



Application

10350 - 2018 Multiuse Trails and Bicycle Facilities

10744 - 2018 Multiuse Trails and Bicycle Facilities

Regional Solicitation - Bicycle and Pedestrian Facilities

Status:

Submitted

Submitted Date:

07/13/2018 3:47 PM

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## Primary Contact

Name:\*

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Salutation

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\*

Maplewood

Minnesota

55109

City

State/Province

Postal Code/Zip

Phone:\*

651-748-2500

Phone

Ext.

Fax:

What Grant Programs are you most interested in?

Regional Solicitation - Bicycle and Pedestrian Facilities

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## Organization Information

Name:

RAMSEY COUNTY

Jurisdictional Agency (if different):

Organization Type:	County Government		
Organization Website:			
Address:	2015 N VAN DYKE ST		
*	MAPLEWOOD	Minnesota	55109
	City	State/Province	Postal Code/Zip
County:	Ramsey		
Phone:*	651-748-2500		
		Ext.	
Fax:			
PeopleSoft Vendor Number	0000023983A2		

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## Project Information

Project Name	Bruce Vento Regional Trail Extension - Buerkle Road to Highway 96
Primary County where the Project is Located	Ramsey
Cities or Townships where the Project is Located:	White Bear Lake, Vadnais Heights, White Bear Township
Jurisdictional Agency (If Different than the Applicant):	



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

Since the development of the Bruce Vento Trail Master Plan in 1993, the Bruce Vento Trail has been a highly popular multi-use trail corridor for Ramsey County residents. The trail corridor is thirteen-miles in length, and extends from the east side of downtown St. Paul to the north County line in White Bear Township. The southern seven-mile segment of the regional trail was completed in 2005 from downtown St. Paul to Buerkle Rd in White Bear Lake on former Burlington Northern Santa Fe (BNSF) railway, the remaining six-miles of the trail was planned to be constructed on BNSF railway, up to the County line. However, this section of trail has remained undeveloped because this section of railway has remained active.

A major planning effort was initiated in 2014 to determine an alternative three-mile trail alignment out of the railway right-of-way from Buerkle Road to Highway 96 in White Bear Lake in hopes of reducing the remaining gap for the Bruce Vento Regional Trail. This major step will provide increased opportunities and connections for multiuse trails and bicycle facilities within the northern section of Ramsey County.

This project will connect the Bruce Vento Regional trail to the Highway 96 Regional Trail, Lakes Line Regional Trail, South Shore Lake Trail, which are identified in the Ramsey County Pedestrian and Bicycle Master Plan and the Lakes Links Trail Network Master Plan. In addition, this project will complete a major gap in the National US Bike Route 41 (USBR 41) for connections north of Ramsey County to Duluth since the Bruce Vento Regional Trail is the designated USBR 41 route through Ramsey County.

The proposed trail will be designed to meet Federal State Aid Standards for multiuse trails and bicycle facilities. The trail width is planned for a twelve-foot

wide trail section consisting of bituminous pavement, trail under-pass components for travel under County Road E and Highway 61 roadway bridges, at-grade crossings, railway pedestrian crossing on the BNSF railway near Hoffman Road/Highway 61 meeting Federal/State/BNSF crossing requirements, fencing, landscaping and restoration, signage, and site amenities. Ramsey County has been working with BNSF Railway on specific requirements for trail within BNSF right of way and for the pedestrian railway crossing. This project is the first of two steps to eliminate half of the six-mile trail gap in the regional and national trail system, and will also set the stage for future connections north of Highway 96 to County Road J, connection to the Hardwood Creek Trail.

*(Limit 2,800 characters; approximately 400 words)*

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

Bruce Vento Regional Trail from Buerkle Rd to CSAH 96- Construct 12-foot wide trail, underpasses at County Road E and US 61, at-grade trail crossings, railway crossing, landscaping, restoration, signage, and amenities

**Project Length (Miles)**

3.0

*to the nearest one-tenth of a mile*

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## 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**

\$4,026,278.00

**Match Amount**

\$1,006,570.00

*Minimum of 20% of project total*

**Project Total**

\$5,032,848.00

**Match Percentage**

20.0%

*Minimum of 20%*

*Compute the match percentage by dividing the match amount by the project total*

**Source of Match Funds**

County Capital Improvements Project funds

*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: 2021

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

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## Project Information

County, City, or Lead Agency Ramsey County

Zip Code where Majority of Work is Being Performed 55110

(Approximate) Begin Construction Date 05/02/2022

(Approximate) End Construction Date 09/30/2023

Name of Trail/Ped Facility: Bruce Vento Regional Trail

(i.e., CEDAR LAKE TRAIL)

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

From:  
(Intersection or Address) Buerkle Road and BNSF railway

To:  
(Intersection or Address) Intersection of CSAH Highway 96 and State Aid Highway 61

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

Clear/Grub, Grade, Agg Base, Bit Base, Bit Surf, Concrete,  
Trailhead, Signals, Lighting, Guardrail, Railway Crossing, Ped  
Ramps, Landscape, Crosswalk

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): Under County Road E Bridge and Highway 61 Bridge

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## 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.

There are several goals, objectives and strategies that are accomplished with this project as it relates to Chapter 2 of the 2040 TP.

Goal: (A) Transportation Stewardship

Objective: (B) Operate the regional transportation system to efficiently and cost-effectively connect people and freight to destinations

Strategy: A1, A2, A3

Goal: (B) Safety and Security Objective: (B)

Reduce the transportation systems vulnerability to natural and man-made incidents and threats.

Strategy: B1, B6

Goal: (C) Access to Destination

Objective:

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

(A) Increase the availability of multimodal travel options, especially in congested highway corridors.

(D) Increase transit ridership and the share of trips taken using transit, bicycling and walking.

(E) Improve multimodal travel options for people of all ages and abilities to connect to jobs and other opportunities, particularly for historically under-represented areas.

Strategy: C1, C15, C17

Goal: (D) Competitive Economy

Objective:

(A) Improve multimodal access to regional job concentrations

(D) Invest in a multimodal transportation system to attract and retain businesses and residents.

Strategy: D1, D3

Goal: (E) Healthy Environment

Objective:

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

(D) Provide a transportation system that promotes community cohesion and connectivity for people of all ages and abilities, particularly for historically under represented populations.

Strategy: E3, E7

*(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.*

Thrive 2040

2040 Regional Parks Plan-(43-50,73-76, attached)

2040 Transportation Plan Chapter 7-(7.11-7.16,7.22-7.24, attached)

**List the applicable documents and pages:**

Ramsey County Parks System Plan- Bruce Vento Section (attached)

Ramsey County Pedestrian and Bicycle Plan- (Executive Summary - attached)

Lake Links Trail Network Master Plan -(Sec 3 - attached)

*(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.

**Multituse 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. Yes

05/02/2016

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.

Date process started

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

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## 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. Yes

[Upload Agreement PDF](#)

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

### 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.

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## Requirements - Bicycle and Pedestrian Facilities Projects

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### Specific Roadway Elements

#### CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES

#### Cost

Mobilization (approx. 5% of total cost)	\$0.00
Removals (approx. 5% of total cost)	\$0.00
Roadway (grading, borrow, etc.)	\$0.00
Roadway (aggregates and paving)	\$0.00
Subgrade Correction (muck)	\$0.00
Storm Sewer	\$0.00

Ponds	\$0.00
Concrete Items (curb & gutter, sidewalks, median barriers)	\$0.00
Traffic Control	\$0.00
Striping	\$0.00
Signing	\$0.00
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	\$0.00
Wetland Mitigation	\$0.00
Other Natural and Cultural Resource Protection	\$0.00
RR Crossing	\$0.00
Roadway Contingencies	\$0.00
Other Roadway Elements	\$0.00
<b>Totals</b>	<b>\$0.00</b>

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## Specific Bicycle and Pedestrian Elements

CONSTRUCTION PROJECT ELEMENTS/COST ESTIMATES	Cost
Path/Trail Construction	\$3,955,648.00
Sidewalk Construction	\$0.00
On-Street Bicycle Facility Construction	\$39,200.00
Right-of-Way	\$0.00
Pedestrian Curb Ramps (ADA)	\$9,000.00
Crossing Aids (e.g., Audible Pedestrian Signals, HAWK)	\$65,000.00
Pedestrian-scale Lighting	\$96,000.00
Streetscaping	\$0.00
Wayfinding	\$25,000.00
Bicycle and Pedestrian Contingencies	\$828,000.00
Other Bicycle and Pedestrian Elements	\$15,000.00
<b>Totals</b>	<b>\$5,032,848.00</b>

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## 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
<b>Totals</b>	<b>\$0.00</b>

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## 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

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## Totals

Total Cost	\$5,032,848.00
Construction Cost Total	\$5,032,848.00
Transit Operating Cost Total	\$0.00

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## Measure A: Project Location Relative to the RBTN

Select one:

Tier 1, Priority RBTN Corridor	Yes
Tier 1, RBTN Alignment	Yes
Tier 2, RBTN Corridor	
Tier 2, RBTN Alignment	
Direct connection to an RBTN Tier 1 corridor or alignment	Yes
Direct connection to an RBTN Tier 2 corridor or alignment	Yes

OR

Project is not located on or directly connected to the RBTN but is part of a local system and identified within an adopted county, city or regional parks implementing agency plan.

Upload Map

1531427864406\_RBTN Map.pdf

*Please upload attachment in PDF form.*

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## Measure A: Population Summary

Existing Population Within One Mile (Integer Only) 28331

Existing Employment Within One Mile (Integer Only) 20309

Upload the "Population Summary" map 1531428045187\_Population Summary Map.pdf

*Please upload attachment in PDF form.*

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## Measure 2B: Snow and ice control

Maintenance plan or policy for snow-removal for year-round use: Yes

*(50 Points)*

Response: If yes, please include a link to and/or description of maintenance plan.

Internal standard level of maintenance for Regional Trails. Snow removal is required for all regional trails.

Upload Maintenance Plan (if no link is available)

1531415166656\_Standard Maintenance LOS for Regional Trails.pdf

*Please upload attachment in PDF form.*

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## 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)*

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: Yes

*(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:**

The development of the Bike and Pedestrian Plan for Ramsey County engaged the entire community and targeted groups not typically involved with public input processes. Partner agencies were involved such as Comunidades Latinas Unidas en Servicio, Rondo Avenue, Inc., Saint Paul Public Housing Authority, Metropolitan Area Agency on Aging, and Cycles for Change. Pop-up meetings were conducted at festivals and community events. Focus groups bringing in specific groups whom have not typically participated in planning were conducted. Besides these in-person methods, surveys, formal open houses, website, social media, and advisory groups were utilized for a variety of input methods. The Bruce Vento Regional Trail and connections to the trail are a large portion of the Bike and Pedestrian Plan.

Three local open houses and online comments specific to the trail were offered inviting the residents and businesses along the route for the Bruce Vento Trail Preliminary design study. In addition, U.S. Bicycle Route 41 held public meetings to provide input to establish portions of the Bruce Vento regional Trail as part of the national route.

A listening session for people with disabilities was coordinated with the Olmstead Implementation Office to inform the Ramsey Countywide Pedestrian and Bicycle Plan, which guided the planning, implementation, and design of the Bruce Vento Trail.

*(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.

The Bruce Vento Regional Trail provides multiple benefits for low-income populations, people of color, people with disabilities and the elderly by providing a safe route to and from shopping, schools, jobs, services, and other community connections. The trail will be ADA accessible for easier use by elderly and people with disabilities more practical. A new senior housing complex was recently opened along the route and others are nearby. The health benefits from walking and biking are universal. The trail also connects to other regional and local trails such as the Highway 96 Regional Trail, Lakes Links Regional Trail, and the South Shore Trail.

**Response:**

The project directly serves a high number of persons with a disability in White Bear Lake's census tract 404.01, where 15% of residents have a disability. The project benefits these residents by providing a safe and ADA-accessible non-motorized transportation route. At its northern terminus, the project connects to a substantial population of children in White Bear Township's census tract 405.04, where 20% of residents are under age 15. The project provides a safe walking/biking route to students within a half-mile of Willow Lane Elementary and Frassati Catholic Academy, and within one mile of Central Middle School.

*(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 only foreseeable negative externalities created by the trail project are the temporary construction inconveniences of dust, noise, and temporary detours. These are mitigated by control measures required by cities and townships regulating construction activity within their jurisdiction.

