Link Distance (ft)	51
Upstream Blk Time (%)	15
Queuing Penalty (veh)	17
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 72: Cleveland Ave & St Paul Ave

Movement	NB	SB
Directions Served	R	LT
Maximum Queue (ft)	91	59
Average Queue (ft)	37	5
95th Queue (ft)	67	30
Link Distance (ft)	651	99
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 73: Cleveland Ave & Inner Drive

Movement	EB	SB
Directions Served	R	TR
Maximum Queue (ft)	51	6
Average Queue (ft)	18	0
95th Queue (ft)	45	4
Link Distance (ft)	285	58
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 140: 46th Ave & E 46th St/Ford Pkwy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SW	
Directions Served	<l< td=""><td>Т</td><td>TR</td><td>L</td><td>Т</td><td>TR></td><td>LT</td><td>></td><td>LT</td><td>R</td><td><lr></lr></td><td></td></l<>	Т	TR	L	Т	TR>	LT	>	LT	R	<lr></lr>	
Maximum Queue (ft)	116	160	142	120	114	161	313	62	274	58	40	
Average Queue (ft)	33	70	50	37	34	70	84	43	115	25	5	
95th Queue (ft)	78	135	111	91	88	135	251	59	240	64	26	
Link Distance (ft)		1464	1464		1080	1080	319		656		627	
Upstream Blk Time (%)							3					
Queuing Penalty (veh)							12					
Storage Bay Dist (ft)	75			110				25		25		
Storage Blk Time (%)	1	7		0	0		35	8	61	2		
Queuing Penalty (veh)	1	5		1	0		110	3	16	3		

