Application

10351 - 2018 Pedestrian Facilities (Sidewalks, Streetscaping, and ADA)

10776 - Lyndale Avenue North Pedestrian Safety Improvements

Regional Solicitation - Bicycle and Pedestrian Facilities

Status:	Submitted
Submitted Date:	07/13/2018 12:08 PM

Primary Contact

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What Grant Programs are you most interested in?	Regional Solicitation - Bicycle and Pedestrian Facilities			

Organization Information

Name:	MINNEAPOLIS,CITY OF
Jurisdictional Agency (if different):	

Organization Type:	City
Organization Website:	http://www.ci.minneapolis.mn.us/
Address:	DEPT OF PUBLIC WORKS
	309 2ND AVE S #300
*	MINNEAPOLIS (City) / Minnesota (State/Province) / 55401 (Postal Code/Zip)
County:	Hennepin
Phone:*	612-673-3884 Ext.
Fax:	
PeopleSoft Vendor Number	0000020971A2

Project Information

Project Name	Lyndale Avenue N Pedestrian Safety Improvements
Primary County where the Project is Located	Hennepin
Cities or Townships where the Project is Located:	Minneapolis
Jurisdictional Agency (If Different than the Applicant):	

Brief Project Description (Include location, road name/functional class, type of improvement, etc.)

The proposed project will provide pedestrian safety improvements and ADA accessibility at select intersections along the Lyndale Avenue North corridor between 22nd Avenue North and 40th Avenue North, a high crash rate corridor in Minneapolis. These safety improvements may include:

- Crossing improvements to narrow the road, resulting in reduced time a pedestrian is exposed to traffic, increased pedestrian visibility, and traffic calming benefits

- Installation of ADA-compliant curb ramps to enhance pedestrian safety and comfort

- Upgraded traffic control device with APS push buttons to provide pedestrian crossing priority and increased compliance of vehicles stopping for pedestrians

- Upgraded bus stops with ADA-compliant loading zones to enhance transit access for people with disabilities

Lyndale Avenue North is a minor arterial roadway with 2017 AADTs ranging between 8,000 (south) - 10,600 (north) vehicles per day. Lyndale Avenue North also serves as a transit corridor in north Minneapolis. Given the community's low rate of auto ownership, safe and comfortable pedestrian access to transit services along Lyndale Avenue North is key for area residents' access to the broader metropolitan area for work, school, services, recreation and retail needs.

The corridor has been identified as part of the Pedestrian Crash Concentration Corridor and High Injury Network in the Minneapolis Pedestrian Crash Study (2017). The prioritization of this project

supports the City's equitable prioritization of multimodal improvements (see the 20 Year Streets Funding Plan and the Complete Streets Policy) and its commitment to Vision Zero to eliminate serious and fatal crashes within 10 years.

(Limit 2,800 characters; approximately 400 words)

TIP Description Guidance (will be used in TIP if the project is selected for funding)

Lyndale Avenue N Pedestrian Safety Improvements

Project Length (Miles)

1.8

to the nearest one-tenth of a mile

Project Funding

Are you applying for competitive funds from another source(s) to implement this project?

No

If yes, please identify the source(s)

Federal Amount

$1,000,000.00

Match Amount

$250,000.00

Minimum of 20% of project total

Project Total

$1,250,000.00

Match Percentage

20.0%

Minimum of 20%
Compute the match percentage by dividing the match amount by the project total

Source of Match Funds

City

A minimum of 20% of the total project cost must come from non-federal sources; additional match funds over the 20% minimum can come from other federal sources

Preferred Program Year

Select one:

2022

Select 2020 or 2021 for TDM projects only. For all other applications, select 2022 or 2023.

Additional Program Years:

2020, 2021

Select all years that are feasible if funding in an earlier year becomes available.

Project Information

County, City, or Lead Agency

City of Minneapolis

Zip Code where Majority of Work is Being Performed

55412

(Approximate) Begin Construction Date

05/02/2022

(Approximate) End Construction Date

10/31/2022

Name of Trail/Ped Facility:

Lyndale Avenue Pedestrian Facilities

(i.e., CEDAR LAKE TRAIL)

TERMINI:(Termini listed must be within 0.3 miles of any work)

From: (Intersection or Address)	22nd Avenue North
To: (Intersection or Address)	40th Avenue North

DO NOT INCLUDE LEGAL DESCRIPTION; INCLUDE NAME OF ROADWAY IF MAJORITY OF FACILITY RUNS ADJACENT TO A SINGLE CORRIDOR

Or At:

Primary Types of Work	grading, aggregate base, curb relocation, storm drain relocation, sidewalk, signals, pedestrian ramps, striping, and signing

Examples: GRADE, AGG BASE, BIT BASE, BIT SURF, SIDEWALK, SIGNALS, LIGHTING, GUARDRAIL, BIKE PATH, PED RAMPS, BRIDGE, PARK AND RIDE, ETC.

BRIDGE/CULVERT PROJECTS (IF APPLICABLE)

Old Bridge/Culvert No.:

New Bridge/Culvert No.:

Structure is Over/Under (Bridge or culvert name):

Requirements - All Projects

All Projects

1.The project must be consistent with the goals and policies in these adopted regional plans: Thrive MSP 2040 (2014), the 2040 Transportation Policy Plan (2015), the 2040 Regional Parks Policy Plan (2015), and the 2040 Water Resources Policy Plan (2015).

Check the box to indicate that the project meets this requirement. Yes

2.The project must be consistent with the 2040 Transportation Policy Plan. Reference the 2040 Transportation Plan goals, objectives, and strategies that relate to the project.

List the goals, objectives, strategies, and associated pages:

Goal B: Safety and Security - The regional transportation system is safe and secure for all users.

-Objective: Reduce crashes and improve safety and security for all modes of passenger travel and freight transport.

-Strategy B6: Regional transportation partners will use best practice to provide and improve facilities for safe walking and bicycling, since pedestrians and bicyclists are the most vulnerable users of the transportation system (page 2.7).

Goal C: Access to Destinations - People and businesses prosper by using a reliable, affordable, and efficient multimodal transportation system that connects them to destinations throughout the region and beyond.

-Objective: Increase the availability of multimodal travel options, especially in congested highway corridors.

-Objective: Improve multimodal travel options for people of all ages and abilities to connect to jobs and other opportunities, particularly for historically under-represented populations.

-Strategy C1: Regional transportation partners will continue to work together to plan and implement transportation system that are multimodal and provide connections between modes. The Council will prioritize regional projects that are multimodal and cost-effective and encourage investments to include appropriate provisions for bicycle and pedestrian travel (page 2.8).

-Strategy C2: Local units of government should

provide a system of interconnected arterial roads, streets, bicycle facilities, and pedestrian facilities to meet local travel needs using Complete Street principles (page 2.8).

Goal E: Healthy Environment - The regional transportation system advances equity and contributes to communities' livability and sustainability while protecting the natural, cultural, and developed environments.

-Objective: Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities and active car-free lifestyles.

-Strategy E3: (page 2.12)

-Strategy E5: (page 2.13)

Goal F: Leveraging Transportation Investment to Guide Land Use - The region leverages transportation investments to guide land use and development patterns that advance the regional vision of stewardship, prosperity, livability, equity, and sustainability.

-Objective: Encourage local land use design that integrates highways, streets, transit, walking, and bicycling.

-Strategy F7: (page 2.16).

(Limit 2500 characters; approximately 750 words)

3.The project or the transportation problem/need that the project addresses must be in a local planning or programming document. Reference the name of the appropriate comprehensive plan, regional/statewide plan, capital improvement program, corridor study document [studies on trunk highway must be approved by the Minnesota Department of Transportation and the Metropolitan Council], or other official plan or program of the applicant agency [includes Safe Routes to School Plans] that the project is included in and/or a transportation problem/need that the project addresses.

City of Minneapolis Pedestrian Master Plan (2009), pages 4, 31-34, 39, 43, 45-46, 88

List the applicable documents and pages:

City of Minneapolis Pedestrian Crash Study (2017), pages 5-4

(Limit 2500 characters; approximately 750 words)

4.The project must exclude costs for studies, preliminary engineering, design, or construction engineering. Right-of-way costs are only eligible as part of transit stations/stops, transit terminals, park-and-ride facilities, or pool-and-ride lots. Noise barriers, drainage projects, fences, landscaping, etc., are not eligible for funding as a standalone project, but can be included as part of the larger submitted project, which is otherwise eligible.

Check the box to indicate that the project meets this requirement. Yes

5.Applicants that are not cities or counties in the seven-county metro area with populations over 5,000 must contact the MnDOT Metro State Aid Office prior to submitting their application to determine if a public agency sponsor is required.

Check the box to indicate that the project meets this requirement. Yes

6.Applicants must not submit an application for the same project in more than one funding sub-category.

Check the box to indicate that the project meets this requirement. Yes

7.The requested funding amount must be more than or equal to the minimum award and less than or equal to the maximum award. The cost of preparing a project for funding authorization can be substantial. For that reason, minimum federal amounts apply. Other federal funds may be combined with the requested funds for projects exceeding the maximum award, but the source(s) must be identified in the application. Funding amounts by application category are listed below.
Multiuse Trails and Bicycle Facilities: *$250,000 to $5,500,000*
Pedestrian Facilities (Sidewalks, Streetscaping, and ADA): *$250,000 to $1,000,000*
Safe Routes to School: *$150,000 to $1,000,000*

Check the box to indicate that the project meets this requirement. Yes

8.The project must comply with the Americans with Disabilities Act (ADA).

Check the box to indicate that the project meets this requirement. Yes

9.In order for a selected project to be included in the Transportation Improvement Program (TIP) and approved by USDOT, the public agency sponsor must either have, or be substantially working towards, completing a current Americans with Disabilities Act (ADA) self-evaluation or transition plan that covers the public right of way/transportation, as required under Title II of the ADA.

The applicant is a public agency that employs 50 or more people and has an adopted ADA transition plan that covers the public right of way/transportation.		Date plan adopted by governing body	
The applicant is a public agency that employs 50 or more people and is currently working towards completing an ADA transition plan that covers the public rights of way/transportation.	Yes	11/01/2017 Date process started	12/31/2018 Date of anticipated plan completion/adoption
The applicant is a public agency that employs fewer than 50 people and has a completed ADA self-evaluation that covers the public rights of way/transportation.		Date self-evaluation completed	

The applicant is a public agency that employs fewer than 50 people and is working towards completing an ADA self-evaluation that covers the public rights of way/transportation.

Date process started

Date of anticipated plan completion/adoption

(TDM Applicants Only) The applicant is not a public agency subject to the self-evaluation requirements in Title II of the ADA.

10.The project must be accessible and open to the general public.

Check the box to indicate that the project meets this requirement. Yes

11.The owner/operator of the facility must operate and maintain the project year-round for the useful life of the improvement, per FHWA direction established 8/27/2008 and updated 6/27/2017.

Check the box to indicate that the project meets this requirement. Yes

12.The project must represent a permanent improvement with independent utility. The term independent utility means the project provides benefits described in the application by itself and does not depend on any construction elements of the project being funded from other sources outside the regional solicitation, excluding the required non-federal match.
Projects that include traffic management or transit operating funds as part of a construction project are exempt from this policy.

Check the box to indicate that the project meets this requirement. Yes

13.The project must not be a temporary construction project. A temporary construction project is defined as work that must be replaced within five years and is ineligible for funding. The project must also not be staged construction where the project will be replaced as part of future stages. Staged construction is eligible for funding as long as future stages build on, rather than replace, previous work.

Check the box to indicate that the project meets this requirement. Yes

14.The project applicant must send written notification regarding the proposed project to all affected state and local units of government prior to submitting the application.

Check the box to indicate that the project meets this requirement. Yes

Requirements - Bicycle and Pedestrian Facilities Projects

1.All projects must relate to surface transportation. As an example, for multiuse trail and bicycle facilities, surface transportation is defined as primarily serving a commuting purpose and/or that connect two destination points. A facility may serve both a transportation purpose and a recreational purpose; a facility that connects people to recreational destinations may be considered to have a transportation purpose.

Check the box to indicate that the project meets this requirement. Yes

Multiuse Trails on Active Railroad Right-of-Way:

2.All multiuse trail projects that are located within right-of-way occupied by an active railroad must attach an agreement with the railroad that this right-of-way will be used for trail purposes.

Check the box to indicate that the project meets this requirement.

Upload Agreement PDF

Check the box to indicate that the project is not in active railroad right-of-way. Yes

Safe Routes to School projects only:

3.All projects must be located within a two-mile radius of the associated primary, middle, or high school site.

Check the box to indicate that the project meets this requirement.

4.All schools benefitting from the SRTS program must conduct after-implementation surveys. These include the student travel tally form and the parent survey available on the National Center for SRTS website. The school(s) must submit the after-evaluation data to the National Center for SRTS within a year of the project completion date. Additional guidance regarding evaluation can be found at the MnDOT SRTS website.

Check the box to indicate that the applicant understands this requirement and will submit data to the National Center for SRTS within one year of project completion.

Requirements - Bicycle and Pedestrian Facilities Projects

Specific Roadway Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Mobilization (approx. 5% of total cost)	$39,000.00
Removals (approx. 5% of total cost)	$69,500.00
Roadway (grading, borrow, etc.)	$0.00
Roadway (aggregates and paving)	$93,400.00
Subgrade Correction (muck)	$0.00
Storm Sewer	$418,000.00
Ponds	$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	$48,500.00
Traffic Control	$39,000.00
Striping	$0.00
Signing	$4,900.00
Lighting	$0.00
Turf - Erosion & Landscaping	$0.00
Bridge	$0.00
Retaining Walls	$0.00
Noise Wall (not calculated in cost effectiveness measure)	$0.00
Traffic Signals	$80,000.00
Wetland Mitigation	$0.00
Other Natural and Cultural Resource Protection	$0.00
RR Crossing	$0.00
Roadway Contingencies	$390,000.00
Other Roadway Elements	$0.00
Totals	**$1,182,300.00**

Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	$0.00
Sidewalk Construction	$0.00
On-Street Bicycle Facility Construction	$0.00
Right-of-Way	$0.00
Pedestrian Curb Ramps (ADA)	$56,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	$8,000.00
Pedestrian-scale Lighting	$0.00
Streetscaping	$3,700.00
Wayfinding	$0.00
Bicycle and Pedestrian Contingencies	$0.00
Other Bicycle and Pedestrian Elements	$0.00
Totals	**$67,700.00**

Specific Transit and TDM Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Fixed Guideway Elements	$0.00
Stations, Stops, and Terminals	$0.00
Support Facilities	$0.00
Transit Systems (e.g. communications, signals, controls, fare collection, etc.)	$0.00
Vehicles	$0.00
Contingencies	$0.00
Right-of-Way	$0.00
Other Transit and TDM Elements	$0.00
Totals	**$0.00**

Transit Operating Costs

Number of Platform hours	0
Cost Per Platform hour (full loaded Cost)	$0.00
Subtotal	$0.00
Other Costs - Administration, Overhead,etc.	$0.00

Totals

Total Cost	$1,250,000.00
Construction Cost Total	$1,250,000.00
Transit Operating Cost Total	$0.00

Measure A: Project Location Relative to Jobs and Post-Secondary Education

Existing Employment Within One-Half Mile:	9603
Existing Post-Secondary Enrollment Within One-Half Mile:	0
Upload Map	1531425144687_A_3_Reg Economy.pdf

Please upload attachment in PDF form.

