APPENDIX A » Discovery Workshop Summary

DOWNTOWN BIKE LOOP AND JACKSON STREET RECONSTRUCTION
Briefing Report – Status to Date
June 1, 2015

Toole Design Group (TDG) was hired by the City of Saint Paul (City) in mid-March 2015 to confirm the best routes for the downtown bicycle network, develop initial design concepts for the recommended bicycle network alignments, determine potential connections to Downtown from the broader regional bikeway system, and implement the first phase of the Downtown bicycle network on Jackson Street from Shepard Road to 11th Street. The larger goals of the project are to help enhance the economic vitality of Downtown, improve the prospects for continued economic development, and make Downtown a more attractive place for all users.

In order to jump start the project, a two-week workshop (charrette) process was proposed to help move things forward given the condensed timeline for the project. The week long discovery workshop was held from Monday, May 18th to Thursday, May 21st. A week long design workshop will be held Monday, June 8th to Thursday, June 11th.

Pre-Workshop Engagement

Prior to the workshops, the TDG team engaged with various project committees, including City staff and community members.

Community Advisory Committee (CAC)

A community advisory committee (CAC) was formed and approved by the Mayor's office in early May. The committee consists of 26 individuals who live and/or work Downtown that represent themselves or various businesses and community groups in Saint Paul. The CAC met once prior to the discovery workshop on Thursday, May 14th. During that meeting, the committee participated in a strengths, weaknesses, opportunities, and threats (SWOT) analysis. The main themes of the analysis are listed in priority rank order in Table 1. A full summary of the CAC meeting and SWOT analysis is available upon request.

CAC members were encouraged to attend the discovery workshop at various times throughout the workshop week, as well as distribute information about the workshop and engagement opportunities to their organizations and peers. In addition, some CAC member sat down with the TDG team for one-on-one stakeholder interviews.

Figure 1 - CAC SWOT Analysis

Table 1 - CAC SWOT Themes in Priority Rank Order

Strengths	Weaknesses	Opportunities	Threats
1) The River and Parks	1) Lack of Activity/Retail	1) Retail/Activities	1a) Parking
2) Culture and Arts	2) Street Infrastructure	2a) Residential/Housing	1b) Status Quo
3) Business and Economic Development	3) Civic Concerns	2b) Transportation	2) Public Safety
4) Transportation	4) Topography	3a) Transit	3) Limited Resources
5) The Capital and History	5) Parking Issues	3b) Go Green	4) Development Concerns
6) "Just Right" Size	6) Weather	3c) Bike Loop	5) Inferiority Complex
			6) Equity

Technical Advisory Committee (TAC)

A technical advisory committee (TAC) consisting of 16 City staff personnel from various departments was formed at the outset of the project. The TAC typically meets biweekly to discuss project progress and provide input on design development. The TAC has participated in a SWOT analysis, trail precedence discussion where photos and descriptions of existing protected bikeways were presented for reactions and to stimulate discussion on what the downtown bicycle network should or could look like, and a branding activity to discuss Saint Paul's personality and the experience they would like the Downtown bicycle network to create. The main themes of the SWOT analysis are listed in priority rank order in Table 2. A full summary of the three TAC meetings and SWOT analysis is available upon request.

Table 2 - TAC SWOT Themes in Priority Rank Order

Strengths (Not Prioritized)	Weaknesses	Opportunities	Threats
Multimodal Transportation Network	1) Connections/Continuity in System	1) Economic Development	1) Funding
Physical Characteristics and Attributes	2) Level Vibrancy	2) Streetscape/Connectivity	2) Traffic
Policy/Political Will	3) Right-of-way	3) Infrastructure	3) Utilities
Destinations and Places to Go	4) Technical/Engineering Capacity	4) Green Infrastructure	4) Politics
Community	5) Perceptions/Considerations	5) Safety/Connections	5) Safety
Advocates/Support Groups			
Natural Resources and Open Space			

TAC members were also invited to the discovery workshop engagement opportunities, including a "pin-up" session where the team shared community priorities revealed during the workshop engagement activities, draft Downtown bicycle network evaluation criteria, draft network route recommendations, and design starter ideas. In addition, some TAC members sat down for one-on-one stakeholder interviews with the project team.

Policy Advisory Committee (PAC)

A policy advisory committee (PAC) consisting of 9 City staff department directors was formed at the project outset. The PAC typically meets monthly to discuss the project status and findings. In addition, some PAC members sat down for one-on-one stakeholder interviews with the project team.

Discovery Workshop (May 18th to May 21st)

A discovery workshop was held the week of May 18th through May 21st. The purpose of the workshop was to listen to stakeholders, community members and City staff regarding the history of downtown bikeways, desires, concerns, likes, and dislikes. This information was used to evaluate alignment alternatives for the downtown bicycle network and create starter ideas for what may be possible along the alternative bikeway routes.

Monday, May 18th – Site Visit and Public Workshop

Figure 2 - Downtown Saint Paul Site Visit

The discovery workshop week began with a site tour of the Downtown area and possible alignments identified in the City of Saint Paul Bike Plan. Tour attendees included City project management staff, TAC members, and TDG team members. Characteristics of each alignment were discussed, along with the history and future plans of each corridor.

