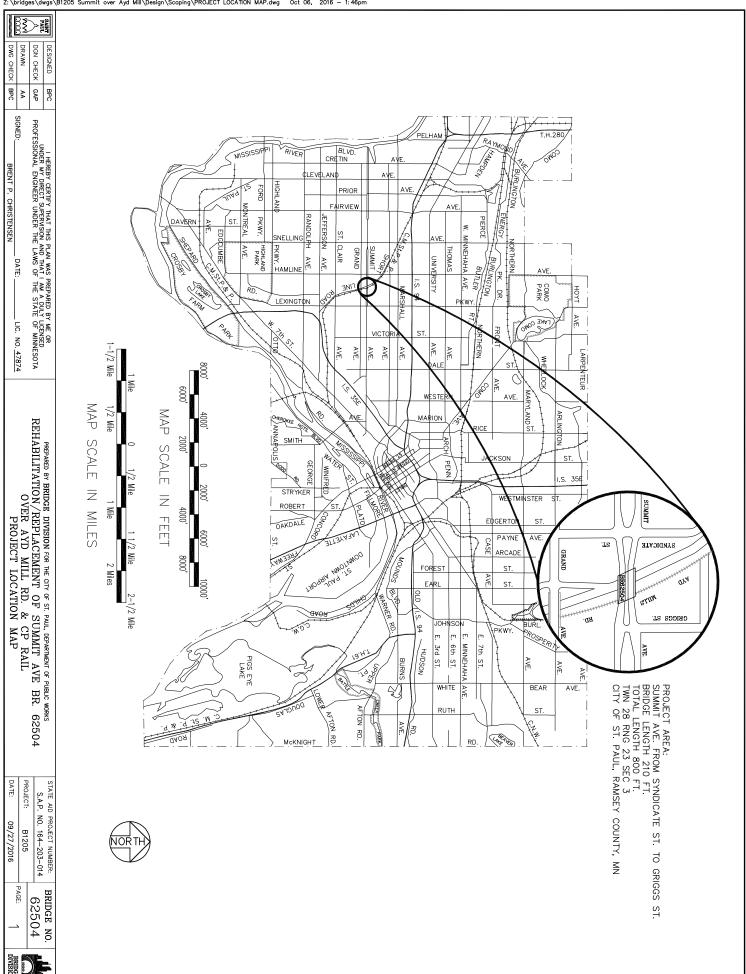
Transportation Committee Staff Report

Committee date: Dec. 5, 2016

Project Name	Reconstruction or Rehabilitation of Summit Avenue Bridge			
Geographic Scope	Summit Avenue from Syndicate Street to Griggs Street			
Ward(s)	1,2,3			
District Council(s)	13,14,16			
Project Description	Reconstruction of 210' bridge and 600' approach roadway			
Project Webpage	Not established at this time			
Project Contact, email/phone	Brent Christensen, brent.christensen@stpaul.gov 651-266-6182			
Lead Agency/Department	City of Saint Paul Public Works (with approvals by MnDOT)			
Purpose of Project/Plan	Bridge is structurally deficient and requires repair/replacement			
Planning References	Comp Transportation Plan (safe well-maintained system, etc.) St. Paul Bicycle Plan, federal/state bridge design reqt's, and Summit Avenue West Heritage Preservation District			
Project stage	Scoping, Historical/Environmental Reviews, Planning, Engineering			
General Timeline	Design through 2017, approvals and shovel-ready by late 2018			
District Council position (if applicable)	Not Applicable			
Level of Committee Involvement	Advise			
Previous Committee action	If any, describe the action taken			
Level of Public Involvement	Inform and Provide Input			
Public Hearing	Will occur during design approvals phase (tbd).			
Public Hearing Location	City Council chambers.			
Primary Funding Source(s)	Federal grant, State bridge bonds, MSAS funding, possibly CIB			
Cost	Approximately \$8.1M total project cost (includes design/engineering)			

Staffrecommendation	No recommendation or action is required (informational briefing)
Action item requested of the Committee	Advise
Committee recommendation	To be filled in at the meeting
Committee vote	To be filled in at the meeting