Measure A: Population Summary

Existing Population Within One-Half Mile	29992
Upload Map	1531425244984_A_4_Pop_Employ.pdf

Please upload attachment in PDF form.

Measure A: Connection to disadvantaged populations and projects benefits, impacts, and mitigation

Select one:

Project located in Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50): *(up to 100% of maximum score)*	Yes
Project located in Area of Concentrated Poverty: *(up to 80% of maximum score)*	
Projects census tracts are above the regional average for population in poverty or population of color: *(up to 60% of maximum score)*	
Project located in a census tract that is below the regional average for population in poverty or populations of color or includes children, people with disabilities, or the elderly: *(up to 40% of maximum score)*	

1.(0 to 3 points) A successful project is one that has actively engaged low-income populations, people of color, children, persons with disabilities, and the elderly during the project's development with the intent to limit negative impacts on them and, at the same time, provide the most benefits.
Describe how the project has encouraged or will engage the full cross-section of community in decision-making. Identify the communities to be engaged and where in the project development process engagement has occurred or will occur. Elements of quality engagement include: outreach to specific communities and populations that are likely to be directly impacted by the project; techniques to reach out to populations traditionally not involved in the community engagement related to transportation projects; residents or users identifying potential positive and negative elements of the project; and surveys, study recommendations, or plans that provide feedback from populations that may be impacted by the proposed project. If relevant, describe how NEPA or Title VI regulations will guide engagement activities.

Response:

Broad public engagement activities began in 2008 with the development of the City of Minneapolis Pedestrian Master Plan, which included three public houses, surveys, press releases, a project website and presentations to stakeholder groups. Minneapolis Public Works introduced this regional solicitation application to City Council and received support in spring 2018 (see attachments).

The project area has high populations of low-income, persons of color, persons with disabilities, and the elderly. Future engagement with these populations will occur during the project development phase of the project. Project managers will strategically choose engagement methods that target populations traditionally not involved in community engagement who use the corridor, such as communities of color, low-income populations, transit riders, renters, and persons with disabilities, as well as identified focus groups and neighborhood organizations. Significant effort will be made to engage the identified populations at pop-up events, bringing public engagement to the people at a time that is convenient to them and in an environment that they are comfortable with instead of seeking input primarily through public meetings. Furthermore, the City will seek input through the Minneapolis Pedestrian Advisory Committee and neighborhood groups along the corridor.

(Limit 1,400 characters; approximately 200 words)

2.(0 to 7 points) Describe the projects benefits to low-income populations, people of color, children, people with disabilities, and the elderly. Benefits could relate to safety; public health; access to destinations; travel time; gap closure; leveraging of other beneficial projects and investments; and/or community cohesion. Note that this is not an exhaustive list.

Response:

The project will have direct benefits for low-income populations, people of color, people with disabilities, children, and the elderly. 2010 census data showed populations of concentrated poverty reached as high as 85 percent in the project area. Nearby census block groups showed values reached as high as 80 percent of the population being residents of color, 45 percent children, nearly 50 percent disabled, and almost 91 percent of one of the census blocks do not have access to a car.

Safety: The proposed Lyndale Avenue North pedestrian improvements provide a safer corridor for low-income populations, people of color and children by installing crossing improvements, such as curb extensions, pedestrian crossing medians, an upgraded traffic control device and APS push buttons, new ADA-compliant pedestrian ramps, and bus loading zones. This portion of Lyndale Avenue North is identified as a Pedestrian Crash Concentration Corridor and a part of the High Injury Network in the Minneapolis Pedestrian Crash Study (2017). In addition, the study identifies the Lyndale Avenue North/West Broadway intersection as having the second highest number of crashes and crash rate within the city for a 10-year period. This intersection is scheduled to receive pedestrian improvements in 2021. The Lyndale Avenue project will leverage and extend the benefits of the planned intersection enhancements. Finally, the Lyndale Avenue North Pedestrian Safety Improvement project supports the City's equitable prioritization of multimodal improvements (20 Year Streets Funding Plan and the Complete Streets Policy) and its commitment to Vision Zero to eliminate serious and fatal crashes within 10 years.

Access and Public Health: Within one-half mile of the project area there are 9,603 jobs. The lack of

vehicle ownership in the area highlights the need for greater pedestrian access to transit, places of employment, health centers, and other destinations. Safe pedestrian infrastructure and crossing accommodations are critical in this area. The Lyndale Avenue North Pedestrian Safety Improvements project will provide a safe, healthy, and economical alternative for residents who may not be able to afford or have access to a personal vehicle or may not have a driver's license. In many households, access to a vehicle is limited, placing enormous pressure on public transit and other transportation modes. Because of this, the implementation of pedestrian improvements along this 1.8-mile north Minneapolis corridor will help to facilitate a regional connection for multiple transportation modes, including public transit, walking, and biking. In addition, these enhancements will improve the health and well-being of community residents by providing a safe route to access community destinations.

(Limit 2,800 characters; approximately 400 words)

3.(-3 to 0 points) Describe any negative externalities created by the project along with measures that will be taken to mitigate them. Negative externalities can result in a reduction in points, but mitigation of externalities can offset reductions.
Below is a list of negative impacts. Note that this is not an exhaustive list.
Increased difficulty in street crossing caused by increased roadway width, increased traffic speed, wider turning radii, or other elements that negatively impact pedestrian access.
Increased noise.
Decreased pedestrian access through sidewalk removal / narrowing, placement of barriers along the walking path, increase in auto-oriented curb cuts, etc.
Project elements that are detrimental to location-based air quality by increasing stop/start activity at intersections, creating vehicle idling areas, directing an increased number of vehicles to a particular point, etc.
Increased speed and/or cut-through traffic.
Removed or diminished safe bicycle access.
Inclusion of some other barrier to access to jobs and other destinations.
Displacement of residents and businesses.
Construction/implementation impacts such as dust; noise; reduced access for travelers and to businesses; disruption of utilities; and eliminated street crossings. These tend to be temporary.
Other

Response:

The proposed project will not create any permanent negative impacts. During construction, access to housing and community destinations will be maintained and temporary noise, dust and traffic impacts will be properly mitigated during construction. In addition, sidewalk users will be directed towards alternate routes with easy to follow detour signing.

(Limit 2,800 characters; approximately 400 words)

Upload Map 1531425345953_A_5_Socio Economic.pdf

Measure B: Affordable Housing

City	Segment Length (For stand-alone projects, enter population from Regional Economy map) within each City/Township	Segment Length/Total Project Length	Score	Housing Score Multiplied by Segment percent
Minneapolis	29992.0	1.0	100.0	100.0

Total Project Length

Total Project Length (as entered in the "Project Information" form) 1.8

Affordable Housing Scoring

Total Project Length (Miles) or Population 29992.0

Total Housing Score 100.0

Affordable Housing Scoring

Measure A: Gaps, Barriers and Continuity/Connections

Response:

Description of barrier: Lyndale Ave North has high vehicle speeds, volumes, and a significant pedestrian crash history which makes crossing this road difficult and dangerous, especially for the elderly, children, and those with reduced mobility. A speed study conducted on Lyndale Avenue between 26th Avenue North and 27th Avenue North for a three-day period in early June 2018 indicated that 85th percentile speeds were 37 mph northbound and 35 mph southbound on a street with a 30 mph speed limit. Northbound traffic between 35th Avenue North and 36th Avenue North during the same period had an 85th percentile speed of 40 mph. A one-day traffic count between 26th Avenue North and 27th Avenue North showed vehicle volumes of over 11,400 vehicles, with over 900 vehicles during the PM peak hour and 10.6% of the volume comprised of trucks during the AM peak hour. Between 2011-2015, there were 16 reported crashes involving pedestrians and vehicles including 1 fatal crash and 3 incapacitating pedestrian injuries.

Access to destinations: Several schools, parks, and numerous commercial areas are located on either side of Lyndale Avenue North. Transit service on the corridor provides greater access to regional destinations, including Brooklyn Center to the north, and downtown Minneapolis, the Minneapolis-St. Paul airport, and the Mall of America to the south. Additional barriers to accessing destinations to the east and west are created by the community's proximity to I-94 and the Mississippi River creating a need for residents to travel north-south on Lyndale Avenue North to access freeway overpasses and bridges as well as needing to cross Lyndale Avenue North to access schools, parks, services, retail areas and transit stops. Furthermore, the adjacent community has low rates of vehicle ownership, a large low-income population, and over 40% of the population are

school-age children making walking a critical transportation mode for the community.

Lyndale Avenue North intersects with the 26th Avenue North Tier 2 RBTN corridor, which is one of only a few east-west RBTN corridors in north Minneapolis. It also intersects with existing bike facilities located on Lowry Avenue North and Dowling Avenue North.

The proposed pedestrian improvements included in this project will reduce the barrier impacts of Lyndale Avenue North and provide safer crossings of Lyndale Avenue North and cross streets at select intersections by encouraging slower vehicle speeds, shortening pedestrian crossing distances, and increasing pedestrian visibility.

(Limit 2,800 characters; approximately 400 words)

Upload the RBTN Evaluation Map

Please upload attachment in PDF form.

1531426575281_A_6_Proj to RBTN Orient.pdf

Measure B: Project Improvements

The project area falls within an Area of Concentrated Poverty where 50% or more of the residents are people of color (ACP50). The Minneapolis Pedestrian Crash Study (2017) found that pedestrian crashes are more likely to occur in ACP50s, in corridors with high frequency transit routes, and near bus stops, which is supported by the fact that every transit user is a pedestrian at some point during their trip. The study also found that 80% of all pedestrian crashes occurred on 10% of the streets in Minneapolis (Pedestrian Crash Concentration Corridor) and that 75% of all fatal or serious crashes occurred on only 5% of the streets in Minneapolis (High Injury Network). Lyndale Avenue North from 22nd Avenue North to 40th Avenue North was identified as a Pedestrian Crash Concentration Corridor and as part of the High Injury Network.

Response:

A review of the crash data for Lyndale Avenue North from 22nd Avenue North to 40th Avenue North reported by the State of Minnesota and the Minneapolis Police Department for the years 2011 through 2015 shows a total of 16 reported crashes involving a pedestrian and vehicle. Crash types reported include:

1 Fatal

3 Incapacitating Injuries

2 Non-Incapacitating Injuries

8 Possible Injuries

2 Unknown or No Injury

The proposed project will provide much needed safety improvements at intersections and promote

walking on Lyndale Avenue North through the installation of crossing improvements, such as curb extensions, pedestrian crossing medians, an upgraded traffic control device and APS push buttons, new ADA-compliant pedestrian ramps, and bus loading zones. Building upon guidance from Minneapolis' transportation action plan, Access Minneapolis, and its comprehensive plan, The Minneapolis Plan for Sustainable Growth, the City of Minneapolis adopted a Complete Streets Policy in 2016 which establishes a modal framework and prioritizes people as they walk, bicycle, and take transit over people when they drive. The City of Minneapolis has also made a commitment to Vision Zero, a goal of eliminating fatalities and severe injuries that are a result of crashes on city streets within the City of Minneapolis by 2027. The Lyndale Avenue North Pedestrian Safety Improvement project will align with and support these initiatives by creating a safer and more accessible environment for pedestrians.

(Limit 2,800 characters; approximately 400 words)

Measure A: Multimodal Elements and Connections

Response:

The proposed Lyndale Avenue North Pedestrian Safety Improvement project will improve safety for all modes of transportation by encouraging slower vehicle speeds and increasing pedestrian visibility. Six Metro Transit routes serve the Lyndale Avenue corridor. Given the community's low rate of automobile ownership, these transit routes are an important mode of transportation for community residents. These routes carry residents to major daily destinations, including employment, schools, retail, and entertainment areas.

The Lyndale Avenue North Pedestrian Safety Improvement project will enhance pedestrian facilities at transit stops along the corridor through the construction of ADA compliant bus loading zones. The provision of crossing treatments such as curb extensions, pedestrian crossing medians, or new ADA-compliant pedestrian ramps will increase pedestrian visibility, shorten crossing distances and act as traffic calming devices to visually narrow the corridor and encourage slower vehicle speeds. These enhancements, along with an upgraded traffic control device and APS push buttons connecting a K-12 school to Farview Park, will allow pedestrians, bicyclists, transit, automobiles, and trucks to cross Lyndale Avenue North and/or adjoining cross streets in a predictable and safe manner. In particular, project improvements will improve safety for people with mental and physical disabilities, the elderly, and school-age children who may use transit and walking as their primary transportation modes.

The project area will provide direct connections to 26th Avenue, which is classified as a Tier 2 RBTN, one of only a few east-west RBTN corridors in north Minneapolis. The Lyndale Avenue North Pedestrian Safety Improvement project will also provide direct connections to bike facilities on Lowry Avenue

North and Dowling Avenue North.

(Limit 2,800 characters; approximately 400 words)

Transit Projects Not Requiring Construction

If the applicant is completing a transit application that is operations only, check the box and do not complete the remainder of the form. These projects will receive full points for the Risk Assessment.
Park-and-Ride and other transit construction projects require completion of the Risk Assessment below.

Check Here if Your Transit Project Does Not Require Construction

Measure A: Risk Assessment - Construction Projects

1)Layout (30 Percent of Points)

Layout should include proposed geometrics and existing and proposed right-of-way boundaries.

Layout approved by the applicant and all impacted jurisdictions (i.e., cities/counties that the project goes through or agencies that maintain the roadway(s)). A PDF of the layout must be attached along with letters from each jurisdiction to receive points.

Yes

100%

Attach Layout

1531494028468_A-12_Concept Map.pdf

Please upload attachment in PDF form.