A facilitated public workshop was held on Monday evening. At the workshop, the public was provided background information about the project, including goals, objectives, scope and schedule, introduced complete streets concept terminology and history, and provided time to participate in a small group breakout session. In the small group sessions, participates had self-facilitated discussions about the Downtown area with guidance from the following questions to jump start the discussions:

1) What should Downtown be like in 100 years (its qualities, attributes, look)?
2) What do you like most about our streets and bike system that you would like to see preserved?
3) What do you dislike most about our streets and bike system that you would like to see changed?
4) What is missing that you would like to see created?

Figure 3 - Small Group Breakout Discussion

Groups were provided roll plot maps of Downtown Saint Paul to write ideas on, as well as sheets to record their discussion. After the small group breakouts, each group shared highlights from their discussion with the large group. Figures 5 and 6 are word clouds from the group facilitated activity showcasing the discussion from the community related to strengths or opportunities, as well as

weaknesses or threats of implementing bikeways in Downtown Saint Paul.

Tuesday, May 19th and Wednesday, May 20th – Stakeholder Interviews

On Tuesday and Wednesday, individual stakeholder interviews were held with community leaders, Downtown business/property owners, cultural institutions, local organizations, City staff, and elected officials. Thirty-one individual or small group stakeholders were interviewed. Table 3 is a list of individuals interviewed. Key findings and themes from community stakeholder discussions are in Table 4. A summary of each individual interview is available upon request.

Figure 4 - Stakeholder Interviews

Stakeholder interviews, advice received from CAC, TAC and PAC members, and the TDG team's bicycle facility design experience informed the TDG team's work during the discovery workshop to define route evaluation criteria, recommend specific streets to serve as the alignments for major Downtown bikeways and streets that merit further consideration for major or minor Downtown bikeways, and bikeway design starter ideas.

Figure 5 - Community Feedback: Strengths and Opportunities

Figure 6 - Community Feedback: Weaknesses and Threats

Table 3 - Stakeholder Interview List

Stakeholder	Representing	Stakeholder	Representing
Scott Beauchamp	Saint Paul Chamber of Commerce	Bruce Beese	City of Saint Paul Public Works
Christine Boulware	Saint Paul Heritage Preservation Commission	Jim Cockarell	Wabasha Street Partners
Mayor Chris Coleman	City of Saint Paul Mayor	Cray Employees Panel	
Amber Dallman	Women on Bikes, Pedal Hub, Active Transportation Coordinator for MN Department of Public Health	Advisory Committee on People with Disabilities	
District 17 – Capitol River Council		Julio Fesser	VP Securian
Pat Hamilton	Science Museum and Director of Global Change Future	Matt Hill	Saint Paul Heritage Preservation Commission and Capitol River Council
Bill Hosko	Hosko Gallery	Bill Huepenbecker	Xcel Energy Center
Jim Ivy	Grand Ave Software	Michael MacRae	Lund's and Byerly's
Roger Meyer	Merriam Park Resident	Rich Pakonen	BOMA and Pak Properties
Brent Peterson	Regions Hospital and CAC	Mary Phelps	Saint Paul Chamber Orchestra and CAC
Matt Rauenhorst	OPUS	Patrick Seeb	Saint Paul Riverfront Corporation
Pat Skinner	Wabasha Action Group	Joe Spartz	BOMA and Downtown Alliance
Paul St. Martin and Brian Vitek	City of Saint Paul Public Works	Russ Stark	City Council President
Jim Stolpestad	Exeter Realty and Downtown Alliance	Bruce Thompson	Ramsey County Director of Property Management and BOMA Director
David Thune and Pat Lindgren	City Councilmember and Aide	Larry Wick	Jackson Street Resident
Mayor's Youth Commission		Carol Hunn-Gregory	Keys Café

Table 4 - Key Findings from Stakeholders

Main Topic	Key Finding
Bike Facilities	Bikeway connections both within and to/from Downtown are desired
	Intersection safety is very important for all modes (bicycles, pedestrians, motor-vehicles, transit)
	Install bikeway demonstration projects to evaluate designs
	Provide end-of-trip facilities (bicycle parking, fix it stations, showers)
Economic Vitality and Development	Bike facilities retain and attract talented workers Bike facilities can help reactivate the street
On-street Parking	Preserve on-street parking as much as possible
	Replace 4+ hour parking with shorter-term parking (1-2 hours)
Wayfinding	Create wayfinding – signs, maps, route identity and branding
Equity	Improve bike facilities to/from downtown jobs, housing, and cultural venues

Thursday, May 21st – Public Open House

Thursday, May 21st was spent finalizing exhibits and information from the pin-up to share with the community at an evening public open house. Information presented at the open house is provided in the Outcomes section of this briefing. The information shared at the open house represents the TDG team's preliminary route alignment recommendations and design starter ideas. At the event, community members were able to interact with staff and exhibits to share what they would like to see prioritized as driving factors for evaluating alignment alternatives, their reaction to the preliminary Downtown bicycle network, and the pros and cons related to the street section design starter ideas.

