



**CITY OF SAINT PAUL**  
*Christopher B. Coleman, Mayor*

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TO: Transportation Committee

FROM: Anton Jerve, Senior City Planner

DATE: March 11, 2016

RE: **Street Design Manual and Complete Streets Action Plan**

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The City of Saint Paul has embarked on the process of adopting a Street Design Manual to guide the design and design process for all future street construction projects. To guide this endeavor, we have affirmatively decided to use Complete Streets principles to organize the Street Design Manual and its implementation. After years of staff and consultant work, the Street Design Manual is ready to consider for adoption. Staff received extensive comments from the Saint Paul Bike Coalition when the Draft Street Design Manual was initially released. Many of the comments resulted in minor edits to the manual.

Additionally, a Complete Streets Action Plan is presented for consideration as a tool to aide in implementation.

The following report describes the draft Street Design Manual, explains the emphasis on Complete Streets, reviews pilot workshops that were used to inform the Complete Streets Action Plan, describes the Complete Streets Action Plan, analyzes Comprehensive Plan conformance, and presents a recommendation for consideration.

**STREET DESIGN MANUAL**

The draft Street Design Manual was created over the past five years with ongoing input from Transportation Committee and several community pilot projects, described below. The lead consultant guiding the development of the project was Toole Design Group. The Manual:

- Establishes the central Street Design Manual for all City departments, as well as community stakeholders.
- Explains how projects proposed at the neighborhood level fit into citywide or regional multimodal networks.
- Illustrates various street improvements and explains how they will affect and benefit multiple transportation modes and users.
- Provides examples of what a multimodal project will look like once it is complete.

The Street Design Manual is based largely on Complete Streets principles.

## COMPLETE STREETS

Complete Streets is a movement broader than our city that reorients street design to consideration of context and needs of all users, rather than the traditional focus exclusively on traffic volume and moving cars efficiently. As defined by the State of Minnesota:

"Complete streets" is the planning, scoping, design, implementation, operation, and maintenance of roads in order to reasonably address the safety and accessibility needs of users of all ages and abilities. Complete streets considers the needs of motorists, pedestrians, transit users and vehicles, bicyclists, and commercial and emergency vehicles moving along and across roads, intersections, and crossings in a manner that is sensitive to the local context and recognizes that the needs vary in urban, suburban, and rural settings.

The City of Saint Paul recognizes the importance of this broader framework for considering street design. The streets of Saint Paul are the public "face" of the city. While many people recognize parks as public space, most people spend more time on streets than in parks. Streets compose about 24 percent of Saint Paul and are a major component of the public realm; as such, they have a major effect on how the city functions as well as how people feel about the city.

Streets have been rebuilt many times through the city's history to better accommodate the changing needs of neighborhoods and businesses. The expectations for the right-of-way are dynamic - what was considered cutting-edge design 50 years ago may not be adequate by today's standards. Though the demands on streets are continually changing, streets projects are typically 10- to 60-year investments. This makes it ever more important that we "get it right" in the design process. That means living up to the goals of our adopted "complete streets" policies, building flexibility in our design process to respond to change, and defining our best practices to ensure we continue to build on existing knowledge.

Moving into the 21<sup>st</sup> century, as the Mayor states in his introduction to the draft Street Design Manual:

*Today we are asking [streets] to do even more. As a community concerned about our impact on the global environment, we are asking our streets to help us expand public transit, treat stormwater, and extend the city's tree canopy. As a community concerned about improving public health, we are asking our streets to be safe and attractive places for people of all ages to walk and bike. As a central city challenged to accommodate a greater share of the region's population, we are asking our streets to serve as gathering places for a more densely settled community.*

These new demands are further highlighted with the following ongoing trends:

- Variable energy costs due to an unstable supply of oil worldwide lead to an increased number of people using transit and moving to urban areas where they can reduce automobile use.
- According to state projections the population over age 65 will increase 125 percent between 2005 and 2035. (<http://mn.gov/admin/demography/data-by-topic/population-data/our-projections/>) Ensuring there are transportation choices and safe streets for this group is vital to the livability of the city.
- Returning to the "neighborhood school" model for elementary schools in Saint Paul will increase the number of students walking to school.
- Nationally, due to limited funding sources, infrastructure funding is being routed to maintain existing roads and bridges rather than to building new projects.
- Despite growth in population, vehicle miles traveled have remained relatively flat since 2004. ([http://www.dot.state.mn.us/traffic/data/reports/traffic%20volume/2014\\_VMT\\_Report.pdf](http://www.dot.state.mn.us/traffic/data/reports/traffic%20volume/2014_VMT_Report.pdf))

- Developments in technology, including smart phones and Big Data, allow new opportunities for analysis and real-time information, and have changed expectations for communication.

In 2009, the City Council passed a Complete Streets resolution (09-213) that recognizes that “livability includes the safe movement of people and goods along all public rights-of-way” and supports the formal incorporation of Complete Streets principles into City practice.

## **PILOT WORKSHOPS**

After completing a preliminary draft of the Street Design Manual, City staff used a series of pilot workshops to test its potential implementation and inform the Complete Streets Action Plan. The following subsections review how the pilot workshops were selected, describe the pilot workshop events, and present street design process changes for inclusion in the Complete Streets Action Plan.

### Pilot Workshop Selection

An analysis of the street infrastructure was conducted to examine the city network, and to identify locations to conduct pilot workshops (described in Part III). The pilot workshops used a draft of the Street Design Manual to apply Complete Street principles to specific streets, intersections and/or neighborhoods. Details of the pilot street design workshops are detailed in Part III.

The mapping analysis used geographic information system (GIS) data to give all streets in Saint Paul a general ranking - relative to other streets in the city - for safety and multimodal access. The process for creating these maps is described below and in Appendix A. This analysis focused on existing data to identify gaps in data for future efforts of this kind. Both maps combined several characteristics of each street to create a rating, and each street segment was color coded to coincide with that rating. The characteristics for each map are described below.

### Street Safety Evaluation Map

The Safety Map, Figure 1, represents the relative safety of each street within the city of Saint Paul. A weighted overlay analysis was performed with greater weights applied to the Annual Average Daily Traffic (AADT), speed limit, and road width layers.

- *AADT* – AADT data were obtained from MNDOT. The greater the daily traffic flow, the more dangerous the street. Unfortunately, AADT data was not available for every street segment; scores were applied only to the streets for which data were available.
- *Speed Limit* – Studies have shown that collisions involving pedestrians/bicyclists and vehicles traveling faster than 30mph are significantly more likely to result in death. Therefore, the faster the speed limit, the more dangerous the street.
- *Road Width* – Road width was deemed to be the third most important factor in terms of safety. As the road width increases, so does the amount of time it takes pedestrians to cross.
- *Collisions with Bikes/Pedestrians* – Crash data from 2007 through 2011 were compiled from police reports. A kernel density (an area based on number of units) analysis was performed using a search radius distance of 2500 ft. Due to the relatively small sample size of 110 incidents spread across the majority of Saint Paul, the kernel density values are quite small. Five classes were used and reclassified with values of 1 to 5, with higher density values receiving a lower score.
- *Pavement Condition Index (PCI)* – numerical rating of the pavement condition that ranges from 0 to 100, with 0 being the worst possible condition and 100 being the best possible condition. The PCI provides a measure of the present condition of the pavement based on the distress

observed on the surface of the pavement, which also indicates the structural integrity and surface operational condition (localized roughness and safety).

- *Missing Sidewalks* – While most of the streets include sidewalks on both sides, a few are missing sidewalks on either one side or both sides.
- *Bus Routes & Signalized Intersections* – This variable rates streets based on the accessibility to bus stops. People are less likely to jaywalk in order to get to a bus stop if they are close to a signalized intersection. Thus, ¼- and ½-mile buffers were generated around all traffic signals located along a bus route. Streets within ¼ mile were given high score, while those located outside of the ½ mile buffer were given a low score.

### Transportation Assessment Map

Another overlay analysis, Figure 2, was generated that focused on trying to quantify multi-modal access. This map included:

- *Bus Stops* – Streets located within ¼ mile of a bus stop were given a high score, while those located beyond a ¼ mile were given a low score.
- *Light Rail Transit (LRT)* – accessibility to LRT stations. A multiple-ring buffer was created around LRT stations at ¼ mile increments up to 1 mile.
- *T2 - T4 Blocks Over 400 ft* – Blocks greater than 400 ft limit accessibility and route options. Streets located within T2, T3, T3M, and T4 zoned areas with blocks greater than 400ft were given a low score, while all other streets were given a high score. A street either met the criterion (Yes) or did not (No).
- *Missing Sidewalks* – While most of the streets include sidewalks on both sides, a few are missing sidewalks on either one side or both sides.
- *Tree Canopy* – Tree canopy coverage is a favorable amenity for pedestrians and bicyclists. Therefore, street segments with canopy coverage received a high score, while all others received a low score. Street segments either had tree canopy (Yes) or not (No).
- *Bikeway Coverage* – A multiple-ring buffer was generated around streets within a ¼ mile of a bikeway. Streets within ¼ mile received high scores, while all others received a low score.
- *Grand Round Gaps* – There is a negative influence on the score of a street that is considered to be a “gap” in the Grand Round scenic byway. A “gap” is defined as any part of the Grand Round that does not have an off-street trail for bikes and pedestrians. These gaps received a negative score because they force bicycles to mix with street traffic. This is the only variable in which a negative score was applied. This variable was only assigned to the street segments that make up the Grand Round.

These two maps were used as two of five ranking factors for selecting pilot street design workshops. Seven projects were selected for pilot workshops. Table 1 below summarizes the final ranking factors for the workshops. Additionally, the table summarizes other important project selection criteria, including geographic equity across the city; different street design challenges; and networks connectivity. The projects were also screened using the street network analyses to identify projects with higher safety or service priorities.

### Findings

The Street Safety Assessment Map generally assigned the lowest scores to areas with higher auto traffic, especially those without sidewalks on both sides of the street, were rated poorest, while the relatively narrow neighborhood streets with sidewalks and low auto traffic counts were rated best. General



consensus among staff was that the assessment “made sense” given the knowledge of the street network, crashes, and community complaints.

The Transportation Assessment Map generally reflected development patterns of the city. Areas that developed around walking and streetcar generally rated higher. Areas that developed when car ownership was commonplace generally had lower density, fewer sidewalks, larger blocks and fewer bus routes, and thus rated poorly. This is clear around the northern, eastern, and western edges of the city. One issue unique to this analysis is that the map quantifies multi-modal access but does not account for multi-modal demand.