Layout completed but not approved by all jurisdictions. A PDF of the layout must be attached to receive points.

50%

Attach Layout

Please upload attachment in PDF form.

Layout has not been started

0%

Anticipated date or date of completion

2)Review of Section 106 Historic Resources (20 Percent of Points)

No known historic properties eligible for or listed in the National Register of Historic Places are located in the project area, and project is not located on an identified historic bridge

100%

There are historical/archeological properties present but determination of no historic properties affected is anticipated.

Yes

100%

Historic/archeological property impacted; determination of no adverse effect anticipated

80%

Historic/archeological property impacted; determination of adverse effect anticipated

40%

Unsure if there are any historic/archaeological properties in the project area.

0%

Project is located on an identified historic bridge

3)Right-of-Way (30 Percent of Points)

Right-of-way, permanent or temporary easements either not required or all have been acquired	Yes

100%

Right-of-way, permanent or temporary easements required, plat, legal descriptions, or official map complete

50%

Right-of-way, permanent or temporary easements required, parcels identified

25%

Right-of-way, permanent or temporary easements required, parcels not all identified

0%

Anticipated date or date of acquisition

4)Railroad Involvement (20 Percent of Points)

No railroad involvement on project or railroad Right-of-Way agreement is executed (include signature page, if applicable)	Yes

100%

Signature Page

Please upload attachment in PDF form.

Railroad Right-of-Way Agreement required; negotiations have begun

50%

Railroad Right-of-Way Agreement required; negotiations have not begun.

0%

Anticipated date or date of executed Agreement

Measure A: Cost Effectiveness

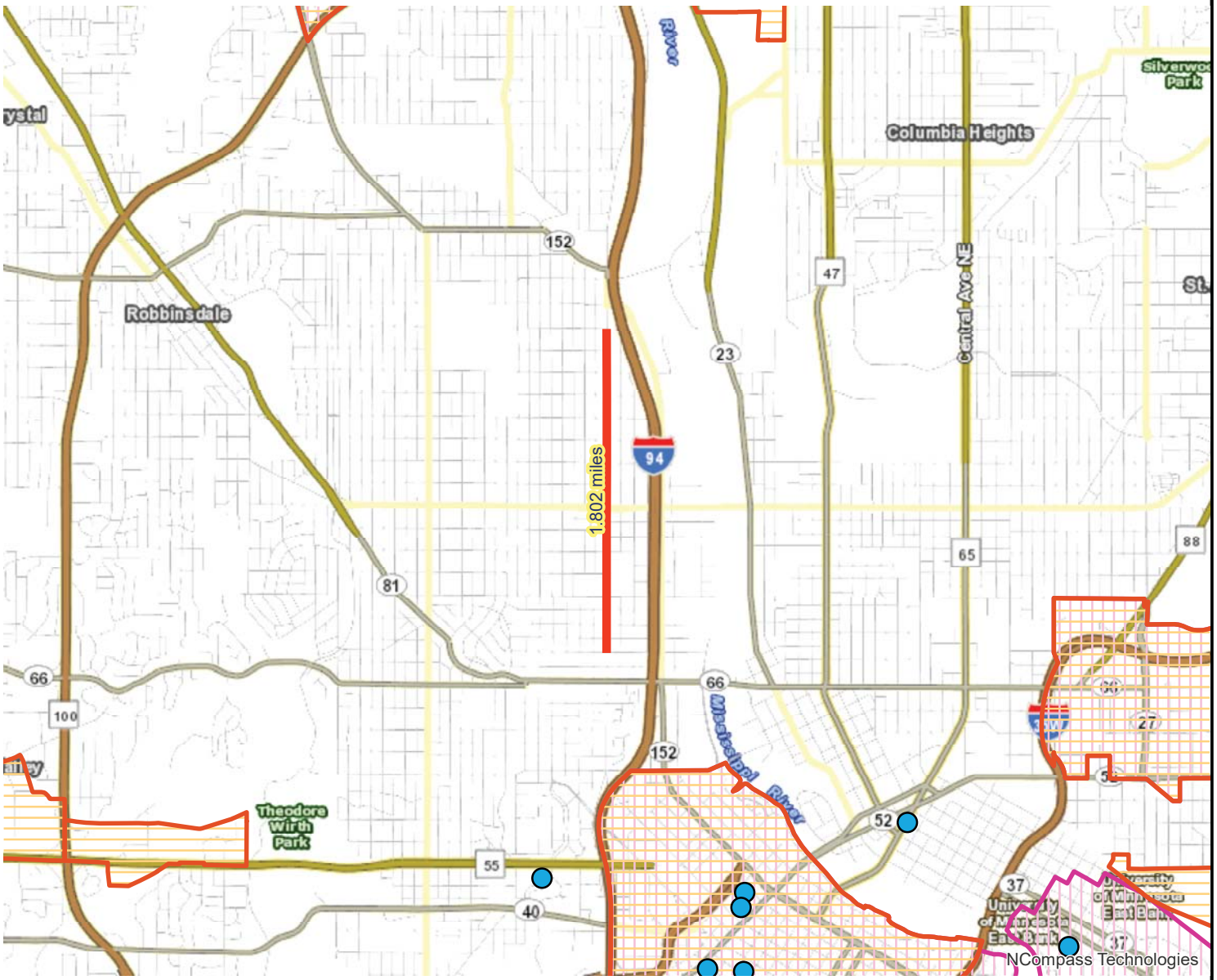
Total Project Cost (entered in Project Cost Form):	$1,250,000.00
Enter Amount of the Noise Walls:	$0.00
Total Project Cost subtract the amount of the noise walls:	$1,250,000.00
Points Awarded in Previous Criteria	
Cost Effectiveness	$0.00

Other Attachments

File Name	Description	File Size
A-10_One-pager Lyndale.pdf	One-page project summary	939 KB
A-11_BeforePhoto.pdf	Before photo of a typical intersection	148 KB
A-12_Concept Map.pdf	Concept map	478 KB
A-13_MPLS_LetterSupport.pdf	Letter of Support (City of Minneapolis)	437 KB
A-1_Ped Master Plan.pdf	Relevant goals from the Minneapolis Pedestrian Master Plan (2009)	2.2 MB
A-2_Minneapolis Pedestrian Crash Study.pdf	Minneapolis Pedestrian Crash Study: Pedestrian Crash Concentration Corridors and High Injury Network	99 KB
A-7 Crashes N_Lyndale.pdf	Pedestrian crashes on Lyndale Ave N between 33rd and 40th	2.8 MB
A-8 Crashes S_Lyndale.pdf	Pedestrian crashes on Lyndale Ave N between 22nd and 33rd	2.6 MB
A-9_Census Percent Child.pdf	Percentage of children per block group with libraries, parks and schools	790 KB

Regional Economy

Pedestrian Facilities Project: Lyndale Avenue N Pedestrian Safety Improvements | Map ID: 1531336783110



Results

Within HALF Mi of project:
Postsecondary Students: 0

Total Population: 29992
Total Employment: 9603
Mfg and Dist Employment: 3289

Project
Postsecondary Education Centers
Manfacturing/Distribution Centers
Job Concentration Centers

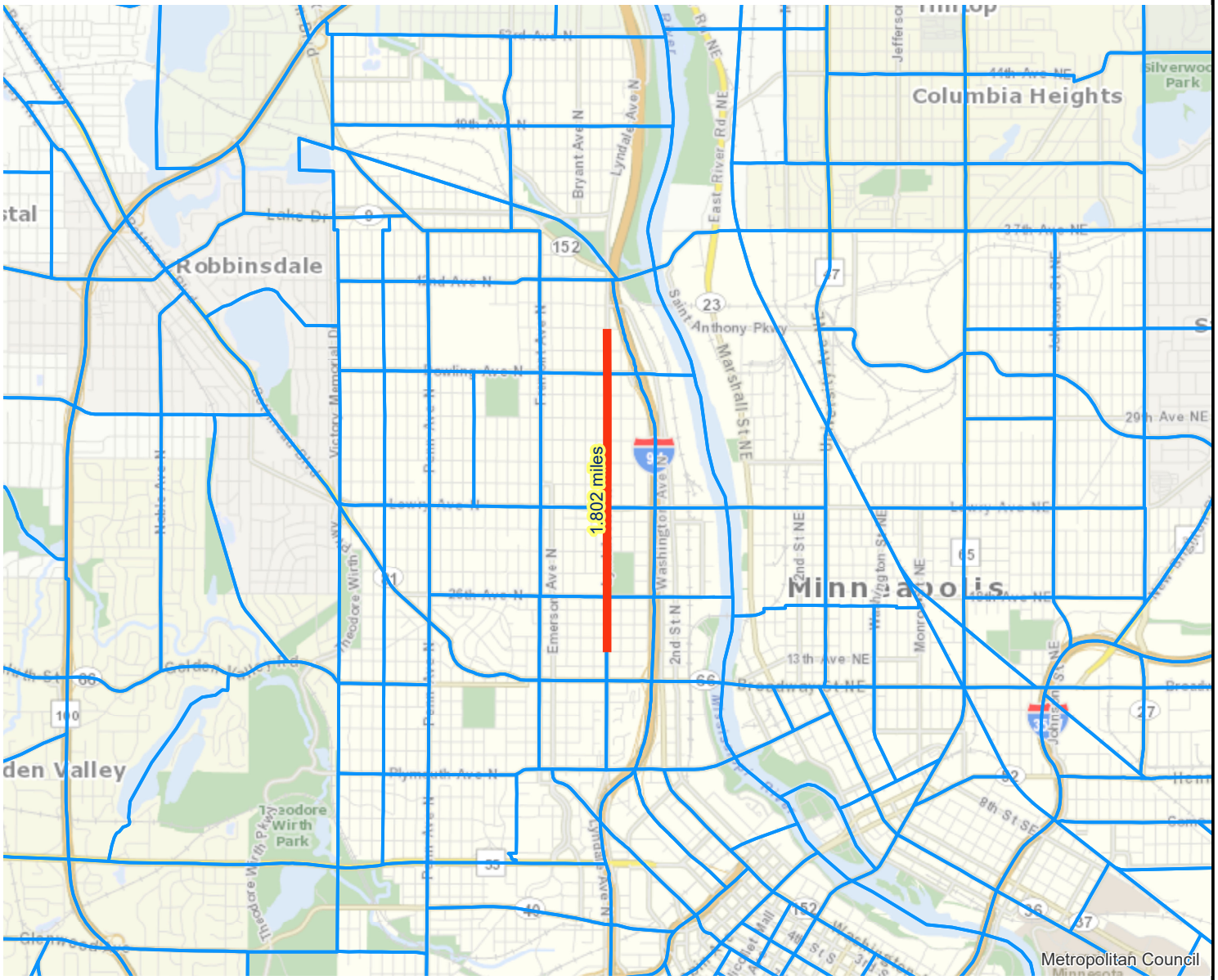
0 0.5 1 2 3 4 Miles

Created: 7/11/2018
LandscapeRSA5

METROPOLITAN COUNCIL

Population/Employment Summary

Pedestrian Facilities Project: Lyndale Avenue N Pedestrian Safety Improvements | Map ID: 1531336783110



Results

Within HALF Mile of project:
Total Population: 29992

Project

2010 TAZ

0 0.5 1 2 3 4 Miles

Created: 7/11/2018
LandscapeRSA4

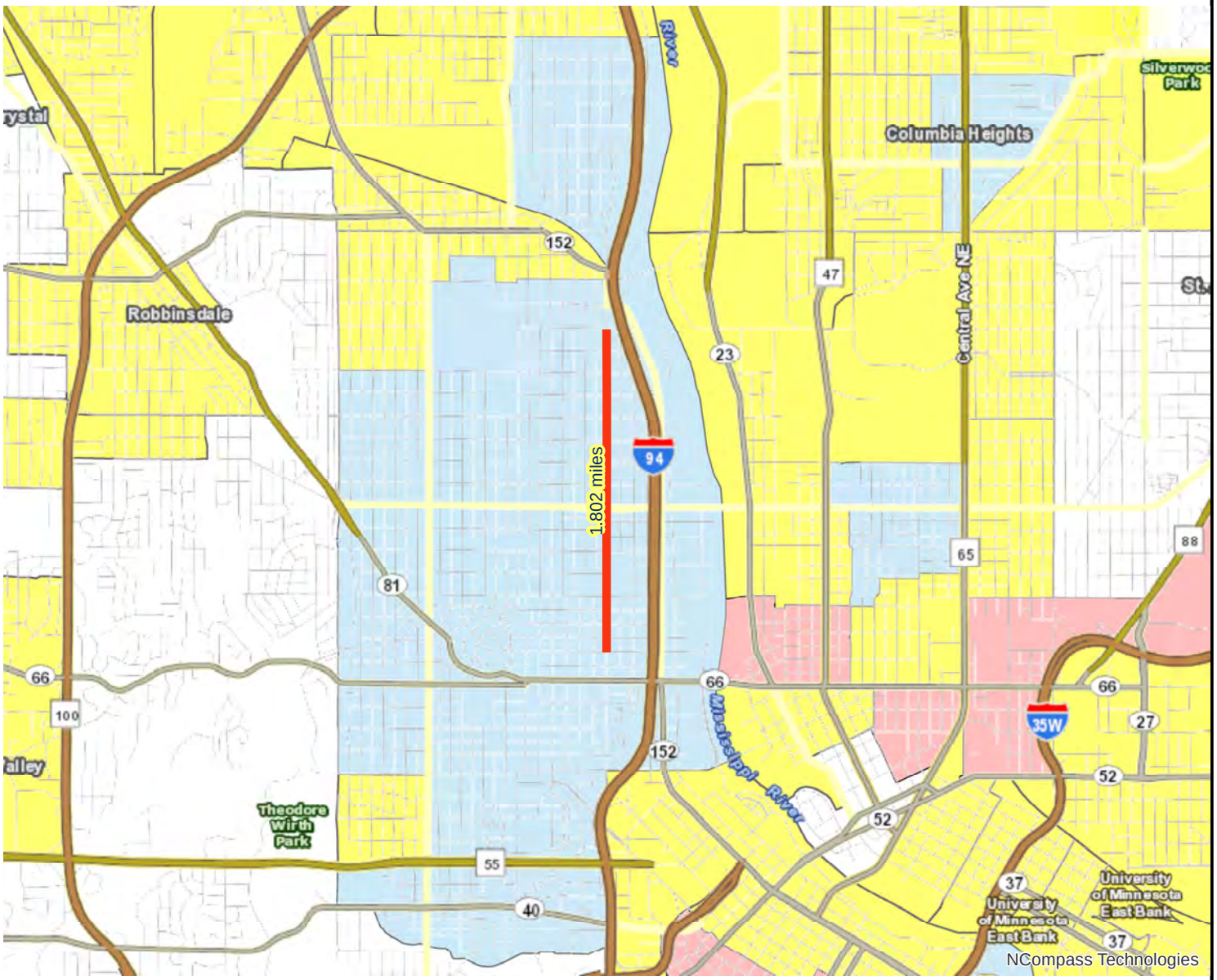
METROPOLITAN COUNCIL

Socio-Economic Conditions

Pedestrian Facilities Project: Lyndale Avenue N Pedestrian Safety Improvements | Map ID: 1531336783110

