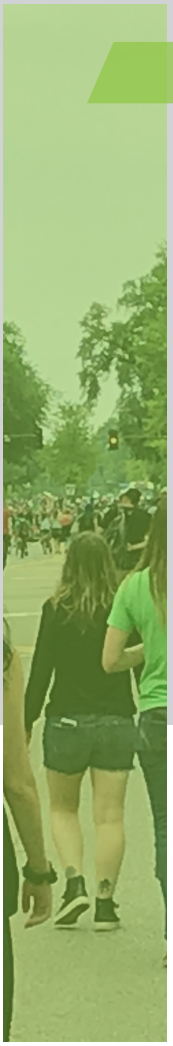
RICHFIELD PEDESTRIAN PLAN

Executive Summary

November 2018



Prepared by:
Zan Associates

EXECUTIVE **SUMMARY**

This plan describes a systematic approach for evaluating pedestrian demand based on proximity to land uses that generate pedestrian trips, social and economic factors that generate a higher demand for pedestrian mobility, and the physical context of a given location. The plan also establishes measures to evaluate the pedestrian network to determine its ability to meet the specific demand and priority. Finally, the plan includes guidance on new and emerging pedestrian design tools and recommendations for implementation of a citywide pedestrian improvement program.

The Richfield Pedestrian Plan is a tool to create safer, more convenient and enjoyable places to walk in the City of Richfield.

Richfield Pedestrian Plan Overview

Walking is fundamental to all aspects of transportation.

People walk... for exercise, to the bus stop, from their bike to their house, from a car to a restaurant, just for the fun of it.

Regardless of the nature of the trip, all pedestrians have the right to a safe pedestrian trip and it should also be efficient and enjoyable.

PEOPLE IN RICHFIELD ARE WALKING

3.5%
In Richfield, 3.5 percent of commuters ***walk to work*** compared to 2.8 percent nationally. *ACS, 2016*

40%
Approximately 40 percent of commuters who walk to work in Richfield are ***people of color*** and 20 percent are ***living in poverty***. *ACS, 2016*

47%
Approximately 47 percent of commuters who walk to work in Richfield ***do not have a vehicle*** available to them. *ACS, 2016*

30%
In Richfield, 30 percent of ***students live within one half mile of a school***. *SRTS Comprehensive Plan, 2014*

23%
23.2% of households in Richfield have at least ***one person with a disability.*** *ACS, 2016* and 10.1% of Richfield residents report ***living with a disability.*** *MN State Demographer, 2017*

WALKING IS GOOD FOR HEALTH

50%
Nearly 50 percent of Minnesotans fail to meet the Department of Health's exercise recommendations (at least 150 minutes per week) *Minnesota Walks, 2016*

62%
Of Minnesotans that meet physical activity guidelines, 62 percent do so by ***including walking*** as part of their regular physical activity. *Minnesota Walks, 2016*

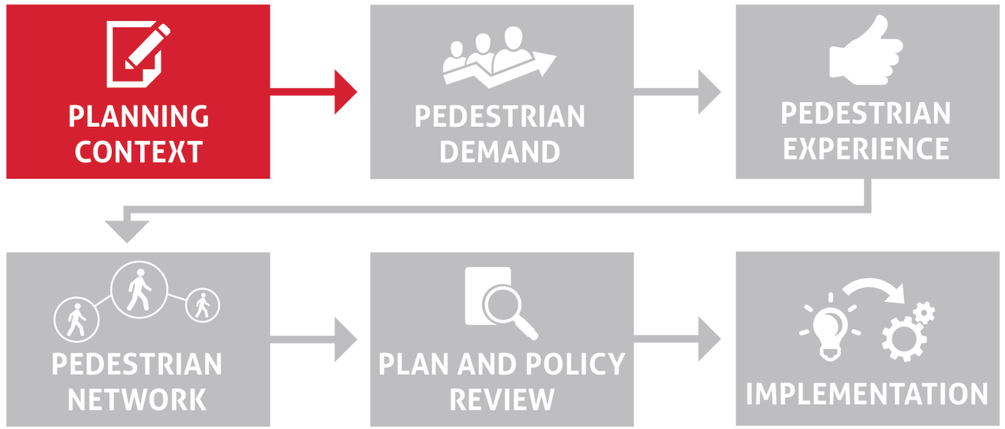
WALKING IS GOOD FOR THE COMMUNITY

People living in pedestrian-friendly cities tend to be engaged in their community. One study found that living in pedestrian-friendly neighborhoods have higher levels of social and community engagement compared with those living in car-oriented suburbs. *Leyden, Kevin M, 2003*

WALKING IS GOOD FOR THE ECONOMY

There is a growing demand to live and work in pedestrian-friendly places. One study found that real estate values increase by $500 to $3,000 per increase in Walk Score Point (walkscore.com). *Cortright, Joe, 2009*

PLANNING **CONTEXT**



Cities and the way people move within them are changing. Many people want walkable urban areas, robust multimodal transportation options, and the ability to lead healthy and active lives.

There is growing momentum around improving multimodal transportation options in Richfield, and walking is a critical component of this trend.

Richfield Pedestrian Plan Goals

The purpose of the Richfield Pedestrian Plan is to help make walking the easy choice. Richfield can achieve this by:

1. Making design for pedestrians first priority
2. Coordinating multimodal transportation networks and land use decisions
3. Making public realm improvements a standard in high activity locations

Influencing Themes and Trends

Livability
A livable place has a combination of vibrant public spaces, mixed income housing, resilient local economy, recreational opportunities, easy access to goods and services. People can walk for recreation and can have a joyous experience while accessing important destinations.

Vehicle speed
Higher vehicle speeds increase the likelihood of pedestrian injury or fatality if a pedestrian is hit. The key turning point for pedestrian safety is 30 miles per hour–any faster and the chance of survival goes way down. For example, if a pedestrian is hit by a vehicle at 40 mph, the fatality rate is 85%, whereas a pedestrian crash at 20 mph has a 5% fatality rate.

Active living
is about creating places that integrate physical activity into daily life by encouraging people to incorporate physical activity into their daily routine. The ability to safely walk is a critical component of active living.