Zone Summary

Zone wide Queuing Penalty: 168

Node	Intersection		Eastboun	Ч	W	/estboun	d	No	orthbound	S	outhbound	4	Overall
	S Ford Ramp/N Ford Ramp					estboui	lu	INC	libound	51	Julibound	4	Overall
10	Lanes					小	^>		\rightarrow			\rightarrow	
	SimTraffic Delay			.6			.7		5.3			7.4	2.2
	•	-											
	SimTraffic LOS			4			4		A			A	A
	SimTraffic 95th Queue		1	.1			2		54			83	
	Queue Block Time (%)												
	Denied Entry												
20	Ford Ave & Woodlawn Ave	(Unsigna	lized)										
	Lanes	\leftarrow	$\uparrow\uparrow$			\uparrow	^>			<>	0		
	SimTraffic Delay	7.0	0.5			0	.7			22.7	-		1.0
	SimTraffic LOS	Α	Α				4			С	A		А
	SimTraffic 95th Queue	40					6			61			
	Queue Block Time (%)	3											
	Denied Entry												
	Mt Curve Blvd & Ford Ave	Unsignal	ized)										
	Lanes	~	↑↑>			$\mathbf{\Lambda}$	^>			\leftarrow		\rightarrow	
	SimTraffic Delay	, 7.7	0.5				.0			、 38.7		, 8.9	1.7
	SimTraffic LOS	A	A 0.5				.σ 4			E		A	A
	SimTraffic 95th Queue	46	~				6	+		21		A 53	А
		40					0			21			
	Queue Block Time (%)											3	
	Denied Entry												
40	Cretin Ave & Ford Ave (Sigr			gth: 110)	 			 					
	Lanes	\leftarrow	个个>				^>			\leftarrow		\rightarrow	
	SimTraffic Delay	19.9	6.1			16	5.6			42.9		10.3	16.1
	SimTraffic LOS	В	Α			I	В			D		В	В
	SimTraffic 95th Queue	141	142			2	86			192		302	
	Queue Block Time (%)	5	1			2	.5			17		1	
	Denied Entry												
	Finn St & Ford Ave (Signaliz	zed Cvc	le Length	: 110)							1		
	Lanes	\leftarrow		<u></u> ^>	\leftarrow	\uparrow	^>	\leftarrow	个>	<'	\uparrow	\rightarrow	
	SimTraffic Delay	21.3		3.8	. 18.2		2.1	、 38.6	28.4	36		, 9.5	16.3
	SimTraffic LOS	C 21.5	-	в.	B 10.2		. B	D	C)	A	10.5 B
	SimTraffic 95th Queue	71		04	134		89	185	112	13		96	U
	•	4		.7	154	10	59	105	112	13		90	
	Queue Block Time (%)	4	L	./	1					1	2	1	
	Denied Entry				10)								
60	Cleveland Ave & Ford Ave			-		•	•		•				
	Lanes	<i>←</i>		^>	\leftarrow		^>	÷	↑>	÷	<u>^</u> 1		
	SimTraffic Delay	39.1).8	33.5		1.6	39.5	39.7	38.8	37.		38.4
	SimTraffic LOS	D		С	C		С	D	D	D	D		D
	SimTraffic 95th Queue	189	3.	54	129	2.	57	327	494	130	45	2	
	Queue Block Time (%)	1		9		1	.0		1	1	25	5	
	Denied Entry												
61	Kenneth St & Ford Ave (Sig	nalized	Cycle Ler	ngth: 55)									
	Lanes	\leftarrow	1	<u>↓</u> ↑>	\leftarrow	\uparrow	^>		<^>		<^>		
	SimTraffic Delay	22.5		L.9	21.0		2.5		18.8		16.7		12.4
	SimTraffic LOS	C		B	C		B		В		В		B
	SimTraffic 95th Queue	72		04	62		24		98		85		5
				04 10	02		.0		50		05		
	Queue Block Time (%)	11	3			L	.0						
~~~	Denied Entry												
62	Fairview Ave & Ford Ave (S			-		•			•				
	Lanes	<i>←</i>	<u>↑</u>	$\rightarrow$	<i>←</i>	$\uparrow$	$\rightarrow$	<i>←</i>	<u> </u>	<del>(</del>	<u>个</u> :		
	SimTraffic Delay	160.8			43.7	24.3		97.6	22.4	51.3	24.		37.8
	SimTraffic LOS	F	D	C	D	С	В	F	С	D	C		D
	SimTraffic 95th Queue	364	765	156	83	292	108	168	358	143	42	3	
	Queue Block Time (%)	31	30			28		4	17	1	26	5	
	Denied Entry												
	Cleveland Ave & Highland I	Pkwy (Sig	nalized	Cycle Ler	gth: 110)				i				
	Lanes		$\uparrow$	$\rightarrow$	</td <td>1</td> <td>$\rightarrow$</td> <td>÷</td> <td>个&gt;</td> <td>$\leftarrow$</td> <td><b>个</b>:</td> <td>&gt;</td> <td></td>	1	$\rightarrow$	÷	个>	$\leftarrow$	<b>个</b> :	>	
	SimTraffic Delay		5.2	15.3	40		14.6	26.8	17.0	30.1	11.		17.7
	SimTraffic LOS		).2 D	B	D		B	C	B	C 50.1	B		В
		L	-	D			U	ι L	U	C	В		U

ode	Intersection	ntersection Eastbou		ł	Westbound			N	orthbound	So	uthbound	Overa
	SimTraffic 95th Queue	152 70		141 70			104	328	85			
	Queue Block Time (%)	4	3	13	4	7	11		22	1	12	
	Denied Entry											
	St Paul Ave & Montreal Av	e (All-way	(stop)									
_	Lanes	<		$\rightarrow$		<^>			<个个>	$\leftarrow$	个个>	
	SimTraffic Delay	10		4.4		19.6			13.9	11.5	9.9	12.7
	SimTraffic LOS		3	 A		C			B	B	A	B
	SimTraffic 95th Queue		2	12		139			105	77	94	
				12		139			105	//	54	
	Queue Block Time (%)	-	L									
	Denied Entry	(0) 11										_
80	Edgcumbe Rd & St Paul Av	-	-	-	85)							
	Lanes	<1		$\rightarrow$		<^^>		$\leftarrow$	个个>	$\leftarrow$	<u> </u>	
	SimTraffic Delay	27		15.2		25.2		36.9	11.5	24.4	22.8	21.5
	SimTraffic LOS		2	В		С		D	В	С	С	C
	SimTraffic 95th Queue	15	58	138		113		279	439	72	183	
	Queue Block Time (%)	4	1	17				21			2	
	Denied Entry											
90	<b>Cleveland Ave &amp; Montreal</b>	Ave (Unsi	gnalized)									
	Lanes		-		<>	-	0		个>	<1	<b>`</b>	
	SimTraffic Delay				7.9		-		0.8	0.3		2.2
	SimTraffic LOS				A		A		A	A		A
	SimTraffic 95th Queue				48	·'				21		
	Queue Block Time (%)										·	
	Denied Entry											
		ve (Ciane	lined Cu	ala Lanat	h. 70)							
100	Fairview Ave & Montreal A		-	_			N .	,	<b>A</b> .	,	<b>A</b> .	
	Lanes	←	<u>↑</u>	$\rightarrow$	<i>←</i>		<b>`&gt;</b>	<i>←</i>	<u> </u>	←	<u> </u>	
	SimTraffic Delay	27.9	14.5	11.1	23.1		1.2	24.9	15.9	37.1	17.3	17.7
	SimTraffic LOS	C	В	В	С		С	С	В	D	В	В
	SimTraffic 95th Queue	46	112	39	64	1	92	99	316	134	311	
	Queue Block Time (%)		35	1		1	L3		21	2	18	
	Denied Entry											
120	Mississippi River Blvd & N	Ford Ram	p (Unsign	alized)								
	Lanes				<>		0		^>	$\leftarrow$	$\uparrow$	
	SimTraffic Delay				7.8		-		1.0	2.6	0.5	1.5
	SimTraffic LOS				А		A		А	А	А	А
	SimTraffic 95th Queue				55				7	48		
	Queue Block Time (%)								•			
	Denied Entry											
	Mississippi River Blvd & S F	ord Pami	) (Uncign	alized)								_
130		oru Kanij	J (Unsigna	alizeuj	1.		0		个>			
	Lanes				<> ₹→		0			←	<u>↑</u>	1.0
	SimTraffic Delay				7.4		-		1.0	2.5	0.4	1.8
	SimTraffic LOS				A		A		A	A	A	A
	SimTraffic 95th Queue				71					21		
	Queue Block Time (%)								I			
	Denied Entry											
400	Mt Curve Blvd & Highland	Pkwy (All	way stop	)								
	Lanes		<^>			<^>			<个>		<^>	
	SimTraffic Delay		6.2			6.8			6.2		6.0	5.7
	SimTraffic LOS		А			А			А		А	Α
	SimTraffic 95th Queue		52			45			51	1	50	
	Queue Block Time (%)					-				1		
	Denied Entry											
500	Cretin Ave & Randolph Ave	(Signaliz	ed Cycle	length	65)		1			1	1	
500			eu Cycii <^>	e Lenguli	<	N	$\rightarrow$		<^>	←	^>	-
	Lanes											
	SimTraffic Delay		25.0		30		13.6		7.7	32.7	25.4	20.3
	SimTraffic LOS		C		C		B		A	C	C	C
	SimTraffic 95th Queue		138		17		61		169	555	72	_
	Queue Block Time (%)		T		5:	L	15		I	22	22	
	Denied Entry											

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Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes	<^>	<^>	<个>	<^>	
	SimTraffic Delay	20.9	22.6	1.4	2.7	4.7
	SimTraffic LOS	С	С	A	А	Α
	SimTraffic 95th Queue	70	98	23	108	
	Queue Block Time (%)					
	Denied Entry					

#### 70: Cleveland Ave & St Paul Ave & Bohland Ave Performance by approach

#### 71: St Paul Ave Performance by approach

Approach	EB NB	SB	All
Denied Del/Veh (s)	0.1 0.0	0.0	0.0
Total Del/Veh (s)	17.2 2.7	0.3	2.7

### 72: Cleveland Ave & St Paul Ave Performance by approach

Approach	NB SB	All
Denied Del/Veh (s)	0.0 0.0	0.0
Total Del/Veh (s)	8.3 0.8	3.4

### 73: Cleveland Ave & Inner Drive Performance by approach

Approach	EB SB	All
Denied Del/Veh (s)	0.1 0.0	0.0
Total Del/Veh (s)	2.8 0.3	0.5

### 140: 46th Ave & E 46th St/Ford Pkwy Performance by approach

Approach	EB	WB	NB	SB	SW	All
Denied Del/Veh (s)	0.3	0.0	2.9	1.1	0.1	0.7
Total Del/Veh (s)	20.3	17.5	42.2	33.5	66.8	24.3

#### **Total Zone Performance**

Denied Del/Veh (s)	1.3	
Total Del/Veh (s)	1316.2	

### Intersection: 70: Cleveland Ave & St Paul Ave & Bohland Ave

Movement	WB	NB	NB	SB
Directions Served	R	Т	TR	TR
Maximum Queue (ft)	64	36	58	8
Average Queue (ft)	19	2	5	0
95th Queue (ft)	45	26	46	8
Link Distance (ft)	762	168	168	556
Upstream Blk Time (%)			0	
Queuing Penalty (veh)			1	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

### Intersection: 71: St Paul Ave

Movement	EB	NB
Directions Served	LR	Т
Maximum Queue (ft)	59	8
Average Queue (ft)	42	0
95th Queue (ft)	62	8
Link Distance (ft)	51	1142
Upstream Blk Time (%)	14	
Queuing Penalty (veh)	15	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

### Intersection: 72: Cleveland Ave & St Paul Ave

Movement	NB	SB
Directions Served	R	LT
Maximum Queue (ft)	87	47
Average Queue (ft)	37	3
95th Queue (ft)	66	27
Link Distance (ft)	651	99
Upstream Blk Time (%)		0
Queuing Penalty (veh)		1
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

### Intersection: 73: Cleveland Ave & Inner Drive

Movement	EB	SB
Directions Served	R	TR
Maximum Queue (ft)	31	14
Average Queue (ft)	11	1
95th Queue (ft)	34	11
Link Distance (ft)	285	58
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

### Intersection: 140: 46th Ave & E 46th St/Ford Pkwy

EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SW	
<	LT	TR	L	Т	TR>	LTR	>	LT	R	<lr></lr>	
149	222	200	159	255	260	546	70	169	56	19	
45	128	110	89	103	135	235	49	82	25	2	
119	201	187	165	218	230	507	60	150	64	12	
	1464	1464		1094	1094	1029		656		272	
75			110				25		25		
0	23		7	5		58	11	50	4		
1	14		18	15		187	11	15	5		
	<ul> <li></li> <li>149</li> <li>45</li> <li>119</li> <li>75</li> </ul>	<ul> <li>LT</li> <li>149</li> <li>222</li> <li>45</li> <li>128</li> <li>119</li> <li>201</li> <li>1464</li> <li>75</li> <li>0</li> <li>23</li> </ul>	<ul> <li>LT TR</li> <li>149 222 200</li> <li>45 128 110</li> <li>119 201 187</li> <li>1464 1464</li> <li>75</li> <li>0 23</li> </ul>	<         LT         TR         L           149         222         200         159           45         128         110         89           119         201         187         165           1464         1464         1464           75         110         0         23	LT         TR         L         T           149         222         200         159         255           45         128         110         89         103           119         201         187         165         218           1464         1464         1094         1094           75         110         0         23         7         5	LT         TR         L         T         TR>           149         222         200         159         255         260           45         128         110         89         103         135           119         201         187         165         218         230           1464         1464         1094         1094           75         110         75         7         5	LT         TR         L         T         TR>         LTR           149         222         200         159         255         260         546           45         128         110         89         103         135         235           119         201         187         165         218         230         507           1464         1464         1094         1094         1029           75         110         58         58	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $

#### Zone Summary

Zone wide Queuing Penalty: 282

de	Intersection	Eastbound			Westbound		Northbound		So	Over		
10	S Ford Ramp/N Ford Ramp	& Ford A	ve (Unsig	nalized)								
	Lanes		$\uparrow$	^>		个个>			$\rightarrow$		$\rightarrow$	
	SimTraffic Delay		2	.0		0.	5		4.4		4.8	1.5
	SimTraffic LOS			4		A	1		А		Α	А
	SimTraffic 95th Queue			9			•		46		56	
	Queue Block Time (%)		•	,					+0		50	
	Denied Entry											
20	Ford Ave & Woodlawn Ave											
	Lanes	$\leftarrow$	$\uparrow\uparrow$			个1					0	
	SimTraffic Delay	4.6	0.4			0.	4				-	0.5
	SimTraffic LOS	Α	A			A	<b>\</b>				А	A
	SimTraffic 95th Queue	31				2						
	Queue Block Time (%)	1										
	Denied Entry											
	Mt Curve Blvd & Ford Ave	(Unsignal	ized)									
	Lanes	(onsignan) ←	↑↑>			个1				$\leftarrow$	$\rightarrow$	
												1
	SimTraffic Delay	5.2	0.4			1.				15.5	6.5	
	SimTraffic LOS	A	Α			A	1			C	A	A
	SimTraffic 95th Queue	30								37	52	
	Queue Block Time (%)									1	2	<u> </u>
	Denied Entry											
40	Cretin Ave & Ford Ave (Sig	nalized	Cycle Len	gth: 80)								
	Lanes	$\leftarrow$	个个>			个1	<b>^&gt;</b>			$\leftarrow$	$\rightarrow$	
	SimTraffic Delay	11.4	4.0			13	.3			32.0	5.4	10
	SimTraffic LOS	В	А			В	}			С	A	В
	SimTraffic 95th Queue	96	81			21				125	82	_
	Queue Block Time (%)	1	01			21				2	02	
		1				Z.	L			2		
	Denied Entry			<b>20</b> )								
50	nn St & Ford Ave (Signalized Cycle Length: 80)								-	•		
	Lanes	$\leftarrow$		^>	$\leftarrow$	个1		$\leftarrow$	0	<1		
	SimTraffic Delay	19.0	12	2.7	11.2	7.	6	31.9	-	28.	1 6.0	11.
	SimTraffic LOS	В	E	В	В	A	<b>\</b>	С	А	C	A	В
	SimTraffic 95th Queue	47	16	67	73	13	5	107		70	60	
	Queue Block Time (%)	1	1	.2						1		
	Denied Entry											
60	Cleveland Ave & Ford Ave	Signalize	d Cycle	Length: 8	0)							
	Lanes	(o.j		 ↑>	<ul> <li></li> <li></li> </ul>	个1	N>	÷	个>	÷	个个>	
		42.8		5.7	41.9	27		24.7		34.1	26.5	25
	SimTraffic Delay											25
	SimTraffic LOS	D		C	D	C		C	B	C	C	C
	SimTraffic 95th Queue	121		19	101	21		227	271	64	215	
	Queue Block Time (%)		3	3	1	2					13	
	Denied Entry											
61	Kenneth St & Ford Ave (Sig	nalized	Cycle Ler	ngth: 80)								
	Lanes	$\leftarrow$	$\uparrow$	^>	$\leftarrow$	个1	^>		<^>		<^>	
	SimTraffic Delay	10.5	5.1		14.6	8.	7	25.3			9.1	
	SimTraffic LOS	В		4	В	A			С		22.5 C	A
	SimTraffic 95th Queue	44		2	59	14			88		83	1
	Queue Block Time (%)	5		.0		5						ł
	Denied Entry	5	1			ر ا						ł
		 	zed Cycle Length: 65									<u> </u>
20		-				•			•	, I	•	<b> </b>
	Lanes	<i>←</i>	<u>↑</u>	$\rightarrow$	<del>\</del>	$\uparrow$	$\rightarrow$	<del>~</del>	<u> </u>	<del>\</del>	<u> </u>	<u> </u>
	SimTraffic Delay	33.3	15.4	8.8	21.7	16.5	11.0	50.9	22.3	33.2	19.4	20.
		С	В	Α	С	В	В	D	С	С	В	В
	SimTraffic LOS		100	91	77	227	86	69	332	92	298	
	SimTraffic LOS SimTraffic 95th Queue	111	190						3			1
	SimTraffic 95th Queue	111	190			13			5	1	2	
	SimTraffic 95th Queue Queue Block Time (%)	111				13			3		2	
	SimTraffic 95th Queue Queue Block Time (%) Denied Entry		8		oth · 20)	13			3		2	
	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Cleveland Ave & Highland	Pkwy (Sig	8 nalized	Cycle Ler								
65	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Cleveland Ave & Highland Lanes	Pkwy (Sig <	8 nalized ↑	Cycle Ler $\rightarrow$	<′	↑	→ 12.2	<del>(</del>	 <b>↑&gt;</b>	<del>\</del>	^>	4.5
65	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Cleveland Ave & Highland	Pkwy (Sig < 36	8 nalized	Cycle Ler		↑ .3	→ 12.2 B	← 13.8 B		← 16.7 B		10. B

## 11967.01_Ford Site Development TS

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ode	Intersection	E	astbound	1	W	estboun	d	No	orthbound	Sou	ıthbound	Overa
	SimTraffic 95th Queue	8	0	66	11	1	61	75	210	45	148	
	Queue Block Time (%)	2	3	8	37	7	4		5		4	
	Denied Entry											
75	St Paul Ave & Montreal Av	e (All-way	v stop)									
	Lanes	<	$\uparrow$	$\rightarrow$		<^>			<^^>	$\leftarrow$	个个>	
	SimTraffic Delay	10	.0	4.2		16.2			13.4	9.2	9.3	11.1
	SimTraffic LOS		4	Α		C			B	A	A	В
	SimTraffic 95th Queue		0	29		103			106	53	91	
	Queue Block Time (%)		2	25		105			100	33	51	
	Denied Entry		-							_		
00	Edgcumbe Rd & St Paul Av	o (Signalia	ad Cual	o Longth	04)					-		
80	-	-	-			<u>، ۸۸</u>		1	<b>^</b>	1	<u> </u>	
	Lanes	<1	-	$\rightarrow$		<^^>		←	<u> </u>	←	<u> </u>	10.4
	SimTraffic Delay		.8	16.5		26.4		23.7	9.1	22.7	20.7	18.0
	SimTraffic LOS		2	В		С		C	A	С	С	В
	SimTraffic 95th Queue		)4	142		120		243	224	69	199	
	Queue Block Time (%)	2	L	24				7			4	
	Denied Entry											
90	<b>Cleveland Ave &amp; Montreal</b>	Ave (Unsi	gnalized)									
	Lanes				<>	C	)		个>	<个		
	SimTraffic Delay				7.4	-			1.3	0.4		1.6
	SimTraffic LOS				А	A	١		А	А		A
	SimTraffic 95th Queue				48				5	28		
	Queue Block Time (%)											
	Denied Entry											
100	Fairview Ave & Montreal A	ve (Signa	lized Cv	cle Lengt	h: 65)							
100	Lanes	() () () () () () () () () () () () () (	↑ (1200 C)	$\rightarrow$	←	$\uparrow$	>	←	个>	<del>(</del>	^>	
	SimTraffic Delay	29.4	22.9	, 13.1	25.9	21		19.1	12.0	25.3	14.5	15.
	SimTraffic LOS	23.4 C	C	B	23.5 C	(		B	B	C	B	B
		-	-	-	-					-		в
	SimTraffic 95th Queue	51	133	50	50	15		69	238	86	247	
	Queue Block Time (%)		38	2		9			13		13	
	Denied Entry											
120	Mississippi River Blvd & N	Ford Ram	p (Unsign	alized)								
	Lanes				<>	C	)		^>	$\leftarrow$	$\uparrow$	
	SimTraffic Delay				6.4	-			1.1	2.9	0.2	1.3
	SimTraffic LOS				А	A	١		A	Α	А	Α
	SimTraffic 95th Queue				47					36		
	Queue Block Time (%)											
	Denied Entry											
130	Mississippi River Blvd & S	Ford Ram	o (Unsigna	alized)								
	Lanes				<>	C	)		个>	$\leftarrow$	$\uparrow$	
	SimTraffic Delay				5.9	-			1.2	2.3	0.2	2.1
	SimTraffic LOS				A	A	۱		А	A	A	А
	SimTraffic 95th Queue				64		-			18		
	Queue Block Time (%)				ντ					10		
	Denied Entry											
100	Mt Curve Blvd & Highland		way stop	)							<u> </u>	—
+00		- Kwy (All·	- <u>way stop</u> <↑>	1	<个				<个>		<^>	
	Lanes SimTraffic Dolay		6.0						5.5		5.8	
	SimTraffic Delay				7.:							5.5
	SimTraffic LOS		A		A				A	_	A	A
	SimTraffic 95th Queue		49		43	5			46		49	
	Queue Block Time (%)							ļ			I	
	Denied Entry											
500	Cretin Ave & Randolph Ave	e (Signaliz		e Length:								
	Lanes		<^>		<1	N 1	$\rightarrow$	$\leftarrow$	^>	$\leftarrow$	^>	
	SimTraffic Delay		26.0		28.	.8	15.1	9.3	7.8	18.4	5.9	12.
	SimTraffic LOS		С		С		В	Α	А	В	А	В
	SimTraffic 95th Queue	1	110		20		57	41	189	101	109	
	Queue Block Time (%)				43		30		10	2	1	
	Denied Entry											

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Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes	<^>	<^>	<^>	<^>	
	SimTraffic Delay	11.2	12.0	1.0	1.3	2.6
	SimTraffic LOS	В	В	A	А	А
	SimTraffic 95th Queue	50	66		60	
	Queue Block Time (%)					
	Denied Entry					

L	ntersection	E	astbound	k	W	/estboun	d	N	orthbound	S	outhbound	Overa
L	5 Ford Ramp/N Ford Ramp	& Ford A	ve (Unsig	nalized)								
_	anes		<u></u>			$\uparrow$	^>		$\rightarrow$		$\rightarrow$	
1.2	SimTraffic Delay		2.			0.			5.	4		3.0 2.3
	SimTraffic LOS					A			A		A	A
	SimTraffic 95th Queue		,				3			9		92
_				,			)		4	9		92
-	Queue Block Time (%)											
	Denied Entry											
20 <b>F</b>	Ford Ave & Woodlawn Ave	(Unsigna	-									
	Lanes	$\leftarrow$	$\uparrow\uparrow$				^>			<>	0	
S	SimTraffic Delay	7.2	0.5			0.	.7			29.5	-	1.0
S	SimTraffic LOS	Α	Α			A	A			D	А	А
S	SimTraffic 95th Queue	39				-	7			61		
C	Queue Block Time (%)	3										
	Denied Entry											
	Mt Curve Blvd & Ford Ave	IIncignali	red)									
			2eu) 个个>			<u>م</u>	^>			<del>~</del>	$\rightarrow$	
	Lanes											10
	SimTraffic Delay	8.1	0.5			2				30.0		3.7 1.8
-	SimTraffic LOS	A	Α			4				D	A	A
	SimTraffic 95th Queue	47	14			1	0			28		54
	Queue Block Time (%)	1								1		3
	Denied Entry											
40 <b>(</b>	Cretin Ave & Ford Ave (Sigr	nalized (	Cycle Len	gth: 110)								
L	anes	$\leftarrow$	$\uparrow \uparrow >$			$\uparrow$	^>			$\leftarrow$	$\rightarrow$	
S	SimTraffic Delay	21.0	6.1			17				43.8		).7 16.5
	SimTraffic LOS	C	A				3			D	B	В
	SimTraffic 95th Queue	146	128			28				193		98
			120			20				193	2	1
	Queue Block Time (%)	6				2	/			18		1
	Denied Entry									_		
50 <b>F</b>	Finn St & Ford Ave (Signaliz		-									
	Lanes	$\leftarrow$	$\uparrow$	^>	$\leftarrow$	$\uparrow$	^>	$\leftarrow$	^>	<	$\uparrow \rightarrow$	
S	SimTraffic Delay	20.5	13	.1	18.2	12	2.3	37.4	40.3	38	8.5 8.9	16.0
S	SimTraffic LOS	С	E	3	В	E	3	D	D	[	A C	В
S	SimTraffic 95th Queue	69	19	97	134	19	97	181	123	12	29 96	
C	Queue Block Time (%)	5	1	5	1	1	1			1	2 1	
ſ	Denied Entry											
_	Cleveland Ave & Ford Ave	Signalized	l Cycle	Length: 1	10)							
	_anes	<i>←</i>	<u>()</u> 个	-		<u>ተ</u>	^>	÷	^>	<i>←</i>	个个>	
	SimTraffic Delay	39.7	30		41.3	40		48.9		42.7		40.3
	SimTraffic LOS	D	(		D		)	D	D	D	D	D
	SimTraffic 95th Queue	180	36		123	23		370	472	135	470	
	Queue Block Time (%)	1	5	3		1	3			1	24	
_	Denied Entry											
61 <b>K</b>	Kenneth St & Ford Ave (Sig	nalized										
L	anes	$\leftarrow$	$\uparrow$	^>	$\leftarrow$	$\uparrow$	^>		<^>		<^>	
- 1-	SimTraffic Delay	21.4	11	.4	21.0	9	.7		18.5		17.3	11.5
5	SimTraffic LOS	С		3	С	A	4		В		В	В
				94	51		57	L	116		90	
S	SimTraffic 95th Queue	75	je	/4			1	-	-	-		
S	SimTraffic 95th Queue	75 10				/						1
S C	Queue Block Time (%)	75 10	2		_	2	•					
S S C C	Queue Block Time (%) Denied Entry	10	2	8		2	•					
S S C 62 <b>F</b>	Queue Block Time (%) Denied Entry F <b>airview Ave &amp; Ford Ave (S</b>	10 ignalized	2 <b>Cycle L</b>	8 ength: 11	0)						•	
S S C 62 F L	Queue Block Time (%) Denied Entry F <b>airview Ave &amp; Ford Ave (S</b> Lanes	10 ignalized ←	2 Cycle L ↑	8 ength: 11 $\rightarrow$	0) ←	1	$\rightarrow$	<i>←</i>	<u>^&gt;</u>	<i></i>	<u>↑&gt;</u>	
S C C 62 <b>F</b> S	Queue Block Time (%) Denied Entry F <b>airview Ave &amp; Ford Ave (S</b> Lanes SimTraffic Delay	10 ignalized ← 64.2	2 <b>Cycle L</b> ↑ 43.6	8 ength: 110 → 26.6	0) ← 61.7	↑ 68.2	→ 42.9	43.1	33.7	35.6	48.7	
S C C 62 <b>F</b> L S	Queue Block Time (%) Denied Entry F <b>airview Ave &amp; Ford Ave (S</b> Lanes	10 ignalized ←	2 Cycle L ↑	8 ength: 11 $\rightarrow$	0) ←	1	$\rightarrow$					47.4 D
S C C 62 <b>F</b> S S	Queue Block Time (%) Denied Entry F <b>airview Ave &amp; Ford Ave (S</b> Lanes SimTraffic Delay	10 ignalized ← 64.2	2 <b>Cycle L</b> ↑ 43.6	8 ength: 110 → 26.6	0) ← 61.7	↑ 68.2	→ 42.9	43.1	33.7	35.6	48.7	
5 5 62 5 5 5 5	Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS	10 ignalized ← 64.2 E	2 Cycle Lu 个 43.6 D	8 ength: 11 → 26.6 C	0) ← 61.7 E	↑ 68.2 E	→ 42.9 D	43.1 D	33.7 C	35.6 D	48.7 D	
S C C C C C C S S S C C C S S C C C C C	Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	10 ignalized ← 64.2 E	2 Cycle L ↑ 43.6 D 458	8 ength: 11 → 26.6 C	0) ← 61.7 E	↑ 68.2 E 601	→ 42.9 D	43.1 D	33.7 C 492	35.6 D	48.7 D 730	
62 F 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	10 ignalized ← 64.2 E 285	2 Cycle L ↑ 43.6 D 458 46	8 ength: 11( → 26.6 C 146	0) ← 61.7 E 201	↑ 68.2 E 601	→ 42.9 D	43.1 D	33.7 C 492	35.6 D	48.7 D 730	
62 F 5 62 F 5 5 5 65 C	Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Cleveland Ave & Highland I	10 ignalized ← 64.2 E 285 Pkwy (Sigu	2 Cycle L ↑ 43.6 D 458 46 nalized	8 ength: 110 → 26.6 C 146 Cycle Len	0) ← 61.7 E 201 gth: 110)	↑ 68.2 E 601 60	→ 42.9 D 124	43.1 D 226	33.7 C 492 12	35.6 D 276	48.7 D 730 27	47.4
62 F 5 62 F 5 5 65 C 1	Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	10 ignalized ← 64.2 E 285	2 Cycle L ↑ 43.6 D 458 46 nalized ↑	8 ength: 11( → 26.6 C 146	0) ← 61.7 E 201	↑ 68.2 E 601 60	→ 42.9 D	43.1 D	33.7 C 492 12 ↑>	35.6 D	48.7 D 730	

### 11967.01_Ford Site Development TS

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lode	Intersection	E	astbound	1	W	/estboun	d	No	orthbound	Sou	ıthbound	Overal
	SimTraffic 95th Queue	14	19	71	15	4	72	108	331	88	228	
	Queue Block Time (%)	4	1	13	48	8	10		21		11	
	Denied Entry											
75	St Paul Ave & Montreal Av	e (All-way	v stop)									
	Lanes	<'	$\uparrow$	$\rightarrow$		<^>			<个个>	$\leftarrow$	个个>	
	SimTraffic Delay	10	.1	4.5		21.2			13.8	10.8	9.9	12.8
	SimTraffic LOS	E		A		С			B	В	A	В
	SimTraffic 95th Queue	3		18		150			107	72	95	
	Queue Block Time (%)	1		10		100			107	72	33	
	Denied Entry		•									
<u>ه</u> م	Edgcumbe Rd & St Paul Av	o (Signaliz	ad Cycl	o Longth	9E)							
80	Lanes	e (Signaliz <↑			. 65)	<^^>		÷	个个>	←	个个>	
		27										20 5
	SimTraffic Delay			15.6		26.1		32.6	11.5	23.9	22.5	20.5
	SimTraffic LOS	(		В		C		C	B	C	C	C
	SimTraffic 95th Queue	16		141		120		272	371	78	184	
	Queue Block Time (%)	4	ł	19				17			2	
	Denied Entry											
90	Cleveland Ave & Montreal	Ave (Unsi	gnalized)		ļ,			ļ,			T	_
	Lanes				<>		0		^>	<↑		
	SimTraffic Delay				7.6		-		0.8	0.4		2.1
	SimTraffic LOS				А		A		А	A		А
	SimTraffic 95th Queue				49					20		
	Queue Block Time (%)											
	Denied Entry											
100	Fairview Ave & Montreal A	ve (Signa	lized Cv	cle Lengt	h: 70)							
	Lanes	←	 	$\rightarrow$	÷	1	`>	←	^>	$\leftarrow$	^>	
	SimTraffic Delay	30.3	14.4	12.3	25.5		2.6	29.1	16.0	37.6	19.0	18.7
	SimTraffic LOS	C	В	B	C		C	C	В	D	В	B
	SimTraffic 95th Queue	46	111	36	64		94	75	313	134	368	
	Queue Block Time (%)		34	2	04		.5	75	22	104	17	
	Denied Entry		54	2		-			22	1	1,	
120	Mississippi River Blvd & N	Eard Pam	n (Uncian	alizad)								
120		Foru Kalli	p (Unsign	alizeuj	1.		0		^>		•	
	Lanes				<->		-			+	<u>↑</u>	1 5
	SimTraffic Delay				8.8		-		1.0	2.6	0.5	1.5
	SimTraffic LOS				A		A		A	A	A	A
	SimTraffic 95th Queue				49				4	50		
	Queue Block Time (%)						1					
	Denied Entry											
130	Mississippi River Blvd & S I	ord Ram	o (Unsigna	alized)								
	Lanes				<>		0		^>	$\leftarrow$	$\uparrow$	
	SimTraffic Delay				7.3		-		1.1	2.5	0.4	1.8
	SimTraffic LOS				Α		A		А	A	A	А
	SimTraffic 95th Queue				59					23		
	Queue Block Time (%)						-					
	Denied Entry											
400	Mt Curve Blvd & Highland	Pkwy (All-	way stop	)								
	Lanes		<^>			<^>			<^>		<^>	
	SimTraffic Delay		6.1			6.9			6.0		6.0	5.7
	SimTraffic LOS		А			А			А		А	А
	SimTraffic 95th Queue		53			46			50		48	
	Queue Block Time (%)										-	
	Denied Entry				l I			l I				
500	Cretin Ave & Randolph Ave	) (Signaliz	ed Cycle	e l enoth:	65)		1				<u> </u>	
500	Lanes		<u> Cyck</u> <个>	guii.	<	<u>۸</u>	$\rightarrow$	÷	^>	<del>\</del>	^>	
												14.2
	SimTraffic Delay		25.3		30		14.8	15.7	7.8	20.2	10.1	14.2
	SimTraffic LOS		C		C		B	B	A	C (127	B	В
	SimTraffic 95th Queue		150		18		64	24	173	127	206	
	Queue Block Time (%)				51	1	15		9	2	6	
	Denied Entry								1		1	

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Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes	<^>	<^>	<^>	<个>	
	SimTraffic Delay	18.0	18.8	1.4	2.5	4.4
	SimTraffic LOS	С	С	A	А	А
	SimTraffic 95th Queue	68	90	20	99	
	Queue Block Time (%)					
	Denied Entry					

atorecation		astbound		14/	estbound		N	orthbound	4	See.	uthbour	ad	Overall
ntersection				VV	estbound		INC	orthound	u	501	Ithbour	na	Overall
Ford Ramp/N Ford Ramp	& FORD A		-				1						
anes			-										
		2.	7		0.4	1			5.5			5.7	1.9
imTraffic LOS		A	ι		A				A			A	A
imTraffic 95th Queue		10	C						51			63	
Queue Block Time (%)													
Denied Entry													
ord Ave & Woodlawn Ave	(Unsigna	lized)											
anes	-				<u> </u>	`>						0	
												-	0.6
-												Δ	A
												~	~
					4								
	2				r								
													-
/It Curve Blvd & Ford Ave (	_												
anes		$\uparrow$	<u> </u> >	$\leftarrow$	$\uparrow\uparrow$	`>							
imTraffic Delay	5.8	0.	9	8.7	1.9	9	42.0	33.	5	29.5	34	4.3	5.7
imTraffic LOS	А	A	•	А	A	T	E	D		D		D	А
imTraffic 95th Queue	31	1	7	68	13	3	108	13	9	64	6	56	
Queue Block Time (%)							5	4		1	1	12	
	nalized (	Cycle Len	oth: 901							I		1	
			-	~	<u></u>	、、	~	•		4	1		
													17.2
													17.3
	_			-			-	-		-		-	В
	142	16	2	65	209	9	180	19	6	126	1	40	
Queue Block Time (%)	4	1		2	28	3	17	8		1		2	
Denied Entry													
inn St & Ford Ave (Signaliz	ed Cycl	e Length:	90)										
anes	$\leftarrow$	个/	<b>^&gt;</b>	$\leftarrow$	<u>ተ</u>	`>	$\leftarrow$	0		<个		$\rightarrow$	
								-		33.7	7		9.3
								Δ					A
	-			-						-			~
-				/4		0	114					52	
	T	0	<i>i</i>							1			
•													
	-			-									
anes	$\leftarrow$		<b>`&gt;</b>	$\leftarrow$	ተተ	`>	$\leq$	ጥ	>	$\leftarrow$		^>	
imTraffic Delay	40.0												
	46.0	23	.8	53.3	22.		16.8	15.		35.2		0.7	22.5
imTraffic LOS	46.0 D	23 C			22. C	0			.0		20		22.5 C
imTraffic LOS imTraffic 95th Queue			2	53.3		0	16.8	15.	.0	35.2	20	0.7	
imTraffic 95th Queue	D	C	)3	53.3 D	C	0 7	16.8 B	15. B	.0	35.2 D	20	0.7 C	
imTraffic 95th Queue Queue Block Time (%)	D	C 19	)3	53.3 D	C 16	0 7	16.8 B	15. B	.0	35.2 D	20	0.7 C 83	
imTraffic 95th Queue Queue Block Time (%) Denied Entry	D 132	0 19 2	2 93 2	53.3 D	C 16	0 7	16.8 B	15. B	.0	35.2 D	20	0.7 C 83	
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b>	D 132 nalized	0 19 2 <b>Cycle Len</b>	2 93 2 gth: 90)	53.3 D 117 1	C 16 2	7	16.8 B	15. B 27	.0	35.2 D	20	0.7 C 83	
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes	D 132 nalized ←	0 19 2 <b>Cycle Len</b> ↑⁄	2 93 2 gth: 90) ↑>	53.3 D 117 1 ←	C 16 2 ↓	0 7 7 `>	16.8 B	15.	.0	35.2 D	20 1 <个>	0.7 C 83	C
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay	D 132 nalized 9.8	0 19 2 <b>Cycle Len</b> ↑ ′ 4.	2 )3 2 gth: 90) ↑> 7	53.3 D 117 1 ← 14.5	C 16 2 ↓ ↓ ↑↑	0 7 7 `> 9	16.8 B	15. B 27 <个> 24.0	.0	35.2 D	20 1 <个> 29.1	0.7 C 83	C 9.1
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic LOS	D 132 nalized 9.8 A	0 19 2 <b>Cycle Len</b> ↑^ 4.	2)3 2 gth: 90) ↑> 7	53.3 D 117 1 ← 14.5 B	C 16 2 ↓ ↓ ↑↑ 8.5	0 7 7 >> 9	16.8 B	15. B 27 < < ↑> 24.0 C	.0	35.2 D	20 1 <↑> 29.1 C	0.7 C 83	C
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic LOS imTraffic 95th Queue	D 132 nalized 9.8	0 19 2 <b>Cycle Len</b> ↑ ′ 4.	2)3 2 gth: 90) ↑> 7	53.3 D 117 1 ← 14.5	C 16 2 ↓ ↓ ↑↑	0 7 7 >> 9	16.8 B	15.	.0	35.2 D	20 1 <个> 29.1	0.7 C 83	C 9.1
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic LOS	D 132 nalized 9.8 A	0 19 2 <b>Cycle Len</b> ↑^ 4.	2 2 gth: 90) ↑> 7 X 7	53.3 D 117 1 ← 14.5 B	C 16 2 ↓ ↓ ↑↑ 8.5	0 7 *> 9 8	16.8 B	15. B 27 < < ↑> 24.0 C	.0	35.2 D	20 1 <↑> 29.1 C	0.7 C 83	C 9.1
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic LOS imTraffic 95th Queue	D 132 nalized (- 9.8 A 43	0 19 2 <b>Cycle Len</b> ↑ ^ 4. A 7	2 2 gth: 90) ↑> 7 X 7	53.3 D 117 1 ← 14.5 B	C 16 2 16 2 1 4 8.5 A 178	0 7 *> 9 8	16.8 B	15. B 27 < < ↑> 24.0 C	.0	35.2 D	20 1 <↑> 29.1 C	0.7 C 83	C 9.1
imTraffic 95th Queue Queue Block Time (%) Denied Entry Cenneth St & Ford Ave (Sig anes imTraffic Delay imTraffic LOS imTraffic 95th Queue Queue Block Time (%)	D 132 nalized ← 9.8 A 43 43	C 19 2 Cycle Len ↑ ^ 4. 7 7 1:	2 2 gth: 90) ↑> 7 3	53.3 D 117 1 ← 14.5 B 63	C 16 2 16 2 1 4 8.5 A 178	0 7 *> 9 8	16.8 B	15. B 27 < < ↑> 24.0 C	.0	35.2 D	20 1 <↑> 29.1 C	0.7 C 83	C 9.1
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic LOS imTraffic 95th Queue Queue Block Time (%) Denied Entry	D 132 nalized ← 9.8 A 43 43	C 19 2 Cycle Len ↑ ^ 4. 7 7 1:	2 2 gth: 90) ↑> 7 3	53.3 D 117 1 ← 14.5 B 63	C 16 2 ↓ ↑↑ 8.9 A 178 7	0 7 >> 9 8	16.8 B	15. B 27 < ^ > 24.0 C 89	0	35.2 D	2( 1 <↑> 29.1 C 91	0.7 C 83 8	C 9.1
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic LOS imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>airview Ave &amp; Ford Ave (S</b> anes	D 132 nalized ← 9.8 A 43 4 ignalized ←	Cycle Len ↑ ^ 4. 7 7 1: Cycle Le	2 gth: 90) ↑> 7 √ 7 3 ength: 65) →	53.3 D 117 1 ← 14.5 B 63 63	C 16 2 ↑↑ 8.5 A 178 7 7	0 7 >> ∂ 8 ->	16.8 B 133 ←	15. B 27 < ^ > 24.0 C 89 ↑	0	35.2 D 55 	2( 1 	0.7 C 83 8 	9.1 A
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic LOS imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>airview Ave &amp; Ford Ave (S</b> anes imTraffic Delay	D 132 132 ← 9.8 A 43 43 4 ignalized ← 43.7	Cycle Len ↑ 4. 77 1: Cycle Le ↑ 17.5	2 gth: 90) ↑> 7 3 ength: 65) → 10.3	53.3 D 117 1 ← 14.5 B 63 ← 27.5	C 16 2 ↑↑ 8.5 A 17% 7 7 18.3	0 7 >> ∂ 8 -> 10.3	16.8 B 133 ← 59.7	15. B 27 < 24.0 C 89 ↑ 21.	0 4 > 9	35.2 D 55 	20 1 	0.7 C 83 8 	C 9.1 A 21.7
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Xenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic DS imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>airview Ave &amp; Ford Ave (S</b> anes imTraffic Delay imTraffic Delay imTraffic LOS	D 132 	Cycle Len ↑ 4. 77 1: Cycle Le ↑ 17.5 B	2 gth: 90) ↑> 7 3 ength: 65) → 10.3 B	53.3 D 117 1 ← 14.5 B 63 ← 27.5 C	C 16 2 ↑↑ 8.5 A 175 7 7 18.3 8	0 7 7 8 8 -> 10.3 8	16.8 B 133 ← 59.7 E	15. B 27 < 24.0 C 89 ▲ 1. C	0 4 >> 9	35.2 D 55	2( 1 ( 29.1 C 91 1 2( 1 2()	0.7 C 83 8 	9.1 A
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic DS imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>airview Ave &amp; Ford Ave (S</b> anes imTraffic Delay imTraffic Delay imTraffic DS imTraffic S5th Queue	D 132 132 ← 9.8 A 43 43 4 ignalized ← 43.7	Cycle Len ↑ 4. 7 1: Cycle Le ↑ 17.5 B 259	2 gth: 90) ↑> 7 3 ength: 65) → 10.3	53.3 D 117 1 ← 14.5 B 63 ← 27.5	C 16 2 ↑↑ 8.5 A 175 7 7 7 7 18.3 8 8 246	0 7 >> ∂ 8 -> 10.3	16.8 B 133 ← 59.7	15. B 27 24.0 C 89 ↑ 21. C 32	0 4 	35.2 D 55 	2( 1 <↑> 29.1 C 91 1 2( 3	0.7 C 83 8 	C 9.1 A 21.7
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic DS imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>airview Ave &amp; Ford Ave (S</b> anes imTraffic Delay imTraffic Delay imTraffic Delay imTraffic 95th Queue Queue Block Time (%)	D 132 	Cycle Len ↑ 4. 77 1: Cycle Le ↑ 17.5 B	2 gth: 90) ↑> 7 3 ength: 65) → 10.3 B	53.3 D 117 1 ← 14.5 B 63 ← 27.5 C	C 16 2 ↑↑ 8.5 A 175 7 7 18.3 8	0 7 7 8 8 -> 10.3 8	16.8 B 133 ← 59.7 E	15. B 27 < 24.0 C 89 ▲ 1. C	0 4 	35.2 D 55	2( 1 <↑> 29.1 C 91 1 2( 3	0.7 C 83 8 	C 9.1 A 21.7
imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cenneth St &amp; Ford Ave (Sig</b> anes imTraffic Delay imTraffic DOS imTraffic 95th Queue Queue Block Time (%) Denied Entry <b>airview Ave &amp; Ford Ave (S</b> anes imTraffic Delay imTraffic Delay imTraffic Delay imTraffic 95th Queue Queue Block Time (%) Denied Entry	D 132 	Cycle Len ↑ 4. 7 1: Cycle Le ↑ 17.5 8 259 13	2 gth: 90) ↑> 7 3 ength: 65) → 10.3 B 105	53.3 D 117 1 ← 14.5 B 63 63 ← 27.5 C 73	C 16 2 ↑↑ 8.5 A 175 7 7 7 7 18.3 8 8 246	0 7 7 8 8 -> 10.3 8	16.8 B 133 ← 59.7 E	15. B 27 24.0 C 89 ↑ 21. C 32	0 4 	35.2 D 55	2( 1 <↑> 29.1 C 91 1 2( 3	0.7 C 83 8 	C 9.1 A 21.7
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ode	Intersection	E	Eastbound	1	W	/estbound			orthbound	So	uthbound	Overa
	SimTraffic 95th Queue	8	1	67	12	.3	63	54	108	48	145	
	Queue Block Time (%)	2	5	8	4	2	4		2		4	
	Denied Entry											
75	St Paul Ave & Montreal Av	e (All-way	/ stop)						<b>.</b>			
	Lanes	<		$\rightarrow$		<^>			<个个>	←	个个>	
	SimTraffic Delay	25	5.9	17.8		31.8			26.1	12.6	17.0	23.7
	SimTraffic LOS		)	C		D			D	B	C	C
	SimTraffic 95th Queue	-	00	80		198			206	57	118	
	Queue Block Time (%)		9	8		150			200	57	110	
		1	.9	0								
	Denied Entry	/o: !:			<b>0</b> \							
80	Edgcumbe Rd & St Paul Av			-	95)						• •	
	Lanes	<1		$\rightarrow$		<^^>		÷	<u> </u>	<del>~</del>	个个>	
	SimTraffic Delay		).7	21.2		29.1		34.4	11.0	28.0	27.0	23.
	SimTraffic LOS		C	С		С		С	В	С	С	C
	SimTraffic 95th Queue	30	03	144		137		277	452	103	229	
	Queue Block Time (%)		2	36				22			6	
	Denied Entry											
90	Cleveland Ave & Montreal	Ave (Uns	ignalized)									
	Lanes	↓ ←	<u>↓</u>	>	$\leftarrow$	<u></u>	>		<个>		<^>	
	SimTraffic Delay	10.7	12		8.8	9.9			2.8		1.3	8.3
	SimTraffic LOS	В	E		A	A			A		A	A
	SimTraffic 95th Queue	38	16		46	81			52	1	34	
	Queue Block Time (%)	50				01			52			
	Denied Entry			·								
100		)	lined Cu	ala Lawat	h. (T)							
100	Fairview Ave & Montreal A	-				۸.			<b>A</b> .		<b>A</b> .	
	Lanes	←	$\uparrow$	$\rightarrow$	<i>←</i>	<u>^&gt;</u>		<i>←</i>	<u> </u>	←	<u> </u>	
	SimTraffic Delay	32.4	22.3	12.4	26.2	22.	0	25.9	13.8	28.4	16.2	17.
	SimTraffic LOS	С	С	В	С	C		С	В	С	В	В
	SimTraffic 95th Queue	54	166	51	69	199	Э	76	247	110	280	
	Queue Block Time (%)		44	2		14			16		15	
	Denied Entry											
120	Mississippi River Blvd & N	Ford Ram	p (Unsign	alized)								
	Lanes	1			<>	0			^>	←	$\uparrow$	
	SimTraffic Delay				6.7	-			1.1	3.2	0.2	1.3
	SimTraffic LOS				А	А			А	А	А	А
	SimTraffic 95th Queue				45				3	39		
	Queue Block Time (%)								-			
	Denied Entry											
120	Mississippi River Blvd & S	Ford Ram	n (I Incigna	(horid								
130	Lanes			anzeuj	<>	0			个>	<del>~</del>	$\uparrow$	
	SimTraffic Delay				7.0					2.7	0.2	2.4
	-					-			1.1			2.4
	SimTraffic LOS				A	A			A	A	A	A
	SimTraffic 95th Queue				71					22		
	Queue Block Time (%)								I			_
	Denied Entry											
205	Mississippi River Blvd & Bo	phland Av	e (Unsigna	alized)								
	Lanes				$\leftarrow$		$\rightarrow$		个>	<1		
	SimTraffic Delay				6.3		3.0		2.4	0.7	7	2.0
	SimTraffic LOS				А		А		А	A		А
	SimTraffic 95th Queue				23		34			36	5	
	Queue Block Time (%)											
	Denied Entry	1										
215	Mississippi River Blvd & M	ontreal A	ve (Unsign	nalized)					1		l	
	Lanes		- (		<>	0			个>	<1		
	SimTraffic Delay				7.2	-			1.1	0.9		1.2
	SimTraffic LOS	l			A	A			A	A		A
	SimTraffic 95th Queue	I			38					8		_
	Queue Block Time (%)									- <b> </b>		$\rightarrow$
	Denied Entry								1	1	1	1

Node	Intersection	Eastbound	Westbour	nd	No	orthbound	Sou	uthbound	Overall
	Lanes	<^>	<^>			<^>		<^>	
	SimTraffic Delay	6.0	7.7			7.1		6.1	6.1
	SimTraffic LOS	А	A			А		А	А
	SimTraffic 95th Queue	47	41			45		49	
	Queue Block Time (%)								
	Denied Entry								
500	Cretin Ave & Randolph Ave	e (Signalized Cycle Lengt	h: 65)						
	Lanes	<^>	<个	$\rightarrow$	$\leftarrow$	^>	$\leftarrow$	^>	
	SimTraffic Delay	26.6	28.3	17.1	11.0	9.0	28.0	8.0	14.8
	SimTraffic LOS	С	С	В	В	А	С	А	В
	SimTraffic 95th Queue	126	221	60	32	217	121	200	
	Queue Block Time (%)		44	34		13	6	1	
	Denied Entry								
501	Cretin Ave & Highland Pkw	vy (Unsignalized)							
	Lanes	<^>	<^>			<^>		<^>	
	SimTraffic Delay	14.0	14.9			1.4		1.5	3.2
	SimTraffic LOS	В	В			А		А	Α
	SimTraffic 95th Queue	55	77			2		78	
	Queue Block Time (%)								
	Denied Entry								

### 70: Cleveland Ave & St Paul Ave & Bohland Ave Performance by approach

#### 71: St Paul Ave Performance by approach

Approach
Denied Del/Veh (s)
Fotal Del/Veh (s)

### 72: Cleveland Ave & St Paul Ave Performance by approach

Approach	SB
Denied Del/Veh (s)	0.0
Total Del/Veh (s)	0.5

### 73: Cleveland Ave & Inner Drive Performance by approach

Approach	EB SB	All
Denied Del/Veh (s)	0.1 0.0	0.0
Total Del/Veh (s)	2.6 0.1	0.7

### 140: 46th Ave & E 46th St/Ford Pkwy Performance by approach

Approach	EB	WB	NB	SB	SW	All
Denied Del/Veh (s)	0.4	0.0	0.0	1.0	0.1	0.2
Total Del/Veh (s)	16.0	10.9	17.6	50.7	74.7	16.9

#### **Total Zone Performance**

Denied Del/Veh (s)	0.4	
Total Del/Veh (s)	786.8	

### Intersection: 70: Cleveland Ave & St Paul Ave & Bohland Ave

Movement	WB	NB	NB
Directions Served	R	Т	TR
Maximum Queue (ft)	75	7	11
Average Queue (ft)	32	0	0
95th Queue (ft)	60	7	7
Link Distance (ft)	762	168	168
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

### Intersection: 71: St Paul Ave

Movement	EB
Directions Served	LR
Maximum Queue (ft)	61
Average Queue (ft)	41
95th Queue (ft)	62
Link Distance (ft)	51
Upstream Blk Time (%)	11
Queuing Penalty (veh)	13
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

### Intersection: 72: Cleveland Ave & St Paul Ave

Movement	NB	SB
Directions Served	R	LT
Maximum Queue (ft)	81	38
Average Queue (ft)	36	3
95th Queue (ft)	63	20
Link Distance (ft)	651	99
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

### Intersection: 73: Cleveland Ave & Inner Drive

Movement	EB	SB
Directions Served	R	TR
Maximum Queue (ft)	49	7
Average Queue (ft)	20	0
95th Queue (ft)	46	4
Link Distance (ft)	285	58
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

# Intersection: 140: 46th Ave & E 46th St/Ford Pkwy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SW	
Directions Served	<l< td=""><td>Т</td><td>TR</td><td>L</td><td>Т</td><td>TR&gt;</td><td>LT</td><td>&gt;</td><td>LT</td><td>R</td><td><lr></lr></td><td></td></l<>	Т	TR	L	Т	TR>	LT	>	LT	R	<lr></lr>	
Maximum Queue (ft)	149	242	201	140	198	217	331	59	239	63	41	
Average Queue (ft)	43	103	86	38	69	99	96	44	104	24	5	
95th Queue (ft)	99	192	172	101	149	185	265	58	201	65	24	
Link Distance (ft)		1464	1464		1080	1080	319		656		627	
Upstream Blk Time (%)							2					
Queuing Penalty (veh)							8					
Storage Bay Dist (ft)	75			110				25		25		
Storage Blk Time (%)	2	15		0	2		36	10	61	3		
Queuing Penalty (veh)	6	10		1	3		113	4	16	4		

#### Zone Summary

Zone wide Queuing Penalty: 177

de Intersection	Eastbound	Westbound	Northbound	Southbound	Over
305 Woodlawn Ave	& Bohland Ave (Unsignalized)				
Lanes	← ^>	个>	<^>	<^>	
SimTraffic Delay	2.1 0.2	1.6	5.8	0.2	0.9
SimTraffic LOS	A A	A	А	А	A
SimTraffic 95th 0	Queue 11		29	28	
Queue Block Tim					
Denied Entry					
	& Village Way (Unsignalized)				_
Lanes	<^>	<^>	<^>	<^>	
SimTraffic Delay	5.3	3.9	0.2	0.5	1.9
SimTraffic LOS	Α	A	A	A	A
SimTraffic 95th 0	Queue 29	10			
Queue Block Tim	e (%)				
Denied Entry					
	& Montreal Ave (Unsignalized)				
Lanes	<^>>	<^>	0		
SimTraffic Delay	4.9	6.5	-		4.4
SimTraffic LOS		A	A		
	A		A		A
SimTraffic 95th C		42			
Queue Block Tim	e (%)				
Denied Entry					
01 Mt Curve Blvd &	Woodlawn Ave (Unsignalized)				
Lanes	0	0	← ↑>	← ↑>	
SimTraffic Delay	-		2.5 0.6	2.7 1.3	2.
SimTraffic LOS	A	Α	A A	A A	
SimTraffic 95th (			34 4	32	
			54 4	52	
Queue Block Tim	e (%)				
Denied Entry					
105 Mt Curve Blvd &	Bohland Ave (Unsignalized)			I	
Lanes	← ↑>	$\leftarrow$ $\uparrow>$	$\leftarrow$ $\uparrow$ >	← ↑>	
SimTraffic Delay	5.2 6.4	4.0 6.6	2.0 0.3	2.2 0.5	2.
SimTraffic LOS	A A	A A	A A	A A	A
SimTraffic 95th 0	Queue 25 34	7 50	5	17	
Queue Block Tim					
Denied Entry					
	Village Way (Unsignalized)				
				(4)	
Lanes	0	0	<^>		
SimTraffic Delay	-	-	0.3	0.1	0.
SimTraffic LOS	Α	Α	A	A	A
SimTraffic 95th 0	lueue				
Queue Block Tim	e (%)				
Denied Entry					
	Montreal Ave (Unsignalized)	1			
Lanes		<^>	<^>	> <^>	
	5.6	5.6	0.3		
SimTraffic Delay					3.
SimTraffic LOS	A	A	Α	A	A
SimTraffic 95th 0		53		13	
Queue Block Tim	e (%)				
Denied Entry					
	crest (Unsignalized)				
Lanes	0	0	← ^>	← ↑>	
SimTraffic Delay	-	-	2.5 0.5		1.
SimTraffic LOS	A	A	A A	A A	A
SimTraffic 95th (			13 8	30	
Queue Block Tim	e (%)				
Denied Entry					
05 Cretin Ave & Bo	nland Ave (Unsignalized)				
	← ↑>	← ↑>	← ↑>	← ↑>	
Lanes					
Lanes SimTraffic Delay	9.0 10.5	7.8 6.8	2.7 0.6	3.0 0.4	1.6

de Intersection	Eastbound		Westbound	Nort	hbound	Sout	hbound	Overa
SimTraffic 95th Queue	41 49	Э	34 55	32		23	2	
Queue Block Time (%)								
Denied Entry								
510 Cretin Ave & Village Way	y (Unsignalized)							
Lanes	0		0	<del>~</del>	个>	←	个>	
SimTraffic Delay	-		-	2.3	0.5	2.9	0.4	2.0
SimTraffic LOS	А		А	A	A	A	A	Α
SimTraffic 95th Queue				7		28		
Queue Block Time (%)				,		20		
Denied Entry								
	vo (Uncignalized)							-
515 Montreal Ave & Cretin A			<b>A</b> .					
Lanes	$\leftarrow$ $\uparrow$		<u> </u>			←	$\rightarrow$	
SimTraffic Delay	4.6 0.8		1.7			7.4	3.3	-
SimTraffic LOS	A A		A			A	A	A
SimTraffic 95th Queue	29		4			81	3	1
Queue Block Time (%)								
Denied Entry								
605 Ranger Way & Bohland	Ave (Unsignalized)							
Lanes			$\uparrow$					
SimTraffic Delay	0.4		0.5					0.4
SimTraffic LOS	A		A					A
SimTraffic 95th Queue								
Queue Block Time (%)								
								_
Denied Entry								-
510 Ranger Way & Village W								_
Lanes	<^>		<^>					_
SimTraffic Delay	3.4		5.0					4.3
SimTraffic LOS	A		A					A
SimTraffic 95th Queue	41		50					
Queue Block Time (%)								
Denied Entry								
705 Finn St & Bohland Ave (A	All-way stop)							
Lanes		$\rightarrow$						
SimTraffic Delay		2.2						0.7
SimTraffic LOS		Α						0.7 A
SimTraffic 95th Queue		23						A .
		23						
Queue Block Time (%)								
Denied Entry								_
710 Finn St & Village Way (U								_
Lanes	←> 0			<个			^>	
SimTraffic Delay	3.8 -			0.1			0.1	2.4
SimTraffic LOS	A A			A			А	A
SimTraffic 95th Queue	47							
Queue Block Time (%)								
Denied Entry								1
711 Finn St & Saunders Ave (	Unsignalized)		u l		1		1	1
Lanes				<^>			· <b>^</b> >	1
SimTraffic Delay				0.2			0.2	0.3
SimTraffic LOS				A			A	A
SimTraffic 95th Queue				A				
								_
Queue Block Time (%)								
Denied Entry								_
715 Montreal Ave & Finn St					T.			_
Lanes	<u>↑</u>		^>			←>	0	
SimTraffic Delay	0.7		2.1			7.6	-	1.8
SimTraffic LOS	A		А			Α	А	Α
SimTraffic 95th Queue						52		1
Queue Block Time (%)								
Denied Entry								
	1							

2040 AM Build - Ryan

Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes			<^>	<^>	
	SimTraffic Delay			0.5	0.2	0.3
	SimTraffic LOS			A	A	А
	SimTraffic 95th Queue					
	Queue Block Time (%)					
	Denied Entry					

	Intersection	Ea	stbound	W	/estbound	1	No	orthboun	d	Sc	outhbound	Over
10	S Ford Ramp/N Ford Ramp	& Ford Ave	(Unsignalized)									
	Lanes		<u> </u>		<u>ተ</u> 1	`>			$\rightarrow$		$\rightarrow$	
1	SimTraffic Delay		3.9		0.6	5			7.3		10.2	3.0
_	SimTraffic LOS		А		А				А		В	A
	SimTraffic 95th Queue		14		10				53		101	
_	Queue Block Time (%)			-	10	,			55		101	
-												
	Denied Entry											
	Ford Ave & Woodlawn Ave											
_	Lanes	←	$\uparrow\uparrow$		11	`>				<>	0	
	SimTraffic Delay	8.2	0.7		0.7	7				36.5	-	1.2
	SimTraffic LOS	Α	A		A					E	В	A
1	SimTraffic 95th Queue	42	10		7					72		
	Queue Block Time (%)	4										
_	Denied Entry											1
_	Mt Curve Blvd & Ford Ave	(Uncignalize										
		-	-		<b>^</b>		1	•		1	۸.	
	Lanes	<i>←</i>	<u> </u>	<i>←</i>	<u>^1</u>		<i>←</i>	<u> </u>		<i>←</i>	<u> </u>	
	SimTraffic Delay	9.3	1.3	12.3	2.3		330.7	165		200.6	261.2	29
-	SimTraffic LOS	A	A	В	A		F	F		F	F	D
-	SimTraffic 95th Queue	48	18	72	27	7	143	30	6	456	80	
ſ	Queue Block Time (%)	1		2		T	91	70	) [	7	72	1
Ī	Denied Entry											1
	Cretin Ave & Ford Ave (Sig	nalized Cv	cle Length: 120	)							1	1
	Lanes	<ul> <li>←</li> </ul>	<u>/ ተተ&gt;</u>	<i>,</i> ←	$\uparrow\uparrow$	`>	$\leftarrow$	$\uparrow$	>	$\leftarrow$	个>	t
-	SimTraffic Delay	34.6	13.9	54.4	33.		50.1	27.		、 53.0	40.8	30
-	SimTraffic LOS	C 54.0	B	D			D	C		D	D	30
_		-		_	-							
-	SimTraffic 95th Queue	186	241	115	34	-	204	24		206	494	
(	Queue Block Time (%)	17	4	22	46	5	27	9		20	20	
1	Denied Entry											
50	Finn St & Ford Ave (Signaliz	zed Cycle	Length: 120)									
	Lanes	$\leftarrow$	个个>	$\leftarrow$	<u></u>	`>	$\leftarrow$	$\uparrow$	>	<′	$\uparrow \rightarrow$	
	SimTraffic Delay	19.6	11.2	21.2	9.6	5	45.6	31.	0	39	.3 10.3	15
	SimTraffic LOS	В	В	С	A		D	C		C		В
	SimTraffic 95th Queue	70	197	126	15		218	12		15		
-	Queue Block Time (%)	4	137	120	15	0	210	12	-	1.		
-		4	14	1						1	4 1	
_	Denied Entry											
-	Cleveland Ave & Ford Ave									. 1		
-	Lanes	$\leftarrow$	<u></u>	$\leftarrow$	11		$\leftarrow$	$\uparrow$			ጥ ጥ ኣ	
ľ	SimTraffic Delay	43.8								$\leftarrow$	个个>	
		45.0	34.3	42.1	37.	5	28.9	39.	7	← 41.3		38
	SimTraffic LOS	D	34.3 C		37. D			39. D				
•	SimTraffic LOS SimTraffic 95th Queue			42.1			28.9			41.3	37.1	
	SimTraffic 95th Queue	D	C 380	42.1 D	D 30	0	28.9 C	D 48	3	41.3 D	37.1 D 383	
· · · · ·	SimTraffic 95th Queue Queue Block Time (%)	D 215	С	42.1 D 177	D	0	28.9 C	D	3	41.3 D 129	37.1 D	
••	SimTraffic 95th Queue Queue Block Time (%) Denied Entry	D 215 1	C 380 12	42.1 D 177 1	D 30	0	28.9 C	D 48	3	41.3 D 129	37.1 D 383	
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig	D 215 1 nalized C	C 380 12 ycle Length: 60)	42.1 D 177 1	D 30 20	0	28.9 C	D 48 1	3	41.3 D 129	37.1 D 383 28	
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes	D 215 1 malized C ←	C 380 12 ycle Length: 60) ↑↑>	42.1 D 177 1 0 ←	D 30 20	0	28.9 C	D 48 1 <个>	3	41.3 D 129	37.1 D 383 28	
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Kenneth St &amp; Ford Ave (Sig</b> Lanes SimTraffic Delay	D 215 1 malized C ← 26.7	C 380 12 ycle Length: 60) ↑↑> 11.6	42.1 D 177 1 	D 30 20 1 14.	0))	28.9 C	D 48 1 <↑> 18.5	3	41.3 D 129	37.1 D 383 28	13
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS	D 215 1 malized C ← 26.7 C	C 380 12 ycle Length: 60) ↑↑> 11.6 B	42.1 D 1777 1 ← 28.9 C	D 30 20 11 14. 8	0 ) `> 9	28.9 C	D 48 1 < >> 18.5 B	3	41.3 D 129	37.1 D 383 28 <↑> 17.6 B	13
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Kenneth St &amp; Ford Ave (Sig</b> Lanes SimTraffic Delay	D 215 1 malized C ← 26.7	C 380 12 ycle Length: 60) ↑↑> 11.6 B 215	42.1 D 177 1 	D 30 20 1 14.	0 ) `> 9	28.9 C	D 48 1 <↑> 18.5	3	41.3 D 129	37.1 D 383 28	13
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS	D 215 1 malized C ← 26.7 C	C 380 12 ycle Length: 60) ↑↑> 11.6 B	42.1 D 1777 1 ← 28.9 C	D 30 20 11 14. 8	0 ) `> 9 1	28.9 C	D 48 1 < >> 18.5 B	3	41.3 D 129	37.1 D 383 28 <↑> 17.6 B	13
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue	D 215 1 malized C ← 26.7 C 70	C 380 12 ycle Length: 60) ↑↑> 11.6 B 215	42.1 D 1777 1 ← 28.9 C	D 30 20 ↑↑ 14. 8 34	0 ) `> 9 1	28.9 C	D 48 1 < >> 18.5 B	3	41.3 D 129	37.1 D 383 28 <↑> 17.6 B	13
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	D 215 1 malized C ← 26.7 C 70 14	C 380 12 ycle Length: 60) ↑↑> 11.6 B 215 30	42.1 D 1777 1 	D 30 20 ↑↑ 14. 8 34	0 ) `> 9 1	28.9 C	D 48 1 < >> 18.5 B	3	41.3 D 129	37.1 D 383 28 <↑> 17.6 B	13
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S	D 215 1 malized C ← 26.7 C 70 14 ignalized	C 380 12 ycle Length: 60) ↑↑> 11.6 B 215 30 Cycle Length: 1	42.1 D 1777 1 28.9 C 888 40)	D 30 20 14 14 34 13	0 ) `> 9 1 3	28.9 C 224	D 48 1 < 18.5 B 109	3	41.3 D 129 1	37.1 D 383 28 <^↑> 17.6 B 88	D 13
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes	D 215 1 malized C ← 26.7 C 70 14 ignalized	C 380 12 ycle Length: 60) ↑↑> 11.6 B 215 30 Cycle Length: 1 ↑ →	42.1 D 1777 1 28.9 C 888 40) ←	D 30 20 ↑1 14. 8 34 13 	0 ) `> 9 1 3 →	28.9 C 224	D 48 1 < 18.5 B 109	3	41.3 D 129 1	37.1 D 383 28 <td>13 B</td>	13 B
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic DOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay	D 215 1 malized C ← 26.7 C 70 14 ignalized ← 117.6	C         380         12         ycle Length: 60)         ↑↑>         11.6         B         215         30         Cycle Length: 1         ↑         51.8       38.3	42.1 D 1777 1 28.9 C 888 40) ← 3 91.7	D 30 20 ↑↑↑ 14. 8 34 13 	0 ) ) 9 1 3 → 83.9	28.9 C 224 ← 54.9	D 48 1 < 18.5 B 109 ↑ 34.	3	41.3 D 129 1 	37.1 D 383 28 <^>> 17.6 B 88 88 ↑> 152.8	13 13 91
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay	D 215 1 malized C ← 26.7 C 70 14 ignalized ← 117.6 F	C 380 12 ycle Length: 60) ↑↑> 11.6 B 215 30 Cycle Length: 1 ↑ → 51.8 38.3 D D	42.1 D 1777 1 28.9 C 888 40) ← 3 91.7 F	D 30 20 ↑↑↑ 14. B 34 13 4 13 108.8 F	0 ) > 9 1 3 -→ 83.9 F	28.9 C 224 ← 54.9 D	D 48 1	3	41.3 D 129 1 	37.1 D 383 28 <^↑> 17.6 B 88 88 ↑> 152.8 F	13 13 91
61 62	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic DS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic DS SimTraffic 95th Queue	D 215 1 malized C ← 26.7 C 70 14 ignalized ← 117.6 F 383	C 380 12 ycle Length: 60) ↑↑> 11.6 B 215 30 Cycle Length: 1 ↑ → 51.8 38.3 D D 751 148	42.1 D 1777 1 28.9 C 888 40) ← 3 91.7 F	D 30 20 ↑↑↑ 14. 8 34 13 14. 13 108.8 <b>F</b> 980	0 ) ) 9 1 3 → 83.9	28.9 C 224 ← 54.9	D 48 1 	3	41.3 D 129 1 	37.1 D 383 28 ↑ 17.6 B 88 88	13 13 91
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic DS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic DS SimTraffic 95th Queue Queue Block Time (%)	D 215 1 malized C ← 26.7 C 70 14 ignalized ← 117.6 F	C 380 12 ycle Length: 60) ↑↑> 11.6 B 215 30 Cycle Length: 1 ↑ → 51.8 38.3 D D	42.1 D 1777 1 28.9 C 888 40) ← 3 91.7 F	D 30 20 ↑↑↑ 14. B 34 13 4 13 108.8 F	0 ) > 9 1 3 -→ 83.9 F	28.9 C 224 ← 54.9 D	D 48 1	3	41.3 D 129 1 	37.1 D 383 28 <	C
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic DS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry	D 215 1 malized C ← 26.7 C 70 14 ignalized F 383 23	C 380 12 ycle Length: 60) ↑↑> 11.6 B 215 30 Cycle Length: 1 ↑ → 51.8 38.3 D D 751 144 47	42.1 D 177 1 28.9 C 88 40) ← 3 91.7 F 8 240	D 30 20 ↑↑↑ 14. 8 34 13 14. 13 108.8 <b>F</b> 980	0 ) > 9 1 3 -→ 83.9 F	28.9 C 224 ← 54.9 D	D 48 1 	3	41.3 D 129 1 	37.1 D 383 28 ↑ 17.6 B 88 88	C
61	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic DS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic DS SimTraffic 95th Queue Queue Block Time (%)	D 215 1 malized C ← 26.7 C 70 14 ignalized F 383 23	C 380 12 ycle Length: 60) ↑↑> 11.6 B 215 30 Cycle Length: 1 ↑ → 51.8 38.3 D D 751 144 47	42.1 D 177 1 28.9 C 88 40) ← 3 91.7 F 8 240	D 30 20 ↑↑↑ 14. 8 34 13 14. 13 108.8 <b>F</b> 980	0 ) > 9 1 3 -→ 83.9 F	28.9 C 224 ← 54.9 D	D 48 1 	3	41.3 D 129 1 	37.1 D 383 28 <	C
61 62 65 0	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic DS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry	D 215 1 malized C ← 26.7 C 70 14 ignalized F 383 23	C         380         12         ycle Length: 60) $\uparrow \uparrow >$ 11.6         B         215         30         Cycle Length: 1 $\uparrow \rightarrow$ 51.8       38.3         D       D         751       148         47	42.1 D 177 1 28.9 C 88 40) ← 3 91.7 F 8 240	D 30 20 ↑↑↑ 14. B 34 13 4 13 14. 5 8 7 108.8 F 980 65	0 ) > 9 1 3 -→ 83.9 F	28.9 C 224 54.9 D 211	D 48 1 	3 >> 1 2 4	41.3 D 129 1 	37.1 D 383 28 <	D
61 62 65	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Cleveland Ave & Highland	D 215 1 nalized C ← 26.7 C 70 14 ⊷ ignalized ← 117.6 F 383 23 Pkwy (Signa	C         380         12         ycle Length: 60) $\uparrow \uparrow >$ 11.6         B         215         30         Cycle Length: 1 $\uparrow \rightarrow$ 51.8       38.3         D       D         751       148         47	42.1 D 177 1 28.9 C 88 40) 40) ↓ 50 40) 50 10 10 10 10 10 10 10 10 10 1	D 30 20 14 14 34 13 7 108.8 F 980 65	0 ) 9 1 3 → 83.9 F 114	28.9 C 224 ← 54.9 D	D 48 1 < 18.5 B 109	3 > 1 2 4 >	41.3 D 129 1 	37.1 D 383 28 28 17.6 B 88 88 17.6 B 88 17.6 B 88 17.6 B 88 17.6 B 88 17.6 B 88 17.6 B 88 17.6 B 88 17.6 B 88 17.6 B 88 17.6 152.8 F 1,641 55 10 2	388 D 13 13 91 F 13 13

de	Intersection	E	Eastbound	d	v	Vestboun	d	N	orthbound	So	uthbound	Over
_	SimTraffic 95th Queue		63	71	16	1	71	48	170	78	210	
	Queue Block Time (%)		1	11	5		10		7	1	9	
	Denied Entry											
	St Paul Ave & Montreal Av	o (All_way	(stop)									
			γ stop) ↑	``		<个>			<u>،</u>	1	<u> </u>	
	Lanes			$\rightarrow$					<^^>	←	<u> </u>	
	SimTraffic Delay		3.7	12.3		112.8			82.9	16.2	22.0	64.
	SimTraffic LOS		C	В		F			F	С	С	F
	SimTraffic 95th Queue	13	30	78		592			643	80	132	
	Queue Block Time (%)	1	.6	5							1	
	Denied Entry											
80	Edgcumbe Rd & St Paul Av	e (Signaliz	zed Cycl	le Length:	: 105)							
	Lanes	<1		$\rightarrow$		<^^>		$\leftarrow$	个个>	$\leftarrow$	个个>	
	SimTraffic Delay		1.6	19.5		33.5		30.3	11.0	33.0	30.5	23.
	SimTraffic LOS		C	B		C		C	В	C	C	 C
	SimTraffic 95th Queue		45	143		141		284	450	103	225	- C
			+5 7			141			450	103	7	
	Queue Block Time (%)		/	33				19			/	
_	Denied Entry											
	Cleveland Ave & Montreal											
	Lanes	$\leftarrow$		`>		<^>			<^>		<^>	
	SimTraffic Delay	9.7	14	1.7		12.9			1.9		0.7	9.
	SimTraffic LOS	А	E	В		В			А		А	A
	SimTraffic 95th Queue	52	16	56		132			48		27	
	Queue Block Time (%)		5	8	1							
	Denied Entry											
	Fairview Ave & Montreal A	vo (Signa	lized Cv	icle Lengt	h· 70)							
00						$\uparrow$		÷	^>	←	^>	
	Lanes	← 22.1	↑ 16.2		<i>←</i>							10
	SimTraffic Delay	33.1	16.3			22		29.6	17.3	39.4	18.8	19
	SimTraffic LOS	C	В	В	C		2	С	В	D	В	В
	SimTraffic 95th Queue	47	140	41	92	22		93	302	142	317	
	Queue Block Time (%)		41	1		2	2		25	1	19	
	Denied Entry											
120	Mississippi River Blvd & N	Ford Ram	p (Unsign	alized)								
	Lanes				<>	(	)		^>	$\leftarrow$	$\uparrow$	
	SimTraffic Delay				8.6	-	-		1.0	3.0	0.6	1.
	SimTraffic LOS				A	A	4		A	A	A	A
	SimTraffic 95th Queue				51		•		5	54		
	Queue Block Time (%)				51				5	54		
	Denied Entry											_
130	Mississippi River Blvd & S F	ord Ram	p (Unsign	alized)					•			
	Lanes				<->	(	J		^>	<del>~</del>	$\uparrow$	
	SimTraffic Delay				8.9	-	-		0.9	2.4	0.5	2.
	SimTraffic LOS				A	A	4		Α	Α	A	A
	SimTraffic 95th Queue				78					20		
	Queue Block Time (%)											
	Denied Entry											
	Mississippi River Blvd & Bo	hland Av	e (Unsign	alized)					1		I	
	Lanes				<del>~</del>		$\rightarrow$		^>	<1	<b>`</b>	
	SimTraffic Delay				7.2		2.9		1.8	0.7		1.
ŀ	SimTraffic LOS				A		A		A	A		A
	SimTraffic 95th Queue				28		39			19	)	
ŀ	Queue Block Time (%)											
	Denied Entry											
215	Mississippi River Blvd & M	ontreal A	ve (Unsig	nalized)								
	Lanes				<>	(	)		^>	<1		
	SimTraffic Delay				8.6	-	-		0.9	2.3		2.
	SimTraffic LOS				A	A	4		A	A		 A
	SimTraffic 95th Queue				36	r	•		~	17		
					50							_
	Queue Block Time (%)	I										
	Denied Entry											

Node	Intersection	Eastbound	Westbour	nd	N	orthbound	So	uthbound	Overall
	Lanes	<^>	<个>			<^>		<^>	
	SimTraffic Delay	6.4	8.2			6.9		16.9	11.5
	SimTraffic LOS	А	A			А		С	В
	SimTraffic 95th Queue	50	55			48		131	
	Queue Block Time (%)								
	Denied Entry								
500	Cretin Ave & Randolph Ave	e (Signalized Cycle Lengt	h: 65)						
	Lanes	<个>	<个	$\rightarrow$	$\leftarrow$	^>	$\leftarrow$	^>	
	SimTraffic Delay	28.4	31.4	16.6	25.8	8.6	27.4	12.5	16.0
	SimTraffic LOS	С	С	В	С	А	С	В	В
	SimTraffic 95th Queue	175	186	65	31	198	146	252	
	Queue Block Time (%)		51	17		12	5	9	
	Denied Entry								
501	Cretin Ave & Highland Pkw	y (Unsignalized)							
	Lanes	<个>	<个>			<^>		<个>	
	SimTraffic Delay	30.8	42.2			1.9		4.2	6.9
	SimTraffic LOS	D	E			А		А	А
	SimTraffic 95th Queue	79	133			45		167	
	Queue Block Time (%)								
	Denied Entry								

#### 70: Cleveland Ave & St Paul Ave & Bohland Ave Performance by approach

#### 71: St Paul Ave Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	13.1	2.7	0.3	2.6

#### 72: Cleveland Ave & St Paul Ave Performance by approach

Approach	NB SB	All
Denied Del/Veh (s)	0.0 0.0	0.0
Total Del/Veh (s)	5.9 0.2	2.2

### 73: Cleveland Ave & Inner Drive Performance by approach

Approach	EB SB	All
Denied Del/Veh (s)	0.1 0.0	0.0
Total Del/Veh (s)	2.6 0.2	0.3

#### 140: 46th Ave & E 46th St/Ford Pkwy Performance by approach

Approach	EB	WB	NB	SB	SW	All
Denied Del/Veh (s)	0.3	0.0	2.9	1.1	0.1	0.6
Total Del/Veh (s)	25.4	19.5	37.4	35.9	58.8	25.3

#### **Total Zone Performance**

Denied Del/Veh (s)	1.1
Total Del/Veh (s)	1648.8

### Intersection: 70: Cleveland Ave & St Paul Ave & Bohland Ave

Movement	WB	NB	NB
Directions Served	R	Т	TR
Maximum Queue (ft)	42	3	30
Average Queue (ft)	17	0	2
95th Queue (ft)	33	3	20
Link Distance (ft)	762	168	168
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

### Intersection: 71: St Paul Ave

Maxamant	EB
Movement	EB
Directions Served	LR
Maximum Queue (ft)	57
Average Queue (ft)	42
95th Queue (ft)	61
Link Distance (ft)	51
Upstream Blk Time (%)	11
Queuing Penalty (veh)	12
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

#### Intersection: 72: Cleveland Ave & St Paul Ave

Movement	NB	SB
Directions Served	R	LT
Maximum Queue (ft)	84	30
Average Queue (ft)	37	1
95th Queue (ft)	63	13
Link Distance (ft)	651	99
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

### Intersection: 73: Cleveland Ave & Inner Drive

Movement	EB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	11
95th Queue (ft)	34
Link Distance (ft)	285
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

#### Intersection: 140: 46th Ave & E 46th St/Ford Pkwy

EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SW	
<	LT	TR	L	Т	TR>	LTR	>	LT	R	<lr></lr>	
149	344	340	160	304	303	441	63	186	58	30	
53	195	180	104	141	161	217	49	91	27	3	
136	305	297	177	274	269	421	58	166	64	15	
	1464	1464		1094	1094	1029		656		272	
75			110				25		25		
1	36		12	7		57	14	54	5		
4	22		48	22		183	14	17	6		
	<pre> &lt;     149     53     136     75     1 </pre>	<ul> <li>LT</li> <li>149</li> <li>344</li> <li>53</li> <li>195</li> <li>136</li> <li>305</li> <li>1464</li> <li>75</li> <li>36</li> </ul>	<ul> <li>LT TR</li> <li>149 344 340</li> <li>53 195 180</li> <li>136 305 297</li> <li>1464 1464</li> <li>75</li> <li>1 36</li> </ul>	<         LT         TR         L           149         344         340         160           53         195         180         104           136         305         297         177           1464         1464         1464           75         110         1         36	<         LT         TR         L         T           149         344         340         160         304           53         195         180         104         141           136         305         297         177         274           1464         1464         1094         1094           75         110         7           1         36         12         7	<ul> <li>&lt; LT TR L T TR&gt;</li> <li>149 344 340 160 304 303</li> <li>53 195 180 104 141 161</li> <li>136 305 297 177 274 269</li> <li>1464 1464 1094 1094</li> <li>75 110</li> <li>1 36 12 7</li> </ul>	<         LT         TR         L         T         TR>         LTR           149         344         340         160         304         303         441           53         195         180         104         141         161         217           136         305         297         177         274         269         421           1464         1464         1094         1094         1029           75         110         7         57	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

#### Zone Summary

Zone wide Queuing Penalty: 328

	Intersection	Eastbound	Westbound	Northbound	Southbound	Overa
305	Woodlawn Ave & Bohland	Ave (Unsignalized)				
	Lanes	$\leftarrow \qquad \uparrow >$		<^>	<^>	
	SimTraffic Delay	2.0 0.2	1.4	5.2	0.8	1.7
	SimTraffic LOS	A A	А	Α	Α	А
	SimTraffic 95th Queue	3		15	45	
	Queue Block Time (%)					
	Denied Entry					
310	Woodlawn Ave & Village V					
	Lanes	<^>	<^>	<^>	<^>	
	SimTraffic Delay	4.4	2.3	0.3	1.4	2.2
	SimTraffic LOS	A	A	A	A	A
	SimTraffic 95th Queue	22	19			
	Queue Block Time (%)					
	Denied Entry					
315	Woodlawn Ave & Montrea	l Ave (Unsignalized)				
010	Lanes		<个>	0		
	SimTraffic Delay	5.1	5.5	8		4.5
		5.1 A		-		
	SimTraffic LOS		A	A		A
	SimTraffic 95th Queue	40	43			
	Queue Block Time (%)					
	Denied Entry					
401	Mt Curve Blvd & Woodlaw	n Ave (Unsignalized)				
	Lanes	0	0	← ^>	← ^>	
	SimTraffic Delay	-	-	3.9 37.9	2.9 1.1	131
	SimTraffic LOS	F	F	A E	A A	F
	SimTraffic 95th Queue	-	-	53 126	35 2	
	Queue Block Time (%)			6	33 2	
		39 1	7 12 2			00
405	Denied Entry		7 12 2	8		96
405	Mt Curve Blvd & Bohland A					
	Lanes	← ↑>	← ↑>	← ↑>	← ↑>	
	SimTraffic Delay	5.9 6.9	7.5 4.0	2.3 0.2	2.4 0.7	2.2
	SimTraffic LOS	A A	A A	A A	A A	A
	SimTraffic 95th Queue	25 44	14 44	7 1	17 2	
	Queue Block Time (%)					
	Denied Entry					
410	Mt Curve Blvd & Village Wa	av (Unsignalized)				
	Lanes	0	0	<个>	<^>	
	SimTraffic Delay	-	-	0.3	0.3	0.6
		•	â			
	SimTraffic LOS	A	A	A	A	A
	SimTraffic 95th Queue			5	5	
	Queue Block Time (%)					
	Denied Entry					
415	Mt Curve Blvd & Montreal	Ave (Unsignalized)				
	Lanes	<^>	<个>	<个>	<^>	
	SimTraffic Delay	6.3	4.4	0.1	0.7	3.4
	SimTraffic LOS	A	А	A	Α	A
	SimTraffic 95th Queue	48	51		11	
		UT	51			
	Queue Block Time (%)					
	Denied Entry	·				
502	Cretin Ave & Hillcrest (Uns					
	Lanes	0	0	← ↑>	← ↑>	
	SimTraffic Delay	-	-	2.9 1.7	3.8 1.3	3.1
	SimTraffic LOS	А	А	A A	A A	A
	SimTraffic 95th Queue			28 62	42	
				1		
	Oueue Block Time (%)					
	Queue Block Time (%) Denied Entry					
50E	Denied Entry	(Unsignalized)				
505	Denied Entry Cretin Ave & Bohland Ave					
505	Denied Entry Cretin Ave & Bohland Ave Lanes	← ↑>	← ↑>	← ↑>	← ↑>             	
505	Denied Entry Cretin Ave & Bohland Ave		←         ↑>           8.1         7.5           A         A	←         ↑>           3.1         0.6           A         A	$\begin{array}{c c} \leftarrow & \uparrow > \\ \hline 3.1 & 0.5 \\ \hline A & A \end{array}$	1.6

lode	Intersection	Eastbound		We	stbound	Nort	hbound	Sout	hbound	Overal
	SimTraffic 95th Queue	40 51	L	27	48	40	9	32	3	
	Queue Block Time (%)									
	Denied Entry									
510	Cretin Ave & Village Way (	Unsignalized)								
	Lanes	0			0	$\leftarrow$	个>	$\leftarrow$	^>	
	SimTraffic Delay	-			-	3.1	0.6	3.3	0.7	1.7
	SimTraffic LOS	A			А	Α	А	Α	А	А
	SimTraffic 95th Queue					21	3	44		
	Queue Block Time (%)									
	Denied Entry									
515	Montreal Ave & Cretin Ave	e (Unsignalized)							· · · · · · · · · · · · · · · · · · ·	
	Lanes	$\leftarrow$ $\uparrow$			^>			$\leftarrow$	$\rightarrow$	
	SimTraffic Delay	4.9 0.9			2.1			7.5	3.	2 3.0
	SimTraffic LOS	A A			А			А	A	Α