Results

Project located **IN**
Area of Concentrated Poverty with 50% or more of residents are people of color (ACP50):
(0 to 30 Points)



Project

Area of Concentrated Povertry > 50% residents of color

Area of Concentrated Poverty

Above reg'l avg conc of race/poverty

0 0.5 1 2 3 4 Miles

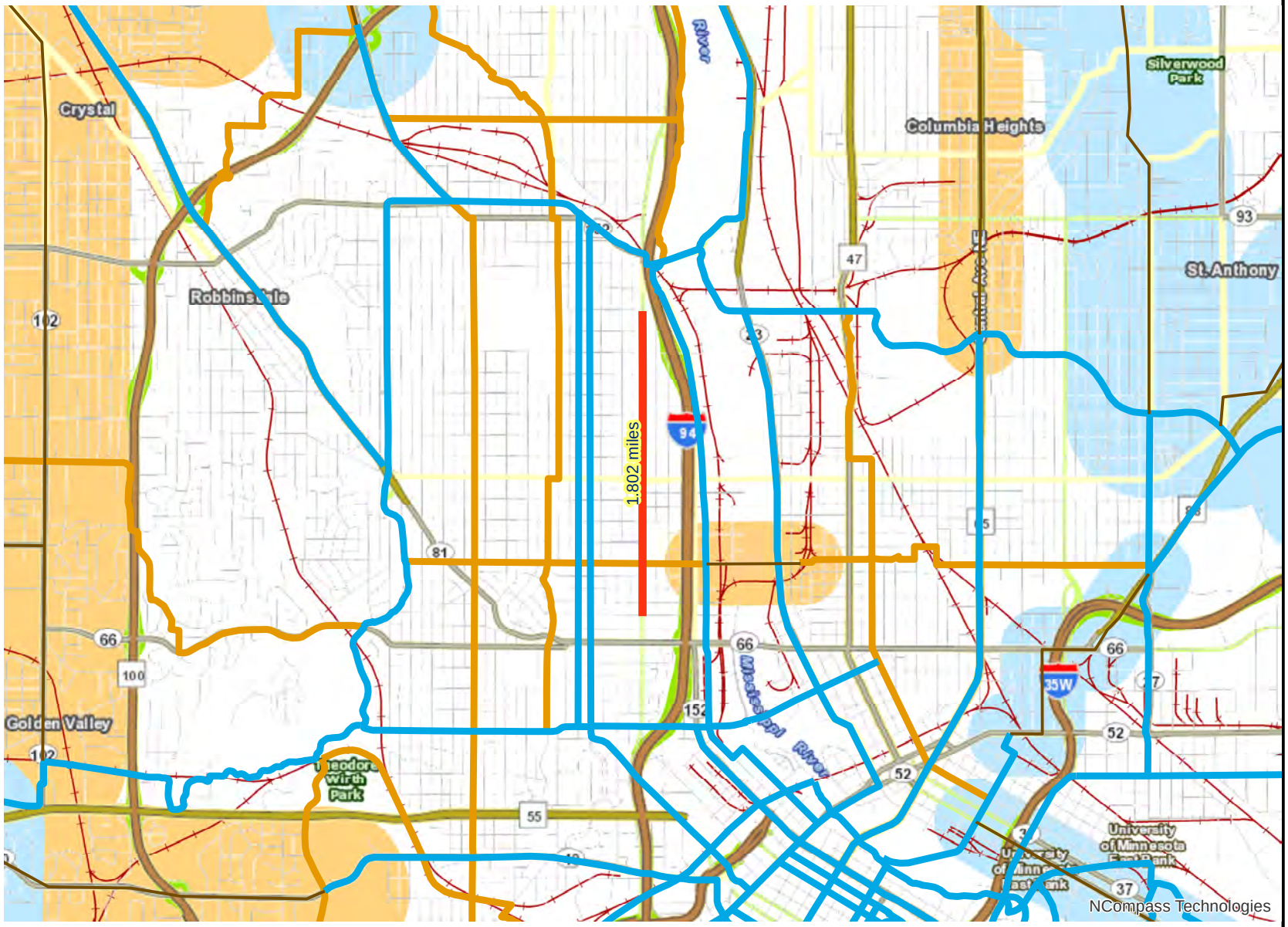
Created: 7/11/2018
LandscapeRSA2

For complete disclaimer of accuracy, please visit
http://giswebsite.metc.state.mn.us/gissitenew/notice.aspx

METROPOLITAN COUNCIL

Project to RBTN Orientation

Pedestrian Facilities Project: Lyndale Avenue N Pedestrian Safety Improvements | Map ID: 1531336783110



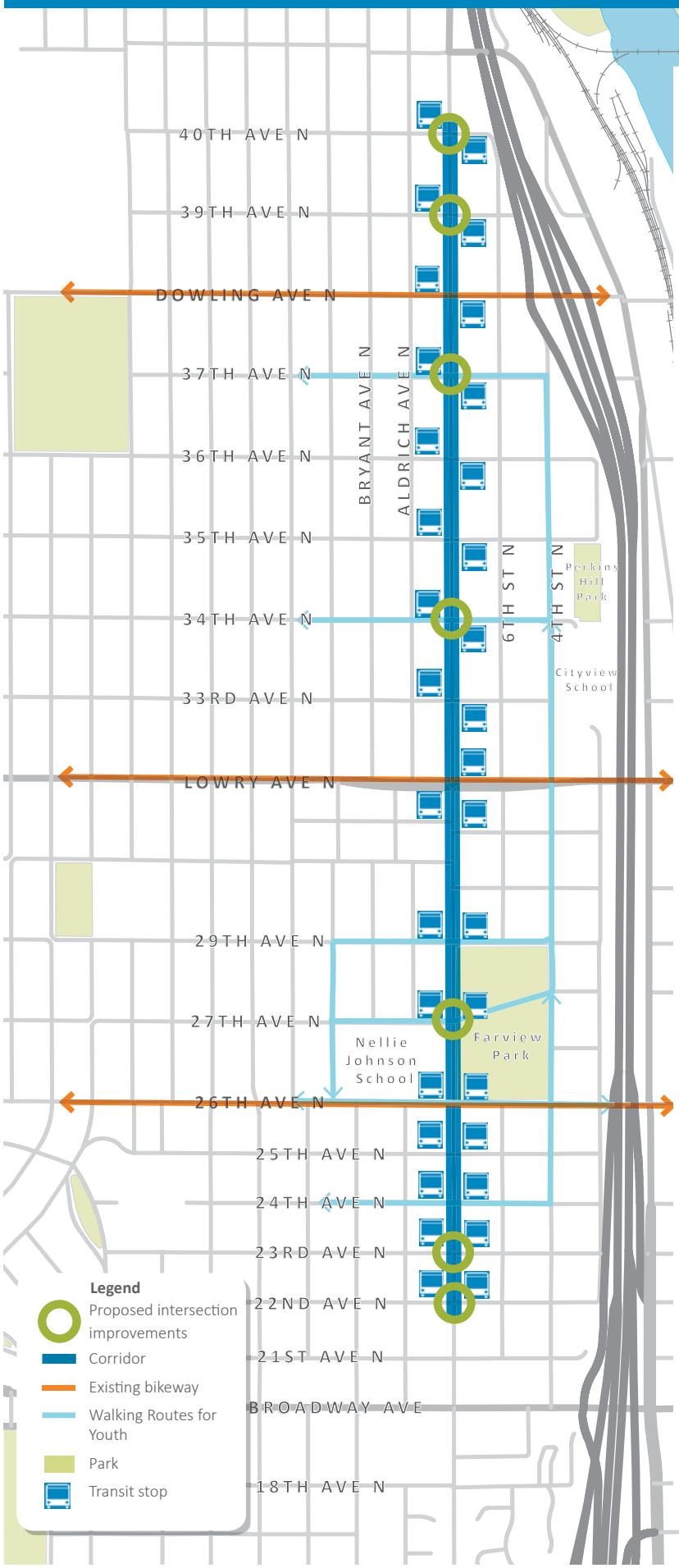
Project
RBTN Corridor Centerlines
RBTN Tier 1 Alignment
RBTN Tier 2 Alignment
RBTN Tier 1
RBTN Tier 2
Principal Arterials
Minor Arterials
Railroads

0 0.5 1 2 3 4 Miles

Created: 7/11/2018
LandscapeRSA6

METROPOLITAN COUNCIL

Lyndale Avenue North Pedestrian Safety Improvements



Tool Box of Potential Intersection Improvement Treatments

Representative traffic control devices and APS push buttons

Representative curb extensions to reduce pedestrian crossing distance

Representative ADA-compliant pedestrian curb ramps

Representative pedestrian crossing median

Minneapolis City of Lakes

Lyndale Ave North Pedestrian Safety Improvements

22nd Ave N to 40th Ave N

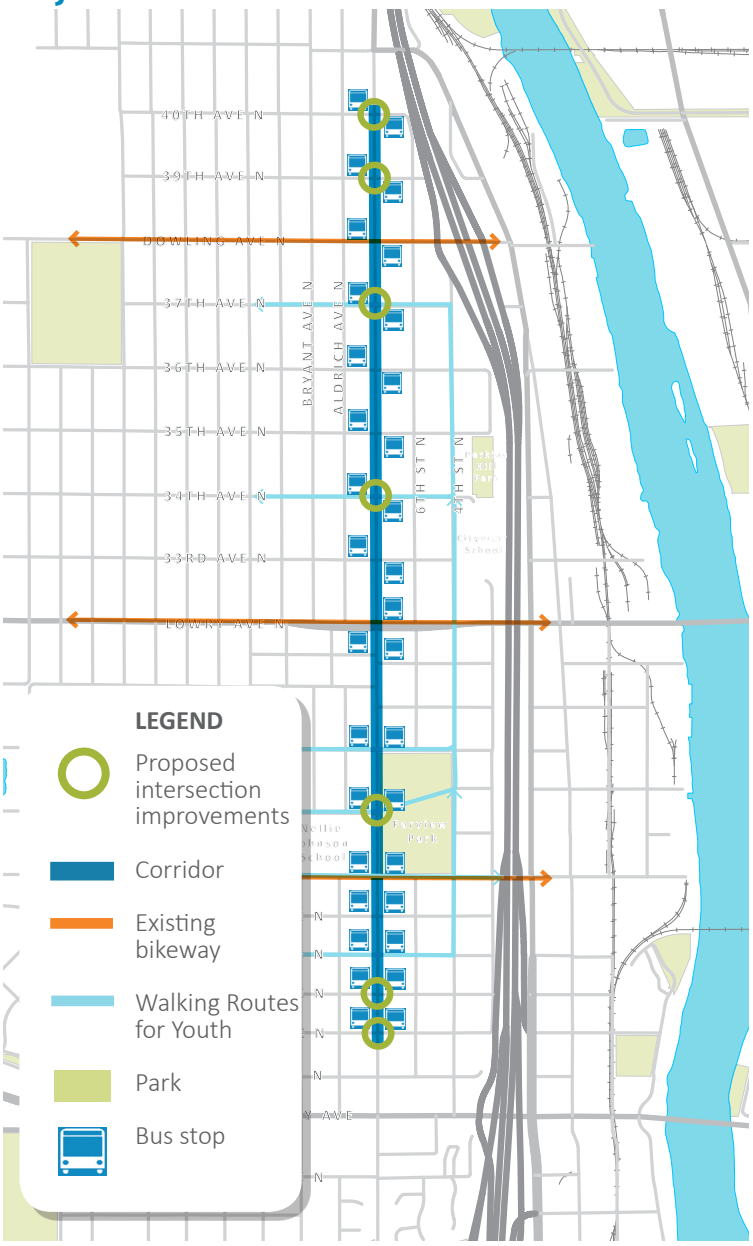
Minneapolis
City of Lakes

Project Background

The proposed project will provide pedestrian safety improvements and ADA accessibility at intersections along the Lyndale Avenue North corridor between 22nd Avenue North and 40th Avenue North, a high crash rate corridor in Minneapolis. Crossing improvements may include curb extensions, pedestrian crossing medians, an upgraded traffic control device and APS push buttons, new ADA-compliant pedestrian ramps, and bus loading zones.

The corridor is identified in the Minneapolis Pedestrian Crash Study as part of the Pedestrian Crash Concentration Corridor and High Injury Network. Lyndale Avenue North also serves as a transit corridor in north Minneapolis and has several schools, parks, and commercial areas. Given the community's low rate of auto ownership, safe and comfortable pedestrian access to transit services along Lyndale Avenue North is key for area residents' access to the broader metropolitan area for work, school, services, recreation and retail needs.

Project Area



Existing Conditions

Average Number of Daily Users

480 pedestrians

30 bicyclists

2 Metro Transit bus routes on Lyndale
6 Metro Transit bus routes cross Lyndale

8,000 - 11,000 motor vehicles

Source: Minneapolis Bicycle & Pedestrian Counts (2016) and Minneapolis Public Works (2017), Metro Transit.

Corridor Context

Typical existing cross section with an under-utilized parking lane, southbound travel lane, and northbound curbside travel lane.