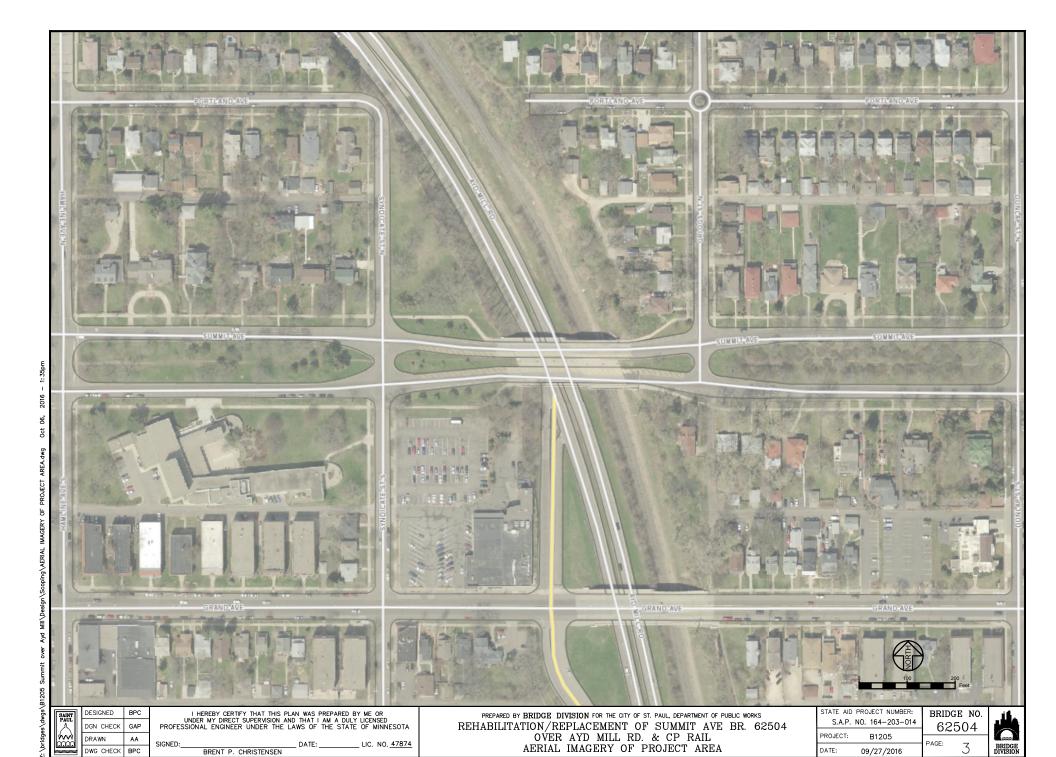
Transportation Committee Staff Report

Committee date: December 5, 2016

Project Name	TH149/13 Smith Avenue High Bridge and Roadway Rehabilitation
Geographic Scope	Smith Avenue/TH149 from West 7 th /TH5 to Annapolis Street/TH13
Ward(s)	Ward 2
District Council(s)	District 3
Project Description	Redecking of High Bridge; Reapportionment of bridge deck space to include bike lanes, wider sidewalks, narrower thru traffic lanes; Mill & Overlay between W. 7 th and Annapolis as well as on Annapolis between Smith and Cherokee Heights Boulevard; Bump outs at some intersections on Smith and Annapolis; quadrant upgrades for ADA; new mainline sidewalks throughout; minor drainage improvements; lead service replacements (SPRWS); signal reconstruction at George Street and Annapolis
Project Webpage	http://www.dot.state.mn.us/metro/projects/hwy149highbridge/index.html
Project Contact,	State: Tara McBride; tara.mcbride.@state.mn.us; 651.234.7724
email/phone	City: David Kuebler, david.kuebler@ci.stpaul.mn.us; 651.266.6217
Lead	Public Works Transportation Planning and Safety
Agency/Department	
Purpose of Project/Plan	Delamination of underside of bridge deck; traffic calming of corridor with improved ride quality; updating of old infrastructure
Planning References	Project is consistent with various State and City planning documents. City documents include the Comp Plan; Street Design Manual, the Bike Plan, D3 Small Area Plan, etc.
Project stage	Environmental work, Engineering, Planning
General Timeline	Letting 2017/2018; Construction in 2018
District Council position (if applicable)	Supportive
Level of Committee Involvement	Inform
Previous Committee action	None known
Level of Public	Inform, advise & consent, involve, development of project/program relative
Involvement	to aesthetic enhancements
Public Hearing	No
Public Hearing	
Location	
Primary Funding	State funds
Source(s)	City funds: CIB for signal work and fiber optics
Cost	City Budget = \$453,000

Level of Committee Involvement

INFORM: Informational briefings	Projects that are in implementation phase; projects from other jurisdictions; policy documents from other agencies/jurisdictions
ADVISE AND CONSENT: Informational briefings with policy discussion, general directives to staff for follow-through	Project and program reviews primarily initiated by staff; or involvement with program development by others
INVOLVE: Discussions to develop directions for projects & programs	Policy involvement from inception through design, inc. policy development; environmental documentation,
DEVELOPMENT OF PROJECT/PROGRAM: Discussion to form process; screening of ideas; development of recommendations; and managing outreach to the community	Committee has primary responsibility for concept development, and/or overseeing participation process, and/or making specific recommendations to Planning Commission, Mayor and/or City Council



Transportation Committee Staff Report

Committee date: December 5, 2016

Project Name	Ford Site
Geographic Scope	135-acre former Ford Plant
Ward(s)	Ward 3
District Council(s)	District 15
Project Description	Overview of Transportation Study and public input received in November
Project Webpage	www.stpaul.gov/ford
Project Contact, email/phone	Merritt Clapp-Smith 651-266-6547 merritt.clapp-smith@ci.stpaul.mn.us
Lead Agency/Department	Planning & Economic Development
Purpose of Project/Plan	Study transportation impacts & opportunities related to the site's redevelopment
Planning References	Comprehensive Plan identifies Ford Site as an opportunity site
Project stage	Planning
General Timeline	Property sale in 2017-18; infrastructure development in 2019; see project webpage for further details
Level of Committee Involvement	Advise and consent
Previous Committee action	None
Level of Public Involvement	Involve
Public Hearing	Yes, for entire public realm plan- to be scheduled
Public Hearing Location	Planning Commission & City Council
Primary Funding Source(s)	
Cost	

Level of Committee Involvement

INFORM: Informational briefings	Projects that are in implementation phase; projects from other jurisdictions; policy documents from other agencies/jurisdictions
ADVISE AND CONSENT: Informational briefings with policy discussion, general directives to staff for follow-through	Project and program reviews primarily initiated by staff; or involvement with program development by others
INVOLVE: Discussions to develop directions for projects & programs	Policy involvement from inception through design, inc. policy development; environmental documentation,
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Ford Site | St. Paul, MN

Multimodal **Modeling and** Design

November 2016









Agenda

- 6:30 p.m. Welcome
- 6:35 p.m. Councilmember Tolbert
- 6:40 p.m. Status of Ford Site Planning
- 6:50 p.m. Study Overview and Results
- 7:30 p.m. Questions and Answers
- 7:45 p.m. Topic Boards comments and questions

Project Timeline – Public Process

	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST
CONCEPT PLAN										
Public Review	000	88								
Staff Revisions										
REVISED CONCEPT P	LAN									
Public Review										
Staff Revisions										
PROPOSED PLAN										
Planning Commission			71		(2)	Z.				
City Council									*	



Councilmember Chris Tolbert







"Any business only exists to make peoples' lives better. At a certain point, shoving more vehicles into urban environments doesn't do that."

- Bill Ford, September 2014





A 21st Century Community for Transportation

- Connect the neighborhood to the Mississippi River
- Expand live, work, and play opportunities for onsite, neighborhood, and regional users
- Provide multiple connections to the surrounding transportation network
- Ensure access for all people using all modes of transportation

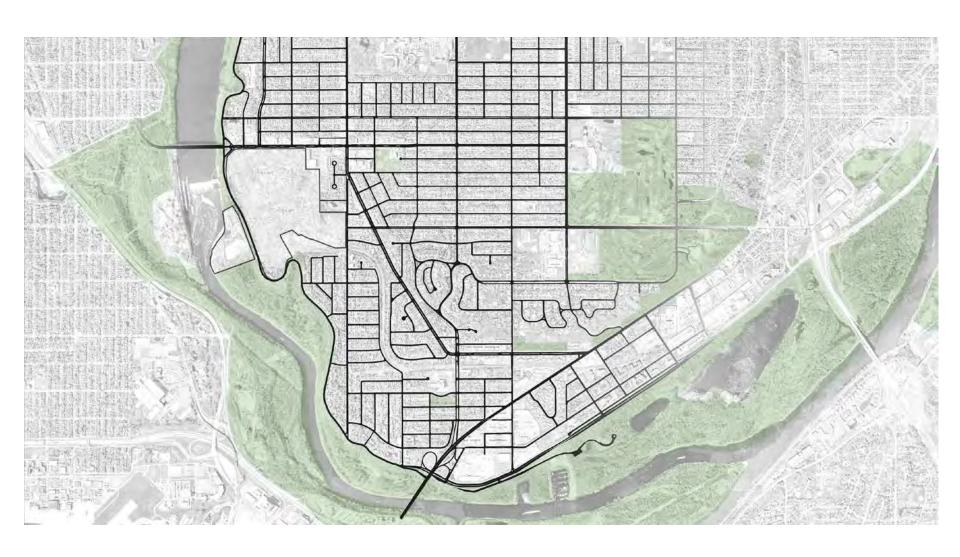


Traffic Impact Study

 Future master developer will be required (under State law) to do a full traffic impact study on the final proposed development plan