	SimTraffic 95th Queue	28			11			84	3	Э
	Queue Block Time (%)									
	Denied Entry									
605	Ranger Way & Bohland Av	e (Unsignalized)			I.		1		1	
	Lanes	<u>↑&gt;</u>			$\uparrow$					
	SimTraffic Delay	0.5			0.5					0.5
	SimTraffic LOS	A			A					A
	SimTraffic 95th Queue									
	Queue Block Time (%)									
	Denied Entry									
610	Ranger Way & Village Way	(Unsignalized)								
010	Lanes	<			<^>					
	SimTraffic Delay	2.5			3.6					2.9
	SimTraffic LOS	A			A.					2.5 A
	SimTraffic 95th Queue	46			46					
	Queue Block Time (%)	40			40					
	Denied Entry									
705	Finn St & Bohland Ave (All	way stop)								-
705		-way stop)	、 、							_
	Lanes		$\rightarrow$							0.0
	SimTraffic Delay		2.5							0.8
	SimTraffic LOS		A							A
	SimTraffic 95th Queue		21							
	Queue Block Time (%)									
	Denied Entry									
710	Finn St & Village Way (Uns					_			•	
	Lanes	←> 0				<个			^>	
	SimTraffic Delay	8.0 -				0.2			0.2	2.1
	SimTraffic LOS	A A				A			A	А
	SimTraffic 95th Queue	41				6				
	Queue Block Time (%)									
	Denied Entry									
711	Finn St & Saunders Ave (U	nsignalized)					<u>r</u>		<u>r</u>	
	Lanes					<个>		<	:↑>	
	SimTraffic Delay					0.2			0.2	0.3
	SimTraffic LOS					А			A	Α
	SimTraffic 95th Queue		T			4				
	Queue Block Time (%)									
	Denied Entry									
715	Montreal Ave & Finn St (U	nsignalized)								
	Lanes	$\leftarrow$ $\uparrow$			^>			<->	0	
	SimTraffic Delay	- 0.7			2.3			9.4	-	1.9
	SimTraffic LOS	A A			А			A	А	A
	SimTraffic 95th Queue	3				1 +		49		
	Queue Block Time (%)	-								1
	Denied Entry									1
		Ave (Unsignalized)							I	+

2040 PM Build - Ryan

Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes			<个>	<^>	
	SimTraffic Delay			0.5	0.2	0.3
	SimTraffic LOS			A	A	Α
	SimTraffic 95th Queue					
	Queue Block Time (%)					
	Denied Entry					

	Intersection		astbound	W	estboun	d	N	orthbound	S	outhbour	nd	Overa
10	S Ford Ramp/N Ford Ramp	& Ford A	ve (Unsignalized)									
	Lanes		<u>↑</u> ↑>		$\uparrow$	^>		$\rightarrow$			$\rightarrow$	
	SimTraffic Delay		2.7		0.			1	5.6		5.9	2.0
	SimTraffic LOS		A		A			A			A	A
			9						40			
	SimTraffic 95th Queue		9		8	5			48		62	
	Queue Block Time (%)											
	Denied Entry											
20	Ford Ave & Woodlawn Ave	(Unsigna	lized)									
	Lanes	$\leftarrow$	$\uparrow\uparrow$		$\uparrow$	^>				(	0	
	SimTraffic Delay	5.0	0.5		. 1.						-	0.8
	SimTraffic LOS	A.			A							0.0 A
			A		F	`				/	4	A
	SimTraffic 95th Queue	35										
	Queue Block Time (%)	2										
	Denied Entry											
30	Mt Curve Blvd & Ford Ave (	(Signalized	d Cycle Length: 8	0)								
	Lanes		· 个个>		$\uparrow$	<b>^&gt;</b>	$\leftarrow$	^>	←	1	`>	
	SimTraffic Delay	15.4	5.4	17.7	6.		、 28.5	26.4	31.4		7.9	8.7
		-	-									-
	SimTraffic LOS	B	A	B	A		C	C	C		C	A
	SimTraffic 95th Queue	34	152	87	13		100	102	66		59	
	Queue Block Time (%)		3	3	4	L .	2	1	2		9	
	Denied Entry											
	Cretin Ave & Ford Ave (Sigr	nalized (	Cycle Length: 80)					I		4	i	
	Lanes	← (all200	↑ ↑ ↑ >	÷	$\uparrow$	^>	←	^>	<del>~</del>	1	`>	
												10
	SimTraffic Delay	18.5	8.7	24.2	18		30.8	22.4	31.3		).2	16.
	SimTraffic LOS	В	A	С	E	3	С	C	С	(	С	В
	SimTraffic 95th Queue	134	124	69	21	.3	181	179	140	13	31	
	Queue Block Time (%)	1			2	)	15	6				
	Denied Entry											
	Finn St & Ford Ave (Signaliz		o Longth (90)									
50				,	•	۸.	,	0		•		
	Lanes	$\leftarrow$	个个>	$\leftarrow$	$\uparrow$		$\leftarrow$	0		·个	$\rightarrow$	
	SimTraffic Delay	19.3	11.8	11.6	8.	0	31.7	-	2	8.9	6.5	11.
	SimTraffic LOS	В	В	В	A	λ	С	A		С	Α	В
	SimTraffic 95th Queue	63	193	76	15	52	101		e	57	56	
	Queue Block Time (%)	2	13							1		
	Denied Entry		-									
	Cleveland Ave & Ford Ave (	(Signaliza)	d Cuclo Longth 9	0)								
00			<u>a Cycle Length. 8</u> 个个>		•	۸.	÷	<b>A</b> .		•	$\rightarrow$	
	Lanes		445	$\leftarrow$	$\uparrow$		<u> </u>	^>	$\leftarrow$		$\rightarrow$	
		$\leftarrow$								1		
	SimTraffic Delay	37.0	17.9	44.2	20	.2	19.6	16.0	40.1	27.5		21.
	SimTraffic Delay SimTraffic LOS				20 (					27.5 C		21. C
	SimTraffic LOS	37.0	17.9	44.2		;	19.6	16.0	40.1	С	24.3	C
	SimTraffic LOS SimTraffic 95th Queue	37.0 D	17.9 B 191	44.2 D 103	0 16	50	19.6 B	16.0 B	40.1 D	C 315	24.3 C	C
	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	37.0 D	17.9 B	44.2 D	(	50	19.6 B	16.0 B	40.1 D	С	24.3 C	C
	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	37.0 D 124	17.9 B 191 1	44.2 D 103	0 16	50	19.6 B	16.0 B	40.1 D	C 315	24.3 C	C
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig	37.0 D 124 nalized	17.9 B 191 1 Cycle Length: 80)	44.2 D 103 1	16 16	2 50 -	19.6 B	16.0 B 307	40.1 D	C 315 29	24.3 C	C
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes	37.0 D 124	17.9 B 191 1 <b>Cycle Length: 80)</b> 个个>	44.2 D 103	0 1€ 1	∑ 50  ↑>	19.6 B	16.0 B 307 <↑>	40.1 D	C 315 29 <个>	24.3 C	C
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig	37.0 D 124 nalized	17.9 B 191 1 Cycle Length: 80)	44.2 D 103 1	16 16	∑ 50  ↑>	19.6 B	16.0 B 307	40.1 D	C 315 29	24.3 C	C
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay	37.0 D 124 nalized ←	17.9 B 191 1 <b>Cycle Length: 80)</b> ↑↑> 5.1	44.2 D 103 1 ←	0 1€ 1	C 50	19.6 B	16.0 B 307 <↑>	40.1 D	C 315 29 <↑> 26.2	24.3 C	9.3
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS	37.0 D 124 malized ← 13.3 B	17.9 B 191 1 <b>Cycle Length: 80)</b> ↑↑> 5.1 A	44.2 D 103 1 ← 14.8 B	0 16 11 10 10 10 10 10 10 10 10 10 10 10 10	C 50 - - - - - - - - - - - - - - - - - -	19.6 B	16.0 B 307 < ^ > 22.3 C	40.1 D	C 315 29 < ^>> 26.2 C	24.3 C	9.3
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue	37.0 D 124 malized ← 13.3 B 49	17.9 B 191 1 <b>Cycle Length: 80)</b> ↑↑> 5.1 A 79	44.2 D 103 1 ← 14.8	( 16 1 1 1 9. 9. 4 19	C i0	19.6 B	16.0 B 307 <^>> 22.3	40.1 D	C 315 29 <↑> 26.2	24.3 C	9.3
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	37.0 D 124 malized ← 13.3 B	17.9 B 191 1 <b>Cycle Length: 80)</b> ↑↑> 5.1 A	44.2 D 103 1 ← 14.8 B	0 16 11 10 10 10 10 10 10 10 10 10 10 10 10	C i0	19.6 B	16.0 B 307 < ^ > 22.3 C	40.1 D	C 315 29 < ^>> 26.2 C	24.3 C	9.3
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Kenneth St &amp; Ford Ave (Sig</b> Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	37.0 D 124 malized ← 13.3 B 49 7	17.9 B 191 1 <b>Cycle Length: 80)</b> 个个> 5.1 A 79 13	44.2 D 103 1 ← 14.8 B 77	( 16 1 1 1 9. 9. 4 19	C i0	19.6 B	16.0 B 307 < ^ > 22.3 C	40.1 D	C 315 29 < ^>> 26.2 C	24.3 C	9.3
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	37.0 D 124 malized ← 13.3 B 49 7	17.9 B 191 1 <b>Cycle Length: 80)</b> 个个> 5.1 A 79 13	44.2 D 103 1 ← 14.8 B 77	( 16 1 1 1 9. 9. 4 19	C i0	19.6 B	16.0 B 307 < ^ >> 22.3 C 87	40.1 D	C 315 29 <↑> 26.2 C 91	24.3 C	9.3
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Kenneth St &amp; Ford Ave (Sig</b> Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	37.0 D 124 malized ← 13.3 B 49 7	17.9 B 191 1 <b>Cycle Length: 80)</b> 个个> 5.1 A 79 13	44.2 D 103 1 ← 14.8 B 77	( 16 1 1 1 9. 9. 4 19	C i0	19.6 B	16.0 B 307 < ^ > 22.3 C	40.1 D	C 315 29 < ^>> 26.2 C	24.3 C	9.3
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S	37.0 D 124 malized ← 13.3 B 49 7 ignalized	17.9 B 191 1 Cycle Length: 80) ↑↑> 5.1 A 79 13 Cycle Length: 75	44.2 D 103 1 ← 14.8 B 77 77	( 16 1 1 1 1 1 9 9 4 19 7 7 19 19 19 19 19 19 19 19 19 19	50 	19.6 B 139	16.0 B 307 < ^ >> 22.3 C 87	40.1 D 105	C 315 29 <↑> 26.2 C 91	24.3 C 160	9.3 A
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic DS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay	37.0 D 124 malized ← 13.3 B 49 7 5 ignalized ← 28.1	17.9 B 191 1 Cycle Length: 80) ↑↑> 5.1 A 79 13 Cycle Length: 75 ↑ $\rightarrow$ 22.5 11.8	44.2 D 103 1 ← 14.8 B 77 77 ( 23.3	( 16 1 9. 9. 4 19 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	50 50 5 5 1 3 7 → 17.8	19.6 B 139	16.0 B 307 <↑> 22.3 C 87	40.1 D 105 	C 315 29 <↑> 26.2 C 91 ↑ 24.2	24.3 C 160 → 11.9	9.3 9.3 A
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic DS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Dolay	37.0 D 124 malized ← 13.3 B 49 7 5 ignalized ← 28.1 C	17.9 B 191 1 Cycle Length: 80) $^{^}$ 5.1 A 79 13 Cycle Length: 75 $^$ $^$ $^$ 22.5 11.8 C B	44.2 D 103 1 ← 14.8 B 77 77 23.3 C	C 16 1 9. 9. 4 19 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Control Contr	19.6 B 139 ← 26.2 C	16.0 B 307 < ^ >> 22.3 C 87 87	40.1 D 105 	C 315 29 < 26.2 C 91	24.3 C 160 → 11.9 B	9.3 9.3 A
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic Dolay SimTraffic 95th Queue	37.0 D 124 malized ← 13.3 B 49 7 5 ignalized ← 28.1	17.9 B 191 1 Cycle Length: 80) $^{^}$ 5.1 A 79 13 Cycle Length: 75 $^$ $^$ 22.5 11.8 C B 261 112	44.2 D 103 1 ← 14.8 B 77 77 ( 23.3	↑ 16 16 16 16 16 16 16 16 16 16	50 50 5 5 1 3 7 → 17.8	19.6 B 139	16.0 B 307 < ^↑> 22.3 C 87 C 87	40.1 D 105 	C 315 29 < 26.2 C 91	24.3 C 160 → 11.9 B 173	9.3 9.3 A
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%)	37.0 D 124 malized ← 13.3 B 49 7 5 ignalized ← 28.1 C	17.9 B 191 1 Cycle Length: 80) $^{^}$ 5.1 A 79 13 Cycle Length: 75 $^$ $^$ $^$ 22.5 11.8 C B	44.2 D 103 1 ← 14.8 B 77 77 23.3 C	C 16 1 9. 9. 4 19 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Control Contr	19.6 B 139 ← 26.2 C	16.0 B 307 < ^ >> 22.3 C 87 87	40.1 D 105 	C 315 29 < 26.2 C 91	24.3 C 160 → 11.9 B 173	9.3 9.3 A
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry	37.0 D 124 malized ← 13.3 B 49 7 7 ignalized ← 28.1 C 127 _	17.9 B 191 1 <b>Cycle Length: 80)</b> $^{^}$ $^>$ 5.1 A 79 13 Cycle Length: 75 $^$ $^>$ 22.5 11.8 C B 261 112 17 Cycle Length: 112 17	44.2 D 103 1 ← 14.8 B 77 77 23.3 C 81	↑ 16 16 16 16 16 16 16 16 16 16	Control Contr	19.6 B 139 ← 26.2 C	16.0 B 307 < ^↑> 22.3 C 87 C 87	40.1 D 105 	C 315 29 < 26.2 C 91	24.3 C 160 → 11.9 B 173	9.3 9.3 A
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%)	37.0 D 124 malized ← 13.3 B 49 7 7 ignalized ← 28.1 C 127 _	17.9 B 191 1 <b>Cycle Length: 80)</b> $^{^}$ $^>$ 5.1 A 79 13 Cycle Length: 75 $^$ $^>$ 22.5 11.8 C B 261 112 17 Cycle Length: 112 17	44.2 D 103 1 ← 14.8 B 77 77 23.3 C 81	↑ 16 16 16 16 16 16 16 16 16 16	Control Contr	19.6 B 139 ← 26.2 C	16.0 B 307 < ^↑> 22.3 C 87 C 87	40.1 D 105 	C 315 29 < 26.2 C 91	24.3 C 160 → 11.9 B 173	9.3 9.3 A
61	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic Delay SimTraffic 95th Queue Queue Block Time (%) Denied Entry	37.0 D 124 malized ← 13.3 B 49 7 7 ignalized ← 28.1 C 127 _	17.9 B 191 1 Cycle Length: 80) ↑↑> 5.1 A 79 13 Cycle Length: 75 ↑ → 22.5 11.8 C B 261 112 17  nalized Cycle Len	44.2 D 103 1 ← 14.8 B 77 77 23.3 C 81	↑ 16 16 1 9. 4 19 7 7 19 7 19 7 19 7 19 7 19 19 7 19 19 7 19 19 19 19 19 19 19 19 19 19	Control Contr	19.6 B 139 ← 26.2 C	16.0 B 307 <^↑> 22.3 C 87	40.1 D 105 	C 315 29 < 26.2 C 91	24.3 C 160 → 11.9 B 173	9.3 A
61 62	SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Kenneth St & Ford Ave (Sig Lanes SimTraffic Delay SimTraffic DS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic Delay SimTraffic P5th Queue Queue Block Time (%) Denied Entry Cleveland Ave & Highland I	37.0 D 124 124 13.3 B 49 7 ignalized ← 28.1 C 127 Pkwy (Signalized	17.9 B 191 1 Cycle Length: 80) $\uparrow \uparrow >$ 5.1 A 79 13 Cycle Length: 75 $\uparrow \rightarrow$ 22.5 11.8 C B 261 112 17  nalized Cycle Length	44.2 D 103 1 ← 14.8 B 77 77 23.3 C 81 gth: 80)	↑ 16 16 1 9. 4 9. 7 7 7 7 7 31.0 C 326 33 N	50 50 5 5 33 7 → 17.8 8 140 140	19.6 B 139 26.2 C C 159	16.0 B 307 < ^↑> 22.3 C 87 C 87	40.1 D 105 	C 315 29 26.2 C 91 ↑ 24.2 C 331 25	24.3 C 160 → 11.9 B 173	9.3 9.3 A

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de	Intersection	E	Eastbound	d	W	/estbound	No	orthbound	Sou	thbound	Over
	SimTraffic 95th Queue	9	2	68	10	1 66	52	120	39	172	
	Queue Block Time (%)	2	8	8	39	9 5		2		5	
	Denied Entry										
75	St Paul Ave & Montreal Av	e (Signaliz	ed Cvc	le Length:	: 80)	1	Ì	I	1	I	1
	Lanes		-	`>	<i>←</i>	个>	←	个个>	←	个个>	
	SimTraffic Delay	23.1		7.9	26.2	19.4	19.2	18.5	15.0	18.9	17.
	SimTraffic LOS	23.1 C		в. 9 В	20.2 C	B	B	B	B	B	B
	SimTraffic 95th Queue	-		ь 64	-	146		<u>в</u> 147		ь 144	D
	· · · · · · · · · · · · · · · · · · ·	59			62		114		72		
	Queue Block Time (%)	1	1	.8	1	12	1	1		1	
	Denied Entry										_
80	Edgcumbe Rd & St Paul Av	-	-	le Length:	105)						
	Lanes	<1		$\rightarrow$		<^^>	$\leftarrow$	$\uparrow\uparrow>$	÷	个个>	
	SimTraffic Delay	34	1.9	23.6		33.5	31.3	10.1	31.1	30.1	24.
	SimTraffic LOS	(	2	С		С	С	В	С	С	C
	SimTraffic 95th Queue	32	28	142		152	273	517	91	238	
	Queue Block Time (%)	2	2	39			16			9	
	Denied Entry										
	Cleveland Ave & Montreal	Ave (Unsi	ignalized)			1		I		1	
	Lanes	Ave (01131		`>	←	个>	1	<^>	-	<^>	
		3.5		.0	4.5	1.9		13.6	-	11.6	л
	SimTraffic Delay										4.
	SimTraffic LOS	A 22		4	A	A		B		B	A
	SimTraffic 95th Queue	22	(	6	28	4		119		68	
	Queue Block Time (%)					1	ļ,	1		1	
	Denied Entry										
L00	Fairview Ave & Montreal A	ve (Signa	lized Cy	cle Lengt	h: 65)						
	Lanes	$\leftarrow$	$\uparrow$	$\rightarrow$	$\leftarrow$	^>	$\leftarrow$	^>	$\leftarrow$	^>	
	SimTraffic Delay	29.8	21.4	17.2	26.3	23.4	26.6	13.7	29.8	19.3	18
	SimTraffic LOS	С	С	В	С	С	С	В	С	В	В
	SimTraffic 95th Queue	58	169	49	63	223	73	245	118	335	
	Queue Block Time (%)		41			16		17		18	
	Denied Entry		1	5						10	
120	Mississippi River Blvd & N	Ford Pam	n (Uncian	alized)							_
.20			h (ousign	alizeuj	1.5	0		^>		•	
	Lanes				<->	-			+	<u>↑</u>	
	SimTraffic Delay				5.7	-		1.1	3.0	0.2	1.
	SimTraffic LOS				A	A		A	А	A	A
	SimTraffic 95th Queue				48				38		
	Queue Block Time (%)										
	Denied Entry										
130	Mississippi River Blvd & S	Ford Ram	o (Unsign	alized)							
	Lanes				<>	0		^>	$\leftarrow$	$\uparrow$	1
	SimTraffic Delay				6.8	-		1.1	2.9	0.2	2.4
	SimTraffic LOS				A	А		A	A	A	A
	SimTraffic 95th Queue				75				21		
	Queue Block Time (%)								~ ~ ~		_
	Denied Entry	hland A.	• /I !=== !=	مانية ما							_
205	Mississippi River Blvd & Bo	oniand Ave	e (Unsign	alized)			ļ	•	<b>.</b>	Ι	
	Lanes				<>	0		<u> </u>	<↑		
	SimTraffic Delay				7.1	-		2.5	0.7		2.
	SimTraffic LOS				A	A		A	A		A
	SimTraffic 95th Queue				38				31		
	Queue Block Time (%)										
	Denied Entry										
215	Mississippi River Blvd & M	ontreal Av	ve (Unsig	nalized)		L		1	1	1	
	Lanes				<>	0		<b>^&gt;</b>	<		
	SimTraffic Delay				7.7	-		1.1	0.9		1.
						-					
	SimTraffic LOS				A (2)	A		A	A		A
	SimTraffic 95th Queue				42				6		
	Ougua Black Time (9/)										
	Queue Block Time (%) Denied Entry						1	1			

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Node	Intersection	Eastbound	Westbour	d	No	orthbound	Sc	outhbound	Overall
	Lanes	<^>	<^>			<^>		<^>	
	SimTraffic Delay	6.0	7.8		7.0		6.1		6.2
	SimTraffic LOS	А	А			А		А	А
	SimTraffic 95th Queue	49	42			51		52	
	Queue Block Time (%)								
	Denied Entry								
500	Cretin Ave & Randolph Ave	(Signalized Cycle Length:	65)						
	Lanes	<^>	<个	$\rightarrow$	$\leftarrow$	^>	$\leftarrow$	^>	
	SimTraffic Delay	29.6	34.2	20.0	12.9	9.0	31.6	8.9	16.3
	SimTraffic LOS	С	С	В	В	А	С	А	В
	SimTraffic 95th Queue	129	243	57	33	218	129	255	
	Queue Block Time (%)		45	38		13	8	1	
	Denied Entry								
501	Cretin Ave & Highland Pkw	y (Unsignalized)							
	Lanes	<个>	<个>			<^>		<^>	
	SimTraffic Delay	13.4	13.5			1.4		1.6	3.1
	SimTraffic LOS	В	В			А		А	A
	SimTraffic 95th Queue	50	74			5		80	
	Queue Block Time (%)								
	Denied Entry								

	Internetica.	Eastbound	Westbound	No	rthbound	Southbo	und .	0
	Intersection		westbound	INO	rthbound	Southbo	una	Overall
305	Woodlawn Ave & Bohland							
	Lanes	<^>	<^>	<^>		<^>		
	SimTraffic Delay	0.3	1.6	5.8		0.2		1.0
	SimTraffic LOS	Α	A	A		A		А
	SimTraffic 95th Queue	9	2	28		33		
	Queue Block Time (%)							
	Denied Entry							
310	, Woodlawn Ave & Village V	/av (Unsignalized)			I			
	Lanes	<^>	<个>	<^>	>	<个>		
	SimTraffic Delay	5.0	2.5	0.2		0		1.8
	SimTraffic LOS						.0	
		A	A	A		A		A
	SimTraffic 95th Queue	27	7	_				
	Queue Block Time (%)							
	Denied Entry							
315	Woodlawn Ave & Montrea	l Ave (Unsignalized)						
	Lanes	<^>	<^>		0			
	SimTraffic Delay	5.0	6.4		-			4.5
	SimTraffic LOS	A	А		А			А
	SimTraffic 95th Queue	33	43			1		
	Queue Block Time (%)					1		
						-		
	Denied Entry					<u> </u>		
401	Mt Curve Blvd & Woodlaw	-			<u> </u>			
	Lanes	0	0	$\leftarrow$	^>	÷	^>	
	SimTraffic Delay	-	-	2.6	0.6	2.7	1.8	2.9
	SimTraffic LOS	А	A	А	А	A	А	А
	SimTraffic 95th Queue			31	2	34	5	
	Queue Block Time (%)							
	Denied Entry							
405	Mt Curve Blvd & Bohland A	vo (Unsignalized)						
405				,	۸.			
	Lanes	<^>	<^>	<del>\</del>	<u></u> ↑>	<del>\</del>	^>	
	SimTraffic Delay	6.2	6.5	1.9	0.3	2.3	0.6	2.2
	SimTraffic LOS	Α	A	A	A	A	A	A
	SimTraffic 95th Queue	41	52	6		19	2	
	Queue Block Time (%)							
	Denied Entry							
410	Mt Curve Blvd & Village Wa	ay (Unsignalized)						
	Lanes	0	0		<^>	<个>		
	SimTraffic Delay	-	_		0.3	0.1		0.6
	SimTraffic LOS	Α	Α		A	A		A
	SimTraffic 95th Queue		A		~	5		~
						J		
	Queue Block Time (%)			_				
	Denied Entry							
415	Mt Curve Blvd & Montreal							
	Lanes	<^>	<^>		<^>	<^>		
	SimTraffic Delay	5.9	5.5		0.2	0.3		3.6
	SimTraffic LOS	Α	А		А	A		Α
	SimTraffic 95th Queue	46	59			11		
	Queue Block Time (%)					1		
	Denied Entry			+				
F 0 2		icentiand)						
502	Cretin Ave & Hillcrest (Uns				•		<b>A</b> :	
	Lanes	0	0	←	<u> </u>	<del>\</del>	<u></u>	
	SimTraffic Delay	-	-	2.3	0.5	3.3	0.9	1.6
	SimTraffic LOS	Α	A	А	A	A	А	Α
	SimTraffic 95th Queue			14	8	24		
	Queue Block Time (%)							
	Denied Entry							
505	Cretin Ave & Bohland Ave	(Insignalized)			1			
202	Lanes	<个>	<个>	←	^>	4	^>	
		512	S12		.1.>	$\leftarrow$	12	
						2.4	~ 4	4 0
	SimTraffic Delay SimTraffic LOS	9.5 A	8.0 A	2.9 A	0.6 A	3.1 A	0.4 A	1.6 A

Node	Intersection	E	astbound	Westbound	Nort	hbound	Sout	hbound	Overall
	SimTraffic 95th Queue		50	55	36		22	6	
	Queue Block Time (%)								
	Denied Entry								
	Cretin Ave & Village Way (	Incignaliz	ed)						
510	Lanes		0	0	<del>\</del>	^>	←	^>	
	SimTraffic Delay		-	-	2.6	0.6	2.8	0.5	1.9
	SimTraffic LOS								
			Α	A	A	A	A	А	A
	SimTraffic 95th Queue				16		28		
	Queue Block Time (%)								
	Denied Entry								
515	Montreal Ave & Cretin Ave		-						
	Lanes	$\leftarrow$	^>	个>			←	0	
	SimTraffic Delay	5.0	0.9	2.4			7.9	-	3.4
	SimTraffic LOS	А	A	A			Α	A	A
	SimTraffic 95th Queue	27		6			81		
	Queue Block Time (%)								
	Denied Entry								
605	Ranger Way & Bohland Ave	e (Unsigna	alized)						
	Lanes		<u>^&gt;</u>	<个					
	SimTraffic Delay		0.4	0.5					0.4
	SimTraffic LOS		A	A					A
	SimTraffic 95th Queue								
	Queue Block Time (%)								
	Denied Entry								
	•	(11	P= 1)						
610	Ranger Way & Village Way	(Unsigna							
	Lanes		<^>	<^>					
	SimTraffic Delay		3.1	5.0					4.2
	SimTraffic LOS		A	A					A
	SimTraffic 95th Queue		42	52					
	Queue Block Time (%)								
	Denied Entry								
705	Finn St & Bohland Ave (All-	way stop							
	Lanes		0						
	SimTraffic Delay		-						0.7
	SimTraffic LOS		А						А
	SimTraffic 95th Queue								
	Queue Block Time (%)								
	Denied Entry								
	Finn St & Village Way (Unsi	gnalized)							
. 20	Lanes	<b>6</b>	0		<			^>	
	SimTraffic Delay	4.7	-		0.2			0.1	2.5
	SimTraffic LOS	4.7 A	A		A			A	A
	SimTraffic 95th Queue	47	~		3			~	
	Queue Block Time (%)	47			3				_
					-				
	Denied Entry	alar - l'-	1)						
/11	Finn St & Saunders Ave (Ur	isignalized	<b>J</b>			I		<b>A</b>	
	Lanes				<^>			× <b>↑&gt;</b>	
	SimTraffic Delay				0.2			0.2	0.3
	SimTraffic LOS				A			A	Α
	SimTraffic 95th Queue				8				
	Queue Block Time (%)								
	Denied Entry								
715	Montreal Ave & Finn St (Ur	nsignalize							
	Lanes		$\uparrow$	<b>^&gt;</b>			<>	0	
			0.7	0.8			8.3	-	1.2
	SimTraffic Delay				1		1 .		•
	Sim Traffic Delay SimTraffic LOS		A	A			A	A	A
	SimTraffic LOS		A	Α				A	A
	SimTraffic LOS SimTraffic 95th Queue		A	A			A 52	A	A
	SimTraffic LOS		A	A				A	A

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Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes			<^>	<^>	
	SimTraffic Delay			1.8	0.1	1.0
	SimTraffic LOS			A	A	А
	SimTraffic 95th Queue					
	Queue Block Time (%)					
	Denied Entry					

_	Intersection		stbound		W	estboun	d	No	orthbound	1	Sc	outhbound		Over
10	S Ford Ramp/N Ford Ramp	& Ford Av		-										
	Lanes		$\uparrow$	^>		$\uparrow$	^>			$\rightarrow$			$\rightarrow$	
	SimTraffic Delay		3	9		0.	7			8.0			9.6	3.0
	SimTraffic LOS		ŀ	A		A	A			А			А	A
-	SimTraffic 95th Queue		ç			5				51			106	
-	Queue Block Time (%)		-	, 		-	, 			51			100	
-	Denied Entry													
_	•	(Unational)												
20	Ford Ave & Woodlawn Ave		-			•	•					-		
	Lanes	$\leftarrow$	$\uparrow\uparrow$			$\uparrow$					<>	0		
	SimTraffic Delay	8.1	0.8			1.	.3				33.4	-		1.
	SimTraffic LOS	A	Α			A	4				D	В		A
	SimTraffic 95th Queue	42				e	5				65			
	Queue Block Time (%)	4												
-	Denied Entry													
_	Mt Curve Blvd & Ford Ave	(Signalized	Cycle	length 1	20)									
-	Lanes		-	^>	∠0, ←	<u>۸</u>	^>	←	<b>↑</b> >		$\leftarrow$	个>		
-														10
-	SimTraffic Delay	20.3	8		18.4	7.		50.4	48.	U	45.3	50.4	•	12
-	SimTraffic LOS	C		4	В	A		D	D		D	D		В
-	SimTraffic 95th Queue	79		00	99	17		156	17:	1	117	73		
	Queue Block Time (%)		8	3	3	8	3	1	1		2	25		
	Denied Entry													
	Cretin Ave & Ford Ave (Sig	nalized C	ycle Len	gth: 120)										
÷	Lanes	$\leftarrow$	<u>个</u>		$\leftarrow$	$\uparrow$	^>	$\leftarrow$	<u></u>	>	$\leftarrow$	^>		1
- F	SimTraffic Delay	56.1		.8	32.6	21		35.7	43.		34.3	59.9		30
-	SimTraffic LOS	E		2	C			D	43. D		C 54.5	E		30 C
-	SimTraffic 95th Queue	253	29		123	24				-		425		
_					123			200	200	J	212	425		
	Queue Block Time (%)	18	4	2		5	)	3	2					
	Denied Entry													
50	Finn St & Ford Ave (Signali	zed Cycle	Length	120)										
	Lanes	$\leftarrow$	$\uparrow$	^>	$\leftarrow$	$\uparrow$	^>	$\leftarrow$	<u>ተ</u> >	>	<′	<b>↑</b>	$\rightarrow$	
	SimTraffic Delay	21.8	15	.0	18.7	12	.4	44.5	36.	9	40	.4	11.1	17
-	SimTraffic LOS	С	E	3	В	E	3	D	D		C	)	В	В
-	SimTraffic 95th Queue	74	23	39	148	23	36	196	123	3	15	52	104	
-	Queue Block Time (%)	5		9	110			150		-	1		1	
-	Denied Entry	5		5			L				1	5	1	
_		(Ciana alia ad	Cuala	المسمعة الم	20)									
50	Cleveland Ave & Ford Ave		-	-		•	•		•			•		
	Lanes	÷	$\uparrow$		<del>\</del>	$\uparrow$		$\leftarrow$	<b>†</b> >		$\leftarrow$	Ϋ́	$\rightarrow$	
	SimTraffic Delay	46.1	42	.8	48.2	39	.1	36.9	43.	6	52.1	44.0	47.3	43
	SimTraffic LOS	D		)	D	0		D	D		D	D	D	D
ſ	SimTraffic 95th Queue	294	44	17	197	32	22	278	550	) T	164	545	204	
	Queue Block Time (%)	2	2	8	1	2	0		2		2	45	3	1
	Denied Entry													
	Kenneth St & Ford Ave (Sig	nalized (	vcle Ler	gth: 60)								1		
₅ 1	Lanes	$\leftarrow$		∱>	$\leftarrow$	<u> </u>	^>		<个>			<个>		
51	LUIICJ				26.6	13			20.1			17.3		17
		10.0	17						20.1 C					13
	SimTraffic Delay	19.6	12			-						В		В
	SimTraffic Delay SimTraffic LOS	В	E	3	С	E								I
-	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue	B 67	E 21	3 1.8		30	)4		106			90		
-	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	В	E 21	3	С		)4					90		
-	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue	B 67	E 21	3 1.8	С	30	)4					90		
-	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	B 67 8	E 21 3	3 18 0	C 76	30	)4					90		
52	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S	B 67 8 ignalized -	E 2: 3 • <b>Cycle L</b>	3 18 0 ength: 12	C 76	30	)4 4	←	106		←		→	
52	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes	B 67 8 ignalized - ←	E 2: 3 • <b>Cycle L</b> ↑	3 18 0 ength: 120 →	C 76 0) ←	30 1 个	)4 4 →	<u>←</u> 45.8	106		← 43.1	$\uparrow$	→ 40.5	52
52	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Fairview Ave &amp; Ford Ave (S</b> Lanes SimTraffic Delay	B 67 8 ignalized - ← 89.5	6 22 3 • <b>Cycle L</b> ↑ 43.7	3 18 0 ength: 120 → 30.0	C 76 0) ← 34.6	30 1 ↑ 55.6	04 4 → 36.0	45.8	106	2	43.1	↑ 50.8	40.5	
52	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS	B 67 8 iignalized - ← 89.5 F	E 2: 3 • <b>Cycle L</b> ↑ 43.7 D	3 18 0 ength: 120 → 30.0 C	C 76 0) ← 34.6 C	30 1 ↑ 55.6 E	04 4 → 36.0 D	45.8 D	106	2	43.1 D	↑ 50.8 D	40.5 D	
52	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue	B 67 8 iignalized - ← 89.5 F 347	E 2: 3 - Cycle L ↑ 43.7 D 622	3 18 0 ength: 120 → 30.0	C 76 0) ← 34.6	30 1 ↑ 55.6 E 588	04 4 → 36.0	45.8	106	2	43.1	↑ 50.8 D 819	40.5 D 197	D
52	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Fairview Ave &amp; Ford Ave (S</b> Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	B 67 8 iignalized - ← 89.5 F	E 2: 3 • <b>Cycle L</b> ↑ 43.7 D	3 18 0 ength: 120 → 30.0 C	C 76 0) ← 34.6 C	30 1 ↑ 55.6 E	04 4 → 36.0 D	45.8 D	106	2	43.1 D	↑ 50.8 D	40.5 D	D
52	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	B 67 8 iignalized - ← 89.5 F 347 11	E 22 3 • Cycle L ↑ 43.7 D 622 44	3 18 0 ength: 12( → 30.0 C 136	C 76 0) ← 34.6 C 235	30 1 ↑ 55.6 E 588	04 4 → 36.0 D	45.8 D	106	2	43.1 D	↑ 50.8 D 819	40.5 D 197	D
52	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Fairview Ave &amp; Ford Ave (S</b> Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%)	B 67 8 iignalized - ← 89.5 F 347 11	E 22 3 • Cycle L ↑ 43.7 D 622 44	3 18 0 ength: 12( → 30.0 C 136	C 76 0) ← 34.6 C 235	30 1 ↑ 55.6 E 588	04 4 → 36.0 D	45.8 D	106	2	43.1 D	↑ 50.8 D 819	40.5 D 197	D
52	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry Fairview Ave & Ford Ave (S Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry	B 67 8 iignalized - ← 89.5 F 347 11	E 22 3 • Cycle L ↑ 43.7 D 622 44 alized	3 18 0 ength: 12( → 30.0 C 136	C 76 0) ← 34.6 C 235	30 1 55.6 E 588 54	04 4 → 36.0 D	45.8 D	106	2	43.1 D 314	↑ 50.8 D 819	40.5 D 197 1	D
62	SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Fairview Ave &amp; Ford Ave (S</b> Lanes SimTraffic Delay SimTraffic LOS SimTraffic 95th Queue Queue Block Time (%) Denied Entry <b>Cleveland Ave &amp; Highland</b>	B 67 8 ignalized - ← 89.5 F 347 11 Pkwy (Sign	E 22 3 • Cycle L ↑ 43.7 D 622 44 alized	3 18 0 ength: 12 → 30.0 C 136 Cycle Len	C 76 76 0) ← 34.6 C 235 gth: 120)	30 1 55.6 E 588 54	04 4 → 36.0 D 134	45.8 D 282	106	2	43.1 D	↑ 50.8 D 819 46	40.5 D 197 1	D

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	Intersection	E	astbound	d	W	estbound		Northbound		thbound	Over
	SimTraffic 95th Queue	14	14	71	16	8 7	1 64	184	78	230	
	Queue Block Time (%)	4	4	14	52	! 1	1	6		10	
	Denied Entry										
75	St Paul Ave & Montreal Av	ve (Signaliz	ed Cvc	le Length:	: 80)	1		ı I		1	
	Lanes	←	-	`>	$\leftarrow$	^>	←	个个>	←	<u> </u>	
	SimTraffic Delay	26.8	19		28.0	21.3	20.6		15.9	20.0	18.
	SimTraffic LOS	20.0 C		3.1 3	20.0 C	C	C	B 18.4	B	B	B
	SimTraffic 95th Queue	37		76	72	186	-		89	149	
		37					135		89		
	Queue Block Time (%)		2	0	2	18	4	2 1		1	
	Denied Entry										
80	Edgcumbe Rd & St Paul Av		-								
	Lanes	<1		$\rightarrow$		<^^>	←	<u>↑</u> ↑>	$\leftarrow$	个个>	
	SimTraffic Delay	41		22.5		37.5	27.7	11.0	34.5	32.9	24
	SimTraffic LOS	0		С		D	С	В	С	С	C
	SimTraffic 95th Queue	28	33	142		148	277	444	110	233	
	Queue Block Time (%)	1	2	35			16			9	
	Denied Entry										
90	Cleveland Ave & Montreal	Ave (Unsi	gnalized)								
	Lanes	÷		`>	$\leftarrow$	^>		<^>		<^>	
	SimTraffic Delay	3.6		.1	5.9	2.3		16.6		17.4	6.
	SimTraffic LOS	A			A	A		C		C	A
	SimTraffic 95th Queue	25		1	51	2		120		107	
	Queue Block Time (%)	25	1	-	51	۷		120			
	Denied Entry										_
	Fairview Ave & Montreal A		lizad C	ala Larrat	h. 70)						
00						•	,	•		•	
	Lanes	<i>←</i>	1	$\rightarrow$	$\leftarrow$	<u> </u>	←	<u></u> >	←	<u> </u>	
	SimTraffic Delay	34.2	16.4	13.3	26.0	21.6	33.7		44.1	23.5	21
	SimTraffic LOS	C	В	В	С	C	С	В	D	С	C
	SimTraffic 95th Queue	51	147	39	98	236	95		139	449	
	Queue Block Time (%)		39	2		22		25	2	22	
	Denied Entry										
.20	Mississippi River Blvd & N	Ford Ram	p (Unsign	alized)							
	Lanes				<>	0		^>	←	$\uparrow$	
	SimTraffic Delay				8.3	-		1.0	3.0	0.6	1.
	SimTraffic LOS				А	А		Α	А	А	А
	SimTraffic 95th Queue				52			5	52		
	Queue Block Time (%)								02		
	Denied Entry										
		Ford Dom	(Ilmaian	ali-ad)							
30	Mississippi River Blvd & S	Ford Kamp	o (Unsign	alized)		0		۸.		•	
	Lanes				<->	0		<u> </u>	←	<u>↑</u>	-
	SimTraffic Delay				8.5	-		1.0	2.6	0.5	1.
	SimTraffic LOS				A	А		A	A	A	A
	SimTraffic 95th Queue				72			2	26		
	Queue Block Time (%)										
	Denied Entry										
05	Mississippi River Blvd & Bo	ohland Ave	e (Unsign	alized)							
	Lanes				<>	0		个>	<个		
	SimTraffic Delay				6.6	-		1.9	0.7		1.
	SimTraffic LOS				А	А		Α	Α		А
	SimTraffic 95th Queue				42				23		
	Queue Block Time (%)				.=						
	Denied Entry										
15	Mississippi River Blvd & M	Intreal A	o (Lincia	(hazilen						I	
-13			e (onsigi	ianzeu)	4.	0		<u>۸</u> ۰			_
	Lanes				<>	0		<u> </u>	<↑		-
	SimTraffic Delay				8.8	-		0.9	2.2		1.
	SimTraffic LOS				A	А		A	A		A
					24			1	26		1
	SimTraffic 95th Queue				34				20		
	SimTraffic 95th Queue Queue Block Time (%)				34						

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Node	Intersection	Eastbound	Westboun	d	N	orthbound	Sc	outhbound	Overall
	Lanes	<个>	<^>			<^>		<^>	
	SimTraffic Delay	6.3	7.0			7.3		6.4	6.3
	SimTraffic LOS	А	A			А		А	А
	SimTraffic 95th Queue	53	48			58		55	
	Queue Block Time (%)								
	Denied Entry								
500	Cretin Ave & Randolph Ave	(Signalized Cycle Lengt	า: 60)						
	Lanes	<^>	<个	$\rightarrow$	$\leftarrow$	^>	÷	^>	
	SimTraffic Delay	24.9	28.5	15.4	20.4	9.5	32.9	14.4	16.8
	SimTraffic LOS	С	С	В	С	А	С	В	В
	SimTraffic 95th Queue	148	181	60	25	221	155	431	
	Queue Block Time (%)		48	18		13	8	9	
	Denied Entry								
501	Cretin Ave & Highland Pkw	y (Unsignalized)							
	Lanes	<个>	<^>			<个>		<^>	
	SimTraffic Delay	26.3	26.8			1.9		3.3	5.3
	SimTraffic LOS	D	D			А		А	А
	SimTraffic 95th Queue	68	249			37		142	
	Queue Block Time (%)								
	Denied Entry								

	Intersection	Eastbound	Westbound	Northbound	Southbound	Overa
305	Woodlawn Ave & Bohland	Ave (Unsignalized)				
	Lanes	<个>	<^>	<^>	<^>	
	SimTraffic Delay	0.2	1.2	4.6	0.9	1.7
	SimTraffic LOS	А	A	A	A	А
	SimTraffic 95th Queue			16	46	
	Queue Block Time (%)					
	Denied Entry					
210	Woodlawn Ave & Village W	Vay (Unsignalized)				_
510				(A)		
	Lanes	<^>	<^>	<^>	<^>	
	SimTraffic Delay	5.3	2.1	0.2	1.5	2.4
	SimTraffic LOS	A	A	A	A	A
	SimTraffic 95th Queue	26	18			
	Queue Block Time (%)					
	Denied Entry					
315	Woodlawn Ave & Montrea	l Ave (Unsignalized)				
	Lanes	<个>	<个>	0		
	SimTraffic Delay	4.8	5.7	-		4.3
	SimTraffic LOS	4.8 A	A	A		4.3 A
						A
	SimTraffic 95th Queue	39	43			_
	Queue Block Time (%)					
	Denied Entry					
01	Mt Curve Blvd & Woodlaw	n Ave (Unsignalized)				
	Lanes	0	0	← ↑>	← ↑>	
	SimTraffic Delay	-	-	2.3 0.9	2.9 1.5	4.3
	SimTraffic LOS	А	Α	A A	A A	A
	SimTraffic 95th Queue			24 9	35	
	Queue Block Time (%)			24 5		
	Denied Entry					
105	Mt Curve Blvd & Bohland A					
	Lanes	<^>	<个>	← ↑>	$\leftarrow$ $\uparrow$ >	
	SimTraffic Delay	6.8	3.8	1.9 0.2	2.2 0.5	2.0
	SimTraffic LOS	А	Α	A A	A A	A
	SimTraffic 95th Queue	49	46	7 1	20 2	
	Queue Block Time (%)					
	Denied Entry					
10						
10	Mt Curve Blvd & Village Wa					
	Lanes	0	0	<^>	<^>	
	SimTraffic Delay	-	-	0.3	0.2	0.6
	SimTraffic LOS	А	А	A	А	A
	SimTraffic 95th Queue			6	7	
	Queue Block Time (%)					
	Denied Entry					
15	Mt Curve Blvd & Montreal	Ave (Unsignalized)				
	Lanes	<	<^>	<^>	<个>	-
	SimTraffic Delay	6.1	4.4	0.1	0.7	-
	•					3.4
	SimTraffic LOS	A	Α	A	A	A
	SimTraffic 95th Queue	49	52		14	
	Queue Block Time (%)					
	Denied Entry					
02	Cretin Ave & Hillcrest (Uns	ignalized)				
	Lanes	0	0	← ^>	← ↑>	
	SimTraffic Delay	-	-	3.1 0.8	3.8 1.3	2.3
		- A				
	SimTraffic LOS	A	A	A A	A A	A
	SimTraffic 95th Queue			29 6	44	
	Queue Block Time (%)					
	Denied Entry					
505	Denied Entry	(Unsignalized)				
05	Denied Entry Cretin Ave & Bohland Ave		<个>	← ^>	← ^>	
;05	Denied Entry	(Unsignalized) 7.9	< <u>^&gt;</u> 10.9	←         ↑>           3.2         0.6	←         ↑>           3.0         0.6	1.7

ode Intersectio	n	E	astbound	Westbound	N	orthbound	Sout	hbound	Overal
SimTraffic 9			53	52	40		36	2	
Queue Bloc									
Denied Ent									
	, & Village Way (U	Insignaliz	ed)						
Lanes		. 0 .	0	0	←	个>	←	^>	
SimTraffic I	Delav		-	-	2.8	0.6	3.5	0.7	1.7
SimTraffic L			A	A	A	A	A	A	A
SimTraffic 9			~	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	21		45	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	~
Queue Bloc					21		45		
Denied Entr									
		/11========	li-od)						
	ve & Cretin Ave			<b>A</b> .				-	
Lanes		<i>←</i>	<u> </u>	<u>↑&gt;</u>			<del>\</del>	0	
SimTraffic D		5.9	0.8	2.6			8.5	-	3.5
SimTraffic L		Α	A	A			A	А	A
SimTraffic 9	-	29		7			88		
Queue Bloc							1	I	
Denied Ent									
605 Ranger Wa	y & Bohland Ave	e (Unsigna	lized)						
Lanes			^>	<个					
SimTraffic D	Delay		0.5	0.4					0.5
SimTraffic L	-		A	A					А
SimTraffic 9	95th Queue								
Queue Bloc	k Time (%)								
Denied Ent									
	y & Village Way	(Unsignal	ized)						
Lanes	y a thinge thuy	(ensignal	<^>	<^>					
SimTraffic I	)elav		2.4	3.8					2.8
SimTraffic L			A	A					2.0 A
SimTraffic 9			47	48					A
	-		47	40					
Queue Bloc									
Denied Ent									
	ohland Ave (All-	way stop							
Lanes			0						
SimTraffic D	-		-						0.8
SimTraffic L			A						A
SimTraffic 9									
Queue Bloc	k Time (%)								
Denied Ent									
710 Finn St & V	illage Way (Unsi	gnalized)							
Lanes		<>	0		<	$\uparrow$		^>	
SimTraffic D	Delay	6.4	-		0	.3		0.2	2.1
SimTraffic L		А	А		/	4		А	А
SimTraffic 9	95th Queue	40			1	.4			
Queue Bloc		_							
Denied Ent									
	aunders Ave (Un	signalized	4)						
Lanes		JIGHUILZER	~) 			^>		<个>	
SimTraffic I	)elav					.2	+	0.2	0.3
Sim Traffic L									
						4		A	A
SimTraffic 9							+		
Queue Bloc							+		_
Denied Ent		• •	<u> </u>		<b> </b>				
	ve & Finn St (Un					<u> </u>			
Lanes		$\leftarrow$	↑	<>			<>	0	
SimTraffic D		5.9	0.7	1.2			9.6	-	1.2
SimTraffic L	.OS	А	A	A			А	А	А
SimTraffic 9	95th Queue	9		2			48		
	k Time (%)								
Queue bioe				1 1	1	1	1		
Denied Ent	ry								

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Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes			<^>	<^>	
	SimTraffic Delay			1.7	0.2	0.7
	SimTraffic LOS			A	A	А
	SimTraffic 95th Queue					
	Queue Block Time (%)					
	Denied Entry					

	Intersection		Eastbound		W	estbound		N	orthboun	d	Sc	outhbound	1	Over
10	S Ford Ramp/N Ford Ramp	& Ford A		-										
	Lanes		$\uparrow$	<b>`&gt;</b>		$\uparrow\uparrow$	·>			$\rightarrow$			$\rightarrow$	
	SimTraffic Delay		3.	0		0.5	<b>;</b>			5.5			6.3	2.1
	SimTraffic LOS		А	\ \		А				А			А	A
	SimTraffic 95th Queue		14	4		5				50			66	
	Queue Block Time (%)			-		-								
	Denied Entry													
	-	/11	1 1)											
20	Ford Ave & Woodlawn Ave					• •								
	Lanes	÷	$\uparrow\uparrow$			$\uparrow\uparrow$						0		
	SimTraffic Delay	5.7	0.6			1.0	)					-		0.
	SimTraffic LOS	A	A			A						A		A
	SimTraffic 95th Queue	35				2								
	Queue Block Time (%)	2												
	Denied Entry													
	Mt Curve Blvd & Ford Ave	Signalize	d Cycle	Length: 8	0)									
	Lanes	← ←	<u>↑</u>	-	←	$\uparrow\uparrow$	`>	$\leftarrow$	$\uparrow$	>	$\leftarrow$	<u>ተ</u> ፡	>	
	SimTraffic Delay	14.4			21.8	6.9		30.4	27		34.4	30.		9.
	-													-
	SimTraffic LOS	B	Α		C	A		C	(		C	C		A
	SimTraffic 95th Queue	53	17		105	158		101	10		63	69		
	Queue Block Time (%)		4		6	4		2	2		2	11		
	Denied Entry													
40	Cretin Ave & Ford Ave (Sig	nalized	Cycle Leng	gth: 80)										
	Lanes	$\leftarrow$	$\uparrow$	<b>`&gt;</b>	$\leftarrow$	$\uparrow\uparrow$	·>	$\leftarrow$	$\uparrow$	>	$\leftarrow$	<u>ተ</u> >	>	
	SimTraffic Delay	20.0	9.	4	30.6	20.	5	30.2	21	.3	28.7	21.	7	17
	SimTraffic LOS	В	A		C	C		С	C		С	C		В
	SimTraffic 95th Queue	136			74	233		172	14		133	154		
	Queue Block Time (%)	130	15	5	/4	3		172	5		155	15.	+	
						3		15	3	)				
	Denied Entry													
50	Finn St & Ford Ave (Signaliz											. 1		
	Lanes	$\leftarrow$	$\uparrow$	<b>`&gt;</b>	$\leftarrow$	$\uparrow\uparrow$	·>	$\leftarrow$	C	)	<'		$\rightarrow$	
	SimTraffic Delay	19.2	13	.6	12.0	9.0	)	30.4	-		24	.4	6.0	12
	SimTraffic LOS	В	B	5	В	A		С	A	۱	C		А	В
	SimTraffic 95th Queue	63	19	1	74	156	5	124			73	3	54	
	Queue Block Time (%)	2	1	5							2			
	Denied Entry													
60	Cleveland Ave & Ford Ave	Signalize	d Cvcle	Length: 8	0)									
	Lanes	←	<u> </u>	-	,	$\uparrow\uparrow$		$\leftarrow$	$\uparrow$	`	÷	$\uparrow$	$\rightarrow$	
	SimTraffic Delay	45.7			59.6	19.		19.4	16		44.5	28.7	25.7	23
										-				
	SimTraffic LOS	D	B		E	B		B	E		D	C	C	C
	SimTraffic 95th Queue	150			138	155		140	30	8	100	330	163	
	Queue Block Time (%)	1	1		4	1						29		
	Denied Entry													
61	Kenneth St & Ford Ave (Sig	nalized	Cycle Len	gth: 80)										
	Lanes	$\leftarrow$	$\uparrow$	<b>`&gt;</b>	$\leftarrow$	$\uparrow\uparrow$	·>		<^>			<^>		
	SimTraffic Delay	11.8	5.	3	15.0	9.3	\$		24.6			23.8		9.
	SimTraffic LOS	B	A		B	A			C			C		A
	SimTraffic 95th Queue	47	8		74	204			82			83		
	Queue Block Time (%)				, 4	8			02					
		5	1	•		°		I						
~~	Denied Entry						ł							<del> </del>
62	Fairview Ave & Ford Ave (S	-		-										
	Lanes	$\leftarrow$	$\uparrow$	$\rightarrow$	$\leftarrow$	$\uparrow$	$\rightarrow$	$\leftarrow$	$\uparrow$		$\leftarrow$	$\uparrow$	$\rightarrow$	
	SimTraffic Delay	21.3	13.4	8.2	24.2	23.6	14.9	78.5	47	.8	107.8	30.3	15.5	30
	SimTraffic LOS	С	В	А	С	С	В	E	C	)	F	С	В	C
	SimTraffic 95th Queue	115	201	74	97	292	124	253	56	57	113	435	182	
	Queue Block Time (%)		8			24			2			31		
	Denied Entry													
	Cleveland Ave & Highland	Dkww /Sia	nalized -	Cycle Len	oth · 201									<u> </u>
	eleverana Ave & nigiliallu				<u>gtii: 80)</u> <个	<u> </u>	$\rightarrow$	$\leftarrow$	$\uparrow$		$\leftarrow$	<b>个</b> >		
05	lanes	-								/	~	1.5		
	Lanes	<												~
	Lanes SimTraffic Delay SimTraffic LOS	34	1.5 C	8.5 A	33. C	0	ј 11.2 В	9.8 A	6. A	1	16.3 B	6.8 A	3	9.3 A

Node	Intersection	E	astbound	d	W	estbound	N	orthbound	Sou	thbound	Overall
	SimTraffic 95th Queue	82	2	67	11	3 63	51	125	44	156	
	Queue Block Time (%)	25	5	8	39	) 4		2		5	
	Denied Entry										
	St Paul Ave & Montreal Av	e (Signaliz	ed Cyc	le Length:	80)	1		I		1	
	Lanes	$\leftarrow$		`>	+	^>	<del>(</del>	个个>	←	个个>	
	SimTraffic Delay	23.4	18	3.5	29.8	19.8	21.4	18.0	14.3	20.0	17.9
	SimTraffic LOS	C		3	С	В	С	В	В	B	В
	SimTraffic 95th Queue	58	17	73	78	167	143	148	63	147	
	Queue Block Time (%)			9	2	14	2	1		1	
	Denied Entry			-							
	Edgcumbe Rd & St Paul Av	e (Signaliz	ed Cvcl	e Length:	105)						
	Lanes	<		→		<^^>	<del>~</del>	个个>	<del>(</del>	个个>	
	SimTraffic Delay	35		22.8		33.0	27.2	10.1	33.4	29.1	23.7
	SimTraffic LOS	D		C		C	C	В	C	C	C
	SimTraffic 95th Queue	32		139		139	275	376	112	231	-
	Queue Block Time (%)	4		39		100	14	570	112	9	
	Denied Entry		,	55			14				
	Cleveland Ave & Montreal	Ave (Linsi	analized)								
	Lanes	Ave (013)		`>	$\leftarrow$	^>		<个>		<个>	
	SimTraffic Delay	3.6		.0	5.0	1.9		15.8		12.6	5.1
	SimTraffic LOS	A 3.0		.0 A	A.	1.9 A	_	13.8 C	_	B	A 3.1
	SimTraffic 95th Queue	A 21		- -	31	3	_	134	_	Б 75	~
	Queue Block Time (%)	21		,	21	3		104	_		
	Denied Entry										
	Fairview Ave & Montreal A	vo (Signal	ized O	ala Lonat	h: 65)						
100	Lanes	ve (Signal ←	12eu Cy ↑	$\rightarrow$	⊷ (11. 65)	^>	←	^>	<del>\</del>	^>	
	SimTraffic Delay	34.1	20.5		27.1	22.8	26.2	14.5	31.2	18.3	18.6
	SimTraffic LOS	54.1 C	20.5 C	14.0 B	27.1 C	22.8 C	20.2 C	14.5 B	C 51.2	B	18.0 B
	SimTraffic 95th Queue	61	172	в 48	ر 77	238	76	261	111	315	В
		01		40	//	17	70	17	111	17	
	Queue Block Time (%)		38	3		1/		1/		1/	
	Denied Entry	Faud Dama	. /	ali-ad)							
	Mississippi River Blvd & N	Ford Kamp	p (Unsign	alized)	1.	0		<u>۸</u>	1	•	
	Lanes				<->	0		<u> </u>	←	<u>↑</u>	1.2
	SimTraffic Delay				5.8	-		1.1	3.2	0.2	1.3
	SimTraffic LOS				A	А		A	A	A	A
	SimTraffic 95th Queue				46				39		
	Queue Block Time (%)										
	Denied Entry										
130	Mississippi River Blvd & S I	-ord Ramp	) (Unsign	alized)				•		•	
	Lanes				<>	0		<u> </u>	←	<u>↑</u>	
	SimTraffic Delay				7.0	-		1.1	2.5	0.2	2.4
	SimTraffic LOS				A	A		А	A	A	A
	SimTraffic 95th Queue				73		_		21		
	Queue Block Time (%)					1					
	Denied Entry										
	Mississippi River Blvd & Bo	onland Ave	e (Unsign	alized)				•	- · · ·		
	Lanes				<>	0		<u> </u>	<↑		
	SimTraffic Delay				6.6	-		2.5	0.7		2.0
	SimTraffic LOS				A	A		A	A		A
	SimTraffic 95th Queue				39				33		
	Queue Block Time (%)							I			
	Denied Entry										
	Mississippi River Blvd & M	ontreal Av	ve (Unsig	nalized)						1	
	Lanes				<>	0		^>	<个		
	SimTraffic Delay				7.2	-		1.2	1.0		1.3
	SimTraffic LOS				А	А		А	А		А
	SimTraffic 95th Queue				37				18		
	Queue Block Time (%)										
		1									
	Denied Entry										

Node	Intersection	Eastbound	Westbour	d	No	orthbound	So	uthbound	Overall
	Lanes	<^>	<^>			<^>		<^>	
	SimTraffic Delay	5.9	7.8			7.0		6.2	6.2
	SimTraffic LOS	А	А			А		А	А
	SimTraffic 95th Queue	47	42			53		52	
	Queue Block Time (%)								
	Denied Entry								
500	Cretin Ave & Randolph Ave	e (Signalized Cycle Length	: 65)		÷				
	Lanes	<^>	<个	$\rightarrow$	$\leftarrow$	^>	$\leftarrow$	^>	
	SimTraffic Delay	28.5	28.1	17.2	13.3	8.5	22.8	6.9	13.7
	SimTraffic LOS	С	С	В	В	А	С	А	В
	SimTraffic 95th Queue	126	216	58	35	204	111	147	
	Queue Block Time (%)		39	35		12	3	1	
	Denied Entry								
501	Cretin Ave & Highland Pkw	vy (Unsignalized)							
	Lanes	<个>	<^>			<^>		<^>	
	SimTraffic Delay	12.8	15.1			1.4		1.6	3.0
	SimTraffic LOS	В	С			А		А	Α
	SimTraffic 95th Queue	47	78			2		77	
	Queue Block Time (%)								
	Denied Entry								

#### 70: Cleveland Ave & St Paul Ave & Bohland Ave Performance by approach

Approach	WB NB S	B All
Denied Del/Veh (s)	0.2 0.0 0	.0 0.0
Total Del/Veh (s)	6.5 0.8 1	5 16

#### 71: St Paul Ave Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	13.3	2.7	0.2	2.7

#### 72: Cleveland Ave & St Paul Ave Performance by approach

Approach	B SB	All
Denied Del/Veh (s)	.0 0.0 (	0.0
Total Del/Veh (s)	9 06 0	2.8

### 73: Cleveland Ave & Inner Drive Performance by approach

Approach	EB SB	All
Denied Del/Veh (s)	0.1 0.0	0.0
Total Del/Veh (s)	2.8 0.1	0.7

#### 140: 46th Ave & E 46th St/Ford Pkwy Performance by approach

Approach	EB	WB	NB	SB	SW	All
Denied Del/Veh (s)	0.4	0.0	0.0	1.0	0.1	0.2
Total Del/Veh (s)	15.5	11.3	7.7	55.9	71.7	14.4

#### **Total Zone Performance**

Denied Del/Veh (s)	0.4	
Total Del/Veh (s)	113.0	

#### Intersection: 70: Cleveland Ave & St Paul Ave & Bohland Ave

Movement	WB	NB	NB	SB
Directions Served	R	Т	TR	Т
Maximum Queue (ft)	81	6	32	8
Average Queue (ft)	32	0	1	0
95th Queue (ft)	63	6	14	5
Link Distance (ft)	762	168	168	556
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

### Intersection: 71: St Paul Ave

Movement	EB
Directions Served	LR
Maximum Queue (ft)	57
Average Queue (ft)	41
95th Queue (ft)	61
Link Distance (ft)	51
Upstream Blk Time (%)	10
Queuing Penalty (veh)	12
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

#### Intersection: 72: Cleveland Ave & St Paul Ave

Movement	NB	SB
Directions Served	R	LT
Maximum Queue (ft)	80	51
Average Queue (ft)	34	3
95th Queue (ft)	58	24
Link Distance (ft)	651	99
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

#### Intersection: 73: Cleveland Ave & Inner Drive

Movement	EB	SB
Directions Served	R	TR
Maximum Queue (ft)	53	3
Average Queue (ft)	19	0
95th Queue (ft)	47	3
Link Distance (ft)	285	58
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

### Intersection: 140: 46th Ave & E 46th St/Ford Pkwy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SW	
Directions Served	<l< td=""><td>Т</td><td>TR</td><td>L</td><td>Т</td><td>TR&gt;</td><td>LT</td><td>&gt;</td><td>LT</td><td>R</td><td><lr></lr></td><td></td></l<>	Т	TR	L	Т	TR>	LT	>	LT	R	<lr></lr>	
Maximum Queue (ft)	149	218	222	141	212	227	328	63	264	60	42	
Average Queue (ft)	41	111	94	39	70	96	86	45	109	26	6	
95th Queue (ft)	101	200	186	102	162	185	238	58	221	67	25	
Link Distance (ft)		1464	1464		1080	1080	319		656		627	
Upstream Blk Time (%)							1					
Queuing Penalty (veh)							8					
Storage Bay Dist (ft)	75			110				25		25		
Storage Blk Time (%)	1	17		1	3		32	11	61	4		
Queuing Penalty (veh)	3	11		2	5		102	4	16	4		

#### Zone Summary

Zone wide Queuing Penalty: 168

	Intersection	Eastbound	Westbound	Noi	rthbound	South	bound	Overall
-	Woodlawn Ave & Bohland			_				
-	Lanes	<^>	< <u></u>	<^>			<b>`&gt;</b>	
	SimTraffic Delay			6.2		0.3		1.0
-	SimTraffic LOS	A	A	A			4	A
_	SimTraffic 95th Queue	17		30		3	4	
	Queue Block Time (%)							
	Denied Entry							
310	Woodlawn Ave & Village V	Vay (Unsignalized)			<u>F</u>			
	Lanes	<^>	<^>	<^>	>	<'	<b>`&gt;</b>	
	SimTraffic Delay	5.1	6.5	0.2			0.8	2.0
	SimTraffic LOS	А	A	А			4	А
	SimTraffic 95th Queue	28	11					
	Queue Block Time (%)							
	Denied Entry							
315	Woodlawn Ave & Montrea	l Ave (Unsignalized)						
-	Lanes	<^>	<^>		0			
-	SimTraffic Delay	5.2	6.4		-			4.6
-	SimTraffic LOS	A	А		А			А
-	SimTraffic 95th Queue	39	42					
-	Queue Block Time (%)							
-	Denied Entry							
	Mt Curve Blvd & Woodlaw	n Ave (Unsignalized)				1		
-	Lanes	0	0	←	个>	<del>\</del>	^>	
	SimTraffic Delay	-	-	2.7	0.7	3.1	1.8	3.0
-	SimTraffic LOS	A	A		0.7 A	A 5.1	1.0 A	
-		A	A	A 20				A
-	SimTraffic 95th Queue			39	6	42	6	
-	Queue Block Time (%)							
	Denied Entry							
-	Mt Curve Blvd & Bohland A		•		•		•	
-	Lanes	<^>	<^>	<del>~</del>	<u> </u>	←	<u></u> ↑>	
	SimTraffic Delay	6.3	7.3	1.8	0.3	2.5	0.6	2.2
-	SimTraffic LOS	A	A	A	A	A	А	A
-	SimTraffic 95th Queue	41	54	5		19	2	
-	Queue Block Time (%)							
	Denied Entry							
410	Mt Curve Blvd & Village Wa	ay (Unsignalized)						
	Lanes	0	0		<^>	<′		
	SimTraffic Delay	-	-		0.3	0	.1	0.6
	SimTraffic LOS	A	A		А		4	Α
	SimTraffic 95th Queue							
	Queue Block Time (%)							
	Denied Entry							
415	Mt Curve Blvd & Montreal	Ave (Unsignalized)						
	Lanes	<^>	<^>		<^>	<′	<b>`&gt;</b>	
ļ	SimTraffic Delay	6.0	6.5		0.3	0	.7	3.6
	SimTraffic LOS	A	A		А	/	4	Α
-	SimTraffic 95th Queue	49	60				)	
-	Queue Block Time (%)							
-	Denied Entry							
	Cretin Ave & Hillcrest (Uns	ignalized)		1	1	1	1	
-	Lanes	0	0	←	个>	←	^>	1
	SimTraffic Delay	-	-	2.8	0.5	3.5	1.0	1.6
-	SimTraffic LOS	A	A	A	0.5 A	A .	A 1.0	A
	SimTraffic 95th Queue			15	2	30	~	
-				51	۷	30		_
-	Queue Block Time (%)				I			_
	Denied Entry					- I		_
	Cretin Ave & Bohland Ave				•		•	
-					<b>Δ</b>		<u> </u>	
	Lanes SimTraffic Delay	<个> 10.3	< <b>^&gt;</b> 8.4	2.7	个> 0.5	← 2.9	<u> </u>	1.5

Node	Intersection	Eastbound		W	/estbound	Nort	hbound	Sout	Overall	
	SimTraffic 95th Queue		55		54	31		20		
	Queue Block Time (%)									
	Denied Entry									
510	Cretin Ave & Village Way (	Unsignaliz	ed)							
510	Lanes		0		0	←	^>	←	^>	
	SimTraffic Delay	-			-	3.0	0.6	3.1	0.5	1.5
	SimTraffic LOS		A		A	A 3.0	A 0.0	A .	A	1.5 A
	SimTraffic 95th Queue		A		A	13	~	23	~	
						15		23		
	Queue Block Time (%)									
<b>F4F</b>	Denied Entry	(11	(I)							_
515	Montreal Ave & Cretin Ave				•		•		•	
	Lanes	$\leftarrow$	<u> </u>	<i>←</i>	<u> </u>	←	<u> </u>	<i>←</i>	<u></u> ↑>	
	SimTraffic Delay	4.5	1.0	2.7	2.3	4.7	12.7	9.3	7.8	4.2
	SimTraffic LOS	A	A	A	A	A	В	A	A	A
	SimTraffic 95th Queue	25		17	5	8	43	96	50	
	Queue Block Time (%)		Π		П		Г	1	т	
	Denied Entry									
605	Ranger Way & Bohland Av	e (Unsigna	lized)							
	Lanes		^>		<个					
	SimTraffic Delay		0.6		0.4					0.5
	SimTraffic LOS		A		A					А
	SimTraffic 95th Queue									
	Queue Block Time (%)									
	Denied Entry									
610	Ranger Way & Village Way	(Unsignal	ized)							
010	Lanes	(ensignal	<^>		<^>					
	SimTraffic Delay		3.0		4.7					3.8
	SimTraffic LOS		A		A.,					A
	SimTraffic 95th Queue		34		42					A
			54		42					
	Queue Block Time (%)									
705	Denied Entry									
705	Finn St & Bohland Ave (All	1							<b>A</b> .	
	Lanes	<->	0			<↑			<u></u> ↑>	
	SimTraffic Delay	4.0	-			5.2			1.1	1.9
	SimTraffic LOS	A	A			A			A	A
	SimTraffic 95th Queue	36				44			43	
	Queue Block Time (%)									
	Denied Entry									
710	Finn St & Village Way (Uns	ignalized)			1		T			
	Lanes	<->	0			<			^>	
	SimTraffic Delay	4.6	-			0.2			1.3	2.3
	SimTraffic LOS	А	А			А			А	A
	SimTraffic 95th Queue	52				7				
	Queue Block Time (%)								-	
	Denied Entry									
711	Finn St & Saunders Ave (U	nsignalized	d)							
	Lanes					<^>			<个>	
	SimTraffic Delay					0.2		0.2		0.3
	SimTraffic LOS					A			A	A
	SimTraffic 95th Queue					3				
	Queue Block Time (%)									
	Denied Entry									
715	Montreal Ave & Finn St (U	nsignalizer	4)						I	
, 13	Lanes		<u>∧</u>		^>			<>	0	
	SimTraffic Delay		0.8		0.9				-	1 /
		-						10.2 P		1.4
	SimTraffic LOS	A	A		A			В	A	A
	SimTraffic 95th Queue					_		55		
	Queue Block Time (%)					_				
	Denied Entry									_
	<b>Cleveland Ave &amp; Saunders</b>	Avo (Unci	znalized)	1		1		1		1

2040 AM Build_Max

Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes			<^>	<^>	
	SimTraffic Delay			1.8	0.3	1.0
	SimTraffic LOS			A	A	А
	SimTraffic 95th Queue					
	Queue Block Time (%)					
	Denied Entry					

	Intersection		stbound		W	/estboun	d	N	orthbound		Sc	outhbound		Over
10	S Ford Ramp/N Ford Ramp	& Ford Av	e (Unsig	nalized)										
	Lanes		$\uparrow$	^>		$\uparrow$	^>		$\rightarrow$	•			$\rightarrow$	
	SimTraffic Delay		4.	2		0.	.8			8.4			10.8	3.3
	SimTraffic LOS		A	١		ŀ	Ą		A				В	A
	SimTraffic 95th Queue		1	6		1	0			59			118	
	Queue Block Time (%)			-			-							
	Denied Entry													
	Ford Ave & Woodlawn Ave	/Uncignali	70d)											
20						<u>م</u>	۸.					0		
	Lanes	<ul><li>←</li></ul>	$\uparrow\uparrow$				<u>^&gt;</u>			<>>				
	SimTraffic Delay	8.9	0.9				.4				1.3	-		1.
	SimTraffic LOS	A	А			A				E		В		A
	SimTraffic 95th Queue	42	9			1	0				63			
	Queue Block Time (%)	5												
	Denied Entry													
30	Mt Curve Blvd & Ford Ave	Signalized	Cycle	Length: 1	20)									
	Lanes	Č ←	<u>,</u> ^∕	-	,	$\uparrow$	^>	$\leftarrow$	^>	←		^>		
	SimTraffic Delay	22.8	9.	•	21.7		.8	、 52.9	47.6		9.7	51.0		14
	SimTraffic LOS	C	 	-	C	A		D	D	D	-	D		B
	SimTraffic 95th Queue	ر 76	22		-		• 99		210			75		B
		76			108			191		1	L25			
	Queue Block Time (%)		1	0	5	1	2	2	2		4	27		
	Denied Entry													
40	Cretin Ave & Ford Ave (Sig		-											
	Lanes	$\leftarrow$	$\uparrow$	^>	$\leftarrow$	$\uparrow$	^>	$\leftarrow$	^>	←		^>		
	SimTraffic Delay	62.7	23	.4	34.7	24	.3	38.1	43.6	3	6.0	92.5		36
	SimTraffic LOS	E	(	2	С	(	2	D	D	D		F		D
	SimTraffic 95th Queue	257	36	57	134	28	35	219	237	2	240	601		
	Queue Block Time (%)	23	4				7	6	3		-	2		
	Denied Entry													
	Finn St & Ford Ave (Signali	rod Cycle	Longth:	120)										
50			-		/	<u>م</u>	^>	/	<u>۸</u>			<u>۸</u>	`	
	Lanes	←	<u>^</u>	-	<ul> <li>←</li> </ul>			<i>←</i>	<u> </u>		<'	-	$\rightarrow$	10
	SimTraffic Delay	23.8	17		22.4		2.2	43.9	40.2		40	-	9.9	19
	SimTraffic LOS	С	E		C		3	D	D		D		A	В
	SimTraffic 95th Queue	73	28	38	172	25	53	223	138		15	3	104	
	Queue Block Time (%)	5	2	2	2	1	1				1	7		
	Denied Entry													
50	Cleveland Ave & Ford Ave	(Signalized	Cycle	Length: 1	20)									
	Lanes	$\leftarrow$	$\uparrow$	^>	$\leftarrow$	$\uparrow$	^>	$\leftarrow$	个>	<i>←</i>		$\uparrow$	$\rightarrow$	
	SimTraffic Delay	57.1	52		53.1	41		43.6	43.9		0.3	42.8	48.2	48
	SimTraffic LOS	E			D		)	45.0 D	D	D		42.0 D	D	
	SimTraffic 95th Queue	298	56		206		37	317	551		166	504	214	
		298						317			2	45	214 5	
	Queue Block Time (%)	3	3	J	2	2	4		1		2	45	5	
	Denied Entry													
61	Kenneth St & Ford Ave (Sig		-	-	н. т				•					
	Lanes	$\leftarrow$	$\uparrow$		$\leftarrow$		^>		<^>			<^>		
	SimTraffic Delay	25.0	12	.7	26.6		l.0		17.1			17.6		13
	SimTraffic LOS	С	E	3	С	E	3		В			В		В
	SimTraffic 95th Queue	68	22	29	83	31	11		105			87		
	Queue Block Time (%)	12	3				5							
	Denied Entry							ļ						
	Fairview Ave & Ford Ave (S	ignalized	Cycle L	ongth · 17	0)				<u> </u>					
2				$\rightarrow$		$\uparrow$	$\rightarrow$	÷	个>	1		$\uparrow$	2	
	Lanes				← 42 ⊑					←			$\rightarrow$	50
	SimTraffic Delay	119.9	52.3	39.0	42.5	60.7	40.0	47.6	55.1		2.6	47.8	36.9	56
	SimTraffic LOS	F	D	D	D	E	D	D	E	D		D	D	E
		200	811	130	234	633	142	292	711	2	293	751	186	
	SimTraffic 95th Queue	386				57			28			44	1	
		24	44			57								
	SimTraffic 95th Queue		44			57								
	SimTraffic 95th Queue Queue Block Time (%) Denied Entry	24		Cycle Ler	ngth: 120)	57								
	SimTraffic 95th Queue Queue Block Time (%) Denied Entry Cleveland Ave & Highland	24 Pkwy (Sign	alized	-		_			个>			<u>ተ&gt;</u>		
	SimTraffic 95th Queue Queue Block Time (%) Denied Entry	24	alized	Cycle Ler → 17.3	n <b>gth: 120)</b> <1 43.	N	→ 19.2	← 16.9	<u>↑&gt;</u> 8.7		2.8	<u>↑&gt;</u> 9.0		13.

ode	Intersection	E	astboun	d	V	/estbound	4 <u></u>	N	orthbound	So	uthbound	Over
	SimTraffic 95th Queue	16	51	70	14	9	71	48	170	82	208	
	Queue Block Time (%)	4	5	13	4	8	11		5		10	
	Denied Entry											
	St Paul Ave & Montreal Av	e (Signaliz	ed Cvc	le Length	: 80)					1		
	Lanes	(•)8		`>	←	$\uparrow$	>	~	个个>	$\leftarrow$	个个>	
	SimTraffic Delay	30.5		.4	43.8	21		× 25.2	20.2	16.2	20.7	20.
	SimTraffic LOS	C 50.5		C+	43.8 D	C		C	20.2	B	20.7 C	20.
		-		-	-			-	-		-	Ľ
	SimTraffic 95th Queue	40		19	88	19		186	143	84	148	
	Queue Block Time (%)		2	7	7	19	ð	7	1		1	
	Denied Entry											
80	Edgcumbe Rd & St Paul Av	-		le Length:	: 120)							
	Lanes	<1	٢Υ	$\rightarrow$		<^^>		$\leftarrow$	个个>	$\leftarrow$	个个>	
	SimTraffic Delay	40	.0	24.5		39.8		27.8	11.0	37.2	34.7	25.
	SimTraffic LOS	[	)	С		D		С	В	D	С	C
	SimTraffic 95th Queue	31	1	140		151		277	451	122	234	
ŀ	Queue Block Time (%)	1	0	41				18			10	
	Denied Entry	-	•					10				1
	Cleveland Ave & Montreal	Avo (Unci	analizad					-				-
90						•			<u>_</u>		<个>	
	Lanes	← 1 1		`>	←	<u>^</u>			<^>			
	SimTraffic Delay	4.1		.5	6.3	2.2			27.7	_	23.6	8.6
	SimTraffic LOS	A	1		A	A			D		C	A
	SimTraffic 95th Queue	29	1	.6	51	5			179		122	
	Queue Block Time (%)								1			
	Denied Entry											
100	Fairview Ave & Montreal A	ve (Signa	lized Cy	cle Lengt/	:h: 70)							
	Lanes	$\leftarrow$	$\uparrow$	$\rightarrow$	$\leftarrow$	$\uparrow$	>	$\leftarrow$	个>	←	^>	
	SimTraffic Delay	34.4	17.5	16.0		21	.8	33.6	17.5	42.9	22.9	20.
	SimTraffic LOS	С	В	В	С	C		С	В	D	С	С
	SimTraffic 95th Queue	59	175		95	22		90	329	143	432	Ũ
	Queue Block Time (%)	55	41			22		50	24	2	21	
	Denied Entry		41	2		22	<u> </u>		24	2	21	
	,			- 1213								
120	Mississippi River Blvd & N	Ford Kam	p (Unsign	ialized)					•		•	
	Lanes				<>	0			<b>^&gt;</b>	$\leftarrow$	$\uparrow$	
ŀ	SimTraffic Delay				8.4	-			1.0	3.1	0.6	1.6
	SimTraffic LOS				A	A	L .		A	A	A	A
	SimTraffic 95th Queue				50				6	54		
	Queue Block Time (%)											
	Denied Entry											
	Mississippi River Blvd & S F	Ford Ram	) (Unsign	alized)								
	Lanes				<>	0			个>	$\leftarrow$	$\uparrow$	
	SimTraffic Delay				8.8				1.0	2.6	0.5	2.2
	SimTraffic LOS					- A					0.5 A	
					A	A			A	A	~	A
	SimTraffic 95th Queue				75					24		
	Queue Block Time (%)								1			
	Denied Entry											_
205	Mississippi River Blvd & Bo	hland Av	e (Unsign	alized)								
	Lanes				<>	0			个>	<1		
	SimTraffic Delay				7.4	-			2.0	0.3	3	1.5
	SimTraffic LOS				А	A			А	A		A
	SimTraffic 95th Queue				48					35		
	Queue Block Time (%)											
	Denied Entry									1		
	Mississippi River Blvd & M	ontreal A	o (Uncia	(hosilea								
215			e (onsig	ializeuj	1.	~			۸.			_
215					<->	0			<u> </u>	<1		<u> </u>
	Lanes			1	8.5	-			0.9	2.:	L	1.9
	SimTraffic Delay											1 .
	SimTraffic Delay SimTraffic LOS				А	A			A	A		A
	SimTraffic Delay					A			Α	A		A
	SimTraffic Delay SimTraffic LOS				А	A			A			A

Node	Intersection	Eastbound	Westbour	d	N	orthbound	So	uthbound	Overall
	Lanes	<^>	<^>			<^>		<^>	
	SimTraffic Delay	6.3	6.9			7.5		6.5	6.4
	SimTraffic LOS	А	A			А		А	А
	SimTraffic 95th Queue	48	45			59		53	
	Queue Block Time (%)								
	Denied Entry								
500	Cretin Ave & Randolph Ave	e (Signalized Cycle Length:	: 60)						
	Lanes	<^>	<个	$\rightarrow$	$\leftarrow$	^>	$\leftarrow$	^>	
	SimTraffic Delay	26.5	29.2	15.0	22.9	9.6	31.5	11.6	15.6
	SimTraffic LOS	С	C	В	С	А	С	В	В
	SimTraffic 95th Queue	154	177	60	32	228	151	274	
	Queue Block Time (%)		47	18		14	9	8	
	Denied Entry								
501	Cretin Ave & Highland Pkw	y (Unsignalized)							
	Lanes	<^>	<^>			<^>		<^>	
	SimTraffic Delay	30.3	45.1			1.9		5.0	7.3
	SimTraffic LOS	D	E			А		А	А
	SimTraffic 95th Queue	78	141			42		202	
	Queue Block Time (%)								
	Denied Entry								

#### 70: Cleveland Ave & St Paul Ave & Bohland Ave Performance by approach

#### 71: St Paul Ave Performance by approach

Approach	EB	NB	SB	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0
Total Del/Veh (s)	13.8	2.8	0.2	2.7

#### 72: Cleveland Ave & St Paul Ave Performance by approach

Approach	NB SB	All
Denied Del/Veh (s)	0.0 0.0	0.0
Total Del/Veh (s)	7.3 0.3	2.9

### 73: Cleveland Ave & Inner Drive Performance by approach

Approach	EB SB	All
Denied Del/Veh (s)	0.1 0.0	0.0
Total Del/Veh (s)	2.8 0.2	0.4

#### 140: 46th Ave & E 46th St/Ford Pkwy Performance by approach

Approach	EB	WB	NB	SB	SW	All
Denied Del/Veh (s)	0.3	0.0	2.7	1.0	0.1	0.6
Total Del/Veh (s)	31.0	23.0	56.7	36.8	58.8	31.5

#### **Total Zone Performance**

Denied Del/Veh (s)	1.0	
Total Del/Veh (s)	1929.6	

#### Intersection: 70: Cleveland Ave & St Paul Ave & Bohland Ave

Movement	WB	NB	NB	SB	SB
Directions Served	R	Т	TR	Т	TR
Maximum Queue (ft)	54	46	84	6	3
Average Queue (ft)	20	3	6	0	0
95th Queue (ft)	41	32	48	7	3
Link Distance (ft)	762	168	168	556	556
Upstream Blk Time (%)		0	0		
Queuing Penalty (veh)		0	0		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

### Intersection: 71: St Paul Ave

Movement	EB	NB	NB
Directions Served	LR	Т	Т
Maximum Queue (ft)	58	6	6
Average Queue (ft)	42	0	0
95th Queue (ft)	62	6	8
Link Distance (ft)	51	1141	1141
Upstream Blk Time (%)	13		
Queuing Penalty (veh)	16		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

#### Intersection: 72: Cleveland Ave & St Paul Ave

Movement	NB	SB
Directions Served	R	LT
Maximum Queue (ft)	97	22
Average Queue (ft)	38	2
95th Queue (ft)	73	15
Link Distance (ft)	651	99
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

#### Intersection: 73: Cleveland Ave & Inner Drive

Movement	EB	SB
Directions Served	R	TR
Maximum Queue (ft)	33	3
Average Queue (ft)	13	0
95th Queue (ft)	37	3
Link Distance (ft)	285	58
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

#### Intersection: 140: 46th Ave & E 46th St/Ford Pkwy

Movement	EB	EB	EB	WB	WB	WB	B29	NB	NB	SB	SB	SW
Directions Served	<	LT	TR	L	Т	TR>	Т	LTR	>	LT	R	<lr></lr>
Maximum Queue (ft)	150	428	417	160	394	396	177	633	65	183	56	28
Average Queue (ft)	69	230	216	120	206	222	6	291	49	87	26	3
95th Queue (ft)	164	373	361	196	363	356	171	583	58	162	65	15
Link Distance (ft)		1464	1464		1094	1094	1515	1043		656		272
Upstream Blk Time (%)							0					
Queuing Penalty (veh)							0					
Storage Bay Dist (ft)	75			110					25		25	
Storage Blk Time (%)	2	42		15	13			59	14	54	6	
Queuing Penalty (veh)	10	26		66	40			191	14	17	7	

#### Zone Summary

Zone wide Queuing Penalty: 387

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de Intersection	Eastbound	Westbound	No	rthbound	Sout	hbound	Overa
305 Woodlawn Ave & Bohla							
Lanes	<^>	<^>	<个>			<个>	
SimTraffic Delay	0.3	1.1	5.8	5.8		1.1	1.9
SimTraffic LOS	А	A	А			A	
SimTraffic 95th Queue	7		20			48	
Queue Block Time (%)							
Denied Entry							
310 Woodlawn Ave & Villag	e Way (Unsignalized)	/ /					
Lanes		<个>	<个>			<个>	
	<^>						2.4
SimTraffic Delay	5.4	2.8	0.2			1.6	2.1
SimTraffic LOS	A	A	A			A	A
SimTraffic 95th Queue	22	23					
Queue Block Time (%)							
Denied Entry							
315 Woodlawn Ave & Mont	real Ave (Unsignalized)						
Lanes	<^>	<^>		0			
SimTraffic Delay	5.1	6.1		_			4.4
SimTraffic LOS	A 5.1	A		А	1		 A
				~			A
SimTraffic 95th Queue	39	44			_		
Queue Block Time (%)				T			_
Denied Entry							
401 Mt Curve Blvd & Woodl	awn Ave (Unsignalized)						
Lanes	0	0	$\leftarrow$	^>	$\leftarrow$	^>	
SimTraffic Delay	-	-	2.4	1.0	3.2	1.5	4.8
SimTraffic LOS	А	А	А	А	А	А	А
SimTraffic 95th Queue			24	7	48	2	
Queue Block Time (%)			27	1		2	
Denied Entry							
405 Mt Curve Blvd & Bohlan							
Lanes	<个>	<^>	÷	^>	÷	^>	
SimTraffic Delay	7.1	4.5	2.1	0.2	2.3	0.6	2.2
SimTraffic LOS	A	A	A	Α	Α	А	A
SimTraffic 95th Queue	47	48	4		23	2	
Queue Block Time (%)							
Denied Entry							
410 Mt Curve Blvd & Village	Way (Unsignalized)						
Lanes	0	0		<个>		<个>	
	0	0					0.5
SimTraffic Delay				0.3		0.3	0.5
SimTraffic LOS	A	A		A		Α	A
SimTraffic 95th Queue					-	6	
Queue Block Time (%)							
Denied Entry							
415 Mt Curve Blvd & Montre	eal Ave (Unsignalized)			÷			
Lanes	<^>	<^>		<^>		<个>	
SimTraffic Delay	6.0	4.8		0.1		0.6	3.3
SimTraffic LOS	A	4.8 A	-		+		
				A		A	A
SimTraffic 95th Queue	48	56				13	
Queue Block Time (%)		l		T			
Denied Entry							
502 Cretin Ave & Hillcrest (U	nsignalized)						
Lanes	0	0	÷	^>	÷	^>	
SimTraffic Delay	-	-	3.1	0.9	4.1	1.5	3.0
SimTraffic LOS	Α	Α	A	A	А	A	A
SimTraffic 95th Queue			34	22	48		
			34	22	40		
Queue Block Time (%)		l		1			_
Denied Entry							_
505 Cretin Ave & Bohland Av							
Lanes	<个>	<个>	$\leftarrow$	个>	$\leftarrow$	^>	
Lanco							
SimTraffic Delay	10.8	8.9	3.2	0.6	3.0	0.6	1.8

### 11967.01_Ford Site Development TS

Node	Intersection	E	astbound	W	estbound	Nort	hbound	So	uthbound	Overall
	SimTraffic 95th Queue		59		47	42		31	2	
	Queue Block Time (%)		00					01	_	
	Denied Entry									
510	Cretin Ave & Village Way (	Uncignaliz	od)							
510	Lanes		0		0	<del>\</del>	^>	<del>\</del>	^>	
	SimTraffic Delay		-			3.1	0.8	3.8	0.7	1.5
					-				-	
	SimTraffic LOS		A		A	A 24	A	A (2)	A	A
	SimTraffic 95th Queue					21		42		
	Queue Block Time (%)									
	Denied Entry									
515	Montreal Ave & Cretin Ave				•		•		•	
	Lanes	÷	^>	←	^>	←	^>	$\leftarrow$	^>	
	SimTraffic Delay	6.0	0.9	3.4	3.0	6.9	13.5	10.3	8.1	4.5
	SimTraffic LOS	A	A	A	A	A	В	В	A	A
	SimTraffic 95th Queue	25	2	11	14	19	56	100	54	
	Queue Block Time (%)							1		
	Denied Entry									
605	Ranger Way & Bohland Av	e (Unsigna	alized)							
	Lanes		^>		<个					
	SimTraffic Delay		0.6		0.3					0.5
	SimTraffic LOS		A		А					А
	SimTraffic 95th Queue									
	Queue Block Time (%)									
	Denied Entry									
610	Ranger Way & Village Way	(Unsignal	lized)							
010	Lanes	(0.10.8.10	< <b>^</b> >		<^>					
	SimTraffic Delay		1.9		1.7					1.8
	SimTraffic LOS		A		A					A
	SimTraffic 95th Queue		41		38					~
	Queue Block Time (%)		71		50					
	Denied Entry									
705	Finn St & Bohland Ave (All	way stop								
705		-way stop	0			<			^>	
	Lanes	4.4	-							1.6
	SimTraffic Delay					4.6			1.1	1.6
	SimTraffic LOS	A	A			A			A	A
	SimTraffic 95th Queue	34				44			46	
	Queue Block Time (%)									
	Denied Entry									
710	Finn St & Village Way (Uns									
	Lanes	<>	0			<个			^>	
	SimTraffic Delay	5.8	-			0.2			1.6	2.1
	SimTraffic LOS	Α	A			A			А	А
	SimTraffic 95th Queue	45				11				
	Queue Block Time (%)									
	Denied Entry									
711	Finn St & Saunders Ave (U	nsignalized	d)							
	Lanes				0	<^>			<^>	
	SimTraffic Delay				-	0.2			0.2	0.3
	SimTraffic LOS				А	А			А	А
	SimTraffic 95th Queue									
	Queue Block Time (%)									
	Denied Entry									
715	Montreal Ave & Finn St (U	nsignalized	d)		1		1		l	
	Lanes	→			^>			<->	0	
	SimTraffic Delay	5.9	0.8		1.3		1	12.0	-	1.4
	SimTraffic LOS	A	A		A			B	А	A
			~~~~		~				~	
		11								
	SimTraffic 95th Queue	11						54		
		11						54		