Identified Issues

16 Reported pedestrian/vehicle crashes between 2011-2015

4 Fatal (1) or Incapacitating pedestrian injuries (3) as a result of traffic crashes

Project Goals

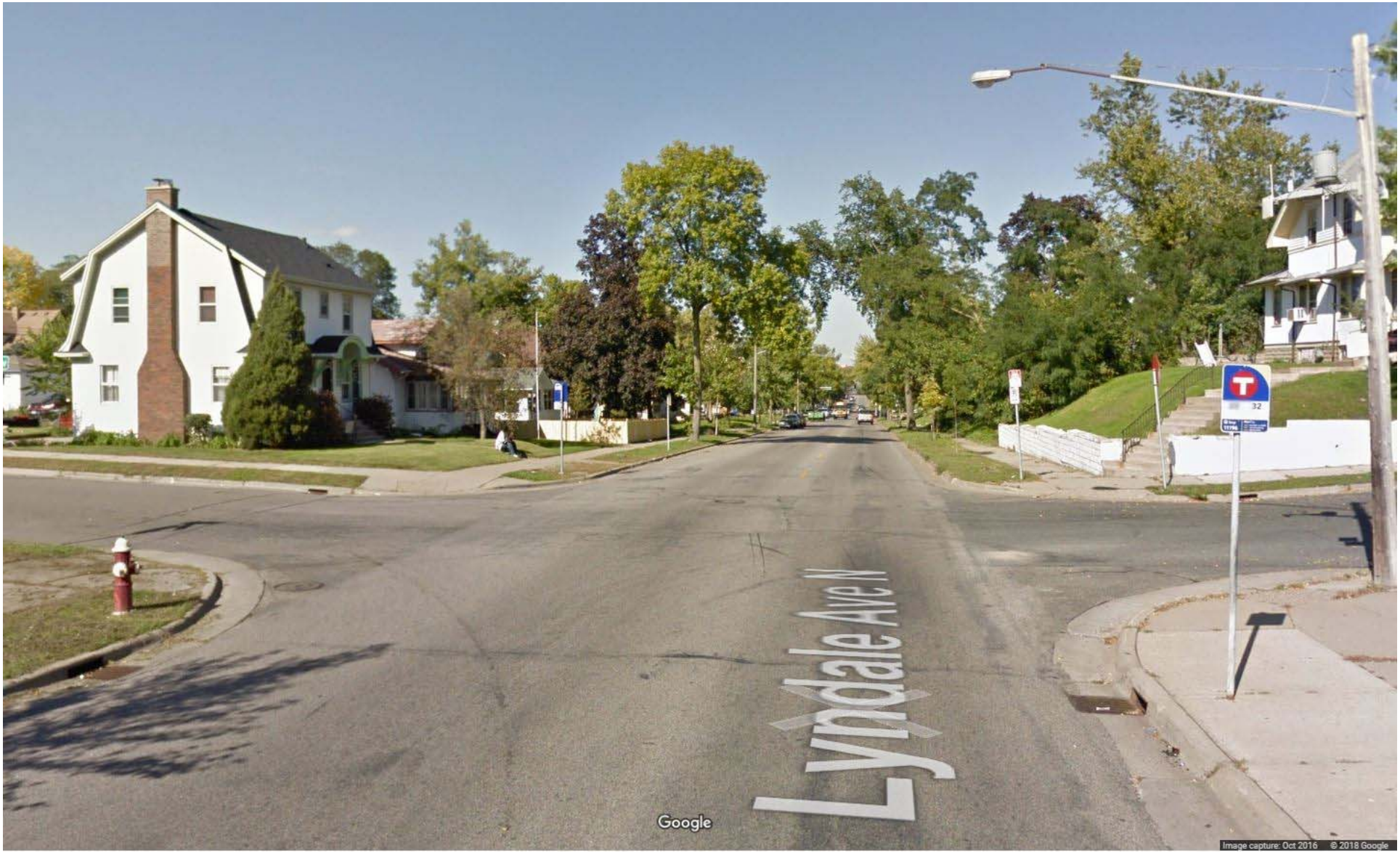
The proposed project aims to create safe and comfortable crossing opportunities for pedestrians while encouraging slower vehicle speeds. Intersection improvements may include:

Traffic control device and APS push buttons

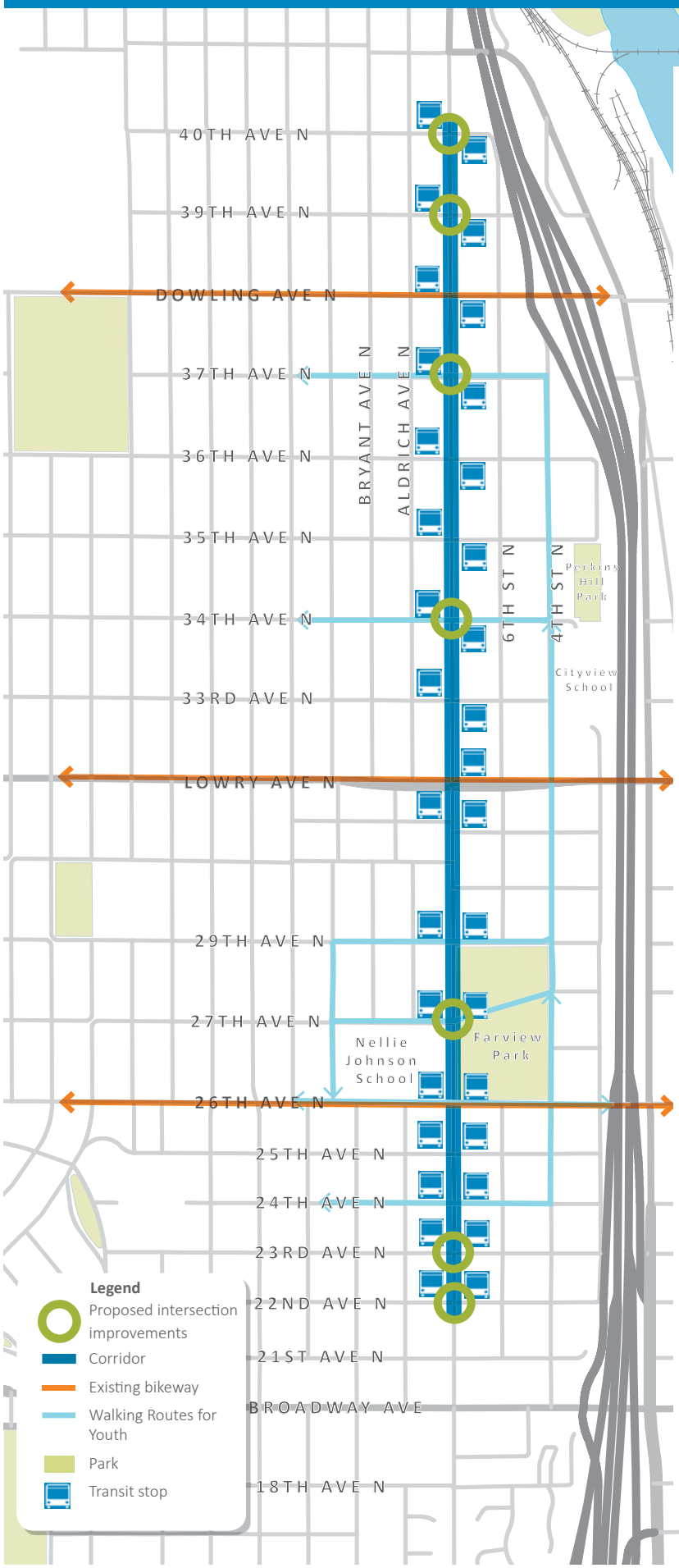
Curb Extensions

ADA-Compliant Curb Ramps

Pedestrian Median


Lyndale Ave N
Google
Image capture: Oct 2016 © 2018 Google

Lyndale Avenue North Pedestrian Safety Improvements



Tool Box of Potential Intersection Improvement Treatments

Representative traffic control devices and APS push buttons

Representative curb extensions to reduce pedestrian crossing distance

Representative ADA-compliant pedestrian curb ramps

Representative pedestrian crossing median

Minneapolis City of Lakes

Minneapolis
City of Lakes

Public Works
350 S. Fifth St. - Room 203
Minneapolis, MN 55415
TEL 612.673.2352
www.minneapolismn.gov

July 5, 2018

Ms. Elaine Koutsoukos
Metropolitan Council
390 North Robert Street
St. Paul, Minnesota 55101

RE: 2018 Regional Solicitation Applications

Dear Ms. Koutsoukos,

The City of Minneapolis Department of Public Works is submitting a series of applications for the 2018 Regional Solicitation for Federal Transportation Funds. The applications and the required matching funds have been authorized by the Minneapolis City Council as described in the Official Proceedings of the Council meeting on June 15, 2018.

The City is submitting applications for seven projects, as listed in the table below, and commits to operate and maintain these facilities through their design life.

Project Name	**Regional Solicitation Category**
Hennepin Avenue S - Douglas Avenue to Lake Street	Roadway Reconstruction/ Modernization
37th Avenue NE - Central Avenue to Stinson Boulevard	Roadway Reconstruction/ Modernization
Nicollet Avenue Bridge over Minnehaha Creek	Bridge Rehabilitation/ Replacement
Intelligent Transportation System Upgrades and Enhancements	Traffic Management Technologies
36th Street West Bicycle and Pedestrian Enhancements	Bicycle and Pedestrian Facilities
Lyndale Avenue N Pedestrian Safety Improvements	Pedestrian Facilities
Near North - Safe Routes to School	Safe Routes to School

The specific applications are described in the attached "Request for City Council Committee Action."

Thank you for the opportunity to submit these applications.

Sincerely,

Robin Hutcheson
Director of Public Works

Council Action No. 2018A-0448 **City of Minneapolis** **File No. 2018-00649**

Committee: TPW, WM Public Hearing: None Passage: Jun 15, 2018 Publication: JUN 23 2018

RECORD OF COUNCIL VOTE				
COUNCIL MEMBER	AYE	NAY	ABSTAIN	ABSENT
Bender	✖			
Jenkins	✖			
Johnson	✖			
Gordon	✖			
Reich	✖			
Fletcher	✖			
Cunningham	✖			
Ellison	✖			
Warsame				✖
Goodman	✖			
Cano	✖			
Schroeder	✖			
Palmisano	✖			

MAYOR ACTION

☑ APPROVED ☐ VETOED

MAYOR

JUN 19 2018

DATE

Certified an official action of the City Council

ATTEST:

CITY CLERK

Presented to Mayor: JUN 15 2018

Received from Mayor: JUN 20 2018

The Minneapolis City Council hereby:

1. Authorizes the submittal of a series of applications for federal transportation funds through the 2018 Metropolitan Council's Regional Solicitation Program, as further set forth in Legislative File No. 2018-00649.
2. Authorizes the commitment of local funds to provide the required local match for the federal funding.

Grant applications through the 2018 Metropolitan Council Regional Solicitation Program for federal transportation funds (RCA-2018-00568)

ORIGINATING DEPARTMENT

Public Works Department

To Committee(s)

#	Committee Name	Meeting Date
1	Transportation & Public Works Committee	Jun 5, 2018
2	Ways & Means Committee	Jun 12, 2018

LEAD STAFF: Liz Heyman, Transportation Planner, Transportation Planning and Programming Division

PRESENTED BY: Liz Heyman, Transportation Planner, Transportation Planning and Programming Division

Action Item(s)

#	File Type	Subcategory	Item Description
1	Action	Grant	Authorizing the submittal of a series of applications for federal transportation funds through the 2018 Metropolitan Council's Regional Solicitation Program.
2	Action	Grant	Authorizing the commitment of local funds to provide the required local match for the federal funding.

Previous Actions

None

Ward / Neighborhood / Address

#	Ward	Neighborhood	Address
1.	All Wards		

Background Analysis

The City will prepare a series of applications for the 2018 Regional Solicitation for Federal Transportation Funds in response to the current Metropolitan Council solicitation. This request includes a summary of the eligible project areas, a brief description of city projects, estimated costs, and the requested amounts. Each project requires a minimum local match for construction in addition to the costs for design, engineering, administration and any additional construction costs to fully fund the project. These applications will maximize the use of federal funding. The funding to be awarded is for projects to be constructed in 2022 and 2023.

Over the course of several months, Public Works identifies projects that meet the eligibility requirements for federal funding and closely evaluates which applications are submitted in a manner that is consistent with the equity-based approach used to select and prioritize as a part of the Capital Improvement Program (CIP). Additional consideration is given to identify which projects align with the criteria upon which the applications are scored, such as: role in the regional transportation system and economy, equity, affordable housing, asset condition, safety, connectivity, cost-benefit, operational benefits, number of users, multimodal elements, etc. Public Works also takes into account project readiness, cost, deliverability, and alignment with adopted plans, policies and initiatives (e.g., *Access Minneapolis*, *20 Year Street Funding Plan*, Complete Streets Policy, Vision Zero, etc.).

The 2018 Regional Solicitation for federal transportation funding is part of Metropolitan Council's federally-required continuing, comprehensive, and cooperative transportation planning process for the Twin Cities Metropolitan Area. The funding program and related rules and requirements are established by the U.S. Department of Transportation (USDOT) and administered locally through collaboration with the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Minnesota Department of Transportation (MnDOT).

Applications are grouped into three primary modal evaluation categories; each category includes several sub-categories as detailed below.

1. Roadways Including Multimodal Elements
    - Roadway Expansion
    - Roadway Reconstruction/Modernization and Spot Mobility
    - Traffic Management Technologies (Roadway System Management)
    - Bridges Rehabilitation/Replacement
2. Transit and Travel Demand Management (TDM) Projects
    - Transit Expansion
    - Transit System Modernization
    - Travel Demand Management
3. Bicycle and Pedestrian Facilities
    - Multiuse Trails and Bicycle Facilities
    - Pedestrian Facilities
    - Safe Routes to School (Infrastructure Projects)

The City is recommending the submittal of up to seven applications, which are summarized below:

Project Name	Category	Requested Federal Amount	Minimum Local Match Required
Hennepin Avenue S - Douglas Avenue to Lake Street	Roadway Reconstruction/ Modernization	$7,000,000	$1,750,000
37th Avenue NE - Central Avenue to Stinson Boulevard	Roadway Reconstruction/ Modernization	$7,000,000	$1,750,000*
Nicollet Avenue Bridge over Minnehaha Creek	Bridge Rehabilitation/ Replacement	$7,000,000	$1,750,000
Intelligent Transportation System Upgrades and Enhancements	Traffic Management Technologies	$3,000,000	$750,000
36th Street West Bicycle and Pedestrian Enhancements	Bicycle and Pedestrian Facilities	$2,000,000	$500,000
Lyndale Avenue N Pedestrian Safety Improvements	Pedestrian Facilities	$1,000,000	$250,000
Near North - Safe Routes to School	Safe Routes to School	$1,000,000	$250,000
	Totals	$27,000,000	$6,750,000

** Local expenditures on this project will be shared between Minneapolis and Columbia Heights, as the two cities share the right-of-way along this section of 37th Avenue NE.*

Details of the proposed applications are described below.