What	Traffic Modeling Study	Traffic Impact Study	
When	2015/2016	2018/2019	
Why	To inform Ford site zoning and public realm plan	To examine viability of proposed development	
How	High level analysis - based on POTENTIAL transportation network and connections	Detailed Analysis - based on PROPOSED transportation network and connections	
Where	Examines on-site, adjacent, and more distant impacts	Examines on-site, adjacent, and more distant impacts	
Who	City pays for study	Developer pays for study	

Existing Street Network



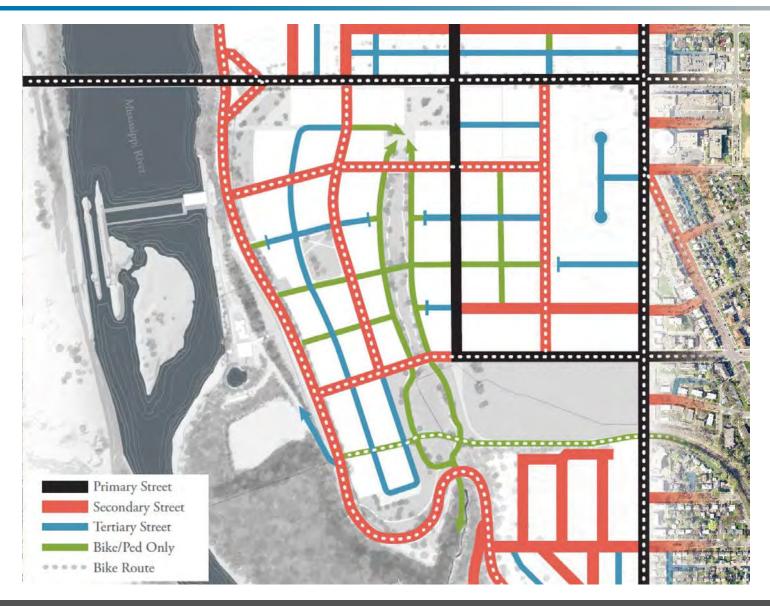
Ford Site as Barrier



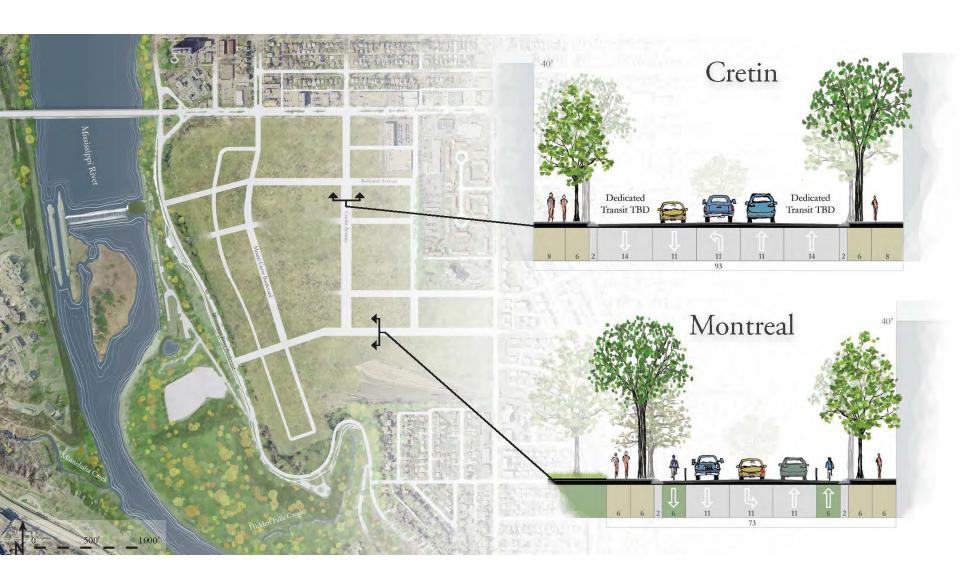




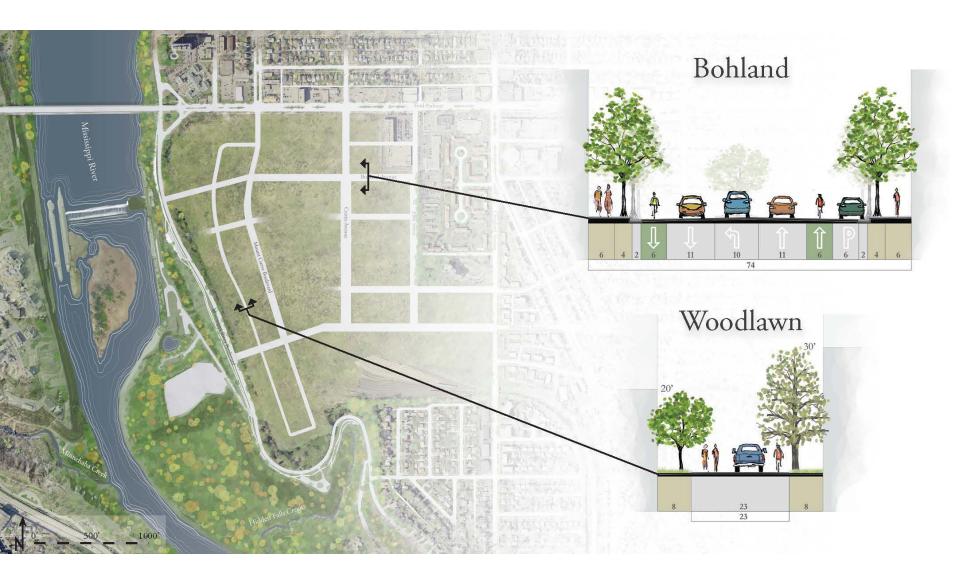
Ford Site Transportation Network



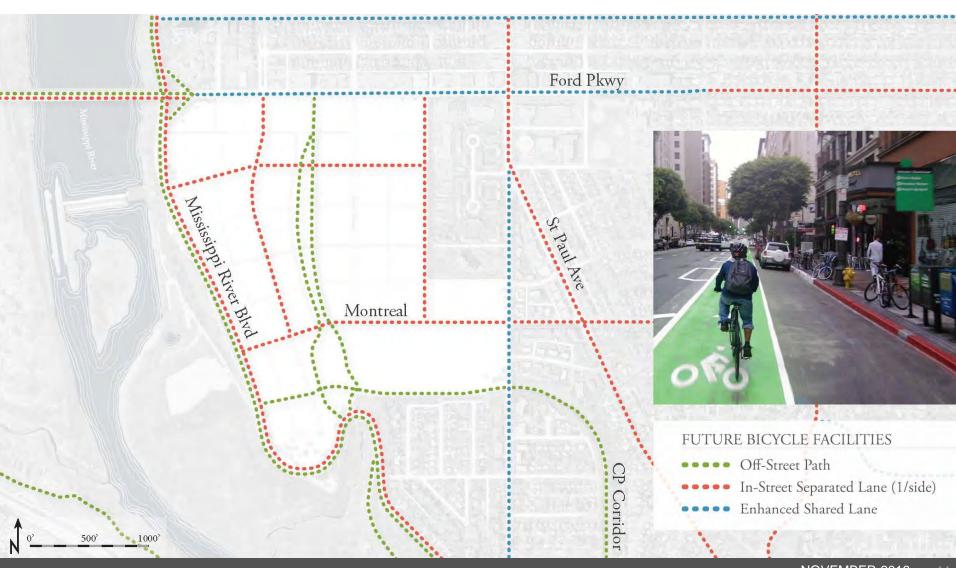
Primary Streets



Secondary Streets



Walking and Biking Network



Multimodal Modeling and Design

The purpose of this effort is to:

- Develop an understanding of how travel will work to, from, and within the Ford Site.
- Review land use and transportation network designs that maximize the value of, and minimize the negative impacts of, Ford site development.

70% of drivers would rather not drive

if other options effectively met their needs





Young adults are finding **new ways to get around.**From 2001 to 2009, 16 to 34-year-olds:



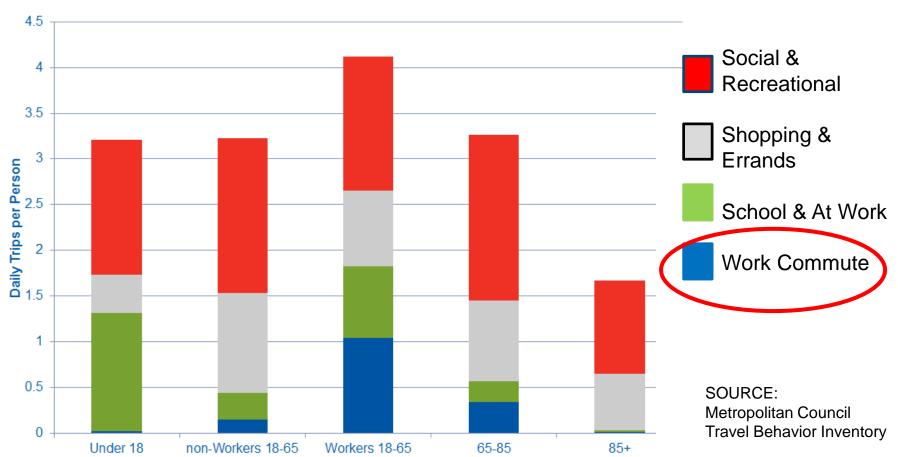






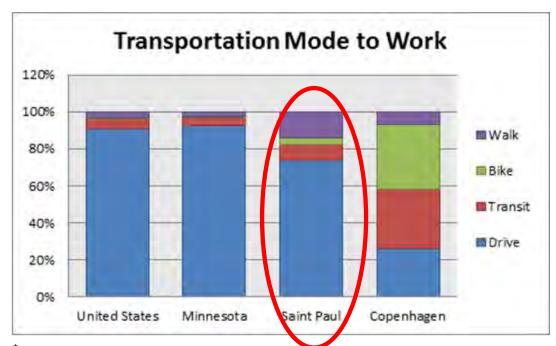
ederal Highway Administration, "National Household Driving Trends," 2001-2009.

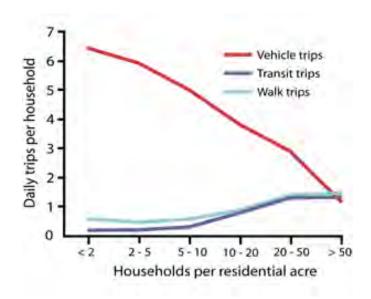
Travel by Age Group (Regional)



In the United States*:

- Public transportation use increased 37% since 1995 and is at the highest rate since 1956
- Bike commuting increased 60% since 2005
- Walking increased 6% since 2005





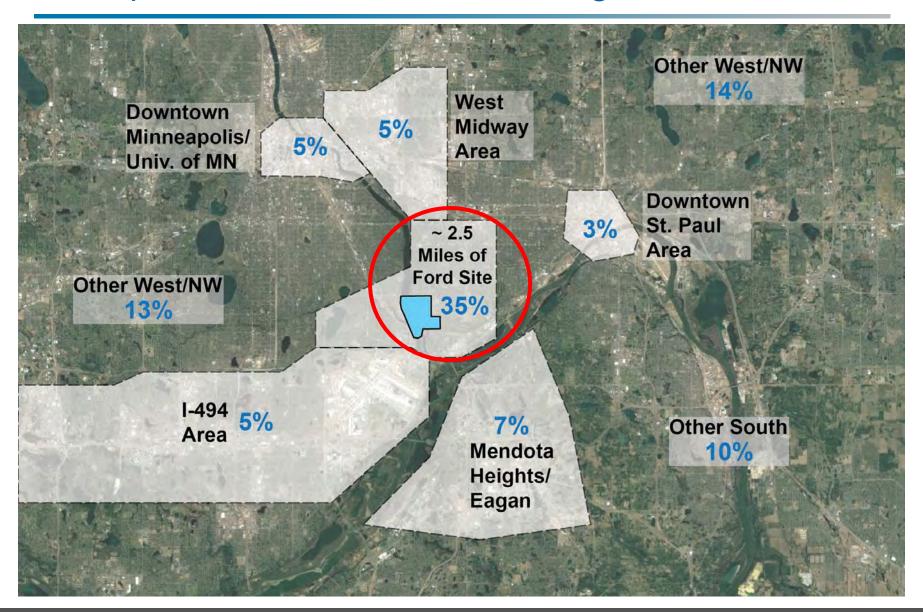
- Miles driven per person in United States decreased 9% since 2005
- Increased density reduces car trips

^{*}Source: 11 Reasons Why Trains, Buses, Bikes and Walking Move Us Toward a Brighter Future, by Jay Walljasper