Comment Box

In addition to feedback received at the various open house stations, the community had an opportunity to provide written comments via comment cards. Documentation of all comments are available upon request. Some key trends of comments included:

- Prioritize connections in and out of Downtown from surrounding neighborhoods
- In addition to the loop, a network of bikeways would improve connectivity throughout Downtown
- Safety is important, especially at intersection crossings
- Provide end-of-trip facilities (especially bicycle parking)
- Consider travel lane removal instead of parking removal
- Consider how the facility is utilized in the winter months
- Consider how businesses may benefit or be negatively impacted from an off-street trail

Online Survey

Following the workshop, TDG created an online survey to gather additional community input on the materials and starter ideas presented at the discovery workshop. The results of that survey are incorporated into the findings of common themes and evaluations of starter ideas discussed in the following Outcomes section of this briefing. Overall 277 surveys were fully completed with 297 partial completions. The full survey results are available upon request.

Outcomes

Based on feedback from stakeholders, the community, pre-workshop engagement, City staff, and TDG team knowledge, the TDG team created starter ideas for bikeway alignments and connections for Downtown Saint Paul.

Route Evaluation Matrix

The City of Saint Paul Bike Plan identified corridors for further study to create a downtown bicycle network with a two-way, off-street urban trail. The TDG team used the study evaluation map from the Bike Plan as a starting point, and built upon those alternatives based upon community feedback. The alignments considered are discussed under the Network Idea Alignment Map section.

Route evaluation criteria were developed based on feedback from the community and stakeholders, as well as the TDG team's expertise gained from planning and designing bikeways in different urban areas across the country. A list of evaluation criteria was provided at the public open house for feedback and for the purposes of allowing participants to record their preferences for the most important criteria.

Route evaluation criteria, listed in rank order based on community preferences, include:

NEIGHBORHOOD/TRAIL CONNECTIVITY - Provides connections to regional trails and neighborhoods outside of downtown.

MICRO/CULTURAL CONNECTIVITY - Provides connections to parks, businesses, cultural resources such as museums, theaters, libraries, etc., and destinations throughout downtown.

LEVEL OF COMFORT - The comfort and ease of use felt by people who use the route. Designs that accommodates children and inexperienced or concerned bicycle riders.

LEGIBILITY & WAYFINDING - The route is straight, easy to find, and easy to navigate. Provides appropriate wayfinding signs and branding.

TRANSIT CONFLICTS - Bikeway route could conflict with transit loading and unloading.

PLACEMAKING OPPORTUNITES - Opportunities to provide new public spaces potentially with grass, trees, or other vegetation

ECONOMIC DEVELOPMENT POTENTIAL - Routes located along existing businesses and areas available for redevelopment.

PRESERVE ON-STREET PARKING - Maintain as much on-street parking as possible, maximize the number and presence of on-street parking spaces.

CONTROL OF RIGHT OF WAY – The City of Saint Paul owns the right of way needed to construct a bikeway.

HISTORIC SITES & REQUIREMENTS - Proximity to historic sites, districts, and impacts on those districts from the routes.

TRAFFIC VOLUMES – Existing traffic volumes along the route.

This criteria was used to evaluate various alignments for major and minor bikeway routes within Downtown Saint Paul and the results are shown in Table 5. Most criteria are given a rank of good, fair, or poor for each street. Based on the results of community engagement, the criteria that are more important are on the top of the table and lower priorities are on the bottom of the table.

Based on this evaluation, the TDG team recommends the following streets be considered major bikeways for the Downtown bicycle network that should move forward into conceptual design:

- Saint Peter Street
- 9th/10th Street combination
- Kellogg Boulevard
- 4th Street

Please note that a “Market District” design concept for 4th Street emerged during the discovery workshop based on stakeholder interviews. In addition to Kellogg Boulevard having a two-way urban trail in the future, the idea of a “4th Street Market District” is to convert 4th Street to a shared street open only to pedestrians, bicyclists, service, and emergency vehicles. The Downtown Station Area Plan identifies 4th Street as an artway corridor, with an extended Farmers and Artisans Market that could spill off sidewalks and into the street, while other plans identify high quality streetscape for the street.