(Limit 2,800 characters; approximately 400 words)

**Upload Map**

1531489295531\_Socio-Economic Conditions Map.pdf

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## 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
White Bear Lake	2.0	0.67	78.0	52.0
Vadnais Heights	0.1	0.03	60.0	2.0
White Bear Township	0.9	0.3	25.0	7.5

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## Total Project Length

Total Project Length (as entered in the "Project Information" form) 3.0

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## Affordable Housing Scoring

Total Project Length (Miles) or Population	3.0
Total Housing Score	61.5

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## Affordable Housing Scoring

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### Measure A: Gaps, Barriers and Continuity/Connections

Check all that apply:

*Gap improvements can be on or off the RBTN and may include the following:*

- *Providing a missing link between existing or improved segments of a regional (i.e., RBTN) or local transportation network;*
- *Improving bikeability to better serve all ability and experience levels by:*
  - *Providing a safer, more protected on-street facility;*
  - *Improving crossings at busy intersections (signals, signage, pavement markings); OR*
  - *Improving a bike route or providing a trail parallel to a highway or arterial roadway along a lower-volume neighborhood collector or local street.*
- *Barrier crossing improvements (on or off the RBTN) can include crossings (over or under) of rivers or streams, railroad corridors, freeways, or multi-lane highways, or enhanced routes to circumvent the barrier by channeling bicyclists to existing safe crossings or grade separations. (For new barrier crossing projects, data about the nearest parallel crossing (as described above) must be included in the application to be considered for the full allotment of points under this criterion).*

**Closes a transportation network gap and/or provides a facility that crosses or circumvents a physical barrier** Yes

*Improves continuity and/or connections between jurisdictions (on or off the RBTN) (e.g., extending a specific bikeway facility treatment across jurisdictions to improve consistency and inherent bikeability)*

**Improves Continuity and/or Connections Between Jurisdictions** Yes

**Response:**

The remaining six-mile gap of undeveloped Bruce Vento Regional Trail from Buerkle Road to County Road J is a major gap and significant barrier for northern communities in Ramsey County. This project will complete a major gap in the National US Bike Route 41 (USBR 41) for connections north of Ramsey County to Duluth since the Bruce Vento Regional Trail is the designated USBR 41 route through Ramsey County. The three-mile trail project from Buerkle Road to Highway 96 will complete approximately one-half of this gap by providing a multi-use trail for pedestrian and bicycles that currently does not exist today for northern communities within Ramsey County. The trail project area between Buerkle Road and Highway 96 has significant barriers due to land use patterns, high vehicle route corridors such as, Highway 61 (25,000-28,000 ADT), Buerkle Rd (7,300 ADT), County Rd E (13,700 ADT) Highway 96 (15,500 ADT), and Otter Lake Road (6,800 ADT), and BNSF railway corridors. This project will eliminate these barriers providing a safe multi-use trail facility and will provide critical connections to other regional and local trail systems for the Bruce Vento Regional Trail (RBTN Tier 1 alignment with approximately 345,500 use in 2016), the Highway 96 Regional Trail (RBTN Tier 1 alignment with approximately 306,600 trail users in 2016), the Lakes Link Regional Trail (RBTN Tier 2 alignment with approximately 50,000 trail users in 2016), and the South Shore Trail (RBTN Tier 1 alignment). These are critical connections identified in the Ramsey County Pedestrian and Bicycle Master Plan and the Lake Trail Network Master Plan. Additionally, the Ramsey County Pedestrian and Bike Plan identifies US-61 as an area of high bicycle and pedestrian traffic stress, with nearly nonexistent level of pedestrian service along the length of the project corridor. The plan also lists US-61 as a high-stress area for pedestrian and cyclists in Ramsey County.

This trail project will also provide multi-modal connections and remove significant barriers to the proposed Rush Line Bus Rapid Transit (BRT) between Buerkle Road and Highway 96. Pedestrians and bicycles will be able to utilize the Bruce Vento Regional Trail to Rush Line BRT station stops that are planned at Buerkle Road, County Road E and Highway 61, Cedar Avenue and Highway 61, and Marina Triangle and Whitaker Street along Highway 61. By providing this critical pedestrian connection, increased ridership for the Rush Line BRT is anticipated.

This project is the first of two steps to eliminate half of the six-mile trail gap in the regional and national trail system, and will also set the stage for future connections north of Highway 96 to County Road J, and provide connection to the Hardwood Creek Trail.

*(Limit 2,800 characters; approximately 400 words)*

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## **Measure B: Project Improvements**



The trail project will provide a multi-modal facility that currently does not exist today for northern communities within Ramsey County. There are very little north-south pedestrian facilities within the proposed trail extension corridor from Buerkle Road to Highway 96 resulting from significant barriers such as, land use patterns, high vehicle route corridors such as Buerkle Road (7,300 ADT), County Road E 13,700 ADT), Highway 96 (15,500 ADT, Otter Lake Road (6,800 ADT), Highway 61 (25,000-28,000 ADT), and Burlington Northern Santa Fe (BNSF) railway corridors.

In efforts to provide a safe and useable multi-modal facility, several barriers and deficiencies must be corrected such as, high vehicular route corridors, railway corridors, and industrial/commercial use. Several design measures have been proposed to provide safe passage. At Buerkle Road, trail crossing signage and crosswalks are proposed for the at-grade crossing. As part of the Rush Line BRT project, a signalized at-grade crossing is currently planned to provide improved access to the station stop at Buerkle Road, and will incorporate the at-grade trail crossing for the trail. At, County Road E and Highway 61, the trail is planned to go under the County Road E Bridge and Highway 61 Bridge to provide a separated multi-modal corridor from these heavy traveled vehicular route corridors. At the intersection of Otter Lake Road, an activated pedestrian light system is proposed due to high north/southbound ADT. At the intersection of Hoffman Road/White Bear Ave and Highway 61, intersection modified are proposed to provide safer pedestrian connections across highway 61. At the intersection of Highway 96 and Highway 61, crosswalk and trail crossing signage is proposed for improved connections to the areas north of Highway 96 and connection to the Lakes Link Regional Trail on the east side of Highway 61.

Response:

Where there is impact to the BNSF corridor, the trail is planned to be located on the outer edge of the railway ROW and safety fencing/barricades will be provided to provide safe measures for trail and bicycle users. Ramsey County has been working with BNSF Railway on specific requirements for trail and for the pedestrian railway crossing along Hoffman Road meeting Federal, State and BNSF requirements.

These trail improvements are critical to the project corridor for many reasons such as, rates of injury and death to people walking and biking in Ramsey County are notably higher than other parts of Minnesota; Ramsey County has the highest estimated pedestrian fatality rate, and the second highest serious injury rate of bicyclists; 40% of all crash fatalities are pedestrians, which is four times the state average; Maplewood and White Bear Lake have the second highest number of pedestrian crashes.

*(Limit 2,800 characters; approximately 400 words)*

---

## **Measure A: Multimodal Elements**

The 3-mile trail project will provide a multi-modal facility that currently does not exist today for northern communities within Ramsey County. The proposed 3-mile trail project will extend the Bruce Vento Regional Trail (RBTN Tier 1 alignment with approximately 345,500 use in 2016), the Highway 96 Regional Trail (RBTN Tier 1 alignment with approximately 306,600 trail users in 2016), the Lakes Link Regional Trail (RBTN Tier 2 alignment with approximately 50,000 trail users in 2016), and the South Shore Trail (RBTN Tier 1 alignment), as identified in the Ramsey County Pedestrian/Bicycle Master Plan, the Lakes Links Trail Network Master Plan, and the Metropolitan RBTN. This project will also set the stage for future connections north of Highway 96 to County Road J for future connection to the Hardwood Creek Trail and complete a major gap in the USBR 41 trail. The project is designed to provide accessible access to adjacent communities that do not have access to regional trail systems.

**Response:**

The trail is also planned to have multi-modal elements for improved use such as separated off-road trail alignments, improved at-grade road crossing for safety, trailhead areas with site amenities that will accommodate the needs for trail users.

The project provides a direct and indirect connection to multiple activity centers via existing trails, including: large Commercial/Office areas along Buerkle Road; Maplewood Mall Transit Center via the highly used existing segment of the Bruce Vento Trail; Vadnais Sports Center; and connections to the west via travel on the Highway 96 Regional Trail such as: Rice Creek Commons (400-acre planned high-density area of employment, residences, and mixed-use development); The New Brighton Exchange, an employment center with senior housing, high-density housing, businesses, and corporate headquarters; The I-694 and Lexington Ave activity

center identified in the Ramsey Countywide  
Pedestrian and Bicycle Plan

This trail project will also provide critical multi-modal connections and remove significant barriers to the proposed Rush Line Bus Rapid Transit (BRT) between Buerkle Road and Highway 96. Pedestrians and bicycles will be able to utilize the Bruce Vento Regional Trail to Rush Line BRT station stops that are planned at Buerkle Road, County Road E and Highway 61, Cedar Avenue and Highway 61, and Marina Triangle and Whitaker Street along Highway 61. By providing this critical pedestrian connection, increased ridership for the Rush Line BRT is anticipated. By providing connection to the Rush Line BRT, residents within northern communities of Ramsey County will be able to access downtown St. Paul via the Rush Line BRT.

*(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**

1531427697859\_Bruce Vento Trail Extension Preliminary  
Design Plans - Buerkle Road to Highway 96.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

06/16/2016

### 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

Yes

100%

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

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

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

Yes

25%

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

0%

Anticipated date or date of acquisition

12/31/2020

### 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)

100%

### Signature Page

Please upload attachment in PDF form.

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

50%

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

0%

Anticipated date or date of executed Agreement 12/31/2020

---

### Measure A: Cost Effectiveness

Total Project Cost (entered in Project Cost Form): \$5,032,848.00

Enter Amount of the Noise Walls: \$0.00

Total Project Cost subtract the amount of the noise walls: \$5,032,848.00

Points Awarded in Previous Criteria

Cost Effectiveness \$0.00

---

### Other Attachments

File Name	Description	File Size
2040 Parks Plan.pdf	Other - Sections from Regional Parks Plan	2.5 MB
2040-TPP-Chapter-2-Strategies.pdf	Other - 2040 TPP Chapter 2 - Strategies	117 KB
2040-TPP-Chapter-7-Bike-and-Pedestrian-Investment.pdf	Other - TPP Chapter 7 sections for Bicycle and Pedestrian Investment direction	2.7 MB
Bruce Vento letter of support - Active Living.pdf	Coordination - Ramsey County Active Living	173 KB
Bruce Vento Letter of Support - Lake Links Association.pdf	Coordination - Lake Links Association	78 KB
Bruce Vento Letter of Support - Vadnais Heights.pdf	Coordination - Vadnais Heights	83 KB
Bruce Vento Letter of Support - White Bear Lake.pdf	Coordination - White Bear Lake	74 KB
Bruce Vento Letter of Support - White Bear Township.pdf	Coordination - White Bear Township	286 KB
Bruce Vento Regional Trail Project Photo.pdf	Summary - Bruce Vento Regional Trail Project Area - Buerkle Road	2.1 MB
BVTE Crash Report.pdf	Other - Bicycle and Pedestrian Crash in Project Area	2.5 MB
DEVELOPMENT PLAN 061716 rev.pdf	Other - Bruce Vento Regional Trail Preliminary Design Study Report - Buerkle Road to Highway 96	147 KB
Lake Links Trail Network Plan.pdf	Other - Sections from Lakes Link Network Plan	4.1 MB
Local Match - RC-ParksRec-Agency Support Letter.pdf	Summary - Ramsey County Parks Local Match Letter	504 KB
RC Pedestrian and Bicycle Plan (1).pdf	Other - Executive Summary from Ramsey County Pedestrian and Bicycle Plan	12.3 MB
RC Pedestrian and Bicycle Plan.pdf	Other Supporting Documents - Ramsey County Pedestrian and Bicycle Master Plan	56.8 MB
Rush Line + BVTE.PDF	Maps - Rush Line BRT and Bruce Vento Extension	5.0 MB
System Plan - Bruce Vento.pdf	Other - Bruce Vento Regional Trail - Ramsey County Parks System Plan	1.1 MB
Task Force BVT Support Letter.pdf	Coordination - Rush Line Task Force	68 KB
White Bear Lake, MN - Bruce Vento Trail Extension - BNSF Response.pdf	Coordination - BNSF	203 KB





# Project to RBTN Orientation

Multiuse Trails and Bicycle Facilities Project: Bruce Vento Trail Extension - Buerkle Road to Highway 96 | Map ID: 153142555509



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

0 0.75 1.5 3 4.5 6 Miles

Created: 7/12/2018  
LandscapeRSA6



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<https://giswebsite.metc.state.mn.us/gissitenew/notice.aspx>



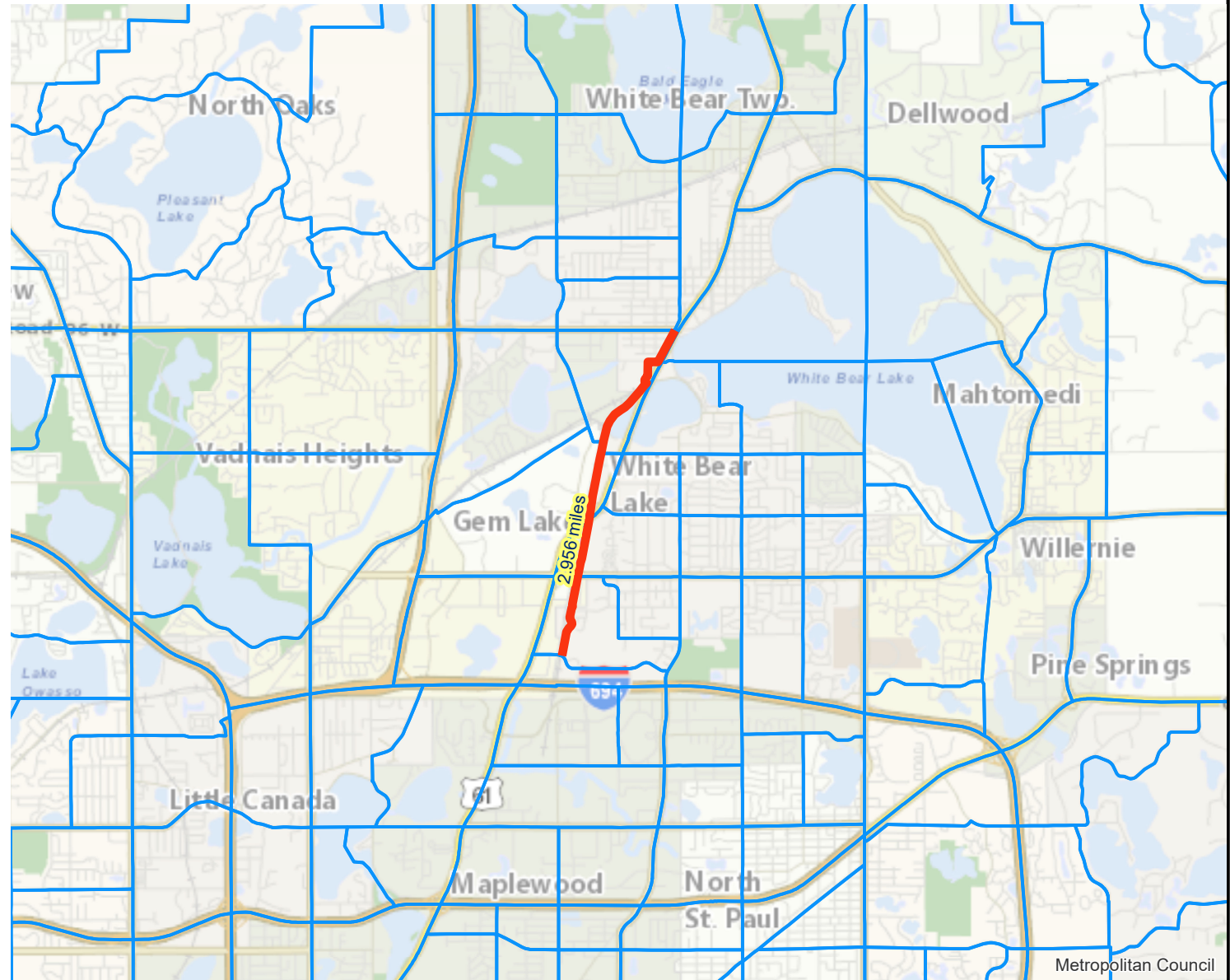
NCompass Technologies

# Population/Employment Summary

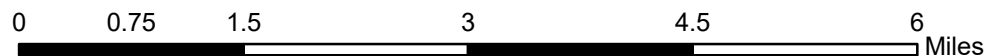
## Results

Within ONE Mile of project:  
Total Population: 28331  
Total Employment: 20309

Multiuse Trails and Bicycle Facilities Project: Bruce Vento Trail Extension - Buerkle Road to Highway 96 | Map ID: 153



— Project  
□ 2010 TAZ



Created: 7/12/2018  
LandscapeRSA4



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



## **Regional Trails – Standard Maintenance Level of Service**

Ramsey County Parks and Recreation strives to provide the highest quality park and recreation amenities. Below is a summary of standard maintenance level of service operations for regional trails.