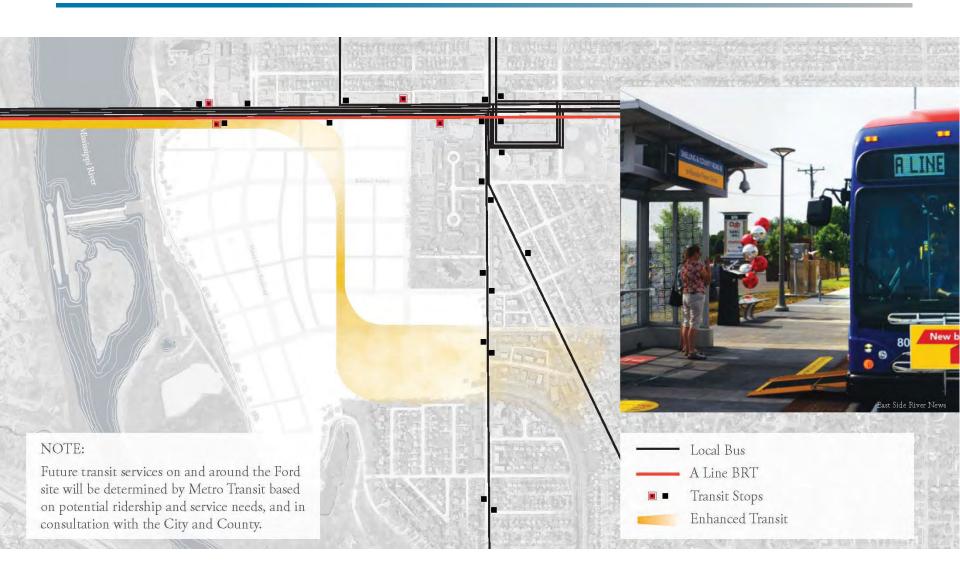




Transportation Observations - Origins



Transit Network



Canadian Pacific Rail Spur







Public Input – Streets, Parking, Traffic

Public Priorities:

- Accommodate cars, but don't encourage them
- Design streets to calm traffic and prevent speeding
- Direct traffic to larger through streets in area
- Provide most parking in structured ramps, with some onstreet and in alleys





Public Input – Bikes, Pedestrians & Transit

Public Priorities:

- Design safe, designated space for bicycles and pedestrians
- Provide well-connected, frequent transit and good shelters
- Balance needs of cars, bikes, pedestrians, and transit in public right-of-way





Performance Evaluation

Goals

Targets

Measures

- Pedestrian Access
- Minimized Vehicle Travel
- Parking Management

- Desired
- Acceptable
- Unacceptable

- Physical
- Operational
- Policy-oriented
- Use-based







Development Goals - Samples



 The Ford site should provide multimodal access with an express goal of minimizing vehicular impacts.
 People traveling to/from the Ford site should have choices of walking, biking, and taking transit.



2. Vehicular level of service on neighborhood streets should continue to function within **acceptable levels**.



3. Parking should be **shared and minimized** as part of overall site plan. The Site should accommodate cars, but not encourage them.

Performance Targets

Desired



Acceptable



Unacceptable

Performance Measures

Physical

- Street Design Elements
- Spatial Measurement
- Parking Spaces per 1,000 SQFT
- Transit Stop Accessibility
- Roadways with Sidewalks
- Sidewalk Width
- Bicycle Parking Distance
- Pedestrian Crossing
 Distance

Policy-Oriented

- Transit Stop
 Amenities
- Internal Street
 Speeds
- Shared Parking Percentage
- EV Ownership
- Parking Price
- Bicycle Lockers
- Bicycle Showers

Use-Based

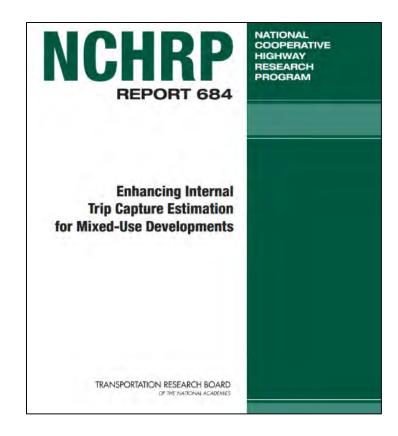
- Surveys
- Peak Hour
 Multimodal Traffic
- Mode Share
- Peak Hour
 Vehicular Traffic
- Trip Lengths

Operational

Bus Frequency

Other Trip Generation Models





TRIP GENERATION





Buildings/ places attract activity and "person trips"

TRADITIONAL MODE CHOICE DECISION

TRADITIONAL





REALITY

Mix of uses generates internal trips

REDUCTION FACTORS FOR OTHER TRIPS

JOBS + HOUSING







OTHER EXAMPLES

TRANSIT PROGRAM LOCAL RETAIL PRESENCE GUARANTEED RIDE HOME ETC...

RESULTING TRIPS OUTSIDE FORD SITE

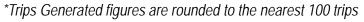


Multimodal thinking captures the totality of how individuals make transportation choices.

- A complementary mix of uses produces shorter, more efficient trips.
- People, especially young people, are driving less than ever.
- Connected street networks distribute vehicular trips.
- Shared parking facilities minimize overall parking need.
- A diversity of transportation options minimizes car ownership.
- People are more willing to walk and walk farther in safe, interesting environments.
- Public transportation should be frequent, reliable and, convenient.
- Bicycle facilities designed for casual users attract greater use.



Land Use	Quantity	
Civic	150,000 GFA	
Employment (Office, etc.)	450,000 GFA	
Retail	300,000 GFA	
Residential	4,000 Units	
Model Steps	Trips Generated*	
ITE vehicle trips	38,600	
Person trips (1.08 AVO applied)	41,700	











TRIP GENERATION Buildings/ places attract activity and "person trips"

TRADITIONAL MODE CHOICE DECISION

TRADITIONAL

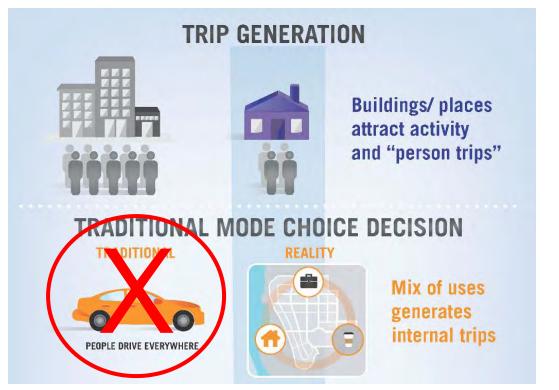


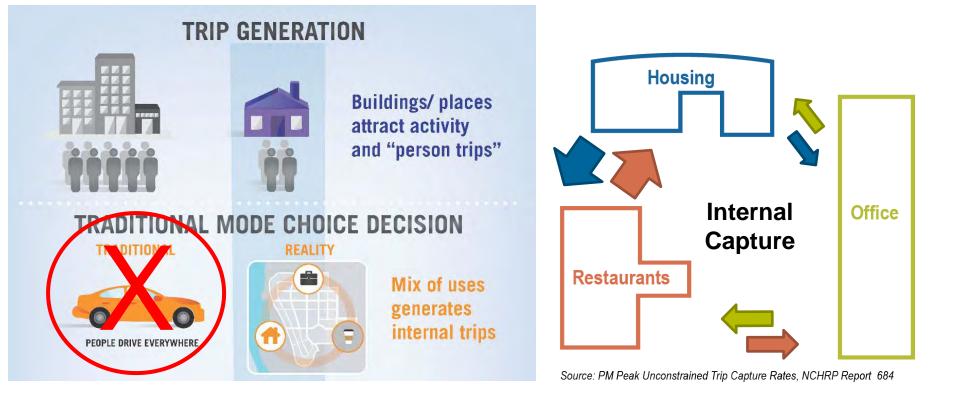
PEOPLE DRIVE EVERYWHERE

REALITY



Mix of uses generates internal trips





Complementary uses:

- Have demand at different times of day to allow for shared parking
- Support quality of life, such as food outlets near offices or grocery stores near housing
- Can absorb trips otherwise made on the external network

Vehicle Trip Reduction Factors



REDUCTION FACTORS FOR OTHER TRIPS

JOBS + HOUSING







BICYCLE



OTHER EXAMPLES

TRANSIT PROGRAM LOCAL RETAIL PRESENCE GUARANTEED RIDE HOME ETC...