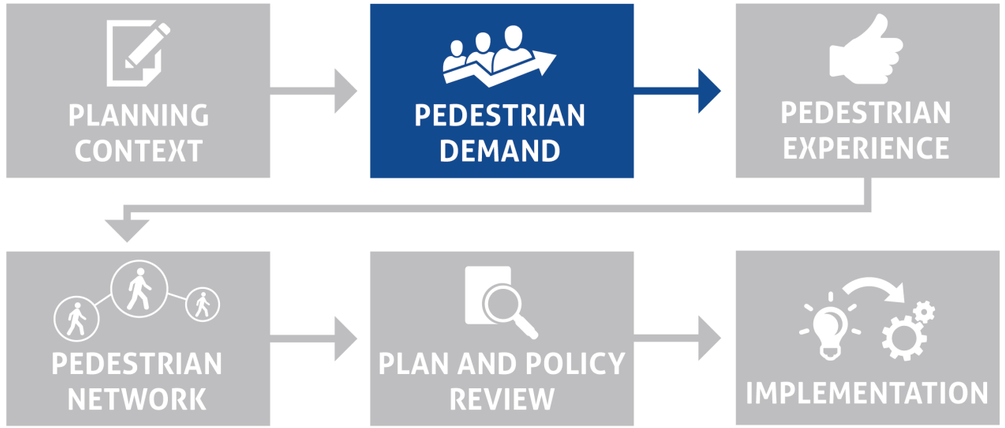
Complete streets
is an approach to street planning and design that considers and balances the needs of all transportation users. This approach to roadway design emphasizes the needs of the most vulnerable users, such as pedestrians, over vehicle users.

Distracted driving
is an activity that takes away attention from driving, thus creating a risk for the driver and others around them. Pedestrians are vulnerable to serious injury and fatalities when hit by drivers, thus making distracted driving a large threat to pedestrians.

Healthy living
is about making healthy behaviors a part of daily life through physical, mental and spiritual means. Regular physical activity such as walking reduces the risk of chronic diseases; as little as 10 minutes of brisk walking a day has cardiovascular benefits. Walking has also been shown to lead to improved mental well-being and reductions in rates of depression and feelings of isolation.

Transportation funding
has been a contentious issue at all levels of government over recent years, often leaving transportation projects with less money. With less funds, walking related projects and programs need to be implemented in an efficient manner and to "do more with less."

PEDESTRIAN **DEMAND**



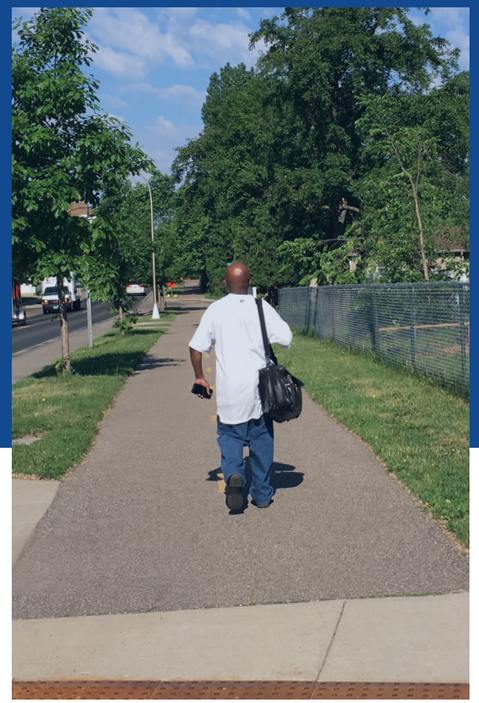
People walk for many different reasons and in many different places, but people avoid walking when they feel unsafe or uncomfortable. As a result, there is often significant latent demand for walking that doesn't show up when counts are made of current walking. A better understanding of both current and latent pedestrian demand is achieved by looking at factors including:

- Adjacent land uses and nearby activity centers
- Proximity to parks and schools
- Presence of transit service
- Population density and demographic make
- Role of the corridor within the larger transportation network