11967.01_Ford Site Development TS

2040 PM Build_Max

Node	Intersection	Eastbound	Westbound	Northbound	Southbound	Overall
	Lanes			<个>	<^>	
	SimTraffic Delay			1.7	0.2	0.9
	SimTraffic LOS			A	A	А
	SimTraffic 95th Queue					
	Queue Block Time (%)					
	Denied Entry					



Appendix E: Responses to Agency Comments on the Draft AUAR



1. Introduction

Pursuant to Minnesota Rules, part 4410.3610, subpart 5c, the Responsible Governmental Unit (RGU) shall revise the environmental analysis document based on comments received during the comment period. The RGU shall include in the document a section specifically responding to each timely, substantive comment received that indicates in what way the comment has been addressed.

The 30-day Draft Alternative Urban Areawide Review (AUAR) comment period began August 19, 2019, and comments were accepted through September 18, 2019. Three comment letters were received from government agencies. Responses to those comments are included in the following sections, and copies of the comment letters are included in Appendix G.



2. Minnesota Pollution Control Agency

Comment	Response
Thank you for the opportunity to review and comment on the Draft Alternative Urban Areawide Review (AUAR) for the Ford Site project (Project) in the city of St. Paul, Ramsey County, Minnesota. The Project consists of development of the 122-acre Ford Site and three other adjacent parcels. Minnesota Pollution Control Agency (MPCA) staff has reviewed the Draft AUAR and has no comments at this time.	Thank you for your comment.

3. Minnesota Department of Transportation

Comment	Response		
Traffic			
Due to the concept level nature of an AUAR, the traffic information is considered to be a general indication of environmental impact. Development scenarios may change after an AUAR is completed, requiring additional traffic analysis. MnDOT's review of this AUAR does not constitute approval of a regional analysis and is not a specific approval for access or new roadway improvements. As more detailed site plans are developed, the accompanying traffic analysis should reflect the changes in the proposed development.	Thank you for your comment. The AUAR process requires the City to complete an AUAR Update every five years after adoption. As site plans are further developed, the City will evaluate those plans with regard to the AUAR traffic analysis assumptions. Any expected changes to traffic impacts will be coordinated with MnDOT and noted in the AUAR Update. Appropriate avoidance or mitigation measures to address any changes would also be identified.		
Trip Generation Estimates			
MnDOT commends the multimodal trip generation estimates and analysis presented. This information is very helpful in developing a more complete understanding of how all the people who will live, visit, work, and shop at the new development will connect with the local and regional transportation system.	Thank you for your comment.		



Comment	Response
Trip Directional Distribution	
The Directional Distribution information presented on Page 30 and Figure 14 of the Transportation Analysis should be revised to better explain the method for estimating the distribution of auto trips among regional state and county roads (MN 5, MN 51, MN 55, and CSAH 46). It is not clear on Figure 14 what the percentages shown in the large blue ovals, smaller red and blue circles represent.	Figure 14 in the Transportation Analysis Report has been updated to clarify (see Appendix D of the Final AUAR).
Multimodal Planning	
The AUAR should provide graphics and narrative describing proposed connections of the site's sidewalks and trails to the Regional Bicycle Transportation Network, which is maintained by the Metropolitan Council.	Discussion of the Regional Bicycle Transportation Network has been added to the Transportation Analysis Report (see page 8 in Appendix D) and Item 18 of the Final AUAR (see page 52). Saint Paul bicycle facilities are shown in Figure 15 of the Final AUAR (page 52).

4. Metropolitan Council

Comment	Response
Land Use	
The eventual build out of the site will affect the transportation analysis zone (TAZ) forecast allocation for this area. TAZ #2063 includes the Ford site and a small amount of a fully developed mixed-use neighborhood west of Cleveland Avenue. Preliminary TAZ allocations provided in 2016 by the City of St. Paul show TAZ #2063 growth of 1,950 households and 3,550 employment during 2014-2040. The City should revise this forecast allocation, per expected development.	Comment noted. The City will submit TAZ forecast allocations to the Metropolitan Council along with the updated 2040 Comprehensive Plan.
• The Ryan Companies scenario implies growth of 3,800 households, 8,550 population, and 900 jobs in the 2020 to 2040 timeframe.	



Comment	Response	
 Ford Site Master Plan maximum redevelopment implies in the same 2020 to 2040 timeframe as growth of 4,000 housing units, 9,000 population, and 1,600 jobs. 		
TAZ forecast allocations must be submitted with the upcoming 2040 Comprehensive Plan update for St. Paul. The City's Planning and Economic Development (PED) Department has noted the comment in "Attachment B", and notes: "The City will update the TAZ allocations as part of the 2040 Comprehensive Plan adoption process."		
The City of St. Paul submitted their 2040 Comprehensive Plan (Plan) and it was determined incomplete for review by the Council on July 24, 2019. The AUAR study site is currently consistent with the City's proposed 2040 Comprehensive Plan. Once the environmental review is complete, the AUAR and subsequent changes to land use must be consistent with the City's Plan and depending on the sequence of approval of the Final AUAR and the final 2040 Comprehensive Plan, an amendment to the City's final 2040 Plan may be necessary.	Comment noted. The proposed development scenarios will be consistent with the 2040 Comprehensive Plan.	
At the time of writing this letter, the City does not have an approved Mississippi River Critical Corridor Area (MRCCA) Plan nor a complete and approved 2040 Plan. The site must be consistent with all zoning requirements and consistent within the City's MRCCA plan and be consistent with the final 2040 Comprehensive Plan.		
The Ford Site is adjacent to both Hidden Falls-Crosby Farm and Mississippi Gorge Regional Parks, as well as portions of the St. Paul Grand Round and the Mississippi River Trail. Without careful design and construction, development of the Ford Site has the potential to significantly impact these regional parks and trail opportunities.	work with the developer to understand the stormwater	
With regard to Hidden Falls-Crosby Farm Regional Park and Hidden Falls Creek, Council staff reiterate the comments previously provided, documented on page B-9 of the AUAR (pdf page 375), which state:	management system within the AUAR study area. The City will continue to work with other agencies to explore options to restore the lower falls area.	
Council staff recently reviewed a Master Plan Update for the Hidden Falls Crosby Farm Regional Park adjacent to the AUAR Site. The Master Plan proposes a number of improvement projects to restore environmental components and enhance access and recreational opportunities within the Park.	There would not be an increase in impervious surface under either the Ryan Development Scenario or the Master Plan Maximum Development Scenario compared to the pre-demolition condition of the Ford Assembly plant. Therefore, the volume of runoff leaving	

FORD SITE

A 21st Century Community

Comment	Response
One of the projects proposed in the Master Plan is to "[R]estore Hidden Falls Creek to incorporate water quality treatment and habitat enhancement in coordination with Ford site redevelopment." The AUAR site stormwater management system that is proposed will have significant direct impacts upon the stability and health of Hidden Falls Creek in the lower third of the watershed. It may be advantageous to undertake the restoration of the lower reach of the Creek within the Park before AUAR site runoff volumes increase as a result of AUAR site redevelopment.	the site will not increase. Per Capitol Region Watershed District requirements, rate control of stormwater runoff leaving the site will also be managed on site through required best management practices. As a result, there are no identified impacts to Hidden Falls Creek. Proposed stormwater treatment within the AUAR study area is discussed under Item 11.b.ii (see page 30 of the Final AUAR).
Council staff requests that the AUAR document evaluate the most expedient and cost-effective time to carry out restoration of the lower reach of the Creek, based upon increased access from the upper reach and future increases in runoff volume during AUAR site redevelopment. If there is consensus that there is a "most efficient and cost-effective time" to undertake the restoration of Hidden Falls Creek in the lower third of the watershed (below Mississippi River Boulevard) during the AUAR site redevelopment timeline, Council staff requests that the AUAR site developer work with St. Paul Parks to coordinate and implement the Hidden Falls Creek restoration accordingly.	As noted in the AUAR, the City will continue to coordinate internally and with Capitol Region Watershed District, Ramsey County, and the Minnesota Department of Natural Resources regarding restoration efforts planned for the creek downstream of the site.
Having the entire Creek restored and stabilized will improve the effectiveness of all other proposed vegetation and habitat restoration and management projects, both on the AUAR site and within Hidden Falls Crosby Farm Regional Park.	
With regard to Hidden Falls Creek (leading to and within Hidden Falls Regional Park), Council staff appreciate the associated response on page B-9 (pdf page 375) that reads:	
The City will continue to coordinate internally and with Capitol Region Watershed District, Ramsey County, and the Minnesota Department of Natural Resources regarding restoration efforts planned for the creek downstream of the site.	
Moreover, Council staff appreciate the text stating, "the new (stormwater management) system will provide pretreatment and rate and volume control to improve water quality runoff leaving the site and to prevent further sedimentation and erosion issues within Hidden Falls Creek" (page 32).	
Beyond these specific comments about the regional park and Hidden Falls Creek, Council staff appreciate the preparer's acknowledgement of these Regional Park	



FORD SITE

A 21st Century Community

Comment	Response
System components and trail opportunities in the narrative on page 13 and in Figure 7 on page 15 of the AUAR. Further, Council staff appreciate the preparer's indication that parks and trails included in the Ryan Development Scenario will make connections into the City and regional trail network (page 22).	
Geology, Soils, and Topography/Land Forms	
Although identified in the scoping EAW response to the City (Council letter July 9, 2019), the AUAR does not acknowledge the potential groundwater hazards due to karst or to known excavations (example: tunneling beneath the site) in the study area. The AUAR also still concludes that, based on the Ramsey County Geologic Atlas, there are no known sinkholes, unconfined/shallow aquifers, or karst conditions within the AUAR study area. While the 1990 Ramsey County Geologic Atlas does not identify those features, the risk of karst is identified at the site in the 2017 DNR report 'Minnesota Regions Prone to Surface Karst Feature Development', which was developed "for planning, environmental and risk management, hazard mitigation, scientific, and other purposes." That report is online at http://files.dnr.state.mn.us/waters/groundwater_section/mapping/gw/gw01_report.pdf . The report includes links to download the supporting data. The mitigation plan for geology, soils, and topography/land forms (page 62 of the AUAR submitted on August 16, 2019, Review #22290-2) still does not acknowledge karst or excavation risks (such as tunneling beneath the site) as potential impacts or propose mitigation.	Seven documented tunnel systems were constructed in the subsurface below the former Ford Assembly Plant at various depths and configurations. The majority of tunnels are less than 10 feet in width/height, although larger tunnels were documented for the sand mining. Based on information provided by Ford Motor Company, the shallow oil tunnel was completely removed and backfilled. Additionally, the steam tunnel was demolished and removed down to the bottom slab of the tunnel. The bottom slab of the steam tunnel was punctured to provide drainage, and the tunnel area was backfilled with Class 5 fill material. The remaining tunnels were bulk-headed at the entrances and left in existing condition. The southwest end (entrance) to the sand tunnel was noted to be collapsed; however, it was also noted that the collapse was likely intentional. The tunnels do not extend under the surrounding residential areas.
	Karst is a landscape formed by the dissolution of a layer or layers of soluble bedrock. Geologic maps developed by Ramsey County and the Minnesota Department of Natural Resources identify the Platteville Limestone and St. Peter Sandstone to have the potential for karst features, typically in the form of natural caves, sinkholes, or other landforms. During the preliminary geotechnical evaluation of the site, no karst-type features were observed during on-site



Comment	Response	
	reconnaissance, review of historical information, or within the soil borings that were drilled into the limestone and sandstone. Based on a review of the available and collected information, the potential for karst features within the AUAR study area is low.	
	Based on the depths of the existing tunnels, the presence of largely intact (Platteville) limestone bedrock above the sandstone, and the findings of the previous tunnel evaluation report from 2012, the potential for settlement issues and geotechnical risks to the proposed development related to the existing tunnels is minimal. Based on the preliminary site development plan, the potential building loads will have negligible effect on the stability and long-term integrity of the existing tunnels.	
Water Resources		
The EAW stated that the AUAR would investigate the status of wells within the study area and provide mitigation strategies (page 19 of the AUAR document submitted on 8/16/2019). However, the AUAR makes no mention of this. Potential impacts may be identified in the discussion of geology, soils, and topography/land forms or the discussion of water resources on pages 62 and 63 of the document submitted on August 16, 2019. Although the AUAR identified potential impacts to sanitary sewer and water main	Information on wells within the study area is provided in the AUAR under Item 11.a.ii (see page 28). According to the Phase I Environmental Site Assessment (ESA) completed in 2018 for the 122-acre Ford Site, there are three sealed wells and 14 monitoring wells that remain on the site. There are no verified wells located within the Burg & Wolfson (Lunds & Byerlys) or Canadian Pacific Railway properties.	
extensions needed within the AUAR study area, no mitigation strategies were identified. This information should be added (page 63 of the AUAR document submitted on August 16, 2019).	In November 2018, Ford Motor Company submitted their 2018 Supplemental Groundwater Monitoring Report to the MPCA. In the report, Ford Motor Company requested permission from the MPCA to abandon the groundwater monitoring wells on the 122- acre Ford Site parcel. Ford Motor Company is currently awaiting the MPCA's response to that request. All wells	



Comment	Response
	will be sealed and abandoned following Minnesota Department of Health (MDH) and MPCA protocol.
	No mitigation strategies related to sanitary sewer and watermain extensions are identified in the Mitigation Plan because no impacts are anticipated (see discussion under Item 11.b.i and 11.b.iii on pages 29 and 34, respectively). Permits required for the sanitary sewer and watermain extensions are included in Table 16 in the Mitigation Plan (see page 61).
Transportation	
The list of all existing routes adjacent to the site need to be consistent throughout the entire AUAR document. Route 87 was left off in the "Transportation Analysis" section. Currently, Route 46, providing more than 60 daily bus trips between the METRO Blue Line 46 th Street Station, and Highland Park, could be re-routed in the future through the Ford Site via Cretin, Montreal, and Cleveland, continuing to end near West 7 th Street and Davern and a potential connection to the planned future Riverview Corridor. This route change would not add operating cost to Route 46. As the Ford Site is redeveloped and the expected commercial and residential land use intensifies, Metro Transit will continue to evaluate ridership potential and adjust Route 46 service levels to respond to transit service demand.	Item 18 of the AUAR (see page 49) and the Transportation Analysis Report have been revised to consistently identify the exiting transit routes serving the AUAR study area. The City will continue to coordinate with Metro Transit regarding service planning as the AUAR study area is developed.
No other Highland area bus route changes or extensions into the Ford Site are currently being considered by Metro Transit, unless facilities for a bus turnaround and layover are provided. The AUAR states that no facilities are currently programed by either the City or the Developer other than bus stop ADA pads.	
Given that only Route 46 service is currently being considered to operate though the Ford Site, it is critical that good pedestrian access is provided from the site to existing bus stops and service on both Ford Parkway and Cleveland Avenue.	



Comment	Response
The proposed development is near the Minneapolis-St. Paul (MSP) International Airport. The AUAR does state that the developer will submit the 7460-1 Airspace Survey. The developer should also review the MSP Joint Airport Zoning Board guidelines. The final AUAR should discuss airport noise in the proposed development area and address any needed mitigation. Alternatives and any non-motorized mitigation should identify potential implementation of the Regional Bicycle Transportation Network (RBTN) Tier 1 corridor and connections to the RBTN from within the site. Reduction calculations for transportation assumed that a Guaranteed Ride Home program does not exist. Metro Transit runs an existing Guaranteed Ride Home program for people who ride the bus, METRO, or Northstar, or carpool, vanpool, bicycle, or walk to work or school at least three times a week. More information about the program is available at: <u>https://www.metrotransit.org/guaranteed-ride-home</u>	Ryan Companies and the City have reviewed the MSP Joint Airport Zoning Board ordinances and have coordinated with the Metropolitan Airports Commission regarding the proposed development (see correspondence included in Appendix A). According to the <i>Minneapolis St. Paul Internal Airport (MSP) 2018</i> <i>Noise Contour Report</i> , the AUAR study area is not within the 2018 actual noise contours from the airport. No airport noise mitigation is anticipated. Discussion of the Regional Bicycle Transportation Network has been added to the Transportation Analysis Report (see Appendix D) and Item 18 of the Final AUAR (see page 52).



Appendix F: Responses to Public Comments on the Draft AUAR



1. Introduction

In addition to the government agency comments addressed in Appendix E, comment letters on the Draft Alternative Urban Areawide Review (AUAR) were received from community organizations and 125 members of the public. Copies of the community organization letters and public comments received are included in Appendix H.

Pursuant to Minnesota Rules, part 4410.3610, subpart 5c, the Responsible Governmental Unit (RGU) shall revise the environmental analysis document based on comments received during the comment period. The RGU shall include in the document a section specifically responding to each timely, substantive comment received that indicates in what way the comment has been addressed. Responses to community organization letters are provided in Sections 2, 3, and 4. Responses to public comments are provided by theme in Section 5.1. Section 5.2 provides an index of the public comments received and the themes included in each.



2. Highland District Council

Comment	Response
Resolution on Transportation Aspects of the Ford Site AUAR	
The HDC Transportation Committee strongly recommends that the AUAR assumptions and throughput thresholds that are informing the mitigation strategies will generate a result that is consistent with city policy objectives and the District 15 Plan of prioritizing pedestrians, cyclists, transit users, and vehicles; while minimizing vehicular congestion and idle times.	The AUAR assumptions have been agreed upon by technical agency staff and are consistent with industry standards for multimodal transportation analysis. The mitigation that has been identified is considered potential mitigation since implementation may be in conflict with other modal priorities.
The comments and recommendations compiled by Toole Design Group should be compared with the mitigation recommendations of the AUAR to identify gaps and opportunities to implement solutions.	The project team has reviewed the Highland Park Transportation Listening & Brainstorming Session Summary (dated September 13, 2017), and no major inconsistencies with the potential mitigation strategies were identified. The listening and brainstorming session summary will be considered as community input.
 The AUAR transportation mitigation is overly focused on motor vehicle trips and does not sufficiently address mitigation of bike and pedestrian network gaps and deficiencies: The AUAR identified potential for 5,470 weekday daily external trips by walk/bike (approximately 17% mode share) but does not recommend a specific or sufficient east-west bike facility along Ford Parkway. The HDC believes enhanced shared lanes or unprotected in-street bike lanes are insufficient to encourage bicycle mode share growth. The AUAR identifies gaps in the sidewalk network but does not recommend addressing them. Based on the expected increase in vehicle traffic, especially along Montreal Avenue and Mt. Curve, these gaps should be addressed and improved crossings provided. Cretin Avenue, Montreal Avenue, and Mississippi River Boulevard are commuter routes and drivers often exceed 	Page 61 of the Ford Site AUAR Transportation Analysis (see Appendix D) states the following: "As part of the Ford Site development, a trail is planned along the south side of Ford Parkway along the limits of the Ford Site. With the projected bicycle demand from the Ford Site, connectivity to Mississippi River Boulevard, and the expected traffic volumes on Ford Parkway, consideration should be given to providing a higher level of bicycle facility on Ford Parkway between the planned trail facility and the existing bike lanes east of Kenneth Street. Consideration should also be given to how these facilities are connected to each other and the adjacent bicycle network." Facility types will be evaluated against City policies to determine what facility is most appropriate and feasible. The Ford Site AUAR Transportation Analysis (pages 62-63) generally identifies enhancements and considerations to improve the pedestrian

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Comment	Response		
posted speed limits and decrease the safety and comfort of pedestrians, cyclists, and residents. Traffic calming measures should be utilized on all of these routes. A preferred solution for Mississippi River Blvd. would be to provide better marking and/or separation of walking and biking paths.	network. The City and/or County would need to further evaluate facility types to determine the most appropriate facility.		
	Page 54 of the Ford Site AUAR Transportation Analysis states the following: "Given the change in volumes on some of the roadways, improvements could be considered to manage increases in traffic volumes and/or speeds on these roadways. Potential improvements, which are consistent with City policies and practices and would likely be included as part of a future street reconstruction, include installing curb bump-outs at the Cretin Avenue/Highland Parkway intersection, along Mount Curve Boulevard (at Highland Parkway, Scheffer Avenue, and Hartford Avenue) and along Montreal Avenue (at Wilder Street and Howell Street). Note that as part of the City's 2019 mill and overlay program, curb bump-outs were constructed on Cleveland Avenue." City and/or County policies will be reviewed evaluate facility types to determine the most appropriate facility.		
The AUAR briefly reviews transit options (rerouting existing lines through the Ford Site and/or providing transit service through the site via the CP Rail Spur) but since neither project is programmed the AUAR does not assume they will take place. The HDC urges that right-of-way be set aside to support dedicated transit lanes and shelters with increased level of service, and that the city advocate for the above.	Comment noted. The <i>Ford Site Zoning and Public Realm Master Plan</i> (Master Plan) allocated right-of-way for dedicated transit lanes on Cretin Avenue. The right-of-way remains the same as what was outlined in the Master Plan.		
The HDC recommends that the city evaluate the impact of greenhouse gas emissions that will be generated from external trips generated by the Ford site development.	The AUAR has addressed vehicle emissions consistent with Minnesota Environmental Quality Board guidance and in consultation with the Minnesota Pollution Control Agency (MPCA). MPCA is the regulatory body for air quality and had no comments on the Draft AUAR. See MPCA comment letter in Appendix G of the Final AUAR.		
	The MPCA monitors 10 air pollutants and reviews the Air Quality Index (AQI) to confirm the Twin Cities metropolitan area continues to be an attainment area. As part of the Clean Air Act, the US Environmental Protection Agency (EPA) calculates the AQI for five major air pollutants. The data collected from the MPCA monitoring stations is		



Comment	Response
	compared to the EPA AQI ranges. The Twin Cities AQI on October 1, 2019 was 17, meaning the air quality in the Twin Cities Metro area is considered good. ¹
	The State of Minnesota has not adopted any additional methods of quantifying the potential impacts of greenhouse gas emissions. There is no agreed upon method to quantify the change in greenhouse gas emissions relative to a specific site or project.
The HDC Transportation Committee requests the city consistently engage the HDC as designs progress.	Comment noted. The City looks forward to engaging Highland District Council as the project progresses.
 The HDC requests answers to the following questions: State the reason the minimum density development scenario was not studied and why it met the criteria for exclusion. Explain the details behind the "various reductions" in Table 9 of Appendix D (Ryan Proposal Scenario Trip Generation Estimate). 	Pursuant to Minnesota Rules, part 4410.3610, an RGU may evaluate more than one scenario of anticipated development, provided that at least one scenario is consistent with the local governmental unit's adopted comprehensive plan and at least one scenario must be consistent with any known development plans of property owners within the study area. The AUAR scope complies with these requirements.
	If a specific project to be reviewed would otherwise require preparation of an EIS or will comprise at least 50 percent of the geographic area to be reviewed, the AUAR is subject to an initial scoping process and public comment period. In accordance with Minnesota Rules, part 4410.3610, subpart 5a, the RGU previously addressed alternative scenarios during the AUAR scoping process. Comments received by the RGU failed to demonstrate why an alternative development scenario is potentially environmentally superior to those identified in the RGU's draft order for review. Nonetheless, the RGU considered and excluded the proposed alternatives, including no-build or lower density scenarios.

¹ Source: <u>https://airnow.gov/index.cfm?action=airnow.local_city&mapcenter=1&cityid=101</u>



Comment	Response
	Pursuant to Minnesota Rules, part 4410.3610, subpart 5a(D), the RGU shall apply the criteria for excluding an alternative from analysis found under part 4410.2300, item G, in determining if a suggested additional scenario or alternative to a specific project should be included or excluded. Minnesota Rules, part 4410.2300, item G, states: "[a]n alternative may be excluded from analysis in the EIS if it would not meet the underlying need for or purpose of the project, it would likely not have any significant environmental benefit compared to the project as proposed, or another alternative, of any type, that will be analyzed in the EIS would likely have similar environmental benefits but substantially less adverse economic, employment, or sociological impacts."
	As set forth in the <i>Ford Site Zoning and Public Realm Master Plan</i> , a no-build alternative or other development scenarios that would result in densities below the minimum Master Plan requirements are not permitted and are not consistent with the purpose of the project. These alternatives are therefore excluded from review. The comments also incorrectly assume that no-build conditions were not evaluated. A review of the no-build alternative, if and when required by state law, is a study of certain existing environmental conditions. Existing conditions were addressed in the Draft AUAR and Mitigation Plan in determining the baseline environmental conditions within the study area at present and as anticipated development occurs exclusive of the proposed development scenarios.
	The AUAR scope adequately addresses a wide range of low, moderate, and high-density development scenarios. As set forth in the <i>Ford Site Zoning and Public Realm Master Plan</i> , a minimum and maximum development range is permitted within the study area (see Table F-1). There are currently no known development plans within the study area for development at the minimum permitted densities. The specific development proposal studied includes minimum densities for retail, civic and institutional uses; low-to-moderate office density; and a permitted housing density. The maximum permitted density scenario studied includes a significant increase in the retail,



Comment	Response			
	Response civic, institutional, and office uses. Review of both the specific development proposal and the maximum permitted density scenario therefore includes a wide-ranging analysis of the potential environmental impacts and mitigation strategies that may result within the permitted density range. Review of both the specific development proposal and the maximum permitted density scenario further identified potential environmental impacts across that broad range and identified certain strategies to be implemented to mitigate such impacts; therefore, evaluation of additional alternatives within this permitted range would not identify any significant environmental benefits. Nor is the evaluation of additional alternatives within the permitted density range required when each alternative would have similar environmental impacts, but lower density development would have potentially greater adverse economic, employment, and sociological impacts by reducing the development of housing (including affordable housing) and economic opportunities within the study area. Table F-1: Ford Site Zoning and Public Realm Master Plan			
	Land Uses	Minimum	Development Proposal	Maximum
	Housing	2,400 Dwelling Units	3,800 Dwelling Units	4,000 Dwelling Units
	Retail & Service	150,000 Sq. Ft. GFA	150,000 Sq. Ft. GFA	300,000 Sq. Ft. GFA
	Office & Employment	200,000 Sq. Ft. GFA	265,000 Sq. Ft. GFA	450,000 Sq. Ft. GFA
	Civic & Institutional	50,000 Sq. Ft. GFA	50,000 Sq. Ft. GFA	150,000 Sq. Ft. GFA
	GFA: Gross Floor Area			
	Page 27 of the Ford Site AUAR Transportation Analysis states the following: "various trip reductions were applied to the trip generation estimates to account for area transit service, walking/bicyclist facilities and environment, jobs and housing balance, amount of below market			



Comment	Response
	rate housing, and Travel Demand Management (TDM) Programs. These various reductions were identified leveraging data from multiple resources and case-studies locally and throughout the country." Detailed information regarding the base trip generation estimate assumptions are provided in the appendix to the Transportation Analysis, including person trips by transportation mode and various reduction factors.
Resolution on Development Aspects of the Ford Site AUAR	
The HDC CDC recommends that the AUAR study include a more thorough analysis of the direct, indirect, and cumulative environmental impact of Area C and the associated network of tunnels that are underneath the proposed development site. The Minnesota Administrative Rules require that "data and analysis shall be commensurate with the importance of the impact. See Minn R. 4410.2300(H) and 4410.3610 Subp.4. Given the level of risk associated with industrial waste contamination in close proximity to a housing development, the AUAR study should include data and analysis that are commensurate with that risk. If the AUAR is relying on additional studies as a basis to not include analysis of Area C and the tunnel network, please include those studies within the AUAR or incorporate them by reference. The stability of the tunnel system and the tunnel collapse near Area C are of particular concern.	Ford and its environmental consultant, Arcadis, are continuing to work with MPCA to address concerns with Area C. ² With respect to Area C and its impact on the 122-acre Ford Site parcel, groundwater flow is to the west, towards the Mississippi River. Based on collected data, there is no evidence of groundwater flow toward the Ford Site from Area C. The MPCA has not identified groundwater issues that require additional investigation on the Ford Site and has issued the Certificate of Completion dated May 15, 2019. Subsurface soil gas from the Area C contamination has not been identified as an issue based on completed investigations as reviewed by the MPCA. Additional subsurface soil vapor data will be necessary as the Ford Site is redeveloped to help inform future building-specific vapor mitigation decisions. The additional soil vapor data will be collected prior to construction of site buildings and under the oversight of the MPCA.
The HDC CDC recommends that the AUAR study be revised to include a more thorough analysis of the evidence of soil vapors and groundwater contamination and the potential direct, indirect, and cumulative impact of such vapors and contamination. The AUAR should include more robust mitigation strategies for such environmental impacts.	Thorough investigation of the 122-acre Ford Site parcel has been completed to the satisfaction of the MPCA, and the MPCA issued a Certification of Completion for that parcel on May 15, 2019. Groundwater conditions have been determined by the MPCA to be protective of public health and the environment. Impacts to perched groundwater were dealt with by removing the impacted soil that

² More information is available at <u>https://www.pca.state.mn.us/waste/saint-paul-ford-site</u>



Comment	Response
	caused the groundwater contamination. Minimal groundwater contamination was found in the St. Peter aquifer under the majority of the site. Groundwater in the St. Peter aquifer is generally well protected from surface sources of contaminants by the overlying Decorah, Platteville, and Glenwood bedrock units. A surface water evaluation demonstrated that the metals detected in the St. Peter aquifer do not pose a risk to the Mississippi River. In addition, the City of Saint Paul provides municipal water to the area, and groundwater at the site will not be used as a drinking water source.
	Additionally, the Certificate of Completion from the MPCA addresses subsurface soil vapors and indicates that the MPCA considers the on- site subsurface soil vapor data to be a screening level evaluation of potential vapor intrusion risk (i.e., to future buildings to be constructed) at the site. The Certificate of Completion indicates that additional subsurface soil vapor data will be necessary as the 122-acre Ford Site parcel is redeveloped to help inform future building-specific vapor mitigation decisions. The additional subsurface soil vapor data will be collected prior to construction of site buildings and under the oversight of the MPCA. Prior to the MPCA issuing the Certificate of Completion, Ryan Companies US, Inc. (Ryan) and Ford Motor Companies (Ford) environmental consultants (Terracon Consultants, Inc. and Arcadis U.S., Inc., respectively) conducted subsurface soil vapor investigations at the site consisting of 84 subsurface monitoring points, and the data was submitted to the MPCA. The MPCA has not required any air quality testing for outdoor air, as sidewalks, parks, trails, open spaces, etc., are not considered receptors to potential soil vapors below grade.
	A Certificate of Completion is the highest level of assurance issued by the MPCA.
The HDC CDC recommends the AUAR study be revised to include a more substantial analysis of the impact of on wildlife; especially the impact to migratory birds of the North American Migratory Mississippi Flyway.	As noted in the AUAR, the wildlife using the study area for habitat are species that are accustomed to a highly urbanized area with human influences. Prior to decommissioning the Ford Assembly Plant there was little vegetation to provide wildlife habitat. Since the building/plant removal and soil remediation that were completed in 2018, the site



Comment	Response
	remains with little vegetation to support wildlife. The proposed central stormwater management feature, green space, and boulevard areas will provide additional areas for the wildlife inhabiting this part of Saint Paul.
	The AUAR study area is within the Mississippi Flyway Zone, and the Mississippi River Corridor is used by numerous species of migratory birds in the spring and fall.
	The proposed development scenarios are not anticipated to have an adverse impact to migratory birds or wildlife. Development of the site will include single family lots along the river edge and other landscaping and a central water corridor within the site. The developed site will provide improved habitat for common songbirds and other urban wildlife compared to what exists today.
The HDC CDC recommends that the AUAR study be revised to include the Ford Site Master Plan Lower Development Scenario as requested by many community members. The Minnesota Administrative Rules state that an additional development scenario or alternative should only be excluded if: (a) "it would not meet the underlying need for or purpose of the project"; (b) "it would likely not have any significant environmental benefit compared to the project as	Pursuant to Minnesota Rules, part 4410.3610, an RGU may evaluate more than one scenario of anticipated development, provided that at least one scenario is consistent with the local governmental unit's adopted comprehensive plan and at least one scenario must be consistent with any known development plans of property owners within the study area. The AUAR scope complies with these requirements.
proposed"; or (c) "another alternative [that is part of the study] would likely have similar environmental benefits but substantially less adverse economic, employment, or sociological impacts." See Minn. R. 4410.2300(G). The response in the Final Order for the Alternative Urban Area-wide Review (AUAR) states, "review of the permitted minimum density range is not likely to identify any significant environmental benefits compared to the project as proposed." If the Minimum Density Scenario is going to be excluded on the basis of this criteria, please "explain (the) reasoning" for why that criteria is met as is required under Minn. R. 4410.3610 Subp. 5a.(D).	If a specific project to be reviewed would otherwise require preparation of an EIS or will comprise at least 50 percent of the geographic area to be reviewed, the AUAR is subject to an initial scoping process and public comment period. In accordance with Minnesota Rules, part 4410.3610, subpart 5a, the RGU previously addressed alternative scenarios during the AUAR scoping process. Comments received by the RGU failed to demonstrate why an alternative development scenario is potentially environmentally superior to those identified in the RGU's draft order for review. Nonetheless, the RGU considered and excluded the proposed alternatives, including no-build or lower density scenarios.



Comment	Response
	Pursuant to Minnesota Rules, part 4410.3610, subpart 5a(D), the RGU shall apply the criteria for excluding an alternative from analysis found under part 4410.2300, item G, in determining if a suggested additional scenario or alternative to a specific project should be included or excluded. Minnesota Rules, part 4410.2300, item G, states: "[a]n alternative may be excluded from analysis in the EIS if it would not meet the underlying need for or purpose of the project, it would likely not have any significant environmental benefit compared to the project as proposed, or another alternative, of any type, that will be analyzed in the EIS would likely have similar environmental benefits but substantially less adverse economic, employment, or sociological impacts."
	As set forth in the <i>Ford Site Zoning and Public Realm Master Plan</i> , a no-build alternative or other development scenarios that would result in densities below the minimum Master Plan requirements are not permitted and are not consistent with the purpose of the project. These alternatives are therefore excluded from review. The comments also incorrectly assume that no-build conditions were not evaluated. A review of the no-build alternative, if and when required by state law, is a study of certain existing environmental conditions. Existing conditions were addressed in the Draft AUAR and Mitigation Plan in determining the baseline environmental conditions within the study area at present and as anticipated development occurs exclusive of the proposed development scenarios.
	The AUAR scope adequately addresses a wide range of low, moderate, and high-density development scenarios. As set forth in the <i>Ford Site Zoning and Public Realm Master Plan</i> , a minimum and maximum development range is permitted within the study area (see Table F-2). There are currently no known development plans within the study area for development at the minimum permitted densities. The specific development proposal studied includes minimum densities for retail, civic and institutional uses; low-to-moderate office density; and a permitted housing density. The maximum permitted density scenario studied includes a significant increase in the retail,



Comment	Response			
	civic, institutional, and office uses. Review of both the specific development proposal and the maximum permitted density scenario therefore includes a wide-ranging analysis of the potential environmental impacts and mitigation strategies that may result within the permitted density range. Review of both the specific development proposal and the maximum permitted density scenario further identified potential environmental impacts across that broad range and identified certain strategies to be implemented to mitigate such impacts; therefore, evaluation of additional alternatives within this permitted range would not identify any significant environmental benefits. Nor is the evaluation of additional alternatives within the permitted density range required when each alternative would have similar environmental impacts, but lower density development would have potentially greater adverse economic, employment, and sociological impacts by reducing the development of housing (including affordable housing) and economic opportunities within the study area. Table F-2: Ford Site Zoning and Public Realm Master Plan			
			aster Plan	
	Land Uses	Minimum	Development Proposal	Maximum
	Housing	2,400 Dwelling Units	3,800 Dwelling Units	4,000 Dwelling Units
	Retail & Service	150,000 Sq. Ft. GFA	150,000 Sq. Ft. GFA	300,000 Sq. Ft. GFA
	Office & Employment	200,000 Sq. Ft. GFA	265,000 Sq. Ft. GFA	450,000 Sq. Ft. GFA
	Civic & Institutional	50,000 Sq. Ft. GFA	50,000 Sq. Ft. GFA	150,000 Sq. Ft. GFA
	GFA: Gross Floo	or Area		



Comment	Response
The HDC CDC recommends that the AUAR study be revised to include an adequate analysis under section b. of Section 9. Land Use. That section requires the RGU to discuss the project's compatibility with <i>nearby land uses</i> . The draft AUAR does not appear to include such a discussion. The analysis should include a thorough discussion of how the Ford Site Master Plan Maximum Development Scenario and the proposed Ryan Development Scenario are compatible with the nearby lower density residential areas. The analysis should also include a thorough discussion of the assumptions that were made about biking and walking, how those assumptions informed the land use decisions, and how those assumptions impact nearby land uses, especially during the winter.	 The City evaluated the compatibility of the nearby land uses as part of the Master Plan process. The zoning and density of districts as identified in the Master Plan were identified and development based on the surrounding land uses with less dense residential along Mississippi River Boulevard and denser mixed-use development as you move from west to east across the site. The design standards have been established to marry the surrounding architecture with the architecture within the AUAR study area. Policy T-3 in the City's Draft 2040 Comprehensive Plan identifies the following modal hierarchy when designing rights-of-way: Pedestrians, with a focus on safety Bicyclists, with a focus on safety Other vehicles
	The industry standards for modeling were used for the AUAR based on the goals outlined the Master Plan. The mode split assumptions that were used for the transportation analysis are identified on page 70-83 of the Transportation Analysis Report found in Appendix D of the Final AUAR.
The draft AUAR study addresses noise mitigation strategies for residents of the Ford development, but nothing for residents of the surrounding existing community. The HDC CDC recommends that the AUAR study be revised to include a robust analysis of noise generated during construction and after project completion (e.g., air handling units, additional traffic) and mitigation strategies for such noise for the surrounding existing community.	Construction activities (i.e., blasting, pile-driving, crushing, and grading activities) will be conducted in compliance with the City of Saint Paul Noise regulations to minimize noise levels and nighttime construction activities. ³ These regulations take into consideration construction adjacent to residential land uses.

³ Chapter 239: <u>https://library.municode.com/mn/st._paul/codes/code_of_ordinances?nodeId=PTIILECO_TITXXVIIIMIOF_CH293NORE</u>



3. Friends of Mississippi River

Comment	Response		
Permits and Approvals Required			
If the city has adopted a new Mississippi River Corridor Critical Area (MRCCA) ordinance, permits may be needed for vegetation removal on and near steep slopes.	Comment noted.		
Land Use			
The description of MRCCA and the Mississippi National River and Recreation Area (MNRRA) on pages 13-14 is dated with references to Executive Order 79-19, whereas the description on page 16 refers to the new MRCCA rules and St. Paul's recently adopted MRCCA Plan. This may have been done on purpose, but it is somewhat confusing. The new rules should be referenced in both places. (Pages 13-16).	The two different references were made intentionally. The reference to State Executive Order No. 79-19 is related to the 1976 designation of the Mississippi River corridor as a critical area, whereas the reference to the MRCCA Plan is related to planned land use and zoning.		
Geology, Soils, and Topography/Land Forms			
The Dorerton-Rock outcrop complex described in Table 6 has a slope of 25-65 percent. According to the new MRCCA rules, this area may need to be defined as a bluff and be protected as a primary conservation area. (Page 24)	Comment noted. The site has been significantly altered; therefore, the slope percentages shown in the soil survey may not be accurate. The study area within this soil map unit is currently less than 25 percent slopes.		
Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)			
This section focuses on potential impacts to rare, threatened or endangered species, but it also needs to address "other sensitive ecological resources." Specifically, we'd like to see this section address potential impacts to birds and wildlife that use the Mississippi River corridor for migration. The Mississippi River is an internationally significant migratory "flyway" used by 60% of all neo-tropical bird species and 40% of North American Waterfowl and Shorebirds.	As noted in the AUAR, the wildlife using the study area for habitat are species that are accustomed to a highly urbanized area with human influences. The proposed central stormwater management feature, green space, and boulevard areas will provide additional areas for the wildlife inhabiting this part of Saint Paul.		



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Comment	Response
Migratory birds can be impacted by glass buildings, which they fly into because of the reflection, and by artificial lighting, which confuses their sense of direction. We recommend discussion of these potential impacts in the AUAR and including the use of appropriate lighting and "bird-safe" glass as mitigation strategies.	The AUAR study area is within the Mississippi Flyway Zone, and the Mississippi River Corridor is used by numerous species to migrate in the spring and fall. Trees will be added within the identified green spaces and boulevards to increase the tree canopy within the AUAR study area and to meet
The AUAR describes adding pollinator habitat for bees, but providing habitat for birds is equally important. Development along Mississippi River Boulevard should allow space for canopy trees as well as native shrubs and other native landscaping. The open space within the hairpin turn could be dedicated to providing additional bird habitat.	the Master Plan and design standards.
Visual	
The AUAR does an inadequate job of addressing potential visual impacts. The discussion on page 42 includes reference to the Public River Corridor Views (PRCVs) identified in the city's recently adopted MRCCA Plan, but it only names one view—"View#5 Ford Dam Overlook," and it fails to name other PRCVs that could be affected, such as "View 4 Hartford Avenue Overlook"	Given the layout of the proposed development, existing vegetation, and proposed trees within the AUAR study area, there will be no views of the proposed development scenarios from the Hartford Avenue Overlook. The Master Plan has identified areas closer to Mississippi River Boulevard to have lower height buildings with the height of the buildings increasing from west to east.
The Hartford Avenue Overlook description states:	Additionally, considering the setback of the development from the bluff
"Downriver are views of the Ford Bridge. There are no buildings that impede the views at this location, providing an excellent and tranquil location to enjoy nature and the views of the forests that run the length of the Gorge Reach."	(east of Mississippi River Boulevard), views from Mississippi River Gorge Regional Park, Minnehaha Regional Park Wabun Picnic Area, Minnehaha Creek Confluence, and Fort Snelling Historic Site will be minimal.
 The following PRCVs from other communities should also be identified in the AUAR: Mississippi Gorge Regional Park 	As stated in the AUAR, the City may pursue flexibility in building height and/or district designation in the MRCCA ordinance. The developer will continue to work with the City to evaluate compatibility of the proposed development to the MRCCA ordinance.
 Minnehaha Regional Park Wabun Picnic Area Minnehaha Creek Confluence Fort Snelling Historic Site In reference to the city's new MRCCA Plan, the AUAR states: 	The proposed development will follow the recently adopted design standards that are now part of the Master Plan. These standards identify private landscape standards. The City will review the proposed developments to confirm they follow the design standards.



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Comment	Response
"Neither of the proposed scenarios are located in the view range of PRCV and, therefore, will not have an impact on any identified significant public views, which is consistent with Policy CA-11. Additionally, the proposed building heights and setback are consistent with the requirements of the MRCCA Districts and Ford MP zoning. The proposed building heights are lower (20-48 feet) along the Mississippi River front and gradually increase in height farther into the study area, which supports Policy CA-13."	The potential need for a conditional use permit or variance has been identified in the Mitigation Plan (see page 62).
In addition to our concern that only one PRCV is referenced here, we also disagree with the language that states the building heights are consistent with MRCCA requirements. Some of the proposed buildings within the MRCCA rules' RTC (River Towns and Crossings) District are planned to exceed the 48-foot height limit.	
The AUAR should emphasize the need for a visual impact study to be provided when the developer makes their application. They will have to get a CUP or variance from the existing 40-foot height limit, because it's part of the city's existing MRCCA ordinance, which is separate from the Ford master plan.	
FMR's main goal is to ensure that the potential visual impacts are robustly evaluated so the public can see how the development's height, shape and materials will impact views from the PRCV sites mentioned above. So far, the visual studies we have seen for the Ford zoning plan look ok, but a final version of the actual project design should also be studied.	
We are also concerned that no mitigation strategies have been identified for potential visual impacts. At the very least the mitigation plan should include the use of vegetative screening and minimizing visibility of roof materials during leaf-on conditions.	



Comment	Response
Transportation	
The transportation section of the AUAR does little to address potential impacts to Mississippi River Boulevard, which is likely to get more traffic once the development is occupied. We suggest that the mitigation plan include the following:	Comment noted. The proposed plan includes an improved bicycle facility along Mississippi River Boulevard. The Master Plan does not preclude the realignment of Mississippi River Boulevard in the future.
 Realign Mississippi River Boulevard at the hairpin turn to create more public open space and/or to restore Hidden Falls Reduce the parking lot pavement near the hairpin turn or move it away from the bluff to create more public open space at the bluff top Improve bike trail and bike facilities along Mississippi River Boulevard 	



4. The Alliance for Metropolitan Stability, Sierra Club North Star Chapter, Sustain Saint Paul, Fresh Energy, Metropolitan Consortium of Community Developers, Frogtown Neighborhood Association, Housing Justice Center, and Move Minnesota

RD SITE

A 21st Century Community

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Comment	Response
We urge you and City Council Members to adopt the Alternative Urban Areawide Review (AUAR) in its current form.	Thank you for your comment.
As neighbors invested in the future livability and sustainability of the city, we support the Ford Plan because:	
 The Ford Site represents an opportunity for Saint Paul to be a national and global leader in environmentally sustainable neighborhood planning The Ford Site can be a national demonstration project for how equitable development can be blended seamlessly with sustainable planning strategies and multi-modal transportation choices. Saint Paul is growing, and requires development that integrates transit, bicycling, and walking options that help people get to where they need to go affordably, efficiently, and in healthy, sustainable ways. 	



5. Public Comments

Thirteen themes related to the AUAR were identified in the public comments received as summarized in Table F-3.

Table F-3: Public Comment Themes

Code	Theme	Number of Comments
1	Responsible Governmental Unit	74
2	Development scenarios	77
3	Land use	75
4	Traffic	104
5	Multi-modal transportation	89
6	Wildlife	69
7	Water resources	3
8	Contamination/hazardous materials	63
9	Visual	63
10	Air	70
11	Noise	64
12	Infrastructure	70
13	Other	2



5.1. Responses by Theme

Summary	Response
1: Responsible Governmental Unit	
Commenters expressed concern that the City of Saint Paul Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts of the proposed project and requested that the Minnesota Environmental Quality Board make the final determination of adequacy on the AUAR.	Assignment of the Responsible Governmental Unit (RGU) for environmental review is determined by state law as set forth in the rules promulgated by the Minnesota Environmental Quality Board (EQB). Pursuant to Minnesota Rules, part 4410.4400, the City of Saint Paul is the local governmental unit assigned by rule to be the RGU for this AUAR.
2: Development Scenarios	
Commenters requested that the AUAR include a no-build scenario and a moderate density scenario.	Pursuant to Minnesota Rules, part 4410.3610, an RGU may evaluate more than one scenario of anticipated development, provided that at least one scenario is consistent with the local governmental unit's adopted comprehensive plan and at least one scenario must be consistent with any known development plans of property owners within the study area. The AUAR scope complies with these requirements.
	If a specific project to be reviewed would otherwise require preparation of an EIS or will comprise at least 50 percent of the geographic area to be reviewed, the AUAR is subject to an initial scoping process and public comment period. In accordance with Minnesota Rules, part 4410.3610, subpart 5a, the RGU previously addressed alternative scenarios during the AUAR scoping process. Comments received by the RGU failed to demonstrate why an alternative development scenario is potentially environmentally superior to those identified in the RGU's draft order for review. Nonetheless, the RGU considered and excluded the proposed alternatives, including no-build or lower density scenarios.
	Pursuant to Minnesota Rules, part 4410.3610, subpart 5a(D), the RGU shall apply the criteria for excluding an alternative from analysis



Summary	Response
	found under part 4410.2300, item G, in determining if a suggested additional scenario or alternative to a specific project should be included or excluded. Minnesota Rules, part 4410.2300, item G, states: "[a]n alternative may be excluded from analysis in the EIS if it would not meet the underlying need for or purpose of the project, it would likely not have any significant environmental benefit compared to the project as proposed, or another alternative, of any type, that will be analyzed in the EIS would likely have similar environmental benefits but substantially less adverse economic, employment, or sociological impacts."
	As set forth in the <i>Ford Site Zoning and Public Realm Master Plan</i> , a no-build alternative or other development scenarios that would result in densities below the minimum Master Plan requirements are not permitted and are not consistent with the purpose of the project. These alternatives are therefore excluded from review. The comments also incorrectly assume that no-build conditions were not evaluated. A review of the no-build alternative, if and when required by state law, is a study of certain existing environmental conditions. Existing conditions were addressed in the Draft AUAR and Mitigation Plan in determining the baseline environmental conditions within the study area at present and as anticipated development occurs exclusive of the proposed development scenarios.
	The AUAR scope adequately addresses a wide range of low, moderate, and high-density development scenarios. As set forth in the <i>Ford Site Zoning and Public Realm Master Plan</i> , a minimum and maximum development range is permitted within the study area (see Table F-4). There are currently no known development plans within the study area for development at the minimum permitted densities. The specific development proposal studied includes minimum densities for retail, civic and institutional uses; low-to-moderate office density; and a permitted housing density. The maximum permitted density scenario studied includes a significant increase in the retail, civic, institutional, and office uses. Review of both the specific development proposal and the maximum permitted density scenario



Summary	Response						
	 therefore includes a wide-ranging analysis of the potential environmental impacts and mitigation strategies that may result within the permitted density range. Review of both the specific development proposal and the maximum permitted density scenario further identified potential environmental impacts across that broad range and identified certain strategies to be implemented to mitigate such impacts; therefore, evaluation of additional alternatives within this permitted range would not identify any significant environmental benefits. Nor is the evaluation of additional alternatives within the permitted density range required when each alternative would have similar environmental impacts, but lower density development would have potentially greater adverse economic, employment, and sociological impacts by reducing the development of housing (including affordable housing) and economic opportunities within the study area. Table F-4: Ford Site Zoning and Public Realm Master Plan 						
	Land UsesMinimumDevelopment ProposalMaximumHousing2,400 Dwelling Units3,800 Dwelling Units4,000 Dwelling UnitsRetail &150,000 Sq.150,000 Sq. Ft.300,000 Sq. Ft.						
	Service	Ft. GFA	GFA	GFA			
	Office &	200,000 Sq.	265,000 Sq. Ft.	450,000 Sq. Ft.			
	Employment	Ft. GFA	GFA	GFA			
	Civic &	50,000 Sq. Ft.	50,000 Sq. Ft.	150,000 Sq. Ft.			
	Institutional	GFA	GFA	GFA			
	GFA: Gross Floor Area						



Summary	Response
3: Land Use	
Commenters requested justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA).	As stated in the AUAR, the City may pursue flexibility in building height and/or district designation in the MRCCA ordinance. The developer will continue to work with the City to evaluate compatibility of the proposed development to the MRCCA ordinance.
	The proposed development will follow the design standards that have been established as part of the Master Plan. These standards identify landscaping requirements, including any vegetative screening that is needed for the proposed development. The City will review the proposed developments as part of its existing regulatory process to confirm they follow the adopted design standards.
	The potential need for a conditional use permit or variance has been identified in the Mitigation Plan (see page 62).
Concerns were raised about how the proposed development can be considered a compatible land use and how it can be considered to be consistent with the stated intents and purposes of the Saint Paul Zoning Code, which is designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.	The City evaluated the compatibility of the nearby land uses as part of the Master Plan process. The zoning and density of districts as identified in the Master Plan were identified and development based on the surrounding land uses with less dense residential along Mississippi River Boulevard and denser mixed-use development as you move from west to east across the site. The design standards were adopted to ensure that the buildings support the walkable, pedestrian, and bike-friendly built environment of the Ford Site.
4: Traffic	
Commenters raised questions about timing of the traffic counts and the Institute of Transportation Engineers (ITE) data and trip reductions assumed in the transportation analysis.	The traffic counts were completed in May 2019 to capture accurate data while schools were still in session. The locations of the traffic counts, as identified on Figure 1 (page 3) of the Transportation Analysis Report, were coordinated with the agencies listed on page 2 of the Transportation Analysis Report included in Appendix D of the AUAR. Comments on the Scoping document were reviewed with the



Summary	Response
	transportation agencies and updates to the traffic analysis were incorporated into the Transportation Analysis Report and the AUAR.
	The trip reduction assumptions used were standard for this type of development and are outlined in the Transportation Analysis Report (Appendix D of the AUAR). Further information on trip generation and reductions is included in the appendix of the Transportation Analysis Report (pages 70-83).
Commenters raised concerns about increases in traffic and impacts on congestion and safety. Questions were raised regarding an intersection capacity of level of service (LOS) D as acceptable.	The Transportation Analysis reviewed the increase in traffic and impact on potential congestion and safety within the AUAR study area and vicinity. Mitigation measures and considerations have been identified within the report and the AUAR to minimize congestion and impacts to the surrounding transportation network.
	Overall intersection LOS A through D is generally considered acceptable within the Twin Cities metropolitan area, although longer delays for short periods of time and/or for specific movements are often considered acceptable as well. In urban areas, it is common for intersections to operate at LOS E or LOS F for short periods of time, particularly when balancing other transportation modal priorities.
Commenters raised concerns about traffic during construction.	The developer will work with the City to establish a traffic mitigation plan during the phases of construction as is required as part of existing regulatory processes such as site plan review.
 Commenters requested additional study of the following areas: The intersections near I-94, I-35, and Highway 5 The intersection of 46th Street and Highway 55 Along Mississippi River Blvd South toward Edgecumbe Randolph North of Randolph on Cretin 	The additional study intersections and roadways identified were reviewed by or developed in collaboration with the various agencies included on page 2 of the Transportation Analysis Report and were outlined in the Final AUAR Order and Scoping EAW.