### **Standard Regional Trail Maintenance Activities: (Daily or Weekly Maintenance)**

#### ***Spring maintenance***

- *Damaged Areas* – After frost thaw, access trail corridor for damaged pavement and adjacent turf areas along trail. Complete repairs as needed.
- *General Cleanup* - Remove any downed trees or branches. Blow the trails off.

#### ***Summer – Fall Maintenance***

- *Mowing* – Weekly or as needed if rain lessons during the mowing season.
- *Tree and Brush Trimming* – As needed, cut back vegetation overgrowth adjacent to trails. If further action is needed beyond general trimming, determine if removal is required. All vegetation either removed or cut back will be disposed of offsite.
- *Trash / recycling* – Conduct trash and recycling by emptying of receptacles weekly or twice a week depending on use
- *Site Amenities* – Access site amenities such as benches, wayfinding signs, trail crossing infrastructure, fencing, etc. for damage, graffiti, or general repair. Repair or replace site amenities as needed. Remove any graffiti as needed.

#### ***Winter Maintenance -***

- *Snow removal* – Access regional trails weekly for snow buildup. Plow regional trails when snowfall is two inches or greater.
- *Salting* – Access regional trails weekly for ice buildup on trails. Regional trails are typically not salted, but limited salting may be required for freezing rain conditions or ice buildup.

### **Standard Pavement Schedule for Regional Trails:**

Below is a summary of standard pavement maintenance schedule for regional trails. Pavement maintenance conditions are identified in a Park and Trails Bituminous Management Report, and is update every 4-5 years to keep maintenance levels in check for pavement areas.

***Regional Trailhead Parking Lots:*** Trailhead parking lots are set up on 5-year increments for pavement maintenance. This would start out from new construction and set every 5-years following.

- Parking lot development or redevelopment
- Year 5 – Crack seal joints
- Year 10 – Crack seal joints and chip seal pavement
- Year 15 – Crack seal joints and various chip seal if needed
- Year 20 – Mill/overlay with selective concrete curb replacement, etc.
- Year 25 – Crack seal joints
- Year 30 – Crack seal joints and chip seal pavement
- Year 35 - Crack seal joints and various chip seal if needed
- Year 40 - Assess for either mill/overlay or determine if reconstruct is needed

**Regional Trails:** Regional trails are set up on 6-year increments for pavement maintenance. This would start out from new construction and set every 6-years following.

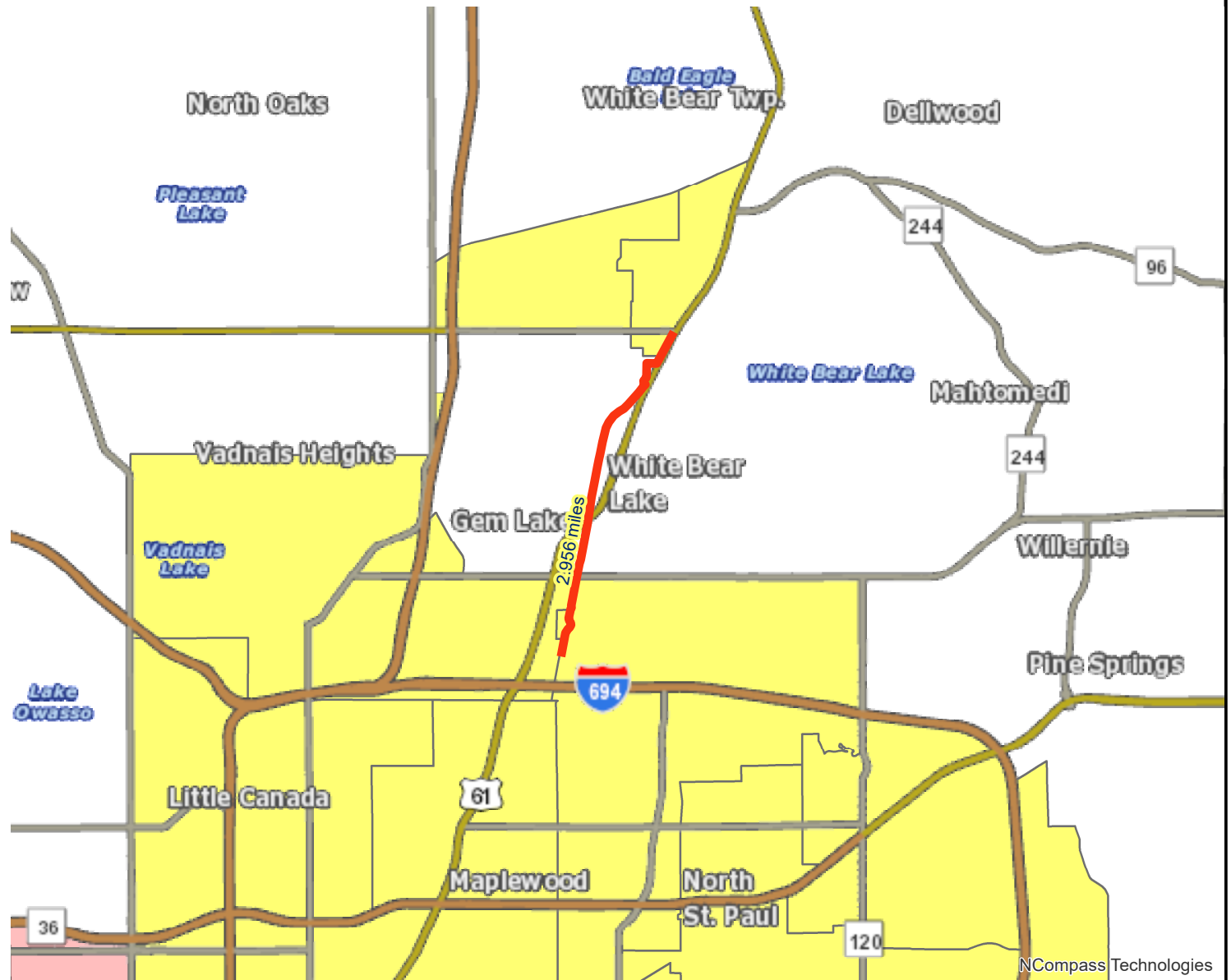
- Trail development or redevelopment
- Year 6 – Crack seal joints
- Year 12 – Crack seal joints and seal coat pavement
- Year 18 – Crack seal joints and various seal coat if needed, determine if trail sections need to have replacement where cracks are bad.
- Year 24 – Trail reconstruction

# Socio-Economic Conditions

Multiuse Trails and Bicycle Facilities Project: Bruce Vento Trail Extension - Buerkle Road to Highway 96 | Map ID: 1531425555

## Results

Project census tracts are above the regional average for population in poverty or population of color:  
(0 to 18 Points)