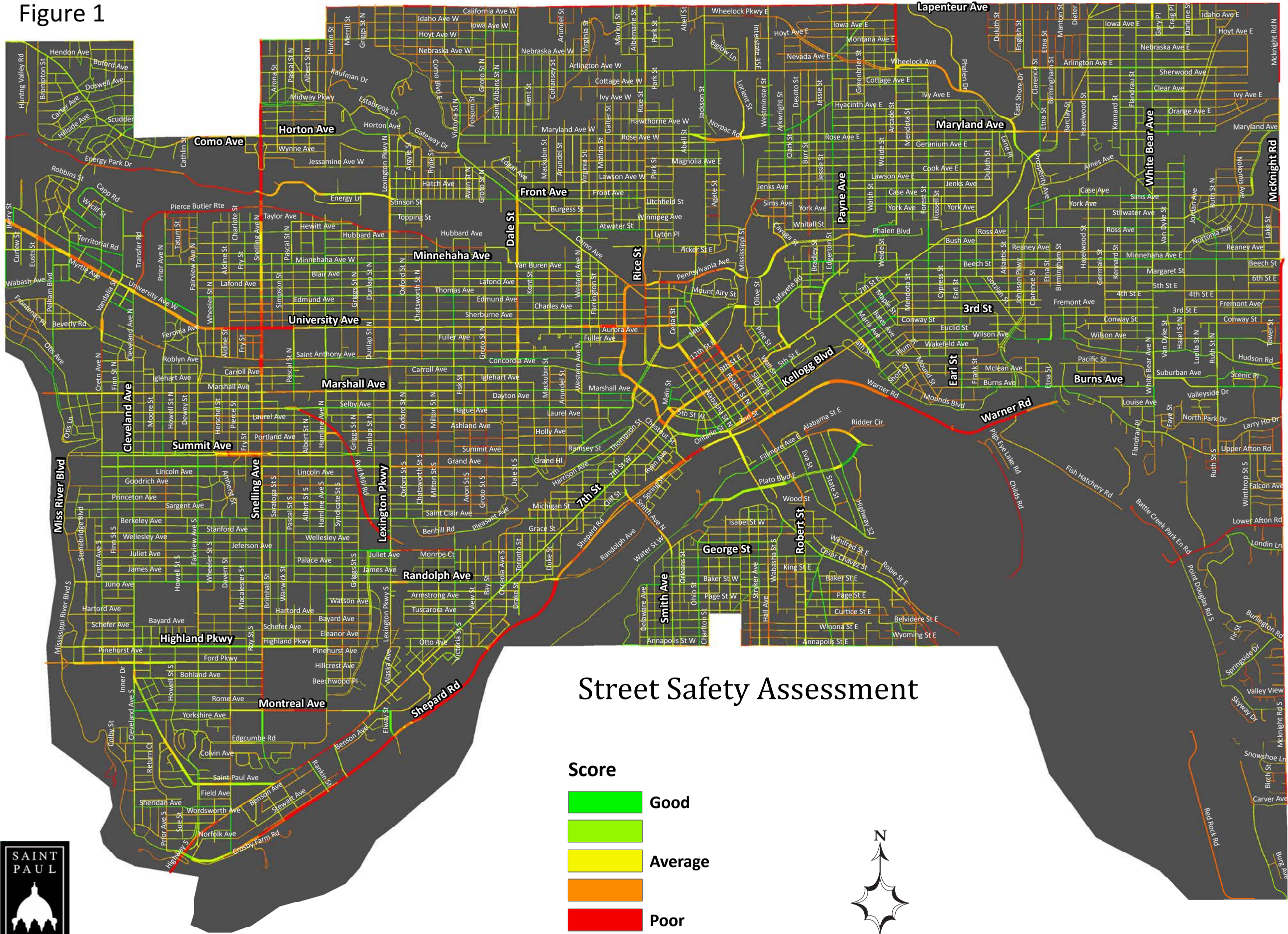
This process of looking at the city from a holistic, data-driven perspective could add value to decision-making processes, especially ones like the CIB process where projects are being evaluated city-wide. However, this is a new process for the City, and the methodology will need to be refined to be most useful. The more this type of analysis can be streamlined and the more people who can produce it will increase the likelihood of this type of exercise being an on-going tool. The City is currently working with MnDOT on another safety analysis model that may provide additional lessons and efficiencies for future analysis efforts.

The process of mapping also identified the need for pedestrian and bike counts. While there are ample data available for automobile and transit traffic, there are very little data for bicycle and pedestrian traffic. The inability to track this data limits the City’s ability to analyze biking and walking patterns in any detail.

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Figure 1



**Missing Sidewalks** – While most of the streets include sidewalks on both sides, there are a few that are missing sidewalks on either one side or both sides.

**Pavement Condition Index (PCI)** – The PCI provides a measure of the present condition of the pavement based on the distress observed on the surface of the pavement, which also indicates the structural integrity and surface operational condition (localized roughness and safety).

**Street Speeds** – Studies have shown that collisions involving pedestrians/bicyclists and vehicles traveling faster than 30mph are significantly more likely to result in death. Therefore, the faster the speed limit the more dangerous the street.

**Crashes** – A density analysis was performed using crash data involving bicyclists and/or pedestrians. Areas near accident sites scored poorly.

**Road Width** – As road width increases so does the time it takes to cross, thus making it more dangerous.

**Annual Average Daily Traffic (AADT)** – The greater the daily traffic volume the more dangerous the street.

**Bus Routes and Signalized Intersections** – This variable rates a street based on the accessibility to bus stops. People are less likely to jaywalk to reach a bus stop if they are close to a signalized intersection. Thus, streets within a 1/2 mile of a signalized intersection are deemed to be safer.

**Street Characteristics Contributing to Safety Options**

A weighted overlay analysis was performed to determine the relative safety of streets within the City of Saint Paul. An overall score was generated using the variables listed.

**Street Safety Assessment**

**Score**

Good

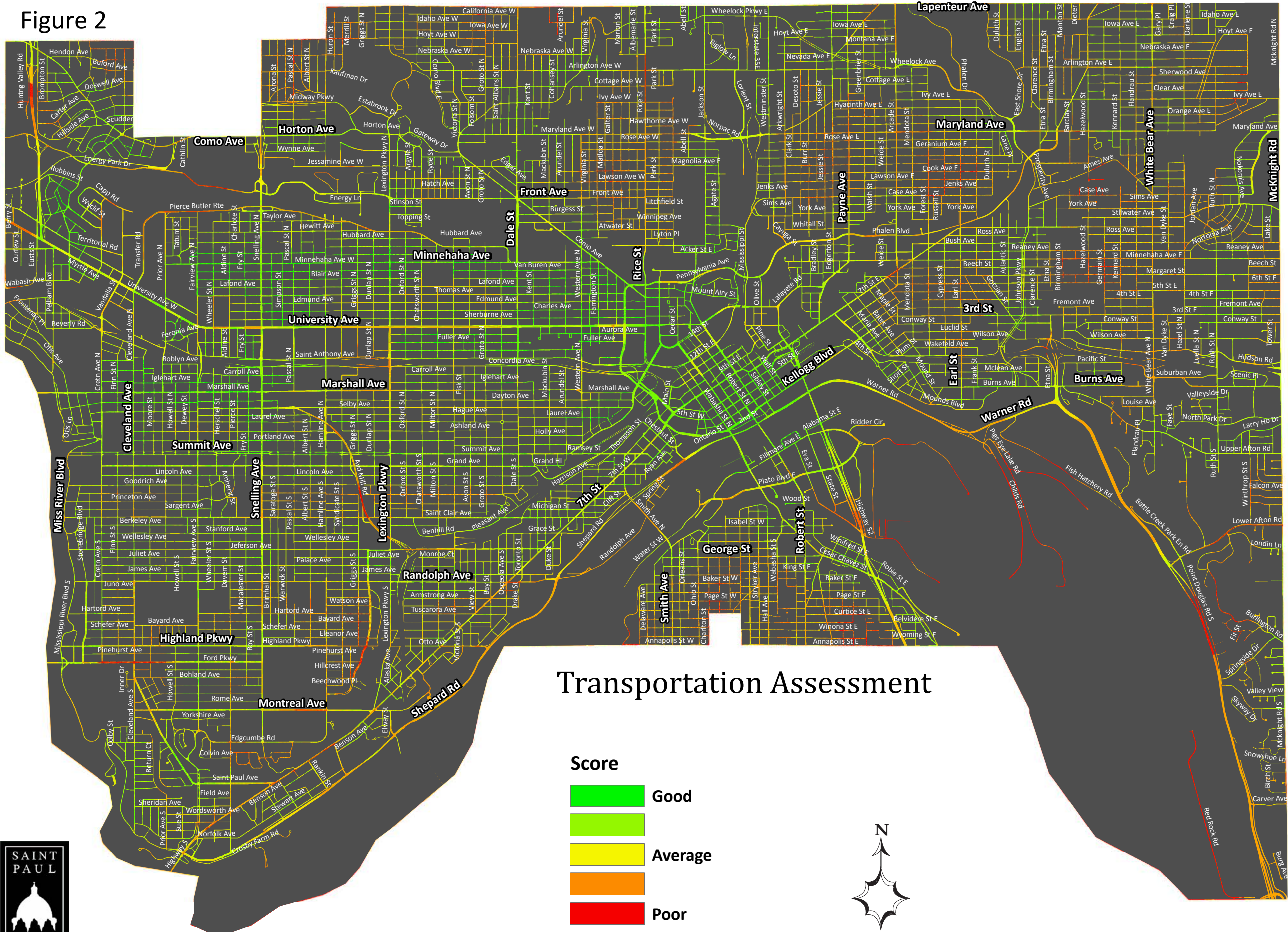
Average

Fair

Poor



Figure 2



**Light Rail Transit (LRT)** – Accessibility to LRT stations. Streets outside 1/2 mile score poorly.

**Bus Stops Coverage** – Accessibility to bus stops. Streets located outside of a 1/4 mile score poorly

**Missing Sidewalks** – While most of the streets include sidewalks on both sides, there are a few that are missing sidewalks on either one side or both sides.

**Bikeway Coverage** – Accessibility to bikeways. These include off-road trails, on-street bike paths/lanes, and share-the-road street segments.

**Grand Rounds Gaps** – There is a negative influence on the score of a street that is considered a “gap” in the grand rounds scenic byway. A gap is defined as any part of the grand rounds trail that does not have an off-street trail for bikes and pedestrians. Thus forcing bicycle traffic to mix in with street traffic using share the road or a bike lane.

**T2-T4 Blocks Over 400 ft** – Blocks greater than 400ft limit accessibility and route options. Streets scored poorly if they are located in a T2, T3, T3M, or T4 zoned area, and has a block length longer than 400 ft.

**Tree Canopy** – Tree canopy coverage is a favorable amenity for pedestrians and bicyclists.

**Infrastructure Characteristics Contributing to Transportation Options**

A weighted overlay analysis was performed based on a streets access to various infrastructure amenities for pedestrians and bicycles. An overall score was generated using the variables listed.



Table 1: Pilot Project List

<i>Project</i>	<i>Limits</i>	<i>Focus</i>	<i>Source</i>	<i>Council Ward</i>	<i>Planning District</i>	<i>Need for Improved Safety</i>	<i>Need for Multimodal Access</i>	<i>Replicability</i>	<i>Network/Regional Connectivity</i>	<i>Readiness (planning / funding)</i>
<b>Grand Avenue</b>	Lexington to Hamline	Pedestrian Safety	Capital Improvements Budget (CIB)	2, 3	14, 15	High	Low	High	High	Medium
<b>Jackson Street*</b>	Magnolia to Larpenteur	Mill and overlay lane restriping / bike lane	Mill and Overlay Project List	5	6	Medium	High	High	High	Medium
<b>Cretin Avenue</b>	I-94 to Marshall	Bus access	Northwest Transportation Study	4	12, 13	High	High	Medium	High	Medium
<b>Jackson Elementary</b>	1/2 mile radius	Safe routes to school	Western Station Area Plan	1	7	Medium	Low	High	Medium	Medium
<b>Ford Parkway</b>	Snelling to Howell	Street reconstruction	Comprehensive Plan; CIB	3	15	Medium	Medium	Medium	High	High
<b>E 7th</b>	Margaret to Arcade	<i>Better Block</i> event	District 4 Plan; CIB	7	4	Medium	High	Medium	High	High
<b>Lynnhurst Avenue</b>	Adjacent to Iris Park	Street retrofit implementation	Raymond Station Area Plan; Livable Communities Demonstration Account Grant	4	13	Medium	Low	Medium	Low	High

\*Workshop was eliminated from list because Ramsey County funding was not allocated for the project and additional time was needed for street design manual.

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## Pilot Workshop Events

Several outreach activities were used in the development of the manual to analyze the City's street design processes. This included a series of five Pilot Street Design Workshops, and an enhanced "Better Block" pilot event. This section will begin with a summary of existing street design processes, the format of the Pilot Street Design Workshops and the Better Block, and finish with process recommendations based on these activities.

## Pilot Street Design Workshops

The Pilot Street Design Workshops were four- to six-hour events with staff and community members to develop preliminary designs for specific street segments at different locations within the city. The goals of the workshops were to:

1. affirm the contents and format of the Street Design Manual;
2. generally review street design processes;
3. test a collaborative workshop format that can be used on street projects in the future; and
4. advance projects with Complete Streets designs.

The workshops resulted in planning-level street designs, and a list of prioritized improvements for design implementation. In the future, this process would allow staff to evaluate the design process within different contexts without the pressures of finishing a project already in process. It also allowed the team to experiment with different workshop formats.

## Workshop Format

Locations were selected based on the criteria listed in Part II, above.