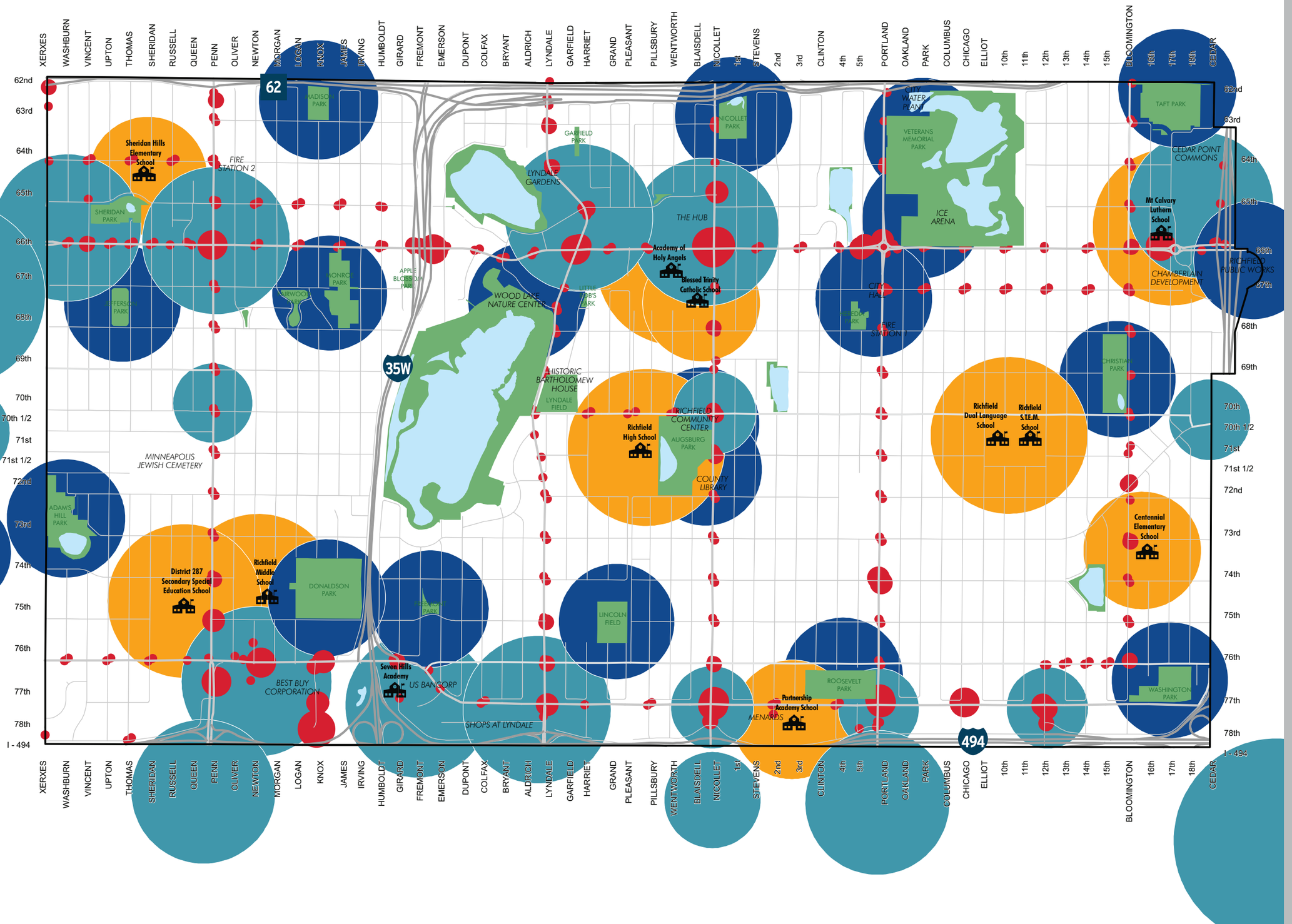
The following maps illustrate pedestrian demand in Richfield. The first shows destinations and activity centers within the city, based on a survey completed as part of the development of the Richfield Bicycle Master Plan in 2010, and updated to reflect current conditions. The second is a pedestrian demand "heat map" which interpolates pedestrian demand factors and population characteristics to show the relative pedestrian demand throughout the city. Together, these maps serve as a starting place for understanding pedestrian demand at a given location.

Demand is inclusive of both existing users and unmet need, or latent demand, based on the surrounding land use and context.

Walking can be an easy choice for many people in Richfield.



Richfield Pedestrian Destinations, Activity Centers, and Transit Stops



Destinations [1]

- Public Areas
- Business Areas
- Schools

Average Daily Transit Boardings, Fall 2015

- <10
- 11–25
- 26–50
- 50–100
- >100

[1] Larger circles indicate higher demand, based on a survey of Richfield residents completed in 2011 as part of the Bicycle Master Plan and updated in 2018 as part of the Richfield Pedestrian Plan.

0 — 0.25 Miles

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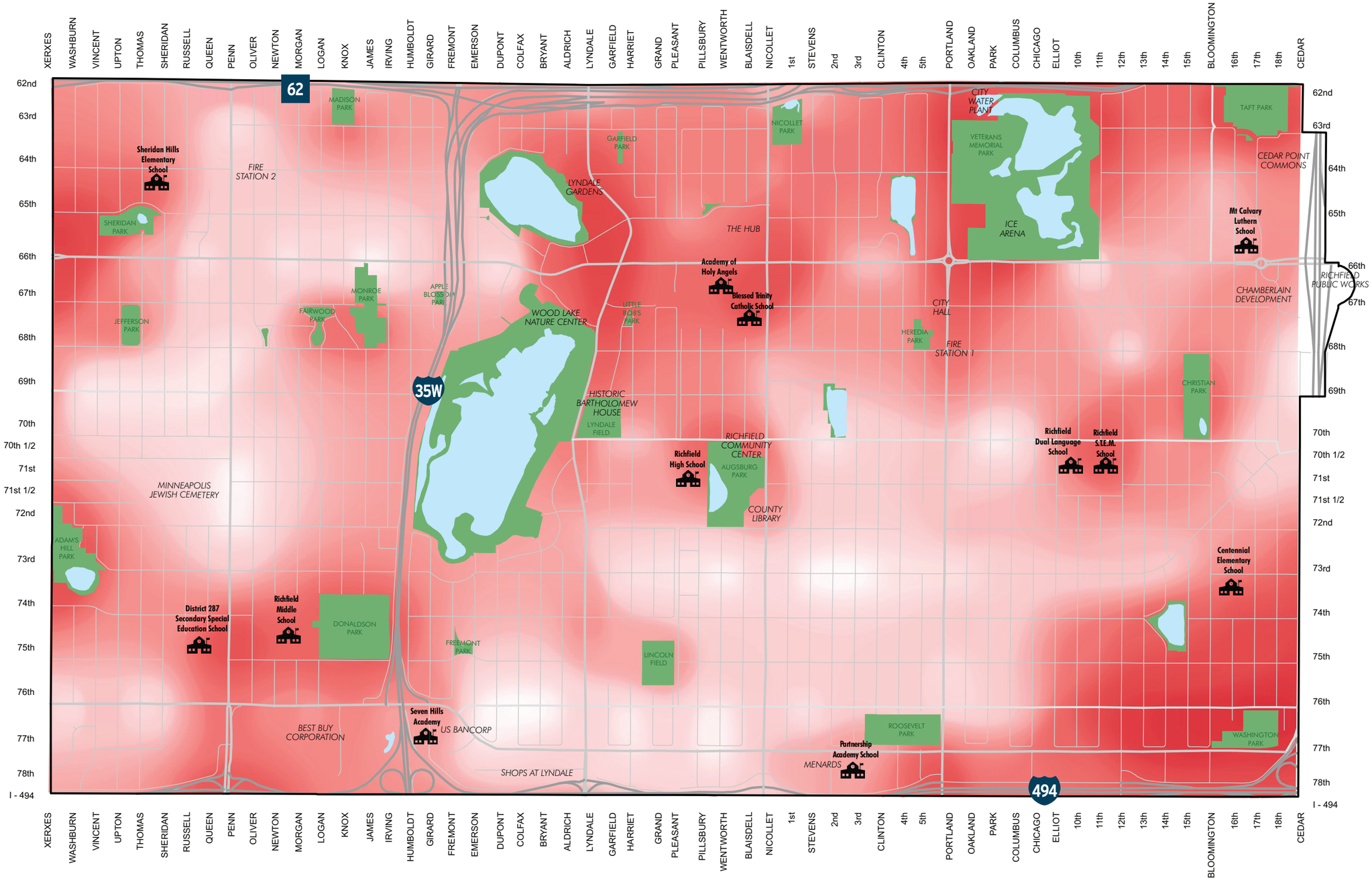
Metropolitan Council (2016) and City of Richfield
Created by Zan Associates October 2018