Table 5 - Saint Paul Downtown Bikeways Evaluation Matrix

EVALUATION CRITERIA	MAJOR ROUTES CONSIDERED							
	SAINT PETER STREET	WABASHA STREET	10TH STREET	11TH STREET	9TH STREET/EXCHANGE STREET	KELLOGG BOULEVARD	4TH STREET	5TH STREET
NEIGHBORHOOD/TRAIL CONNECTIVITY Provides connections to regional trails and neighborhoods outside of downtown.	YES (N)	YES	YES (W)	NO	YES	YES	YES	YES (W)
NOTES	N to John Ireland Blvd	N to John Ireland blvd, S to Mississippi River	W to Summit Ave		W to Summit Ave, E to Pine St	W to Summit Ave, E to East Saint Paul	E to Prince Street, which connects into Swede Hollow then up to Gateway/Bruce Vento/regional trails	W to Summit Ave
MICRO/CULTURAL CONNECTIVITY Provides connections to parks, businesses, cultural resources such as museums, theaters, libraries, etc., and destinations throughout downtown.	YES	YES	YES	NO	YES	YES	LIMITED	YES
NOTES	Key Downtown restaurants, Landmark Plaza	Intentional historic visual connection from Capitol to Mississippi River, local stores, MN Children's Museum	Pedro Park, Lund's, MN History Center		Fitzgerald Theater, future shared street plan (Fitzgerald Park Precinct Plan)	Saint Paul RiverCentre, Xcel Energy Center, Science Museum of MN, George Latimer Central Library, Union Depot	Rice Park, future art corridor (Downtown Station Area Plan/Bike Walk Central Corridor Action Plan)	Landmark Plaza, Rice Park, Ordway Theater, Xcel Energy Center, restaurants
LEVEL OF COMFORT The comfort and ease of use felt by people who use the route. Designs that accommodates children and inexperienced or concerned bicycle riders.	HIGH	MEDIUM	HIGH	LOW	HIGH	MEDIUM	HIGH	MEDIUM
LEGIBILITY/WAYFINDING The route is straight, easy to find, and easy to navigate. Provides appropriate wayfinding signs and branding.	HIGH	HIGH	MEDIUM	HIGH	LOW	HIGH	HIGH	MEDIUM
TRANSIT CONFLICTS Bikeway route could conflict with transit loading and unloading.	NO	YES (BUS)	NO	NO	NO	NO	NO	YES (BUS)
PLACEMAKING OPPORTUNITIES Opportunities to provide new public spaces potentially with grass, trees, or other vegetation.	YES	YES	YES	ON DOT PROPERTY ONLY	YES	YES	YES	MAYBE
ECONOMIC DEVELOPMENT POTENTIAL Routes located along existing businesses and areas available for redevelopment.	EXISTING	EXISTING	EXISTING	LONG-TERM	SHORT-TERM	SHORT-TERM	SHORT-TERM	SHORT-TERM
PRESERVE ON-STREET PARKING Maintain as much on-street parking as possible, maximize the number and presence of on-street parking spaces.	1 SIDE	1 SIDE	1 SIDE	LIMITED	1 SIDE	YES	N/A|TBD	YES
CONTROL OF RIGHT OF WAY The City of Saint Paul owns the right of way needed to construct a bikeway.	YES	YES	YES (HISTORY CENTER)	YES (S SIDE)	NO	YES	YES	YES
HISTORIC SITES & REQUIREMENTS Proximity to historic sites, districts, and impacts on those districts from the routes.	SITES	DISTRICT (SE) & SITES	NONE	DISTRICT (N)	DISTRICT (E)	DISTRICT (E) & SITES	DISTRICT (E) & SITES	DISTRICT (E)
TRAFFIC VOLUMES* Existing traffic volumes along the route.	5000-5100	2400-14400	2900-5900	6700-12500	2000**	16200-22400	5200-6200	8600-9400

LEGEND

GOOD	GOOD	GOOD
FAIR	FAIR	FAIR
POOR	POOR	POOR

S = SOUTH
N = NORTH
E = EAST
W = WEST
BUS = BUS ROUTE
RR COORD = RAILROAD COORDINATION MAY BE NEEDED
EXISTING = EXISTING RETAIL
SHORT-TERM = VACANT BUILDINGS, STORE FRONTS OR LOTS ALONG ROUTE
LONG-TERM = EXISTING BUILDINGS WOULD NEED REPLACEMENT OR RETROFITTING FOR RETAIL
*WAS NOT PRESENTED AT WORKSHOP OR SURVEY.
*ACTUAL COUNTS RECORDED DURING LANE CLOSURES ON KELLOGG BOULEVARD AND WABASHA STREET BRIDGE
** BASED ON GOOGLE ADT LISTINGS

Preliminary Downtown Bikeway Network

A common theme raised by the community was a desire for a bicycle network that provided connects to and within Downtown. The TDG team focused on major routes for the location of a two-way, off-street urban trail, but also identified minor routes within Downtown for bicycle facilities, such as bike lanes or shared lane markings (sharrows). This would allow for a more complete network of bikeways within Downtown Saint Paul to connect to a greater number of local and regional destinations.

Utilizing the evaluation criteria identified through the community engagement process, certain alignments represent greater opportunities to meet the criteria than others. Overall public reaction to the preliminary major and minor routes (both at the workshop and through the community survey) and the TDG team's evaluation of the major bikeway alternatives support the preliminary Downtown Bikeway Network recommendations that emerged through the discovery workshop process.

Further analysis regarding the placement and the design of the facility with each major bikeway route is needed. Therefore the following major bikeway routes are recommended to move forward into the conceptual engineering phase of the project:

- Major Bikeway Routes
    - Saint Peter Street
    - 9th/10th Street combination
    - Kellogg Boulevard
    - 4th Street

It is noted that if fatal flaws emerge during the design phase, then an alternative major bikeway route will be selected to enter the design phase to replace the initial recommended route.

Starter Cross-sections

In order to start understanding the design opportunities and challenges for the major bikeway routes being analyzed, starter cross-sections were created to show possible roadway configurations within the existing right-of-way. In order to accommodate a two-way, off-street urban trail, space will need to be reallocated from an existing use (e.g., travel lane or parking lane). Based on community engagement and stakeholder interviews, on-street parking is clearly a desired amenity Downtown. Therefore, the TDG team recommends that decisions prioritize reallocating space to accommodate an urban trail in the following order:

1) Drop a travel lane
    a. May depend on traffic volumes
    b. May depend on emergency services
2) Restrict parking during peak traffic hours
    a. May depend on available width
    b. May depend on existing transit routes
3) Conversion from a two-way street to a one-way street
    a. May depend on impacts to roadway network
4) Eliminate on-street parking
    a. Preserve as much on-street parking as possible

Figures 9 through 13 demonstrate the starter ideas for the major bikeway routes analyzed during the discovery workshop. In addition to showing possible roadway space reallocations, the pros and cons of each alignment are presented.