The scoping of the Pilot Design Workshops consisted of reviewing adopted plans and conditions to develop project parameters for the project. An effort was made to coordinate each design workshop with the applicable District Council as the first step in outreach. District Councils and their transportation (or similar) committees were asked to participate. The intent was to get about 25 participants for each workshop representing diverse perspectives, and representative of those with a stake in the design of the street and neighborhood in which it was located. Workshops were held either on location or at the closest recreation center to the site.

Pilot Design Workshops were 5-6 hour meetings that included three main activities:

1. A presentation of best practices for street design based on the Street Design Manual and customized to the particulars of the street. This presentation was developed by reviewing existing conditions, including crashes and complaints and existing plans.
2. A walking tour of the location with discussion about how best practices could be applied to solve problems and issues seen on the street.
3. Small group conversations to discuss street improvements and draw them on maps. The solutions were then reported back to the larger group. All participants then prioritized the design elements they would most prefer to see implemented.

The response to this workshop format from participants was generally positive. The format has the potential to appeal to different learning styles by including a presentation, walking tour, drawing activity and discussion. The results of the Pilot Design Workshops are included in Appendix B.

Flexibility in scheduling was an important consideration from project to project. In some locations, it made more sense to hold the workshop during the day to facilitate participation of businesses on a commercial street, or students for a project adjacent to a school. In other cases, it worked better to hold the meeting over the weekend when more people were off work and automobile traffic volumes were lower.

The Pilot Design Workshops also tested the “Functional Balance Worksheet,” (Appendix C) which is a tool adapted from a 2013 training called “Complete Streets Workshop,” presented by MnDOT and the University of Minnesota Center for Transportation Studies. This worksheet was used at three workshops and was generally received favorably. The worksheet captures the relative priority for each mode/use for a given segment. The identification of modes/uses (including pedestrian, transit, bicycle, auto, freight, parking, and environmental) helps to document the modal priorities of the right-of-way, which then guides the allocation of right-of-way.

The Saint Paul Riverfront Corporation Design Center has since facilitated several additional street workshops, and has conducted them over the course of two evenings rather than a single day in order to facilitate the participation of residents who are only available at night. The Design Center has also developed a card-sized version of portions of the Manual for use as a tool during design workshops.

One of the most beneficial aspects of the Pilot Design Workshop format is the educational aspect. It gives participants a chance to get up to speed on best practices, which helps them to know what questions to ask. This information can then be passed among neighbors. This format also puts lay persons and experts in a collaborative environment necessitating discussion to develop design solutions.

The main shortcomings of this format are the size limits and time commitment. The workshop format becomes unwieldy after about 35-40 people in terms of facilitation, material, and meeting spaces. Five to six hours is also a lot of time to ask, especially of volunteers. The art of implementing this workshop format is in developing a sense of when it can be most effective. This will only come with practice and ongoing evaluation.

#### Pilot East 7<sup>th</sup> Street Better Block Event

The East 7<sup>th</sup> Street Better Block was a day-long event where one block was redesigned using temporary materials. The purpose of the Better Block in the planning process for the Street Design Manual was to have an event that would be more tangible and interesting than a typical open house, and allow the City to showcase new bike and pedestrian design elements in an interactive way.

The East 7<sup>th</sup> Street Better Block redesigned one block of East 7<sup>th</sup>, from Margaret to Arcade, to showcase the types of design elements that were included in the Street Design Manual. The City hired Team Better Block to facilitate this event, and partnered with Dayton’s Bluff District Council to host the event. The East 7<sup>th</sup> Street Better Block is summarized in detail in Appendix B.



Based on the Team Better Block model, several factors go into selecting a successful location for this type of event, including:

1. form - building edges that define space.
2. pop-ups - leasable/available buildings that present opportunities for temporary business development.
3. street - potential for multi-modal street infrastructure, available capacity/width, ADT under 20,000.
4. community - proximity to a neighborhood.
5. comfort - trees and shade.
6. partners - interest from local partners, existing organizations.
7. people - existing special events.

East 7<sup>th</sup> Street especially stood out from the several candidates because of the commercial outreach and organization that had been put into place by the District Council through their “Make It Happen on East 7<sup>th</sup> Street” initiative.

The general process and schedule for the Better Block is described in the following Appendix D.

The Better Block process depends on volunteers from the community for success. The volunteers are organized into several teams:

- Street Team – About 20 volunteers focus on redesigning the street with Complete Street principles, including bicycle and pedestrian amenities.
- Pop-Up Team – About 20 volunteers work on to filling vacant shops with a flower shop, a coffee shop, book store, music house, gift shop, etc.
- Marketing and Documentation Team – About six volunteers attract people to the Better Block event and document it.
- Wayfinding Team – About four volunteers with graphic capabilities create signage and wayfinding for the Better Block and the surrounding community.

Due to the fact that there were several pending transit studies focusing on East 7<sup>th</sup> Street that will influence the future design, it was determined that the event should focus on highlighting some street design elements that do not yet exist in Saint Paul. East 7<sup>th</sup> Street was converted from four lanes of traffic and two lanes of parking to two lanes of traffic, two lanes of parking, a two-way cycle track, and wider sidewalks as illustrated in Appendix B. Margaret Street was closed to vehicle traffic to make space for a market and pop-up park.

The East 7<sup>th</sup> Better Block attracted approximately 200-300 people over five hours. Before and during the event performance indicators were measured as illustrated in the table below.

**Table 3: Better Block Performance Indicators**

	<b>Metric</b>	<b>Before</b>	<b>After</b>
<b>Safety</b>	Auto Speed	37 mph	25 mph
	Pedestrian Buffer	8ft	20 feet
	Unsignalized Crossing Distance	60 feet	22 feet
	Space allocated for bikes	0 feet	12 feet
<b>Comfort</b>	Noise	92db	60db
	Seats	6	50
	Average lingering time	20 seconds	120 seconds
<b>Commerce</b>	Food sales	N/A	Sold Out
	Draw	Local	Regional

An important finding of the East 7<sup>th</sup> Better Block was the extent to which this type of event highlights the link between street design and street-level commercial vitality. As we saw at the event, traffic slowed and quieted down, which complemented all the existing and pop-up businesses, and created a more pleasurable environment for all the pedestrians. In addition to Complete Streets policies, this is another lens through which to view street design (beyond looking at just traffic).

It was also timely to be able to demonstrate the cycle track at the E. 7th Better Block. This had not been demonstrated before in Saint Paul; the event allowed many people to see how it looks and feels first-hand. A variation of the cycle track design has since been recommended in the draft Saint Paul Bicycle Plan for the downtown Bike Loop.

### Street Design Process Changes

Through the effort of the Pilot Design Workshops and East 7<sup>th</sup> Street Better Block, the following two changes were recommended for the City's street design process:

1. An additional preliminary interdepartmental meeting should be added to coordinate the scope of the project. This new step allows departments to exchange information, which can then be provided to the community as parameters of the design process.
2. A form that documents the design process and outlines how a project meets Complete Streets policies should be completed as part of street design projects. This "Complete Streets Checklist" should supplement or replace staff reports to the Transportation Committee for street projects.

Several other communities and agencies have adopted complete streets checklists, including MnDOT.

These recommendations have been incorporated into the draft Complete Streets Action Plan.

### **COMPLETE STREETS ACTION PLAN**

The Complete Streets Action Plan outlines the next steps for implementation of Complete Streets policies, after adoption of the Street Design Manual. The Action Plan identifies next steps to implement Complete Streets-related goals identified in the Comprehensive Plan, specifically:

1. The City and community should explore traffic problems and options together, resulting in recommendations that will be the most likely to achieve the neighborhood's objectives.
2. Provide safe citywide connections to schools, libraries, parks, and recreation centers, with improved crossings and comfortable pedestrian environments at high demand destinations.
3. Design should be sensitive to the context and community in which it is located. Performance standards should be established with measurable outcomes.
4. Support transit-oriented design through zoning and design guidelines. Compact, street-oriented design should be emphasized to promote walkability and transit use, especially in commercial corridors. Standards for building placement and design based primarily on the needs of the pedestrian should be enforced and expanded.
5. Develop a strategy for investing in a broad range of infrastructure projects, including, but not limited to, street and traffic improvements to support the growth of existing employment, services, parks, and schools.
6. Collaborate with non-profit, volunteer, and business organizations to coordinate bicycle counts at sample intersections and on selected routes. Regular counts will help the City better understand trends in bicycling citywide and prioritize improvements and maintenance.
7. Increase pedestrian, bicycle, and motorist safety through effective law enforcement, detailed crash analysis, and engineering improvements to reduce the risk of crashes
8. Connect neighborhoods that have poor sidewalks or little access to trails and bike routes, especially east and north of Downtown.
9. Define parkway character, features, and amenities; clarify parkway designations; and assign improvement responsibilities and resources.

Action items were identified during the process of developing the Street Design Manual. See the report attachments for the full Action Plan draft.

### **COMPREHENSIVE PLAN CONFORMANCE**

The four guiding strategies of the Transportation Chapter all support complete streets. The four strategies are:

- Provide a safe and well-maintained system
- Enhance balance and choice
- Support active lifestyles and a healthy environment
- Enhance and connect neighborhoods

Under “Provide a safe and well-maintained system” are the following policies:

- 1.1 Complete the streets.
- 1.2 Examine alternatives to enhance safety through right-of-way design, including narrowing or removing lanes on roads.
- 1.3 Evaluate existing crosswalk striping, design, and pedestrian-scale lighting standards.
- 1.4 Implement reconstruction projects for improved safety.
- 1.6 Design for improved accommodation of pedestrians and bicycles on bridges.
- 1.8 Support the completion of Residential Street Vitality Program (RSVP), an ongoing program to reconstruct and improve the appearance, function, and safety of Saint Paul streets.
- 1.9 Complete a bikeways safety audit to evaluate design, function, and connectivity of existing facilities.
- 1.12 Partner with schools, nonprofits, other government agencies, and businesses to educate people about bicycling and walking.
- 1.13 Establish freight corridors to enable the prompt delivery and transfer of cargo and to reduce noise and air pollution in adjoining neighborhoods.
- 1.14 Increase pedestrian, bicycle, and motorist safety through effective law enforcement, detailed crash analysis, and engineering improvements to reduce the risk of crashes.

Under the “Enhance balance and choice” strategy are the following policies:

- 2.1 Create true transportation choices for residents, workers, and visitors in every part of the city.
- 2.11 Create more seamless connections between pedestrians, bicycles, transit, and automobiles.

Under “Support active lifestyles and a healthy environment” are:

- 3.1 Support cooperative efforts in streetscape design, landscaping, pedestrian-scale lighting, and other amenities for people.
- 3.2 Formalize citywide standards and above-standard options for pedestrian oriented streetscapes.
- 3.3 Strengthen pedestrian pathways between housing, transit, and neighborhood services.
- 3.4 Develop and maintain a complete and connected bikeway system.
- 3.6 Fill gaps in the bikeway system.
- 3.7 Create a comprehensive system of bicycle network and pedestrian path signage and way-finding.
- 3.8 Promote “bicycle boulevards” as a new type of bikeway.
- 3.12 Support the work of planning initiatives that promote public health and physical activity, such as Active Living Ramsey County and Design for Health.

Under “Enhance and connect neighborhoods” are the following complete streets-related policies:

4.4 Coordinate with surrounding communities and jurisdictions to enhance regional bicycle and pedestrian networks, recognizing the importance of Saint Paul in regional and statewide connectivity.

4.7 Connect neighborhoods that have poor sidewalks or little access to trails and bike routes, especially east and north of Downtown.

4.8 When redevelopment opportunities become available, reinstate the traditional street grid pattern to increase neighborhood connectivity.

4.11 To create livable neighborhoods and compact commercial areas, promote and fund traffic calming measures.

#### **STAFF RECOMMENDATION**

Staff recommends that the Transportation Committee recommend that the Planning Commission release the draft Street Design Manual and Complete Streets Action Plan for public review and schedule a public hearing for May 13, 2016.

#### **Appendices:**

- A. Mapping Methodologies
- B. Pilot Project Summaries
- C. Functional Balance Exercise
- D. Better Block Process

#### **Attachments:**

- 1. Draft Street Design Manual
- 2. Draft Complete Streets Action Plan

## Appendix A: Mapping Methodologies

### Safety Analysis Map

The summary below identifies the weighted methodology for the overlay analysis.