Citywide Pedestrian Demand



Pedestrian Demand

High

Low

Pedestrian Demand Methodology

Pedestrian demand was determined based a review of arterial, collector, and connector roadways and their relative proximity to activity centers and population density. A higher concentration of, or closer proximity to activity centers, means higher demand. Activity centers considered include:

- Community buildings such as the community center, libraries, and city offices
- Businesses and commercial areas such as shopping centers, restaurants, retail stores, large offices and industrial parks
- Schools, recreation facilities and parks

Likewise, closer proximity to higher population density means higher demand, as well as proximity to concentrations of older adults, people living in poverty, minority populations, and young people.

0 0.25 Miles

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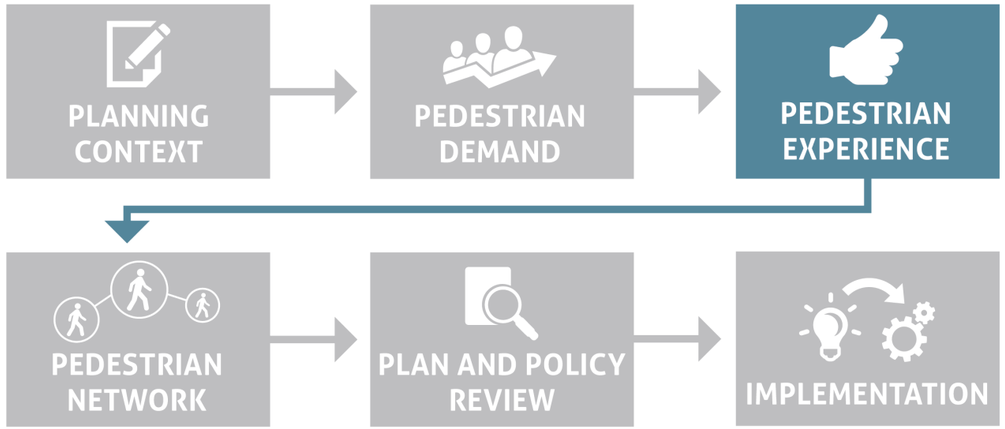
City of Richfield
Created by Zan Associates October 2018

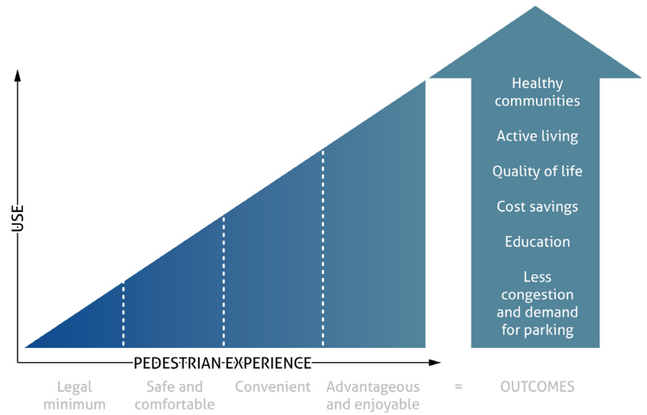
PEDESTRIAN **EXPERIENCE**



Walking increases as the level of pedestrian improvements increases. With a higher level of accommodation, it becomes more advantageous, or even enjoyable, to choose walking over other modes of transportation.

People are drawn to walk in locations where they feel safe, where the route is convenient, and where the overall experience is enjoyable.

Level of Accommodation/Use Relationship

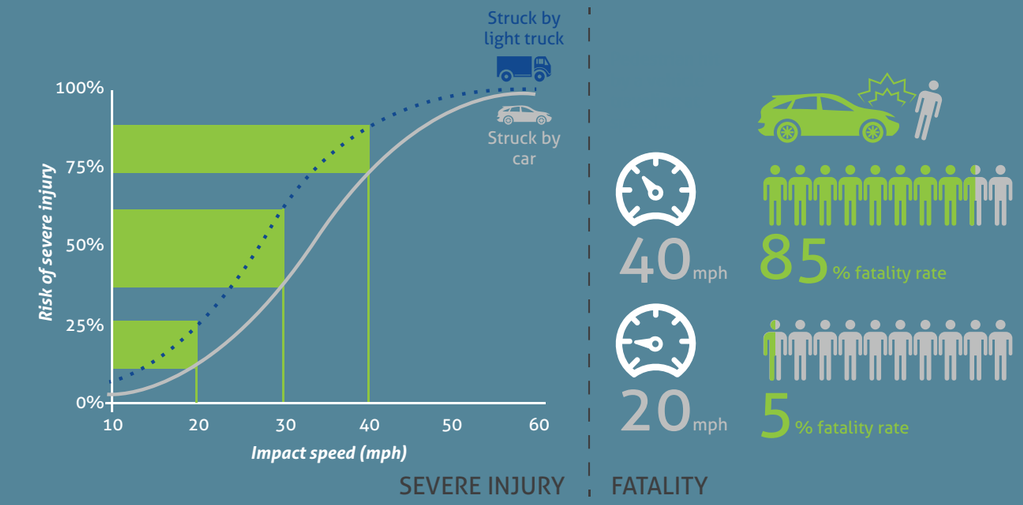


Pedestrian Safety

Safety is the primary concern when planning and designing pedestrian facilities. Safety includes consideration for people walking, biking, using transit and in motor vehicles.