Project

Area of Concentrated Poverty > 50% residents of color

Area of Concentrated Poverty

Above reg'l avg conc of race/poverty

0 0.75 1.5 3 4.5 6 Miles

Created: 7/12/2018  
LandscapeRSA2



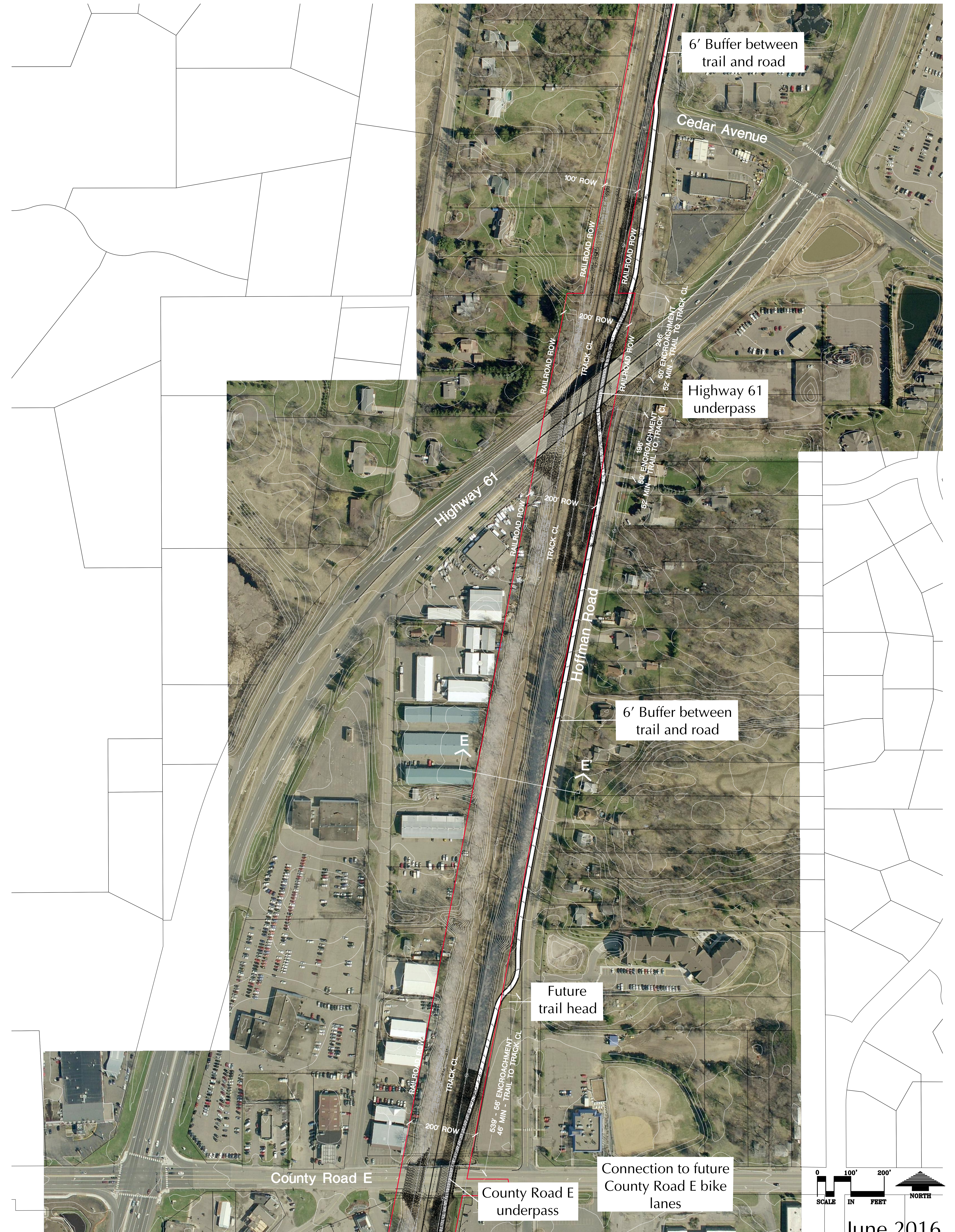
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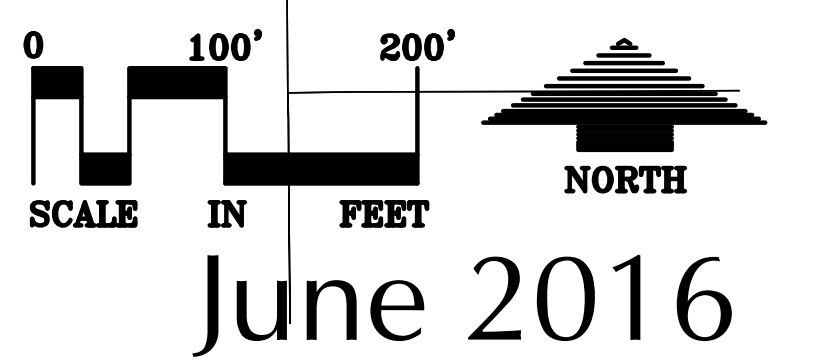
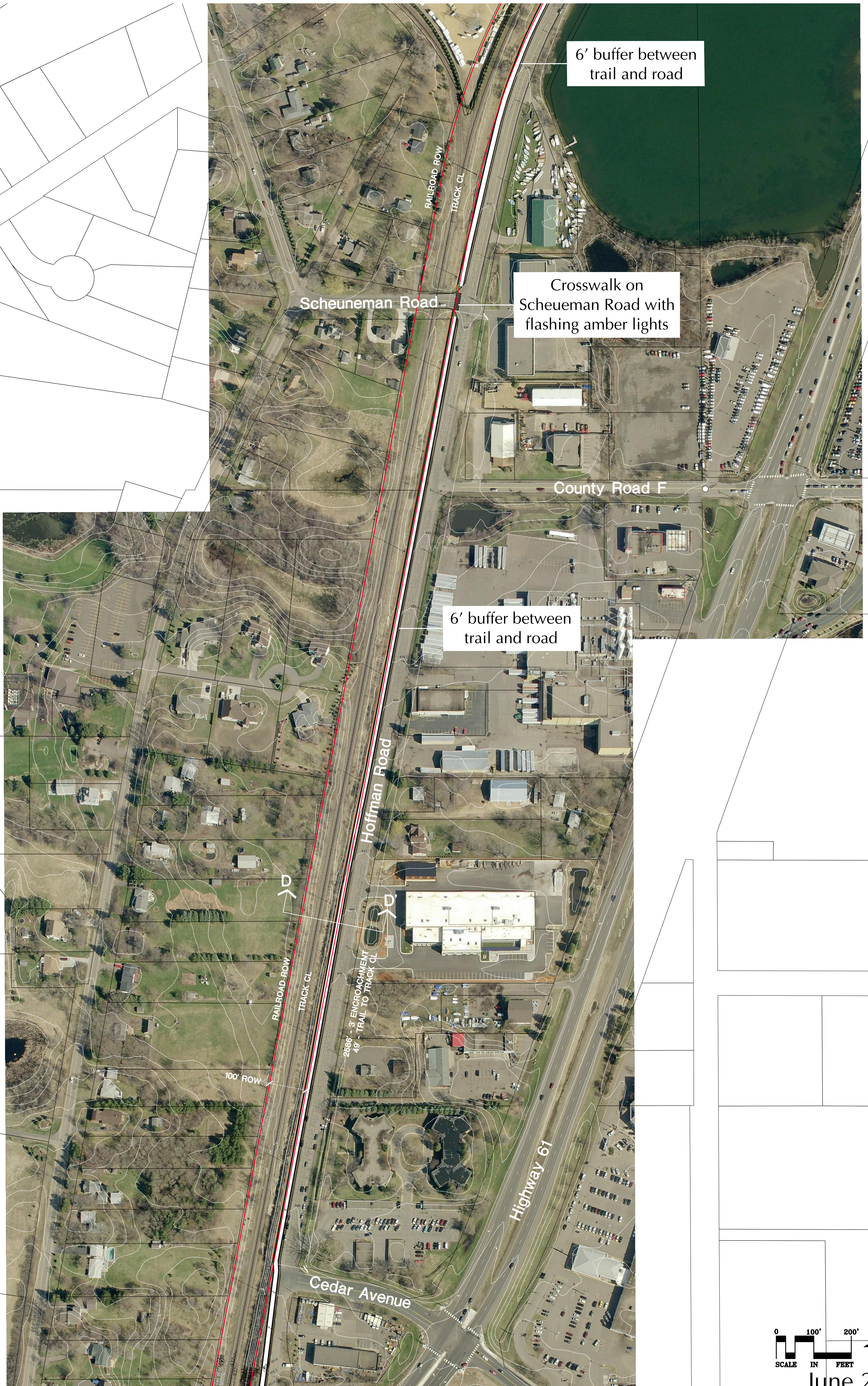
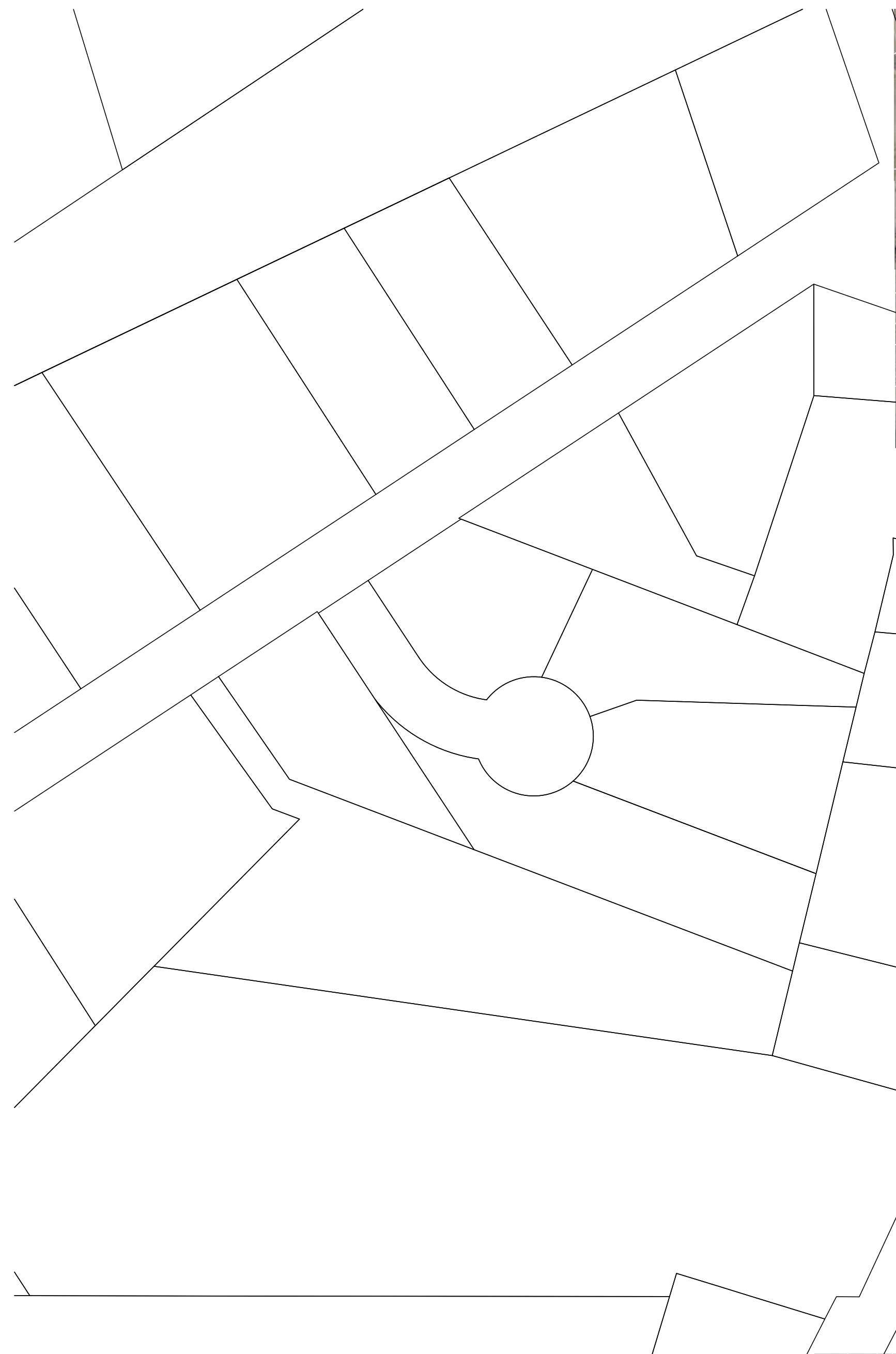




# VENTO TRAIL - NORTH EXTENSION

County Road E to Cedar Avenue





June 2016

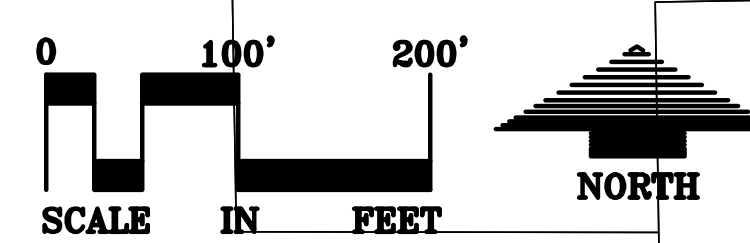
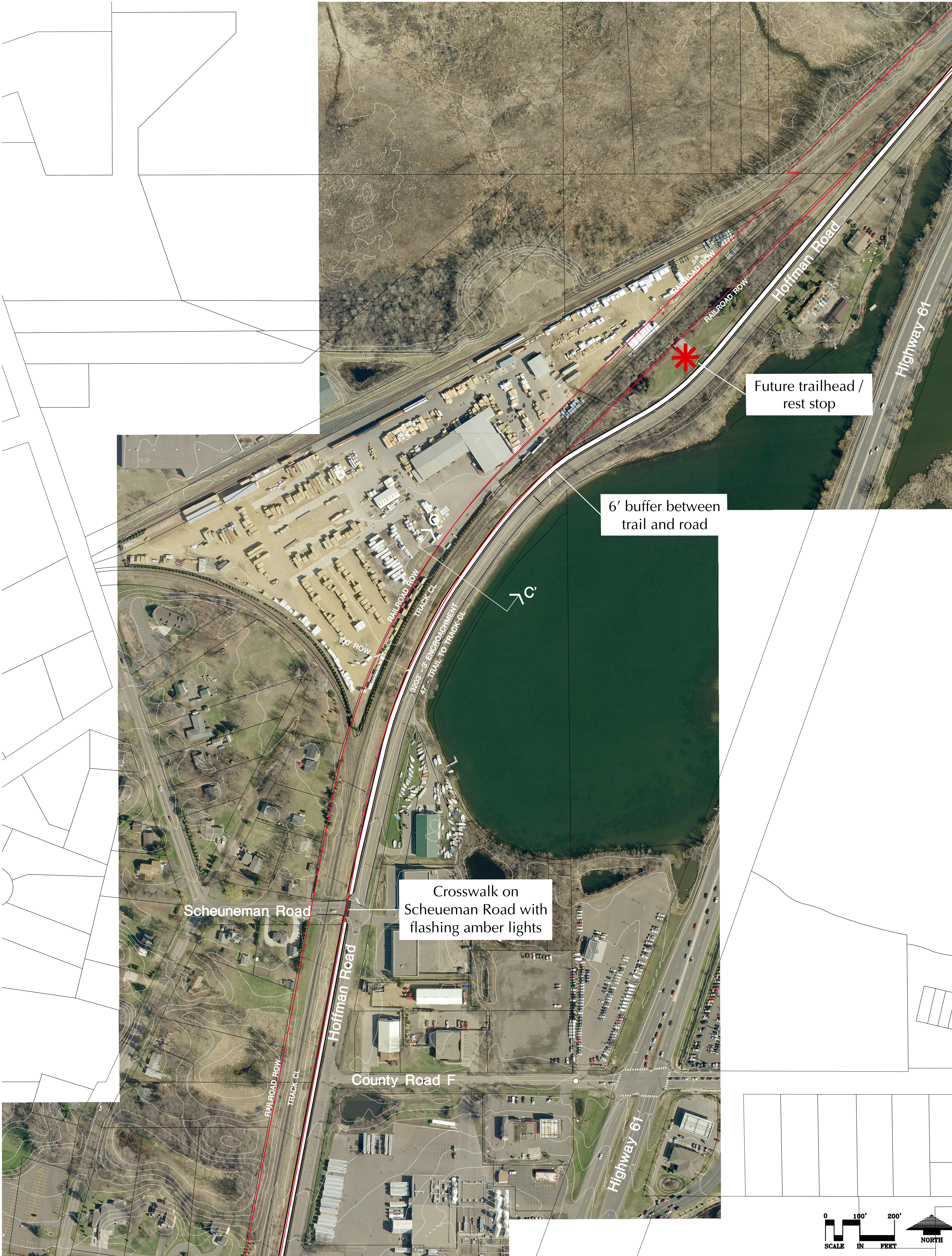


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# VENTO TRAIL - NORTH EXTENSION

Cedar Avenue to Scheuneman Road





June 2016



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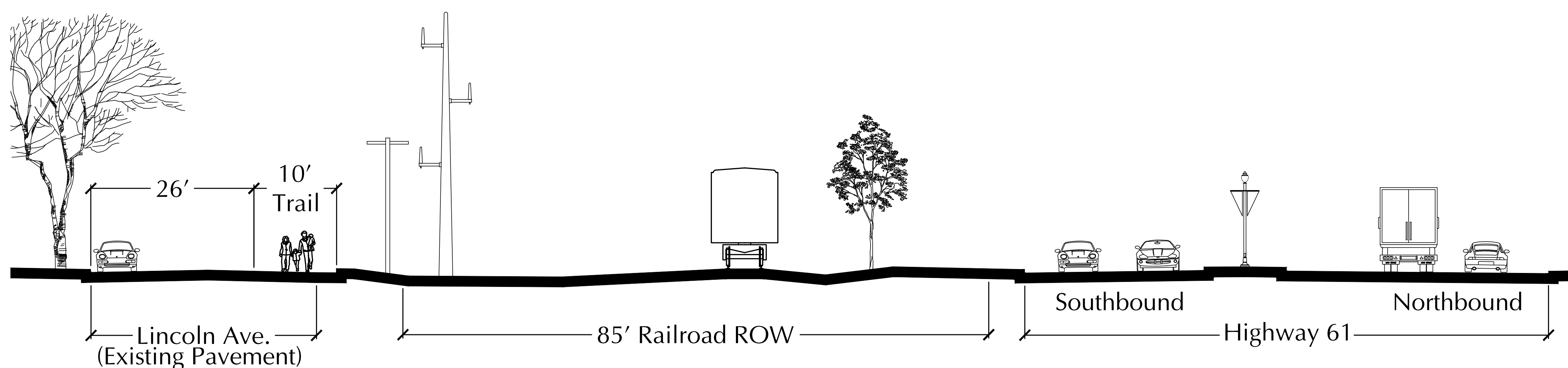
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Scheuneman Road north