#### *Annual Average Daily Traffic (AADT)*

<i>Class Ranges (AADT)</i>	<i>Reclassified Value</i>
< 2501	5
2501 - 5000	4
5001 - 10000	3
10001 - 15000	2
> 15000	1

#### *Collisions with Bikes/Pedestrians*

<i>Class Ranges (density)</i>	<i>Reclassified Value</i>
Low	5
	4
Medium	3
	2
High	1

#### *Speed Limit*

<i>Class Ranges (mph)</i>	<i>Reclassified Value</i>
< 25	5
25 - 30	4
30 - 35	3
35 - 40	2
40 - 50	1

#### *Pavement Condition Index (PCI)*

<i>Class Ranges</i>	<i>Reclassified Value</i>
80 - 100	5
60 - 80	4
40 - 60	3
20 - 40	2
< 20	1

#### *Road Width*

<i>Class Ranges (feet)</i>	<i>Reclassified Value</i>
< 20	5
20 - 40	4
40 - 60	3
60 - 80	2
> 80	1

#### *Missing Sidewalks*

<i>Class Ranges (missing sidewalks)</i>	<i>Reclassified Value</i>
None	5
Either side	2
Both sides	1

### *Bus Routes & Signalized Intersections*

<i>Class Ranges (miles)</i>	<i>Reclassified Value</i>
< 0.25	5
0.25 - 0.5	3
> 0.5	1

### **Multimodal Service Analysis Map**

The summary blow identifies the weighted methodology for the overlay analysis.

#### *Bus Stops*

<i>Class Ranges (miles)</i>	<i>Reclassified Value</i>
< 0.125	5
0.125 - 0.25	3
> 0.25	1

#### *Light Rail Transit (LRT)*

<i>Class Ranges (miles)</i>	<i>Reclassified Value</i>
< 0.25	5
0.25 - 0.5	4
0.5 - 0.75	3
0.75 - 1	2
> 1	1

#### *T2 - T4 Blocks Over 400 ft*

<i>Class Ranges</i>	<i>Reclassified Value</i>
No	5
Yes	1

#### *Missing Sidewalks*

<i>Class Ranges (missing sidewalks)</i>	<i>Reclassified Value</i>
None	5
Either side	2
Both sides	1

#### *Tree Canopy*

<i>Class Ranges</i>	<i>Reclassified Value</i>
Yes	5
No	1

#### *Bikeway Coverage*

<i>Class Ranges</i>	<i>Reclassified Value</i>
< 0.125	5
0.125 - 0.25	4
> 0.25	1

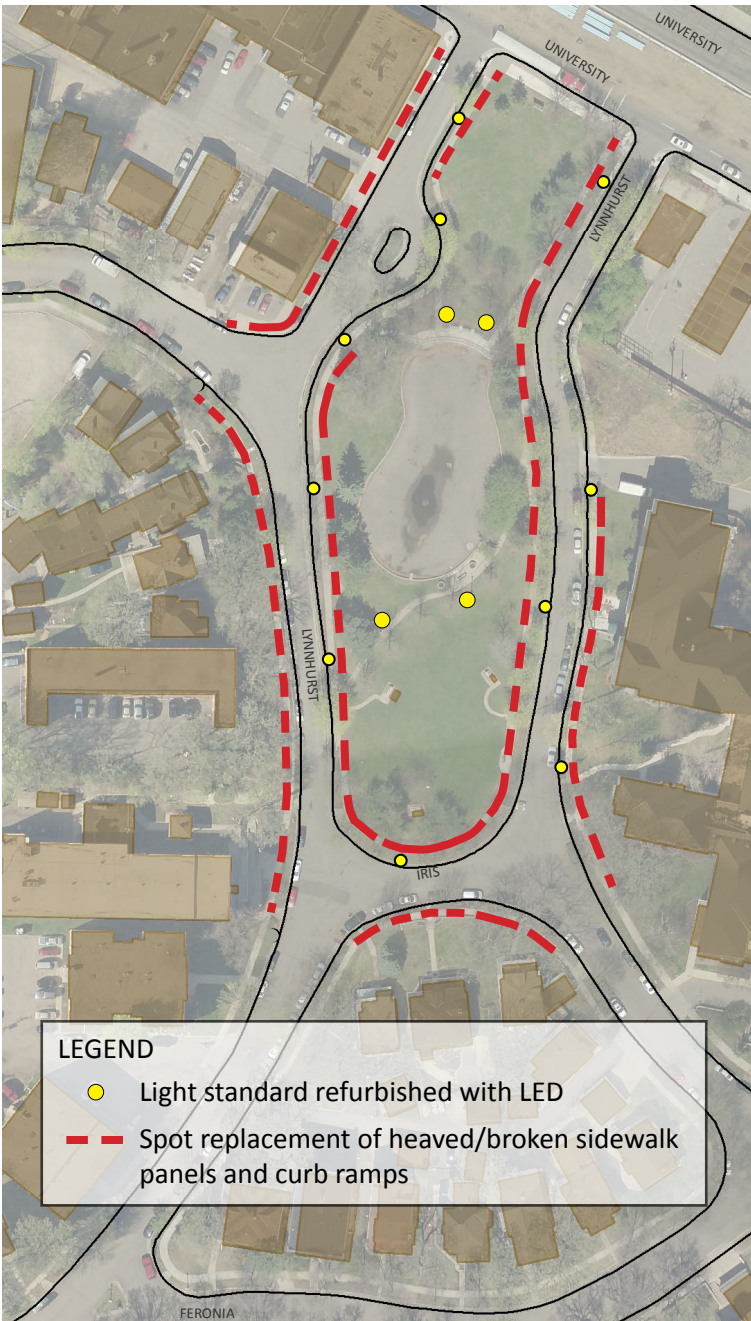
*Grand Round Gaps*

<i>Class Ranges</i>	<i>Reclassified Value</i>
Gap	-1
Other	0



**Appendix B: Pilot Project Summaries**

# Appendix B: Lynnhurst Pilot Workshop, January 31, 2013



**Background and Objective**  
With the new Episcopal Homes development and the opening of Green Line LRT on University Avenue, the Iris Park area will have an influx of senior pedestrians in the coming years. The City of Saint Paul was awarded a \$109,000 Metropolitan Council Livable Communities Demonstration Account (LCDA) grant for the Episcopal Homes project to improve pedestrian connections to and around Iris Park. The workshop January 31 at Episcopal Homes was intended to identify priorities for these funds and test a new format of design workshop.

## Issues

- Issues identified by participants included:
- High demand for on-street parking
  - Allowing for service vehicle circulation
  - Poor lighting
  - Poor condition of sidewalks
  - Lack of ADA ramps at corners
  - Difficulty knowing where to cross at corners
  - Perceived lack of safety at night

- Goals** (number of people who shared goal)
- Connectivity (x8)
    - To Fairview Station/University (x5)
    - To neighborhood (x2)
    - To Episcopal Homes
  - Multimodal access (x3)
  - Walkability (x3)
  - Sustainability
    - Ongoing maintenance
    - Stormwater
    - Green infrastructure
  - Character of park (x2)
  - Allow service truck circulation (x2)
  - Rerouting and increased traffic (x2)
  - Design for all stakeholders (current and future)
  - Wide corners
  - Public art
  - Improved lighting
  - Explore one-way versus two-way
  - Biking to Fairview Station
  - Parking after Green Line is operational

## Public Art Opportunities

Workshop participants expressed interest in memorializing the former Porky’s restaurant through public art in some form. Although the grant does not include funds for public art, the group thought it was important enough to document for future projects.

## Improvements Ranked

Tallies	Improvement
ALL	<b>Replicate Porkey’s Checkers at intersection of E. Lynnhurst and University</b>
18	Square corners at Iris Place / E. Lynnhurst
18	Square corners at Iris Place / W. Lynnhurst
15	Square corners at Oakley / W. Lynnhurst
13	Enhanced crosswalks and “gateway” at University / Lynnhurst intersections
12	Convert W. Lynnhurst one-way southbound; convert E. Lynnhurst one-way northbound
11	Install mid-block crossing on E. Lynnhurst for improved park access from Episcopal Homes
10	<b>Increase lighting at intersections</b>
10	<b>Improve sidewalks including ramps at crosswalks</b>
9	Define intersections and on-street parking with bump outs
5	Install stormwater feature in island at W. Lynnhurst and Iris Place (Park property)
3	Create speed tables outside the Episcopal Homes entry at E. Lynnhurst
2	Widen Iris Place
0	Create a speed table on West Lynnhurst

*Improvements in bold are recommended to be funded with grant.*

## Participants

- Michelle Beaulieu, PED  
Lindsay Becker, Episcopal Homes  
Sam Carlson, Riverfront Corporation  
Laura Eash, Green Corps  
Anne Gardner, Parks  
Joni Giese, SRF  
Mary Gotz, Episcopal Homes  
Tim Griffin, Riverfront Corporation  
Jonathan Grothe, TWP  
Dan Haak, PW  
Brandon Henry, Red House Records  
Anton Jerve, PED  
Jim Johnson  
Anne Kamiri, Episcopal Homes  
Sarah Kidwell, Union Park  
Josh Kinney, Riverfront Corporation
- Peter Lagerwey, Toole Design  
Eriks Ludins, PW  
Mike McGarvey, SRF  
Karin Misiewicz, Parks  
Julie Niewald  
Diane Nordquist, PED  
Greg Reese, Parks Forestry  
Ellen Stewart, Parks  
Deborah Veit, Episcopal Homes  
Benita Warns, Mr. Michael Recycles Bicycles  
Sarah West, Public Art St. Paul  
Anne White, Union Park  
Foster Willey

## Next Steps

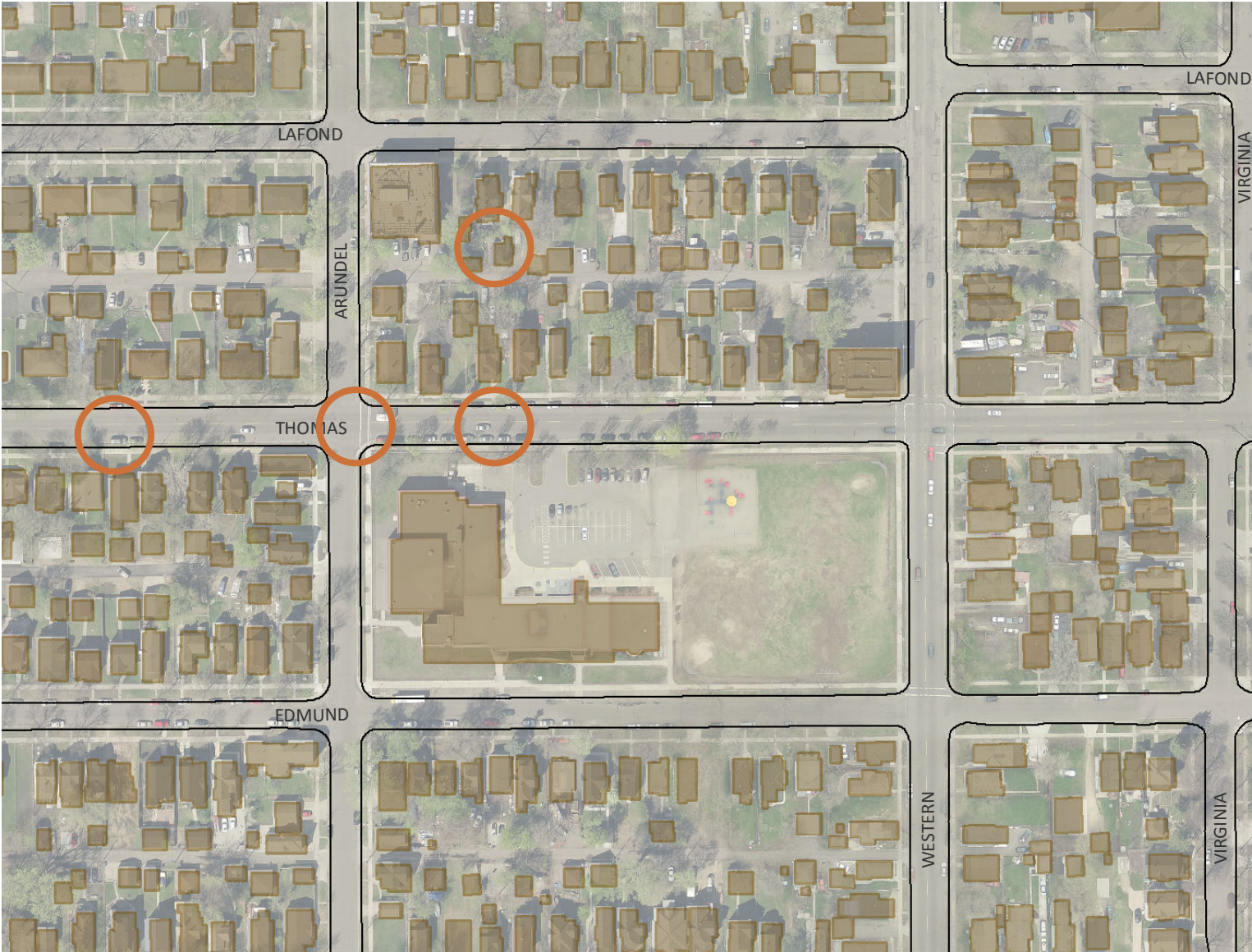
1. Balance feedback collected after the workshop regarding night time safety, focusing on pedestrians, and parking issues with recommendations from the workshop.
2. Coordinate street construction with Episcopal Homes construction and Iris Park improvements.
3. Finalize street improvements to be constructed in 2015.
4. Use workshop to help guide development of Street Design Manual.