The data are clear – pedestrian safety is enhanced by slower traffic speeds, shorter crossing distances (less crash exposure), and greater driver awareness and visibility.

Vehicle Speed and Pedestrian Injury Relationship



Source: *Impact Speed and a Pedestrian's Risk of Injury or Death. AAA Foundation for Traffic Safety. September 2011.*

*Richfield Crash Trends**

Most crashes happen at intersections
81% occurred at or near an intersection

More than half are at signalized intersections
56% occurred at traffic signals

Most crashes happen on higher speed roadways
67% occurred on roads with posted speed limits of 35 miles per hour or more

Most crashes happen on multilane roadways
67% occurred on undivided roadways with two or more lanes in each direction

Crashes are more likely at high activity locations
70% of crashes occurred within 1/8 mile of a commercial area, park or other public space, school, or bus stop

Crashes at roundabouts
0 crashes involving fatalities or incapacitating injuries at roundabouts in Richfield and 0 reported pedestrian crashes

***Source:** MnCMAT (2017) and City of Richfield*

Measures of Pedestrian Experience

The following are typical criteria for the evaluation of pedestrian experience, for both crossings and linear facilities

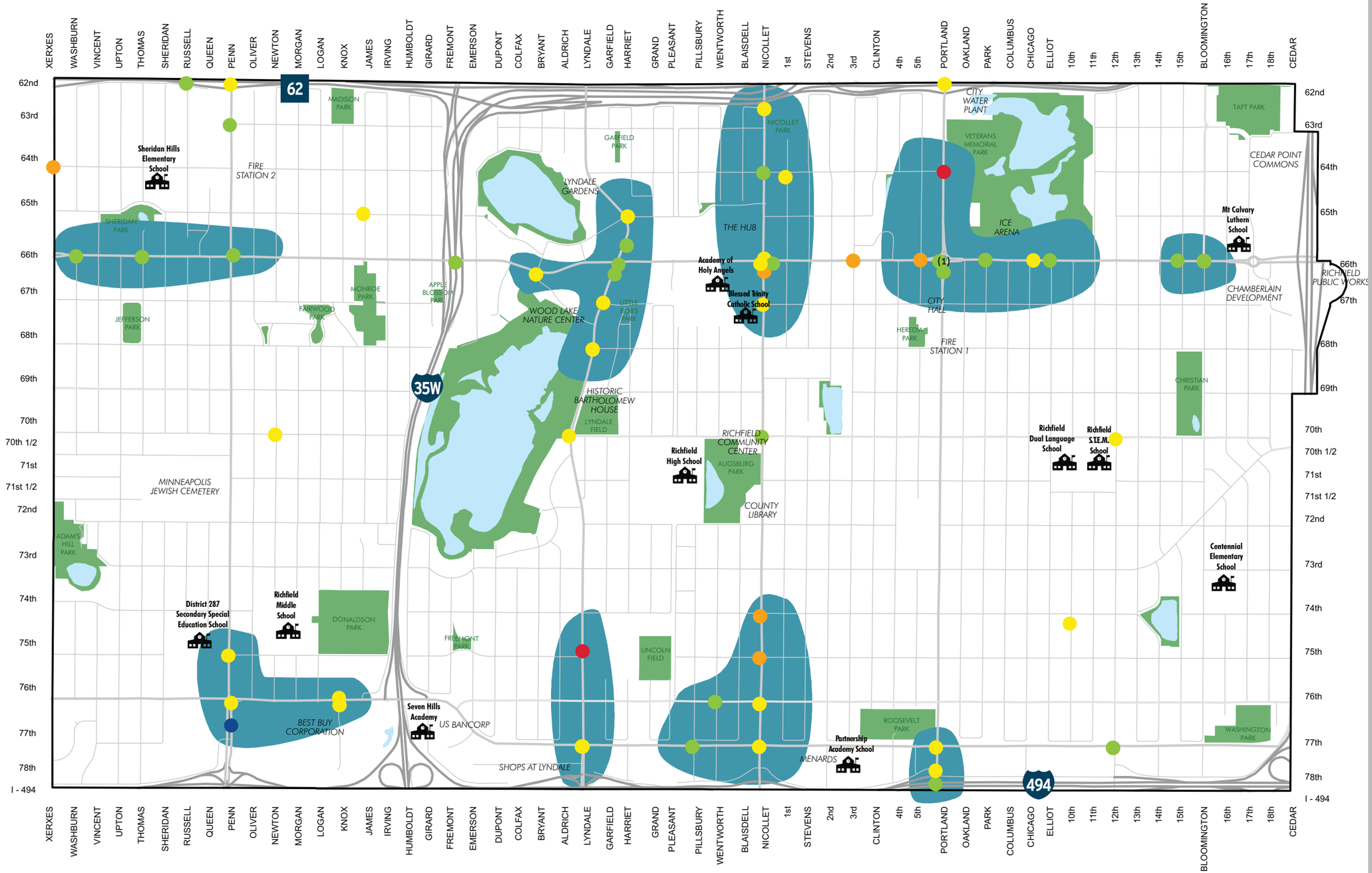
Crossing Facilities

- Physical condition
- Pedestrian delay
- Crossing distance and crash exposure
- Speed of opposing vehicle traffic
- Visibility
- Land use connectivity

Linear Facilities

- Physical condition
- Width of the Pedestrian Access Route (PAR)
- Separation from traffic – boulevard, furnishing zone, sign zone
- Pedestrian features
- Visual quality
- Land use connectivity

Location and Severity of Crashes in Richfield (2006 – 2015)



Pedestrian Areas of Concern

Severity of Pedestrian Crash

- Fatal *(2 Total)*
- Incapacitating Injury *(9 Total)*
- Possible Injury *(32 Total)*
- Non-incapacitating Injury *(29 Total)*
- Property Damage *(1 Total)*

(1) There have been zero injury crashes reported at the Portland Avenue and 66th Street roundabout since it was first installed in 2009.