Summary	Response
 Specific mitigation suggestions identified by commenters are as follows: Add a traffic signal or 4-way stop sign at the intersection of Howell and Montreal Change the Ford and Cleveland intersection to allow for right turn from (eastbound) Ford to (southbound) Cleveland when the northbound Cleveland has green arrow Convert Cleveland and Cretin to a one-way going north and a one-way going south Separate the biking and walking paths along Mississippi River Boulevard rather than adding a northbound bike lane Cretin Avenue Southbound: Limiting left turns on Lincoln Avenue during afternoon rush hour. Left turn lane and/or phased turn signal during rush hour at Cretin and St. Clair. Phased left turn signal eastbound during rush hour at Cretin and Randolph. Eliminate west side parking on Cretin Avenue south of Jefferson, or at a minimum south of James. Cretin Avenue Northbound: Expand the morning no parking time restrictions from Summit to Marshall from 7-9am to 7- 10am and the afternoon restrictions from 4-7pm to 3-7pm. The current restrictions are violated regularly by 15 minutes to 30 minutes. Ford Parkway/Mount Curve Blvd. – If traffic volumes permit and some property north of Ford Parkway can be acquired, consider installing a roundabout Implement traffic calming measures on Cretin, Montreal, and Mississippi River Boulevard Immediately implement the recommended mitigation of installing left-turn signal phasing capability at the intersection of Fairview/Montreal. Also, install speed bumps on Yorkshire Ave between Fairview and Davern. 	The City has reviewed the recommended mitigation measures. The feasibility of the identified mitigation measures was reviewed, and it was determined that the mitigation measures identified Transportation Analysis Report and AUAR are sufficient for mitigating anticipated traffic impacts for both scenarios. The mitigation measures identified in the AUAR have been thoroughly vetted by the stakeholders and the mitigation plan, as outlined in the AUAR, identified potential improvements or actions that have been identified for consideration are intended to provide discretion and engineering judgement to the responsible stakeholders and decision-makers with respect to balancing the needs of the various modes of travel. Bicycle and pedestrian facility enhancements along Mississippi River Boulevard were outlined in the AUAR. Speed humps were not identified as part of the mitigation. Existing concerns, such as speed hump requests, should be submitted to the City's Traffic Engineering Division of Public Works. Other traffic calming measures were identified in the Transportation Analysis Report.



Summary	Response					
Commenters were curious about the ITE parking minimums used in the transportation analysis and proposed parking as part of the development scenarios.	The parking ratios and minimums outlined in the Transportation Analysis Report were based on the ITE Manual, 10 th Edition. The proposed parking for both scenarios meets the goals and requirements of the Master Plan. Existing concerns with parking should be submitted to the City's Traffic Engineering Division of Public Works.					
5: Multi-Modal Transportation						
Concerns were raised about assumptions related to walking and biking used in the transportation analysis and the need to consider the winter climate. There were also questions about what the City is doing to promote multi-modal transportation.	 Policy T-3 in the City's Draft 2040 Comprehensive Plan identifies the following modal hierarchy when designing rights-of-way: Pedestrians, with a focus on safety Bicyclists, with a focus on safety Transit Other vehicles The Saint Paul Bicycle Plan (SPBP) is an addendum to the Saint Paul Comprehensive Plan. It was adopted by City Council on March 18, 2015, and has subsequently been updated twice, most recently on July 19, 2017. The SPBP will guide the development of a safe, effective, and well-connected network of bicycle facilities to encourage and facilitate bicycle transportation. The primary objective of the SPBP is to designate alignments throughout the city for future development of bikeways. The vision established in the SPBP will more than double the mileage of bicycle facilities throughout Saint Paul over the next several decades. 					
Commenters requested that gaps in the sidewalk network be addressed.	The City's Pedestrian Plan identifies actions to support walking in Saint Paul. The Pedestrian Plan was adopted by the City Council on June 5, 2019 and is an addendum to the 2040 Comprehensive Plan. As noted in the AUAR, the City's adopted Pedestrian Plan reiterates the sidewalk in-fill policy and further requires private property owners to install sidewalk adjacent to all streets abutting properties					



Summary	Response						
	undergoing site redevelopment. It does not require developers to add sidewalk beyond their property.						
Commenters raised questions about what is considered an acceptable walking distance to a transit station.	An acceptable walking distance is 0.25 miles for a local bus station and 0.5 miles for a light rail or bus rapid transit station. This is standard practice within the Twin Cities metro area.						
Questions were raised about how bicycle traffic is measured (ITE estimates or counts).	As noted in the AUAR, the bicycle trip generation estimates were calculated using the ITE Trip Generation Manual, 10 th Edition.						
Commenters also requested improvements to the bike trail and facilities along Mississippi River Boulevard.	Bicycle and pedestrian facility enhancements along Mississippi River Boulevard were outlined in the AUAR.						
6: Wildlife							
Commenters raised concerns about impacts to wildlife in the area and requested additional information on potential impacts to wildlife and migratory birds.	As noted in the AUAR, the wildlife using the study area for habitat are species that are accustomed to a highly urbanized area with human influences. Prior to decommissioning of the Ford Plant there was little vegetation to provide wildlife habitat. Since building/plant removal and soil remediation that was completed in 2018, the site remains with little vegetation to support wildlife. The proposed central stormwater management feature, green space, and boulevard areas will provide additional areas for the wildlife inhabiting this part of Saint Paul.						
	The AUAR study area is within the Mississippi Flyway Zone, and the Mississippi River Corridor is used by numerous species of migratory birds in the spring and fall.						
	The proposed development scenarios are not anticipated to have an adverse impact to migratory birds or wildlife. Development of the site will include single family lots along the river edge and other landscaping and a central water corridor within the site. The developed site will provide improved habitat for common songbirds and other urban wildlife compared to what exists today.						



Summary	Response
7: Water Resources	
Commenters raised concerns about potential impacts to the Mississippi River as a result of development of the AUAR study area.	The proposed project will not directly impact the Mississippi River. The development scenarios will provide stormwater treatment that is an improvement to the existing condition of the site. The proposed stormwater management system will provide treatment, volume, and rate control which will avoid indirect impacts to the Mississippi River. With the Mississippi River down the bluff and at a lower elevation from the AUAR study area, the proposed development scenarios will not be visible from the Mississippi River; therefore, the proposed development scenarios will not have a negative impact on the views from the river.
8: Contamination/Hazardous Materials	
Commenters requested additional information on and mitigation measures for soil vapors and raised concerns about contamination at Area C.	Ford and its environmental consultant, Arcadis, are continuing to work with MPCA to address concerns with Area C. ⁴ With respect to Area C and its impact on the 122-acre Ford Site parcel, groundwater flow is to the west, towards the Mississippi River. Based on collected data, there is no evidence of groundwater flow toward the Ford Site from Area C. The MPCA has not identified groundwater issues that require additional investigation on the Ford Site and has issued the Certificate of Completion dated May 15, 2019. Subsurface soil gas from the Area C contamination has not been identified as an issue based on completed investigations as reviewed by the MPCA. Additional subsurface soil vapor data will be necessary as the Ford Site is redeveloped to help inform future building-specific vapor mitigation decisions. The additional soil vapor data will be collected

⁴ More information is available at <u>https://www.pca.state.mn.us/waste/saint-paul-ford-site</u>.



Summary	Response
	prior to construction of site buildings and under the oversight of the MPCA.
9: Visual	
Commenters requested additional assessment of impacts to Significant Public Views, including the Veteran's Home and views of the Mississippi River Gorge.	Given the layout of the proposed development, existing vegetation, existing topography of the site, and proposed trees within the AUAR study area, there will be no views of the proposed development scenarios from the Mississippi River Gorge Regional Park or the Veteran's Home across the Mississippi River. The Master Plan has identified areas closer to Mississippi River Boulevard to have lower height buildings, with the height of the buildings increasing from west to east, to minimize visibility from the west.
10: Air	
Commenters raised questions about vehicle emissions given projected increases in traffic and requested additional study of carbon dioxide, greenhouse gas emissions, non-diesel particulate matter emissions, and the impact of the project on climate change.	The AUAR has addressed vehicle emissions consistent with Minnesota Environmental Quality Board guidance and in consultation with the MPCA. MPCA is the regulatory body for air quality and had no comments on the Draft AUAR. See MPCA comment letter in Appendix G of the Final AUAR.
	The MPCA reviews the Air Quality Index (AQI) to confirm that the Twin Cities Metro Area continues to be in an Attainment Area for Air Quality.
	The MPCA monitors 10 air pollutants and reviews the Air Quality Index (AQI) to confirm the Twin Cities metropolitan area continues to be an attainment area. As part of the Clean Air Act, the US Environmental Protection Agency (EPA) calculates the AQI for five major air pollutants. The data collected from the MPCA monitoring stations is compared to the EPA AQI ranges. The Twin Cities AQI on



Summary	Response					
	October 1, 2019 was 17, meaning the air quality in the Twin Cities Metro area is considered good. ⁵					
	The State of Minnesota has not adopted any additional methods of quantifying the potential impacts of greenhouse gas emissions. There is no agreed upon method to quantify the change in greenhouse gas emissions relative to a specific site or project.					
11: Noise						
Commenters requested additional noise analysis to study impacts to residents of the surrounding community from construction, operations, and increased traffic.	Construction activities (i.e., blasting, pile-driving, crushing, and grading activities) will be conducted in compliance with the City of Saint Paul Noise regulations to minimize noise levels and nighttime construction activities. ⁶ These regulations take into consideration construction adjacent to residential land uses.					
	As noted in the AUAR, traffic volumes in the project area are either on roadways that do not have receivers that are sensitive to noise, or, the traffic level increase attributable to the project are well below the amount that would generate a sound increase that would be noticeable.					
12: Infrastructure						
Commenters raised concerns about the stability of the tunnel system and the tunnel collapse near Area C and requested additional information.	Seven documented tunnel systems were constructed in the subsurface below the former Ford Assembly Plant at various depths and configurations. The majority of tunnels are less than 10 feet in width/height, although larger tunnels were documented for the sand mining. Based on information provided by Ford, the shallow oil tunnel was completely removed and backfilled. Additionally, the steam tunnel was demolished and removed down to the bottom slab of the					

 ⁵ Source: <u>https://airnow.gov/index.cfm?action=airnow.local_city&mapcenter=1&cityid=101</u>
 ⁶ Chapter 239: <u>https://library.municode.com/mn/st._paul/codes/code_of_ordinances?nodeId=PTIILECO_TITXXVIIIMIOF_CH293NORE</u>



Summary	Response
	tunnel. The bottom slab of the steam tunnel was punctured to provide drainage, and the tunnel area was backfilled with Class 5 fill material. The remaining tunnels were bulk-headed at the entrances and left in existing condition. The southwest end (entrance) to the sand tunnel was noted to be collapsed; however, it was also noted that the collapse was likely intentional to block the tunnel. The tunnels do not extend under the surrounding residential areas.
	Based on the depths of the existing tunnels, the presence of largely intact (Platteville) limestone bedrock above the sandstone, and the findings of the previous tunnel evaluation report from 2012, the potential for settlement issues and geotechnical risks to the proposed development related to the existing tunnels is minimal. Based on the preliminary site development plan, potential building loads will have negligible effect on the stability and long-term integrity of the existing tunnels.
Commenters requested consideration on re-evaluating the roads coming and going into the development due to concern that the infrastructure cannot support the increase in traffic.	The roadway network for the proposed development scenarios was established as part of the Master Plan process, including access points for the AUAR study area.
13: Other	
Commenters raised concerns about proposed materials used and architecture of the proposed development.	The proposed development will be designed to comply with the design standards that have been established for the Ford Site.
Commenters had some questions about project financing, including public financing mechanisms.	The developer has requested Tax Increment Financing (TIF) through the City's Housing Redevelopment Authority (HRA). Additional information on project financing can be viewed on the City's website. ⁷

⁷ See the information available at <u>https://www.stpaul.gov/departments/planning-economic-development/planning/ford-site-21st-century-community/frequently-asked</u>



Summary	Response
Commenters requested elements of sustainability to be incorporated into the design of the development scenarios.	The Master plan identifies sustainable practices and green infrastructure, which are also further identified in the City's Draft Climate Action and Resilience Plan. The proposed development scenarios will incorporate sustainable practices and, if it is awarded public financing over \$200,000, the development will be subject to the City's sustainable development policies. ⁸

⁸ Available at <u>http://www.sustainablebuildingpolicy.umn.edu/saintpaul/</u>



5.2. Index of Public Comments

		Themes Addressed in Comment												
Comment Number ⁹	Name	1: Responsible Governmental Unit	2: Development Scenarios	3: Land Use	4: Traffic	5: Multi-Modal Transportation	6: Wildlife	7: Water Resources	8: Contamination/ Hazardous Materials	9: Visual	10: Air	11: Noise	12: Infrastructure	13: Other
1	Margy Peterson	Х	Х	Х	Х	X					Х		Х	
2	Gary Martland				Х									
3	Jacqueline Mosio										Х			Х
4	Jas McVeety/Deborah Green		Х											
5	Catherine Hunt						Х							
6	Brian Murphy				Х									
7	Thomas Kozlak				Х	X								
8	Pat Golfis				Х	X								
9	Theodore Blomgren			Х										
10	Mary Blomgren			Х	Х									
11	Bruce Faribault													X
12	Martha Faust					X								
13	Dorothy Lupscheedy												Х	
14	Tom Clarke		Х	Х	Х								Х	
15	Tram Hoang		Х			X								
16	Carol Kist				Х	X								
17	Mary Lilly				Х									
18	Colleen Zuro-White				Х									
19	Jim Winterer	Х	Х	Х	Х		Х		Х		Х	Х		
20	Michael Daigh					X								

⁹ Multiple comments submitted by the same person are grouped under one comment number.



		Themes Addressed in Comment												
Comment Number ⁹	Name	1: Responsible Governmental Unit	2: Development Scenarios	3: Land Use	4: Traffic	5: Multi-Modal Transportation	6: Wildlife	7: Water Resources	8: Contamination/ Hazardous Materials	9: Visual	10: Air	11: Noise	12: Infrastructure	13: Other
21	Frank Douma					X								
22	Amy Murphy													Х
23	Jenna Strank				Х									
24	Frank Stifter					X								
25	Christine Mary Popowski					X								
26	Jan Martland	Х	Х	Х	Х	X			Х		Х			
27	Jim Ginther	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
28	Allison Mariani	X	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
29	Anne Brataas	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
30	Bill Diederich	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
31	Bobbette Axelrod	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
32	David Goldberg	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
33	Gail Stremel				Х									
34	Isla Hejny	X	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
35	Janine McQuillan	Х	Х		Х									
36	Jesse Onkka	Х	Х	Х	Х	X	Х		X	Х	X	X	Х	
37	Jim & Kathie Cech	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	
38	Jim Carlen	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
39	Jim McQuillan	Х	Х		Х									
40	John White	Х	Х	Х	Х	X	Х		X	Х	Х	Х	Х	
41	Kate Burda	Х	Х		Х		Х						Х	
42	Kent Petterson			Х			Х			Х				
43	Kristen Grant	X	Х	Х	Х	X	Х		X	Х	Х	Х	Х	
44	Layne Hendel	X	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
45	Lorelei Weidman	X	Х	Х	Х	Х	Х		X	Х	Х	Х	Х	



		Themes Addressed in Comment												
Comment Number ⁹	Name	1: Responsible Governmental Unit	2: Development Scenarios	3: Land Use	4: Traffic	5: Multi-Modal Transportation	6: Wildlife	7: Water Resources	8: Contamination/ Hazardous Materials	9: Visual	10: Air	11: Noise	12: Infrastructure	13: Other
46	Margaret Killeen	Х	Х	Х	Х	Х	Х		X	Х	Х	Х	Х	
47	Murphy		Х	Х										
48	Stuart & Mary Ellen Knappmiller			Х		x								
49	Susie Leek	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
50	Terry Frahm				Х	X								
51	Tom Kreuzer	X	Х	Х	Х	Х	Х		X	Х	X	X	Х	
52	Vera Kirschik				Х									
53	Pratik Joshi	X	Х	Х	Х	X	Х		X	Х	X	X	Х	
54	Barbara Pilney	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	
55	Ronald & Kathryn Bennett	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	
56	Jill Meyer	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	
57	Allan Brill	X	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	
58	Beth Friend	X	X	Х	Х	X	Х			Х	X	X		
59	Christa Treichel	X	X	Х	X	X	Х	Х	X	Х	X	X	X	
60	Jeffrey Stanko	X	X	Х	Х	X	Х		X	Х	X	X	X	
61	John Pilney	X	X	X	X	X	Х		X	<u>X</u>	X	X	X	
62	Karen Wilson	X	X	Х	Х	X	Х		X	Х	X	X	X	
63	Sally Rafowicz	X	X	Х	X	X	X		X	X	X	X	X	
64	Yu-Mao (Sam) Tsai	X	X	X	X	X	X		X	<u>X</u>	X	X	X	
65	Kathryn McGuire	X	Х	Х	Х	X	Х		X	X	X	X	Х	
66	Nancy Werner	X	X	Х	X	X	X		X	X	X	X	Х	
67	Catherine Bittner	X	X	X	X	X	Х		X	X	X	X	Х	
68	Clarence Chaplin	X	X	X	X	X	X		X	X	X	X		
69	Lori Brostrom	X	Х	Х	Х	X	Х		X	Х	X	Х	Х	



		Themes Addressed in Comment												
Comment Number ⁹	Name	1: Responsible Governmental Unit	2: Development Scenarios	3: Land Use	4: Traffic	5: Multi-Modal Transportation	6: Wildlife	7: Water Resources	8: Contamination/ Hazardous Materials	9: Visual	10: Air	11: Noise	12: Infrastructure	13: Other
70	Matt Meyer	Х	Х	Х	Х	X	Х		X	Х	X	Х	Х	
71	Pamela Moody-Ginther	Х	Х	Х	Х	X	Х	Х	Х	Х	X	Х	Х	
72	Moria A. Keane				Х	X							Х	
73	Thomas L. Romens				Х	X							Х	
74	Valerie Nebel					X								
75	Joan Guilfoyle				Х	X								
76	Molly Foster				Х									
77	Rick Dagenais				Х	X							Х	
78	Howard Miller				Х	X								
79	Yorkshire Avenue Homestead Owners		х		Х									
80	Camille McCann	Х	Х	Х	Х	X	Х		X	Х	Х	Х	Х	
81	Christie Englund	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	
82	Colleen Traxler	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
83	Craig Dock	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
84	Jennifer Barrett	Х	Х	Х	Х	X	Х		Х	Х	X	X	Х	
85	Kelly Harmon Schmitt	Х	Х		Х	Х					X	Х		
86	Kristi Haselman	Х	Х	Х	Х	X	Х		X	Х	X	X	Х	
87	Lyons St. Fleur	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
88	Maggie LaNasa	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
89	Mary Dunn				Х	X					Х			
90	Molly Barrett	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
91	Scott Swanson				Х									
92	Victoria Stewart	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
93	Anne Lynch	Х	Х	Х	Х	Х	Х		X	Х	Х	Х	Х	



		Themes Addressed in Comment												
Comment Number ⁹	Name	1: Responsible Governmental Unit	2: Development Scenarios	3: Land Use	4: Traffic	5: Multi-Modal Transportation	6: Wildlife	7: Water Resources	8: Contamination/ Hazardous Materials	9: Visual	10: Air	11: Noise	12: Infrastructure	13: Other
94	Deborah Patterson	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
95	Edward Stephens				Х									
96	Gail Peterson	X	Х	Х	Х	X	Х		X	Х	X	X	Х	
97	Luana Ciccarelli	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	
98	Nolan Zavoral				Х									
99	Jody Cohen Press	Х	Х	Х	Х									
100	Philip Rampi	Х	Х	Х	Х	X	Х		X	Х	Х	Х	Х	
101	Renate Sharp	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
102	Suzanne & Shawn Hansen	Х		Х	Х	X	Х		X	Х	Х	Х		
103	Anne Stark	Х	Х	Х	Х	X	Х		X	Х	Х	Х	Х	
104	Charles Hathaway	Х	Х	Х	Х	X	Х		X	Х	Х	Х	Х	
105	Christine Walsh	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
106	Colleen Basney				Х								Х	
107	Elisa Hayday		Х		Х		Х	Х						
108	Elizabeth Lenz	Х	Х	Х	Х	X	Х		X	Х	Х	Х	Х	
109	Elizabeth Madson Ankeny	Х	Х	Х	Х	X	Х		X	Х	Х	Х	Х	
110	Glen & Gretchen Carpenter	Х	Х	Х	Х	X	Х		X	Х	Х	Х	Х	
111	Kathleen Hetrick & John Wittenstrom	X	х	х	x	X	Х		x	х	x	x	x	
112	Lynn Varco	Х	Х		Х								Х	
113	Margaret Isom	Х		Х	Х									
114	Matt McGuire	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	
115	Michael Stoick													
116	Sheila O'Hara	Х	Х	Х	Х	X	Х		Х	Х	X	X	Х	
117	Tom Stark	Х	Х		Х									



		Themes Addressed in Comment												
Comment Number ⁹	Name	1: Responsible Governmental Unit	2: Development Scenarios	3: Land Use	4: Traffic	5: Multi-Modal Transportation	6: Wildlife	7: Water Resources	8: Contamination/ Hazardous Materials	9: Visual	10: Air	11: Noise	12: Infrastructure	13: Other
118	Sarah Stewart					X								
119	Michelle Doyle & Andrew Nelson			х	x	x	Х				х		Х	
120	Hugo Bruggeman			Х	Х	Х					Х			
121	Paul Earl-Torniainen				Х	X							Х	
122	Sally Bauer				Х	X								
123	Robert Larson				Х	X								
124	Leigh Homstad	Х												
125	Gil Young													Х
	TOTAL	74	77	75	104	89	69	3	63	63	70	64	70	2



Appendix G: Agency Comment Letters

MINNESOTA POLLUTION CONTROL AGENCY

520 Lafayette Road North | St. Paul, Minnesota 55155-4194 | 651-296-6300 800-657-3864 | Use your preferred relay service | info.pca@state.mn.us | Equal Opportunity Employer

September 10, 2019

Menaka Mohan Ford Site Planner City of Saint Paul 25 W 4th Street, Suite 1400 St. Paul, MN 55102

Re: Ford Site Draft Alternative Urban Areawide Review

Dear Menaka Mohan:

Thank you for the opportunity to review and comment on the Draft Alternative Urban Areawide Review (AUAR) for the Ford Site project (Project) in the city of St. Paul, Ramsey County, Minnesota. The Project consists of development of the 122 acre Ford Site and three other adjacent parcels. Minnesota Pollution Control Agency (MPCA) staff has reviewed the Draft AUAR and has no comments at this time.

We appreciate the opportunity to review the Project. Please be aware that this letter does not constitute approval by the MPCA of any or all elements of the Project for the purpose of pending or future permit action(s) by the MPCA. Ultimately, it is the responsibility of the Project proposer to secure any required permits and to comply with any requisite permit conditions. If you have any questions concerning our review of this Draft AUAR, please contact me by email at <u>Karen.kromar@state.mn.us</u> or by telephone at 651-757-2508.

Sincerely,

leven knowner

Karen Kromar Project Manager Environmental Review Unit Resource Management and Assistance Division

KK:bt

cc: Dan Card, MPCA, St. Paul Suzanne Hanson, MPCA, Duluth

DEPARTMENT OF TRANSPORTATION

September 11, 2019

Menaka Mohan, Ford Site Planner City of Saint Paul 25 West Fourth Street, Suite 1400 Saint Paul, MN 55102

SUBJECT: Ford Site AUAR August 2019 MnDOT Review # AUAR19-005 SE quad of Ford Pkwy and Mississippi River Blvd City of Saint Paul, Ramsey County

Dear Ms. Mohan:

Thank you for the opportunity to review the August 2019 Alternative Urban Areawide Review (AUAR) for the above referenced project. As plans are refined, we welcome the opportunity to meet with project partners and review updated information. MnDOT has the following comments:

Traffic

Due to the concept level nature of an AUAR, the traffic information is considered to be a general indication of environmental impact. Development scenarios may change after an AUAR is completed, requiring additional traffic analysis. MnDOT's review of this AUAR does not constitute approval of a regional analysis and is not a specific approval for access or new roadway improvements. As more detailed site plans are developed, the accompanying traffic analysis should reflect the changes in the proposed development.

Please contact Ashley Roup of the Metro District's Traffic Engineering Section at 651-234-7815 or <u>Ashley.Roup@state.mn.us</u> to provide further information and to address related questions.

Trip Generation Estimates

MnDOT commends the multimodal trip generation estimates and analysis presented. This information is very helpful in developing a more complete understanding of how all the people who will live, visit, work, and shop at the new development will connect with the local and regional transportation system.

Trip Directional Distribution

The Directional Distribution information presented on Page 30 and Figure 14 of the Transportation Analysis should be revised to better explain the method for estimating the distribution of auto trips among regional state and county roads (MN 5, MN 51, MN 55, and CSAH 46). It is not clear on Figure 14 what the percentages shown in the large blue ovals, smaller red and blue circles represent.

Please be in touch with Jim Henricksen, MnDOT's Metro District Director of Travel Behavior Analysis, at <u>Jim.Henricksen@state.mn.us</u> or 651-234-7782, with related questions.

Multimodal Planning

The AUAR should provide graphics and narrative describing proposed connections of the site's sidewalks and trails to the <u>Regional Bicycle Transportation Network</u>, which is maintained by the Metropolitan Council.

Please continue to coordinate multimodal planning with Mackenzie Turner Bargen, MnDOT's Metro District Pedestrian & Bicycle Coordinator, at <u>Mackenzie.Turnerbargen@state.mn.us</u> or 651-234-7879.

Review Submittal Options

MnDOT's goal is to review proposed development plans and documents within 30 days of receipt. Electronic file submittals are typically processed more rapidly. There are four submittal options:

- 1. Email documents and plans in PDF format to <u>metrodevreviews.dot@state.mn.us</u>. Attachments may not exceed 20 megabytes per email. If multiple emails are necessary, number each message.
- Upload PDF file(s) to MnDOT's external shared internet workspace site at: <u>https://mft.dot.state.mn.us.</u> Contact MnDOT Planning development review staff at <u>metrodevreviews.dot@state.mn.us</u> for access instructions and send an email listing the file name(s) after the document(s) has/have been uploaded.
- Mail, courier, or hand deliver documents and plans in PDF format on a CD-ROM compact disc to: MnDOT – Metro District Planning Section Development Reviews Coordinator 1500 West County Road B-2 Roseville, MN 55113
- 4. Submit printed documents via U.S. Mail, courier, or hand delivery to the address above. Include one set of full-size plans.

MnDOT welcomes the opportunity to review updated traffic and transportation information, as well as to meet with representatives of the city, developer, and other agencies. You are welcome to contact me at (651) 234-7795 with questions.

Sincerely,

David Elvin, AICP Principal Planner

Copy via E-Mail:

Buck Craig, Permits Carl Jenson, Transit Ben Klismith, Right-of-Way Shelia Kauppi, Area Manager Mark Lindeberg, Area Engineer Chris Chatfield, Water Resources

Jeff Rones, Design Ashley Roup, Traffic Cameron Muhic, Multimodal Jim Henricksen, Metro Forecasting Russell Owen, Metropolitan Council Heidi Schallberg, Metropolitan Council September 17, 2019

Ms. Menaka Mohan, Ford Site Planner City of St. Paul 25 West 4th Street, Suite 1400 St. Paul, MN 55102

RE: City of St. Paul Ford Site draft Alternative Urban Areawide Review (AUAR) Metropolitan Council Review No. 22290-2 Metropolitan Council District No. 14, Kris Fredson

Dear Ms. Mohan:

Metropolitan Council staff completed its review of the Ford Site Alternative Urban Areawide Review (AUAR) to determine its accuracy and completeness in addressing regional concerns. Staff concludes that the AUAR is complete and accurate with respect to regional concerns and does not raise major issues of consistency with Council policies. However, staff offers the following comments for your consideration:

Item 9. ii. Planned land use (Patrick Boylan, 651-602-1438, Todd Graham, 651-602-1322) The eventual build out of the site will affect the transportation analysis zone (TAZ) forecast allocation for this area. TAZ #2063 includes the Ford site and a small amount of a fully developed mixed-use neighborhood west of Cleveland Avenue. Preliminary TAZ allocations provided in 2016 by the City of St. Paul show TAZ #2063 growth of 1,950 households and 3,550 employment during 2014-2040. The City should revise this forecast allocation, per expected development.

- The Ryan Companies scenario implies growth of 3,800 households, 8,550 population, and 900 jobs in the 2020 to 2040 timeframe.
- Ford Site Master Plan maximum redevelopment implies in the same 2020 to 2040 timeframe as growth of 4,000 housing units, 9,000 population, and 1,600 jobs.

TAZ forecast allocations must be submitted with the upcoming 2040 Comprehensive Plan update for St. Paul. The City's Planning and Economic Development (PED) Department has noted the comment in "Attachment B", and notes: "The City will update the TAZ allocations as part of the 2040 Comprehensive Plan adoption process."

9.a. iii. Zoning (Patrick Boylan, 651-602-1438)

The City of St. Paul submitted their 2040 Comprehensive Plan (Plan) and it was determined incomplete for review by the Council on July 24, 2019. The AUAR study site is currently consistent with the City's proposed 2040 Comprehensive Plan. Once the environmental review is complete, the AUAR and subsequent changes to land use must be consistent with the City's Plan and depending on the sequence of approval of the Final AUAR and the final 2040 Comprehensive Plan, an amendment to the City's final 2040 Plan may be necessary.



Ms. Menaka Mohan, City of St. Paul September 17, 2019 Page 2 of 4

At the time of writing this letter, the City does not have an approved Mississippi River Critical Corridor Area (MRCCA) Plan nor a complete and approved 2040 Plan. The site must be consistent with all zoning requirements and consistent within the City's MRCCA plan and be consistent with the final 2040 Comprehensive Plan.

Item 9.b. – Land Use – Compatibility with Nearby Land Uses, Zoning, and Plans (Jim Larsen, 651-602-1159, Colin Kelly, 651-602-1361)

The Ford Site is adjacent to both Hidden Falls-Crosby Farm and Mississippi Gorge Regional Parks, as well as portions of the St. Paul Grand Round and the Mississippi River Trail. Without careful design and construction, development of the Ford Site has the potential to significantly impact these regional parks and trail opportunities.

With regard to Hidden Falls-Crosby Farm Regional Park and Hidden Falls Creek, Council staff reiterate the comments previously provided, documented on page B-9 of the AUAR (pdf page 375), which state:

Council staff recently reviewed a Master Plan Update for the Hidden Falls Crosby Farm Regional Park adjacent to the AUAR Site. The Master Plan proposes a number of improvement projects to restore environmental components and enhance access and recreational opportunities within the Park.

One of the projects proposed in the Master Plan is to "[R]estore Hidden Falls Creek to incorporate water quality treatment and habitat enhancement in coordination with Ford site redevelopment." The AUAR site stormwater management system that is proposed will have significant direct impacts upon the stability and health of Hidden Falls Creek in the lower third of the watershed. It may be advantageous to undertake the restoration of the lower reach of the Creek within the Park before AUAR site runoff volumes increase as a result of AUAR site redevelopment.

Council staff requests that the AUAR document evaluate the most expedient and cost effective time to carry out restoration of the lower reach of the Creek, based upon increased access from the upper reach and future increases in runoff volume during AUAR site redevelopment. If there is consensus that there is a "most efficient and cost-effective time" to undertake the restoration of Hidden Falls Creek in the lower third of the watershed (below Mississippi River Boulevard) during the AUAR site redevelopment timeline, Council staff requests that the AUAR site developer work with St. Paul Parks to coordinate and implement the Hidden Falls Creek restoration accordingly.

Having the entire Creek restored and stabilized will improve the effectiveness of all other proposed vegetation and habitat restoration and management projects, both on the AUAR site and within Hidden Falls Crosby Farm Regional Park.

With regard to Hidden Falls Creek (leading to and within Hidden Falls Regional Park), Council staff appreciate the associated response on page B-9 (pdf page 375) that reads:

> The City will continue to coordinate internally and with Capitol Region Watershed District, Ramsey County, and the Minnesota Department of natural Resources regarding restoration efforts planned for the creek downstream of the site.

Ms. Menaka Mohan, City of St. Paul September 17, 2019 Page 3 of 4

Moreover, Council staff appreciate the text stating, "the new (stormwater management) system will provide pretreatment and rate and volume control to improve water quality runoff leaving the site and to prevent further sedimentation and erosion issues within Hidden Falls Creek" (page 32).

Beyond these specific comments about the regional park and Hidden Falls Creek, Council staff appreciate the preparer's acknowledgement of these Regional Park System components and trail opportunities in the narrative on page 13 and in Figure 7 on page 15 of the AUAR. Further, Council staff appreciate the preparer's indication that parks and trails included in the Ryan Development Scenario will make connections into the City and regional trail network (page 22).

Item 10 Geology, Soils, and Topography/Land Forms (Lanya Ross, 651-602-1803) Although identified in the scoping EAW response to the City (Council letter July 9, 2019), the AUAR does not acknowledge the potential groundwater hazards due to karst or to known excavations (example: tunneling beneath the site) in the study area. The AUAR also still concludes that, based on the Ramsey County Geologic Atlas, there are no known sinkholes, unconfined/shallow aquifers, or karst conditions within the AUAR study area. While the 1990 Ramsey County Geologic Atlas does not identify those features, the risk of karst is identified at the site in the 2017 DNR report 'Minnesota Regions Prone to Surface Karst Feature Development', which was developed "for planning, environmental and risk management, hazard mitigation, scientific, and other purposes." That report is online at <u>http://files.dnr.state.mn.us/waters/groundwater_section/mapping/gw/gw01_report.pdf</u>. The report includes links to download the supporting data.

The mitigation plan for geology, soils, and topography/land forms (page 62 of the AUAR submitted on August 16, 2019, Review #22290-2) still does not acknowledge karst or excavation risks (such as tunneling beneath the site) as potential impacts or propose mitigation.

Item 11.b.iii. – Water Resources – Water Appropriation – (Lanya Ross, 651-602-1803) The EAW stated that the AUAR would investigate the status of wells within the study area and provide mitigation strategies (page 19 of the AUAR document submitted on 8/16/2019). However, the AUAR makes no mention of this. Potential impacts may be identified in the discussion of geology, soils, and topography/land forms or the discussion of water resources on pages 62 and 63 of the document submitted on August 16, 2019.

Although the AUAR identified potential impacts to sanitary sewer and water main extensions needed within the AUAR study area, no mitigation strategies were identified. This information should be added (page 63 of the AUAR document submitted on August 16, 2019).

Item 18.a.3. Availability of Transit (Scott Thompson, 612-349-7774) The list of all existing routes adjacent to the site need to be consistent throughout the entire AUAR document. Route 87 was left off in the "Transportation Analysis" section.

Currently, Route 46, providing more than 60 daily bus trips between the METRO Blue Line 46th Street Station, and Highland Park, could be re-routed in the future through the Ford Site via Cretin, Montreal, and Cleveland, continuing to end near West 7th Street and Davern and a potential connection to the planned future Riverview Corridor. This route change would not add operating cost to Route 46. As the Ford Site is redeveloped and the expected

Ms. Menaka Mohan, City of St. Paul September 17, 2019 Page 4 of 4

commercial and residential land use intensifies, Metro Transit will continue to evaluate ridership potential and adjust Route 46 service levels to respond to transit service demand.

No other Highland area bus route changes or extensions into the Ford Site are currently being considered by Metro Transit, unless facilities for a bus turnaround and layover are provided. The AUAR states that no facilities are currently programed by either the City or the Developer other than bus stop ADA pads.

Given that only Route 46 service is currently being considered to operate though the Ford Site, it is critical that good pedestrian access is provided from the site to existing bus stops and service on both Ford Parkway and Cleveland Avenue.

Item 18. b Transportation (Russ Owen, 651-602-1724)

The proposed development is near the Minneapolis-St. Paul (MSP) International Airport. The AUAR does state that the developer will submit the 7460-1 Airspace Survey. The developer should also review the MSP Joint Airport Zoning Board guidelines. The final AUAR should discuss airport noise in the proposed development area and address any needed mitigation.

Alternatives and any non-motorized mitigation should identify potential implementation of the Regional Bicycle Transportation Network (RBTN) Tier 1 corridor and connections to the RBTN from within the site.

Reduction calculations for transportation assumed that a Guaranteed Ride Home program does not exist. Metro Transit runs an existing Guaranteed Ride Home program for people who ride the bus, METRO, or Northstar, or carpool, vanpool, bicycle, or walk to work or school at least three times a week. More information about the program is available at: https://www.metrotransit.org/guaranteed-ride-home

The Council will not take formal action on the AUAR. If you have any questions or need further information, please contact Patrick Boylan, Principal Reviewer, at 651-602-1438.

Sincerely,

Ungelan Mris

Angela R. Torres, AICP, Manager Local Planning Assistance

CC: Tod Sherman, Development Reviews Coordinator, MnDOT - Metro Division Kris Fredson, Metropolitan Council District No. 14 Chai Lee, Metropolitan Council District No. 13 Judy Sventek, Water Resources Manager Patrick Boylan, Sector Representative/ Principal Reviewer Raya Esmaeili, Reviews Coordinator

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Appendix H: Public Comment Letters



Resolution on Transportation Aspects of the Ford Site AUAR

WHEREAS the Ford Site draft Alternative Urban Areawide Review (AUAR) has been released to the public and the comment period is open until September 18, 2019; and

WHEREAS Toole Design Group compiled community comments and recommendations from approximately 30 community members during a September 13, 2017 discussion of transportation issues surrounding the Ford Site that was co-hosted by the HDC and East Metro Strong in cooperation with Councilmember Chris Tolbert; and

WHEREAS HDC Transportation Committee Members attended the transportation AUAR open house and the AUAR Q&A at the HDC board meeting on September 5, 2019;

BE IT THEREFORE RESOLVED, that the Transportation Committee of the Highland District Council submits the following comments and questions on the draft AUAR pursuant to Minnesota Rules 4410.3610, Subpart 5, Item B.

- 1. The HDC Transportation Committee strongly recommends that the AUAR assumptions and throughput thresholds that are informing the mitigation strategies will generate a result that is consistent with city policy objectives and the District 15 Plan of prioritizing pedestrians, cyclists, transit users, and vehicles; while minimizing vehicular congestion and idle times.
- 2. The comments and recommendations compiled by Toole Design Group should be compared with the mitigation recommendations of the AUAR to identify gaps and opportunities to implement solutions;
- 3. The AUAR transportation mitigation is overly focused on motor vehicle trips and does not sufficiently address mitigation of bike and pedestrian network gaps and deficiencies:
 - a. The AUAR identified potential for 5,470 weekday daily external trips by walk/bike (approximately 17% mode share) but does not recommend a specific or sufficient east-west bike facility along Ford Parkway. The HDC believes enhanced shared lanes or unprotected in-street bike lanes are insufficient to encourage bicycle mode share growth.
 - b. The AUAR identifies gaps in the sidewalk network but does not recommend addressing them. Based on the expected increase in vehicle traffic, especially along Montreal Avenue and Mt. Curve, these gaps should be addressed and improved crossings provided;
 - c. Cretin Avenue, Montreal Avenue, and Mississippi River Boulevard are commuter routes and drivers often exceed posted speed limits and decrease the safety and comfort of pedestrians, cyclists, and residents. Traffic calming measures should be



utilized on all of these routes. A preferred solution for Mississippi River Blvd. would be to provide better marking and/or separation of walking and biking paths

- 4. The AUAR briefly reviews transit options (rerouting existing lines through the Ford Site and/or providing transit service through the site via the CP Rail Spur) but since neither project is programmed the AUAR does not assume they will take place. The HDC urges that right-of-way be set aside to support dedicated transit lanes and shelters with increased level of service, and that the city advocate for the above;
- 5. The HDC recommends that the city evaluate the impact of greenhouse gas emissions that will be generated from external trips generated by the Ford site development.
- 6. The HDC Transportation Committee requests the city consistently engage the HDC as designs progress.
- 7. The HDC requests answers to the following questions:
 - a. State the reason the minimum density development scenario was not studied and why it met the criteria for exclusion.
 - b. Explain the details behind the "various reductions" in Table 9 of Appendix D (Ryan Proposal Scenario Trip Generation Estimate).

Approved September 10, 2019 By the Transportation Committee of the Highland District Council

Resolution 2019 - 26T



Resolution on Development Aspects of the Ford Site AUAR

WHEREAS the Ford Site draft Alternative Urban Area-wide Review (AUAR) has been released to the public and the comment period is open until September 18, 2019; and

WHEREAS HDC Community Development Members attended the HDC meeting on August 10, 2019, where AUAR was discussed, the AUAR open house on August 20, 2019, and the AUAR Q&A at the HDC board meeting on September 5, 2019;

BE IT THEREFORE RESOLVED, that the Community Development Committee (CDC) of the Highland District Council submits the following comments on the draft AUAR pursuant to Minnesota Rules 4410.3610, Subpart 5, Item B.

- 1. CDC recommends that the AUAR study include a more thorough analysis of the direct, indirect, and cumulative environmental impact of Area C and the associated network of tunnels that are underneath the proposed development site. The Minnesota Administrative Rules require that "data and analysis shall be commensurate with the importance of the impact. See Minn R. 4410.2300(H) and 4410.3610 Subp.4. Given the level of risk associated with industrial waste contamination in close proximity to a housing development, the AUAR study should include data and analysis that are commensurate with that risk. If the AUAR is relying on additional studies as a basis to not include analysis of Area C and the tunnel network, please include those studies within the AUAR or incorporate them by reference. The stability of the tunnel system and the tunnel collapse near Area C are of particular concern.
- CDC recommends that the AUAR study be revised to include a more thorough analysis of the evidence of soil vapors and groundwater contamination and the potential direct, indirect, and cumulative impact of such vapors and contamination. The AUAR should include more robust mitigation strategies for such environmental impacts.
- 3. CDC recommends the AUAR study be revised to include a more substantial analysis of the impact of on wildlife; especially the impact to migratory birds of the North American Migratory Mississippi Flyway.
- 4. CDC recommends that the AUAR study be revised to include the Ford Site Master Plan Lower Development Scenario as requested by many community members. The Minnesota Administrative Rules state that an additional development scenario or alternative should only be excluded if: (a) "it would not meet the underlying need for or purpose of the project"; (b) "it would likely not have any significant environmental benefit compared to the project as proposed"; or (c) "another alternative [that is part of the study] would likely have similar environmental benefits but substantially less adverse economic, employment, or sociological impacts." See Minn. R. 4410.2300(G). The response in the Final Order for the Alternative Urban Area-wide Review (AUAR) states, "review of the permitted minimum density range is not likely to identify any significant environmental benefits compared to the



project as proposed." If the Minimum Density Scenario is going to be excluded on the basis of this criteria, please "explain (the) reasoning" for why that criteria is met as is required under Minn. R. 4410.3610 Subp. 5a.(D).

- 5. CDC recommends that the AUAR study be revised to include an adequate analysis under section b. of Section 9. Land Use. That section requires the RGU to discuss the project's compatibility with <u>nearby land uses</u>. The draft AUAR does not appear to include such a discussion. The analysis should include a thorough discussion of how the Ford Site Master Plan Maximum Development Scenario and the proposed Ryan Development Scenario are compatible with the nearby lower density residential areas. The analysis should also include a thorough discussion of the assumptions that were made about biking and walking, how those assumptions informed the land use decisions, and how those assumptions impact nearby land uses, especially during the winter.
- 6. The draft AUAR study addresses noise mitigation strategies for residents of the Ford development, but nothing for residents of the surrounding existing community. CDC recommends that the AUAR study be revised to include a robust analysis of noise generated during construction and after project completion (e.g., air handling units, additional traffic) and mitigation strategies for such noise for the surrounding existing community.

Approved September 17, 2019

By the Community Development Committee of the Highland District Council



Working to protect the Mississippi River and its watershed in the Twin Cities area.

101 East Fifth Street Suite 2000 Saint Paul, MN 55101 651-222-2193 www.fmr.org info@fmr.org

September 18, 2019

Menaka Mohan, Ford Site Planner City of St. Paul 25 West 4th Street St. Paul, MN 55102

Re: Friends of the Mississippi River comments on the Ford Site AUAR & Mitigation Plan

Dear Ms. Mohan,

Thank you for the opportunity to comment on the Ford Site Draft Alternative Urban Areawide Review (AUAR).

Friends of the Mississippi River (FMR) is a local non-profit organization that works to protect, restore and enhance the Mississippi River and its watershed in the Twin Cities metropolitan region. We have more than 2,700 active members, 3,500 volunteers and 2,000 advocates who care deeply about the river's unique resources.

FMR takes an active interest in working with municipalities, counties, state government, and other stakeholders to help shape and influence decisions that impact the health of the river. FMR was founded and continues to play a leadership role in ensuring that the public resources of our National Park —the Mississippi National River and Recreation Area (MNRRA), are preserved for current and future generations to benefit from.

FMR has been working with the city of Saint Paul and other stakeholders for many years to plan for and revitalize the Mississippi River Corridor. We have appreciated opportunities to work in partnership with St. Paul, and we look forward to continuing to have a productive relationship with city staff and leadership moving forward. We also keep a close eye on how development impacts the National Park, in order to ensure that the outstanding scenic qualities of the confluence area, also known as B'dote, are preserved for all to enjoy.

FMR staff has reviewed the Ford Site AUAR and Mitigation Plan and we are mostly satisfied with the document but there are a few specific items that still give us cause for some concern. Our comments and suggestions are as follows.

Permits and Approvals Required

If the city has adopted a new Mississippi River Corridor Critical Area (MRCCA) ordinance, permits may be needed for vegetation removal on and near steep slopes. (Page 12)

Land Use

The description of MRCCA and the Mississippi National River and Recreation Area (MNRRA) on pages 13-14 is dated with references to Executive Order 79-19, whereas the description on page 16 refers to the new MRCCA rules and St. Paul's recently adopted MRCCA Plan. This may have been done on purpose, but it is somewhat confusing. The new rules should be referenced in both places. (Pages 13-16)

Geology, Soils, and Topography/Land Forms

The Dorerton-Rock outcrop complex described in Table 6 has a slope of 25-65 percent. According to the new MRCCA rules, this area may need to be defined as a bluff and be protected as a primary conservation area. (Page 24)

Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features)

This section focuses on potential impacts to rare, threatened or endangered species, but it also needs to address "other sensitive ecological resources." Specifically, we'd like to see this section address potential impacts to birds and wildlife that use the Mississippi River corridor for migration. The Mississippi River is an internationally significant migratory "flyway" used by 60% of all neo-tropical bird species and 40% of North American Waterfowl and Shorebirds.

Migratory birds can be impacted by glass buildings, which they fly into because of the reflection, and by artificial lighting, which confuses their sense of direction. We recommend discussion of these potential impacts in the AUAR and including the use of appropriate lighting and "bird-safe" glass as mitigation strategies.

The AUAR describes adding pollinator habitat for bees, but providing habitat for birds is equally important. Development along Mississippi River Boulevard should allow space for canopy trees as well as native shrubs and other native landscaping. The open space within the hairpin turn could be dedicated to providing additional bird habitat.

Visual

The AUAR does an inadequate job of addressing potential visual impacts. The discussion on page 42 includes reference to the Public River Corridor Views (PRCVs) identified in the city's recently adopted MRCCA Plan, but it only names one view—"View#5 Ford Dam Overlook," and it fails to name other PRCVs that could be affected, such as "View 4 Hartford Avenue Overlook"

The Hartford Avenue Overlook description states:

"Downriver are views of the Ford Bridge. There are no buildings that impede the views at this location, providing an excellent and tranquil location to enjoy nature and the views of the forests that run the length of the Gorge Reach." The following PRCVs from other communities should also be identified in the AUAR:

- Mississippi Gorge Regional Park
- Minnehaha Regional Park Wabun Picnic Area
- Minnehaha Creek Confluence
- Fort Snelling Historic Site

In reference to the city's new MRCCA Plan, the AUAR states:

"Neither of the proposed scenarios are located in the view range of PRCV and, therefore, will not have an impact on any identified significant public views, which is consistent with Policy CA-11. Additionally, the proposed building heights and setback are consistent with the requirements of the MRCCA Districts and Ford MP zoning. The proposed building heights are lower (20-48 feet) along the Mississippi River front and gradually increase in height farther into the study area, which supports Policy CA-13."

In addition to our concern that only one PRCV is referenced here, we also disagree with the language that states the building heights are consistent with MRCCA requirements. Some of the proposed buildings within the MRCCA rules' RTC (River Towns and Crossings) District are planned to exceed the 48-foot height limit.

The AUAR should emphasize the need for a visual impact study to be provided when the developer makes their application. They will have to get a CUP or variance from the existing 40-foot height limit, because it's part of the city's existing MRCCA ordinance, which is separate from the Ford master plan.

FMR's main goal is to ensure that the potential visual impacts are robustly evaluated so the public can see how the development's height, shape and materials will impact views from the PRCV sites mentioned above. So far, the visual studies we have seen for the Ford zoning plan look ok, but a final version of the actual project design should also be studied.

We are also concerned that no mitigation strategies have been identified for potential visual impacts. At the very least the mitigation plan should include the use of vegetative screening and minimizing visibility of roof materials during leaf-on conditions.

Transportation

The transportation section of the AUAR does little to address potential impacts to Mississippi River Boulevard, which is likely to get more traffic once the development is occupied. We suggest that the mitigation plan include the following:

- Realign Mississippi River Boulevard at the hairpin turn to create more public open space and/or to restore Hidden Falls
- Reduce the parking lot pavement near the hairpin turn or move it away from the bluff to create more public open space at the bluff top
- Improve bike trail and bike facilities along Mississippi River Boulevard

Thank you again for the opportunity to weigh in on the Ford Site AUAR. If you have additional questions or wish to discuss the content of this letter, please don't hesitate to contact us.

Sincerely,

Whiting J. anh

Whitney L. Clark Executive Director

September 18th, 2019

Menaka Mohan Ford Site Planner 25 W 4th Street, Suite 1400 St. Paul, MN 55102

Dear Ms. Mohan,

On behalf of numerous community members and organizations who believe that a sustainable community is one that finds strength in the changes that come with time, we urge you and City Council Members to adopt the Alternative Urban Areawide Review (AUAR) in its current form. As neighbors invested in the future livability and sustainability of the city, we support the Ford Plan because:

- The Ford Site represents an opportunity for Saint Paul to be a national and global leader in environmentally sustainable neighborhood planning. The plan provides responsible protection of natural resources along the riverfront, additional green space, and the opportunity to explore alternative forms of energy. Good land use planning, which includes density and transit-oriented development, is necessary for the city to do its part to address climate change. By planning for future integration of the site with our transit system, community members can choose to live in the city with minimal reliance on automobile travel. By designing buildings that are energy-efficient with renewable sources, residents will benefit from improved air quality and low energy bills. And communities can attract economic growth by supporting adding housing options on a near net-zero energy site.
- The Ford Site can be a national demonstration project for how equitable development can be blended seamlessly with sustainable planning strategies and multi-modal transportation choices. This plan supports compact urban development form, and the corresponding densities in residential, commercial and retail structures in turn support the creation of a mixed-income, mixed-use community that will be available for everyone, not just the economically advantaged. It will be important to ensure that the "affordable units" be interspersed with the market rate buildings as opposed to physically segregated from them. In order to achieve a vision of an inclusive, accessible and green neighborhood, it is imperative that the City Council remain 100% in favor of the master zoning plan, its corresponding affordable housing goals (especially its commitment to 10% of housing being affordable to households earning 30% AMI and below), and the ambitious transit/bike/walk features that will make this a signature site in the entire Twin Cities region. As part of this planning process, we also encourage the city to continue working with the Metropolitan Council and Metro Transit to incorporate essential transit connections throughout the site.
- Saint Paul is growing, and requires development that integrates transit, bicycling, and walking options that help people get to where they need to go affordably, efficiently, and in healthy, sustainable ways. Beyond reduced pollution, transit-oriented development saves money, builds upon existing corridors, and will allow residents, employees, and visitors multiple modes for traveling to and from Highland. The extension of the existing street grid pattern will allow both vehicle traffic and the extension of current transit routes to flow more smoothly through the entire neighborhood, and will connect existing neighborhoods to the river with enhanced biking

and walking infrastructure. As Saint Paul continues to grow, transit and traffic will continue to be critical issues, but they needn't prevent the city from moving forward with the Ford Plan in its current form.

We appreciate the work that SRF Consulting, Kimley Horn and Ryan Companies have done not only to anticipate the many impacts of the Ford Site development, but plan for the mitigation of those impacts. We are especially excited to see that mitigation infrastructure goes beyond the status quo of more traffic lanes, and includes both pedestrian, bike, and public transit. This will provide ample opportunities to implement Transportation Demand Management (TDM) strategies that will further reduce single-occupancy vehicle (SOV) trips and for this area to become one of the city's multimodal transportation hubs. Many residents who live in Saint Paul desire dense residential communities that provide convenient options to walk, bike and take transit. Our organizations consist of and work with many people whose lived experiences are reflected in the Ford Site plans. We are hopeful that future development will continue to reflect this.

An accessible, inclusive, net-zero energy, forward-looking development is one of the best ways Saint Paul can ensure prosperity for future generations. The city's transit, environmental, and housing needs are urgent. It is time to move forward with the Ford Plan so that we can face these challenges head-on. We appreciate the time and energy the city has invested in planning for this site, and urge you to move forward with approval of the AUAR. Thank you for your consideration and service to Saint Paul.

Sincerely,

The Alliance for Metropolitan Stability Sierra Club North Star Chapter Sustain Saint Paul Fresh Energy Metropolitan Consortium of Community Developers Frogtown Neighborhood Association Housing Justice Center Move Minnesota







Metropolitan Consortium of Community Developers









MINNESOTA

Comment	Number:
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Open House #1 Comment Form August 20, 2019

August 20, 20	019	\sim		# 7	
NAME:	Margy	Kity	SM	H w	
ADDRESS:	(781	Pinet	Mus	A	
PHONE:	- Cesti	690 9	3028		
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You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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on cleveland do for
Does hat seen to be a
good idea

Comment	Number:
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Open House #1 Comment Form August 20, 2019

NAME:	Margy Eterson	
ADDRESS:	1789 Pinchurst Are	
PHONE:	65 690 5028	
EMAIL:	paulmargy @. msn. com	or mangy. Cs. fetuson
(one	is on the list)	Contlook, com

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at FordSitePlanning@ci.stpaul.mn.us or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Wednesday, September 18, 2019 4:16:00 PM
Attachments:	image002.png
	image003.png
	image004.png

Making Saint Paul the Most Livable City in America

From: Margy Sather Peterson [mailto:margy.cs.peterson@outlook.com]
Sent: Tuesday, September 17, 2019 4:47 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission, My name is Margy Sather Peterson, and I live at 1787 Pinehurst Avenue 55116.

I am writing to express my concerns pertaining to the Draft AUAR. I want to make our part of St. Paul a vibrant community where it's easy to bike, bus, walk, and roll.