Workshop participants demonstrating the curb line at Lynnhurst / Oakley if it were modified with a bump out.



# Appendix B: Jackson Elementary Pilot Workshop, June 3, 2013



## Background and Objective

Jackson Prep was transitioning from a magnet school to neighborhood school and had contacted Public Works to review signing for the upcoming year. Being able to walk safely to the school was called out as a policy in the Western Station Area Plan. Public Works and Planning staff met with the School staff, Police, and School District Transportation staff to evaluate the school in a holistic way that could be replicated at other elementary schools.

## Issues

- Improve safety during walk to school (x3)
- Improve walkability of neighborhood overall
- Improve route planning
- Coordinate school bus/parent loading zones
- Questions
  - How do kids get to school
  - How do kids view their walk to school
  - What is dangerous about walk to school
  - What school patrols can do to improve safety
  - What can be done to enhance community identity and aesthetics

## Needs

- Well-marked crosswalks
- Sidewalk connections to all entrances
- Bike racks
- Bump-outs on collectors
- Well-maintained sidewalks
- ADA pedestrian ramps
- Adequate street lighting

## Public Art

- Gardening
- LRT
- Music (blues)
- Charles Bikeway (community driven)
- Farmers market
- Celebrate veterans
- Frogs/wetlands

## General Design Principles

1. Bump-outs at intersections on designated school crossings.
2. Higher visibility crosswalks at higher volume intersections adjacent to school.
3. Standard intersection markings at low volume streets adjacent to school.
4. Provide walkway from sidewalk to staff entrance.
5. Locate parent drop-off zone away from bus boarding zone and intersections.
6. Paved boulevards at drop-off/pick-up locations.
7. Consistent buffer between sidewalk and roadway.
8. Signs at preferred crossings. Explore using public art to create or enhance a wayfinding system beyond the school block.
9. Locate ample bike parking in convenient secure location away from sidewalk.

## Next Steps

1. Develop an official Safe Routes to School program with PW and SPPS participation that will include, planning, implementation, education and enforcement.
2. Test applicability of “General Design Principles” at other schools.

## Participants

Michelle Beaulieu, SPPED  
Joni Giese, SRF  
Tim Griffin, Design Center  
Craig Guidry, Jackson Prep  
Anton Jerve, SPPED  
Charles Ly, SPPD  
Andrew Martinez, Jackson Prep

Mike McGarvey, SRF  
Koury Michlitsch, SPPS  
Kate Ryan, Jackson Prep  
Elizabeth Stiffler, SPPW  
Foster Willey





# Appendix B: Grand Avenue Pilot Workshop, June 4, 2013



## Background and Objective

Grand Avenue is a street with high pedestrian traffic where people often cross the street to access businesses, transit, and parking. The section between Lexington and Hamline has been the site of several crashes involving pedestrians and is unique because it includes the intersection with Ayd Mill and lacks the dual lantern street lights found elsewhere on Grand. The Grand Avenue Business Association, Macalester-Groveland Community Council and Summit Hill Association jointly submitted a City of Saint Paul Capital Improvement Budget (CIB) proposal focusing on pedestrian safety and traffic calming after a pedestrian was hit and killed at Grand and Hamline in the fall of 2012. In their application, they described that:

*The project focuses on traffic calming and pedestrian safety on Grand Avenue between Lexington Avenue and Hamline Avenue. This is a heavily trafficked area, used by pedestrians, cyclists and motorists accessing businesses and residences. Due to recent pedestrian accidents and fatalities, we are requesting CIB funding to calm traffic and bring more visibility to pedestrians.*

This workshop focused on refining and prioritizing improvements to the street based on the issues and solutions identified in the CIB application.

## Issues

- Solutions to pedestrian and bike safety issues (x4)
- Limit impact to businesses by accommodating access (x3)
- Improve pedestrian crossings
- Multimodal street design
- Thriving business corridor
- Parking issues
- Introduce public art & community identity
- Traffic calming off of Ayd Mill
- Wayfinding for visitors
- Accessibility improvements
- Provide guidance for future projects

## Next Steps

1. Re-submit for next round of CIB funding.
2. Identify improvements that can be done sooner and which may be part of a long-term implementation plan.
3. Identify other funding sources for street improvements.

## Public Art

- Tradition
  - Converted homes
  - Locally owned
  - Generations of shop owners
  - Street cars
- Walking/Strolling/Promenade
- “Grand” place
- Regional destinations
- Colleges
- City in miniature
- Gateway to downtown
- Vistas
- Higher density of activity



## Improvement Priorities

Location	Votes	Improvement
Hamline Ave.	3	Improve lighting
	2	Bump-outs
	2	Leading Pedestrian Interval (LPI)
	2	Hamline pedestrian improvements
Syndicate Ave.	8	Bump-outs
	3	Lighting
	2	Reduce/close driveways near Kowalski's
	2	Add crosswalk and sign
	2	Artist-designed bike racks
Ayd Mill Rd.	7	Retrofit Ayd Mill ramps to be more “urban” by tightening radii, narrowing lanes, carrying sidewalk across, and add “Welcome to Mac-Groveland” gateway sign.
	5	Speed limit sign
	3	Narrow bridge travel lanes and add signage/paint
Griggs Ave.	7	Crosswalk at Griggs (Accommodate Trail)
Griggs to Dunlap	5	Mid-block crosswalk and/or median refuge
Dunlap Ave.	4	Bump-outs with signage and/or lights
Lexington Pkwy	2	Leading Pedestrian Interval (LPI)
General	3	Visitor wayfinding, banners, visitor info

## Participants

- Monica Beeman, SPPW

Jenna Bowman, GABA

Reuben Collins, SPPW

Laura Eash, SPPW

Tim Griffin, Design Center

Dan Haak, SPPW

Anton Jerve, SPPED

Josh Kinney, Design Center
- Mike Oase, Kowalski's

Nathon Park, US Bank

Dave Pasiuk, MGCC

Joan Pasiuk, BWTC/TLC

Callie Recknagel, MGCC

Erik Riesenberg, MGCC

Jeff Roy, SHA

Foster Willey



# Appendix B: Ford Parkway Pilot Workshop, August 13 2013



## Background and Objective

Ford Parkway was scheduled for reconstruction in 2015 from Snelling Ave to Howell Ave. The street is a County road as well as a parkway which makes the design process more complicated due to the multiple agencies involved in the design. The goal of the workshop was to assist County staff as they initiate their design process.



## Desired Outcomes

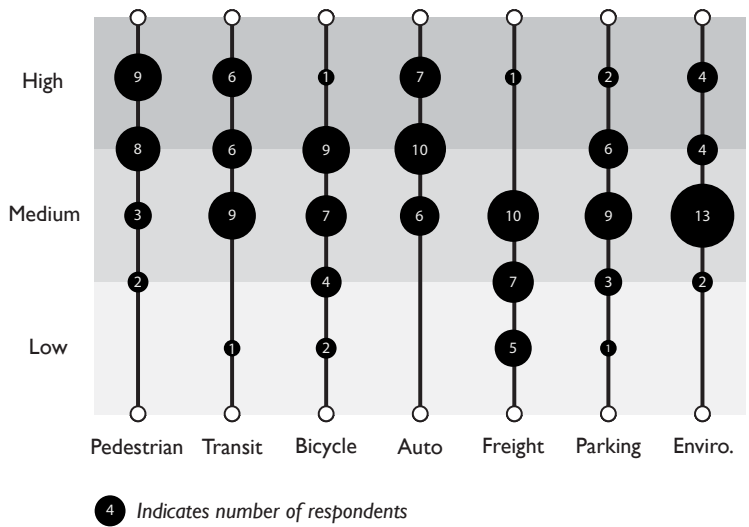
- Multi-modal street (x2)
- Pedestrian safety (x2)
- Efficient travel for all modes (x2)
- Accessibility for kids and disabled pedestrians
- Identify win-win design solutions
- Connect to Ford site
- Connect to transit
- Connect to park
- Traffic calming

## Next Steps

1. Provide draft workshop summary to Ramsey County Public Works.
2. Ramsey County will initiate and complete design process in 2014.
3. Street reconstruction in 2015.

## Prioritizing Modes

Attendees prioritized different modes for Ford Parkway. For each user group or roadway quality, attendees chose either High, Medium, or Low importance. The chart above shows the results of this exercise. Pedestrians and auto traffic were judged to be most important, with most other uses receiving Medium votes.



## Prioritizing Improvements

Votes	Improvement
23	Bump-outs at Howell, Davern, and Macalester
23	High visibility crosswalks at Howell, Davern and Macalester
13	Bike lane off Ford Parkway, on a parallel route
11	Planted median islands
11	Reduce radii on corners at Fairview
11	Relocate BRT station and travel lane around BRT
11	Widen sidewalk
6	Far side bus stop at Howell (and others if they exist)
3	Bike lanes on Ford Parkway
1	Bump-outs on Fairview (not on Ford Pkwy)