Miles
0 0.25

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MNCMAT (2017) and City of Richfield
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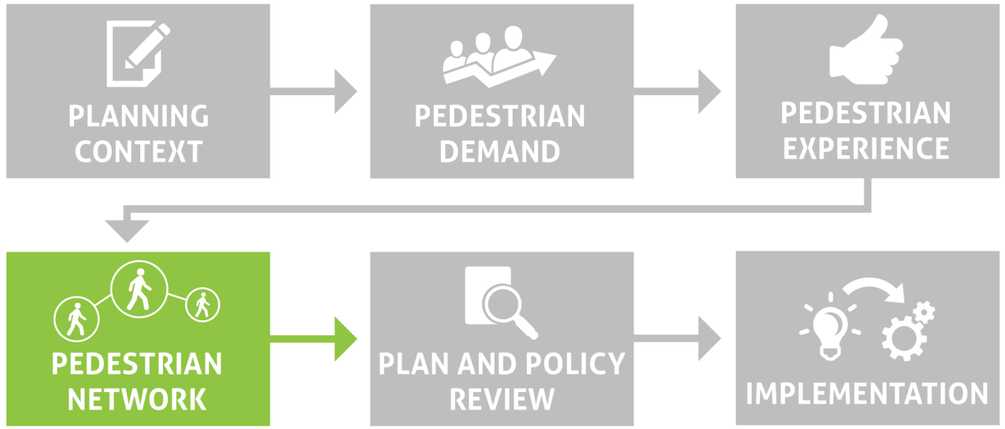
PEDESTRIAN **NETWORK**



The city's pedestrian network will be expanded and modernized overtime to improve safety and to create a positive pedestrian experience with the highest priority given to safety countermeasures at high traffic roadway crossings. In addition, priority pedestrian routes have been identified based on proximity to activity centers, gaps in the existing pedestrian network, and crossings of major pedestrian barriers (e.g., highway bridges, railroad crossings, etc.). Routes with existing pedestrian facilities will also be modernized, based on need, to provide a positive pedestrian experience.

Richfield has a robust transportation system, but there is more work to be done.

"I walk for health, wellness and longevity."

- Richfield resident at Penn Fest 2017

Land Use Typologies

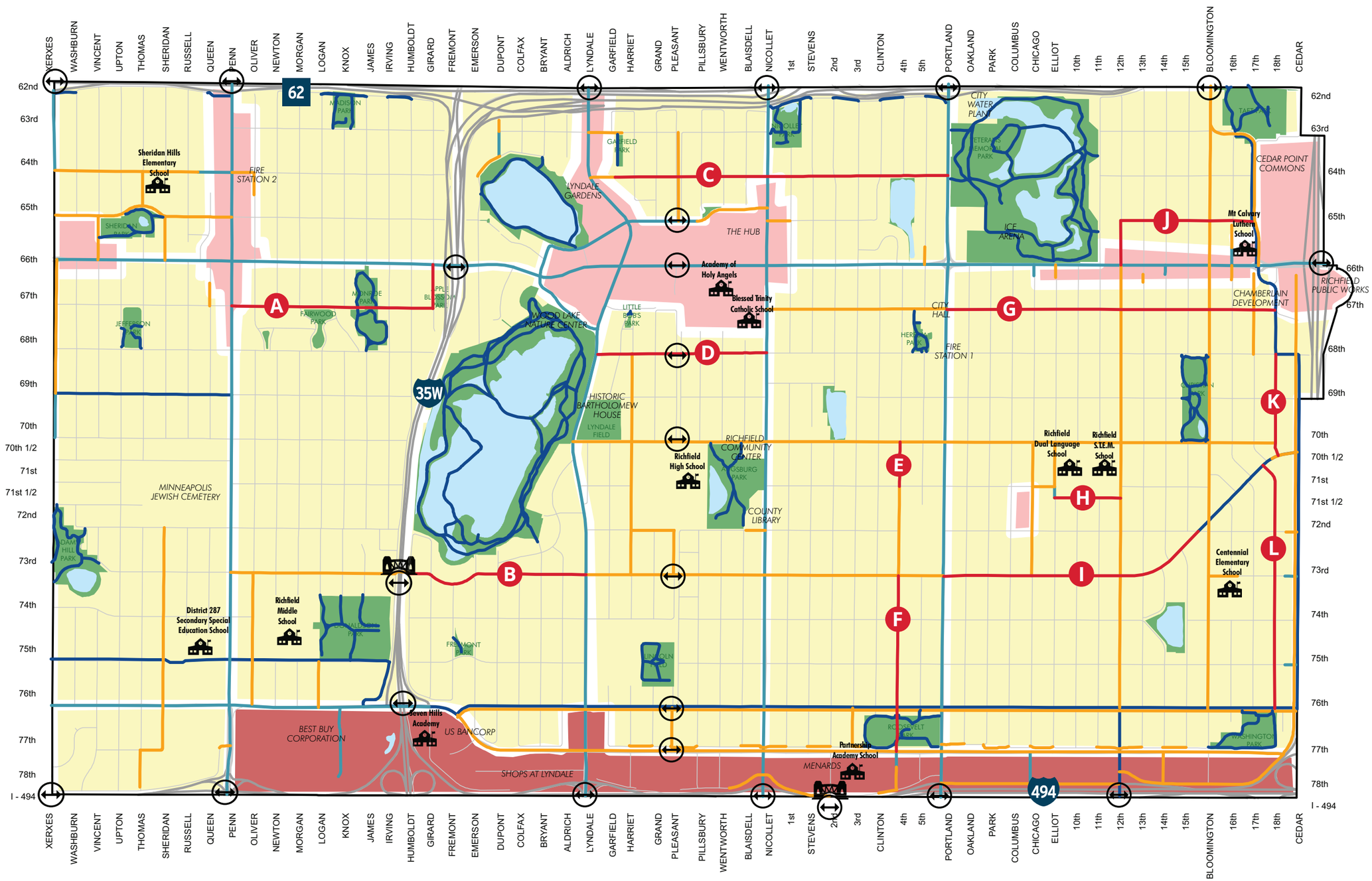
Land use typologies provide are a basis for decision making and should be used in the project development process, in combination with an understanding of pedestrian demand and experience, to identify a suitable pedestrian facility design. The following typologies have been identified:

Neighborhood Residential
Primarily residential uses along lower volume streets. Focus on slower vehicle speeds, clear and well-maintained walking paths, and safe crossings

Neighborhood Commercial
Generally, neighborhood serving commercial uses. Focus should be safe and efficient crosswalks, direct and visually appealing pedestrian routes, and separation from vehicle traffic

Highway Commercial
Tends to be auto oriented land uses. Focus should be on providing separation from vehicle lanes and safe places to cross the street

Planned Pedestrian Network



Land Use Typologies

- Neighborhood Residential
- Neighborhood Commercial
- Highway Commercial

Priority Pedestrian Routes

Priority Pedestrian Routes

- **A** *67th St from Penn Ave to Girard Ave and Girard Ave from 67th St to 66th St*
- **B** *73rd St from the I-35W Ped Bridge to Lyndale Ave*
- **C** *64th St from Lyndale Ave to Portland Ave*
- **D** *68th St from Lyndale Ave to Nicollet Ave*
- **E** *4th Ave from 70th St to 71st St*
- **F** *4th Ave from 73rd St to 76th St*
- **G** *67th St from Portland Ave to Richfield Pkwy*
- **H** *71st St from Elliot Ave to 12th Ave*
- **I** *73rd St Diagonal Blvd from Portland Ave to Cedar Ave*
- **J** *12th Ave from 66th St to 65th St and 65th St from 12th Ave to Richfield Pkwy*
- **K** *Richfield Pkwy, from 68th St to 70th St*
- **L** *Richfield Pkwy, from Diagonal Blvd to 76th St*

Pedestrian Infrstructure

- Sidewalk on One Side
- Sidewalk on Both Sides
- Two-way Trail
- Pedestrain Bridges
- Barrier Crossing

0 — 0.25 Miles

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Metropolitan Council (2018) and City of Richfield
Created by Zan Associates October 2018

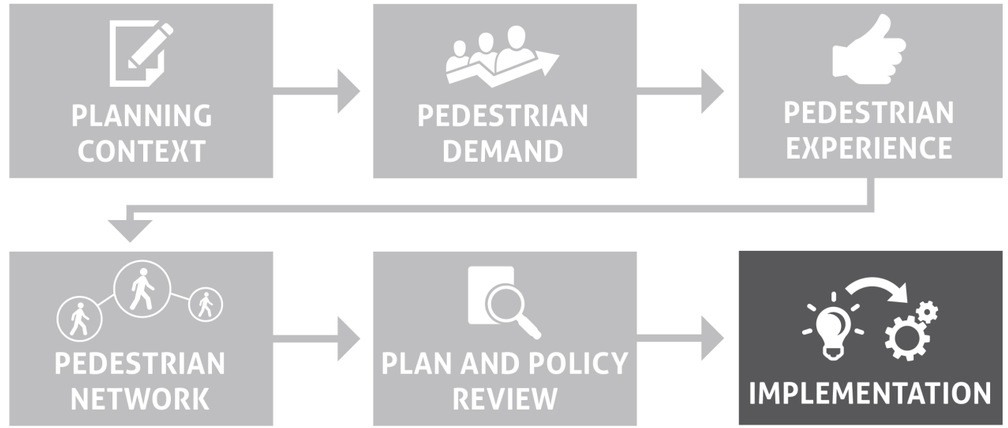
PLAN AND POLICY **REVIEW**

Existing plans and policies show a strong commitment at every level to make walking a safe and convenient transportation and recreation option in Richfield.

There is a planning and policy level emphasis on walking in Richfield. However, plans and policies need to be updated to allow greater flexibility in the siting of pedestrian facilities and to include people-based factors, such as activity generating land uses and concentrations of populations who often rely on walking. The following plans and policies may need to be updated to reflect pedestrian priority based on demand and context:

- Richfield Sidewalk Standards Policy (2016)
- Richfield Pedestrian Crosswalk Pavement Markings Policy (2006)
- Richfield Sidewalk Snow Plowing Policy (2011)
- Richfield Complete Streets Policy (2015)
- Guiding Principles for Transportation (2013)
- ADA Transition Plan (2014)
- Richfield Safe Routes to School Comprehensive Plan (2014)

IMPLEMENTATION



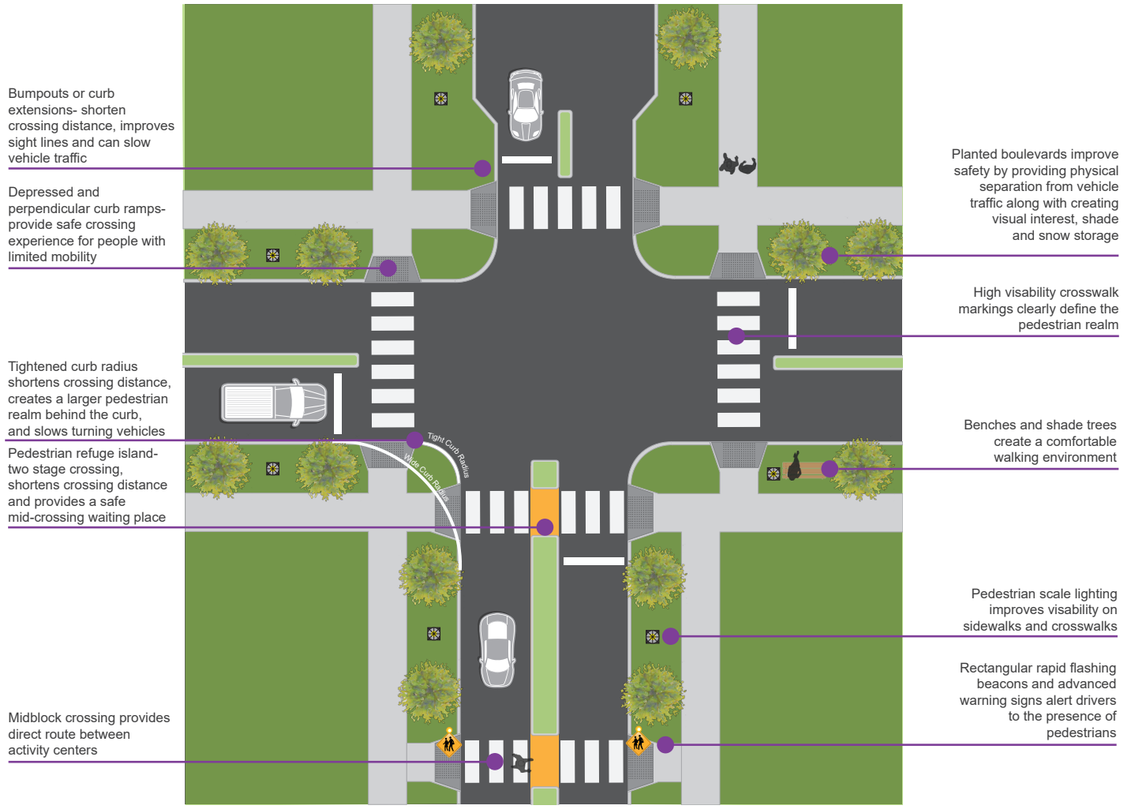
Pedestrian Facility Best Practices: Designing for Pedestrians