And to drive cars which are increasingly green. Both/and is a better guide than either or.

And I think this is a very exciting opportunity for a redevelopment that shapes the future of Saint Paul for decades to come. Let's not leave out the elderly, those with tiny children or disabilities. Let's remember that not everyone can walk and bike when the sidewalks are icy or the temperatures below zero.

And let's not place all of the desired high density housing in the Highland area. Here are concerns which, if solved, would support a zoning system that places high density housing at key intersections throughout the city

- 1. Eliminate gun crimes that make entire neighborhoods war zones
- 2. Attract more large employers closer to areas of high poverty. Perhaps this will
- 3. Improve existing housing stock by continuing/increasing loans which allow people to do maintenance with high quality materials like stucco and Hardy board instead of plastics and vinyl which degrade and lead to environmental risks.

In addition, I feel that that the Draft AUAR is inadequate in the following ways:

*Given the placement of schools, this assumes that ANY child living in the development will take the bus to school. This is the time of life when walking to school builds healthy lifetime habits.

Add some schools, or increase density near pre-existing schools. Truancy is a far reaching problem that affects generations.

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

*There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study.

*The AUAR contains misleading comments that should be removed. Nothing even close to the highdensity Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.

*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%.

*The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

* The Twin City area is rated as one of the coldest and snowiest urban centers in the United States. The AUAR study should be revised to include assumptions that account for Minnesota's winter climate.

*Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

*Public requests for study of carbon dioxide (CO2) were not addressed. The AUAR study should include a study of CO2, other greenhouse gas emissions, non-diesel particulate matter emissions, and the project's impact on climate change under Section 16 – Air and under Section 19 –

Cumulative Potential Effects. If PED is not going to study these issues, please explain why there have not been specific responses to the dozens of public requests to study CO2 and non-diesel particulate matter.

*The purpose of the AUAR is to study the environmental impact to the community. It is imperative that the study of all present and future car emissions be included in the AUAR.

Thank you for reading this. I look forward to a plan with density that's revised downward.

Margy Sather Peterson 6126704313

Get Outlook for Android

Comment Number:
2



Open House #1 Comment Form August 20, 2019

NAME:	Gary Martland
ADDRESS:	1862 Montrez Ade
PHONE:	6173877609
EMAIL:	Martland 789@ gahoo, com

1

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at FordSitePlanning@ci.stpaul.mn.us or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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Comment	Number:
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Open House #1 Comment Form August 20, 2019

NAME:	JACQUELINE Mosio
ADDRESS:	1716 S. Mississippi River Blvd.
PHONE:	612-396-3644
EMAIL:	jbell mosio Oasl.com

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at FordSitePlanning@ci.stpaul.mn.us or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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Open House #1 Comment Form

August 20, 20		
NAME:	Jas. McVeety/Peborah Green	
ADDRESS:	2119 Schelffer Ave	
PHONE:	651-698-0317	
EMAIL:	ImcVeetr @ Sparedu	<u>1-11111111111</u> 7

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at FordSitePlanning@ci.stpaul.mn.us or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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Public comment submitted 8/20/2019 during the public comment period 8/19 to 9/18/2019 By Catherine Hunt, 2081 Highland Parkway, St. Paul, MN 55116

Dear Ms. Mohan and the Department of Planning and Economic Development Commission members:

The second draft with mitigation under #13, page 38: Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features) only refers to some songbirds and on page 39 states: "No adverse impacts are anticipated to state-listed or federally-listed species. The AUAR study area is highly disturbed with a lack of bumble bee or other native wildlife habitat. Species currently using the AUAR study area are adapted to a highly disturbed urban environment, and minimal impacts are anticipated to those species."

The AUAR determination of no adverse impact is manifestly wrong. The AUAR fails to include migratory birds which fall into state and federally listed species that take the North American Migratory Mississippi Flyway from Canada to the Gulf of Mexico. The Ford development is literally under the Mississippi Flyway. Massive residential, commercial, recreational buildings with heights up to 75 ft with glass/reflective surfaces, and a water feature will fatally attract migratory birds. Excessive light from this build environment is likely to have a disorienting effect on migratory birds leading to bird collisions with the built environment. Contrary to the AUAR declaration that urban birds and wildlife have adapted to the "disturbed urban environment," respected conservation groups such as The American Bird Conservancy and Audubon Society have thoroughly scientifically documented massive bird kills from urban structures.

Therefore, the science of bird fatalities in the build environment like the Ford site makes the case that the AUAR must assess harm to migratory and urban birds and develop mitigation strategies for bird fatalities resulting from the built environment. Ample resources are available to guide AUAR assessment and mitigation. Begin with Audubon resources https://mn.audubon.org/conservation/birdsafe-buildings

COMMENT NUMBER: 5

DATE: 8/21/2019

NAME: Catherine Hunt

COMMENT:

The second draft with mitigation under #13, page 38: Fish, Wildlife, Plant Communities, and Sensitive Ecological Resources (Rare Features) only refers to some songbirds and on page 39 states: "No adverse impacts are anticipated to state-listed or federally-listed species. The AUAR study area is highly disturbed with a lack of bumble bee or other native wildlife habitat. Species currently using the AUAR study area are adapted to a highly disturbed urban environment, and minimal impacts are anticipated to those species."

The AUAR determination of no adverse impact on state and federally listed species is manifestly wrong. In fact, in Minnesota, the Bald Eagle and Golden Eagle are protected under the Bald and Golden Eagle Protection Act. It is a fact that these eagles' nest along the Mississippi River at or close to the Ford parcels. Also, in Minnesota, the Northern Long-Eared bat is a threatened species statewide. It hibernates in caves and mines - swarming in surrounding wooded areas in autumn. The Mississippi River area around the Ford development certainly qualifies as habitat for this bat. Please check the Federal US Fish and Wildlife Service website for a list of MN endangered, threatened species last updated on 5/29/19 https://www.fws.gov/midwest/endangered/lists/minnesot-spp.html. From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: Meneka MohanDate:Friday, August 23, 2019 10:57:39 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

-----Original Message-----From: Brian Murphy [mailto:mrfy1219@gmail.com] Sent: Thursday, August 22, 2019 6:18 PM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: Meneka Mohan

Traffic issues related to Ford Site Development:

It is proposed that the intersection of St Paul Ave and Montreal have a 4-way "light signal" installed. The plans also calls for a smaller Round About or 4-way Stop sign at the intersection of Cleveland Ave & Montreal Ave. My concern is that the Traffic Study, to date, does not include Signal Light or 4-way Stop sign at the intersection of Howell and Montreal Ave. We currently have a speeding corridor between St Paul Ave to Fairview heading either East or West on Montreal. A 4-way Stop sign at Howell & Montreal will slow traffic on Montreal. Additionally it will allow easier foot traffic, bicycle-crossing, and North and South bound traffic crossing on Howell.

With all the additional traffic that will flow onto Montreal Ave. we need to make sure we are hearing current residents concerns and act upon those concerns. An additional stop sign is not too much to ask for the safety of this neighborhood.

Thank you

Brian Murphy 1219 Bayard Ave. Saint Paul, MN. 55116

Comment Number	:
7	

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: Attn: Menaka Mohan
Date:	Friday, August 23, 2019 10:57:29 AM
Attachments:	image007.png
	image002.png
	image003.png

image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us P: Pi Pi Pi Pi Pi Pi

Making Saint Paul the Most Livable City in America

From: Thomas Kozlak [mailto:tomk@rtggolf.com]
Sent: Thursday, August 22, 2019 8:48 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: Attn: Menaka Mohan

I agree with Gary

Dear Neighbors,

My name is Gary Martland. I am an "At Large" member of the Highland Park District Council and I am also the ViceChairman of the Community Development Committee. I've been on Board for the past three (3) months.

I am writing to you to ask for your support regarding proposed traffic plans for Montreal Ave between St Paul Ave and Fairview Ave.

You may be, or not, aware that as part of the build out for the Ford Site that Montreal Ave is to be extended to East River Road, through the Ford Site Development.

It is proposed that the intersection of St Paul Ave and Montreal have a 4-way "light signal" installed. The plans also calls for a smaller Round About or 4-way Stop sign at the intersection of Cleveland Ave & Montreal Ave.

My concern is that the Traffic Study, to date, does not include Signal Light or 4-way Stop sign at the intersection of Howell and Montreal Ave. We currently are a speeding corridor between St Paul Ave to Fairview heading either East or West on Montreal. A 4-way Stop sign at Howell & Montreal will slow traffic on Montreal. Additionally it will allow easier foot traffic, bicycle-crossing, and North and South bound traffic crossing on Howell.

If you agree with my premise I am asking you mail a note to:

Menaka Mohan City of St Paul 25 W Fourth Street St Paul, MN 55102 Or send an email to attn at: FordSitePlanning@ci.stpaul.mn.us

My intent is to slow traffic, protect our neighbors, and our children as our density in Highland Park changes as the development is built out. Please act now before the AUAR in completed and make

sure your voice is heard. Tom Kozlak Remarkable Travel Group RTG Golf 1599 Selby Avenue Suite 106 Saint Paul, Minnesota 55104 612-816-3337 tomk@rtggolf.com www.rtggolf.com



From:Payne, AshleyTo:Peterson, KestraSubject:FW: Montreal traffic issueDate:Monday, August 26, 2019 8:44:29 AMAttachments:image002.png
image003.png
image004.png

Ashley Payne, CWD Kimley-Horn | 323 South Broadway, Rochester, MN 55904 Direct: 507-216-0763 | Mobile: 507-251-6096 | www.kimley-horn.com

From: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Sent: Monday, August 26, 2019 8:40 AM
To: Payne, Ashley <Ashley.Payne@kimley-horn.com>
Subject: FW: Montreal traffic issue



Making Saint Paul the Most Livable City in America

From: Pat Golfis [mailto:plgolfis@gmail.com]
Sent: Friday, August 23, 2019 10:59 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: Montreal traffic issue

My concern is that the Traffic Study, to date, does not include Signal Light or 4-way Stop sign at the intersection of Howell and Montreal Ave. Montreal is currently are a speeding corridor between St Paul Ave to Fairview heading either East or West on Montreal. A 4-way Stop sign at Howell & Montreal will slow traffic on Montreal. Additionally it will allow easier foot traffic, bicycle-crossing, and North and South bound traffic crossing on Howell.

Please be sure these traffic controls are in the traffic plan and implemented.

Pat Golfis 570 Mount Curve Blvd Saint Paul

--Pat Golfis mobile phone 612-419-4674



Open House #2 Comment Form August 27, 2019

NAME:	Theodore Blomgren	
ADDRESS:	1918 Montreal Ave.	
PHONE:	651- 699-8645	
EMAIL:	tblom 3@ aul.com	

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

Why is the Canadian Pacific area Not being utilized? It seems like it would add some options for routes in /out of the Ford development area. It certainly doesn't seem Future with a railroad use. a have to



Open House #2 Comment Form

August 27, 2	019	\cap
NAME:	Mary	Beh Blongren
ADDRESS:		1918 Montreal Ave
PHONE:	lesi	699-8645
EMAIL:	TBIOM	3@ AOL.COM

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

Why are you putting a mosquito B wear (water Facture) in the development	reeding
wear (water Fature) in the development	
How about: Recreation?	/
Open field?	
Trees ?	
Benches ?	



Open House #2 Comment Form August 27, 2019

	Maa. Al	
NAME:	May Slongren	
ADDRESS:	1918 Montreal Avenue	
PHONE:	(651) $699-8645$	
EMAIL:	TBLOM3EaoL-COM	

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

Re: Montreal Ale, This is one of 2 Entrances For the development for Cars Coming from the East, +
For the development for Cars Loming from the East, +
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pick up on other side of the strect,
Waking my daily U-turns With all the additional
Wohing my daily U-turns With all the additional traffic



Open House #2 Comment Form August 27, 2019

NAME:	Mary Blomgren	
ADDRESS:	1918 Montreal Avenue	
PHONE:	651 699-8645	
EMAIL:	TBIOM3@ HOL.Com	

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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Comment Number:
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Open House #2 Comment Form August 27, 2019	
NAME: VSUCE KICTBAULT CT (SIII = 2409	
ADDRESS: $161512EECHWOOD AVEW, 2(1)JJ1074901PHONE: 651-690-3569$	
EMAIL: bruceFavibaute quail. Con	

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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Open House #2 Comment Form August 27, 2019

NAME:	Martna Frust	
ADDRESS:	904 Saunders Ave SSTIG	
PHONE:	6513074371	
EMAIL:	martha fau @ gmail. com	

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Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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Open House #2 Comment Form

august zr, z	
NAME:	Denachy Lypsochered -
ADDRESS:	740 miss, Run, Blad & - 6E
PHONE:	631-699-8702
EMAIL:	Here and a second a s

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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Open House #2 Comment Form August 27, 2019

NAME:	TonClarke
ADDRESS:	3000 WEST RIVER PKWY JO 7-305
PHONE:	651-399-0106
EMAIL:	thetarkesis & gmail.com

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at FordSitePlanning@ci.stpaul.mn.us or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

20 0 RIA DU 0 en W Q

Are the sofficiet acres of passive and active pank paces planned for that meet city or national standard? Why not more height and density near Ford Pkwy + Cleveland intersection? And near existing high rise bldg (s?) near Cleveland # South of Ford Pkwy? Isthere a formal consittation process for City of Mpts and Mpts residents? Thank you,



Open House #2 Comment Form August 27, 2019

NAME:	Tram	Hoang				
ADDRESS:	2700	University	Ave West	#316	, St. Paul	55114
PHONE:	(503	,) 998-6k	013		ž	
EMAIL:	traw	my hoang 1	@ gmail.co	<u></u>		

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

COMMENTS:

who lives in essional aunt taul multi kilding dense anily and Vea to see opmen derrel excited MOSP SAMP elemen ac norporat attenders meeting heard other Older white homeowners resen mostu who ver carstitient Important grap the only not O Sharld stering express their dense bousing transi in innsible do Coulder -PP help Lim not haneou kerow experience existence homeowners' it doesn't mean ignere THEODOSALES because it allows plan This housing density (which I aijay) and increased transit i multi-model transportation. Both of these elements not only weate a fun, connected community, but also help to combat the climate change impa uban sprawl. Please listen to the silenced (not silent) majority that will be tiving + working in this city for decades to come, the

I hope that this development team focuses an who wants to and will live at the Ford Site - not those who oppose A and won't be a part of A anyways. Mank you!

			Comment Number: 16
	FORD SITE A 21st Century Community	ALTERNATIVE URBAN AREAWIDE REVIEW (AUAR)
	\checkmark		
Open House August 27, 2	#2 Comment Form 019		
NAME:	Carol Kist		
ADDRESS:	1959 Palace >	Ave. Straul	MN 55705
PHONE:	651-265-151	7	
EMAIL:		93 	

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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Open House #2 Comment Form August 27, 2019

NAME:	Mary Lilly
ADDRESS:	458 Mount Curve B/V&
PHONE:	
EMAIL:	many plilly @ gmail.com

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

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Open House #2 Comment Form

August 27, 20	019	
NAME:	Colleen Zuro-White	
ADDRESS:	2095 Pinehurst Avenue	
PHONE:	920- 540-4658	
EMAIL:	zurowhite@gmail.com	

You may leave this completed form with us today by dropping it into the comment box. You may also email your comments to Menaka Mohan at <u>FordSitePlanning@ci.stpaul.mn.us</u> or mail this form to the following address:

Menaka Mohan City of Saint Paul 25 W Fourth Street Saint Paul, MN 55102

COMMENTS:

Need to study traffic impact@ intersections of 46th street/Hwy55-Ford site WILL impact and even if Ford Bridge can handle traffic with H lanes, 40th street cannot. Why not look @ increase in traffic along Mississippi River Blud South toward Edgecumb - more people will travel this route. 包 Highland Parkway's Fairview intersection IS NOW DANGEROUS, HP onto Fairview. This will get worse! left turn off NIMBY attitude - why not consider the impact of Ford Develop. s there a Randolph on Cretin? Yes this is not in Highlandfork North of traffic will increase, especially around. St. Thomas. hould have preferred more of a "big picture overview" presentation of all boards ~ maybe 10-15 minutes prior to going downstairs. I think this would have "mitigoted" many negative comments. hanks for the meeting and the boards.

Online Comment COMMENT NUMBER: 19 DATE: 8/29/2019 NAME: Jim Winterer COMMENT: Menaka Mohan, Ford Site Planner, Department of Planning and Economic Development 25 W 4th Street, Suite 1400, Saint Paul, MN 55102 FordSitePlanning@ci.stpaul.mn.us

Thank you for the opportunity to comment on the Ford Site's AUAR. My name is Jim Winterer and for 25 years I have lived three houses south of the Ford site at 1032 Bowdoin St.

I will open with two general comments, and then will offer some specific comments chronologically according to their AUAR page number.

General Comments

In his July 12, 2019, introduction to the Ford Site Alternative Urban Areawide Review (AUAR), Dr. Bruce Corrie gives his reasoning for not including in the review the adjacent toxic-waste site "Area C" and also for not considering lower-density scenarios for the site.

I think the intent and spirit of the AUAR calls for both of those things.

- Regarding lower-density scenarios: In its introduction page, the AUAR itself states: "An Alternative Urban Areawide Review (AUAR) is a planning tool that local governments can use to understand how different development scenarios will affect the environment of the community."

- Regarding the cement-capped toxic waste site: On Page 7, below a map of the Ryan Plan for the site, the AUAR states: "The intent of the AUAR is to identify the worst-case potential impacts and the mitigation required to compensate for those impacts." Because the highly toxic "Area C" is directly across the street from what will be one of the most densely populated housing developments in state history, and because a maze of underground tunnels connect the Area C site to main Ford site, you would think a review like the AUAR would of course examine the potential dangers to Ford site residents because of the waste that has been buried next door.

My second general comment relates to the fact that as the Responsible Government Unit (RGU), the City of St. Paul drafted the AUAR. At a recent meeting of the Highland District Council, I was told that there is some overlap in city employees who worked on both of these projects: the plan and then the study of the plan.

At the least, this calls into question the level of objectivity required for drafting something like an AUAR. How, for instance, would someone want to find fault or throw a monkey wrench into something they worked so hard to create and promote.

An example of this can be found in the section dealing with wildlife. According to Ford site AUAR, "Minimal wildlife habitat is located within the AUAR study area due to the prior extent of impervious surfaces and minimal natural vegetation. Wildlife that can be found within the study area are some song birds and small mammals ...". This statement is far from true (more details below) but the underlying message is this: "Move along folks, there's nothing to see here."

Following are six more specific comments:

On Page 6, it says only two development scenarios will be evaluated. I'd like to know why only these two are being considered. I have read the explanation from Dr. Bruce Corrie in his introduction letter, but it stands to reason that if you can expand the analysis from one plan (the city's master plan) to a second plan (the Ryan plan) then why not have a third as well.

Telling us that the AUAR will not consider a development with less density reinforces the uncomfortable feeling that those who created the plan are now the ones who are studying the plan. In other words: the fox is guarding the chickens. They don't want anyone to even consider the possibility of a development that more closely reflects the broader neighborhood.

On Page 23, it says "The Canadian Pacific Railway property had some remediation activities completed during the Ford Site remediation efforts. Any redevelopment of the property will require additional coordination with the MPCA. No further analysis will be included in the AUAR.

The worksheet language is not clear. Does this mean there won't be any analysis of the possible pollution of the railroad property? I know there has been some remediation, but I don't think it was all the railroad property as some tracks still remain in place.

It is important to know the level of contamination under those tracks because of how close the track are to thousands of proposed new dwellings, to the proposed adjacent baseball fields, and especially to the proposed adjacent community gardens. Also, it would seem that the wetland portions of the railroad property will feed into the water that eventually will go under Mississippi River Boulevard en route to the river.

On Page 24, in the Fish and Wildlife section, it says:

"Minimal wildlife habitat is located within the AUAR study area due to the prior extent of impervious surfaces and minimal natural vegetation. Wildlife that can be found within the study area are some songbirds and small mammals that have adapted to the highly disturbed urban environment."

As someone who lives just a few houses from the site, I can say that "some songbirds and small mammals" is misleading and damages the credibility of the document. I have seen turkeys, turkey vultures, bald eagles, peregrine falcons, pileated woodpeckers and hummingbirds. Joining the small mammals on the site are whitetail deer, raccoons and opossums. This summer we have a family of frequently photographed coyotes living at the end of Bowdoin Street. We hear them several times a week, especially when an ambulance siren can be heard in the area.

On Page 27, in the section dealing with noise, it says:

"The AUAR study area will be developed such that any land use activities that are sensitive to noise will have sufficient setbacks from existing noise sources to thereby reduce the potential for any noise impact. These details will be determined as the project development proceeds.

"The change in traffic noise levels is not anticipated to be readily perceptible.

"No further noise analysis is anticipated for the AUAR."

I have some experience dealing with how noise can affect a neighborhood. I was working at the University of St. Thomas when it built two science and engineering buildings near the intersection of Cretin and Summit. The science building had a fan on the roof to provide air circulation. The fan made considerable noise and neighbors rightly complained and asked that something be done. St. Thomas, to its credit, kept working on the problem until it was solved.

The Ryan plan calls for a population density that is equivalent to or greater than the population of many Minnesota cities (International Falls, for example). It is hard to believe that concentrating that many people on 122 acres will not generate noise that will impact the surrounding neighborhood. I understand that in the short-term, there will be unavoidable construction noise, but could someone discuss why no long-term analysis of noise is planned?

On Page 28, in the Transportation Section, I would like to suggest the study boundaries be expanded well beyond the immediate neighborhood.

For example, one of the worst nightly traffic jams in the area, (without the additional traffic generated by the Ford site) is southbound traffic on Cretin Avenue from the freeway toward St. Thomas during rush hours.

Also, it doesn't seem that the study is taking into consideration the cumulative traffic impact from all the large apartment projects being built or planned in the general vicinity, including those across the river in Minneapolis.

If the city stands to gain significant tax revenues from the Ford site, the city also needs to address the added congestion this development will bring to neighborhood streets, and to the condition of the streets as well. Will the AUAR suggest mitigation methods to solve this problem?

On Page 30, in the section on Cumulative Potential Effects, it says:

"No reasonably foreseeable future projects that may interact with the environmental effects of the Ford Site have been identified other than the Burg & Wolfson (Lunds & Byerlys) and Canadian Pacific Railway property, which are included in the AUAR study area and analyses."

and

"Due to the lack of additional foreseeable projects in the vicinity, cumulative potential effects will not be addressed in the AUAR."

As I mentioned above, it seems reasonable to include the impact of all the other high-density projects being built or planned in the general area. To the person who wrote in the AUAR that there is a "lack of

additional foreseeable projects in the vicinity," I would suggest that she or he take a drive down Snelling Avenue or read a couple back issues of the Highland Villager newspaper.

Sincerely, Jim Winterer 1032 Bowdoin St. St. Paul, MN 55115 jcwinterer@gmail.com

COMMENT NUMBER: 20

DATE: 8/27/2019

NAME: Michael Daigh

COMMENT:

Sir/Ma'am,

- 1) What does the city intend to be the primary method of commuting/movement to and from the Ford development?
- 2) What measures are being taken, if any, to actively exclude cars, or make driving the least convenient transportation option?
- 3) What is considered acceptable walking distance for a resident to get to his/her primary transit pickup point? What is considered acceptable average walking distance for a driver from their parking spot to their destination?
- 4) Are ITE parking minimum numbers being used as the benchmark for measuring the Ford Site's own parking numbers against?

Thank you for your time, and I will appreciate a reply to my query.

Sincerely,

Michael Daigh

COMMENT NUMBER: 21

DATE: 8/27/2019

NAME: Frank Douma

COMMENT:

This is clearly a very comprehensive document, but for its length, I still find the transportation section to be disappointing in that it focuses much more attention on car movement, and does not even discuss possible transit and bicycle improvements within the development site, while spending considerable attention on the planned streets. I'm not sure if this is a fault of the AUAR or of the planning process more broadly, but I am concerned about the amount of attention being dedicated to car movement, using conventional assumptions and models, and very little discussion about potential new transit and bike facilities, to say nothing of incorporating shared mobility services (Uber/Lyft, HOURCAR, bikeshare, and scooters) and possible developments in vehicle automation, all of which could lead to significant changes (even reductions) in parking and car movements. Operating on current assumptions encourages perpetuating current deficiencies. Planning for alternative options needs to be accelerated so that these options can be evaluated on similar terms as automobile travel

COMMENT NUMBER: 22

DATE: 8/27/2019

NAME: Amy Murphy

COMMENT:

As a Highland Park resident, I appreciate the approach Ryan companies has taken to engage the community. They are doing an excellent job understanding the culture of Hyland. I truly caution the city of not forcing any type of architecture or style that may be politically correct that contradicts the true culture in architect of our Hyland community. Any type of structural change to the proposed Brownstones would diminish the value and appeal. Let Ryan companies do their job. Stop interfering. Do you need a broad tax space to accommodate affordable housing? Let the beautiful 35 single family homes be. But the beautiful brownstones be. Do not force cost down because it will remove an important tax base.

Online Comment

COMMENT NUMBER: 23

DATE: 8/27/2019

NAME: Jenna Strank

COMMENT:

I am concerned about the impact development will have on Fairview Avenue. Currently, it is highly utilized at all times of day as a direct thoroughfare to/from Hwy 5 to St. Paul neighborhoods - and by vehicles of all types (cars, trucks, buses, etc.). Why were the there no Historical Average Daily Traffic Volumes for Fairview included in Figure 12 to provide context to the current state of that roadway? I only see AM and PM rush-hour information--and mitigation efforts on southbound traffic (what about northbound traffic?). Clearly, given the rest of the information in your report, Fairview is highly trafficked - and will no doubt become even more so (I see D's and F's) at full development of the site. I think it's time to think of alternate options for N/S-bound traffic i.e. can something be done about the Snelling stretch south of Montreal to encourage drivers to utilize that access point? A stop light there so that drivers can cross traffic on W. 7th? I know that's why I gave up on taking Snelling to get to Hwy 5 and started exclusively using Fairview...Regardless, I don't think that the issue is the lack of turn signals or bike lanes on Fairview - there's a need to encourage people to use alternative routes vs. continuing to clog up the intersections.

Online Comment

COMMENT NUMBER: 24

DATE: 8/23/2019

NAME: Frank Stifter

COMMENT:

When considering how to integrate cars and non-car transportation, please attempt to separate these two groups. Cars travel at significantly higher speeds and require more space as most travel is done this way, even in the metro; and especially by families with children. (A parent with a kid or two is unlikely to transport them to sports or other activities via walking or a bike trailer, and if they do they should have the safety and security of their own separate path, unattached to the motor vehicle roadway.) It will be safer and more effective for those attempting to reduce vehicle use. Thank you

Online Comment

COMMENT NUMBER: 25

DATE: 9/3/2019

NAME: Christine Mary Popowski

COMMENT:

I would very much appreciate that making the city a vibrant community where it is easy to bike be your major priority.

 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: Concerns about AUAR environmental study.

 Date:
 Monday, September 16, 2019 12:44:03 PM

 Attachments:
 image002.png image003.png image004.png

	Menaka Mohan
?	Ford Site PlannerPlanning & Economic Development25 W. 4th St., Suite 1400Saint Paul, MN 55102P: 651-266-6093menaka.mohan@ci.stpaul.mn.usImage: Image: I

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From: Janice Martland [mailto:mrfy1219@comcast.net]
Sent: Friday, September 13, 2019 8:34 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: Concerns about AUAR environmental study.

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Jan Martland and I have lived at 1219 Bayard Avenue for nearly 40 years. I am writing to express my concerns pertaining to the Draft AUAR.

My main concerns include:

- The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.
- 2. The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, <u>traffic will increase by 20% to 30%</u>. Not to mention that public had no opportunity to give input into the traffic study. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.
- 3. I did not see any information of the impact of traffic on Randolph Avenue which is a major east west street that connects to 35 E and would also bear an increase in traffic.
- 4. The AUAR Is based on certain assumptions about increases in biking and walking (which I believe are flawed). However, the Twin City area is rated as one of the <u>coldest and snowiest</u> <u>urban centers in the United States.</u> The AUAR study should be revised to include assumptions that account for Minnesota's winter climate.

- 5. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.
- 6. The purpose of the AUAR is to study the environmental impact to the community. It is imperative that the study of all present and future car emissions be included in the AUAR.
- 7. The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset.
- 8. Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.
- 9. Though Area C is not included in the 122 acre development site, I am concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.
- 10. It is my belief that the Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. I am requesting that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

Thank you, Jan Martland 1219 Bayard Avenue St. Paul, MN 55116 mrfy1219@comcst.net

11.

Ashley Payne, CWD Kimley-Horn | 323 South Broadway, Rochester, MN 55904 Direct: 507-216-0763 | Mobile: 507-251-6096 | www.kimley-horn.com

-----Original Message-----From: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Sent: Monday, September 9, 2019 4:11 PM To: Payne, Ashley <Ashley.Payne@kimley-horn.com> Subject: FW: Traffic Plans

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Janice Martland [<u>mailto:mrfy1219@comcast.net]</u> Sent: Saturday, September 7, 2019 6:38 PM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: Traffic Plans

Dear Menaka Mohan,

I am writing as it is my understanding that the AUAR traffic study to date, does not include a Signal Light or 4-way stop at the intersection of Howell and Montreal Ave. If you have driven down Montreal, you know that it is already a speeding zone. I am in support of a 4-way stop sign at Howell and Montreal to help slow down the traffic on Montreal Avenue. This area is close to multiple schools with significant foot traffic and vehicle traffic and I feel it is a safety issue.

Thank you, Jan Martland 1219 Bayard Avenue St. Paul, MN 55116 651-295-4862 mrfy1219@comcast.net

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 17, 2019 10:22:17 AM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
	Ford Site Planner
	Planning & Economic Development
	25 W. 4th St., Suite 1400
?	Saint Paul, MN 55102
	P: 651-266-6093
	menaka.mohan@ci.stpaul.mn.us
	2 2 2

From: Jim Ginther [mailto:jamesmginther@gmail.com]
Sent: Monday, September 16, 2019 11:02 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Jim Ginther______, and I live at 1019 Colby St., St.Paul, MN 55116______.

I am writing to express my concerns pertaining to the Draft AUAR.

I live immediately south of the Ford site and the CP Rail Yards. Last Fall when Carl Bolander and Sons Construction was digging up the contaminated soil and piling some of it no more than 150 feet from our house there was the strongest chemical smell coming from those piles. (I still have pictures of them). I spoke with a man named Jim Xline about the acrid smell and he said the piles would be covered and then removed. The heavy plastic covering did stop the strong fumes and the huge piles of soil were eventually removed. However most of the soil under the CP rail yards and some of the site to the west has not been excavated. I am sure that the soil in these places is as full of vaporous chemicals and poses health risks and dangers to the surrounding area.

Therefore, based on my and my family's personal experience I strongly endorse the following issues and statements:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue ae awful ht pott stake. Please request that the Minnesota Board of Environmremental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project. *The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

*There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the highdensity Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.

*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

*The AUAR Is based on certain assumptions about increases in biking and walking. However, the Twin City area is rated as one of the coldest and snowiest urban centers in the United States. The AUAR study should be revised to include assumptions that account for Minnesota's winter climate. *Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

*Public requests for study of carbon dioxide (CO2) were not addressed. The AUAR study should include a study of CO2, other greenhouse gas emissions, non-diesel particulate matter emissions, and the project's impact on climate change under Section 16 – Air and under Section 19 – Cumulative Potential Effects. If PED is not going to study these issues, please explain why there have not been specific responses to the dozens of public requests to study CO2 and non-diesel particulate matter.

*The purpose of the AUAR is to study the environmental impact to the community. It is imperative that the study of all present and future car emissions be included in the AUAR.

*Per the 2012 recommendation by Manick & Smith Group Inc., the AUAR study should include further investigation of the stability of the tunnel system and further investigation of the tunnel collapse near Area C. If additional studies outside of the AUAR have been completed that reach different conclusions than the Manick & Smith Group, Inc. study, please include citations to those studies in the AUAR.

*Given the potential health risks related to evidence of soil vapors, The AUAR study should include additional specific mitigation measures to address these risks.

*The AUAR should include a more comprehensive traffic study to address traffic congestion, including study of the cumulative impact at the intersections near Highways 94, 35, and 5.

*The Draft AUAR addresses noise mitigation for residents of the Ford development, but nothing for residents of the existing community. The AUAR study should include a robust study of pre-construction noise, and noise generated by construction, air-handling equipment, and future traffic

increases for the entire community.

*The Draft AUAR underestimated the impact to wildlife, in particular the migratory birds of the North American Migratory Mississippi Flyway. The AUAR study should include a more thorough and objective study of wildlife impacts.

*The AUAR study should include a more thorough assessment of the Significant Public Views (National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site.

*The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset. *Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: Ford Site, Open House #2 Comment, Aug. 27, 2019

 Date:
 Tuesday, September 10, 2019 11:39:56 AM

 Attachments:
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	Menaka Mohan	
2	<i>Ford Site Planner</i> Planning & Economic Development 25 W. 4th St., Suite 1400	
	Saint Paul, MN 55102 P: 651-266-6093	
	menaka.mohan@ci.stpaul.mn.us	
	????	

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From: Jim Ginther [mailto:jamesmginther@gmail.com]
Sent: Monday, September 9, 2019 9:48 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: Ford Site, Open House #2 Comment, Aug. 27, 2019

Menaka Mohan City of St. Paul 25 W Fourth Street St. Paul, MN 55102

I live in Highland Park and travel Montreal Ave., 2 to 4 times a day. Even during non-rush hour times I often encounter cars speeding in the area between St. Paul Avenue and Davern St. I am a driver myself but too many drivers cruise down the street at 35-45 mph.

I would like the City Public Works Dept. to consider putting a 4-way stop at Howell and Montreal Ave. I think this would help slow traffic speeds on the entire stretch of Montreal from St. Paul Ave. up to Snelling.

Respectfully, Jim Ginther 1019 Colby St. St.. Paul, MN 55116

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 10, 2019 1:27:26 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us Image: Strate Str

From: Allison Mariani [mailto:allisonhmariani@gmail.com]
Sent: Tuesday, September 10, 2019 12:51 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Allison HIckey Mariani, and I grew up at 1795 Pinehurst Ave and am actively looking at return to Highland now with my own family.

I am writing to express my concerns pertaining to the Draft AUAR.

I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Thank you,

Allison Hickey Mariani

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 10, 2019 11:39:08 AM
Attachments:	image002.png
	image003.png
	image004.png

 Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us 		Menaka Mohan
0 0 0 0	?	<i>Ford Site Planner</i> Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093

From: Anne D Brataas [mailto:annebrataas@mac.com]
Sent: Tuesday, September 10, 2019 6:50 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is ______, and I live at ______. I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

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Anne Brataas | M.S., M.En.S., Ph.D.V.

President The Story Laboratory, LLC Science Writing | Science & CME Curriculum | Informational Graphics | Histories of Science, Medicine & Technology University Club Building Suite #307 420 Summit Avenue Saint Paul, Minnesota 55102 U.S.A.

t: +1-651-270-2706 e: <u>anne@fastponypress.com</u> w:<u>www.thestorylaboratory.com</u> From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 10, 2019 11:39:47 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

-----Original Message-----From: Bill Diederich [mailto:bill.diederich@gmail.com] Sent: Tuesday, September 10, 2019 3:40 AM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Bill Diederich, and I live at 1034 Cleveland ave s. I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

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From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 10, 2019 2:26:30 PM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

-----Original Message-----From: Bobbette Axelrod [mailto:sisterfun@comcast.net] Sent: Tuesday, September 10, 2019 2:06 PM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Bobbette Axelrod, and I live at 2080 Hartford Ave.

I am writing to express my concerns pertaining to the Draft AUAR.

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From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 10, 2019 11:38:18 AM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093
	menaka.mohan@ci.stpaul.mn.us
	?????

From: Djg [mailto:djgoldberg@aol.com]

Sent: Tuesday, September 10, 2019 8:20 AM

To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>

Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission, My name is David Goldberg _, and I live at 1870 Worcester ave. Saint . I am writing to express my concerns pertaining to the Draft Paul,55116 AUAR. PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER. Additionally, I feel that that the Draft AUAR is inadequate in the following ways: *The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project. *The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated. *There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period. *The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

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From:	<u>*CI-StPaul FordSitePlanning</u>
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 10, 2019 11:39:41 AM
Attachments:	image002.png
	image003.png
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	Menaka Mohan		
	Ford Site Planner		
	Planning & Economic Development		
?	25 W. 4th St., Suite 1400		
	Saint Paul, MN 55102		
	P: 651-266-6093		
	menaka.mohan@ci.stpaul.mn.us		
	??????		

From: gailstremel@aol.com [mailto:gailstremel@aol.com]
Sent: Tuesday, September 10, 2019 4:10 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Gail Stremel and I live at 1383 Scheffer St Paul.

I am writing to express my concerns pertaining to the Draft AUAR.

Unfortunately St Paul has a record of poor traffic "studies" and this appears to be another such instance.

I urge you to better consider traffic issues as well as the environmental aspects of this plan.

From:	<u>*CI-StPaul FordSitePlanning</u>
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 10, 2019 1:27:35 PM
Attachments:	image002.png
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2	Ford Site PlannerPlanning & Economic Development25 W. 4th St., Suite 1400Saint Paul, MN 55102P: 651-266-6093menaka.mohan@ci.stpaul.mn.us???

From: Isla Hejny [mailto:ihejny@gmail.com]
Sent: Tuesday, September 10, 2019 12:19 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is _Isla Hejny_		, and I live at $_1718$
Highland Parkway_	_St. Paul 55116_	·

I am writing to express my concerns pertaining to the Draft AUAR. They are as follows:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

*There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study.

*The AUAR contains misleading comments that should be removed. Nothing even close to the highdensity Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.

*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce

congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

*The AUAR Is based on certain assumptions about increases in biking and walking. However, the Twin City area is rated as one of the coldest and snowiest urban centers in the United States. The AUAR study should be revised to include assumptions that account for Minnesota's winter climate. *Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

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*The purpose of the AUAR is to study the environmental impact to the community. It is imperative that the study of all present and future car emissions be included in the AUAR.

*Per the 2012 recommendation by Manick & Smith Group Inc., the AUAR study should include further investigation of the stability of the tunnel system and further investigation of the tunnel collapse near Area C. If additional studies outside of the AUAR have been completed that reach different conclusions than the Manick & Smith Group, Inc. study, please include citations to those studies in the AUAR.

*Given the potential health risks related to evidence of soil vapors, The AUAR study should include additional specific mitigation measures to address these risks.

*The AUAR should include a more comprehensive traffic study to address traffic congestion, including study of the cumulative impact at the intersections near Highways 94, 35, and 5.

*The Draft AUAR addresses noise mitigation for residents of the Ford development, but nothing for residents of the existing community. The AUAR study should include a robust study of preconstruction noise, and noise generated by construction, air-handling equipment, and future traffic increases for the entire community.

*The Draft AUAR underestimated the impact to wildlife, in particular the migratory birds of the North American Migratory Mississippi Flyway. The AUAR study should include a more thorough and objective study of wildlife impacts.

*The AUAR study should include a more thorough assessment of the Significant Public Views (National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site. *The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset. *Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Study
Date:	Tuesday, September 10, 2019 11:38:26 AM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
	Ford Site Planner
	Planning & Economic Development
	25 W. 4th St., Suite 1400
?	Saint Paul, MN 55102
	P: 651-266-6093
	menaka.mohan@ci.stpaul.mn.us
	? ? ? ?

From: McQuillan, Janine S. [mailto:jsmcquillan@stthomas.edu]
Sent: Tuesday, September 10, 2019 8:07 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Study

My name is Janine McQuillan, and I live at 519 Mount Curve Blvd.

I am writing to express my concerns pertaining to the Draft AUAR. I am a 4th generation member of St. Paul and 2 generations in the Highland/ Mac Groveland neighborhood. The proposed development plan is not ideal for us as residents on Mount Curve Blvd. Nevertheless, I understand the opportunity at hand and the need to prudently develop this site. Having stated this, I have several concerns in the AUAR draft:

<u>TRAFFIC STUDY</u> - There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study.

I attended many public hearings on this site and TRAFFIC was the top concern of our community.

In order to maintain good will with the immediate community, it is crucial that the public be allowed to provide input into this study.

<u>Carefully review the record on density</u>: The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed.

<u>Get the facts corrected</u>: The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated. <u>Eliminate the conflict of interest to protect the integrity of the process</u>: The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

Thank you for your consideration. Janine McQuillan

Jennie McQuillan | Receptionist
The Saint Paul Seminary School of Divinity
E: ismcquillan@stthomas.edu | W: semssp.org | 0: 651-962-5050



"All the way to heaven is heaven, because Jesus said, 'I am the way.' "— St. Catherine of Siena

Image removed by sender.	
?	

From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: Future of the Ford SiteDate:Tuesday, September 10, 2019 1:27:27 PM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Jesse O [mailto:jonkka_99@yahoo.com] Sent: Tuesday, September 10, 2019 12:47 PM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: Future of the Ford Site

Dear Ms. Mohan and Members of the Saint Paul Planning Commission, My name is Jesse Onkka, and I live at 591 Cretin. I strongly agree with the views of Neighbors for a Livable St. Paul and am writing to express my concerns pertaining to the Draft AUAR. I don't think the current plan adequately address the quality of life impacts to those living in Cretin ave, which will see a substantial increase in traffic should the plan move forward as is, to include pedestrian safety for the children who live in the neighborhood and often walk to the shops on Ford parkway. Additionally, I feel that the Draft AUAR is inadequate in the following ways: *The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project. *The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated. *There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the highdensity Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period. *The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and

assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area. *The AUAR Is based on certain assumptions about increases in biking and walking. However, the Twin City area is rated as one of the coldest and snowiest urban centers in the United States. The AUAR study should be revised to include assumptions that account for Minnesota's winter climate. *Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives. *Public requests for study of carbon dioxide (CO2) were not addressed. The AUAR study should include a study of CO2, other greenhouse gas emissions, non-diesel particulate matter emissions, and the project's impact on climate change under Section 16 – Air and under Section 19 – Cumulative Potential Effects. If PED is not going to study these issues, please explain why there have not been specific responses to the dozens of public requests to study CO2 and non-diesel particulate matter. *The purpose of the AUAR is to study the environmental impact to the community. It is imperative that the study of all present and future car emissions be included in the AUAR. *Per the 2012 recommendation by Manick & Smith Group Inc., the AUAR study should include further investigation of the stability of the tunnel system and further investigation of the tunnel collapse near Area C. If additional studies outside of the AUAR have been completed that reach different conclusions than the Manick & Smith Group, Inc. study, please include citations to those studies in the AUAR. *Given the potential health risks related to evidence of soil vapors, The AUAR study should include additional specific mitigation measures to address these risks. *The AUAR should include a more comprehensive traffic study to address traffic congestion, including study of the cumulative impact at the intersections near Highways 94, 35, and 5. *The Draft AUAR addresses noise mitigation for residents of the Ford development, but nothing for residents of the existing community. The AUAR study should include a robust study of pre-construction noise, and noise generated by construction, air-handling equipment, and future traffic increases for the entire community. *The Draft AUAR underestimated the impact to wildlife, in particular the migratory birds of the North American Migratory Mississippi Flyway. The AUAR study should include a more thorough and objective study of wildlife impacts. *The AUAR study should include a more thorough assessment of the Significant Public Views (National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site. *The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset. *Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community. *Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Thank you.

Jesse Onkka

From:	<u>*CI-StPaul FordSitePlanning</u>
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 10, 2019 11:38:35 AM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us
	2 2 2

From: Jim and Kathie Cech [mailto:jkcech@msn.com]
Sent: Tuesday, September 10, 2019 7:57 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Kathleen Cech, and I live at 2115 Highland Parkway and I am writing to express my concerns pertaining to the Draft AUAR.

I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 10, 2019 11:38:40 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Jim Carlen [mailto:jpcarlen@gmail.com] Sent: Tuesday, September 10, 2019 7:29 AM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Jim Carlen, and I live at 601 Montcalm Pl, Saint Paul.

I am writing to express my concerns pertaining to the Draft AUAR.

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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Thank you for your consideration.

Jim Carlen

 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: AUAR Public Comments

 Date:
 Tuesday, September 10, 2019 11:39:20 AM

 Attachments:
 image002.png image004.png

	Menaka Mohan
2	Ford Site PlannerPlanning & Economic Development25 W. 4th St., Suite 1400Saint Paul, MN 55102P: 651-266-6093menaka.mohan@ci.stpaul.mn.usImage: Image: I

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From: McQuillan, Jim (MMA) [mailto:Jim.McQuillan@MarshMMA.com]
Sent: Tuesday, September 10, 2019 5:48 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Jim McQuillan, and I live at 519 Mount Curve Blvd.

I am writing to express my concerns pertaining to the Draft AUAR. I am a 4th generation member of St. Paul and 3 generations in the Highland/ Mac Groveland neighborhood. The proposed development plan is not ideal for us as residents on Mount Curve Blvd. Nevertheless, I understand the opportunity at hand and the need to prudently develop this site. Having stated this, I have several concerns in the AUAR draft:

- 1. <u>TRAFFIC STUDY</u> There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study.
 - a. I attendee nearly all public hearings on this site and TRAFFIC was the top concern of our community.
 - b. In order to maintain good will with the immediate community, it is crucial that the public be allowed to provide input into this study.
- 2. <u>Carefully review the record on density</u>: The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed.

- 3. <u>Get the facts corrected</u>: The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.
- 4. Eliminate the conflict of interest to protect the integrity of the process: The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

Thank you for your consideration. Jim

This e-mail transmission and any attachments that accompany it may contain information that is privileged, confidential or otherwise exempt from disclosure under applicable law and is intended solely for the use of the individual(s) to whom it was intended to be addressed. If you have received this e-mail by mistake, or you are not the intended recipient, any disclosure, dissemination, distribution, copying or other use or retention of this communication or its substance is prohibited. If you have received this communication in error, please immediately reply to the author via e-mail that you received this message by mistake and also permanently delete the original and all copies of this e-mail and any attachments from your computer.

Please note that coverage cannot be bound or altered by sending an email. You must speak with or receive written confirmation from a licensed representative of our firm to put coverage in force or make changes to your existing program. Thank you.

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 10, 2019 1:27:40 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
	Ford Site Planner
	Planning & Economic Development
	25 W. 4th St., Suite 1400
1	Saint Paul, MN 55102
	P: 651-266-6093
	menaka.mohan@ci.stpaul.mn.us
	??????

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From: JOHN WHITE [mailto:jwhite15@comcast.net]
Sent: Tuesday, September 10, 2019 11:58 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission, My name is John White and wife Ramona White , and I live at 4254 33rd Ave so Minneapolis 55406 . I am writing to express my concerns pertaining to the Draft AUAR. PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER. Additionally, I feel that that the Draft AUAR is inadequate in the following ways: *The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project. *The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated. *There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the

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From:	<u>*CI-StPaul FordSitePlanning</u>
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 10, 2019 11:37:39 AM
Attachments:	image002.png
	image003.png
	image004.png

 Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us 		Menaka Mohan
	?	Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093

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From: Burda, Kate A [mailto:kate.burda@usbank.com]
Sent: Tuesday, September 10, 2019 11:26 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

To Ms. Mohan and Members of the Saint Paul Planning Commission -

Our names are Andrew, Kate, Hugh and Amelia Burda. We are a family that live at 2196 Berkeley Ave, Saint Paul MN 55105. We are concerned about the Draft AUAR. We have continually expressed concerns over the validity and accuracy traffic study, grave concerns over high density, and the city and city council outright disregard for the citizen who live in the area now. The city and the PED is so intent on getting what they want common sense cannot prevail. Our taxes are horrendously high, city services lacking and crime rising. This effort along, with other city initiatives, are decided upon behind closed doors and then camouflaged and promoted as an open and inclusive process. It's no wonder that our trust and confidence level in the city, city council, and PED is at an all-time low. The people who live in the new development will have all the benefits of the new development, while the rest of us who live around the development will take on the burden of increased density, increased traffic past our homes and in our neighborhood, reduced standard of living and increased taxes. The development is the shiny object while the current city residents are treated like a speed bump. We are a credible resource of knowledge, expertise and experience. The citizens and taxpayers of this neighborhood have been discounted and marginalized by the city, the city council, PED and the mayor. Other practical, intelligent and well considered points that must be considered per the AUAR are the following:

- 1. The AUAR should include accurate tabulation of public comments!!!!!!
- 2. Concerns about density and wildlife were not correctly tabulated.
- 3. <u>The AUAR contains misleading comments that should be removed.</u> Nothing even close to the high-density Ford Master Plan was ever suggested or

discussed.

- 4. **PED is not objective.** The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.
- 5. This point has been repeated and repeated and ignored and ignored!!!! There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study.

The Burda Family

2196 Berkeley Ave Saint Paul MN 55105

U.S. BANCORP made the following annotations

Electronic Privacy Notice. This e-mail, and any attachments, contains information that is, or may be, covered by electronic communications privacy laws, and is also confidential and proprietary in nature. If you are not the intended recipient, please be advised that you are legally prohibited from retaining, using, copying, distributing, or otherwise disclosing this information in any manner. Instead, please reply to the sender that you have received this communication in error, and then immediately delete it. Thank you in advance for your cooperation.

From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: Ford Site AUAR commentDate:Tuesday, September 10, 2019 11:37:49 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Kent Petterson [<u>mailto:terrace@winternet.com</u>] Sent: Tuesday, September 10, 2019 9:51 AM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: Ford Site AUAR comment

To whom it may concern

I am disappointed in the lack of attention that the draft study pays to the Mississippi River and the effects that the dense population at the Ford site may have within the critical area of the river on the bluff. The Critical Area of the river is in part within the defined limits of the AUAR study. There are serious concerns that defenders of the future of the river have made and continue to make about water run off, proximity of population density, obstruction of views into the valley, affects on the migratory bird flyway and other basic concerns for the natural area this National Park protects. These concerns should not be delayed for assessment until a later building by building permitting process raises them. This dilutes the concerns and will not address, in my opinion, the big picture affects the project will have on the river in the future.

Thank you, Kent Petterson 503 St. Clair Ave. St. Paul, MN 55102

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 10, 2019 11:37:58 AM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
2	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us 2 2 2 2 2 2 2 2 2

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From: Kristen Grant [mailto:kebgrant@gmail.com]
Sent: Tuesday, September 10, 2019 9:23 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Kristen Grant, and I live at 2098 Wellesley Avenue.

I am writing to express my concerns pertaining to the Draft AUAR.

Much of the process of the Ford Site Development seems to have been an exercise in selecting only the convenient facts. The decision makers had a pre-conceived desired outcome, and instead of being guided by the reality of what that plan would do to the neighborhood, they chose to highlight certain information and ignore those facts that did not support their goals.

It seems that Draft AUAR Environmental Study follows this pattern in some very troubling ways:

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(National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site.

*The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset. *Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Like most residents of this neighborhood -- and most mature adults -- I realize that change is inevitable. But if a dramatic change is forced upon the area from a blank-slate ideal of urban planning, rather than an organic addition to an existing community, you may destroy what is currently a thriving and healthy neighborhood. Not only will this be a very bad exercise of your power and responsibility, it won't do much good for that all important tax base. Something to keep in mind as you make your final decisions.

Sincerely, Kristen Grant From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 10, 2019 11:39:15 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Layne Hendel [mailto:hendellayne@gmail.com] Sent: Tuesday, September 10, 2019 6:36 AM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is ______Layne Hendel______, and I live at _____1861 Norfolk Ave, St. Paul, MN. 55116 ______.

I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

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Sent from my iPhone

 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: AUAR Public Comments

 Date:
 Tuesday, September 10, 2019 11:39:07 AM

 Attachments:
 image002.png image003.png image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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From: Lorelei Weidman [mailto:loreleiweidman@gmail.com]
Sent: Tuesday, September 10, 2019 6:56 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission, My name is

. I am writing to _, and I live at __ express my concerns pertaining to the Draft AUAR. PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER. Additionally, I feel that the Draft AUAR is inadequate in the following ways: *The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project. *The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated. *There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period. *The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the

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From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 10, 2019 11:39:24 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: M K [mailto:irishcillin@gmail.com] Sent: Tuesday, September 10, 2019 5:23 AM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Margaret Killeen , and I live at 2076 Niles Avenue

I am writing to express my concerns pertaining to the Draft AUAR.

I feel that the Draft AUAR is inadequate in the following ways:

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

M Killeen Irishcillin@gmail.com

Sent from my iPhone

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW:
Date:	Tuesday, September 10, 2019 2:26:25 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan		
	Ford Site Planner		
	Planning & Economic Development		
?	25 W. 4th St., Suite 1400		
	Saint Paul, MN 55102		
	P: 651-266-6093		
	menaka.mohan@ci.stpaul.mn.us		
	????		

Making Saint Paul the Most Livable City in America

From: murphyk314@aol.com [mailto:murphyk314@aol.com]
Sent: Tuesday, September 10, 2019 2:19 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject:

Ford Site That Matters.....

We all know that A commercial type development is not the right thing to happen at the Ford Site, nor do we want it to be a one sided development of expensive condos. This is an area that has both St. Thomas and St. Catherine universities not far down the road. We need to take into consideration what college students needs are. They need to have affordable housing. They have enough to think of with the cost of a college education costing so much these days.

To make this an area for all to enjoy is the key idea here. Park area, shopping, eating spots, housing for students, a place for young families starting out, and for seniors as well. A community that can live together and have affordability in all areas of life is the best thing that St. Paul can do for this site.

Thank you!

Concerned citizen working with non-profit organizations for better communities and transit for all needs.

From:	<u>*CI-StPaul FordSitePlanning</u>
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 10, 2019 1:29:04 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us P: Pi Pi Pi Pi Pi

Making Saint Paul the Most Livable City in America

From: Stuart Knappmiller [mailto:stuartknappmiller49@hotmail.com]
Sent: Tuesday, September 10, 2019 11:54 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Stuart Knappmiller, and we live at 1112 Orange Ave East. Our daughter's family of 4 live at 2142 James. We did all day childcare for their youngest daughter six years ago 3 days a week and visit their home and neighborhood once a week, so we have quite a connection to the Mississippi River Corridor via walking, running, biking, canoeing and climbing the bluff with the grand girls. They and we take advantage of the neighborhood by walking as far as Ford Parkway to access businesses.

They are perhaps atypical young people, both 39, in that they were track, nordic and CC athletes at Central High and were officers for the UM Nordic Ski Club. They have biked and run to work in Anchorage, to the U, Anne Sullivan School, and REI in Roseville. Their oldest biked to our home via Summit and Phalen Blvd at age 6. We six welcome the development at the Ford Plant site.

It is a shame that our neighbor who worked at the plant couldn't afford a home in that neighborhood, so bought a home 3 houses from us. 42 years ago we paid \$10,000 less on our \$67,000 home than we would have for a comparable home "over there." Will you have housing available for those who can't afford a home there today?

Having skied across Lake Phalen for several years while we rented in Maplewood to get to the Phalen Golf Course back in the day where one broke a trail, rather then paid "exorbitant" taxes to have a machined track, etc, we also saw our two block walk/ski to the course as a plus. The there was the undeveloped Gateway Trail to bike on with our two children. Heh, fewer taxes needed. Mary Ellen walked the RR tracks (now Phalen Blvd. more taxes needed) to her process engineering job at 3M, until the Monday Sarah was born.

Future council member Karl Neid told me I was not a NIMBY when I called for Rep. Bruce Vento in Karl's basement phone bank. I didn't know that phrase as I was "new" to politics. The folks below are NIMBYs. I've never had respect for them. Ironically, the chair of the Poly Sci. dept at UW-P gave me this focus by showing me where libertarianism can take us. He talked about the rural "independent" farmers who wouldn't put restrictions on what folks could do with their land. Why, one could buy up a farm and build a housing development! Which he did. On the farm down the road, Paul Bonin's farm. We babysat Bob's children there in 1971, when we were first married. So people moved to the country to have a country experience, but them being there made the lands around less "country." I'm having real difficulty understanding how this development will make the environment where the plant existed worse.

I'm not following this closely. I'm on the side of the "other" group, but got on these folks email list to keep track of their positions. Some of what they say reminds me of the woman at the Terri Thao meet and greet Sunday describing the Eastside Review as having hardly any news about the Eastside. I'm gonna guess she didn't help Bill and Gladys Godwin put out the Eastsider, like I did. She seemed blinded by her ideas so she isn't aware Lilly is keeping those of us who read it (ignoring the SW News stuff unless it looks like we could learn something from the article) aware of much of what happens in our neighborhood.

I am writing to express my concerns pertaining to the Draft AUAR as presented by Neighbors for a Livable St Paul. I'll leave their talking points below. Having read through them, I'm not sure I have enough knowledge to agree with any of them. I am able to see where people who consider themselves citizens who have imperfect knowledge lambast people like you for not doing what they want. I will only lambast you for allowing more McMansions to go up directly on the bluff. I trust you will plan a separated two way bike lane as part of this process.

Excuse this mostly all sidebar, but I want to be sure you understand how I view you. Thank you for your service. I hope your work makes for a better St Paul for all, with a sharp focus on equity. I hope the same focus happens in the development of the less valuable golf course land here on the Eastside.

One last look at their concerns. I bike and walk when I can to businesses. I can walk in the winter. I chose to not set up a winter bike. I get 60-70 mpg driving our Prius on city streets. Our last 100 miles average speed is 23 mph. I intend to buy an electric car as St Paul moves to provide more charging stations. We'll chage it from the panels on our roof. My emissions going forward will decline, as will others. Perhaps these folks intend to be driving their pickup trucks 20 years from now? I'm sad I won't be alive to see the positives we will do to try to fix the damage we've done to our children's earth. But we hope to have 20 more years experiencing our Grand Round, a bike trail on Ayd Mill connected to the Greenway, etc.

If you read this whole thing, you really are amazing. Best wishes as you work on this project.