Mix of Use Factors

- Jobs & Housing Balance
- Local Serving Retail
- Below Market Rate Housing

Walking Environment Factors

- Intersection Density
- SidewalkCompleteness
- Block Size

Bicycle Environment Factors

- Separated Bike Lanes
- Bicycle Parking
- Winter Bike Path Maintenance

Other Factors

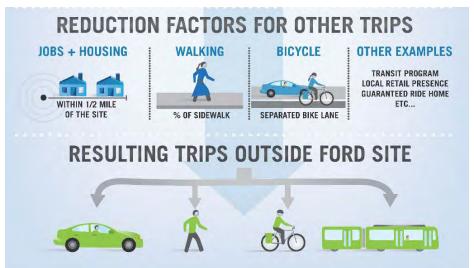
- Transit Service and Proximity
- Parking Policy
- TransportationDemand ManagementPrograms







Vehicle Trip Reduction Factors









Vehicle Trip Reduction Factor Group	Basic Scenario	Advanced Scenario
Mix of Uses	5.2%	5.2%
TOD & Transit Services	7.5%	7.5%
Walking Environment	6.6%	7.5%
Bicycle Infrastructure	2.9%	7.4%
Parking Management &TDM	0.0%	22.2%
Total	22.1%	49.8%









External Trip Generation

External Vehicular Trips



Model	Daily*	AM Peak*	PM Peak*
Ford Model (Basic)	24,300	2,500	2,500
Ford Model (Advanced)	17,500	1,800	1,800

^{*} Numbers are rounded to the nearest 10 trips

External Transit Trips



Model	Daily*	AM Peak*	PM Peak*
Ford Model (Basic)	6,200	640	630
Ford Model (Advanced)	10,700	1,120	1,080

^{*} Numbers are rounded to the nearest 10 trips

External Walk+Bike Trips

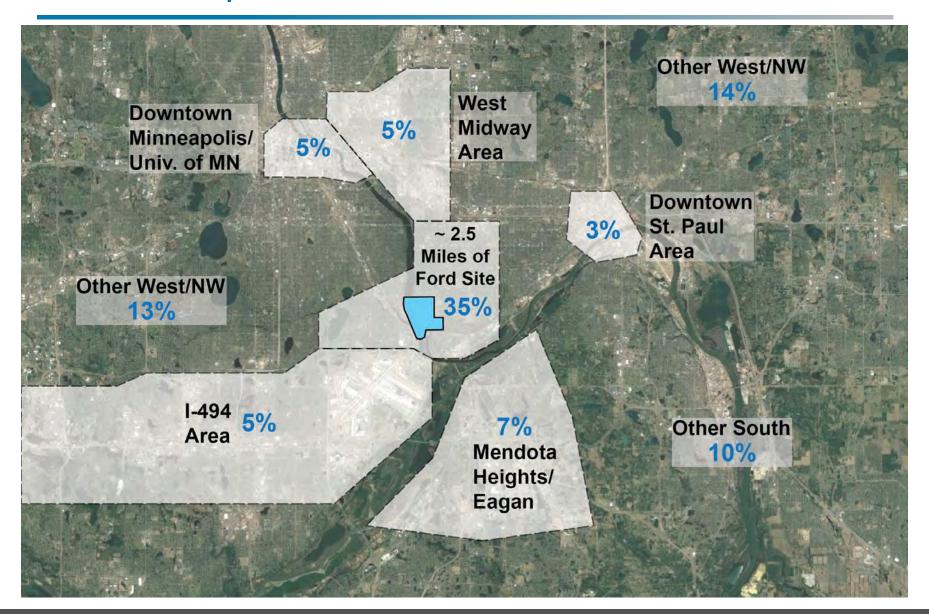




Model	Daily*	AM Peak*	PM Peak*
Ford Model (Basic)	4,060	420	410
Ford Model (Advanced)	7,030	740	710

^{*} Numbers are rounded to the nearest 10 trips

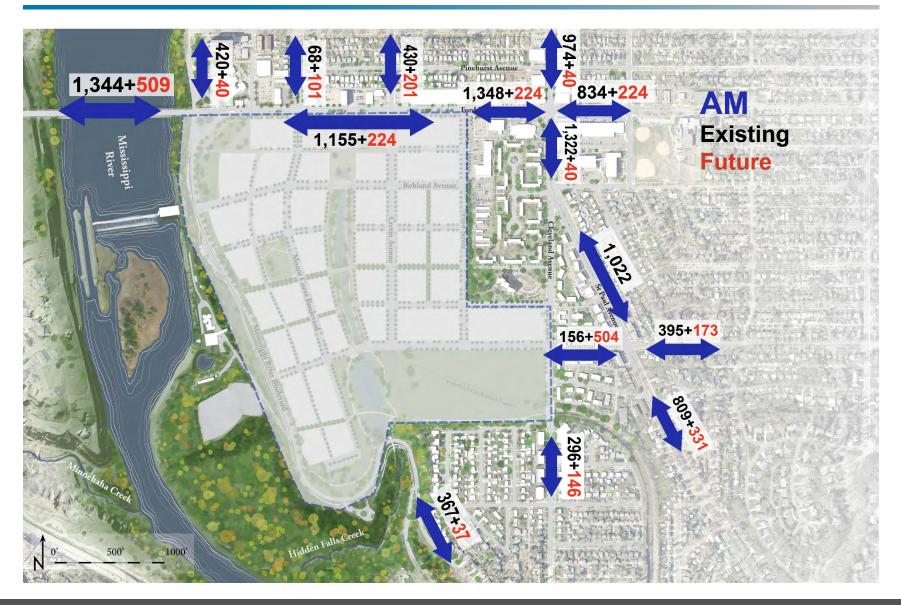
Where People Will Arrive From And Travel To