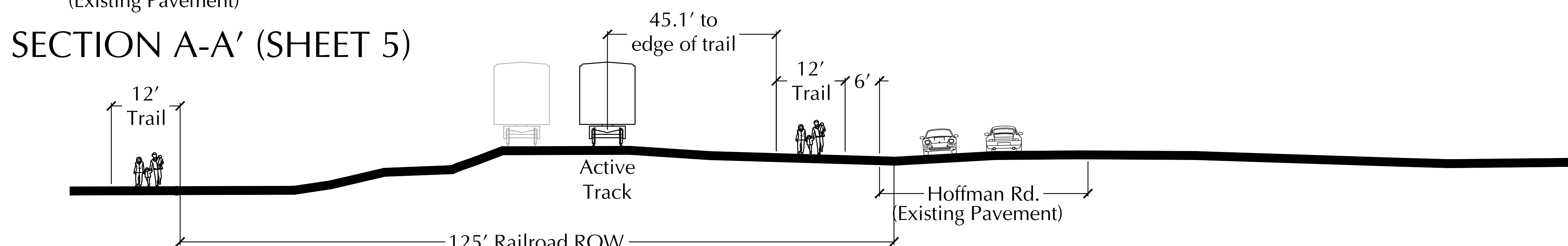




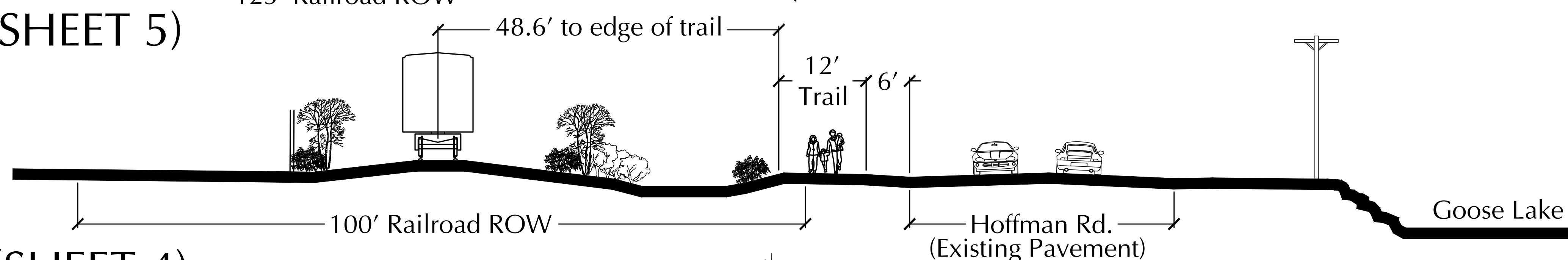




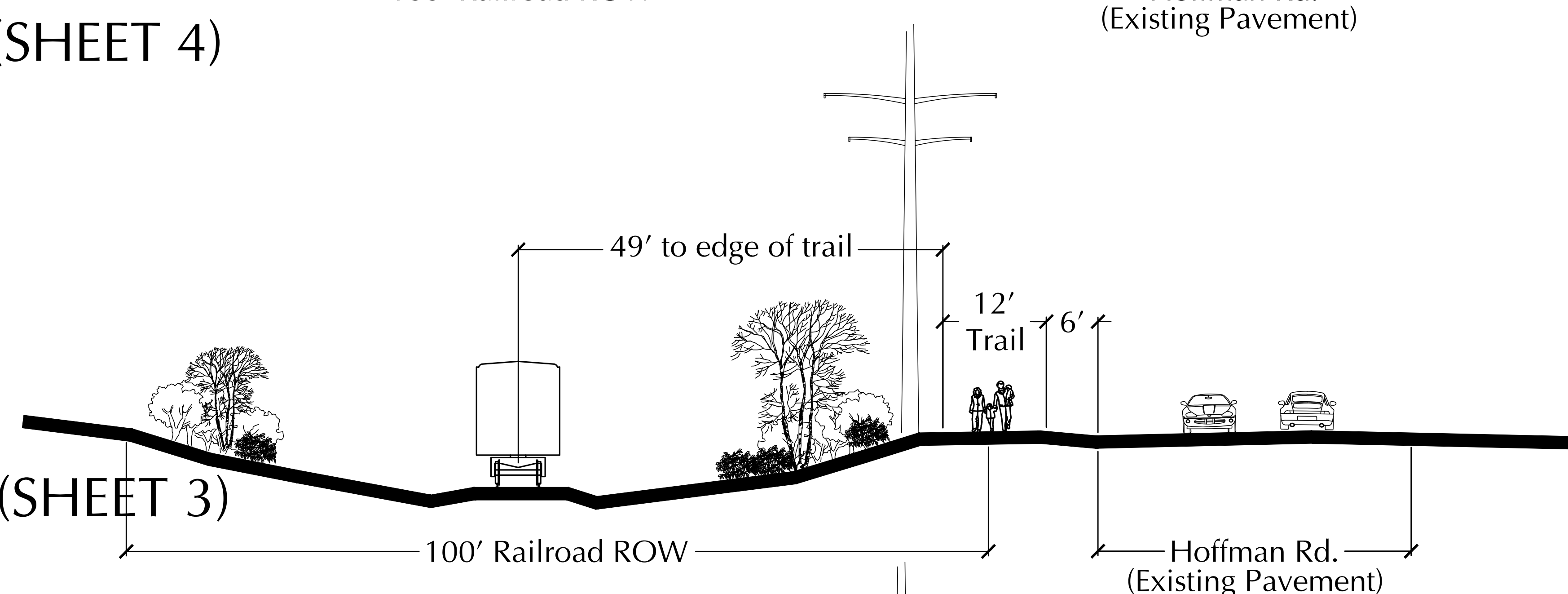
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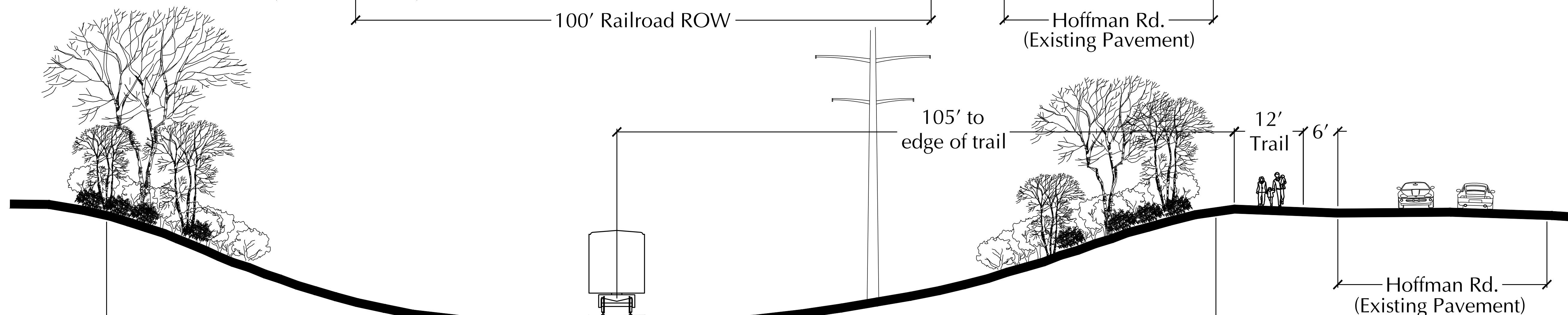
SECTION B-B' (SHEET 5)



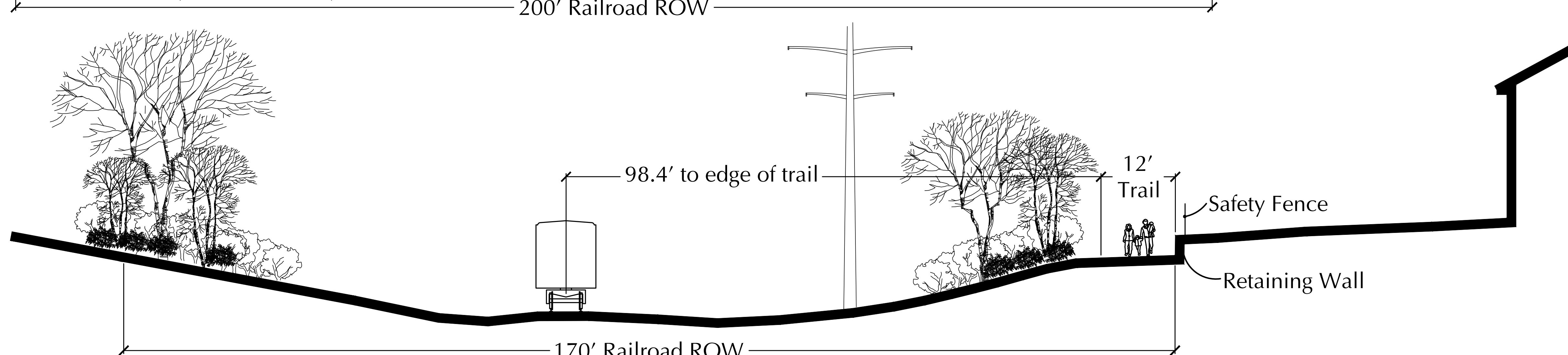
SECTION C-C' (SHEET 4)