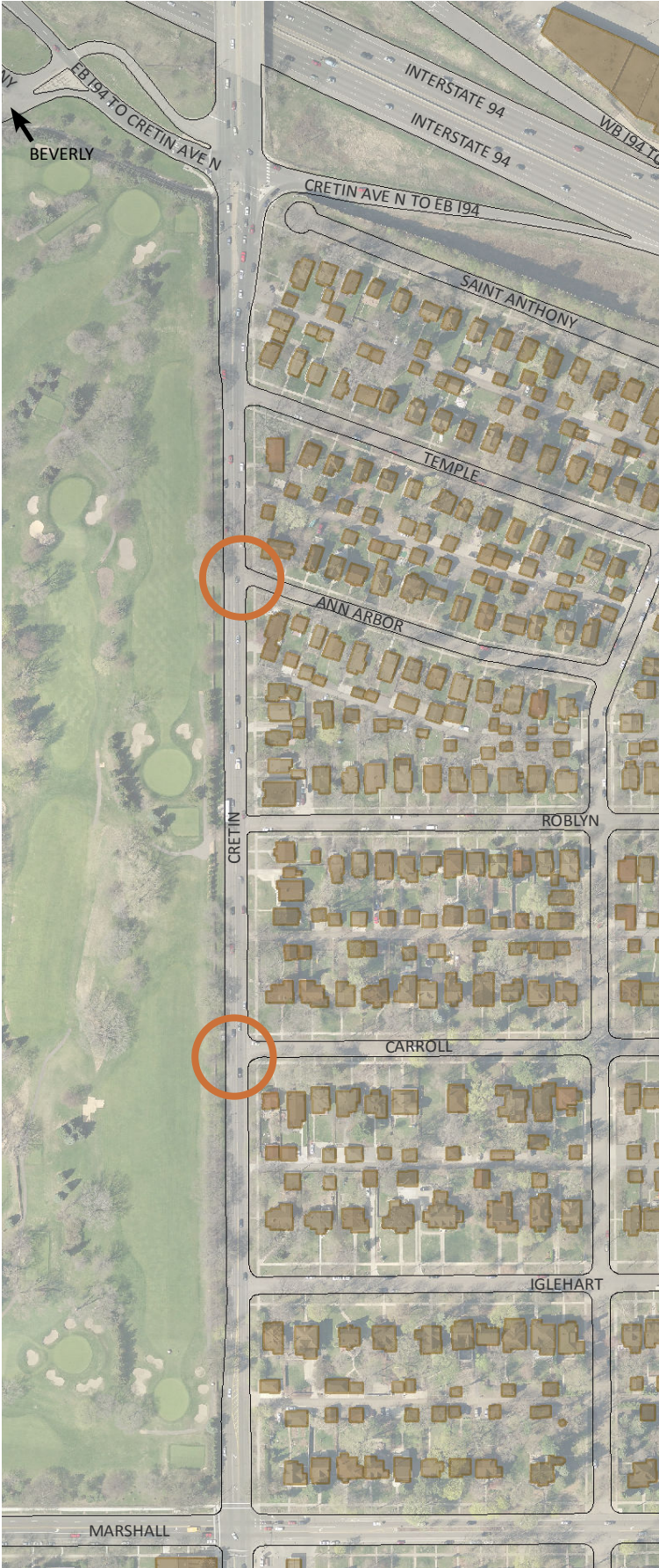
*\*\*Description of ranking exercise. Improvements in bold are called out on the preceding page.*

## Participants

- Tia Anderson, HDC  
Kathy Carruth, HDC  
Heather Cole, Smart Trips  
Reuben Collins, SPPW  
Charles Decker, HDC  
Peter Demuth, Metro Transit  
Brian Fewell, Design Center  
Nick Fischer, Ramsey Co.  
Anne Gardner, SPPR  
Barb Gibson, HDC  
Joni Giese, SRF  
Dan Haak, SPPW  
Fay Hassie, HDC
- Brian Haus, HDC  
Anton Jerve, SPPED  
Zach Jorgensen, SP Forestry  
Erin Laberee, Ramsey Co.  
Eriks Ludins, SPPW  
Mike McGarvey, SRF  
Mike Richardson, SPPED  
Katie Roth, Metro Transit  
Ellen Stewart, SPPR  
Clarice Swisher, HDC  
Gary Thompson, HDC



# Appendix B: Cretin Avenue Pilot Workshop, August 22, 2013



## Background and Objective

This pilot workshop location was selected due to the difficult access to and from bus stops along the west side of Cretin Avenue. The difficulty is due to the number of lanes (four) higher speeds (35 mph, posted) and lack of sidewalks on the the western side of the street. This is not a common typology in Saint Pail, but wherever it occurs, it can be unsafe, detract from the experience of riding transit, and lengthen the walking distance for those unwilling or unable to cross at the unsignalized intersections. There is no funding or project previously identified for this location.

## Issues Identified

- Crossing challenges along Cretin (x3)
- Pedestrian safety (x3)
- Slowdown/minimize cut-through traffic (x2)
- Bike safety (x2)
- Access to Green Line (x2)
- Vehicle speed concerns
- Potholes/pavement quality
- Bus accessibility
- Bring public into design
- Bike connectivity and accessibility
- Integration of complete streets
- Lack of sidewalk (west side of Cretin)

## Public Art Themes

### Form

- Murals
- Graffiti Art
- Paint the pavement
- Utility Box painting/wrapping
- Sculpture (Snoopy)

### Nature Influence

- Stormwater (Maplewood Mall)
- Flowers and Trees
- Hanging baskets
- Mississippi River

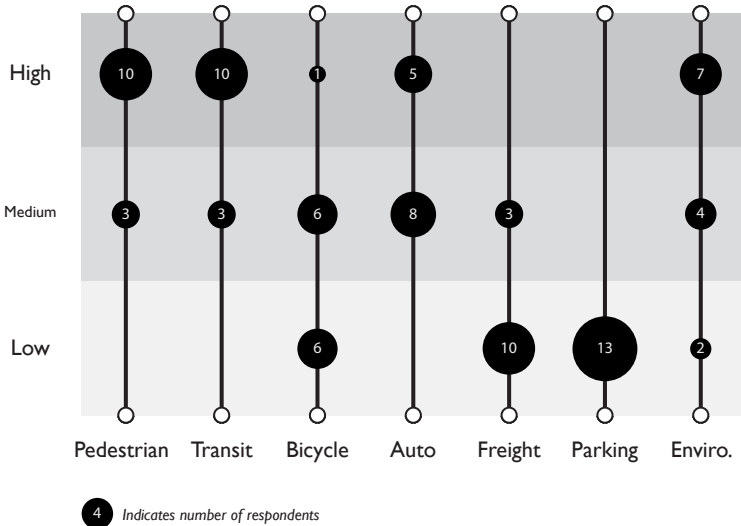
### Transportation

- LRT Stations
- Oxcarts

### Neighborhood History

- “Pill Hill”
- “Shadow Falls”
- Higher education connection

## Functional Balance Exercise



Attendees at this Pilot Workshop were asked to choose the level of importance of different uses for Cretin Avenue. For each user group or roadway quality, attendees chose either High, Medium, or Low importance. The chart above shows the results of this exercise. Pedestrians and transit were judged to be most important, with parking and freight voted least important.



## Next Steps

1. Identify sources and opportunities for implementation.
2. Work with public agencies and neighborhood organizations to imeplement improvements.
3. Explore demonstration project to test improvements.

## Improvements Ranked

Tallies	Improvement
12	Multi-use trail along west side of Cretin
11	Tighten corner radius at I-94 ramp to southbound Cretin and relocate bus stop from off-ramp to Cretin
11	Remove Temple bus stop and enhance bus stops at Carroll and Ann Arbor with high visibility crosswalk, flasher and/or median island refuge
8	Reduce speed to 30 mph
6	Relocate sidewalk on east side of Cretin between Temple and I-94 and reconfigure pork chop at I-94 ramp for new NB bus stop
6	Add sidewalk on Beverly to complete circuit around Town and County
3	One southbound bus stop at Roblyn with place pedestrian flasher and crosswalks and pedestrian crossing signage at Temple and Carroll
3	Add community gateway at north end of Cretin
2	Bike path connection from Beverly to Cretin
2	Trail connection on east side of cretin to St. Anthony
2	Consistent street trees along corridor
1	New geometry for I-94 eastbound off-ramp
1	Improve sight lines at southern off-ramp intersection and add signage to watch for pedestrians at I-94
1	Enhanced signage to indicate left turn to St. Anthony
1	Striped wide median down center of Cretin

*\*\*Description of ranking exercise. Improvements in bold are called out on the preceding page.*

## Participants

Michelle Beaulieu, SPED  
Monica Beeman, SPPW  
Kyle DuKart, Union Park DC  
Tim Faust, Union Park DC  
Joni Giese SRF  
Tim Griffin, Saint Paul  
Riverfront Corp.  
Dan Haak, SPPW  
Anton Jerve, SPED  
Josh Kinney, Saint Paul  
Riverfront Corp.  
Mike McGarvey, SRF

Michael Mechtenberg,  
MetroTransit  
Drew Ross, Desnoyer Park  
Brenda Ryan  
Anna Springfield, St. Paul  
Smart-Trips  
Scott Thompson, Metro  
Transit  
Jessica Treat, St. Paul Smart-  
Trips  
Anne White, Union Park DC



# Appendix B: East 7th Street “Better Block” Event June 8, 2013

## Background and Objective

A “Better Block” event was held on June 8, 2013 on East 7th Street between Margaret and Arcade Streets. The purpose of the event was to showcase what can be done in the street, by temporarily transforming the existing block into a “Complete Street” with walkable and bikeable amenities and pop-up businesses. The event illustrated the Street Design Manual’s design guidelines in a way that the community could participate in and experience.

More than a dozen locations were evaluated for the Better Block event using the criteria listed below under “Site Selection Process.” East 7th was selected because it provided an opportunity to build on the existing initiatives in Dayton’s Bluff and the event’s principles and format could be adopted for other parts of the City as well. This Appendix lays out the components of Better Block event planning in a way that can be used by other communities to plan their own, similar event.



## Site Selection Process

Provide a description of:

- Immediate area
- Sense of safety
- Potential for interest (Ages 8-80)
- Unique qualities

Rate the following from 1 (low) to 4 (high):

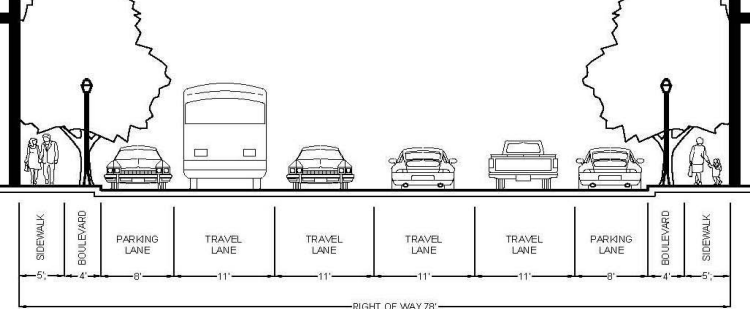
- **Form:** Building edges that define space.
- **Pop-up:** Leasable/Available buildings which present opportunities for temporary business development.
- **Street:** Potential for multi-modal street infrastructure, available capacity (ADT under 20,000).
- **Community:** Proximity to a neighborhood.
- **Comfort:** Trees and shade.
- **Partners:** Interest from local partners, existing organizations.
- **People:** Existing special events.

Total points = Overall rating

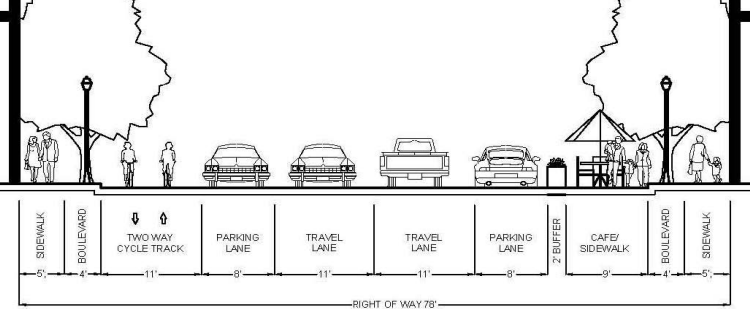
## Team Organization

A Better Block event is most successful when a wide group of stakeholders and community members work together. The East 7th Street Better Block was organized jointly by Team Better Block and Dayton’s Bluff Community Council and supported over forty volunteers and City staff. Organizing the volunteers is crucial to getting the various tasks completed in an efficient and timely manner. The descriptions below can help recruit the right volunteers for the right jobs.

## Existing Cross Section



## Event Cross Section



**Street Team:** Focus on redesigning the street with complete street principles including bicycle and pedestrian amenities. It helps to know how to talk to engineers. Volunteers needed:

- 10 Streetscapers. The ability to lift 50 pounds is a must for street re-invention. You will get a hands-on education in street improvements from collecting, mobilizing to installing cross walks, lighting, planters and café furniture. You will learn how their placement influences placemaking and effects business.
- 5 Landscapers. Connections to landscapers and others with plants helps. We borrow and we borrow well. We will need to acquire plants from local nurseries to use for the day, place them and keep them alive!
- 4 Number crunchers. Nothing is worth doing unless you measure it! Speed study, pedestrian and bicycle counts and other livability indicators will be tracked before and during the Better Block.
- 1 Designer. Needs the ability to work with CADD and/or Photoshop.

Total people needed: 20

## Pop-Up Shops



**Pop-Up Team:** Always wanted to start that small business or have a friend or family member that talks about the flower shop they always wanted to own? This is the time to try it out! We will have a crowd of folks wanting to see the better block and they will bring a wallet. We find access to vacant shops and we want to fill them with: Flower shop, coffee shop, book store, music house, gift shop, you name it! Bring in food trucks to buffer parking lots. Bring your ideas.