Stuart and Mary Ellen Knappmiller

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: AUAR Public Comments

 Date:
 Tuesday, September 10, 2019 11:39:37 AM

 Attachments:
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	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us Image: Ima

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From: susan leek [mailto:sleek591@gmail.com]
Sent: Tuesday, September 10, 2019 5:20 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is ______Susie Leek______, and I live at _____591

Desnoyer Ave_____

I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

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From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: Ford Site AUAR study commentsDate:Tuesday, September 10, 2019 11:38:54 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Terry's G-mail [mailto:trfrahm59@gmail.com] Sent: Tuesday, September 10, 2019 7:01 AM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Cc: Jim Ginther </br/>jamesmginther@gmail.com> Subject: Ford Site AUAR study comments

Good morning,

My name is Terry Frahm and I reside at 1314 Miss Riv Blvd S. I have attended various meetings as well as reviewed the AUAR study associated with the Ford site development. I understand there has been a tremendous amount of energy and focus placed on this development... we all want to do it right the first time of course.

I am supportive of the majority of the development plan, with a few exceptions, primarily surrounding the (I believe) VERY unrealistic view of traffic, as well as bicycle and pedestrian activity in the area. I have ridden my bike recreationally this year for over 1,000 miles to date, all of my Minnesota miles occurring between April and today. The latest date I've ridden in MN was mid-November, about 5 years ago, an extremely late date due to moderate weather that year. The boil down is that I don't believe you will convince St Paul residents of the new Ford site, or surrounding locals, to ride their bikes AT ALL for at least the winter-weather months each year. If this is true, the development needs to plan for automobile traffic for those winter months as a priority. Pedestrian activity follows this logic closely. My wife and I walk .75 miles to church most of the year (including many winter Sunday mornings), but when weather turns winter the walks are very rare. You can close your eyes and dream about everyone walking and riding bikes (like in Copenhagen?), it's not a likely scenario in our weather environment. An aging population will also not ride/walk MOST of the year due to health and fitness issues, and our population is aging, NOT getting younger.

Also, ANY increase in driving traffic on Ford Parkway, Cleveland, Montreal, Cretin, etc will be a disaster at numerous times of the day/week. Sit outside Starbucks or Panera any weekday afternoon from 4p-6p and you won't need to spend money on a consultant study. Locals currently avoid that intersection like the plague, and the area will be completely choked with traffic in the future EVEN WITHOUT the Ford Site development, not to mention the significant increases in air and noise pollution additional traffic will bring.

There is clearly a political motivation for trying to shoehorn the proposed new housing units into this area. Longtime locals aren't pleased, but I'm amazed at how open-minded many of them are, versus the folks who don't live in the area and feel their density demands are reasonable and if one doesn't agree with them, they are labeled dinosaurs, or worse.

I hope you are able to achieve a balance in this development. All eyes are on you, and to be a truly progressive development, PROGRESS will need to be obvious for the site to succeed.

Best of luck to you,

Terry Frahm

 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: AUAR Public Comments

 Date:
 Tuesday, September 10, 2019 11:38:11 AM

 Attachments:
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	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us
	????

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From: Tom Kreuzer [mailto:tckreuzer@gmail.com]
Sent: Tuesday, September 10, 2019 8:42 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Tom Kreuzer, and I live at 715 Kenneth St, St Paul, MN 55116. I am writing to express my concerns pertaining to the Draft AUAR.

I feel that the Draft AUAR is inadequate in the following ways:

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 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: Impacts of Ford plant site development

 Date:
 Tuesday, September 10, 2019 11:37:46 AM

 Attachments:
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Menaka Mohan
 Ford Site Planner
 Planning & Economic Development
 25 W. 4th St., Suite 1400
 Saint Paul, MN 55102
 P: 651-266-6093
 menaka.mohan@ci.stpaul.mn.us
 P
 P
 P

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From: Vera Krischik [mailto:krisc001@umn.edu]
Sent: Tuesday, September 10, 2019 11:15 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>; verakrischik@gmail.com
Subject: Impacts of Ford plant site development

FINAL IMPORTANT POINTS

Please remember to include your name and address on your email or letter. Emails should be sent to: FordSitePlanning@ci.stpaul.mn.us Letters can be mailed to: Menaka Mohan, Ford Site Planner Department of Planning and Economic Development 25 W 4th Street, Suite 1400 Saint Paul, MN 55102

As a resident of Highland Parkway for 25 years I think that I have a valid opinion and understanding of the traffic and human needs in Highland Park.

I strongly believe the development of the Ford site into a large scale housing project is a huge mistake. Ford Parkway form the bridge to Flynn St is already backuped for 20 mins during rush hour. There is no room for traffic on the current NS streets or on Ford Parkway.

As already is happening, people will sell their houses and move out of Highland. With high property taxes that currently exist and the older homes it will be inevitable that properties will decline and foreclosures will increase.

It is cheaper to live outside St Paul and more people will move out.

This is a housing development based on greed and not the interests of the community. The Current St Paul major has shown a steady lack of insight and planning for sustainable communities. This development is a big mistake that will cause the deterioration of the community.

Dr. Vera Krischik verakrischik@gmail.com

From:	*CI-StPaul FordSitePlanning		
То:	Payne, Ashley		
Subject:	FW: AUAR Public Comments		
Date:	Wednesday, September 11, 2019 9:17:48 AM		
Attachments:	image002.png		
	image003.png		
	image004.png		

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us 2 2 2 2 2

Making Saint Paul the Most Livable City in America

From: Pratik Joshi [mailto:jpratik@gmail.com]
Sent: Tuesday, September 10, 2019 9:10 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is	_Pratik Joshi	 , and I live at	1690
Beechwood Aver	iue		

I am writing to express my concerns pertaining to the Draft AUAR.

I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

*There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.

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congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

From:	*CI-StPaul FordSitePlanning	
То:	Payne, Ashley	
Subject:	FW: AUAR Public Comments	
Date:	Wednesday, September 11, 2019 9:21:34 AM	
Attachments: image002.png		
	image003.png	
	image004.png	

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

From: blpilney@aol.com [mailto:blpilney@aol.com] Sent: Wednesday, September 11, 2019 9:18 AM

To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>

Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission, My name is Barbara Pilney __, and I live at _1620 Scheffer Avenue, st paul 55116 . I am writing to express my concerns pertaining to the Draft AUAR. PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER. Additionally, I feel that that the Draft AUAR is inadequate in the following ways: *The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project. *The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated. *There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period. *The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

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From:Payne, AshleyTo:Peterson, KestraCc:Dammel, RachelSubject:FW: AUAR Public CommentsDate:Wednesday, September 11, 2019 1:18:57 PMAttachments:image002.png
image003.png
image004.png

Ashley Payne, CWD Kimley-Horn | 323 South Broadway, Rochester, MN 55904 Direct: 507-216-0763 | Mobile: 507-251-6096 | www.kimley-horn.com

From: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Sent: Wednesday, September 11, 2019 1:18 PM
To: Payne, Ashley <Ashley.Payne@kimley-horn.com>
Subject: FW: AUAR Public Comments



Making Saint Paul the Most Livable City in America

From: RON BENNETT [mailto:rbennett7587@comcast.net]
Sent: Wednesday, September 11, 2019 11:35 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Cc: kgb3@comcast.net; Ronald Bennett <rbennett7587@comcast.net>
Subject: Re: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

We are Kathryn and Ronald Bennett and I live at 700 Mount Curve Boulevard in St. Paul . I am writing to express my concerns pertaining to the Draft AUAR, which have also

been expressed by the group Neighbors for a Livable Saint Paul.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project. The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

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The AUAR Is based on certain assumptions about increases in biking and walking. However, the Twin City area is rated as one of the coldest and snowiest urban centers in the United States. The AUAR study should be revised to include assumptions that account for Minnesota's winter climate. Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

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Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Thank you in advance for considering these requests.

Ronald and Kathryn Bennett 700 Mount Curve Boulevard

651-695-6378

 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: AUAR Public Comments and Concerns

 Date:
 Monday, September 16, 2019 12:44:59 PM

 Attachments:
 image002.png image003.png image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us ????????????????????????????????????

Making Saint Paul the Most Livable City in America

From: Jill Meyer [mailto:jillmeyer1@gmail.com]
Sent: Thursday, September 12, 2019 2:46 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments and Concerns

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Jill Meyer and I live in the 2000 block of Magoffin Ave.I am writing to express my concerns pertaining to the Draft AUAR.

Below I will express my environmental concerns, but the biggest concern I see if traffic. I live between Montreal/River Road and Cleveland and Return Ct. Based on the traffic impact information I've seen and read I am in the most heavily affected area. It seems that my immediate neighborhood will be absorbing most of the increase in traffic. There are not enough additional streets going into the new development. How the study thinks that our current infrastructure can bear the burden of a nearly 500% increase in traffic at Cleveland/Montreal and a over 150% increase along Cleveland is beyond me.

I appreciate keeping the integrity of the River Road, but those of us so close to this development shouldn't have to bear the burden of such an increase in traffic. Traffic in, and around Highland, is always congested. It is our choice to live here, but our voice should also have a say in what happens directly in our backyard. Consider re-evaluating the roads coming and going into the development. Many of the people making these decisions live far from this site. Change is good and with change come progress, but with both change and progress should come compromise. We all chose not to buy homes on thoroughfares or highways, and that seems to be the future of many of the Highland Park streets. We need to ck and look at more realistic infrastructure to support this development there will be a lot more land for sale, because no one will want to live around it. Additionally, I feel that the Draft AUAR is inadequate in the following ways:

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Thanks for your time and consideration.

Jill Meyer

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Monday, September 16, 2019 12:44:41 PM
Attachments:	image002.png
	image003.png
	image004.png

Menaka Mohan
Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

From: Zimmermans Dry Goods [mailto:zimmdrygoods@gmail.com]
Sent: Friday, September 13, 2019 4:20 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Allan Brill_______, and I live at _____593 Montrose lane _Saint Paul_55116______.

I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

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From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Monday, September 16, 2019 12:44:35 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us
	menaka.mohan@ci.stpaul.mn.us

From: Beth Friend [mailto:bethrfriend@gmail.com]
Sent: Friday, September 13, 2019 4:48 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Beth Friend and I live at 15 Orme Court in Highland Park. I I am writing to detail the inadequacies of the Draft AUAR and explain my opposition to it in its present form.

The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. These very goals are being ignored.

1. The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

The AUAR should include a more comprehensive traffic study to address traffic congestion, including study of the cumulative impact at the intersections near Highways 94, 35, and 5.

It should be noted that the traffic study was conducted in May 2019, prior to the first public

comment period in June 2019. In other words, the public had no opportunity to give input into the traffic study.

2. The AUAR Is based on incorrect assumptions about increases in biking and walking in the neighborhood. Let's be realistic: the Twin Cities is one of the coldest and snowiest urban centers in the United States. The AUAR study should be revised to include realistic assumptions that account for Minnesota's winter climate.

3. Public requests for study of carbon dioxide (CO2) were not addressed. The AUAR study should include a study of CO2, other greenhouse gas emissions, non-diesel particulate matter emissions, and the project's impact on climate change under Section 16 – Air and under Section 19 – Cumulative Potential Effects. If PED is not going to study these issues, please explain why there have not been specific responses to the dozens of public requests to study CO2 and non-diesel particulate matter.

4. The Draft AUAR addresses noise mitigation for residents of the Ford development, but nothing for residents of the existing community. The AUAR study should include a robust study of preconstruction noise, and noise generated by construction, air-handling equipment, and future traffic increases for the entire community.

5. The Draft AUAR underestimated the impact to wildlife, in particular the migratory birds of the North American Migratory Mississippi Flyway. The AUAR study should include a more thorough and objective study of wildlife impacts.

6.The AUAR study should include a more thorough assessment of the Significant Public Views (National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site.

7. The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

8. **Public requests for alternative scenarios have not been adequately addressed.** The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed."

Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.

9. PED - Given its interest in the success of the project as proposed - in other words, given the tax revenue at stake - **the Department of Planning and Economic Development (PED) cannot objectively evaluate the environmental impacts.** The Minnesota Board of Environmental Quality must make the final determination of adequacy on the Ford Site AUAR.

Sincerely, Beth Friend

15 Orme Court St. Paul, MN 55116 651-808-7036

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Monday, September 16, 2019 12:44:48 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	<i>Ford Site Planner</i> Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093
	menaka.mohan@ci.stpaul.mn.us
	222

From: Christa Treichel [mailto:ChristaJT@live.com]
Sent: Friday, September 13, 2019 4:18 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Christa Treichel and I live at 1860 Mississippi River Blvd S. I am writing in response to the Draft AUAR. I would appreciate confirmation that you have received my email.

I have three main concerns that I would like to highlight:

1) I am concerned about the increases in traffic that will occur in the Highland Park neighborhood area. We already have several congested areas (e.g., Ford Parkway and Cleveland Avenue). I am also concerned about the increase in construction traffic during the building process with many of our roads being in disrepair already.

2) I am concerned about impact upon wildlife in the area including the Mississippi River as a migratory pathway.

3) I am concerned about the impact of this project upon the Mississippi River.

I also feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

*There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study.

*The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.

*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%.

*The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates

and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

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*The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset.

*Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Monday, September 16, 2019 12:44:33 PM
Attachments:	image002.png
	image003.png
	image004.png

 Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us 		Menaka Mohan
? ? ? ?	?	<i>Ford Site Planner</i> Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093

From: Isla Hejny [mailto:ihejny@gmail.com]
Sent: Friday, September 13, 2019 5:11 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name isJeffrey Stanko	, and I live at $_1718$
Highland Parkway,_St. Paul, 55116	·
I am writing to express my concerns pertaining to the Draft AUAR.	In my opinion, it is

inadequate in the

following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and

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*The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset. *Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Monday, September 16, 2019 12:44:24 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan		
?	Ford Site Planner		
	Planning & Economic Development		
	25 W. 4th St., Suite 1400		
	Saint Paul, MN 55102		
	P: 651-266-6093		
	menaka.mohan@ci.stpaul.mn.us		
	??????		

From: John Pilney [mailto:jppilney@aol.com]

Sent: Friday, September 13, 2019 5:44 PM

To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>

Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission, My name is _____John Pilney______, and I live at _____1620 Scheffer Ave______

. I am writing to express my concerns pertaining to the Draft AUAR. PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER. Additionally, I feel that that the Draft AUAR is inadequate in the following ways: *The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project. *The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated. *There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period. *The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area. *The AUAR Is based on certain assumptions about increases in biking and walking. However, the Twin City area is rated as one of the

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We have lived in our house on Scheffer Ave for over 50 years and now the traffic on our street is so heavy and disturbing, including dozens of school bus each day, that we are thinking of moving out. We own a lake home on a big lake in northern MN that has a lot of land, is valued way above our Scheffer Ave home and the property taxes are 1/3 of what we pay in St. Paul. I would never recommend that Highland Park is now a good place to raise a family.

John and Barbara Pilney

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Monday, September 16, 2019 12:43:56 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us P Planning & Planner Planning & Planner Pla

From: Karen Wilson [mailto:karen.mia.wilson@gmail.com]
Sent: Saturday, September 14, 2019 2:22 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is _	_Karen Wilson	 , and I live at	1690 Beechwood
Avenue			

I am writing to express my concerns pertaining to the Draft AUAR.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Monday, September 16, 2019 12:44:08 PM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Avenue

Making Saint Paul the Most Livable City in America

-----Original Message-----From: Sally Rafowicz [mailto:quizzicalsal@aol.com] Sent: Friday, September 13, 2019 7:12 PM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is _Sally Rafowicz______, and I live at _____769 Hague

I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

We lived in Venice California when they put through the development in Playa Del Rey, which is of a similar size to this one. Although the developers and the city had supposedly done careful environmental impact statements, what happened afterwards is exactly what we fear will happen here—traffic became absolutely impossible along not only the main streets of the area, but side streets as well, as cars tried to slip past the gridlock. We're not talking a rush hour, we're talking any hour. Even late at night. That part of the city has become basically impassible, adding hours, cars idling. The last time we were there, we sat at a bus stop at one of the main corners, and watched a gang of boys banging on car windows looking for women to harrass. This was easy to do, because all the cars sat there, unmoving, through several lights. At eleven in the morning. Even when the lights changed, the traffic repeatedly could not move—the corners were blocked by cars stuck in stop-and-go the other way.

Keep in mind that this was in Los Angeles, where winter might mean a January rainy season, with temps rarely falling below forty. We, however, live in the Twin Cities, where temperatures can swing 75 degrees in one day, and January and February regularly have a low enough windchill that walking the dog around the block can risk your life. How can you possibly assume the level of walking and biking considered under this PED? It will never happen.

Then, too, the air during a traffic jam is much more dangerous air, even for those stuck in cars waiting to be able to get out of there, simply from exhaust fumes. Now imagine those fumes tucked under our summer and winter St. Paul inversion layers. This development and the traffic it will create will increase pollution for the entire city. Again, I speak from experience.

We have been so grateful to live in St. Paul, to have moved to such a livable city, one that seems to care so much about its population, its history, its connection to nature, and its open space. My children and I have pulled over next to The Ford lot and watched in awe as a young bald eagle flew back and forth then settled in a tree, the river and the sunset behind it. We've seen gold-finches and geese, and even scarlett tanagers. All of those birds would be put at risk.

Los Angeles worships development like a God. I beg you not to follow that model—the city will become a nightmare if we do.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Sincerely,

Sally Rafowicz

From:	<u>*CI-StPaul FordSitePlanning</u>
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Monday, September 16, 2019 12:44:52 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us
	? ? ? ?

From: Sam Tsai [mailto:samtsai3240@gmail.com]
Sent: Friday, September 13, 2019 4:11 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is _YU-MAO TSAI_, and I live at 2215 Scheffer Ave, Saint Paul_ . I am writing to express my concerns pertaining to the Draft AUAR.

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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*The AUAR study should include a more thorough assessment of the Significant Public Views (National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site.

*The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset. *Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Kathryn McGuire, and I live at 2203 Fairmount Avenue in Saint Paul. I am writing to express my concerns pertaining to the Draft AUAR. I feel that the Draft AUAR is inadequate in several ways and relies on unrealistic assumptions.

My first concern is that the Draft AUAR fails to acknowledge the incompatibility in zoning, though this was mentioned in numerous public comments. The development proposal is an island of extreme density, remotely removed from both downtown areas and surrounded by residential neighborhoods of low to moderate density. Traffic will be a major problem because the Ford site does not have convenient freeway access and is surrounded on two sides by the Mississippi River which forms a barrier to traffic. The AUAR study should acknowledge, explain, and carefully examine this incompatibility in zoning and how this will impact adjacent residential areas both environmentally and in relation to the stated Intents and Purposes of the Saint Paul Zoning Code.

Secondly, the Draft AUAR should carefully examine the flawed premises upon which this development has been designed. The city has inventively labeled the Ford project as a "21st Century Community" because it does not meet the criteria of Transit Oriented Development. Yet, city planners propose that the high density factor will be successful without the other attributes of Transit Oriented Development such as jobs and carbon neutral transit. The proposed Ford development will create levels of population density that acutely exceed all density levels in the Twin Cities, with levels of traffic, traffic congestion, and car emissions that will overwhelm the surrounding residential neighborhoods. The environmental sustainability of this development is highly questionable given the negative environmental impact of significant increases in vehicular traffic and increased production of greenhouse gases. The AUAR study should acknowledge, explain, and carefully examine this faulty assumption about high-density development and explain specifically how this development will improve environmental sustainability when, in fact, it increases car emissions and greenhouse gases to surrounding areas.

A third concern is that the Draft AUAR fails to acknowledge dozens of public comments expressing concerns about carbon dioxide (CO₂) emissions, and it fails to include study of CO₂ and all car emissions as part of the study. If the underlying premise of high density development is environmental sustainability, then the only reasonable justification for this level of extreme density would be a decreases in harmful greenhouse gases and vehicular emissions. It is imperative that the AUAR include study of all harmful emissions, including CO₂.

A fourth concern is that the Draft AUAR fails to adequately explain the city's refusal to include alternative scenarios in the study, in spite of dozens of public requests for a no-build scenario and various other lower density scenarios. Yet, the AUAR scoping document, as published on the city government website, states that this is the very purpose of the comments on a Scoping document. The document states:

"Pursuant to Minnesota Rules 4410.3610, Subp. 5a (C), the purpose of the comments on a Scoping document for an AUAR is to suggest additional development scenarios that include alternatives to the specific large project or projects proposed to be included in the review, including development at sites outside of the proposed geographic boundary. The comments must provide reasons why a suggested development scenario or alternative to a specific project is potentially environmentally superior to those identified in the RGU's draft order."

In light of this stated purpose, I wish to reiterate the request for a no-build scenario at the Ford site. The no-build scenario implies minimal construction and build-out at the Ford site with the proposed housing being instead distributed at various infill locations across St. Paul, and much of the Ford site instead used for park, recreational, and wildlife habitat. This scenario would be environmentally superior because it would use existing infrastructure in the city, and it would distribute density over the broader area of the city at strategic locations offering employment and convenient access to freeways and Green Line Light Rail. Broader distribution of density near sources of employment and along existing transit lines and light rail would encourage walking, greater use of mass transit, and less traffic congestion.

Though environmentally compromised, this unique and beautiful property on the Mississippi River Gorge is deserving of the most genuine, forthright, and thorough independent study of environmental impact. The AUAR study should include the afore mentioned concerns in addition to those listed below pertaining to transportation, air, noise, visual, wildlife, contamination, land use, cumulative impact, and other potential environmental effects which are likely to impact the surrounding community. To conduct anything less than this would be a disservice to the residents of the community and a discredit to the many state and municipal agencies founded to protect the environment and the people.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

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From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Monday, September 16, 2019 12:43:13 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us
	? ? ? ?

From: nancy werner [mailto:fedooley2@gmail.com]
Sent: Sunday, September 15, 2019 2:10 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Nancy Werner, and I live at 1680 Bayard Ave, St Paul MN 55116.

I am writing to express my concerns pertaining to the Draft AUAR.

I am concerned about the traffic study done without public input being included. I am concerned as to the impact on wildlife. I feel there are too many assumptions as to traffic and density among other items that concern me.

The following states my concerns best. I feel that that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Thank you for your time and consideration to this most important matter concerning my neighbors and me.

Sincerely, Nancy Werner

From:	<u>*CI-StPaul FordSitePlanning</u>	
То:	Payne, Ashley	
Subject:	FW: AUAR Public Comments	
Date:	Monday, September 16, 2019 12:42:59 PM	
Attachments:	image002.png	
	image003.png	
	image004.png	

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us
	?????

Making Saint Paul the Most Livable City in America

From: Carrie Bittner [mailto:carrie.bittner@spps.org]
Sent: Monday, September 16, 2019 8:57 AM
To: *CI-StPaul_FordSitePlanning
FordSitePlanning@ci.stpaul.mn.us>
Cc: Carrie Bittner
carrie.bittner@spps.org>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Catherine Bittner, and I grew up in Highland Park and currently live at Laurel Ave and Snelling Ave. I am writing to express my immense concerns pertaining to the Draft AUAR.

My entire life I have experienced people living in, and trying to move into, Highland Park. There is a sense of community, a sense of family and pride in being a part of this area. Whether it be in a million dollar mansion or a modest single level home; in one of the many duplexes as a renter, or in a small apartment building. There are opportunities here that make the area diverse and wonderful. Some of the things that are not here, are overcrowding, a recklessness in regards to green spaces and wildlife, a bottom line money mentality, or disregard for the nature of the neighborhood and it's residents.

As it seems the day to day concerns and hopes of the community are not enough to prompt appropriate action, below are the MANY legal concerns that support our positions, especially concerning traffic increases. Perhaps with these legal points to help guide the process, some on the council will join the community who actually inhabits this area, and start to make better decisions for our future. I feel that the Draft AUAR is inadequate in the following ways:

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Sincerely, Catherine Bittner From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Monday, September 16, 2019 12:42:51 PM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

-----Original Message-----From: Clarence Chaplin [<u>mailto:cachaplin@mac.com</u>] Sent: Monday, September 16, 2019 10:41 AM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Clarence Chaplin, and I live at _____1921 Lincoln Ave__.

I am writing to express my concerns pertaining to the Draft AUAR. Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%.

*The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

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*Given the potential health risks related to evidence of soil vapors, The AUAR study should include additional specific mitigation measures to address these.

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*Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Sent from my iPhone

From:	*CI-StPaul FordSitePlanning	
То:	Payne, Ashley	
Subject:	FW: AUAR Public Comments	
Date:	Monday, September 16, 2019 12:42:45 PM	
Attachments:	image002.png	
	image003.png	
	image004.png	

enaka Mohan
<i>d Site Planner</i> nning & Economic Development 7. 4th St., Suite 1400 t Paul, MN 55102 51-266-6093 aka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

From: Lori Brostrom [mailto:lbrostrom@comcast.net]
Sent: Monday, September 16, 2019 12:16 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission;

I am very concerned that the draft AUAR environmental study for the Ford site is inadequate in several areas, and given the massiveness of this project, and the long-term and far-reaching impact that this project will have, that it behooves the City and the developer to do much more in-depth work on it. Not only is this critical to ensuring that the development on this site is done thoughtfully and with the least amount of negative impact to the surrounding areas, but it also is potentially precedent-setting for other large developments in St. Paul in the future.

I feel that the Draft AUAR is inadequate in the following ways:

- The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.
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- The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.
- The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%.
- The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.
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- The AUAR study should include a more thorough assessment of the Significant Public Views (National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site.
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- Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Thank you for your consideration.

Lori Brostrom 710 Summit Avenue



Virus-free. <u>www.avast.com</u>

 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: AUAR Public Comments and Concerns

 Date:
 Monday, September 16, 2019 12:42:49 PM

 Attachments:
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	Menaka Mohan		
	Ford Site Planner		
	Planning & Economic Development		
	25 W. 4th St., Suite 1400		
?	Saint Paul, MN 55102		
	P: 651-266-6093		
	menaka.mohan@ci.stpaul.mn.us		
	2 2 2 2		

Making Saint Paul the Most Livable City in America

From: Matt Meyer [mailto:meyeravenue@gmail.com]
Sent: Monday, September 16, 2019 11:28 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments and Concerns

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Matt Meyer and I live in the 2000 block of Magoffin Ave.I am writing to express my concerns pertaining to the Draft AUAR.

Below I will express my environmental concerns, but the biggest concern I see is traffic in my part of the Highland neighborhood. The project was supposed to be committed to keeping the integrity of the neighborhood, but given the increase in traffic (vs. a no-build scenario) I found this impossible to be the case. I live between Montreal/River Road and Cleveland and Return Ct. Based on the traffic impact information I've seen and read I am in the most heavily affected area. It seems that my immediate neighborhood will be absorbing most of the increase in traffic. There are not enough additional streets going into the new development. How the study thinks that our current infrastructure can bear the burden of a nearly 500% increase in traffic at Cleveland/Montreal and a over 150% increase along Cleveland is beyond me.

I appreciate keeping the integrity of the River Road (and would like the commission to do so), but those of us so close to this development shouldn't have to bear the burden of such an increase in traffic. Traffic in, and around Highland, is *already* always congested. It is our choice to live here, but our voice should also have a say in what happens directly in our backyard. Consider re-evaluating the roads coming and going into the development. Many of the people making these decisions live far from this site. Change is good and with change come progress, but with both change and progress should come compromise. We all chose not to buy homes on thoroughfares or highways, and that seems to be the future

of many of the Highland Park streets. We need to check and look at more realistic infrastructure to support this development there will be a lot more land for sale, because no one will want to live around it. Lastly, I just find it very unlikely that we the project will raise surrounding property values (as we've been told) if it is in fact impossible to get around due to increase in congestion.

Additionally, I feel that that the Draft AUAR is inadequate in the following ways:

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Thanks for your time and consideration.

Matt

 From:
 *CI-stPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: Public comment regarding the Ford AUAR study

 Date:
 Monday, September 16, 2019 12:43:05 PM

 Attachments:
 image002,png image003,png image004,png

	Menaka Mohan	
	Ford Site Planner	
	Planning & Economic Development	
	25 W. 4th St., Suite 1400	
Saint Paul, MN 55102		
	P: 651-266-6093	
	menaka.mohan@ci.stpaul.mn.us	
	??????	

Making Saint Paul the Most Livable City in America

From: pam ginther [mailto:plmginth@comcast.net]
Sent: Monday, September 16, 2019 12:29 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: Public comment regarding the Ford AUAR study

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Pamela Moody - Ginther, and I live at 1019 Colby Street, St. Paul, MN . I am writing to express my concerns pertaining to the Draft AUAR.

I do not see how we can move forward until we have a clean, solid, foundation and mindful planning and design.

My concerns remain the same:

- Preserving the health of this community and keeping it a desirable place to live.

— **Too much density concentrated at the Ford site location.** When it could be dispersed and shared with

downtown St. Paul and the other communities that surround St. Paul's downtown – enlivening them, and a sleeping

city center. Concerns about allowing people to live on an unclean site.

— Making sure Area C, and the toxins in caves below the proposed development site, are completely clean. Both cities get their drinking water from the Mississippi. And there has been discussion about removing the lock and dam in the near future. This would cause the river to shift back to its natural course and flow

directly against the sandstone wall of Area C where the toxins are located. The entire area is porous, connected, and an incredible natural resource that requires ethical stewardship.

— The development of the CP rail area is continually not discussed – it too has toxins, will affect the entire design of the plan, and the density.

— I am concerned, and ask the city to stay in keeping with Ryan's promised vision of "soft edges" in the new development, so as to minimize the impact of rail, high-speed noise, and people traveling through residential streets.

To take care integrating the existing community with the new to preserve the quality of life and community.

— **Traffic congestion** is not realistically solved by biking, particularly in our climate. (Note: The plan appears to call for adding yet another bike lane on River Road. There are already 2. It's already narrow. And bikers still ride in the street outside the designated lanes. There is a need to factor in room for Fed Ex type delivery needs and visitor parking.)

— Stress on the existing an aged infrastructure I am concerned that our aging infrastructure will not be able

to handle the stress of building this new site and the disruption it could cause along with predicted global warming (much more rain in MN) resulting in fiascos for the existing residents. (i.e. water main breaks, sewer back ups, electrical outages, internet disruption etc).

And with the density increase I am concerned whether we have studied the impact it will have on services, schools, trash collection, maintenance, utilities, fire, rescue and police.

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COMMENT NUMBER: 72

DATE: 9/13/2019

NAME: Moria A. Keane

COMMENT:

A mitigation strategy being proposed to reduce traffic and facilitate an increase in walking and biking is the addition of a northbound bike lane on Mississippi River Boulevard. I drive Mississippi Boulevard on a regular, almost daily basis.

South of the Ford site, Mississippi Blvd is hilly with a number of curves. Riding northbound on the street is simply not safe – with or without bike lanes. A northbound bike lane would narrow the street so much in some areas with blind approaches that it would inhibit the safe travel of cars. A northbound bike path would limit parking for residents, service vehicles (landscaping and snow removal), package delivery, and the US Postal Service. Some of the blocks both north and south of the Ford site are long blocks (Hartford to Randolph on the north and Magoffin to Itasca on the south serve as examples). Not only is a northbound lane unsafe, it is disruptive.

A better solution for facilitating and increasing walking and biking, is to improve the bike and walking path along that stretch of MRB by separating the two wherever possible, adding signage, and widening and adding lane stripes where separation is not feasible.

COMMENT NUMBER: 73

DATE: 9/12/2019

NAME: Thomas L. Romens

COMMENT:

Housing density projections affect traffic projections.

The Ford Site Master Plan indicates that at full build out there would be an increase of 4,320 to 7,200 new residents. Part of the basis for this projection is 2010 census data which shows that the average multi-unit household size in Highland averages 1.8 people. That ratio of individuals per unit was used for the Ford Site Master Plan projection. It should be noted that in the 2011-2015 Census update the estimated number of persons per unit in Highland was 2.17 (all units, not just multi-units).

At the Highland District Council meeting on September 5, 2019, Tony Barranco of Ryan Companies stated that Ryan Companies does not have an estimate of the number of different unit sizes that will comprise the 2,400 to 4,000 residential units being planned. This would suggest that to use the 2010 census data for average house size, which is based in part on a number of apartment buildings built in the mid-20th century, might significantly underestimate the ratio for multi-unit housing being built post 2020. Note as well that 760 units are designated as affordable housing and there are 35 large single-family homes planned as part of the housing mix.

For residential population estimates, a number closer to the estimated number of persons per unit in Highland, 2.17 persons as noted above, is likely to be more accurate. There can be no debate that the actual number of residents living on the site when fully built out is unknown. Using a 2.0 residents per unit ratio seems prudent. There is no downside to planning for a population of X, and implementing mitigation strategies for a population of X - 10%.

Why is this important for traffic planning purposes? Table 12: Regional Roadway Traffic Volume Changes indicates that State Hwy 5, State Hwy 51 (Snelling), and Cretin Avenue are all projected to be near estimated road capacity based on both the Ryan Scenario and the 2040 Master Plan Maximum Development. This is based on 1.8 individuals per housing unit. Estimating approximately 10% more persons per unit, or roughly 2/unit, would show that selected road capacities may be exceeded and additional mitigation strategies for cars and for pedestrian safety may be warranted. Note: This is not an objection to the density being proposed for the site. It is a concern that the AUAR may be underestimating the traffic and this would have an impact on proposed mitigation strategies. Strategies which involve reduced parking can be contentious.

Some additional mitigation strategies not mentioned on pages 11 and 12 of the Ford Site AUAR: Transportation Analysis Overview (August 2019):

Cretin Avenue Southbound: Limiting left turns on Lincoln Avenue during afternoon rush hour. Left turn lane and/or phased turn signal during rush hour at Cretin and St. Clair. Phased left turn signal eastbound during rush hour at Cretin and Randolph. Eliminate west side parking on Cretin Avenue south of Jefferson, or at a minimum south of James.

Cretin Avenue Northbound: Expand the morning no parking time restrictions from Summit to Marshall from 7-9am to 7-10am and the afternoon restrictions from 4-7pm to 3-7pm. The current restrictions are violated regularly by 15 minutes to 30 minutes.

Ford Parkway/Mount Curve Blvd. – If traffic volumes permit and some property north of Ford Parkway can be acquired, consider installing a roundabout

Encouraging walking and pedestrian safety (page 63 sidewalk gaps)

It is unconscionable that Mississippi River Boulevard (MRB) has no marked pedestrian crossings from Shepard Road to Randolph Avenue (Randolph is the only marked crossing). Street intersections with sidewalks that end on MRB include Prior Avenue, Cleveland Avenue, and Highland Parkway. At a minimum, with the housing density near MRB and Highland Parkway a marked crossing should be added there.

The wording regarding sidewalk gaps on east side of Mississippi River Boulevard is very vague. As has been requested by the facility, there certainly should be a sidewalk from the New Perspectives assisted living facility to Highland Parkway. Groups of senior citizens currently walk on the MRB bike and pedestrian trail on a regular basis and there is no safe crossing anywhere near that facility.

If there are sufficient, regularly spaced marked crossings, there is no need to incur the expense of adding sidewalks on the east side. As an MRB resident, I believe that not having a sidewalk on the east side is a plus. The two locations mentioned above, both north of the Ford site are the only gaps that really need to be filled.

On the west side of Mississippi River Blvd., serious consideration should be given to providing separate bike lanes and pedestrian lanes. There are two paths in some areas but there are many areas where there is a single shared path in spite of the fact that there is ample space to separate the two. St. Paul should follow the Minneapolis example in terms of separating bike paths and pedestrian paths. Sometime this can only be accomplished by widening the path and adding striping. Still this is preferable to the current situation where there are single paths and blind corners.

Biking

p. 62 Mississippi River Boulevard Bicycle Facility

"There is currently an on-street bicycle lane in the southbound direction along Mississippi River Boulevard, in addition to the adjacent multi-use trail. There is no existing northbound bike lane. The existing facilities are popular, and the Ford Site is expected to increase the use of these facilities. Given the use of the corridor by pedestrians and bicycles and the current shared facility design, consideration should be given to reviewing the planned pedestrian and bicycle facilities on Mississippi River Boulevard."

Note that there is no specific mention here of adding a northbound bike lane and indeed the mitigation strategy is even less transparent—it refers to "bike lanes" on Mississippi River Blvd. The casual reader might miss this subtlety.

(Personal note: I live on Mississippi River Boulevard and have been running year-round and biking seasonally on Mississippi River Blvd. between Summit Avenue and Shephard Road multiple times per week for 29 years. As both a runner and a biker I know these paths intimately.)

For much of the spring, summer, and fall, the on-street southbound MRB bike lane is potholed and marginal. With the freeze thaw cycles in winter it is not safe for biking. South of the Ford site, Mississippi River Blvd is hilly with a number of curves. Riding northbound on the street is simply not safe – with or without bike lanes. A northbound bike lane would narrow the street so much in some areas with blind approaches that it would inhibit the safe travel of cars. A northbound bike path would limit parking for residents, service vehicles (landscaping and snow removal), package delivery, and the US Postal Service. Some of the blocks both north and south of the Ford site are long blocks (Hartford to Randolph on the north and Magoffin to Itasca on the south serve as examples). So not only is a northbound lane unsafe, it is disruptive. A better solution is to improve the MRB bike and walking path by separating the two wherever possible and widening and adding lane stripes where separation is not feasible. Special attention must be paid to fixing a number of combined path blind curves. Additional signage warning pedestrians and bikers where the path narrows is warranted.

COMMENT NUMBER: 74

DATE: 9/11/2019

NAME: Valerie Nebel

COMMENT:

Since Montreal Ave, where my husband and I live, will be much busier in 10-15 years I hope the city is communicating with Metro Transit about improving bus service on the street. We're currently served by route 84, which much of the time runs only every half hour. It's usually more convenient to walk the 5 blocks to Ford Parkway to take the A line. When or if a streetcar is built on West 7th, it will also be very important to have bus service that runs the length of Montreal to West 7th, which currently does not exist. Then we would have an actual convenient transit system in Highland Park that would make it easy for people to leave their cars at home when going downtown. !

COMMENT NUMBER: 75

DATE: 9/10/2019

NAME: Joan Guilfoyle

COMMENT:

I worked for NPS when the process started years ago, and have been keeping an eye on it from a distance to consider living there when I move back to MN. Thank you for taking the following into considerations: 1) ensuring that residents have NON-vehicular access to the local businesses in Highland Park; it would be counter to so much of what this project is designed for for residents to have to drive to Lunds, or the movie theatre, or gym, etc. Make sure there are walking paths and/or biking paths for us to use so it's not a road dominant neighborhood. This would ease the traffic concerns that current HP residents have anyway. 2) Set aside space for community gardens. Growing veggies and flowers when one doesn't necessarily have a yard improves quality of life tremendously. 3) Make sure the multi-unit buildings are SMOKE-FREE. Check with the Association for Non-Smokers about how this would NOT diminish the value of the properties, but rather very likely to increase it. Smoking is on the decline and in dense housing situations, it's critical to control and/or eliminate it. There is no way to seal current apartments off from each other to keep smoke out; you have to build the structure in a certain way. OR just make them smoke-free. Solves the problem! You can call them at 651-646-7478. 4) Similar to #1, make sure residents can easily access trails along the river, to Minnehaha Falls, the river road, L&D #1, etc. Not having to drive to these places is part of what makes this location so attractive.

COMMENT NUMBER: 76

DATE: 9/10/2019

NAME: Molly Foster

COMMENT:

I am writing regarding the intersection at Cretin and Highland Parkway.

Since I have lived in the neighborhood, there have been numerous accidents at this intersection.

There was one recently where a young man who was driving too fast ran off the road and up onto the sidewalk.

Luckily no one was walking on the sidewalk at the time.

I am concerned about the safety of both pedestrians and vehicles at this intersection.

With the development of the Ford Plant, the amount of traffic and pedestrians will increase.

Therefore, I would like to know what options there are for improving the safety at this intersection.

COMMENT NUMBER: 77

DATE: 9/17/2019

NAME: Rick Dagenais

COMMENT:

The AUAR draft does not mention impact and needed improvements to Mississippi River Blvd (MRB) in order to handle the future demands of the Ford Site development. The current configuration of pedestrian, bicycle and running trails along with motor vehicle traffic provides limited capacity and are mostly shared. With the planned additional 3700+ residential homes and future businesses at the Ford Site the recreational and traffic capacity of MRB will be inadequate. The impact of the Ford Site on MRB must be included in the AUAR study. The area of study needs to be at least, but not limited to, MRB from Jefferson Ave on the north to State Highway 5 on the south. An example of an area that is currently unsafe for recreational use is the underpass of Ford Parkway. The sidewalk/trail width is far too narrow for current use let along the future demands the Ford Site development will have. MRB must be redesigned for this large increase in demand. Implementation of the new design should be completed prior to the full development of the Ford Site. Much of the focus and attraction of the Ford Site is the close proximity to the Mississippi river and the recreational benefits. Not including a comprehensive review of MRB in the AUAR is a major miss that needs to be corrected.

COMMENT NUMBER: 77

DATE: 9/9/2019

NAME: Rick Dagenais

COMMENT:

The draft AUAR does not address current parking issues in the area outside the Ford Site development property nor does it address the impact the transportation mitigation plans would have. There is currently limited parking for businesses in the area. An example is along Cleveland from Hartford Ave to Ford Parkway. The mitigation plan would put additional stress on available parking forcing more into the residential areas. Currently Highland Parkway and Pinehurst parking capacity on either side of Cleveland is filled to capacity, or close to it, most days leaving limited parking for residents. The mitigation at Cleveland/Ford will reduce capacity on Cleveland forcing more into the neighborhoods. The mitigation of Cretin between Highland and Ford will also cause more stress on current parking capacity.

A comprehensive parking study needs to be completed to provide a current base and a non-build impact analysis through year 2040. The build forecast and mitigation plans could then be modeled to understand impact to the neighborhoods surrounding the development. The need for a comprehensive parking study for the Highland Village businesses and surrounding residential area has been documented in the Highland District 10-year plan.

COMMENT NUMBER: 78

DATE: 9/7/2019

NAME: Howard Miller

COMMENT:

While motorized vehicle traffic is assessed via counting using various methods, there is no mention of how bicycle traffic is measured. Are they counted as well or are ITE estimates alone used? These estimates have little application to specific regions and urban areas. Mitigation strategies for traffic fold in large increases of pedestrian and bicycle traffic as well as transit use. How is this possible? Where the latter is concerned most studies indicate that use of transit, other than rail-based, is declining. There being no rail-based transit serving the Ford site why would major increases in transit based and bicycle travel, be factored in as mitigating factors.

The inference that current traffic plus additional traffic from the developed Ford site will be absorbed by the additional street grid on the Ford site is not factually based; i.e. traffic is comprised of vehicles going to or coming from somewhere, typically outside of Highland Park since few people live and work in HP. Many vehicles pass through HP daily going to southern suburbs, seeking to avoid Ayds Mill and 35E jams. These additional vehicles are going into and out of HP via the same pinch points mentioned repeatedly during AUAR meetings as well as in the AUAR report. Existing trans-Highland traffic plus Highland traffic including that from the new Ford site, will be offered no meaningful new options. This will lead to extreme queues and all of the negative factors produced by them.

September 12, 2019

Menaka Mohan, Ford Site Planner Department of Planning and Economic Development 25 W 4th Street, Suite 1400 Saint Paul, MN 55102

and

Members of the Saint Paul Planning Commission

We the undersigned homestead owners on Yorkshire Ave east of Fairview Ave make the following objections and requests about the draft AUAR for the Ford Site:

Fairview Avenue – Montreal Avenue intersection: The present level of traffic on Fairview has three adverse effects on Yorkshire Avenue, which increased traffic will aggravate. The Transportation Analysis Report projects queues of more than 300 feet during peak hours (AUAR Appendix D, pp. 37-38). First, even at present traffic levels, such peak time northbound queues prevent turns onto Fairview from Yorkshire. Second, to avoid waiting a block away from the light, many northbound drivers turn east onto Yorkshire. The predicted increased traffic will only worsen the excessive volume of traffic on Yorkshire. Third, in addition to treating Yorkshire as a major collector (like Montreal) rather than a local street, many of those impatient drivers exceed the speed limit as they accelerate up the equivalent of two blocks toward Davern Street past the unexpected T-intersection with Hampshire Avenue.

Proposed solution: Immediately implement the recommended mitigation of installing left-turn signal phasing capability at the intersection. Also, install speed bumps on Yorkshire Ave between Fairview and Davern.

Fairview Avenue – Ford Parkway intersection: The transportation study recommends implementing trip-reduction measures to avoid 24-car or more backups at this intersection at all approaches. (Appendix D, p. 48.) The proposed curtailment of local trips to mitigate a problem caused by maximizing density violates the express purpose of the Saint Paul Zoning Code to protect the livability and general welfare of the community.

Ford Parkway - Cleveland Avenue intersection: The *present* volume of traffic at that intersection in the heart of Highland Village is a deterrent to us shopping in Highland Village during peak hours. The proximity to Highland Village is one of the benefits of living in the Highland Park neighborhood. The certainty of increased traffic diminishes the value of living close to the neighborhood amenities. While the AUAR argues that a D level intersection is acceptable, in reality, that level of traffic congestion is tolerable only to those commuters who have no other choice.

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Montreal Avenue – Saint Paul Avenue intersection: The projected backups at this intersection will compound the peak-time travel deterrent effect of the current and forecasted exacerbated traffic jams in the heart of Highland Village for those of us who use this intersection to get to Highland Village. The transportation study predicts queues on Montreal of 24 cars or more in the directions leading to Highland Village. (Appendix D, p. 43; 600 feet *or longer* for westbound and northbound vehicles.) Any mitigation effort at this intersection will not overcome the impossibility of mitigation at the next encountered intersection in the heart of Highland Village, as discussed above.

Proposed solution for above intersection issues: Reduce the number of residential units to moderate density so that the increased traffic is compatible with the realistic maximum cumulative capacity of these intersections.

Conclusions:

The city should install speed bumps on Yorkshire Avenue east of Fairview Ave and implement left-turn signals for north-south traffic at Fairview/Montreal.

The high-density proposal by the Ryan plan and the maximum build scenario are both incompatible with the ability of the intersecting streets to accommodate the expected increased traffic. The AUAR study should include a no-build scenario and a moderate density scenario.

Impeding access to Highland Village by the owners of existing homes by creating traffic jams to accommodate new high-density residents violates the Saint Paul Zoning Code.

We ask that you supply reasons for not considering no-build or moderate density scenarios, as required by the Minnesota Administrative Rules.

Printed Name:	Printed Name:
Morley Friedman	KarenErnst
Signature:	Signature:
Morley Friedman	2 and AM
Address:	Address:
1753 St. Paul MN 55116	$\frac{1764}{\text{St. Paul MN 55116}}$ Yorkshire Avenue

Saint Paul Planning Commission | Yorkshire property owners | AUAR comments | Page 3 of

Printed Name: Printed Name: teven N. Elkin Lisa M. Skarda nature: Signature: Signature: 5 Oh Address: Address: 1735 Yorkshire Avenue 1711 Yorkshire Avenue St. Paul MN 55116 St. Paul MN 55116 **Printed Name: Printed Name:** Patrick McLaughlic Signature: Partick McHee SUNITA SARICER Jonté Jorten Signature: -Address: 1717 YORKSHRE Address: 55 lb Yorkshire Avenue 1747 Yorkshire Avenue St. Paul MN 55116 St. Paul MN 55116 Printed Name: **Printed Name:** ignature: Pathan Shippee Signature: Signature: Address: Address: 1759 Yorkshire Avenue 1729 Yorkshire Avenue St. Paul MN 55116 St. Paul MN 55116

Saint Paul Planning Commission | Yorkshire property owners | AUAR comments | Page of

Printed Name: Printed Name: MOULY BACHMAN Stephanic Regnier Signature: Signature: Signature: tophan Address: Address: 77 136 Yorkshire Avenue Yorkshire Avenue St. Paul MN 55116 St. Paul MN 55116 Printed Name: **Printed Name:** Joel Shapira JACQUELINE J. LUX Signature: Signature: Address: Address: 1730 1742 Yorkshire Avenue Yorkshire Avenue St. Paul MN 55116 St. Paul MN 55116 Printed Name: **Printed Name:** Nickolay William nature: MM Millia Sally Hanlon Signature: Signature: Address: Address: **U** Yorkshire Avenue 1754 Yorkshire Avenue St. Paul MN 55116 St. Paul MN 55116

Saint Paul Planning Commission | Yorkshire property owners | AUAR comments | Page 4 of 76

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Printed Name:	Printed Name:
	Nigel Kopp Endorf
Signature:	Signature:
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Address:	Address:
Yorkshire Avenue St. Paul MN 55116	180 Yorkshire Avenue St. Paul MN 55116
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Yorkshire Avenue St. Paul MN 55116	Yorkshire Avenue St. Paul MN 55116

Saint Paul Planning Commission | Yorkshire property owners | AUAR comments | Page & of

	Printed Name:	Printed Name:
	Dana Peterson	
	Signature:	Signature:
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	Address:	Address:
	174-B Yorkshire Avenue	Yorkshire Avenue
	St. Paul MN 55116	St. Paul MN 55116

Printed Name:	Printed Name:
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From:	*CI-StPaul FordSitePlanning	
То:	Payne, Ashley	
Subject:	FW: AUAR Public Comments	
Date:	Tuesday, September 17, 2019 10:22:48 AM	
Attachments:	image002.png	
	image003.png	
	image004.png	

	Menaka Mohan
?	Ford Site PlannerPlanning & Economic Development25 W. 4th St., Suite 1400Saint Paul, MN 55102P: 651-266-6093menaka.mohan@ci.stpaul.mn.us???

Making Saint Paul the Most Livable City in America

From: imaginecm2 [mailto:imaginecm2@yahoo.com]
Sent: Monday, September 16, 2019 5:43 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Camille McCann_____, and I live at _1724 Hartford

Ave

I am writing to express my concerns pertaining to the Draft AUAR.

I am against any building on the Ford Site.

I think that property should mirror the grounds across the river. Communities need more green spaces in our living spaces. My career has brought me around the world and I have spent time in many cities. The most "alive" communities have parks everywhere. The cities that are "dead" are not unlike your suggested plans for the Ford Site. Along with the over building on Snelling and University of trailer on top of trailer looking apartment skyrises your suggested plan may make the builders money but it will move this area into the long list of not so desired areas. Are we going to make this area an area that few families want to live in anymore thus causing home prices to fall along with the tax revenue expectations from this "project".

The location of the Ford Site cries for rebirth of the land that has been roughed up for too many years. Let's create a space for families to visit, reconnect, and play. To wonder and awe in the miracle of a beautiful piece of our earth.

Come on! Let's create some beautiful memories!!!

Included below are even more reasons we need to back up

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

*There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.

*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

*The AUAR Is based on certain assumptions about increases in biking and walking. However, the Twin City area is rated as one of the coldest and snowiest urban centers in the United States. The AUAR study should be revised to include assumptions that account for Minnesota's winter climate. *Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

*Public requests for study of carbon dioxide (CO2) were not addressed. The AUAR study should include a study of CO2, other greenhouse gas emissions, non-diesel particulate matter emissions, and the project's impact on climate change under Section 16 – Air and under Section 19 – Cumulative Potential Effects. If PED is not going to study these issues, please explain why there have not been specific responses to the dozens of public requests to study CO2 and non-diesel particulate matter.

*The purpose of the AUAR is to study the environmental impact to the community. It is imperative that the study of all present and future car emissions be included in the AUAR.

*Per the 2012 recommendation by Manick & Smith Group Inc., the AUAR study should include further investigation of the stability of the tunnel system and further investigation of the tunnel collapse near Area C. If additional studies outside of the AUAR have been completed that reach different conclusions than the Manick & Smith Group, Inc. study, please include citations to those studies in the AUAR.

*Given the potential health risks related to evidence of soil vapors, The AUAR study should include

additional specific mitigation measures to address these risks.

*The AUAR should include a more comprehensive traffic study to address traffic congestion, including study of the cumulative impact at the intersections near Highways 94, 35, and 5. *The Draft AUAR addresses noise mitigation for residents of the Ford development, but nothing for residents of the existing community. The AUAR study should include a robust study of preconstruction noise, and noise generated by construction, air-handling equipment, and future traffic increases for the entire community.

*The Draft AUAR underestimated the impact to wildlife, in particular the migratory birds of the North American Migratory Mississippi Flyway. The AUAR study should include a more thorough and objective study of wildlife impacts.

*The AUAR study should include a more thorough assessment of the Significant Public Views (National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site.

*The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset. *Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Thank you Camille McCann

Sent from my Verizon, Samsung Galaxy smartphone

From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 17, 2019 10:22:35 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Christie Englund [mailto:cestp@mac.com] Sent: Monday, September 16, 2019 6:22 PM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Christie Englund and my home is at 2169 Wellesley Ave. I am writing to express my concerns pertaining to the Draft AUAR.

The current Ford Site Plan is of great concern to me as I live on Wellesley Ave, three houses from Cretin. If the current plan goes forward, my neighborhood will effectively be adjacent to a freeway. The traffic between I94 and the site is largely routed on Cretin, as a consequence of the enormous volume of people on the site, living and working there, my neighborhood will suffer greatly. This plan must be reconsidered, and zoning brought to a level that will minimize impact on established

This plan must be reconsidered, and zoning brought to a level that will minimize impact on established neighborhoods.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

*There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study.

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very end of the ten-year period.

*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%.

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*Given the potential health risks related to evidence of soil vapors, The AUAR study should include additional specific mitigation measures to address these risks.

*The AUAR should include a more comprehensive traffic study to address traffic congestion, including study of the cumulative impact at the intersections near Highways 94, 35, and 5.

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From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 17, 2019 10:23:24 AM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
2	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us 2 2 2 2 2

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From: Colleen Traxler [mailto:colleentraxler@gmail.com]
Sent: Monday, September 16, 2019 3:18 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Colleen Traxler and I live at 1780 Scheffer Ave. St. Paul 55116. I am writing to express my concerns pertaining to the Draft AUAR.

I believe that that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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*The AUAR should include a more comprehensive traffic study to address traffic congestion, including study of the cumulative impact at the intersections near Highways 94, 35, and 5. Traffic in the Highland area is already miserable at peak travel times.

*The Draft AUAR addresses noise mitigation for residents of the Ford development, but nothing for residents of the existing community. The AUAR study should include a robust study of preconstruction noise, and noise generated by construction, air-handling equipment, and future traffic increases for the entire community.

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Additionally, I have bolded the items that are extremelly important to me; in particular is the horrific traffic that **already exists** and the expected increase in congestion which has been extremely understated. All of the "traffic calming measures" in the city have created GRIDLOCK; no turn lanes, curbs prevent right hand turns and bicycle lanes block residential parking. People need cars and the mentality that cars are not a necessity in Minnesota is naive. You will lose many tax paying citizens if the City of St. Paul continues to ignore the voices of it's citizens.

Respectfully submitted, Colleen Traxler

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 17, 2019 10:22:57 AM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan	
2	<i>Ford Site Planner</i> Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102	
	P: 651-266-6093	
	menaka.mohan@ci.stpaul.mn.us	
	?????	

Making Saint Paul the Most Livable City in America

From: craig dock [mailto:craigdock@msn.com]
Sent: Monday, September 16, 2019 4:58 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Craig Dock, and I live at 1993 Field, Ave, Saint Paul MN 55116. I am writing to express my concerns pertaining to the Draft AUAR. I do not believe the current plan has the best interest of Highland Park residents.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

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*The AUAR Is based on certain assumptions about increases in biking and walking. However, the Twin City area is rated as one of the coldest and snowiest urban centers in the United States. The AUAR study should be revised to include assumptions that account for Minnesota's winter climate. *Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

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*The purpose of the AUAR is to study the environmental impact to the community. It is imperative that the study of all present and future car emissions be included in the AUAR.

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*The AUAR study should include a more thorough assessment of the Significant Public Views (National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site.

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Sincerely

Craig Dock

From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 17, 2019 10:22:40 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

-----Original Message-----From: Comcast [mailto:jenniferjames.barrett@comcast.net] Sent: Monday, September 16, 2019 5:50 PM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Jennifer Barrett and I live at 1691 Niles Avenue.

I am writing to express my concerns pertaining to the Draft AUAR. My biggest concern through this process is the extreme high density being considered, unrealistic assumptions as it relates to the traffic study and lack of response to public requests and comment.

I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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*The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

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*Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

From:	<u>*CI-StPaul FordSitePlanning</u>
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 17, 2019 10:23:19 AM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan	
?	<i>Ford Site Planner</i> Planning & Economic Development 25 W. 4th St., Suite 1400	
	Saint Paul, MN 55102 P: 651-266-6093	
	menaka.mohan@ci.stpaul.mn.us	

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From: Kelly Harmon Schmitt [mailto:harmonschmitt@gmail.com]
Sent: Monday, September 16, 2019 3:49 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Kelly Schmitt and I live at 2203 Sargent Ave. St. Paul, MN. I am writing to express my concerns pertaining to the Draft AUAR.

I am still very concerned about the significant increase in the amount of traffic. 36,000 more trips a day or even 21,000 trips a day adjusted down for people who will ride bikes year round and or take the bus is a lot of traffic on our residential roads. I think a hard look at this traffic and what it means for the environment and the safety of other riders and walkers and cyclists, given that many more drivers including distracted drivers on the road. I understand that this development is supposed to be green and that doesn't just apply to he development but also to the whole impact environmentally on the community.

I believe in density in the right places -- like the way Minneapolis did it -- close to the business district and along the green line. This Ford development is isolated -- not near any business districts so that most people have to commute to their jobs.

(Side suggestion --yes, I know St. Paul needs more tax \$. But let's build up the businesses in the business district of downtown St. Paul and increase the density there and along the light rail in St. Paul. Let's do density with a bigger view of work and commuters in mind.)

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 17, 2019 10:22:24 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Kristi Haselman [mailto:kristihaselman@gmail.com] Sent: Monday, September 16, 2019 7:38 PM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is ______, and I live at _____397 Brimhall Street

I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

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 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: AUAR Public Comments

 Date:
 Tuesday, September 17, 2019 10:23:04 AM

 Attachments:
 image002.png image003.png image004.png

	Menaka Mohan
	Ford Site Planner
	Planning & Economic Development
	25 W. 4th St., Suite 1400
?	Saint Paul, MN 55102
	P: 651-266-6093
	menaka.mohan@ci.stpaul.mn.us
	?????