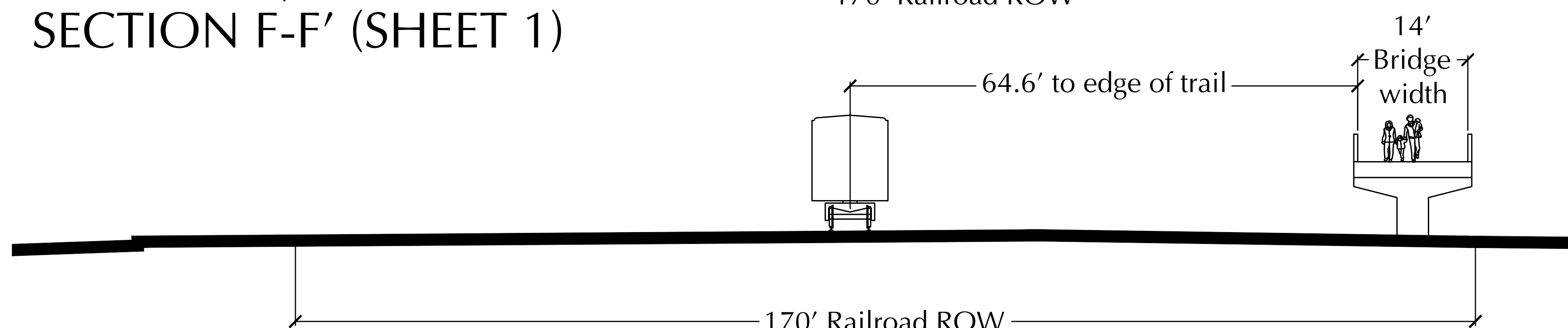
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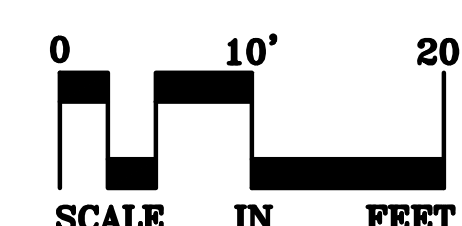
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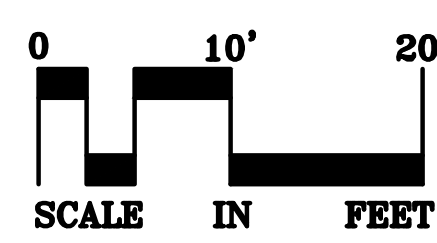
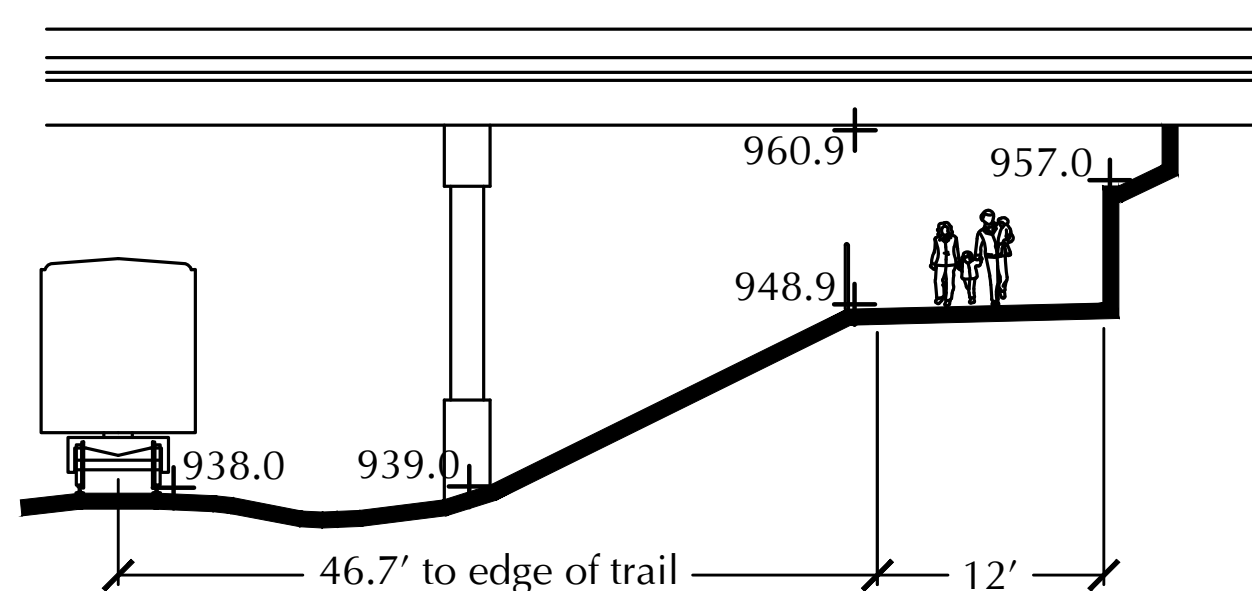
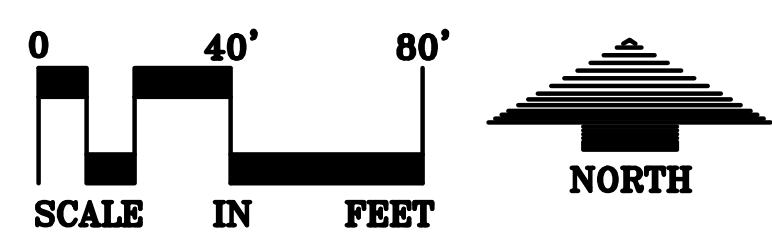
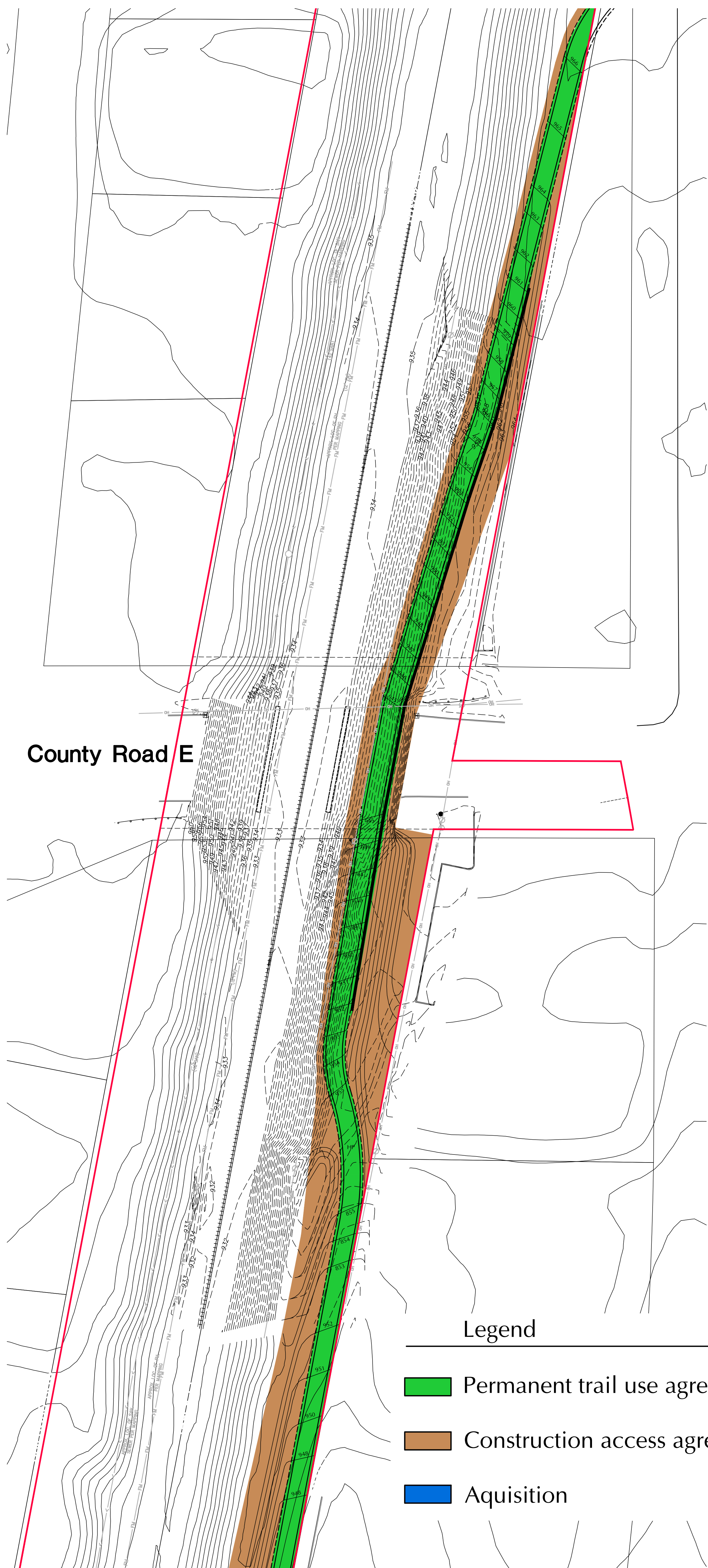


SECTION G-G' (SHEET 1)

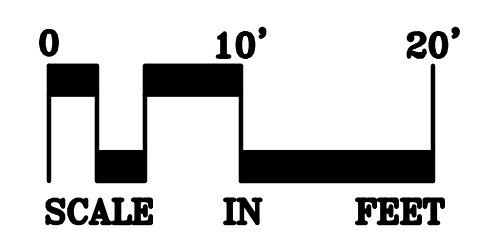
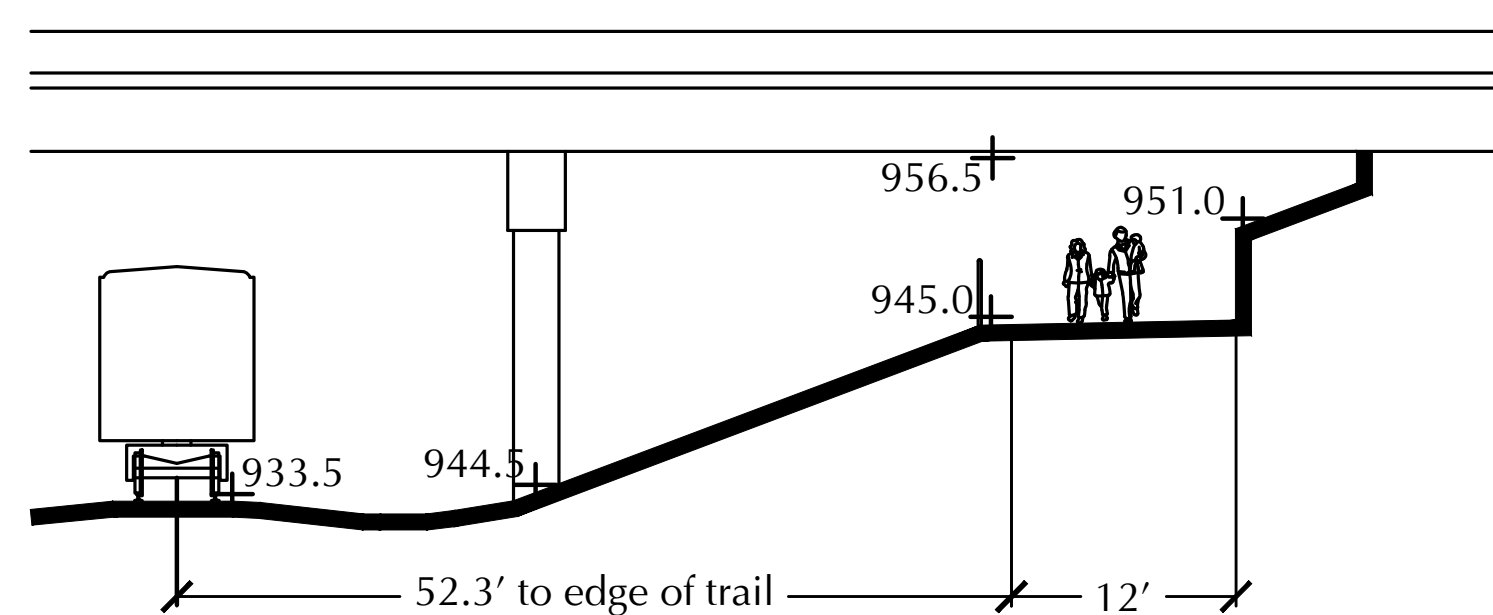
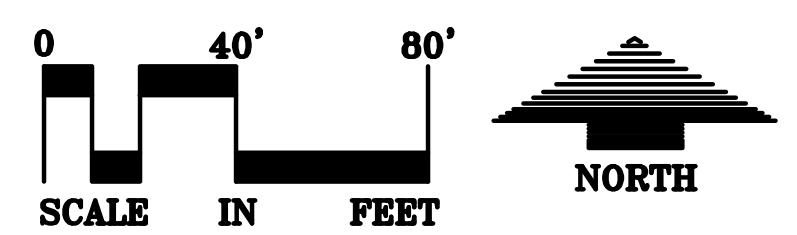
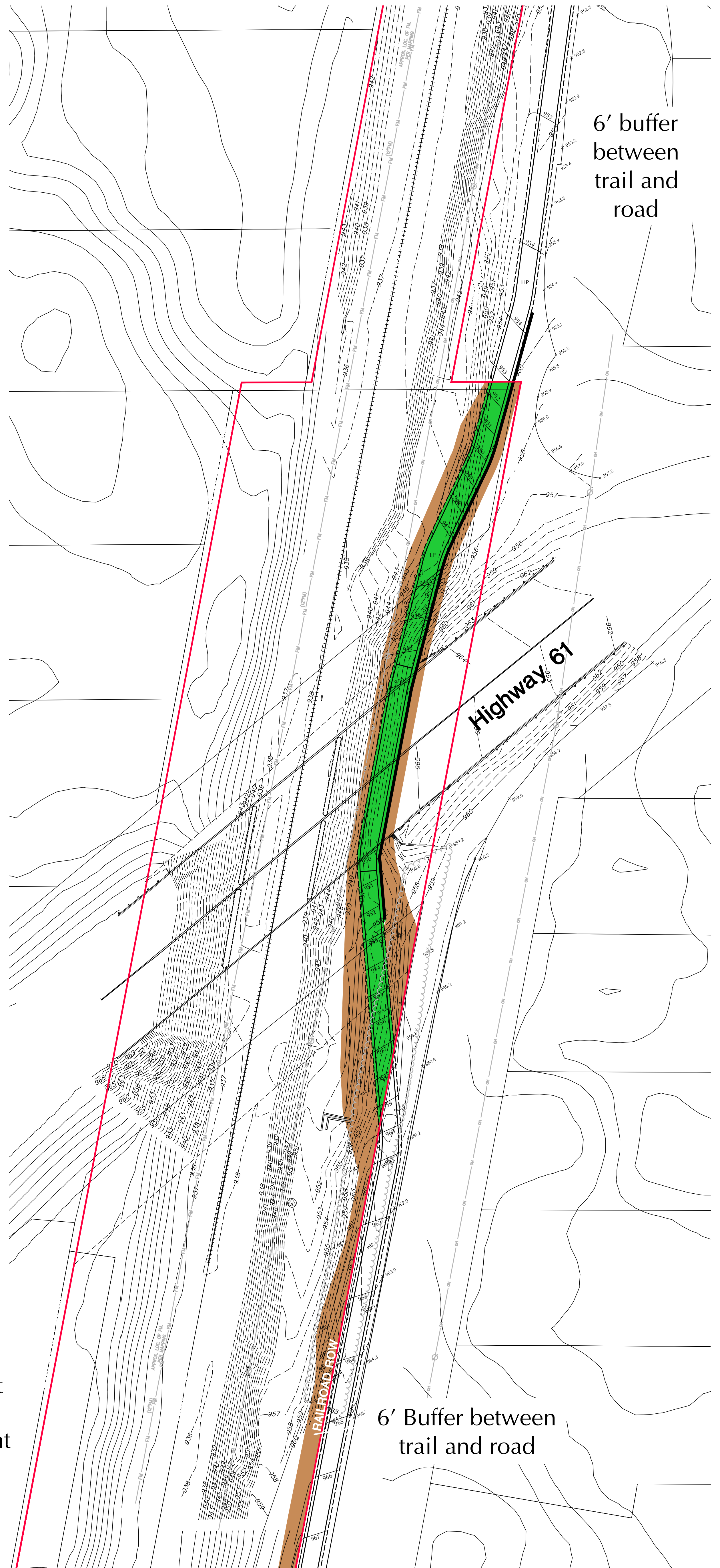