Hennepin Avenue S – Douglas Avenue to W Lake Street

The proposed project is a complete reconstruction of Hennepin Avenue South from Douglas Avenue to West Lake Street, a distance of approximately 1.3 miles. Hennepin Avenue has been identified as a future reconstruction candidate, driven primarily by pavement condition, multimodal connections, number of daily users, as well as an opportunity to better plan for Metro Transit's future E-Line Rapid Bus service. Hennepin Avenue serves an estimated 3,400 people walking, 280 people biking, 6,600 transit users, 400 buses, and 31,500 people driving per day. This segment is programmed in the City's Capital Improvement Program (CIP) for reconstruction in 2023. Hennepin Avenue South is identified as a Pedestrian Crash Concentration Corridor and High Injury Network in the *Minneapolis Pedestrian Crash Study* (2017). The prioritization of this project supports the City's commitment to Vision Zero to eliminate serious and fatal crashes within 10 years. The proposed project will reconstruct the pavement surface, curb and gutter, signage, storm drains,

driveway approaches, traffic signals, striping, lighting, street trees, sidewalks, ADA ramps, and implement shelters/platforms for the future Metro Transit E-Line. This is the last remaining segment of Hennepin Avenue under the City's jurisdiction to be reconstructed between 36th Street West and Washington Avenue South.

Program Category: Roadway Reconstruction/Modernization

37th Avenue NE – Central Avenue to Stinson Boulevard

The proposed project is a complete reconstruction of 37th Avenue NE from Central Avenue to Stinson Avenue, a distance of approximately 1 mile. This section of 37th Avenue NE is along the border between Minneapolis and Columbia Heights and is programmed in the City's Capital Improvement Program (CIP) for reconstruction in 2023. The application and proposed project will be done in collaboration with the City of Columbia Heights. The proposed project will reconstruct the pavement surface, curb and gutter, traffic signals, lighting, ADA ramps, some sidewalks, as well as construction of a bicycle facility.

Program Category: Roadway Reconstruction/Modernization

Nicollet Avenue Bridge over Minnehaha Creek

This project proposes the major repair and renovation of the Nicollet Avenue Bridge over Minnehaha Parkway and Minnehaha Creek and is programmed in the City's Capital Improvement Program (CIP) for reconstruction in 2022. The existing bridge is a 16-span open-spandrel concrete arch bridge, 818 feet long and 63 feet wide. The original bridge was built in 1923 and renovated in 1974. Numerous bridge components are significantly deteriorated, in poor condition and should be repaired or replaced in order to extend the useful life of the structure.

Program Category: Bridge Rehabilitation/Replacement

Intelligent Transportation System Upgrades & Enhancements

The purpose of the project is to upgrade the City's traffic management systems. Key features of the project include installing fiber optic cable to create a higher bandwidth and more reliable traffic communication network, deploying additional CCTV cameras, upgrading detection systems, and installing infrastructure for advancements in connected vehicle V2I technology in locations throughout the City. The City is collaborating with Hennepin County on the project.

Program Category: Traffic Management Technologies

36th Street W Bicycle and Pedestrian Enhancements

The proposed project involves ADA upgrades, sidewalk gap infill, transit accommodations, and construction of a protected bikeway to replace the interim bollard protected pedestrian and bicycle path between Richfield Road and Dupont Avenue S.

Program Category: Bicycle and Pedestrian Facilities

Lyndale Ave N Pedestrian Safety Improvements

The proposed project would include the implementation of pedestrian-related safety improvements at select intersection along Lyndale Avenue North between 18th Avenue North and 40th Avenue North. Lyndale Avenue North has been identified as part of the Pedestrian Crash Concentration Corridor and High Injury Network in the *Minneapolis Pedestrian Crash Study* (2017). The prioritization of this project supports the City's commitment to Vision Zero to eliminate serious and fatal crashes within 10 years. Intersection improvements may include signal upgrades, ADA-compliant curb ramps, bump outs, medians, signage, traffic control devices, and pavement markings at select locations.

Program Category: Pedestrian Facilities

Near North - Safe Routes to School

The proposed project would include pedestrian and bicycle-related improvements along 16th Avenue North between Penn Avenue North and Aldrich Avenue North, which connects North High School and Franklin Middle School. This portion of 16th Avenue North is identified in the Minneapolis Bicycle Master Plan as a future bicycle boulevard and has also been identified as a Pedestrian Crash Concentration Corridor in the *Minneapolis Pedestrian Crash Study* (2017). The prioritization of this project supports the City's commitment to Vision Zero to eliminate serious and fatal crashes within 10 years. Bicycle and pedestrian improvements may include ADA-compliant curb ramps, traffic circles, speed bumps, speed tables, bump outs, medians, signage, traffic control devices, and pavement markings at select locations.

Program Category: Safe Routes to School

The proposed projects were presented to the Pedestrian Advisory Committee on May 2nd, 2018, and to the Bicycle Advisory Committee on May 23rd, 2018.

FISCAL IMPACT STATEMENT

- No fiscal impact anticipated

Attachments

Regional Solicitation Map

GOAL 3: SAFE STREETS AND CROSSINGS

Pedestrians need to be able to safely and conveniently cross streets and travel along streets. Concerns about the safety of crossing streets was a common concern reported through the pedestrian master planning process.

Curb extensions such as these crossing Lake Street shorten pedestrian crossings and improve visibility between pedestrians and drivers.

The intersection of Cedar Avenue and Washington Avenue ("Seven Corners") is a complex intersection with a high incidence of pedestrian crashes.

Implementation Strategies

Objective 3.1: Reduce Pedestrian-Related Crashes *(see also 7.2, 7.3)*

- 3.1.1 Investigate the cause of pedestrian-related crashes at high crash intersections and corridors.
- 3.1.2 Review pedestrian-related traffic crashes regularly.
- 3.1.3 Investigate improvements to pedestrian-related crash reporting.

Objective 3.2: Promote Safe Behavior for Drivers, Bicyclists and Pedestrians *(see also 6.2, 7.4)*

- 3.2.1 Educate pedestrians, bicyclists and motorists about rights and responsibilities.
- 3.2.2 Enforce traffic laws.

Objective 3.3: Improve Pedestrian Safety for the Most Vulnerable Users *(see also 6.1)*

- 3.3.1 Continue to implement the School Pedestrian Safety Program.
- 3.3.2 Investigate creation of new focused pedestrian safety improvement programs for other vulnerable users.

Objective 3.4: Improve Traffic Signals for Pedestrians *(see also 2.1)*

- 3.4.1 Inventory and prioritize corrections to accessibility barriers at traffic signals.
- 3.4.2 Develop a plan for installing pedestrian countdown signals citywide.
- 3.4.3 Evaluate signal timing for pedestrians in all signal retiming efforts.
- 3.4.4 Inventory and prioritize corrections to accessibility barriers at signal push buttons.
- 3.4.5 Explore new technologies for pedestrian signal actuation and push buttons.

Objective 3.5: Improve Crosswalk Markings

- 3.5.1 Improve the visibility of crosswalk pavement markings.
- 3.5.2 Investigate potential improvements to the current crosswalk marking practice.

Chapter 5 - Goal 2: Accessibility for All Pedestrians

Pedestrians of all ages and ability levels need to be able to safely and conveniently travel on foot or with a mobility device. Accessible pedestrian facilities benefit a broad range of users, including people with temporary and permanent disabilities, senior citizens, children on bicycles, and adults with wheeled luggage, strollers/wagons or grocery carts.

A part of the Americans with Disabilities Act (ADA), originally passed in 1990, required that infrastructure in the public right of way be made accessible to all users, which triggered significant changes to the design and construction of pedestrian facilities. As a result, pedestrian curb ramps were installed at nearly all intersections in Minneapolis. However, the pedestrian system is not yet fully accessible and barriers remain.

Objective 2.1: Identify and Remove Accessibility Barriers on Pedestrian Facilities

Objective 2.2: Improve and Institutionalize Best Design Practices for Accessibility

All pedestrians benefit from accessible facilities.

OBJECTIVE 2.1: IDENTIFY AND REMOVE ACCESSIBILITY BARRIERS ON PEDESTRIAN FACILITIES

The ADA requires state and local governments of 50 or more employees to have an updated self-evaluation and ADA Transition Plan[20] to identify, prioritize and schedule improvements to remove accessibility barriers, including for pedestrian facilities. Minneapolis does not have a complete and updated ADA Transition Plan for pedestrian facilities. The City recently drafted an Accessible Pedestrian Signal (APS) Transition Plan; however, there is no similar plan for removing accessibility barriers on other portions of the pedestrian system.

Potential accessibility barriers on the pedestrian system include:

- *Curb Ramps.* Although the majority of corners in Minneapolis have curb ramps, many curb ramps were constructed before current ADA standards and have substandard designs such as excessive slopes or diagonal orientation, which can make them difficult, unusable, and sometimes dangerous. Current practice requires curb ramps to be replaced when they are "defective" (i.e., cracked, crumbling, or heaving), but not when they have substandard designs. Curb ramps are currently replaced as part of the sidewalk repair program, street reconstruction projects, and many new developments. There is no inventory of the condition and design of curb ramps in Minneapolis.

This curb ramp is very steep and difficult to maneuver.

- *Sidewalks.* Potential accessibility barriers on sidewalks include steep cross-slopes on sidewalks, sidewalk driveway crossings that do not maintain an accessible cross-slope, heaving or cracked sidewalk panels, heavily textured sidewalk surfaces, vertical obstructions in the sidewalk, and horizontal protruding objects that are not detectable to blind pedestrians. While there is no inventory of the location of these types of accessibility barriers, many of these problems may be present on streets with very narrow pedestrian zone widths (see Chapter 7 and Map A-22). The City's annual sidewalk repair program for defective sidewalks, as explained Chapter 8, can help to correct some of these barriers.

This sidewalk corridor is too narrow.

- *Pedestrian Signals.* Pedestrian signals need to be accessible to all users, including the WALK and DON'T WALK visual indications, as well as the design and placement of push buttons at actuated signals. These issues are addressed in Chapter 6.

[20] FHWA Clarification of FHWA's Oversight Role in Accessibility Memorandum, September 12, 2006, www.fhwa.dot.gov/civilrights/ada_memo_clarifications.htm.

- *Maintenance of Pedestrian Facilities.* The pedestrian system needs to be maintained and operated to be accessible to all users. Many of the most common accessibility complaints in Minneapolis relate to the day-to-day maintenance of the system, addressed in Chapter 8.
- *Pedestrian Bridges.* A few pedestrian bridges in Minneapolis are accessible only by stairs.

Implementation Strategies

2.1.1 ***Prepare and maintain an updated Americans with Disabilities Act (ADA) Transition Plan.*** The City will complete an updated ADA Transition Plan for accessibility improvements that are the responsibility of the City and its contractors and will update that Plan periodically.

2.1.2 ***Inventory and prioritize corrections to accessibility barriers at curbs.*** In coordination with the ADA Transition Plan, the City will inventory the presence, design and condition of curb ramps at legal crosswalks and prioritize bringing those curb ramps into current standards.[21] The prioritization methodology should consider both the severity of the accessibility barrier and the magnitude of demand associated with a particular location. This work could be integrated into the annual sidewalk inspection program.

2.1.3 ***Inventory and prioritize corrections to accessibility barriers on sidewalk corridors.*** In coordination with the ADA Transition Plan, the City will inventory the presence of accessibility barriers in sidewalk corridors and develop a plan for removing those accessibility barriers. This work could be integrated into the annual sidewalk inspection program.

2.1.4 ***Inventory and prioritize corrections to accessibility barriers on pedestrian bridges.*** In coordination with the ADA Transition Plan, the City will inventory accessibility of existing pedestrian bridges.

See also:

Objective 3.4: Improve Traffic Signals for Pedestrians

Objective 5.1: Ensure Effective Snow and Ice Clearance for Pedestrians.

Objective 5.2: Maintain Sidewalks in Good Repair

Objective 5.3: Manage Encroachments on Sidewalks

Objective 5.4: Maintain Pedestrian Safety and Accessibility in Construction Zones

Objective 7.2: Integrate Pedestrian Improvements into Capital Improvement Programs

[21] Sample inventory forms can be found in: *Designing Sidewalks and Trails for Access*, FHWA, 2001.

OBJECTIVE 2.2: IMPROVE AND INSTITUTIONALIZE BEST DESIGN PRACTICES FOR ACCESSIBILITY

When pedestrian facilities are altered due to redevelopment projects, utility repair, or other projects, they need to be replaced with facilities that meet pedestrian accessibility needs. City staff and contractors who design and construct pedestrian facilities need to understand what makes the pedestrian system accessible and integrate accessible design and construction into their projects. There are a lot of different people who do this work; therefore, clear and consistent information on accessible design and construction needs to be integrated into city practices.

What constitutes accessible design can be confusing because accessibility standards have changed and are anticipated to change again. Currently adopted federal ADA standards, the Americans with Disabilities Act Accessibility Guidelines (ADAAG), were developed principally for buildings and site work and are difficult to apply to pedestrian facilities in the public right-of-way. New standards, the Public Rights of Way Accessibility Guidelines (PROWAG)[22], are drafted and have been undergoing review for several years, but they have not yet been adopted by the US Department of Justice to become the new standard. In the meantime, the Federal Highway Administration (FHWA) has recommended the PROWAG as the best practice for the design of sidewalks and street crossings.[23] The FHWA has also recommended use of its guide, *Designing Sidewalks and Trails, Part II, Best Practices Design Guide.*[24]

The Pedestrian Design Guide developed through the *Minneapolis Pedestrian Master Plan* includes best practice guidance from the PROWAG and other sources. Implementing these best practices will require educating staff, updating some standard specifications, and integrating accessibility requirements into various city practices.

With regard to curb ramps, there are some specific challenges with the current curb ramp standard. First, the current curb ramp standard requires a single curb ramp in one direction of travel at two-way stop sign controlled intersections and at intersections with no traffic control, even though sidewalks and legal crosswalks are provided in all directions. This design requires pedestrians to change direction of travel in the street, which is a potentially unsafe manuever. Second, it is difficult to construct two perpendicular curb ramps per corner using the Mn/DOT curb ramp standard template on typical Minneapolis corners. As a result, some curb ramps are being constructed with one ramp per corner, with running or cross slopes that exceed the standard, or with an insufficient level landing pad at the top of the ramp.

This curb ramp is an example of a design which could make it easier to fit two perpendicular curb ramps per corner than the current standard. Source: *Accessible Public Rights of Way: Planning and Designing for Alterations*, Institute of Transportation Engineers, July 2007.