Total people needed: 20

## Interpretive Sign



**Signage and Wayfinding:** What am I looking at and where do I go? We need folks that have graphic capabilities to create signage and wayfinding for the better block and the surrounding community. The East 7th Street Better Block included pages from the draft Street Design Manual describing changes to the street. This team is responsible for graphics, production and installation.

Total people needed: 4

## Performance Measures

Metric	Before	During
Safety		
Auto speed	37 MPH	25 MPH
Buffer from moving vehicle	8 feet	20 feet
Crossing distance	60 feet	22 feet
Comfort		
Noise (decibel level)	92 db	60 db
Outdoor seats (number)	6	50
Lingering time (Average)	20 seconds	120 seconds
Interest level		
Food sales	N/A	Sold Out
Population	Local	Regional

**Marketing and Documentation:** We need to get people to the better block to show them what a revitalized main street is and we need to document the event well to spread the news later. Team identifies metrics to measure before and during the event (as shown for the East 7th Street Better Block, above).

Volunteer needs include:

- 1 Outreach manager
- 2 Photographers and videographers
- 1 Web manager
- 1 Copy editor
- 1 Reporter/writer

Total people needed: 6



# Appendix B: East 7th Street “Better Block” Event June 8, 2013

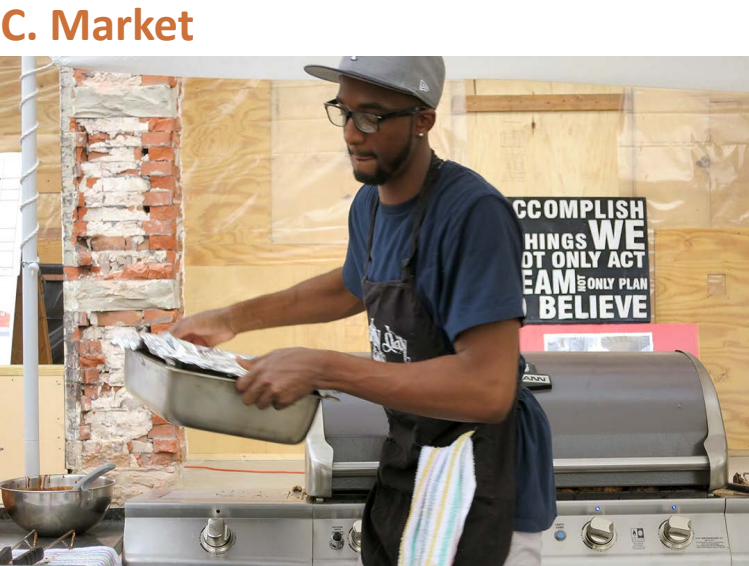
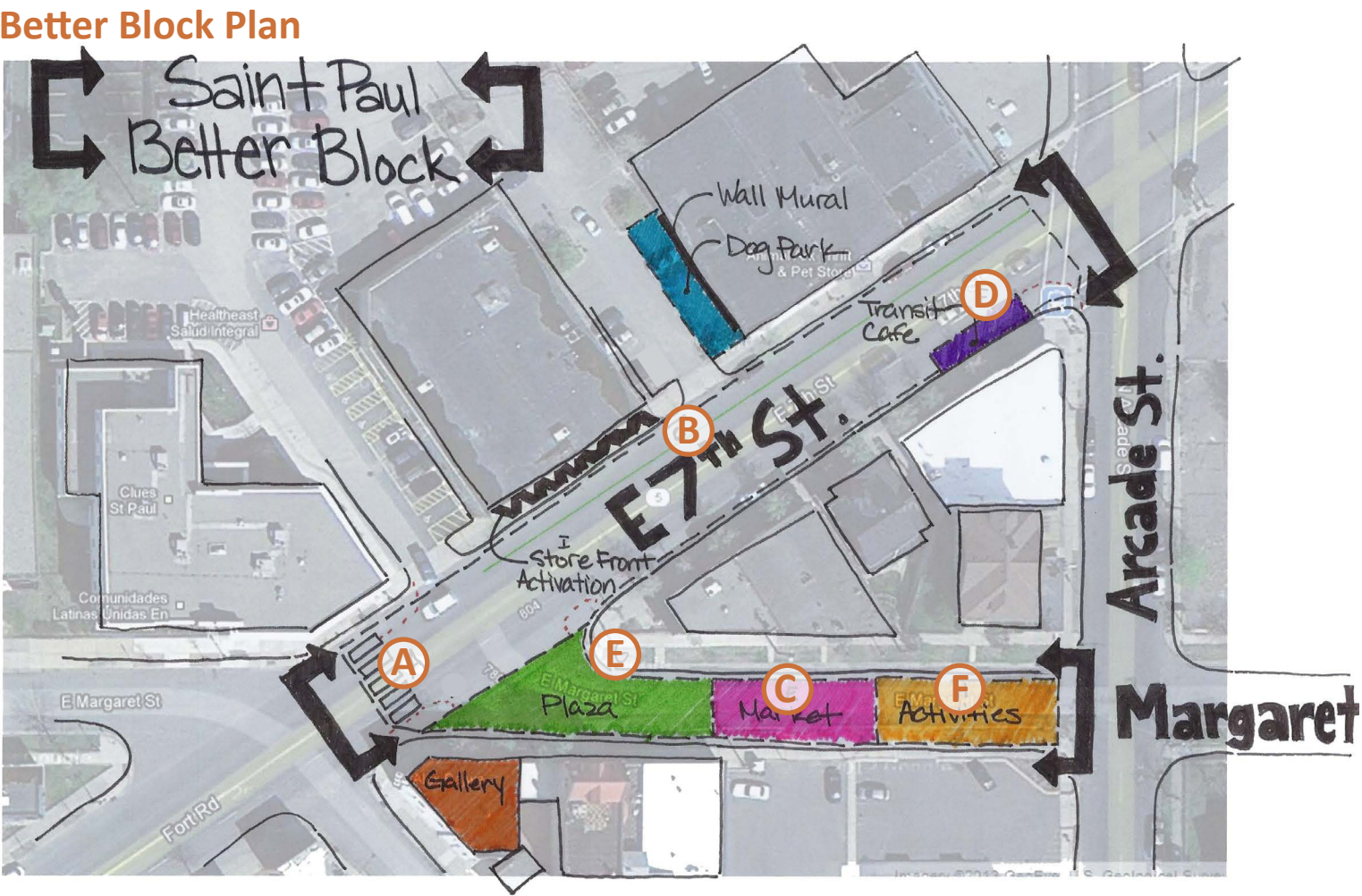
### Event Poster

• Saturday, June 8th, 3pm - 8pm •

# The Better Block PROJECT

at East 7th Street  
b/w E. Margaret and Arcade Streets

The City of Saint Paul Presents: The Better Block Project  
The Saint Paul Better Block will happen on June 8th from 3pm to 8pm on East 7th Street @ Margaret and Arcade Streets. The Better Block builds on the “Make it Happen” initiatives of the Dayton’s Bluff Community Council and will illustrate the City of Saint Paul’s Street Design Manual by temporarily transforming the block into a complete street, with walkable and bikeable amenities and a local market. Free fun for all ages!  
To volunteer or for more information visit <http://saintpaul.teambetterblock.com>  
This material is based upon work supported by the FHWA under TIGER II Cooperative Agreement No. TDG-II-P-28. Any opinions, findings, and conclusions or recommendations expressed in this publication are of those of the Author(s) and do not necessarily reflect the view of the FHWA.





# Appendix B: East 7th Street “Better Block” Event June 8, 2013

## Making the Better Block

A Better Block event requires materials to mold the street into a new configuration. Ideally, these materials would be borrowed or obtained through donations to keep the costs of the event down. Some of the elements that make a successful Better Block are listed below. Communities should find a space to safely and securely store these materials as needed, as well as an open, well-ventilated space to make the benches and bike racks for the event.

## Materials Starter List

- 6-15 trees
- 40-60 shrubs
- 2 large planters
- 35 small planters
- 40 café chairs
- 10 café tables
- 6 info podiums
- 50 pallets to make benches and bike racks
- 3-5 paint gallons
- 12 sixty yard duct tape rolls
- 2,000 feet straw wattles for temporary curbs
- 100-200 posters

## Tools Starter List

- 15 saws
- 4 ladders
- 5 drills
- 10 power screwdrivers
- 15 hammers
- 30 paint brushes
- 10 paint rollers
- 200 nails
- 40 four inch bolts
- 200 screws

## Better Block Checklist

- ☐

Organize a core group of volunteers into teams (see descriptions of each team on page F-i):
  - Street Team
  - Outreach, Marketing and Documentation
  - Pop-up Retail
  - Signage and Wayfinding
- ☐

Meet with Public Works Traffic Division to discuss event and discuss parameters for the event. It is good to identify any safety concerns and refine design ideas with City staff.
- ☐

Set a date and make a poster. Organize the Better Block in coordination with an existing event, like an art crawl or food festival. Publicize the Better Block at least three months in advance. Expect to have about 10% of the project “figured out” at this point. Have faith that the project will develop smoothly.
- ☐

Shoot a video of the existing conditions in the area and splice it together with images of what you would like to see happen, such as a plaza, a bike lane and active businesses. Use this to get traction and excitement for the project.
- ☐

Set up an online sign-up form to organize volunteers. Host weekly gatherings to begin to plan the Better Block. Host a community walk of the area on a Saturday morning. Invite the community, business owners, property owners, the press, City staff and local leaders to have a look at the block. Use the Better Block Survey to capture people’s impressions. Highlight what is good about the area and then talk about what is holding it back. Ask what this neighborhood needs to be complete.
- ☐

Organize the community input into a strengths and weaknesses document. Host a design workshop with a local urban planner or designer to discuss light, quick and cheap methods of improving the block. Be sure to invite property owners and request access to vacant buildings at this time. It is a great way for them to show off their property and get a free tidying up from the Better Block volunteers!
- ☐

Apply for a special event permit (Type B) from the City. Typically these applications need 30 to 60 days for review. You will likely need to provide a traffic control plan, special event insurance, porta-potties, police officers and sanitation. These are typical for any event. Partnering with an existing event will relieve some of this burden.
- ☐

“Borrow, build and buy only if you have to” is the mantra for getting the Better Block done. Have volunteers begin asking friends and contacts for access to landscaping, chairs and tables, building materials and whatever needs your team identifies. People are often glad to loan something if only for a weekend. Make a sponsor page on your web site and solicit donations and in-kind assistance for pulling off the Better Block. Typically, you will need a minimum of \$1,000-\$2,000 to cover special event permit requirements, basic services, and incidental materials.
- ☐