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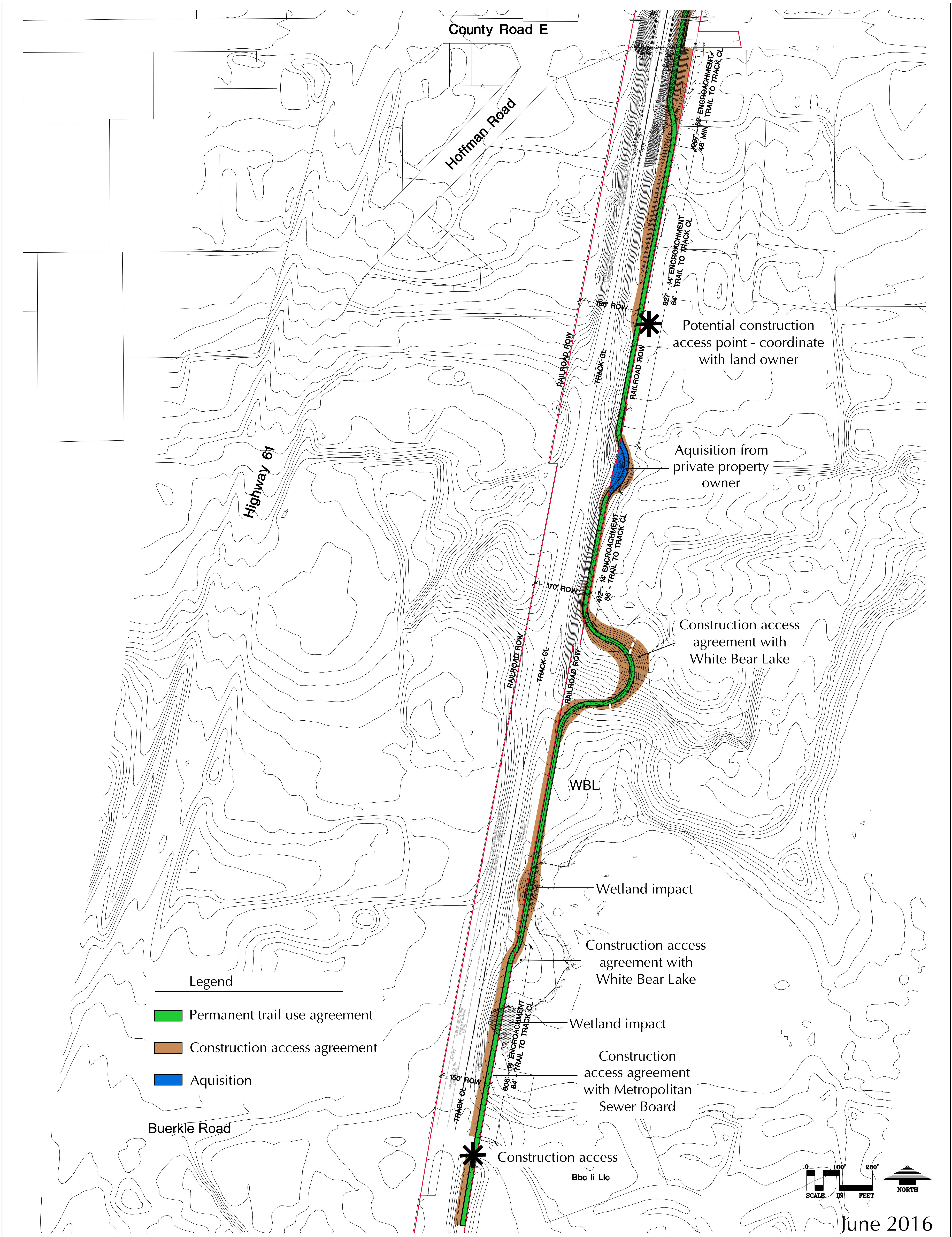
**COUNTY ROAD E  
UNDERPASS**



**HIGHWAY 61  
UNDERPASS**

June 2016

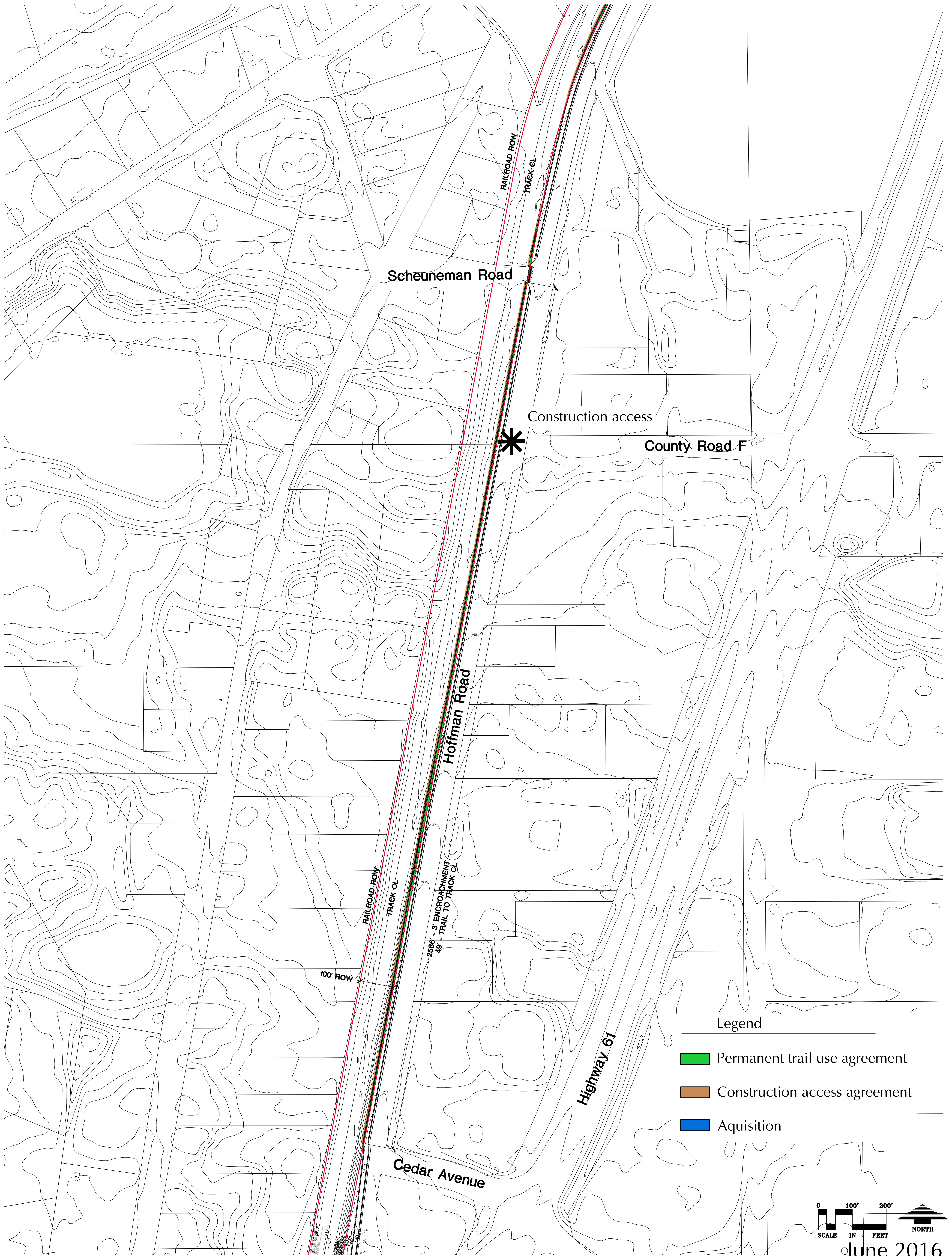




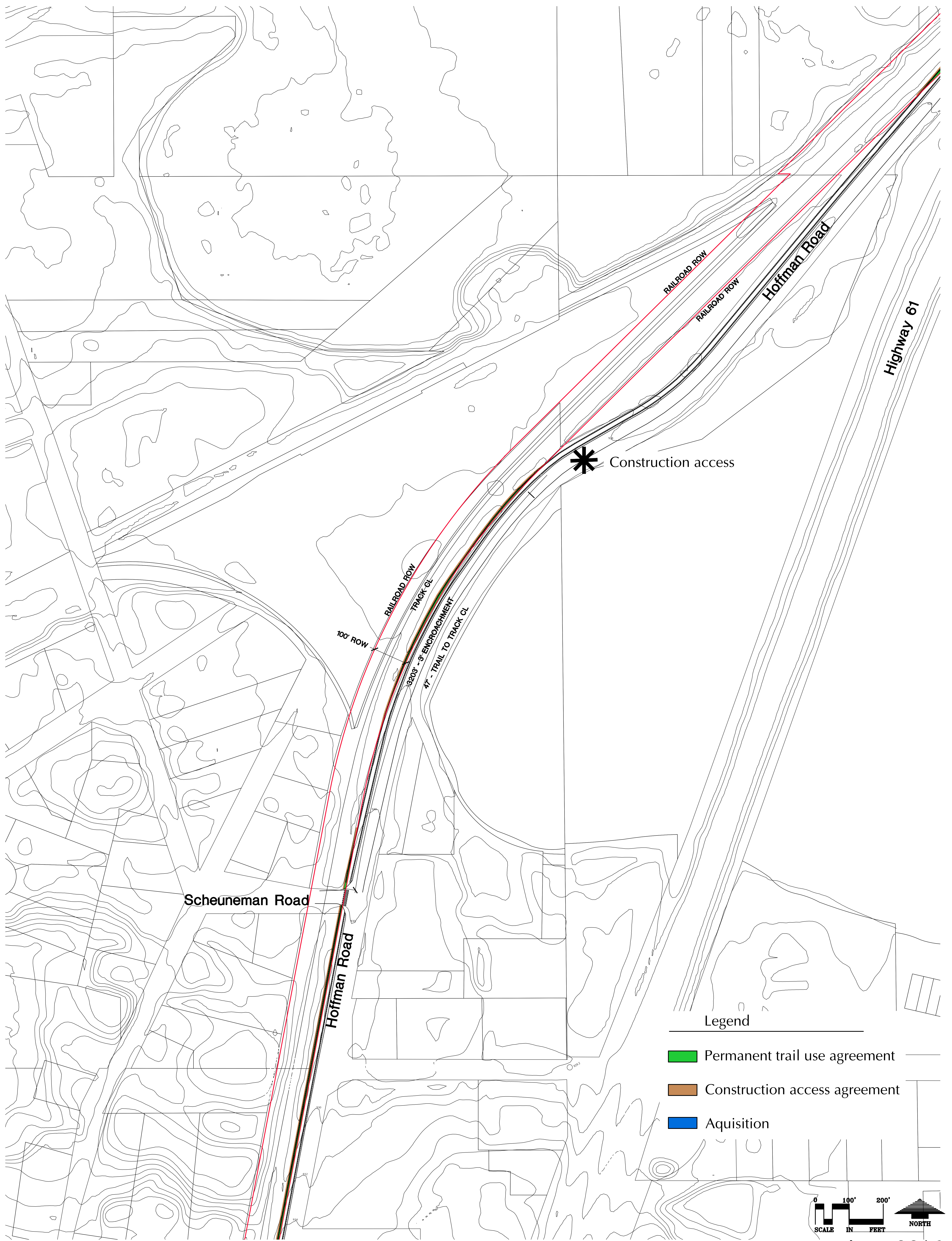






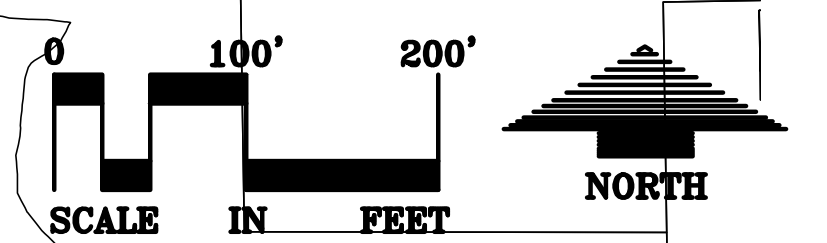






Legend

- Permanent trail use agreement
- Construction access agreement
- Aquisition



June 2016



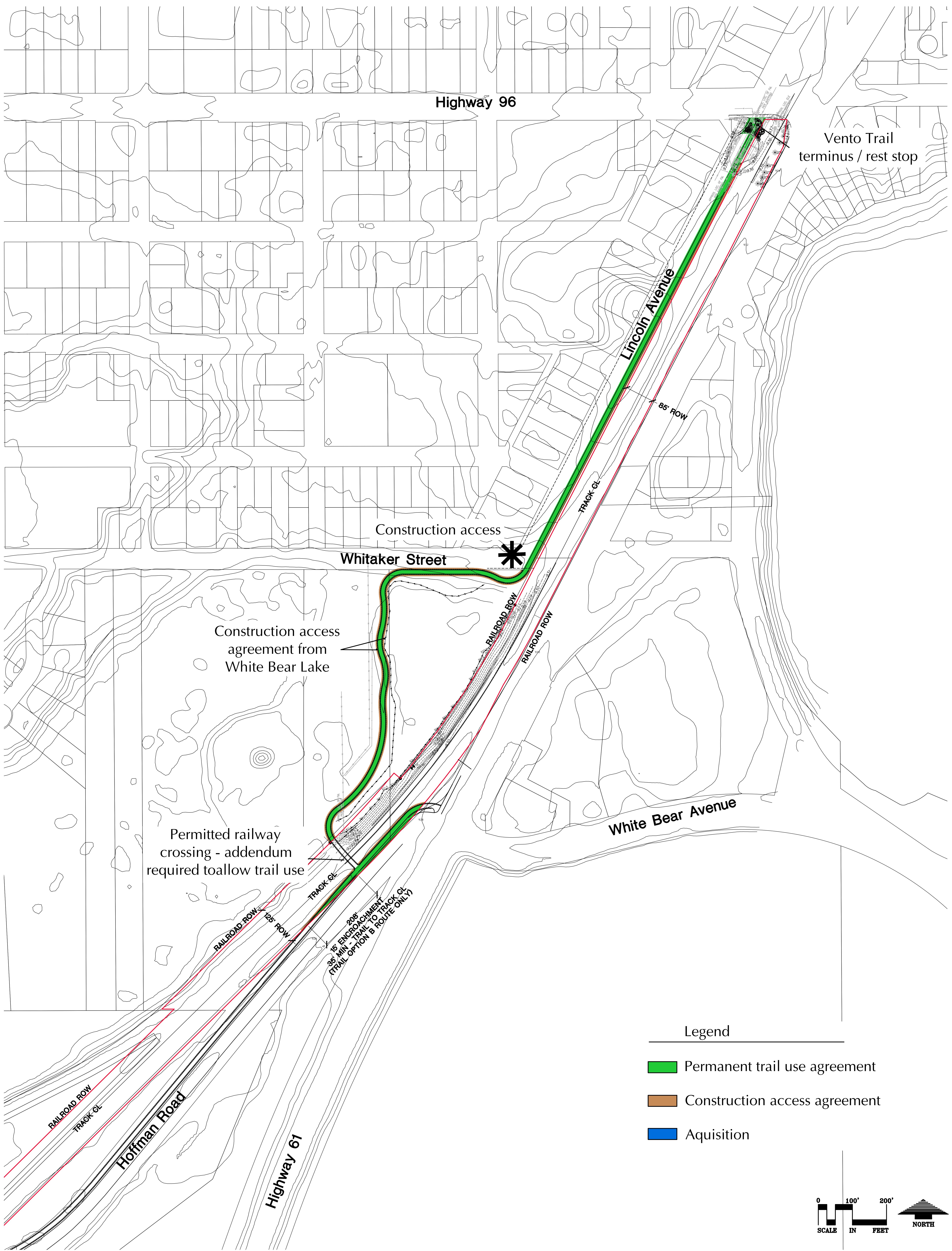
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# VENTO TRAIL - NORTH EXTENSION