People walk for many different reasons and, thus, a variety of facilities are needed. A recreational jogger may have different needs than someone waiting for the bus, a father pushing a stroller, or an older adult using a walker.

Pedestrians want a safe and comfortable walking experience. This means short and well-marked crossings, slower rather than faster vehicle traffic, separation from traffic lanes, shade and periodic rest areas, and visually interesting environments.

Pedestrian facilities should be designed for easy use by a range of ages, abilities, and mobility levels.

Best Practice Pedestrian Treatments



Implementation Framework

Actions

Near-term *(1-4 years)*

Include evaluation of the appropriate pedestrian crossings and linear facilities on all capital and maintenance projects in the future, considering pedestrians as the priority mode.

Look for opportunities to implement stand-alone pedestrian projects in high demand areas and in areas with high crash frequency and severity. Consider the use of temporary installations.

Evaluate opportunities for non-infrastructure pedestrian programming to educate the community and build awareness for pedestrians. For example:

- Walk! Bike! Fun! Education programs at schools
- Community walking maps
- Walk to school and work days
- Mileage and/or step counting programs
- Safety campaigns (Stop For Me)

Strategically pursue all funding sources for pedestrian infrastructure. At a minimum, this should include consideration of the following:

- Federal Transportation Funding allocated through the regional solicitation process
- U.S. Dept. of Transportation: BUILD (formerly TIGER) discretionary grants
- DNR Local Trail Connections Program
- State funds for Safe Routes to School (SRTS)
- MN Department of Health Statewide Health Improvement Program
- Blue Cross Blue Shield Center for Prevention funds

Complete a system wide evaluation to develop a prioritized program of pedestrian safety projects, based on the demand evaluation framework in this plan.

Mid-term *(5-9 years)*

Install modern pedestrian facilities on all minor arterial roadways. This includes protected crossings in high demand areas and sidewalks or trails, separated from the roadway with a boulevard or other vertical screening.

Implement solutions to address high crash frequency and severity locations, citywide.

Institutionalize non-infrastructure programs and campaigns to change user behavior.

Pursue a dedicated and ongoing funding source for stand-alone pedestrian projects.

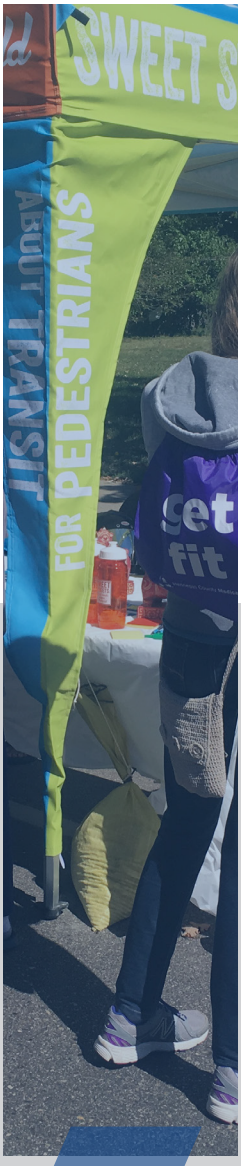
Long-term *(10+ years)*

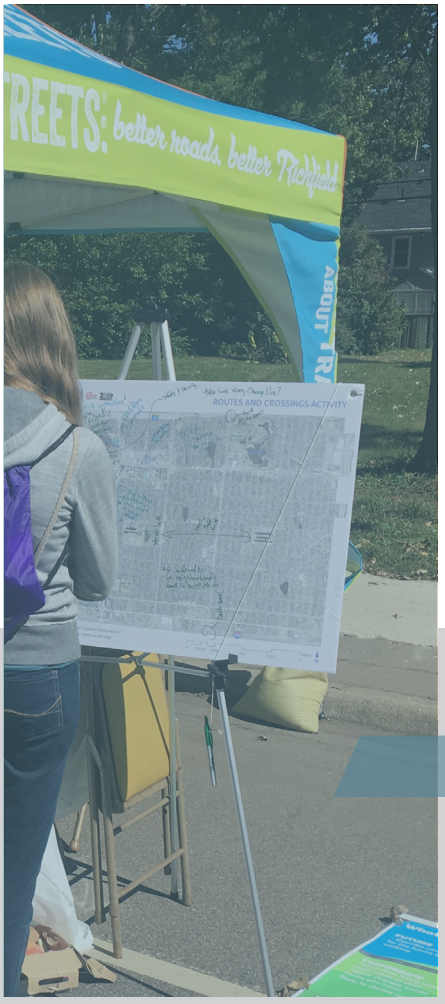
Work toward buildout of the citywide pedestrian network, including pedestrian facilities on all minor arterial, collector, and select local roadways.

Look for opportunities to create signature places to walk within Richfield, such as pedestrian plazas and greenways.

Pursue legislative policy changes to allow for reduced speed limits on residential streets

For more information, and to view the full report visit:
www.RichfieldSweetStreets.org





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