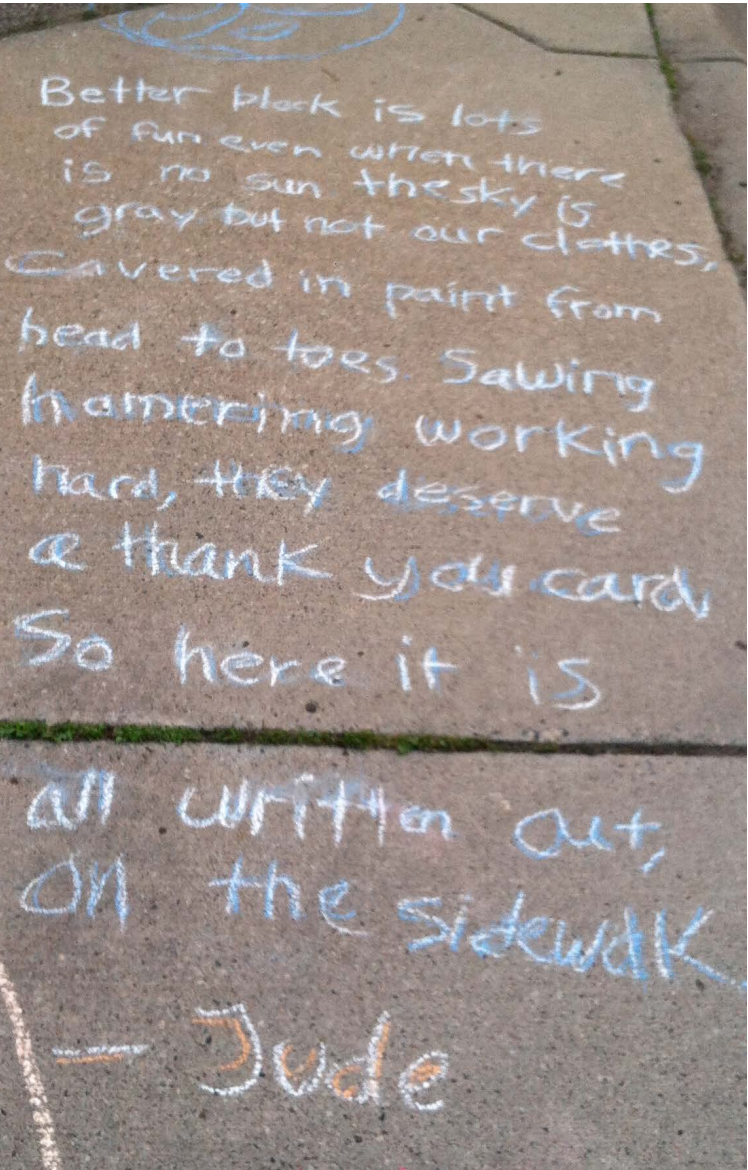
Host a build day a week or two prior to the event. Gain access to vacant buildings and have the pop up teams work on setting them up, build tables and chairs and clean-up the Better Block area.
- ☐

Post pictures from the pre-build to your website and share with the media. Invite policymakers and city staff to the Better Block. Make sure insurance and other requirements have been acquired.
- ☐

Assign volunteers to document the Better Block while it is in progress with video and pictures. Upload them to social media during the event. Use the Performance Measures to document the impacts. Thank sponsors during and after!
- ☐

Coordinate a meeting with volunteers and City leaders after the Better Block to discuss ways to make the changes permanent. Make plans for more Better Blocks and lend support to pop-up businesses to become permanent.

## Thank You Poem

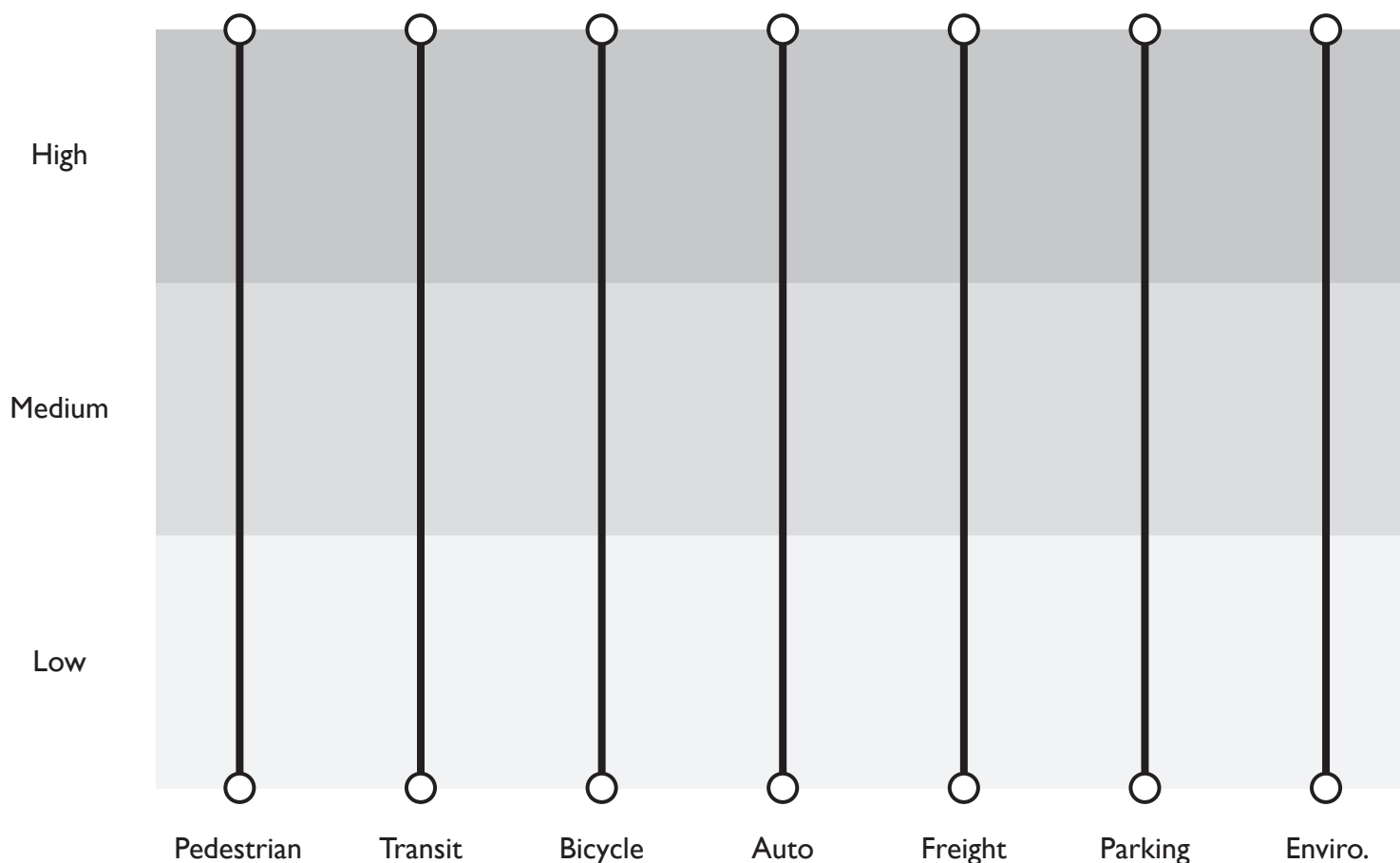


## Next Steps

- Incorporate an improved East 7th crossing and pedestrian improvements to Margaret Street as part of the Margaret Bikeway project.
- Identify where cycle tracks may be be appropriate elsewhere in the city.
- Permitting has become more complicated given the State jurisdiction over food permits. Develop info describing the permitting process for future Better Block events. Additionally, the Open Streets concept, where the street is closed to auto traffic is another option for a street-focused community building event.
- Use the Better Block process to help design a street.

# Appendix C: Functional Balance Exercise

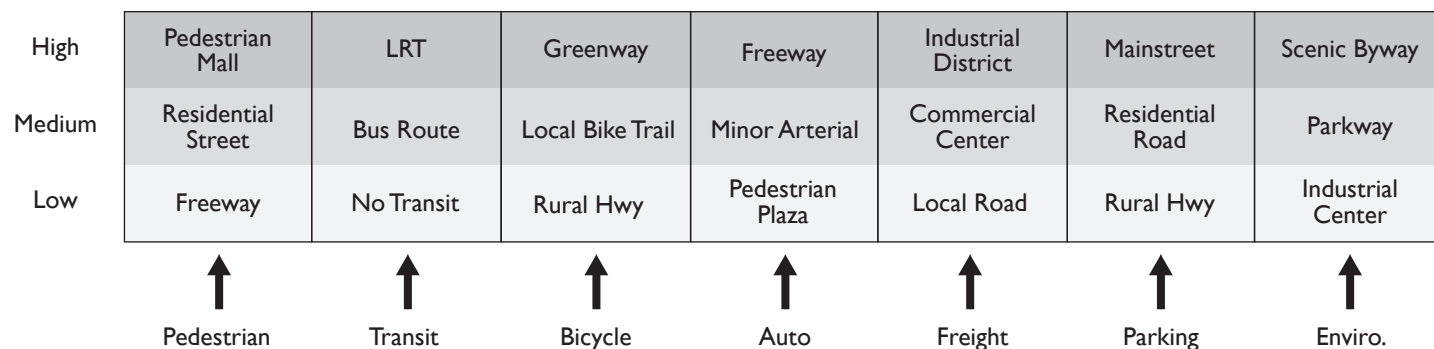
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Notes:

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Example Use Spectrum:



Appendix D: Better Block Process

TIME	EVENT	OBJECTIVES	ACTIVITIES
6 MONTHS	Meet with Better Block organizers	Select block location	<div><input type="checkbox"/> Develop goals for event</div> <div><input type="checkbox"/> Evaluate potential sites based on Better Block criteria and select preferred location</div>
4 MONTHS	Meet with City and partner organization	<div>Set event date</div> <div>Identify permits needed</div> <div>Recruit volunteers</div> <div>Create promotion materials</div> <div>Develop ideas for block</div>	<div><input type="checkbox"/> Make and publicize event poster at least three months in advance</div> <div><input type="checkbox"/> Identify an existing event, like an art crawl or food festival, to share with Better Block</div> <div><input type="checkbox"/> Begin hosting weekly planning gatherings (typically, about 10% of the project is “figured out” at this point)</div> <div><input type="checkbox"/> Collect images of existing conditions and pair with images of what you would like to see</div> <div><input type="checkbox"/> Set-up an online sign-up form to gather volunteers</div> <div><input type="checkbox"/> Sketch a few street design alternatives and begin to vet with organizers and city staff</div>
3 MONTHS	<div>Meet with property and business owners</div> <div>Host community meeting and walk</div>	<div>Capture peoples’ impressions of block</div> <div>Identify needs and opportunities</div>	<div><input type="checkbox"/> Invite the community, business owners, property owners, City staff and leaders for a site tour</div> <div><input type="checkbox"/> Discuss and document what is good about the neighborhood, what is holding it back, and what it needs to be complete</div> <div><input type="checkbox"/> Organize the community input into a strengths and weaknesses document</div> <div><input type="checkbox"/> Identify volunteer team leaders</div>
2 MONTHS	Meet with permitting agencies	Submit permit applications	<div><input type="checkbox"/> Complete special event permit (typically, requires 30 to 60 day review period)</div> <div><input type="checkbox"/> Identify supplemental requirements such as traffic control plan, special event insurance, food permits, police officers, sanitation, etc.</div>
6 WEEKS	Hold planning session	<div>Organize volunteers</div> <div>Borrow, build and buy <i>(but only if you must)</i></div>	<div><input type="checkbox"/> Host a design workshop with a local urban planner or designer and property owners to discuss lighter, quicker and cheaper methods of improving the block</div> <div><input type="checkbox"/> Request access to vacant buildings</div> <div><input type="checkbox"/> Create list of supplies needed</div> <div><input type="checkbox"/> Finalize volunteer teams</div> <div><input type="checkbox"/> Finalize food and drink vendor list and locations</div> <div><input type="checkbox"/> Have volunteers begin asking friends and contacts for access to landscaping, chairs and tables, other building materials</div> <div><input type="checkbox"/> Make a sponsor page on your web site and solicit donations and in-kind assistance (typically, minimum costs are \$1,000-\$2,000 for permits and services)</div>
1 WEEK	Hold build sessions	<div>Build furniture</div> <div>Stage event spaces</div> <div>Paint murals and assemble public art</div>	<div><input type="checkbox"/> Gain access to vacant buildings and have the pop up teams work on setting them up</div> <div><input type="checkbox"/> Post pictures from the pre-build to your web-site and share with the media</div> <div><input type="checkbox"/> Invite policymakers and City staff to the Better Block</div> <div><input type="checkbox"/> Confirm insurance, traffic control, and other requirements are in place</div> <div><input type="checkbox"/> Train flaggers for traffic control safety (if needed)</div> <div><input type="checkbox"/> Finalize and stage materials for set-up</div> <div><input type="checkbox"/> Clean-up the Better Block area</div>
6 HOURS	Set-up the event	Prepare for event	<div><input type="checkbox"/> Complete any changes to street first then focus on staging on private property</div> <div><input type="checkbox"/> Assign volunteers to document the Better Block while it is in progress</div> <div><input type="checkbox"/> Upload video and photos to social media</div>
BETTER BLOCK	Better Block	Document metrics	<div><input type="checkbox"/> Collect performance measures to document impacts</div> <div><input type="checkbox"/> Thank sponsors and volunteers during and after</div>