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From: Lahens StFleur [mailto:lahensstfleur@prodeoacademy.org]
Sent: Monday, September 16, 2019 4:42 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission, My name is Lyons _, and I live at _____2181 Highland Park way St.Fleur . I am writing to express my concerns pertaining to the Draft AUAR. PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER. Additionally, I feel that the Draft AUAR is inadequate in the following ways: *The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project. *The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated. *There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period. *The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the

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Lahens St.Fleur Community Outreach Manager 620 Olson Memorial Hwy Minneapolis, MN 55411 T: <u>763.205.9950</u> www.prodeoacademy.org Image removed by sender. From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 17, 2019 10:22:19 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

-----Original Message-----From: Maggie LaNasa [<u>mailto:maggie.lanasa@gmail.com</u>] Sent: Monday, September 16, 2019 8:07 PM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Maggie LaNasa and I live at 1752 Bohland Ave. I am writing to express my concerns pertaining to the Draft AUAR.

I feel that the planning commission has not taken into account the future negative impacts of the Draft AUAR. I believe that current plan will cause economic, physical and environmental harm to existing and future residents. I would hate for economic interests to outweigh the future health of this community. As a millennial, I will say that transparency and positive environmental impact are more important to me than urban development. I would hate for this development to be seen as not just a mistake but as a detrimental decision for the future of a prosperous and healthy community.

I would like you to address the following areas of Draft AUAR that are inadequate:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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*The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset.

*Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 17, 2019 10:22:15 AM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
2	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us Planning & Planner Planning & Economic Development Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

From: Mary Dunn [mailto:dunnmary@comcast.net]
Sent: Monday, September 16, 2019 8:21 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Mary Dunn and I live at 674 Mount Curve Blvd., St. Paul, MN 55116. I have lived at this address with my husband for 27 years and am writing to express my concerns pertaining to the Draft AUAR.

I am concerned about the AUAR Environmental study, particularly the impact of traffic on our neighborhood. It is my understanding that the traffic study was conducted in May 2019. We were not given an opportunity to provide input into the traffic study prior to it being released. It is not clear how the Ford development will reduce traffic, reduce car emissions and greenhouse gases. The AUAR should include an explanation of how these goals will be achieved. I have concerns that not only will the emissions and greenhouse gases not be reduced, but that the traffic in our neighborhood will increase by a significant amount. I understand that the AUAR Is based on certain assumptions about increases in biking and walking. However, the Twin Cities is rated as one of the coldest and snowiest urban centers in the United States. The AUAR study should be revised to include assumptions that account for Minnesota's winter climate. Being a lifetime resident of Minnesota I know all too well that biking and walking in the winter are sometimes just not feasible.

I appreciate your attention to my concerns!

Mary Dunn

674 Mount Curve Blvd. St. Paul, MN 55116 dunnmary@comcast.net From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 17, 2019 10:22:36 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

-----Original Message-----From: Molly Barrett [mailto:mollybarrett@comcast.net] Sent: Monday, September 16, 2019 7:36 PM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Molly Barrett, and I live at 1944 Goodrich Ave, 55105. I am writing to express my concerns pertaining to the Draft AUAR.

I attended many of the town hall meetings and nearly every issue brought up has been ignored. That is unfair and unjust for a city to turn a blind eye to its residence who will be negatively affected by your financial gain.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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Molly Barrett (651)245-3288

 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: AUAR Public Comments

 Date:
 Tuesday, September 17, 2019 10:23:11 AM

 Attachments:
 image002.png image003.png image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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From: Swanson, Scott G. [mailto:SGSWANSON@stthomas.edu]
Sent: Monday, September 16, 2019 4:38 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

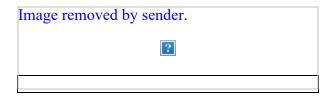
Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Scott Swanson, and I live at 2145 Goodrich Avenue in St. Paul.

I'm a big fan of planning 40 years out, and I think you folks have done a pretty good job of trying to make sense of how to use the Ford Plant site, based on what I've read from the Draft AUAR.

I'm still very skeptical about how traffic will flow out of the new site, and its impact on Cretin & Cleveland Avenues. I'm particularly bothered by what appears to be a wishful thinking approach related to use of public transportation; the plan seems to assume that decades out, people will have magically transformed their behaviors, and will not fill the roads with more cars. Not my experience in the last 60 years.

Scott Swanson



From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 17, 2019 10:22:52 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Victoria Stewart [<u>mailto:stew0042@umn.edu]</u> Sent: Monday, September 16, 2019 5:16 PM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Victoria Stewart and I live at 124 Montrose Place. I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

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Sent from my iPad

From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 17, 2019 10:22:03 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Anne Lynch [mailto:alynchskow@aol.com] Sent: Tuesday, September 17, 2019 8:01 AM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is _____Anne Lynch______, and I live at ___2134 Highland Parkway St. Paul MN 55116 ______.

I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

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From:	<u>*CI-StPaul FordSitePlanning</u>
To:	Payne, Ashley
Subject:	FW: AUAR Public Comments "CORRECTED COPY"
Date:	Wednesday, September 18, 2019 4:16:59 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us P: P: P

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From: Deborah Patterson [mailto:dfpatter@gmail.com]
Sent: Wednesday, September 18, 2019 10:12 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments "CORRECTED COPY"

CORRECTED COPY

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Deborah Patterson, and I live at 1792 Pinehurst Avenue, Saint Paul, MN 55116. I am writing to express my concerns pertaining to the Draft AUAR.

I, as a life-long Saint Paul citizen, am appalled that the City of Saint Paul would even consider buying property that is not deemed habitably safe for humans to live on the ground floor in a building. I feel that the **City Council members are not providing due diligence for the welfare of the tax paying citizens by absolutely requiring ENVIRONMENTALLY SAFE grounds for habitation**. It is inexcusable that we are not making the Ford Motor Co. properly clean-up **ALL contamination**. It is a foregone conclusion that this will come back and bite us on so many fronts - DO YOUR JOB and properly take care of the citizens. I am shocked by quick decisions that are not properly evaluated as to potential PROS and CONS, no one is looking at any possible negative impact — clearly there is an agenda and NO proper analysis. NO ONE will want to live on potentially carcinogenic property. It is simply amazing that this small group of people have so much power — all of these major decisions should be VOTED on and not decided by a City Council that has NOT given proper analysis to any potential future problems.

Furthermore, there is no way that Highland Village will be able to handle **7500 more people** — absolutely ridiculous concept and not properly analyzed — just stand on the corner of Ford Parkway and Cleveland during rush hour!

Now that Saint Paul has purchased **Hillcrest Golf Course**, they should consider that area for more people especially given that East side infrastructure could probably handle it better than Highland Village. Why is there such a rush to push this project? Already Saint Paul has proven financial incompetence in the entirely overblown costs for school remodels in the last year. Is there anyone in charge to enforce budget

compliance? The City of Saint Paul is looking like an easy place to give a low bid, get the job and totally rob the city treasury.

Another issue, VERY FEW PEOPLE want to bike in Minnesota's typically cold, rainy, snowy, humid, hot weather!! Of the mostly recreational bikers that do want to - GREAT but that will definitely change as they age — remember this city is for <u>ALL</u> the citizens— what about the handicapped, the elderly, the parent with small children in tow — the list goes on! This city should be accommodating everyone and not just the healthy, young bikers. The City Council also has not recognized that there is a very "large group of people" who are afreid to complein and feel that they

recognized that there is a very "large group of people" who are afraid to complain and feel that they have no voice because it is not *politically correct* — who will just leave!! I am very tired of hearing that nice, individual homes in Highland Park are a bad thing — someone should do an analysis of the homes over \$300,000+ and determine the tax amount that those homeowners contribute to the city; if those homeowners leave Saint Paul, it could easily end up like Detroit, with no one here to pay property taxes! The City Council should remember the exodus of Summit Avenue homeowners and *how long* it took to bring that lovely gem back to something that Saint Paul is very proud of today! Not sure who wants, beside the Saint Paul City Council members, to have everyone on a bike and to live in high-rises; attractive, well-kept homes/neighborhoods have always been desired by any city — why are we trying to ruin Highland Village?

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: The Ford plant site.
Date:	Tuesday, September 17, 2019 10:26:16 AM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us P: P: P

Making Saint Paul the Most Livable City in America

From: neddc10@aol.com [mailto:neddc10@aol.com]
Sent: Tuesday, September 17, 2019 10:22 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: The Ford plant site.

Too many housing units in very tall buildings with 2 or 3 roads in or out. Traffic already backed up on Cleveland and Ford for many blocks. Due to the Finn bldg ask the home owners if they or their visitors are able to park in front their house. I don't know if this is in your department but the height levels and amount of off street parking are always stretched in the developer favor.example Snelling ave. Mr & Mrs Edward Stephens 1865 Bayard Ave

From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 17, 2019 10:21:54 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Gail Peterson [mailto:ga.peterson@comcast.net] Sent: Tuesday, September 17, 2019 8:16 AM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is _Gail Peterson_, and I live at 1801 Pinehurst Ave_. I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABOUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

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*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%.

*The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

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Sent from my iPad

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Tuesday, September 17, 2019 12:53:13 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan	
2	Ford Site Planner	
	Planning & Economic Development	
	25 W. 4th St., Suite 1400	
	Saint Paul, MN 55102	
	P: 651-266-6093	
	menaka.mohan@ci.stpaul.mn.us	
	?????	

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From: Luana Ciccarelli [mailto:luana.ciccarelli@comcast.net]
Sent: Tuesday, September 17, 2019 10:50 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission, My name is Luana Ciccarelli, and I live at 1689 Juliet Ave. I am writing to express my concerns pertaining to the Draft AUAR. I am very concerned about the amount of congestion the new developments will cause to our community in the Highland Village area, specifically on Ford Parkway and the surrounding cross streets. We residents live her because of the small community feel of the Highland Park area and this would grossly modify that. Additionally, I feel that that the Draft AUAR is inadequate in the following ways: *The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project. *The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated. *There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the

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From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Tuesday, September 17, 2019 10:21:50 AM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Nolan Zavoral [mailto:nzavoral@toast.net] Sent: Tuesday, September 17, 2019 9:05 AM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Nolan Zavoral______, and I live at 861 Wilder St. S., St. Paul______.

We don't need MORE traffic in the neighborhood. It's bad enough now. The AUAR study is fraught with bad assumptions and disregard for the environment and for our neighborhood lifestyle. We work hard to make this a peaceful place in the middle of urban tumult. Please work with us and not with developers and big business.

Thank you.

--Nolan Zavoral

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Wednesday, September 18, 2019 4:16:39 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site PlannerPlanning & Economic Development25 W. 4th St., Suite 1400Saint Paul, MN 55102P: 651-266-6093menaka.mohan@ci.stpaul.mn.us???

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From: Jody Cohen Press [mailto:jody@presslawoffice.com]
Sent: Tuesday, September 17, 2019 11:10 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission:

I am a 35 year resident of Highland Park. I reside here because of Highland's livability which means, among other things, an equilibrium among people (density), housing (density), shopping and traffic. The Ford site plan will desecrate the equilibrium.

The traffic on Ford Parkway between Finn and Cleveland on weekdays between 3:00 pm and 6:30 pm has become **extremely** congested, bordering on unbearable. **Building housing for** <u>thousands</u> of people, even if not one of them has a car, will cause insufferable traffic congestion.

The heyday of the retail industry has come and gone. The only retail that seems viable are coffee shops and (some) restaurants. Highland Park does not need more of either.

It is also my understanding that the Draft AUAR is deficient in several ways:

• The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

- The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.
- There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study.
- The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed.

An exceedingly better use of every taxpayer dollar allocated, or to be allocated, to the Ford site would be to direct said dollars to the *millions* needed to repair the crumbling streets of St. Paul. <u>http://www.startribune.com/public-works-crumbling-st-paul-streets-need-cash-infusion/521743481/</u>

This reallocation will <u>benefit</u> all St. Paul residents rather than <u>burden all</u> Highland Park residents.

Jody Cohen Press 2001 Magoffin Ave St Paul 55116

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Wednesday, September 18, 2019 4:15:53 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
2	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us 2 2 2 2 2 2 2 2

Making Saint Paul the Most Livable City in America

From: Philip Rampi [mailto:prgconsulting@prodigy.net]
Sent: Tuesday, September 17, 2019 12:55 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Philip Rampi, and I live at 2150 Jefferson Avenue, St Paul MN 55105.

I am writing to express my concerns pertaining to the Draft AUAR.

I've attended several of the local public Ford site development presentations, with a keen interest in how this project will effect traffic flow / density in our neighborhood. While attending these presentations, I would stay afterwards and make sure to talk with the traffic studies representatives that were available for dialog. When I would raise concerns over traffic density, especially spilling onto the Mississippi River Boulevard, I would receive the same canned answer, which is that the studies had determined that there would be little impact, and told not to worry about it.

In one of those conversations, I raised my concern for Cretin avenue traffic heading to and from hwy 94, and was told something to the effect of *"there's nothing in that area that will cause traffic increases..."*. There were several other people with me when I asked about this issue, and when we heard the dismissive / ignorant response there was a collective moan and a gasping of disbelief that this was the narrative being peddled. Needless to say, there was a lot of push back expressed by residents in these encounters, none of which was adequately considered, and or addressed.

Because our traffic concerns were so poorly met, my trust for the whole series of site studies was greatly diminished, thus I'm adding the following concerns, which have been pointed out to me by members of Neighbors for a Livable Saint Paul. I find that all of these concerns have merit and thus need to be addressed. I agree with those who feel that that the Draft AUAR is inadequate in the following ways:

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Respectfully,

Philip Rampi

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Wednesday, September 18, 2019 4:16:06 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us Image: Content of the state of

Making Saint Paul the Most Livable City in America

From: Renate Sharp [mailto:rmesharp@gmail.com]
Sent: Tuesday, September 17, 2019 7:03 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is	_Renate Sharp	, and I live at _536
Mt. Curve Blvd,	, St Paul 55116	·
I am writing to	express my concerns pertaining to th	e Draft AUAR.

Climate change is confronting us every day and I fear the Draft AUAR is oblivious to that threat: We need parks filled with trees not just a couple trees here and there. Further, parks and trees are most beneficial for the mental health of all of us.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

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*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

From:	*CI-StPaul FordSitePlanning
To:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Wednesday, September 18, 2019 4:16:35 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site PlannerPlanning & Economic Development25 W. 4th St., Suite 1400Saint Paul, MN 55102P: 651-266-6093menaka.mohan@ci.stpaul.mn.us??????

Making Saint Paul the Most Livable City in America

From: Suzanne Hansen [mailto:sethansen@yahoo.com]
Sent: Tuesday, September 17, 2019 8:26 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My husband and I live at 237 Woodlawn Avenue in Saint Paul. I am writing to express my concerns pertaining to the Draft AUAR.

I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. **Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.**

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

*There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. **The public must be given the opportunity.**

*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%.

*Ford and Cleveland traffic is already intractable! How in good conscience can you blindly move forward without a more realistic

Plan. The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway accessl, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

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THIS INCLUDES ASSUMPTIONS FOR WHEN STREET ARE DOWN TO ONE LANE DUE TO NEARLY UNPLOWABLE CONDITIONS. THE STUDY CANNOT ONLY INCLUDE THE ROSY SCENARIOS.

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Respectfully submitted ,

Shawn and Suzanne Hansen

From:	<u>*CI-StPaul FordSitePlanning</u>
То:	Payne, Ashley
Subject:	FW: Ford Plant plans
Date:	Wednesday, September 18, 2019 4:17:22 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
?	Ford Site PlannerPlanning & Economic Development25 W. 4th St., Suite 1400Saint Paul, MN 55102P: 651-266-6093menaka.mohan@ci.stpaul.mn.usImage: Image: I

Making Saint Paul the Most Livable City in America

From: Anne Stark [mailto:annestark03@comcast.net]
Sent: Wednesday, September 18, 2019 11:12 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: Ford Plant plans

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Ann Stark, and I live at 545 Mount Curve Blvd . I am writing to express my concerns pertaining to the Draft AUAR.

PLEASE EXPRESS YOUR CONCERNS ABUT THE AUAR ENVIRONMENTAL STUDY. YOU MAY WISH TO USE SOME OF THE POINTS BELOW. YOU MAY ALSO INCLUDE ALL POINTS BELOW IN YOUR LETTER.

If the Ford Plant plans are to move forward as proposed there will be overcrowding in the Highland Park area. The traffic right now is horrific. Driving down Cleveland during rush hour is stop and go straight from Interstate 94 .Ford Parkway is also overcrowd coming over the bridge from Minneapolis. Where is all the new traffic going to go? The proposal to use the side streets near the project is observe. Quiet neighborhoods where people who chose to live will become congestive.The streets were not meant to hold that much traffic. People who live there pay high taxes for a reason. Would taxes then decrease as house values would?

Having an area as big as the Ford Plant located in a quiet neighbor comes once in a lifetime. I hope that when the final decision is made it will be a well thought of plan made depending on preserving the neighborhoods and schools .My hope is that will develop the area without making" how much money they can get from the land" its

main goal. The Ford Plant incorporated the neighbor and the neighborhood welcomed them. They added to Highland Park by planting trees and building the walking trail on the Mississippi River. I hope this new project can also give to the neighbor rather than take from it.

Please listen to the neighbors that live there daily . Imagine what it would look like 10, 20 years from now. Would the school district be able to handle it? What would pollution be like from all the fumes from the cars. The idea that bikes will be used is absurd. Have you lived here in the wintertime?

Thank you for listening to my concerns.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

*Public requests for study of carbon dioxide (CO2) were not addressed. The AUAR study should include a study of CO2, other greenhouse gas emissions, non-diesel particulate matter emissions, and the project's impact on climate change under Section 16 – Air and under Section 19 – Cumulative Potential Effects. If PED is not going to study these issues, please explain why there have not been specific responses to the dozens of public requests to study CO2 and non-diesel particulate matter.

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*Per the 2012 recommendation by Manick & Smith Group Inc., the AUAR study should include further investigation of the stability of the tunnel system and further investigation of the tunnel collapse near Area C. If additional studies outside of the AUAR have been completed that reach different conclusions than the Manick & Smith Group, Inc. study, please include citations to those studies in the AUAR.

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From:	<u>*CI-StPaul FordSitePlanning</u>
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Wednesday, September 18, 2019 4:18:06 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
2.	Ford Site PlannerPlanning & Economic Development25 W. 4th St., Suite 1400Saint Paul, MN 55102P: 651-266-6093menaka.mohan@ci.stpaul.mn.us??????

Making Saint Paul the Most Livable City in America

From: Charles Hathaway [mailto:hathaway@iphouse.com]
Sent: Wednesday, September 18, 2019 3:43 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Cc: hathaway@iphouse.com
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Charles Hathaway and I live at 507 Montrose Lane. I am writing to express my concerns pertaining to the Draft AUAR.

EQB guidance regarding the AUAR states:

"Responsible Governmental Units (RGU) can use an AUAR as a planning tool to understand how **different** development scenarios will affect the **environment of their community** before the development occurs. The process is designed to look at the **cumulative** impacts of anticipated development scenarios within a given geographic area."

With this in mind, the Draft AUAR is inadequate for several reasons —

1) The Draft AUAR fails to consider *different* development scenarios. It addresses only the original City proposal, and the Ryan proposal, the two of which are nearly identical — not different. For the AUAR to be effectively used as a planning tool, it needs to a range of alternatives, including lower-density alternatives. The City's argument that it hasn't proposed other scenarios, so none others need consideration, is wholly self-serving and should be rejected by the AUAR's reviewers.

2) The Draft AUAR fails to adequately consider how different development scenarios will affect the

environment of their community. There is no serious consideration given to how the proposed Ford development will affect the quality of life in the surrounding Highland neighborhoods. The Draft AUAR ignores the negative impacts of the development's increased noise, traffic, air pollution and crowding; and stress on parks, roadways, other public and recreational facilities, and police and fire services. It is negligent for the City and the AUAR authors to imply that these impacts are unimportant and need not be addressed, or that they are somehow not relevant to the "environment of their community." And the fact that the traffic study already includes consideration of impacts distant from the actual Ford site shows that examining impacts on the adjacent neighborhoods is, in fact, within the mandate and scope of the overall AUAR.

3) Figure 4 shows the planned development buildout with nothing on the CP Rail yard. The eventual buildout of the CP Rail yard acreage is a *cumulative impact,* and should be addressed in the AUAR because it will affect traffic, noise levels, etc. within the site, and will have impacts on the surrounding neighborhoods.

4) In Section 9b of the AUAR, the instructions state that the authors should examine "compatibility with nearby land uses." The authors imply that because the proposed development is in accord with the City's zoning plan — a zoning plan developed specifically for the purpose of accommodating the City's desire for high-density development at the site — compatibility is assured. This is circuitous reasoning, and in no way addresses the problem of the proposed development's being greatly at odds with nearby land uses — those uses being primarily medium-density single-family neighborhoods.

Additionally, I concur with the Neighbors for a Livable Saint Paul group's perspective that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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 From:
 *CI-StPaul FordSitePlanning

 To:
 Payne, Ashley

 Subject:
 FW: AUAR Public Comments

 Date:
 Wednesday, September 18, 2019 4:17:51 PM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Christine Walsh [mailto:christine0628@msn.com] Sent: Wednesday, September 18, 2019 2:23 PM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is christine Walsh , and I live at 1575 Edgcumbe

I am writing to express my concerns pertaining to the Draft AUAR.

I am concerned mostly about area C.

Rd

Now is our best chance to clean that area!

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

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Sent from my iPhone

Ashley Payne, CWD Kimley-Horn | 323 South Broadway, Rochester, MN 55904 Direct: 507-216-0763 | Mobile: 507-251-6096 | www.kimley-horn.com

-----Original Message-----From: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Sent: Thursday, September 19, 2019 8:20 AM To: Payne, Ashley <Ashley.Payne@kimley-horn.com> Subject: FW: Cretin Ave

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: Colleen Basney [mailto:colleen.basney@gmail.com] Sent: Wednesday, September 18, 2019 9:01 PM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: Cretin Ave

I would like to comment on the impending use of Cretin Ave as a main thoroughfare. Many of us living on Cretin Avenue have driveways that force us to back up onto Cretin to get out of our place. As of right now, this is a treacherous undertaking because of the huge amount of traffic already present on Cretin. I invite all of you to sit on my porch from 3:30 to 6:00 pm everyday to watch the speeding, running red lights, right turns on red, bumper to bumper traffic in front of my house on Cretin and Randolph. Often cars and trucks seem to use Randolph to Ford Parkway as the local race track of an I-35 alternative because there is only 1 crosswalk along the way to slow them down, which most drivers do not observe. At the minimum we need flashing crosswalks, another stoplight, and multiple other crosswalks just to be able to cross the street. There are no streetlights on Cretin, the ash trees do not get replaced or trimmed and now it is becoming a primary street for the Ford development. Cretin Avenue is at its maximum capacity right now. Please come sit on I my front steps and observe what is really going on. Colleen Basney 495 Cretin Avenue South

Sent from my iPad

From:	*CI-StPaul FordSitePlanning			
То:	Payne, Ashley			
Subject:	FW: AUAR : Continuing concerns			
Date:	Wednesday, September 18, 2019 4:18:20 PM			
Attachments:	image002.png			
	image003.png			
	image004.png			

	Menaka Mohan
?	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us 2 2 2 2 2 2

Making Saint Paul the Most Livable City in America

From: zoyalisa@aol.com [mailto:zoyalisa@aol.com]
Sent: Wednesday, September 18, 2019 4:10 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR : Continuing concerns

Dear Ms. Mohan and Members of the St. Paul Planning Commission:

I continue to have concerns about the quality-of-life effects of density, traffic, pollution, and lack of open space that are likely to be imposed on human inhabitants of the surrounding area as well as on the wildlife and natural features of the Mississippi corridor. Disregard for our environment is disregard for our own quality of life. I believe that environmental impacts such as those I have listed are best addressed by specialists in environmental review, not solely by the planning commission and parties that may have an interest in the resulting studies and development of the site.

The traffic study seems strangely inadequate, as there is no indication of effects beyond the area closest to the site. This increased traffic, and its accompanying pollution and safety challenges, will not disappear at some designated stop signs. It will continue through neighborhoods and onto highways and interstates, particularly 94, 35, and 5. My own neighborhood will be included. How much more traffic will be manageable around the colleges and universities nearby?

Let's not forget how many of us are dependent on drinking water from the Mississippi and the hard-won improvements to water quality over the years. Careful, objective study of remaining pollutants on and near the site must be done.

Thank you. Sincerely,

Elisa Hayday 2112 Berkeley Avenue, St. Paul
 From:
 Payne, Ashley

 To:
 Peterson, Kestra

 Subject:
 FW: AUAR Public Comments

 Date:
 Thursday, September 19, 2019 8:26:07 AM

 Attachments:
 image002,png image003,png image004,png

Ashley Payne, CWD Kimley-Horn | 323 South Broadway, Rochester, MN 55904 Direct: 507-216-0763 | Mobile: 507-251-6096 | www.kimley-horn.com

From: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Sent: Thursday, September 19, 2019 8:20 AM
To: Payne, Ashley <Ashley.Payne@kimley-horn.com>
Subject: FW: AUAR Public Comments



Making Saint Paul the Most Livable City in America

From: Elizabeth Lenz [mailto:elizabethjlenz@gmail.com]
Sent: Wednesday, September 18, 2019 8:37 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is	_Elizabeth Lenz	 	, and I live at
Fairview	and Palace		

I am writing to express my concerns pertaining to the Draft AUAR.

I'm concerned about the environmental impact and the traffic

impact of this plan.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

*The AUAR should include accurate tabulation of public comments. Concerns about density and wildlife were not correctly tabulated.

*There is a process error in that the traffic study was conducted in May 2019, prior to the first public comment period in June 2019. The public had no opportunity to give input into the traffic study. *The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.

*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%. *The AUAR traffic study is unrealistic in assuming that existing traffic congestion at Ford and Cleveland will improve, especially in light of the 20% to 30% more traffic that will be added to the immediate area, no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The community has already encountered understated automobile trip estimates and assumptions that may lead to an inaccurate / flawed traffic impact analysis of the future Highland area.

*The AUAR Is based on certain assumptions about increases in biking and walking. However, the Twin City area is rated as one of the coldest and snowiest urban centers in the United States. The AUAR study should be revised to include assumptions that account for Minnesota's winter climate. *Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

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*The purpose of the AUAR is to study the environmental impact to the community. It is imperative

that the study of all present and future car emissions be included in the AUAR.

*Per the 2012 recommendation by Manick & Smith Group Inc., the AUAR study should include further investigation of the stability of the tunnel system and further investigation of the tunnel collapse near Area C. If additional studies outside of the AUAR have been completed that reach different conclusions than the Manick & Smith Group, Inc. study, please include citations to those studies in the AUAR.

*Given the potential health risks related to evidence of soil vapors, The AUAR study should include additional specific mitigation measures to address these risks.

*The AUAR should include a more comprehensive traffic study to address traffic congestion, including study of the cumulative impact at the intersections near Highways 94, 35, and 5.

*The Draft AUAR addresses noise mitigation for residents of the Ford development, but nothing for residents of the existing community. The AUAR study should include a robust study of preconstruction noise, and noise generated by construction, air-handling equipment, and future traffic increases for the entire community.

*The Draft AUAR underestimated the impact to wildlife, in particular the migratory birds of the North American Migratory Mississippi Flyway. The AUAR study should include a more thorough and objective study of wildlife impacts.

*The AUAR study should include a more thorough assessment of the Significant Public Views (National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site.

*The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset. *Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Those are just a few of my concerns. Thanks, Elizabeth Lenz 1817 Palace Ave 55105 Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Elizabeth Madson Ankeny, and I live at 671 Woodlawn Avenue. .

As a mother, a grandmother and a citizen of a global world in crisis I am writing to express my concerns pertaining to the Draft AUAR.

I have deep concerns about the Auar Environmental Study results.

Additionally, I feel that that the Draft AUAR is inadequate in the following ways:

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*Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario.

Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

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*Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property,

safety, aesthetics, livability, and general welfare of the community. *Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

With respect, Elizabeth Madson Ankeny
 From:
 Payne, Ashley

 To:
 Peterson, Kestra

 Subject:
 FW: AUAR Public Comments

 Date:
 Thursday, September 19, 2019 8:20:25 AM

 Attachments:
 image002,png image003,png image004,png

Ashley Payne, CWD Kimley-Horn | 323 South Broadway, Rochester, MN 55904 Direct: 507-216-0763 | Mobile: 507-251-6096 | www.kimley-horn.com

From: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Sent: Thursday, September 19, 2019 8:20 AM
To: Payne, Ashley <Ashley.Payne@kimley-horn.com>
Subject: FW: AUAR Public Comments



Making Saint Paul the Most Livable City in America

From: Glen Carpenter [mailto:glen.o.carpenter@gmail.com]
Sent: Wednesday, September 18, 2019 7:50 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

Our names are Glen and Gretchen Carpenter, and we live at 730 Ridge Street in Saint Paul. We are writing because we have concerns about the AUAR study.

The AUAR study does not adequately address citizen concerns pertaining to car emissions, specifically CO₂, the greenhouse gas. The projected traffic from this development is likely to overwhelm the surrounding neighborhood with congestion, additional emissions, and traffic noise. When high-density development is being sought as an environmentally sustainable development, it is not logical to increase CO₂ and other emissions to the surrounding area.

The AUAR study should include an evaluation of CO2 emissions at current levels and at various

stages of build out.

The traffic projections seem unrealistic. The Twin City area is one of the coldest, snowiest urban areas in the entire U.S. Projections about pedestrian and bicycle traffic are unrealistic in this climate. Furthermore, it does not seem logical to add thousands of people and tens of thousands of vehicle trips to the Ford area which has no freeway access, no light rail, and is bordered on two sides by the Mississippi River. This forms a natural barrier to traffic. The AUAR study should include more realistic projections for Minnesota's winter climate, and the study should look at more realistic options for the Ford site.

Dozens of public comments included requests for a no-build scenario, keeping the Ford site for minimal development and mostly park, recreational space and park space. Infill development near employment opportunities throughout the city would be an environmentally superior alternative. Using existing infrastructure and development along existing freeways and Green Line light rail would be more likely to encourage walking and use of light rail and express buses. The AUAR should include a no-build or low-density scenario for the Ford site.

Please consider our concerns above as well as all of those listed below.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

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From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Wednesday, September 18, 2019 4:17:14 PM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: John Wittenstrom [mailto:drwitt@mac.com] Sent: Wednesday, September 18, 2019 10:46 AM To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

Our names are _____Kathleen Hetrick and John Wittenstrom _____, and we live at __910 Howell St South.

We are writing to express our concerns pertaining to the Draft AUAR.

While we did not compose the following points ourseslves, we absolutely agree with the Neighbors for a Livable St Paul and applaud their thoroughness and work regarding issues we wouldn't normally grasp. What we are able to grasp, however, is the recent article in the Villager outlining the increased traffic in our neighborhood. Needless to say, we, like everyone else who reads that article. are thinking about how to avoid those highly congested areas—and that means using sidestreets(ours), etc.

Also, we don't know why people rely so heavily on assumptions that biking and walking will increase. While I (Kathleen) do walk to Lunds in decent weather, I certainly can't carry much home (I'm 69). "Decent weather" being the

operative term. We are one of the coldest/snowiest urban centers in the US, and the AUAR study should reflect those assumptions.

Additionally, we feel that the Draft AUAR is inadequate in the following ways:

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*Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: Ford AUAR study
Date:	Wednesday, September 18, 2019 4:17:27 PM
Attachments:	image002.png
	image003.png
	image004.png

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From: Lynn Varco [mailto:lvmaroon@yahoo.com]
Sent: Wednesday, September 18, 2019 11:52 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: Ford AUAR study

Hello,

My name is Lynn Varco and I live at 1587 Beechwood Avenue in St. Paul. The following parts of the draft AUAR merit further consideration and correction:

The city appears to have not met its burden under the administrative rules to exclude the requests for the Ford Site Master Plan Minimum Density Scenario. Not including this would be a missed opportunity to study the impact of the minimum density scenario (2,400 units).

The MN admin rules state that "the RGU must consider all timely and substantive comments received when finalizing the order for review" and that a proposed additional development scenario or alternative should only be excluded if: (a) "it would not meet the underlying need for or purpose of the project"; (b) "it would likely not have any significant environmental benefit compared to the project as proposed"; or (c) "another alternative [that is part of the study] would likely have similar environmental benefits but substantially less adverse economic, employment, or sociological impacts." See Minn. R. 4410.2300(G).

The city's response in the Final Order for the Alternative Urban Areawide Review (AUAR) states, "review of the permitted minimum density range is

not likely to identify any significant environmental benefits compared to the project as proposed." However, PED is required to "explain it's reasoning" for why that criteria is met. See Minn. R. 4410.3610 Subp. 5a. (D). Since PED offers no such explanation, their reasoning doesn't hold together.

How could a 2,400 unit development not have a different impact on environmental issues than a 3,800 or 4,000 unit development? On its face, it seems the minimum density scenario (2,400 units) would have a measurable impact on, for example, all modes of transportation and consequently, requires further study. If PED wants to exclude the minimum scenario, that's their prerogative but, either way, they ought to explain their reasoning in the final AUAR study.

Second, the trip generation estimates detailed on Table 9 are flawed and misleading. By using the national ITE (Institute for Transportation Engineers) formulas and then applying two sets of reductions, it appears that the study authors are manipulating data to create a preferred policy outcome that favors the high density scenario.

The "Various Reduction" category is especially egregious with no explanation for such a massive cut (lowering weekday daily trips by 7,608). For the mid-rise multifamily housing category, the study estimates that there will be only one commuter trip (in/out daily) for every four dwelling units implying that most residents will stay in their apartment, walk/bike or take mass transit. It doesn't seem accurate that 75% of mid-rise multifamily housing residents will not be driving. Where is the cite or explanation for this assumption?

Even if the city doesn't offer a more reasonable ITE formula, they give no meaningful discussion of how the study's current trip estimate increase (21,791 weekday daily trips) would impact current traffic levels (See Table 9). Again, the city appears to have predetermined policy goals baked into their AUAR numbers. The preferred outcome appears to be that the city will force reduced demand by creating more congestion and high idle times. All of which have adverse environmental impacts.

Respectfully submitted, Lynn Varco

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Wednesday, September 18, 2019 4:18:10 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
2.	Ford Site PlannerPlanning & Economic Development25 W. 4th St., Suite 1400Saint Paul, MN 55102P: 651-266-6093menaka.mohan@ci.stpaul.mn.us??????

Making Saint Paul the Most Livable City in America

From: Margaret Isom [mailto:marge@grophy.com]
Sent: Wednesday, September 18, 2019 4:00 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission --

My name is Margaret Isom, and I live at 1477 Highland Parkway. I am writing to express my concerns pertaining to the Ford Site AUAR.

It's surprising Highland and adjacent neighborhoods have the infrastructure to manage the proposed growth at the Ford Site, despite current traffic stopped several blocks deep daily - traveling south on Cleveland and east on Ford Parkway -- during heavy traffic times in the late afternoon. I imagine morning traffic stuggles similarly, taking several light sequences to get through the intersection.

AUAR has proposed removal of on street parking as a solution. Retail proposed at the Ford Site depend on easy in/out parking, and thus have been an integral part of the plan by developer, Ryan Companies. As a result, this unfortunately isn't a viable solution.

I'm hoping you can specifically reply to the following concerns:

how the the AUAR *define* "capacity of streets in the study area"? As noted above, it's already a dense traffic area at rush hour, readily avoided by neighbors during that time.
 what steps were taken to ensure an fully transparent and objective appraisal of the potential impacts of the project. Given the Department of Planning and Economic Development (PED) has tax revenue and other intangibles to gain, they may not be able to objectively evaluate the environmental impacts given possible (even unconscious) bias in the success of the proposed project.

Thanks for considering my thoughts and defer the project until more stringent anaylsis takes place,

Margaret Isom and Family 1477 Highland Parkway St. Paul, MN 55116 651/690-2228 marge@grophy.com From:*CI-StPaul FordSitePlanningTo:Payne, AshleySubject:FW: AUAR Public CommentsDate:Wednesday, September 18, 2019 4:18:00 PM

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

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-----Original Message-----From: mfmcguire83@gmail.com [mailto:mfmcguire83@gmail.com] Sent: Wednesday, September 18, 2019 3:10 PM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Matt McGuire and I live at 1646 Niles Ave, Saint Paul, Minnesota 55116.

I am writing to express my concerns pertaining to the Draft AUAR.

One concern I have is that the Traffic Study, to date, does not include Signal Light or 4-way Stop sign at the intersection of Howell and Montreal Ave. That is currently a speeding corridor between St Paul Ave to Fairview heading either East or West on Montreal. A 4-way Stop sign at Howell & Montreal will slow traffic on Montreal. Additionally it will allow easier foot traffic, bicycle-crossing, and North and South bound traffic crossing on Howell. Please include a 4-way Stop sign at that intersection.

Additionally, I feel that the Draft AUAR is inadequate in the ways described in the list below. In my opinion, the exclusion of the ford master plan minimum density scenario and lack of reasoning as to why the exclusion criteria were met, the lack of study of Area C and tunnels, the lack of study of evidence of soil vapors and groundwater contamination, and the lack of study of greenhouse gases and response to requests to study them present the largest exposure to adequacy challenges for PED. I urge you to build these parts of the study out.

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*The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed during the ten-year study period. The plan was presented by PED at the very end of the ten-year period.

*The Ford development was proposed to be environmentally sustainable, reduce traffic, reduce congestion, reduce harmful car emissions, and reduce greenhouse gases. The AUAR should include an explanation of how these goals will be achieved, when in fact, traffic will increase by 20% to 30%.

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*Public requests for alternative scenarios were inadequately addressed. The AUAR study should include a no-build scenario and a moderate density scenario. Please explain why studying the no build or lower density scenarios "is not likely to identify any significant environmental benefits compared to the project as proposed." The Minnesota Administrative Rules appear to require the RGU to give reasoning for excluding alternatives.

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*The AUAR should include a more comprehensive traffic study to address traffic congestion, including study of the cumulative impact at the intersections near Highways 94, 35, and 5.

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*The Draft AUAR underestimated the impact to wildlife, in particular the migratory birds of the North American Migratory Mississippi Flyway. The AUAR study should include a more thorough and objective study of wildlife impacts.

*The AUAR study should include a more thorough assessment of the Significant Public Views (National Historic Register—Veteran's Home, views of the Mississippi River Gorge) which have been overlooked in the Comprehensive Plan and which are likely to be obstructed by over-development at the Ford site.

*The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this most precious natural asset.

*Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

*Though Area C is not included in the 122 acre development site, the community continues to be very concerned about the environmental impact related to the industrial waste disposal at Area C and the evidence of groundwater contamination of hazardous chemicals.

Thank you for all of your work on this and your attention to these issues.

-Matt McGuire

Sent from my iPhone

From:	*CI-StPaul FordSitePlanning
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Wednesday, September 18, 2019 4:16:48 PM
Attachments:	image002.png
	image003.png
	image004.png

	Menaka Mohan
2	Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us 2 2 2 2 2 2

Making Saint Paul the Most Livable City in America

From: Michael Stoick [mailto:stoick@csp.edu]
Sent: Wednesday, September 18, 2019 7:35 AM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is Michael Stoick and I live at 2206 Highland Parkway St. Paul.

I would like to express in writing that I want the Ford sight to be as environmentally progressive as possible, with rooftop agriculture and solar panels on every building, smart transportation with nocar zones, all done in a way that includes affordable housing units and attainable business and office space.

Local food and energy production is the key to sustainability and resilience.

The only way to make sure this happens is to require clean energy and urban agricultural infrastructure to be part of any development plan.

Thank you for your work, Michael Stoick From:Payne, AshleyTo:Peterson, KestraSubject:FW: AUAR Public CommentsDate:Thursday, September 19, 2019 7:52:14 AM

Ashley Payne, CWD Kimley-Horn | 323 South Broadway, Rochester, MN 55904 Direct: 507-216-0763 | Mobile: 507-251-6096 | www.kimley-horn.com

-----Original Message-----From: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us> Sent: Wednesday, September 18, 2019 6:15 PM To: Payne, Ashley <Ashley.Payne@kimley-horn.com> Subject: FW: AUAR Public Comments

Menaka Mohan Ford Site Planner Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093 menaka.mohan@ci.stpaul.mn.us

Making Saint Paul the Most Livable City in America

-----Original Message-----From: Sheila O' Hara [<u>mailto:sheila.l.ohara@gmail.com</u>] Sent: Wednesday, September 18, 2019 5:59 PM To: *CI-StPaul_FordSitePlanning </br/>FordSitePlanning@ci.stpaul.mn.us> Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is __Sheila O'Hara_____, and I live at __2189 Scheffer Avenue ___St. Paul

I am writing to express my concerns pertaining to the Draft AUAR.

I am extremely concerned about the amount traffic on Cretin and Mt Curve!!! It is estimated that there will be up to 9,000 plus cars traveling on those streets. I am Very concerned about the amount of air and noise pollution that amount of traffic will bring to the neighborhood !! Also the increased safety concerns with crossing the street or even turning onto those streets. Highland Park has always been a very walkable neighbored!

I would very much appreciate a plan that mitigates/limits the number of cars traveling on Cretin and Mt Curve with the Ford Development!!!

Thank you.

Sheila O'Hara

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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*Given this proposal of an island of extreme density in the middle of a low density residential area, the AUAR study should include a thorough analysis of how the proposed Ford development plan can be considered a compatible land use and how it can be considered to be consistent with the stated Intents and Purposes of the Saint Paul Zoning Code, which are designed to protect the health, property, safety, aesthetics, livability, and general welfare of the community.

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Sent from my iPhone

From:	<u>*CI-StPaul FordSitePlanning</u>
То:	Payne, Ashley
Subject:	FW: AUAR Public Comments
Date:	Wednesday, September 18, 2019 4:17:46 PM
Attachments:	image002.png
	image003.png
	image004.png

Menaka Mohan
<i>Ford Site Planner</i> Planning & Economic Development 25 W. 4th St., Suite 1400 Saint Paul, MN 55102 P: 651-266-6093
menaka.mohan@ci.stpaul.mn.us
 ?????

Making Saint Paul the Most Livable City in America

From: Tom Stark [mailto:tom@tomstark.com]
Sent: Wednesday, September 18, 2019 2:03 PM
To: *CI-StPaul_FordSitePlanning <FordSitePlanning@ci.stpaul.mn.us>
Subject: AUAR Public Comments

Dear Ms. Mohan and Members of the Saint Paul Planning Commission,

My name is tom stark, and I live at 545 mt curve blvd. I am writing to express my concerns pertaining to the Draft AUAR.

Additionally, I feel that the Draft AUAR is inadequate in the following ways:

*The Department of Planning and Economic Development (PED) may not be able to objectively evaluate the environmental impacts given their interest in the success of the project as proposed and given the tax revenue at stake. Please request that the Minnesota Board of Environmental Quality make the final determination of adequacy on the Ford Site AUAR. If PED is not willing to make this request, please explain how PED can make an objective appraisal of the potential impacts of the project.

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*The AUAR contains misleading comments that should be removed. Nothing even close to the high-density Ford Master Plan was ever suggested or discussed

COMMENT NUMBER: 118

DATE: 9/18/2019

NAME: Sarah Stewart

COMMENT:

I continue to support the Ford site development plans, including the proposed density. I would like to see a continued emphasis on including affordable housing in the site, ideally interspersed throughout it. This is critical as our city works to address the growing affordable housing crisis. I also fully support an emphasis on green transportation, with prioritization for biking, walking, and transit. My family lives in Highland Park. We have one car, but often use biking, walking, and transit to get around, including when traveling with our two small children. The transportation boards presented at the open house focused so much on the LOS as a measure of success of the roadway. I understand this is important, but one thing that concerned me when I saw some of the mitigation measures being proposed was that they would negatively impact non-drivers. I would like to see more done to study how theses mitigation measures impact non-motorized road users. I would also like to see the proposed trail along Ford Parkway be better connected to nearby bike routes/roads that are more comfortable for riding than Ford - especially to Highland Parkway, potentially via Mount Curve. I do not feel comfortable biking on Ford Parkway when I have my children with me. Better connections will make bicycling a more viable option for a wider range of people. Overall, I support the plans and am excited to see them come to fruition.

COMMENT NUMBER: 119

DATE: 9/18/2019

NAME: Michelle Doyle & Andrew Nelson

COMMENT:

Dear Ms. Mohan and the Department of Planning and Economic Development,

We live to the east of the Ford site, just south of Montreal Ave. We have concerns regarding the AUAR assessments of the impact of traffic and on the environment.

We have the following concerns regarding the traffic impact around the Ford site:

Estimates of traffic impact seem to be underestimated, particularly given that 20-30% more traffic will be added to the immediate area, there's no direct freeway access, and the Mississippi River transportation barrier which surrounds the Ford property on two sides. The study utilizes Institute of Transportation Engineers (ITE) national formulas and then makes reductions based on several assumptions. The reductions used are not clearly explained in the AUAR (see Table 9) and the details should be included. The AUAR traffic assessment includes estimates of trips using transit and biking/walking that are overestimated, particularly given the cold and snowy winter in Minnesota. At a minimum, these estimates should be adjusted for winter time conditions.

While traffic congestion at the intersection of Ford and Cleveland may be dispersed, traffic will be increased on several surrounding streets, including Montreal Ave, St. Paul Ave, Mount Curve, Cretin north of Ford parkway, and Mississippi River Boulevard. The AUAR includes some mitigation strategies for key intersections that are designed to improve traffic flow but there are no mitigations included to ensure pedestrian and bike safety. Streets with increased traffic will need additional traffic calming measures to protect pedestrians and bicyclists. These mitigations should be included in the AUAR. Specifically, there should be marked crosswalks with pedestrian activated flashing signs to alert drivers on Montreal at Howell and Wilder, on Cretin at Highland Parkway and on Mount Curve as needed. Additionally, we would prefer a path with separate bike lanes (both directions) and walking lanes on Mississippi River Boulevard rather than the addition of a northbound bike lane on the roadway.

We have the following environmental concerns:

The AUAR should include an analysis of the impact of greenhouse gases on the climate, including carbon dioxide (CO2), other greenhouse gas emissions, and non-diesel particulate matter emissions.

The impact to wildlife is underestimated in the draft AUAR, in particular the migratory birds of the North American Migratory Mississippi Flyway. The AUAR study should include a more detailed and objective study of wildlife impacts.

The AUAR study should include the justification for varying from the standards of the Mississippi River Critical Corridor Area (MRCCA), which are designed to protect this precious natural asset.

Sincerely,

Michelle Doyle and Andrew Nelson

1878 Hampshire Ave St. Paul, MN 55116

COMMENT NUMBER: 120

DATE: 9/18/2019

NAME: Huggo Bruggeman

COMMENT:

While I am truly excited about this unique opportunity to build a new neighborhood, I am critical of the transportation sections. The analysis are much more detailed for vehicular traffic than for any other mode of transportation. Consequently, the mitigations are leaning towards solving vehicular traffic LOS and queuing. However, increased vehicular traffic volumes have many other negative impacts on the quality of life of the people currently living in the surrounding neighborhoods. Please expand your analysis with:

- Safe routes to school. The report does not make any mention of safe routes to school. What will
 the city do to expand safe routes to school so more children can walk and bike to school in the
 surrounding neighborhoods. This is important because it will reduce the number of cars on the
 road. Thus, safe routes to school are key to your mitigation measures.
- 2. Exposure to traffic-related particulate matter. The report is short in such analysis. Simply stating that cars become more energy efficient is not sufficient as small particulate matters from tires and braking will be a growing issue for the much heavier electric vehicle of the future. I urge the city to install permanent equipment to measure particulate matter at every moment of the day for the next 25 years. This data is equally if not more important than traffic counts, as these data will be critical to safeguard clean air for all.
- 3. The report lacks the impact of future modes of transportation such as electric bikes and electric scooters. The city will need to build better infrastructure to support both. More people on electric bikes and scooters may reduce the number of cars on the road. Thus, electric bikes and scooters are key to your mitigation measures.
- 4. Finally, the moment is here to take be bold and make East River Parkway (aka East River Road) a true recreational gateway. Please make this road one where cars are guests instead of king. At a minimum, the city should prevent any increase in vehicle traffic on East River Road, such as by lowering the speed limit to 15 mph along with enforcement thereof.

Kind regards, Hugo Bruggeman

COMMENT NUMBER: 121

DATE: 9/17/2019

NAME: Paul Earl-Torniainen

COMMENT:

Efficient movement of people vs efficient movement of vehicles.

I look forward to welcoming new neighbors to our Highland Park community. With close proximity to trails, parks, playgrounds, shopping, and schools, Highland Park is a wonderful place to live. I would like to suggest an additional metric for the transportation study - people "LOS" vs vehicle "LOS". On my reading of Appendix D, it seems that the focus is on identifying and mitigating vehicular congestion at intersections around the Ford redevelopment area. While this may improve level of service (LOS) at those particular intersections, I am concerned that it will encourage increased vehicular traffic to and from the new development, at the expense of walking and biking. I like that the study identified gaps in the sidewalk and biking network, but did someone look at how pedestrians and cyclists will be affected by the proposed traffic mitigation plan? My family bikes and walks whenever we can to reduce our auto usage. My wife bike commutes to her job in Minneapolis nearly every weekday from Maythrough October. My daughters bike to Highland Park JR and SR High Schools most days in the fall and spring. I would suggest that there are ways to improve the existing "bikeability" of Highland Park beyond what was proposed in Appendix D. I would add a northbound bike lane on Mississippi River Parkway and bike lanes on another north-south artery from the development. (Currently, northbound bikes often share the combined path on parkway which creates unnecessary congestion - i.e. lower LOS.) From a pedestrians perspective, have you considered controlling intersections so that pedestrians can cross diagonally? This might help mitigate both pedestrian and vehicular congestion (pedestrians cross two streets at once and cars don't need to wait for pedestrians in the crosswalk). Ultimately, I think that encouraging biking and walking will both support healthier lifestyles for us and our new neighbors as well as preferentially driving traffic to our local businesses. All in all, it will improve our wonderful community of Highland Park.

COMMENT NUMBER: 122

DATE: 9/17/2019

NAME: Sally Bauer

COMMENT:

Having attended the Open House on the Transportation portion of the AUAR and having reviewed the materials presented, I am very concerned that the primary focus of the AUAR is clearly on cars and car throughput in our neighborhood. Nearly all the mitigation strategies focus on decreasing wait times, increasing speeds, etc. by adding turn lanes, increasing lane width, etc. All these mitigation strategies do not align with the city priorities of putting pedestrians first, bikers second, transit users, and then last vehicles. It feels that the sections on pedestrians and bikers were afterthoughts and not prioritized in the same way as vehicles.

I live in Highland because I LOVE what a walkable neighborhood it is. All within 6 blocks of where I live, I can walk to several restaurants, a grocery store, many local businesses which I frequent...all by foot or bike. I do this with my three kids in tow, all year round. I've been thrilled about the Ford Site development, the opportunity it presents for new people to enjoy our awesome neighborhood and for the new businesses and park spaces all of Highland will enjoy. However, right now I fear that we're putting far too much priority on vehicle throughput which will decrease the quality of transit by other modes. I'm already always on high attention as I walk through the neighborhood fearful of turning vehicles even when I have the right away. I would greatly prefer a longer vehicular wait time at intersections if it ensured a positive pedestrian and biking experience. I would love to see mitigation strategies like a pedestrian scramble at major intersections, raised crosswalks, road diets, or other pedestrian focused improvements. We also need to ensure enhanced transit options through the area. When it's easy and pleasant to walk/bike/take transit in a neighborhood, people don't choose to drive which will reduce traffic issues.

I hope when the city considers what mitigation steps to take, it will realign the priorities to pedestrians first, bikers second, etc. If we truly want the Ford Development to be a sustainable and forward-looking site, we must put cars last in our priority list.

COMMENT NUMBER: 123

DATE: 9/16/2019

NAME: Robert Larson

COMMENT:

Highland Ford Site has been a well-traveled and visited area for over 50 years of my life

let's give some life to this site liven up streets with curves housing that zigzag rather than flat face structures let ad character

I have seen where homes and multifamily housing are placed at an angle to the street with square or rectangle structured housing with windows with views from point of multifamily housing with a protruding point to look out at street two different directions reduce crime with neighborhood crime watch safer rather than flat face boring domino-style buildings. angled housing has higher value and better ventilation and views and longer life of building curb appeal

and healthier daylight exposure and a breeze when having windows on two or more sides of multifamily housing

flat face buildings have stagnant air and waste more energy wasting since air and breeze natural movements are hindered in flat face housing

causes air-conditioning to run excessively when the open window would save energy bills and heat island effect of 4000 air-conditioners heating outside air

big massive housing buildings may encounter insurance hazard premium in times of economic stress insurance industry stress high-risk behavior

of Tennant residences cities leniency loose restrictions lack of enforcement by officials of city hall or overwhelmed management red tape

security lapses in protecting multi-family residences that are big box and you do not even know your neighbors versus criminal intruders

smaller housing of 8 18 or 30 per building you get to know each other provides protection

big buildings cost less and have a shorter life span

ADA housing from low end to high end?

enclosed garages to accommodate handicap full-sized family vans let's do it does not discriminate against large families?

the multi-generational extended family next-gen housing granny flats mother in law housing adopt a low-income street person accessory apartment

provide talent assessment of gifted people to discover their hardwired talent applications to solve and serve the needs of the community

provide pedal-powered people mover grocery mover to those in need

how does this ford site plan address # 2 health issue loneliness does this housing help integrate or isolate individuals segregated singles apts

high-income home adjacent to the accessory apartment is integrating high and low income attached or next door to each other

full life all ages homes reduce transit needs transit stress on system when 3 or 4 or more live under the same roof A BIG TRANSIT TRAFFIC solution

your street design plan proposed has been shown to increase crime right

Dead end cul-de-sac short non-thru streets reduce crime

your current street plan is not friendly to 8 to 80-year-olds

there are many more options for making street crossing safety enhancements needed

mid-city block cross walks like redwing Minnesota saves lives

lower level auto's bus LRT

upper deck or sky way walking

severe weather covered underground walkways is LRT bus safe zone

the LRT transit sidewalks were made to small it took 10 years for LRT to make bigger larger sidewalks listen to common sense planners

the LRT transit safe structures Planners wanted to destroy storm shelters along Light Rail Transit thankfully it was saved

the LRT transit turn lanes were made to block the view of oncoming traffic along with LRT transit resolved with protected turn signal lights for cars

the MN dot engineering design flaw with turn lane island 20 to 30-foot i =n wrong direction fixed after 30 years danger zone accidents

mouth to small of street entrance to narrow for fire trucks and ambulance to enter urban village fixed after 10 years design flaw

sharp dangerous curve accident open house urban plan shows off presenter's error traffic engineer 30 years experienced 7-second blind spot

30-year traffic engineer report thrown out by city hall miscalculated snow incline speed to blind curve auto's in deep gully collision open house

30-year traffic engineer report to add new street to the most dangerous blind curve city hall did right thing listen to city residents cancel new street location was proposed at very bad spot moved new street to safer new location city hall traffic engineers needs to walk to locations inspect

some people make decisions based

on

greed short term blinders to reality

need is better long term

Need to listen to people with a commonsense not big ego

'listen to investigate solutions to every need?

do you have a designated listener at all meetings taking pro and con without limiting views on both sides of issues at hand?

do you have genuine input allowed or canned rehearsed buzz words blurbs canned responses rubberstamp approval?

flat roofs leak

flat floor window ledges leak

Ryan Builders needs to go out and listen to those who live and work in their buildings for real-world input to correct their errors & contractor errors

this is a serious long-term project that impacts the health wellbeing and health insurance claims of tenants and owners

Ryan you can do a better job of listening and inspecting resolving building owners' occupants needs

Ryan get out of your office and inspect concrete work errors, ventilation errors, design errors, electrical hazard errors, moisture mold errors,

how long do you stand behind your work?

cities can do a better job of foresight to present and future needs

licensed experts get out of your office and visit past & present real-life work sites talk and interact with amateur experts who have seen impacts

do you have a caring heart that is group minded working best interests based on need not greed?

a caring concerned person who deeply cares about professionals do the right thing for the L-O-N-G Term?

Sept. 10, 2019

To: Menaka Mohan and Members of the Saint Paul Planning Commission

My name is Leigh Homstad. I live at 481 Mount Curve Blvd., Saint Paul.

I'm sorry to have to write to you to express my concerns about the inadequacies of the AUAR document and the seeming biases it reflects.

The document appears to be pushing an agenda and falls short of a completely objective appraisal of the project's potential impacts. There are mistakes in the record of public comments and misleading comments that seemed to be used to favor certain policy positions.

We need an objective pair of eyes. At this point, I feel the Minnesota Board of Environmental Quality should make the final determination of adequacy on the Ford Site AUAR.

You have a tremendous responsibility. This is the City's most important large-scale development project in recent history – maybe ever. It needs to be done very carefully and done right, so our decisions don't come back to haunt us.

Sincerely,

berle Hornstand

Leigh Homstad

Leigh Homstad 481 Mount Curve Blvd. St. Paul MN 55116

> Menaka Mohan, Ford Site Planner Department of Planning and Economic Development 25 W 4th Street, Suite 1400 Saint Paul, MN 55102

55102\$1662 CO18

COMMENT NUMBER: 125

DATE: 9/14/2019

NAME: Gil Young

COMMENT:

The Ford Site AUAR does not adequately analyze and address the impact of the site on climate change and the unique opportunity that the site presents for demonstrating how sustainable and passive designs for residential, commercial, and industrial buildings can be viable and cost effective. The St Paul Climate Action and Resilience Plan commits the city to be carbon neutral by 2050. The Ford Site presents an opportunity to kick start this goal by requiring all building construction to use passive or electric energy only. Ultimately, all buildings in Saint Paul will need to be replaced or retrofitted to passive or electric design. The Ford Site design standards must begin this process with a bold and significant step toward a sustainable energy future. No fossil fuel use should be allowed in any building on the site.