Further Review

During the conceptual engineering phase, additional analysis will be completed to confirm the feasibility of the major bikeway routes, including:

1) Traffic analysis (underway)
2) Intersection design (design workshop – starter ideas)
3) Bikeway transitions (design workshop – starter ideas)
4) Structural considerations (on-going)
5) Emergency vehicle considerations (on-going)
6) State aid requirements and variances (2015 legislation)

Mood Boards

In addition to bikeway planning and design ideas, the TDG team presented mood boards for the community to review and reflect upon to be utilized in the Downtown bicycle network brand identity and wayfinding. Three boards were presented based on conversations with the TAC on the personality and experience of Downtown Saint Paul. Moods presented included charming, modern, and grounded and are represented in Figure 14. A full summary of comments is available upon request. General community reflections included:

- Grounded is clean, legible, and has character while providing a good balance of modern and traditional
- Modern is universally appealing and more forward thinking, while conveying a sense of vitality, but there is a concern it may not fit with the existing character of Saint Paul
- Charming is too stuck in “classic Saint Paul” and reinforces the City being behind the times

Based on the overall feedback, the TDG team will present information for reflection and further comment during the design workshop that combines modern with grounded for use in branding, wayfinding, and materials for the major routes in the Downtown bicycle network.

Next Steps - Design Workshop (June 8th to June 11th)

As a follow up to the discovery workshop, a design workshop will be held from Monday, June 8th to Thursday, June 11th at Metro Square in Downtown Saint Paul. The design workshop will be primarily team work between the consultants and city staff, some additional stakeholder interviews, open studio time for the public and CAC to participate, and a public workshop event to widely share the results of the design workshop and seek input.

The TDG team will focus on the following topics during the design workshop:

- Full concept design alternatives for a protected bikeway on Jackson Street from Shepard Road to 11th Street
- Look and feel (materials, landscaping, and branding) for Jackson Street and the major routes in the Downtown bicycle network
- Further assessment, including preliminary concepts and cross-sections, for the major routes in the Downtown bicycle network:
    - Saint Peter Street
    - 9th/10th Street combination
    - Kellogg Boulevard
    - 4th Street

The timeframe for public events, CAC and TAC engagement during this workshop are as follows:

- TAC Topical Focus Groups: Monday, June 8 and Tuesday, June 9
- Open Studio for CAC and General Public : Tuesday, June 9th from 4-6pm
- Open Studio for CAC and General Public: Wednesday, June 10th from 11am-1pm
- TAC Pin-up Session: Wednesday, June 10th from 3-5pm
- Public Workshop: Thursday, June 11th from 5-7pm

In addition to the public events during the workshop, the TDG team will have topical focus groups with TAC members to obtain input and feedback on design development. Topics will include, and are not limited to, traffic, cultural/historic resources, public art, stormwater, and urban design/landscape architecture.

Following the workshop, an online survey will be developed and made available to the public for feedback on designs and exhibits presented at the public workshop on Thursday, June 11th. The survey will be open for approximately two weeks following the workshop.

Outside of the workshop, two additional public open houses will be held in late summer/fall for the Downtown bicycle network and Jackson Street reconstruction. Stakeholder outreach will also be ongoing, particularly with Jackson Street property owners and businesses for construction phasing. Other public outreach will be scheduled as appropriate. The TAC, CAC, and PAC will also continue to meet bimonthly and monthly to discuss the evolving design progress on the project.

The TDG team would appreciate PAC support for moving forward with concept design and further analysis focusing on the recommended major routes and Jackson Street from Shepard Road to 11th Street. The City plans to construct Jackson Street in 2016.