[22] Revised Draft Guidelines for Accessible Public Rights-of-Way , November 23, 2005, www.access-board.gov/prowac/index.htm

[23] FHWA Public Rights-of-Way Access Advisory Memorandum, January 23, 2006, www.fhwa.dot.gov/environment/bikeped/prwaa.htm.

[24] www.fhwa.dot.gov/environment/sidewalk2

OBJECTIVE 3.1: REDUCE PEDESTRIAN-RELATED CRASHES

As the largest urban area in the State of Minnesota, Minneapolis has a lot of pedestrians and a lot of traffic, resulting in a high occurrence of pedestrian-related traffic crashes, relative to the rest of the state. 31% of the pedestrian crashes in the State of Minnesota from 2002 to 2006 occurred in the City of Minneapolis, and an additional 17% occurred in St. Paul.[27] However, compared with peer cities Minneapolis has a relatively low incidence of pedestrian-related crash deaths. Minneapolis ranked 40th out of the 47 cities with year 2000 populations over 350,000 for pedestrian crash deaths per capita, as shown in Table 3.

In Minneapolis, there are approximately 250 pedestrian-related traffic crashes that are reported to the police every year. This number varies from one year to another, but has been relatively constant over the past five years (see Figure 5).

The City of Minneapolis maintains a database of all traffic crashes in the City reported by the Minneapolis Police Department.[28] An analysis of the 1,443 pedestrian-related traffic crashes 2002-2006 in this database showed the following trends:

- *Pedestrian crashes are a significant component of traffic fatalities and severe injuries in Minneapolis.* When a pedestrian gets hit by a car, injuries are highly likely. Pedestrian crashes comprised approximately 4% of all reported traffic crashes in Minneapolis, but 25% of all crashes resulting in a fatality and 21% of all crashes resulting in a severe injury.
- *Pedestrian crashes occur throughout the year.* Unlike bicycle crashes, pedestrian crashes in Minneapolis are not seasonal; they occurred steadily throughout the year, as shown in Figure 6.
- *More pedestrian crashes occur at intersections, than away from intersections.* 68% of pedestrian crashes occurred within 15 feet of the intersecting street curb. In most cases, these crashes occurred in the area where a legal crosswalk typically exists, but they may also include crashes in the middle of the intersection or on the sidewalk at intersections.[29]
- *Many pedestrian crashes involved a left-turning vehicle.* As shown in Table 4, 27% of pedestrian crashes involved a left-turning vehicle, in contrast to 10% involving a right-turning vehicle. 16% of pedestrian crashes occurred at signalized intersections when the pedestrian had a WALK signal and the vehicle was turning left.
- *Few pedestrian crashes occur when a vehicle is turning right at a red light.* As shown in Table 4, only 2% of pedestrian crashes involve a vehicle turning right at a red light when the pedestrian is crossing with a WALK signal.[30] Through the *Pedestrian Master Plan* process, several comments were received related to perceived pedestrian safety benefits of No Turn On Red (NTOR) vehicle restrictions. However, research nationally and in Minneapolis has shown no pedestrian safety benefits of NTOR restrictions in most circumstances. NTOR is most effective as a safety measure

[27] Source: Mn/DOT Office of Traffic, Safety, and Technology.

[28] The database does not include crashes reported by the State Patrol, which are typically on the freeway system, and may not include all crashes reported by Metro Transit Police and University of Minnesota police.

[29] This trend was also confirmed through a review of pedestrian-related crashes from the state's crash database for 2002-2006, which showed that 63% of pedestrian crashes in Minneapolis occurred at intersections, compared with 55% statewide.

[30] This figure is even lower for total traffic crashes: only 0.6% of total traffic crashes in Minneapolis involved a vehicle turning right at a red light.

OBJECTIVE 3.2: PROMOTE SAFE BEHAVIOR FOR DRIVERS, BICYCLISTS AND PEDESTRIANS

Pedestrian safety is a shared responsibility among motorists, pedestrians, and bicyclists. The most effective solutions to improving pedestrian traffic safety involve a combination of engineering solutions, along with education and enforcement. Through the Pedestrian Master Plan process, many pedestrian safety concerns were raised regarding motorist compliance with the crosswalk law and bicyclists riding on sidewalks.

Minnesota state law requires motorists to stop for a pedestrian who has entered the crosswalk (stepped off the curb) at a marked or unmarked crosswalk, provided the pedestrian has not suddenly walked into the path of a vehicle that is so close that the driver cannot stop (see Appendix D). However, many motorists and pedestrians either don't understand or don't comply with this law. Failure of a motorist to yield to pedestrians is one of the most commonly cited barriers to walking cited by the public through the master planning process.

While the Bike/Walk Ambassador program provides some guidance on pedestrian safety in their work, there are currently no active pedestrian safety education campaigns underway serving Minneapolis. One example of a pedestrian safety education campaign is shown in Figure 7 from Calgary, Canada.[32]

Figure 7: Calgary Pedestrian Safety Campaign

Bicyclists are legally permitted by state law (see section 169.222 in Appendix D) and City ordinance (Chapter 490.140) to ride on sidewalks and have the same rights and duties applicable to pedestrians on sidewalks unless posted otherwise. Bicyclists must yield right-of-way to pedestrians on sidewalks and may not ride on sidewalks in business districts. Business districts are defined in state law as street frontages that have at least half of the frontage occupied by buildings in use for business for at least 300 feet.

Bicyclists are more likely to ride on sidewalks where there is not an on-street bicycle lane and where traffic volumes are higher, as shown in Table 5. The City is continuing to expand the bicycle network through new on-street facilities, off-street trails, and development of a Bicycle Master Plan. Continued development of bicycle facilities and education is needed to reduce real and perceived conflicts between bicyclists and pedestrians.

[32] http://www.calgary.ca/docgallery/bu/roads/pedestrian_safety_brochure.pdf

OBJECTIVE 3.3: IMPROVE PEDESTRIAN SAFETY FOR THE MOST VULNERABLE USERS

The City receives numerous concerns and questions about traffic safety from the public, many of which are related to pedestrian safety near parks, schools, and senior housing. The City's Traffic division investigates every pedestrian safety complaint and makes improvements where needed.

School-patrolled crossing in Seward neighborhood

One proactive approach to improving pedestrian safety for vulnerable users is the City's School Pedestrian Safety Program, through which City traffic operations staff work with each K-8 school to evaluate safety and operations and identify opportunities to increase the number of students walking to school. The program also works with schools to identify school patrolled intersections; eliminate or reduce conflicts among buses, vehicles, and pedestrians; and identify needs for short-term and long-term infrastructure improvements. Typical improvements include overhead school crossing signs, durable pavement markings at crosswalks, highly visible sign posts for regulatory signs, speedwagons, and separated parent and bus pick-up/drop-off activities. The program also assesses school patrol practices and the need for adult supervision at school crossings. Some schools have implemented walking and bicycling curriculum programs, as well.

Reviews of all 87 K-8 schools in Minneapolis was completed in June 2009. A similar approach could be applied for pedestrian safety near parks and senior housing.

Implementation Strategies

3.3.1 Continue to implement the School Pedestrian Safety Program.
The City will complete implementation of the School Pedestrian Safety program.

3.3.2 Investigate creation of new focused pedestrian safety improvement programs for other vulnerable users.
The City will investigate using the school pedestrian safety program model for other types of vulnerable users, such as a Safe Routes to Parks program or a Safe Routes for Seniors program. The City will pursue potential funding sources to support these potential programs.

See also:

Objective 6.1: Promote Walking for Youth

OBJECTIVE 3.4: IMPROVE TRAFFIC SIGNALS FOR PEDESTRIANS

Traffic signal design has a significant impact on the convenience and safety of crossing the street. There are approximately 800 signalized intersections in Minneapolis, all of which have pedestrian signal heads (see Map A-17). There are a number of potential challenges with the existing design of traffic signals for pedestrians in Minneapolis; however, work has begun to address many of these issues:

- *More countdown timers are being installed in Minneapolis.* Countdown timers show the number of seconds remaining in the signal for pedestrians to cross the street and help pedestrians to safely decide if they have enough time. The City of Minneapolis began installing countdown timers as part of all new signal installations in 2008. There are currently over 70 intersections in Minneapolis with countdown timers (see Map A-17). The proposed 2009 version of the Manual on Uniform Traffic Control Devices (MUTCD) is expected to require that all signalized intersections with pedestrian crosswalks have countdown timers within the ten year compliance period specified in the MUTCD.

- *More accessible pedestrian signals (APS) are being installed in Minneapolis.* The information that pedestrian signals provide through the WALK and DON'T WALK visual indications is not accessible to blind and low vision pedestrians. Accessible pedestrian signals (APS) provide an audible and vibro-tactile indication of the WALK interval. There are currently 11 APS in Minneapolis (see Map A-17), and the City has obtained federal funding to install APS in 15 additional locations. The City has also drafted an APS transition plan, under which all traffic signals will be evaluated and prioritized for APS installation over the next 10 years.

- *Upcoming standards will require more walk time for pedestrians in signal timing.* The standard pedestrian crossing speed used to calculate signal crossing time is changing to better reflect the needs of an aging population, those with mobility impairments, and other slower-moving pedestrians. The proposed 2009 MUTCD requires that signal timing for the pedestrian clearance time be based on a pedestrian crossing speed of 3.5 feet per second (2.0 mph) and a total

Countdown Timer

Accessible Pedestrian Signal


This push button is not accessible or convenient for all pedestrians.

Table 10: Minneapolis Pedestrian Master Plan Goals, Objectives and Strategies (continued)

Goal 2: Accessibility for All Pedestrians
Objective 2.1: Identify & Remove Accessibility Barriers on Pedestrian Facilities *(see also 3.4, 5.1 – 5.4, 7.2)*
2.1.1 Prepare and maintain an updated Americans with Disabilities Act (ADA) Transition Plan.
2.1.2 Inventory and prioritize corrections to accessibility barriers at curbs.
2.1.3 Inventory and prioritize corrections to accessibility barriers on sidewalk corridors.
2.1.4 Inventory and prioritize corrections to accessibility barriers on pedestrian bridges.
Objective 2.2: Improve and Institutionalize Best Design Practices for Accessibility *(see also 5.4, 7.1)*
2.2.1 Improve the curb ramp standard template.
2.2.2 Review and update the standard specifications for best practices in accessible design.
2.2.3 Establish regular staff training programs and materials on accessible design.
2.2.4 Update design standards and guidance as accessibility standards are improved.
Goal 3: Safe Streets and Crossings
Objective 3.1: Reduce Pedestrian-Related Crashes *(see also 7.2, 7.3)*
3.1.1 Investigate the cause of pedestrian-related crashes at high crash intersections and corridors.
3.1.2 Review pedestrian-related traffic crashes regularly.
3.1.3 Investigate improvements to pedestrian-related crash reporting.
Objective 3.2: Promote Safe Behavior for Drivers, Bicyclists and Pedestrians *(see also 6.2, 7.4)*
3.2.1 Educate pedestrians, bicyclists and motorists about rights and responsibilities.
3.2.2 Enforce traffic laws.
Objective 3.3: Improve Pedestrian Safety for the Most Vulnerable Users *(see also 6.1)*
3.3.1 Continue to implement the School Pedestrian Safety Program.
3.3.2 Investigate creation of new focused pedestrian safety improvement programs for other vulnerable users.
Objective 3.4: Improve Traffic Signals for Pedestrians *(see also 2.1)*
3.4.1 Inventory and prioritize corrections to accessibility barriers at traffic signals.
3.4.2 Develop a plan for installing pedestrian countdown signals citywide.
3.4.3 Evaluate signal timing for pedestrians in all signal retiming efforts.
3.4.4 Inventory and prioritize corrections to accessibility barriers at signal push buttons.
3.4.5 Explore new technologies for pedestrian signal actuation and push buttons.
Objective 3.5: Improve Crosswalk Markings
3.5.1 Improve the visibility of crosswalk pavement markings.
3.5.2 Investigate potential improvements to the current crosswalk marking practice.

Street Characteristics

Crash Concentration

Although crashes have occurred throughout the city over the past 10 years, the majority of crashes are concentrated to a small number of streets. In fact, 80 percent of all pedestrian crashes occurred on 10 percent of the streets in the city. These 10 percent of streets, in this study called the "Pedestrian Crash Concentration Corridors" are highlighted in light purple in **Figure 5-6**. Because pedestrian crashes in Minneapolis are most common at intersections, there is no minimum or maximum length of corridor for selection. As such, the shorter corridors are largely due to one or two adjacent intersections with a history of crashes.

Major Crashes are also concentrated. Nearly three-quarters (74 percent) of all major crashes occurred on less than five percent of the streets in the city. These streets are shown in dark purple and labeled as the "High Injury Network" on **Figure 5-6**.