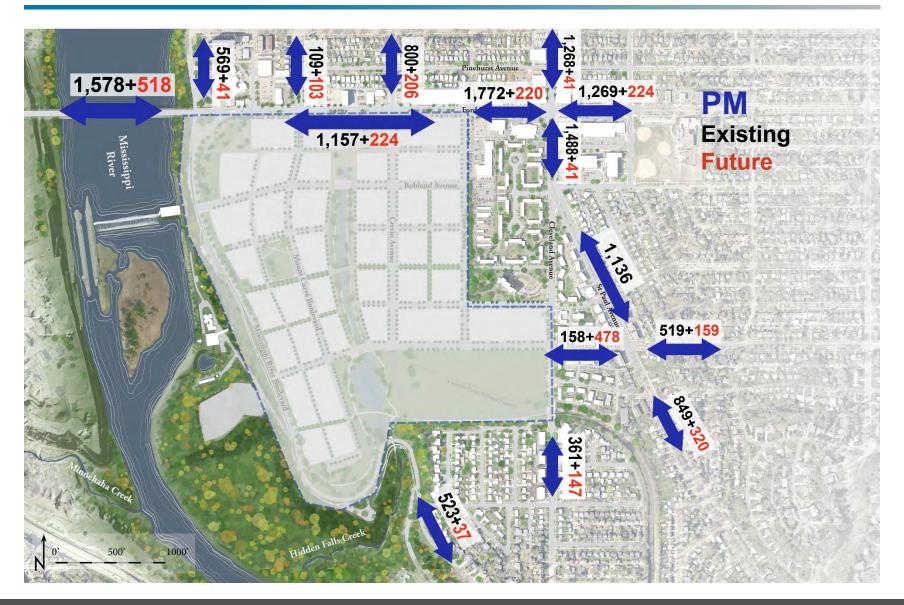
Trip Distribution



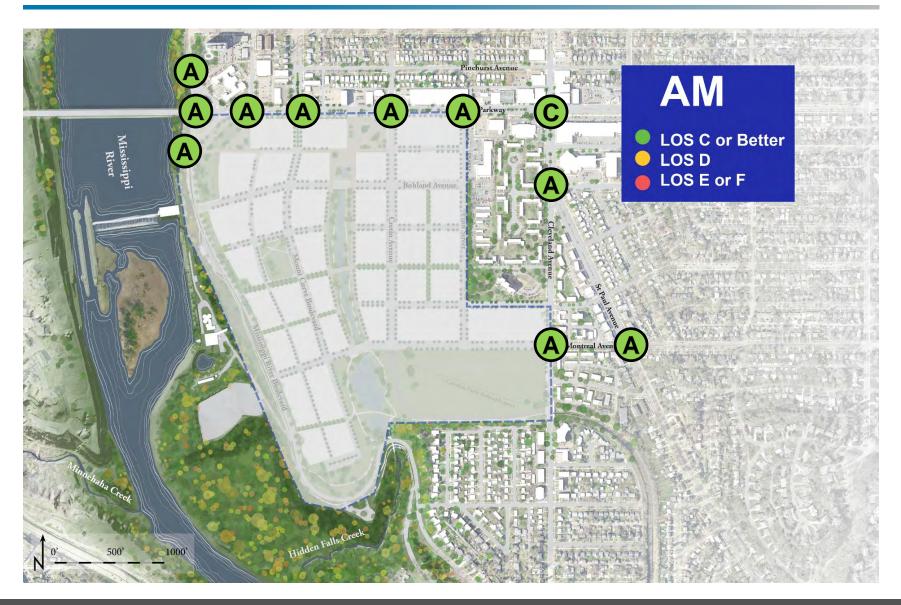
Vehicular Volumes at AM Peak Hour



Vehicular Volumes at PM Peak Hour



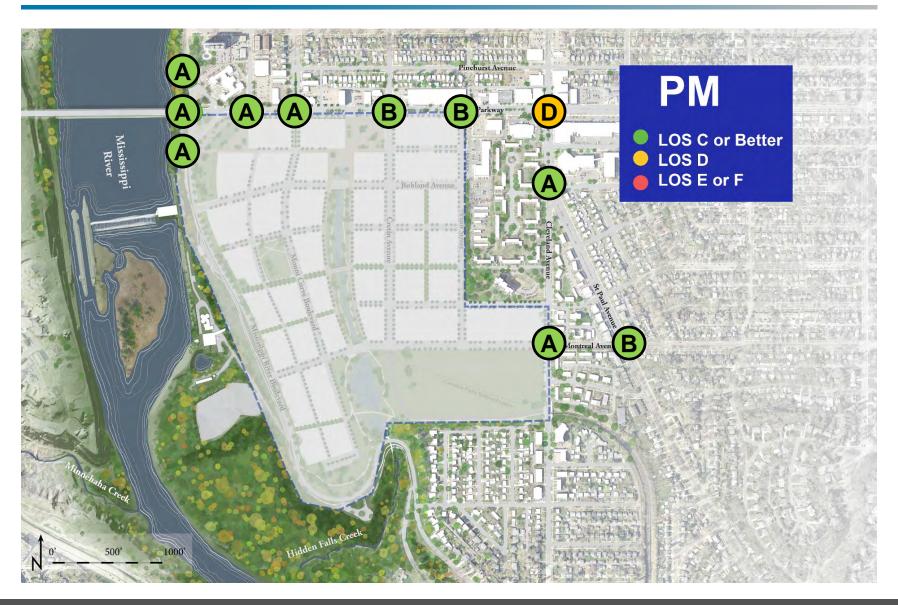
Existing Intersection Level of Service



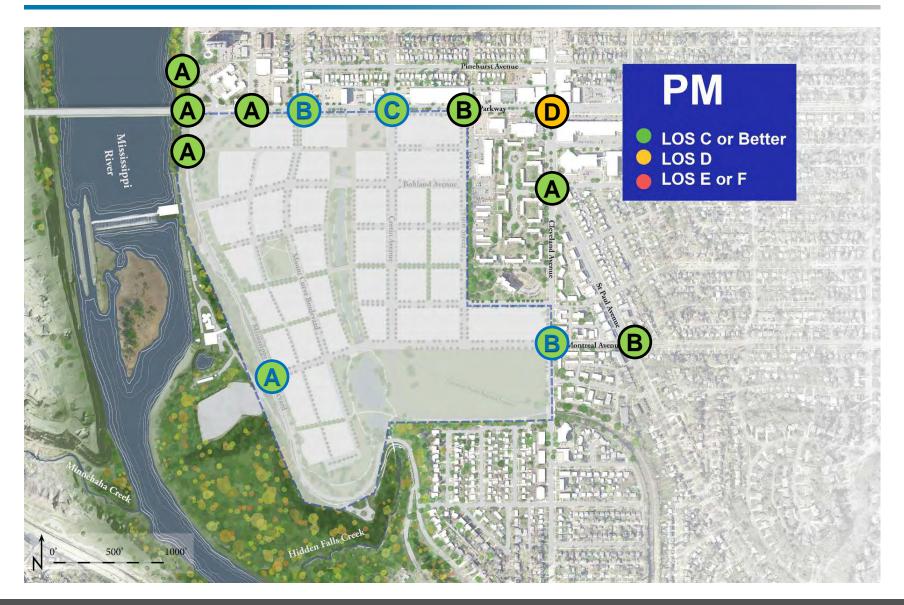
After-Development Intersection Level of Service



Existing Intersection Level of Service



After-Development Intersection Level of Service



Intersection	Improvements			
Ford Parkway/ Mount Curve Boulevard	 Signalize intersection Provide NB/SB Left-turn lanes Extend WB left-turn lane 			
Ford Parkway/ Cretin Avenue	 Add NB left- and right-turn lanes* Extend WB left-turn lane Remove part of the median EB right-turn lane* 			
Cleveland Avenue/ Montreal Avenue	Signalize intersectionAdd west leg			
Montreal Avenue/ St. Paul Avenue	 Signalize intersection Requires removal of part of the median EB/WB left-turn lanes 			
Cleveland Avenue/ St. Paul Avenue	 Optimize signal timing 			

^{*} May Impact **Pedestrian/Bicycle** Environment. Future Discussion Required.