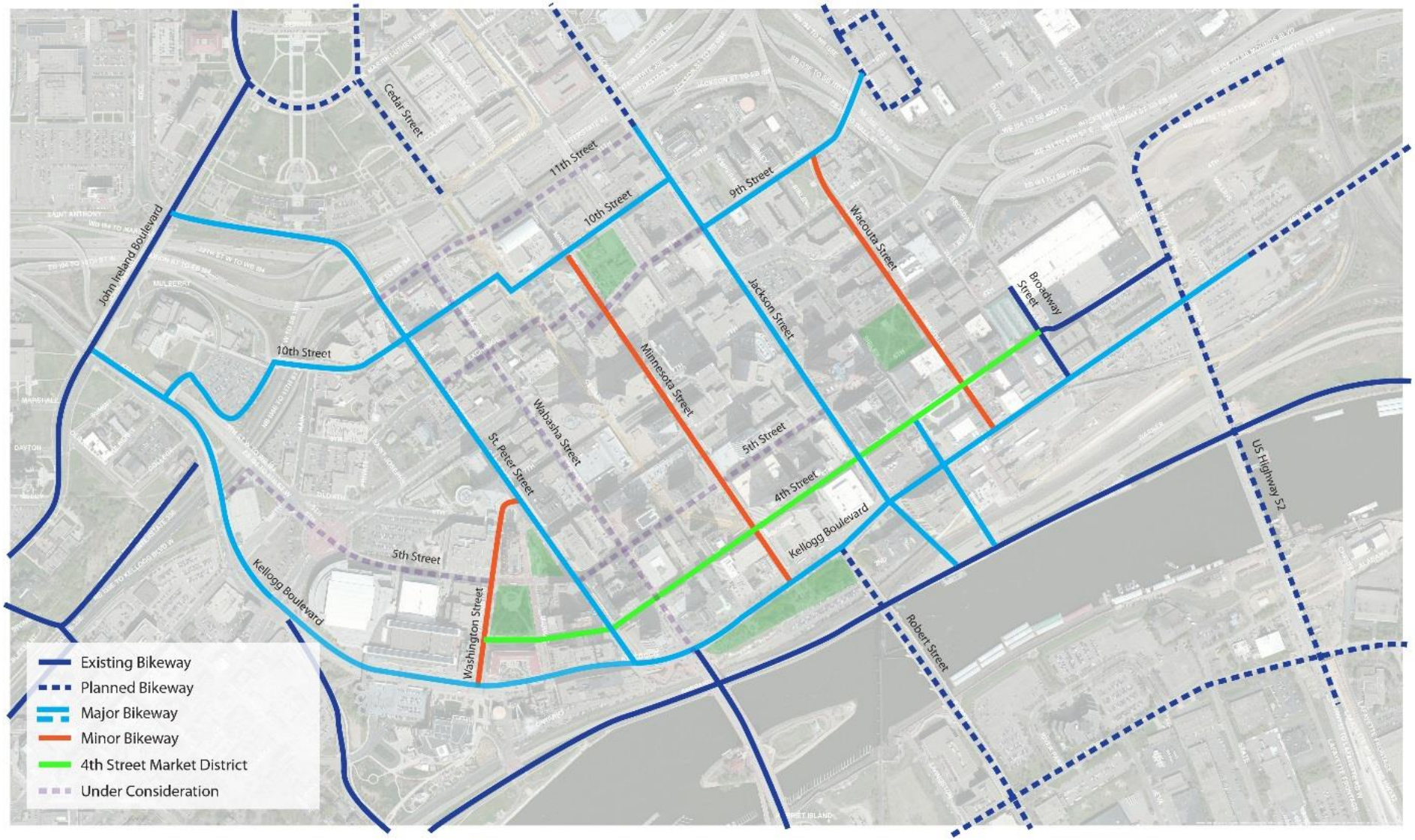
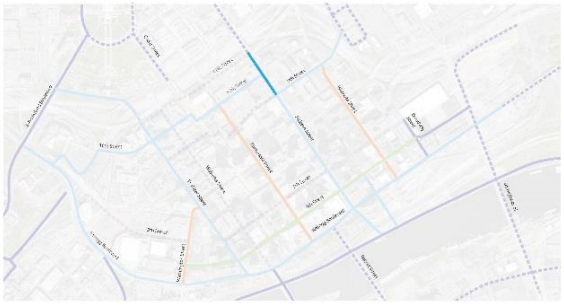


Figure 7 – Preliminary Saint Paul Downtown Bikeway Network

JACKSON STREET - SEGMENT 1



TREATMENTS

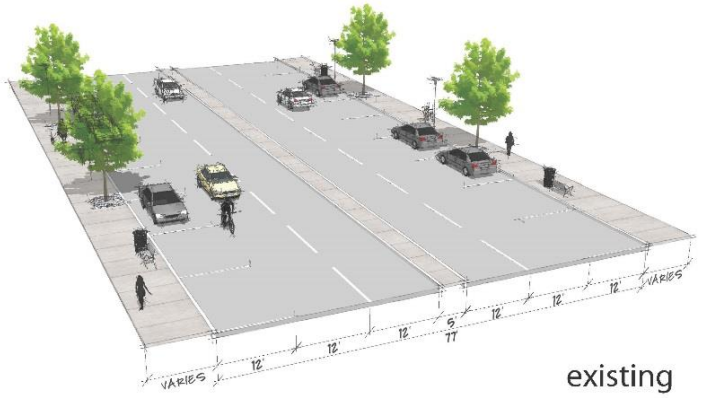
» Remove travel lanes
» Move curb
» Remove median

PROS

» Connection to Capitol Area and river-front destinations
» Retain on-street parking
» Possibility of new public spaces

CONS

» Loss of travel lane



existing

starter ideas

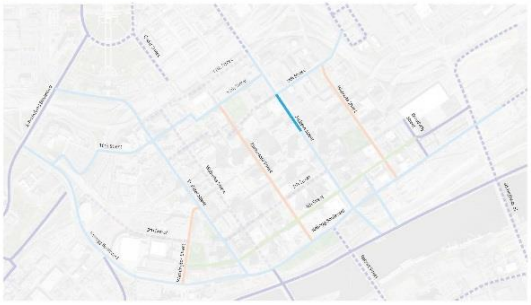
starter ideas

Saint Paul Bicycle Network

ToolDesignGroup

Figure 8 - Jackson Street Segment 1 Starter Cross-sections

JACKSON STREET - SEGMENT 2



TREATMENTS

» Remove travel lanes
» Move curb

PROS

» Connection to Capitol Area and river-front destinations
» Retain on-street parking
» Possibility of new public spaces