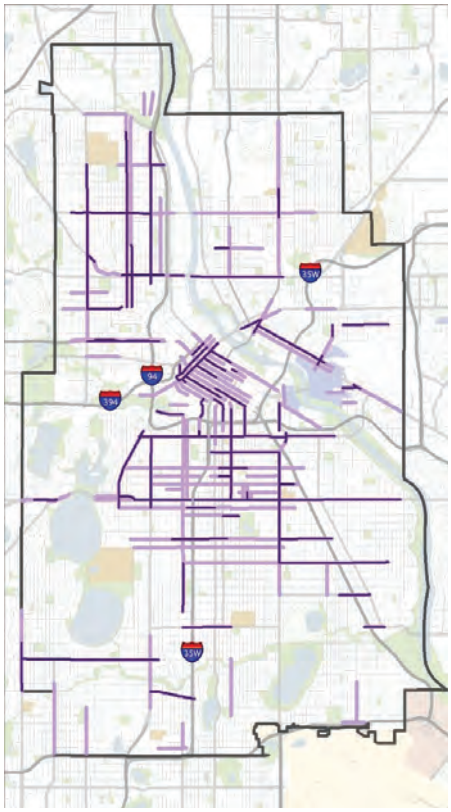


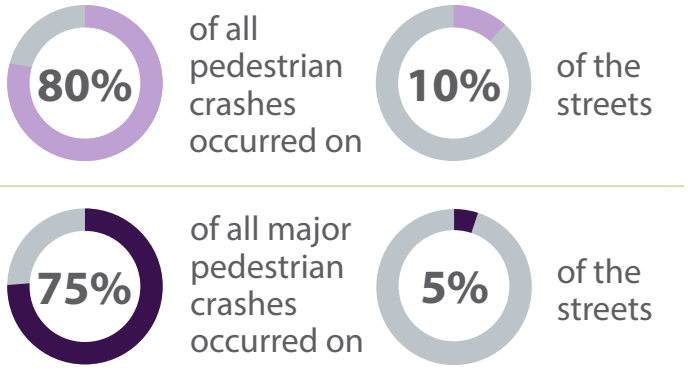
Figure 5-6. Pedestrian Crash Concentration Corridors
Source for Pedestrian Crash Data: 10-Year Dataset

JURISDICTION OF PEDESTRIAN CRASH CONCENTRATION CORRIDORS

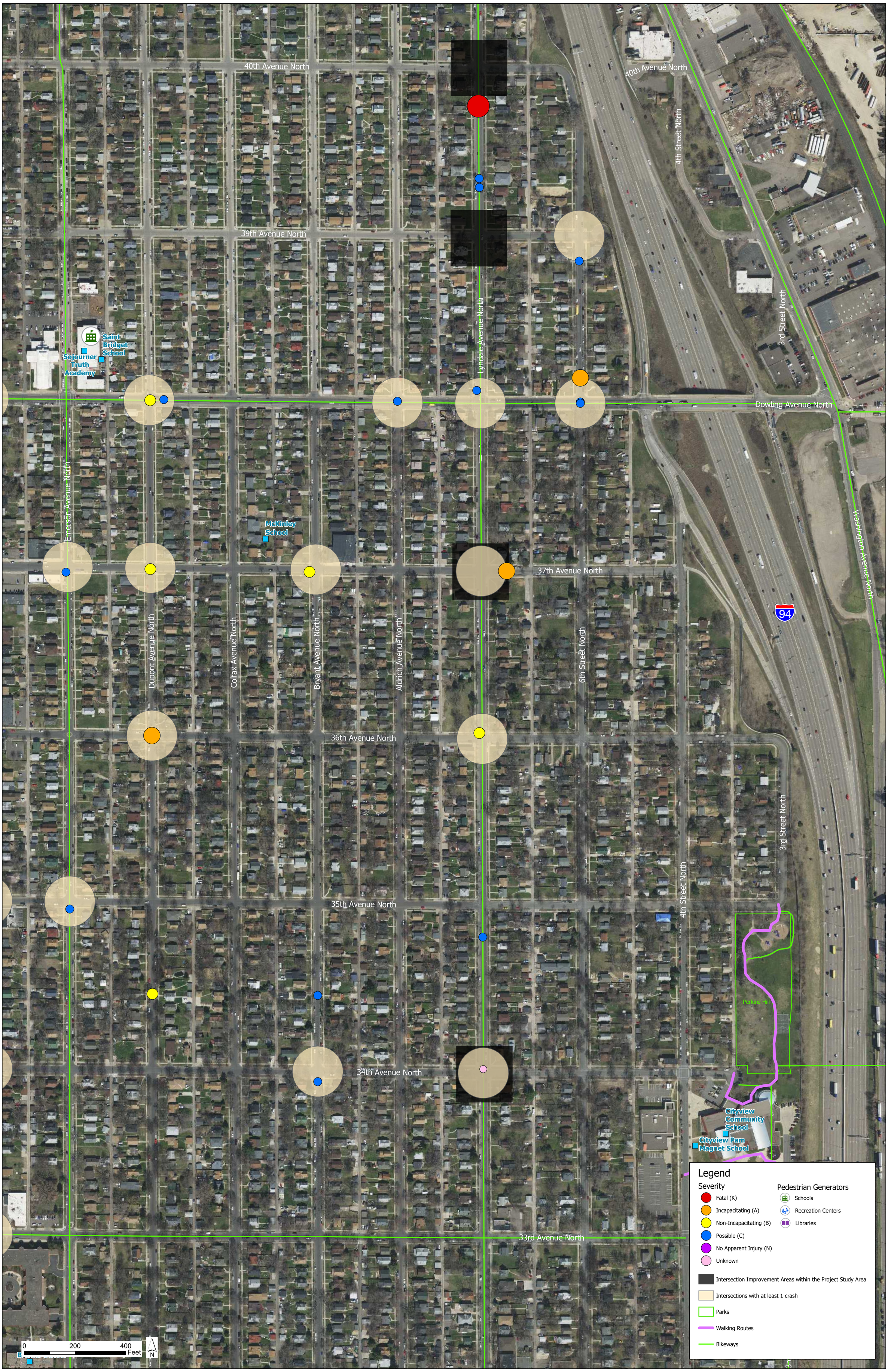
Most of miles of streets in the city are under City of Minneapolis jurisdiction, but 20 percent of the miles of streets in the city are owned and maintained by other agencies. The Pedestrian Crash Concentration Corridors and the High Injury Network occur both on City of Minneapolis streets and on streets under the jurisdiction of other agencies. Of the 110 miles of Pedestrian Crash Concentration Corridors:

- 63 miles are owned and operated by the City of Minneapolis. This represents seven percent of the streets under city jurisdiction.
- 38 miles are owned and operated by Hennepin County. This represents 41 percent of the streets under the county's jurisdiction in the city.
- 9 miles are owned and operated by MnDOT. This represents 14 percent of the streets under the state's jurisdiction in the city.

Eighty percent of all pedestrian crashes occurred on 10 percent of the streets in the city.



CRASH DENSITY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39th Avenue North
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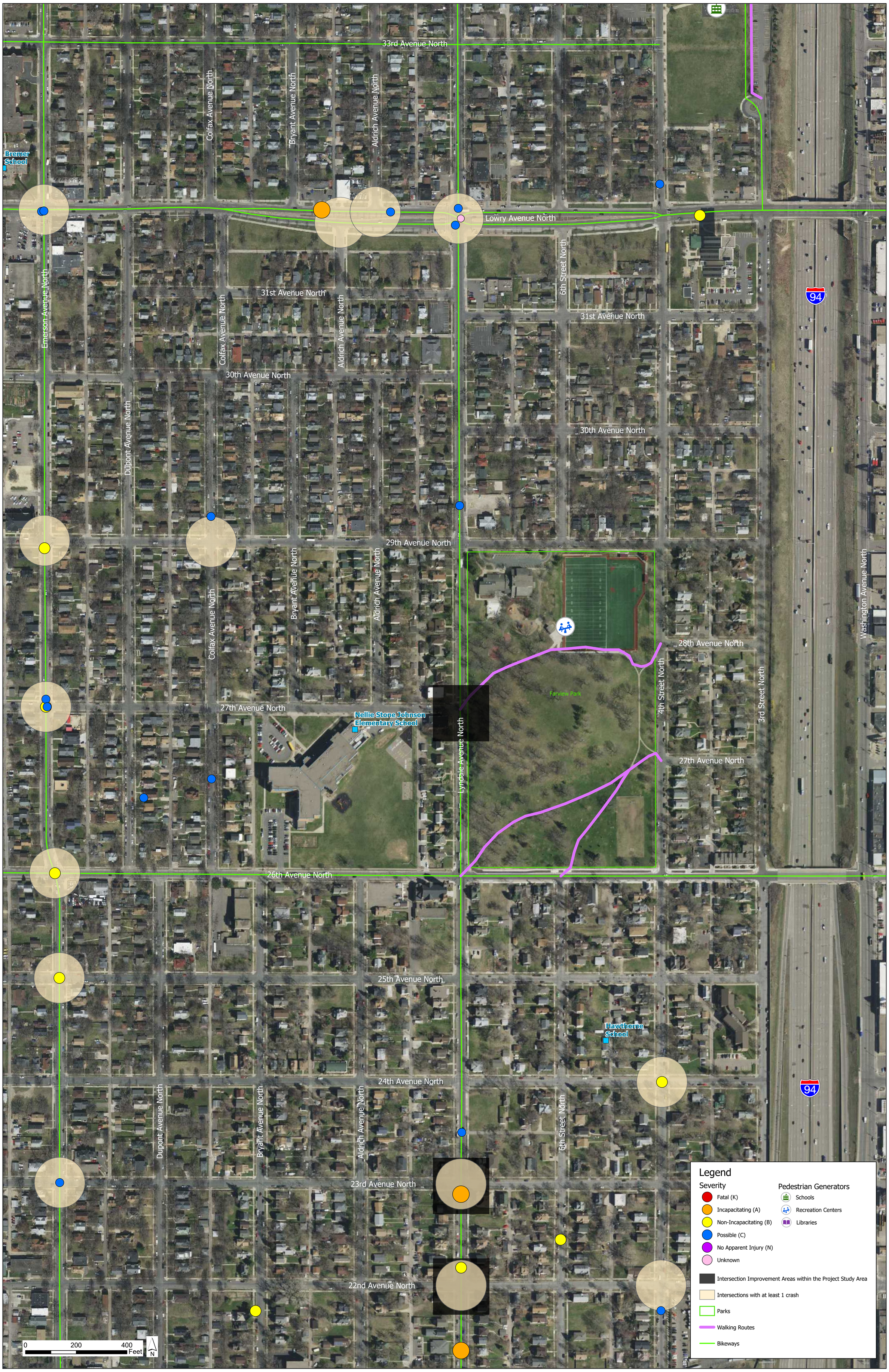
Sojourner Truth Academy
McKinley School
Emerson Avenue North
Dupont Avenue North
Colfax Avenue North
Bryant Avenue North
Aldrich Avenue North
Lyndale Avenue North
4th Street North
3rd Street North
Dowling Avenue North
Washington Avenue North
37th Avenue North
6th Street North
36th Avenue North
35th Avenue North
Perkins Hill
Cityview Community School
Cityview Pam Magnet School
34th Avenue North
33rd Avenue North
94
0
200
400
Feet
N
Legend
Severity
Fatal (K)
Incapacitating (A)
Non-Incapacitating (B)
Possible (C)
No Apparent Injury (N)
Unknown
Pedestrian Generators
Schools
Recreation Centers
Libraries
Intersection Improvement Areas within the Project Study Area
Intersections with at least 1 crash
Parks
Walking Routes
Bikeways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Colfax Avenue North
Bryant Avenue North
Aldrich Avenue North
Bremer School
Lowry Avenue North
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31st Avenue North
Emerson Avenue North
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30th Avenue North
94
Dupont Avenue North
30th Avenue North
29th Avenue North
Bryant Avenue North
Aldrich Avenue North
28th Avenue North
Washington Avenue North
Farview Park
4th Street North
3rd Street North
27th Avenue North
Nellie Stone Johnson Elementary School
Lyndale Avenue North
27th Avenue North
26th Avenue North
25th Avenue North
Hawthorne School
24th Avenue North
Dupont Avenue North
Bryant Avenue North
Aldrich Avenue North
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Severity
Fatal (K)
Incapacitating (A)
Non-Incapacitating (B)
Possible (C)
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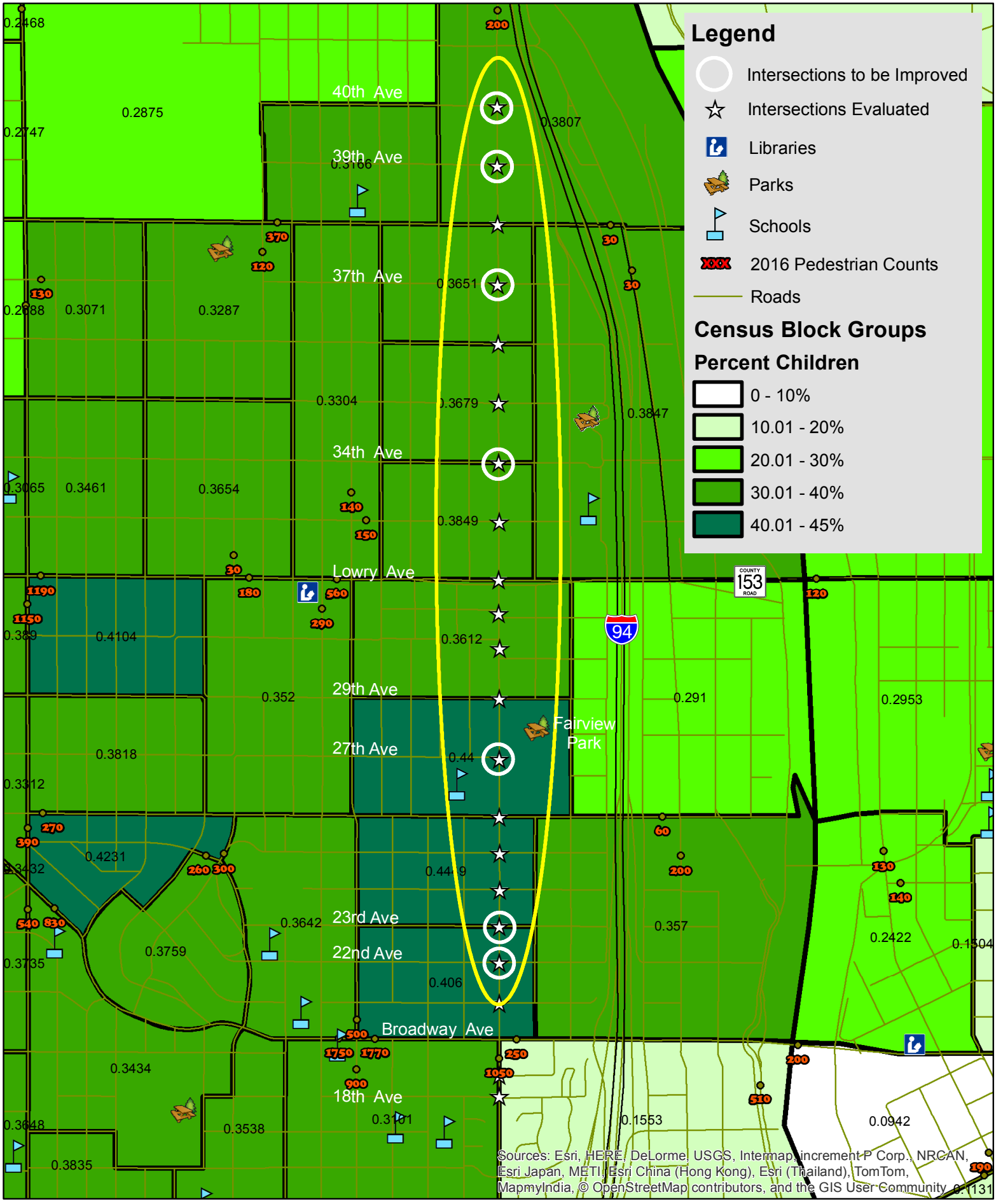

2010 Census Data - Percentage of Children per Block Group