Intersection	Improvements				
Ford Parkway/ Mount Curve Boulevard	 Signalize intersection Provide NB/SB Left-turn lanes Extend WB left-turn lane 				
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Cleveland Avenue/ St. Paul Avenue Optimize signal timing					

^{*} May Impact **Pedestrian/Bicycle** Environment. Future Discussion Required.

Intersection

Improvements

Ford Parkway/
Mount Curve Boulevard

- Signalize intersection
- Provide NB/SB Left-turn lanes
- Extend WB left-turn lane



Intersection

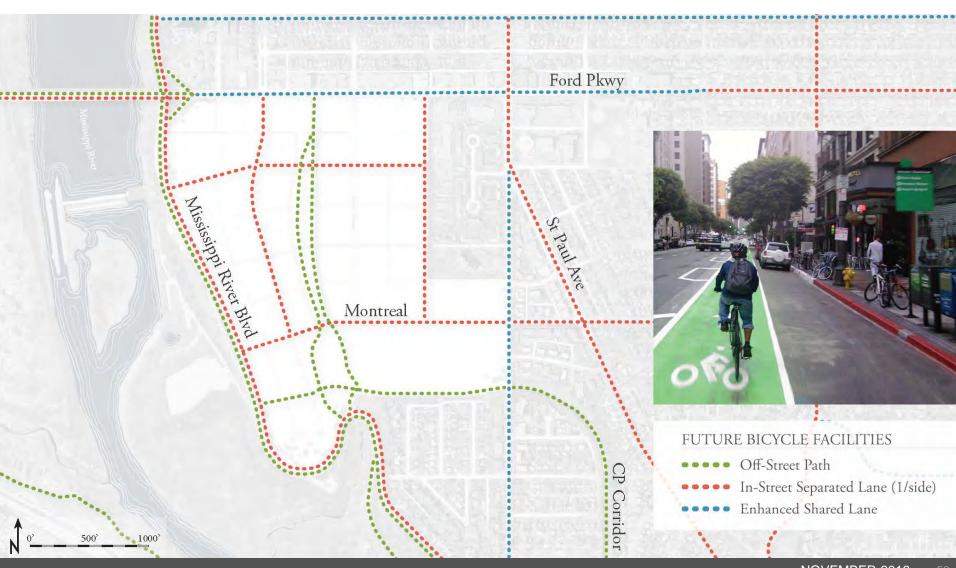
Improvements

Ford Parkway/ Cretin Avenue

- Add NB left- and right-turn lanes*
- Extend WB left-turn lane
- Remove part of the median
- EB right-turn lane*



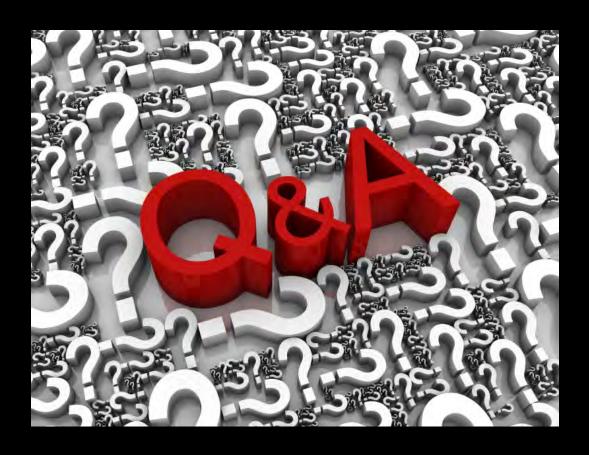
Walking and Biking Network



Bike/Pedestrian Intersection Level of Service

	Bicycle Level of Service		Pedestrian Level of Service	
Intersection	Existing Configuration	With Recommended Improvements	(Continuination	With Recommended Improvements
Ford Parkway/ Mississippi River Boulevard Access Ramps (North and South ramps at Ford Pkwy)	C (55)	C (68)	B (88)	A (98)
Ford Parkway/ Woodlawn Avenue	D (52)	C (58)	C (69)	B (76)
Ford Parkway/Mount Curve Blvd	D (52)	B (75)	C (69)	B (78)
Ford Parkway/Cretin Avenue	D (48)	B (74)	C (68)	B (75)
Ford Parkway/ Finn Avenue	E (30)	C (60)	C (68)	B (81)
Ford Parkway/ Cleveland Avenue	D (49)	C (71)	C (73)	B (83)
Cleveland Avenue/ Saint Paul Avenue	D (50)	C (67)	C (68)	B (79)
Cleveland Avenue/Montreal Avenue	C (55)	B (75)	B (90)	A (94)
Saint Paul Avenue/Montreal Avenue	D (49)	B (79)	C (70)	B (87)
E. 46th Street/46th Avenue S. (Minneapolis)	D (40)	C (60)	C (72)	B (75)
Davern Street/Montreal Avenue	D (53)	B (75)	B (80)	B (89)

Questions and Answers



Topic Tables

- 1. Traffic Study Overview
- 2. Traffic Study Method
- 3. Traffic Study Traffic Counts and Intersections
- 4. Traffic Study Results
- 5. Corridor Sections
- 6. Transportation Network
- 7. Vehicular Network
- 8. Bike-Ped Network
- 9. Parking System



How to engage:

- Circulate among the tables
- Consider the topic at each
- Ask questions or chat with the table facilitator and others at the table
- Provide input, if desired

Future meetings

Ford Zoning, Public Realm and Transportation Meeting Wednesday, November 30 6:30 – 8:00 p.m.
Summit Brewing

Ford Task Force Meetings
Monday, December 5
Monday, December 12
6:30 – 8:30 p.m.
St. Luke Lutheran
1807 Field Ave



Stay Connected



stpaul.gov/21stCenturyCommunity

- Provide input at Open St Paul Ford
- Sign up for E-newsletters & Notifications
- Go to source for information on the project



Facebook.com/cityofsaintpaul



@cityofsaintpaul



Thank You!



Ralph DeNisco

617-279-0932 RDeNisco@nelsonnygaard.com