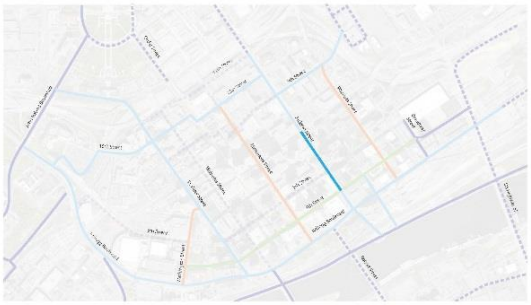
CONS

» Loss of travel lane

existing

starter idea

JACKSON STREET - SEGMENT 3



TREATMENTS

» Remove travel lanes
» Move curb
» Remove median

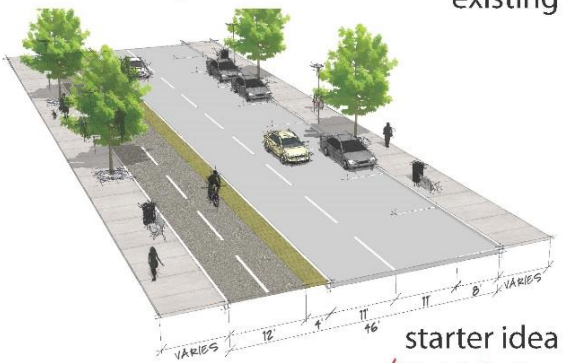
PROS

» Connection to Capitol Area and river-front destinations
» Retain on-street parking on one side of street
» Possibility of new public spaces
» Removes peak-hour restriction on parking on one side of street

CONS

» Loss of travel lane
» Loss of on-street parking on one side of street

existing



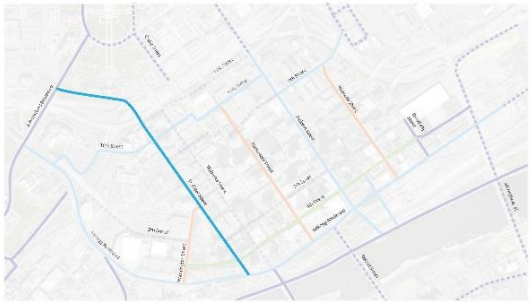
starter idea

Saint Paul Bicycle Network

TooleDesignGroup

Figure 9 - Jackson Street Segments 2 and 3 Starter Cross-sections

ST. PETER STREET



TREATMENTS

» Remove parking on one side

» Move curb

PROS

» Relatively low average daily traffic (4,000)

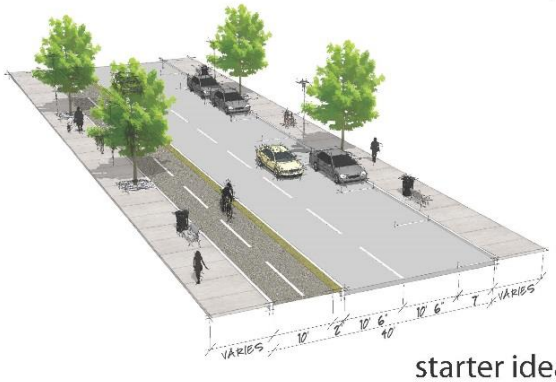
» Connection to Capitol Area, Rice Park, George Latimer Central Library and other cultural destinations

» Restaurants and nightlife

CONS

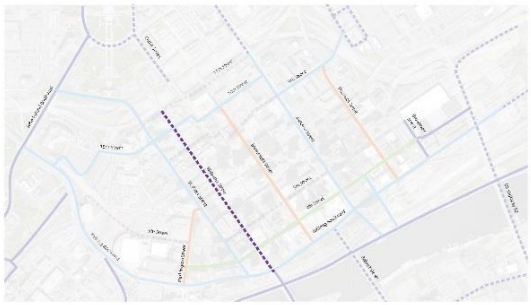
» Removal of parking on one side

existing



starter idea

WABASHA STREET



TREATMENTS

» Remove parking on one side

» Move curb

PROS

» Connections to Capitol Area, Church of Scientology, Children's Museum, and other cultural destinations

» Vibrant daytime business corridor

» Wabasha Bridge Connection

» Number of travel lanes remain the same

CONS

» Relatively high average daily traffic (10,000)

» Removal of parking on one side

existing

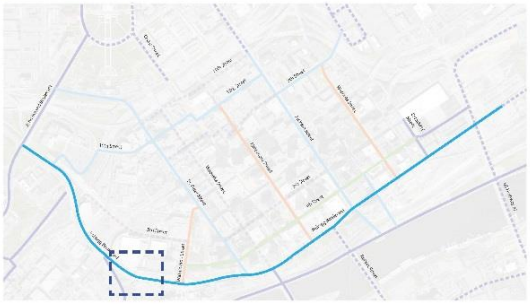
starter idea

Saint Paul Bicycle Network

TooleDesignGroup

Figure 10 - St. Peter and Wabasha Street Starter Cross-sections

KELLOGG BOULEVARD



TREATMENTS

» Reconfigure intersections

» Move curb

PROS

» Connections to Summit Avenue, Minnesota History Center, XCEL Energy Center, Science Museum of Minnesota, future river balcony, river trails and CHS field

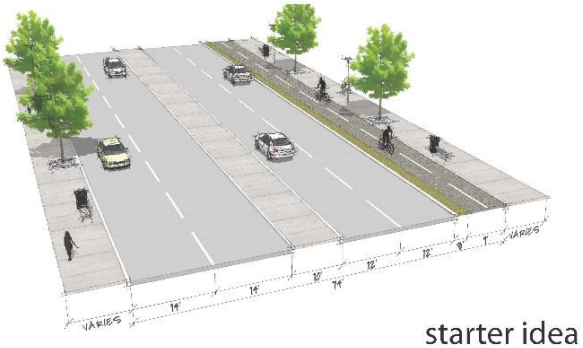
» No on-street parking affected

CONS

» Loss of travel lane

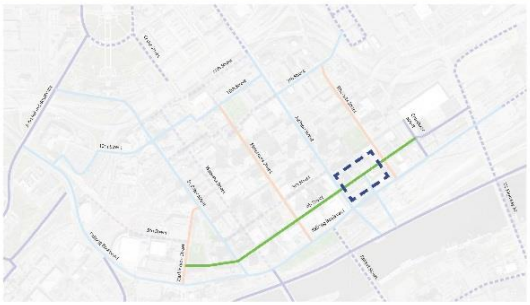
» Partially built on bridges (weight capacity of bridges)

existing



starter idea

4TH STREET MARKET DISTRICT



TREATMENTS

» Convert travel lane to shared bicycle / commercial vehicle space

» Flush street with valley gutter for drainage

» Open to pedestrians, bicyclists, and service and emergency vehicle access on current one-way segement

PROS

» Connections to XCEL Energy Center, Rice Park, and CHS field

» Relatively low average daily traffic (2,000)

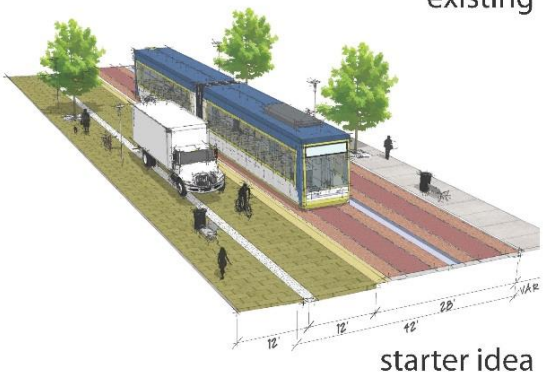
» Maintains access for commercial and emergency vehicles

CONS

» Removal of passenger vehicle lane along Green Line

» Bikes occasionally share space with large vehicles

existing



starter idea

Saint Paul Bicycle Network

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Figure 11 - Kellogg Boulevard and 4th Street Starter Cross-sections

9TH STREET

TREATMENTS

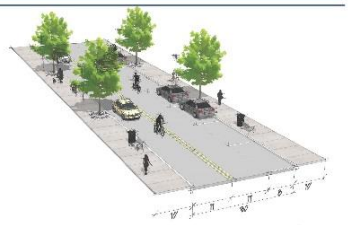
» Remove parking
» Explore crossing Cedar Sreet
» Route shared with Exchange Street

PROS

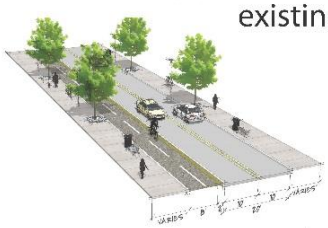
» Connections to St. Joseph's Hospital, Wacouta Commons, and eastern destinations via the 9th Street Bridge over I-94
» Relatively low average daily traffic (2,000 to 3,000)

CONS

» Challenging connection across Cedar Street
» Zig-zagging route



existing



starter idea

10TH STREET

TREATMENTS

» Move curb
» Remove on-street parking on one side

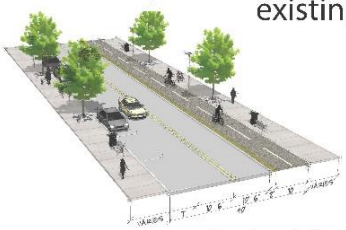
PROS

» Connections to History Center, St. Joseph's Hospital, and Pedro Park
» Access to vibrant businesses

CONS

» Challenging connection across Cedar Street
» Zig-zagging route

existing



starter ideas

11TH STREET

TREATMENTS

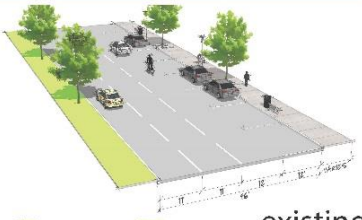
» Remove travel lane
» Move curb

PROS

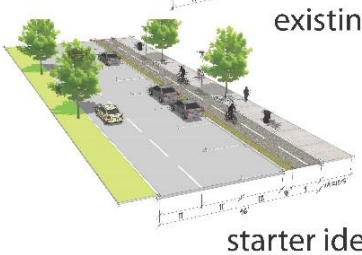
» Parallel to existing green space along I-35E
» Maintain on-street parking in some locations

CONS

» Relatively high volumes (16,000)
» Traffic noise from I-35E
» Interstate on/off ramps at both ends
» Removes on-street parking in some locations



existing



starter idea

Saint Paul Bicycle Network

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Figure 12 - 9th, 10th, and 11th Street Starter Cross-sections

Figure 13 - Mood Boards