## Easement and Aquisition Plan

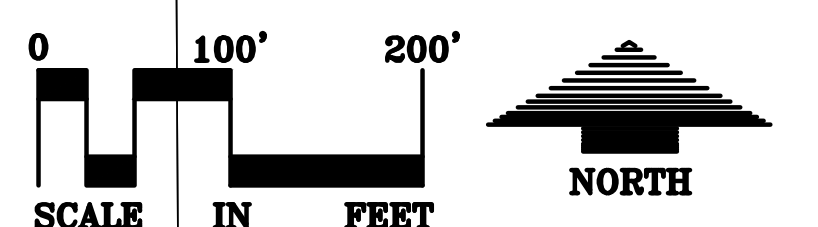
### Scheuneman Road north





Legend

- Permanent trail use agreement
- Construction access agreement
- Aquisition



June 2016



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## VENTO TRAIL - NORTH EXTENSION

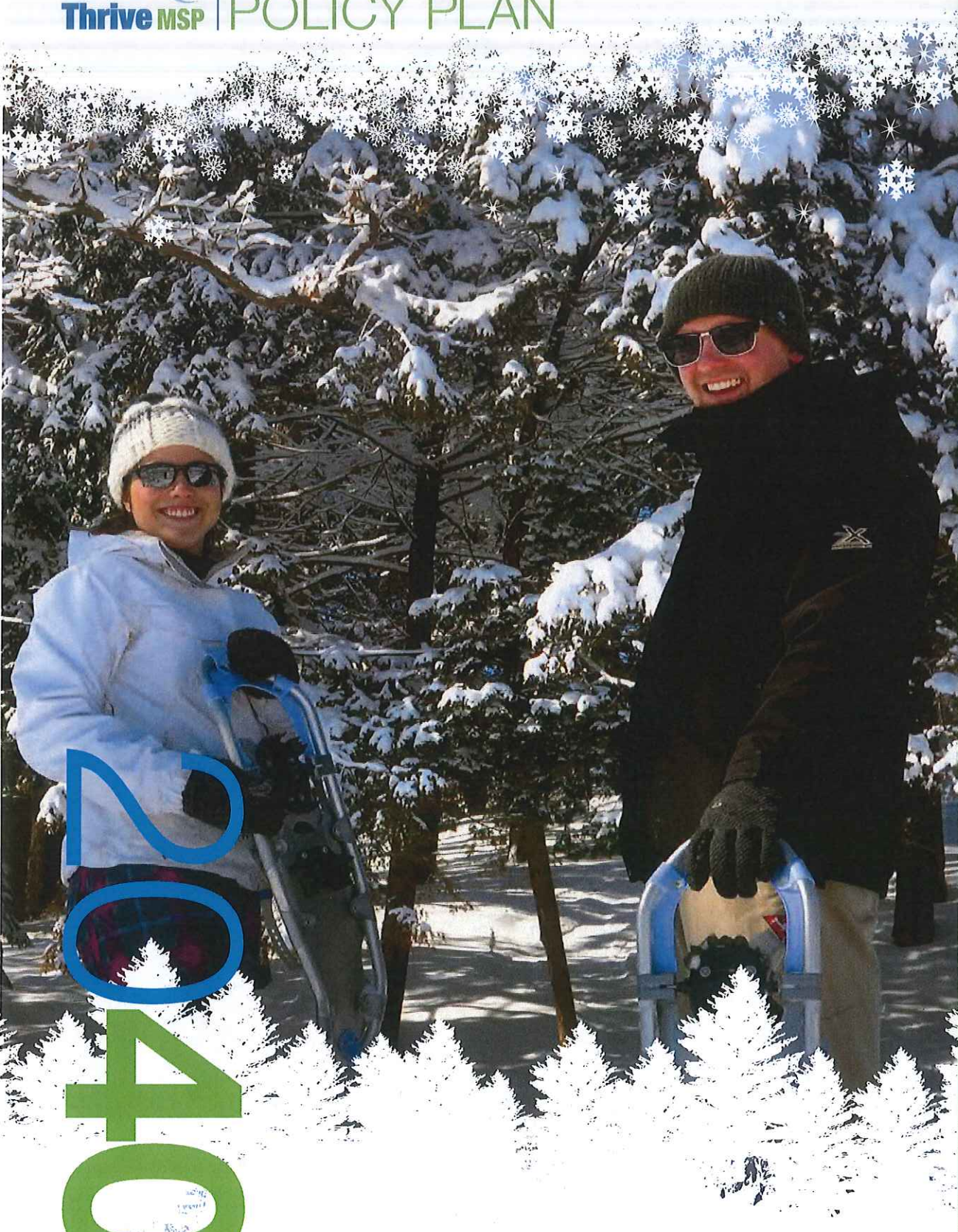
Easement and Aquisition Plan  
Scheuneman Road north to Highway 96

Sheet 12





# REGIONAL PARKS POLICY PLAN



2040

*Strengthening Equity, Fostering Livability.*







**Thrive MSP**

ONE VISION, ONE METROPOLITAN REGION

2040



## Regional Trails

Regional trail corridors are intended to provide for recreational travel along linear pathways throughout the metropolitan area. Ideally, they are selected to follow natural or linear features that traverse areas of scenic appeal and/or historical, architectural and developmental interest while assuring that the trail treadway will have no adverse effect on the natural resource base. The regional trails are selected to pass through or provide connections between components in the Regional Parks System. The regional parks and park reserves perform the important function of providing places for parking, comfort facilities and safe water supplies.

Trails also are selected for their ability to intersect with local trail networks, with the regional trails functioning much like regional highways that interconnect with more local arterials and local streets. The regional trail network, especially in the urban areas, serves as commuting routes for bicyclists in addition to serving recreational purposes. As the regional trail and transit systems expand, opportunities to provide connections between these forms of travel should be explored. People can ride the bus or light rail to access a regional trail, and conversely, people can use regional trails to access transit.

Regional trails can also be developed as greenways, or linear parks, where the trail itself is a destination. These greenways typically include wide corridors that provide opportunities for improving wildlife habitat, protecting natural resources, and providing recreational opportunities.

People tend to prefer trails that are relatively close to where they live. Surveys conducted by the Metropolitan Council show that more than 75% of trail visitors live within 3 miles of the trails they used. However, trail users travel from one city or county to another. It is this inter-jurisdictional trail length that makes these trails regionally significant.

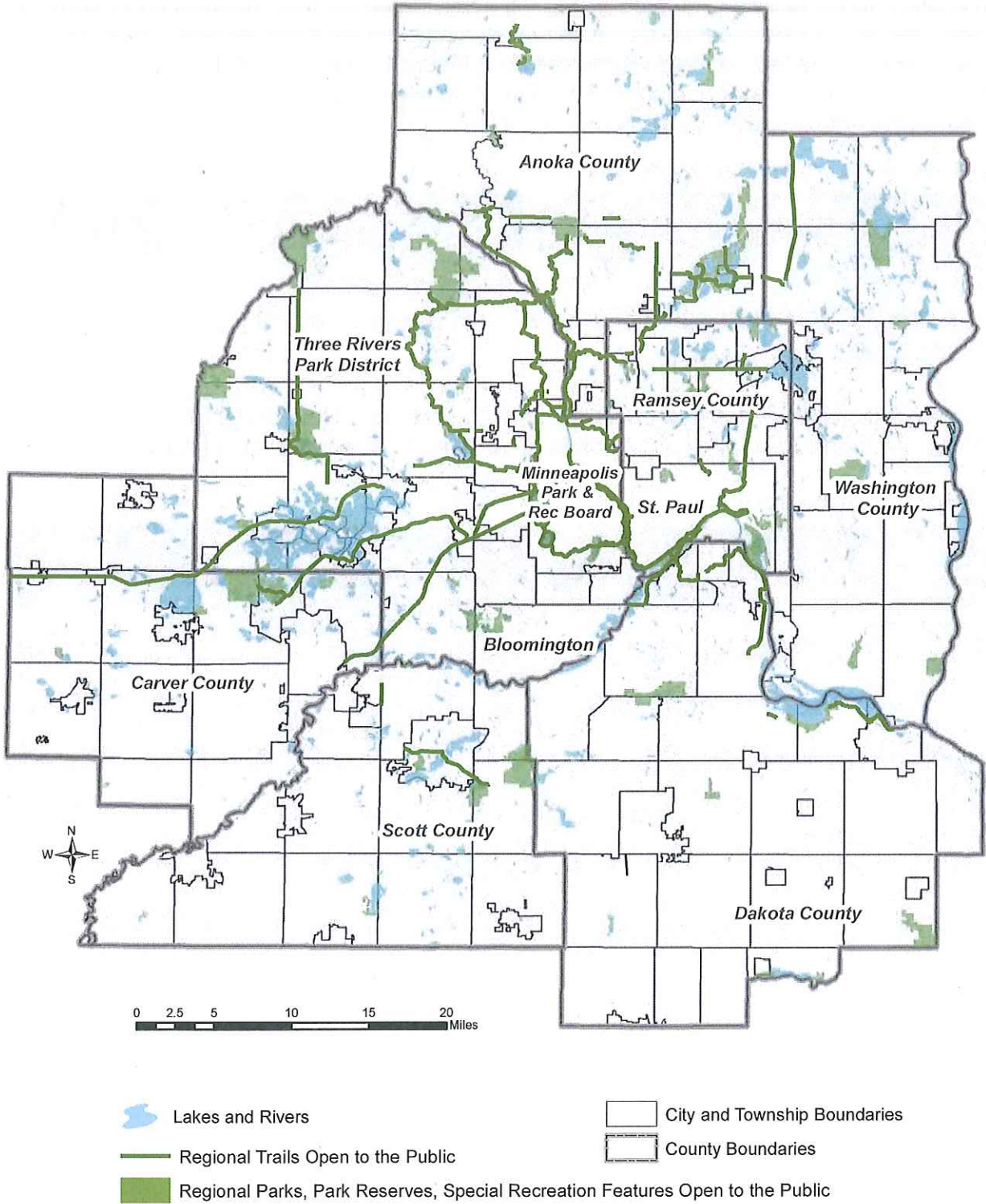
As of 2014, there were 40 regional trail corridors, with a total of 340 miles open to the public, listed in Table 5 and Figure 7. Many trails are constructed in phases, some as part of roadway improvement projects or local development. Therefore, although a trail is listed as being open, some portions of the trail corridor may be developed in the future and are not yet open to the public.



**Table 5:** Regional Trails Open to the Public (2014)

Regional Trails		Park Agency
1	Bunker Hills-Chain of Lakes Regional Trail	Anoka County
2	Central Anoka Regional Trail	Anoka County
3	Coon Creek Regional Trail	Anoka County
4	East Anoka County Regional Trail	Anoka County
5	Mississippi River Regional Trail (Anoka Co)	Anoka County
6	Rum River Regional Trail	Anoka County
7	Rice Creek North Regional Trail	Anoka County/Ramsey County
8	Rice Creek West Regional Trail	Anoka County/Ramsey County
9	Southwest Regional Trail	Carver County
10	Dakota Rail Regional Trail	Carver County/Three Rivers
11	Minnesota River Bluffs LRT Regional Trail	Carver County/Three Rivers
12	Big Rivers Regional Trail	Dakota County
13	Mississippi River Regional Trail (Dakota Co)	Dakota County
14	River to River Greenway Regional Trail	Dakota County
15	Cedar Lake Regional Trail	Minneapolis Park & Recreation Board
16	Columbia Parkway Regional Trail	Minneapolis Park & Recreation Board
17	Kenilworth Regional Trail	Minneapolis Park & Recreation Board
18	Minnehaha Parkway Regional Trail	Minneapolis Park & Recreation Board
19	Ridgway Parkway Regional Trail	Minneapolis Park & Recreation Board
20	St. Anthony Parkway Regional Trail	Minneapolis Park & Recreation Board
21	Victory Memorial Parkway Regional Trail	Minneapolis Park & Recreation Board
22	Luce Line Regional Trail	Minneapolis/Three Rivers
23	Northeast Diagonal Regional Trail	Minneapolis/Three Rivers
24	Shingle Creek Regional Trail	Minneapolis/Three Rivers
25	Birch Lake Regional Trail	Ramsey County
26	Trout Brook Regional Trail	Ramsey County
27	Highway 96 Regional Trail	Ramsey County
28	Bruce Vento Regional Trail	Ramsey County/Saint Paul
29	Scott County Regional Trail	Scott County
30	Samuel Morgan Regional Trail	Saint Paul
31	Bassett Creek Regional Trail	Three Rivers Park District
32	Cedar Lake LRT Regional Trail	Three Rivers Park District
33	Lake Independence Regional Trail	Three Rivers Park District
34	Lake Minnetonka LRT Regional Trail	Three Rivers Park District
35	Medicine Lake Regional Trail	Three Rivers Park District
36	Nine Mile Creek Regional Trail	Three Rivers Park District
37	North Cedar Lake Regional Trail	Three Rivers Park District
38	Rush Creek Regional Trail	Three Rivers Park District
39	Twin Lakes Regional Trail	Three Rivers Park District
40	Hardwood Creek Regional Trail	Washington County

**Figure 9:** Regional Parks System Facilities Open to the Public (2014)





### Planned Regional Parks System Facilities

In addition to the facilities that are open to the public, there are three regional parks and one park reserve that have Council-approved master plans, but have not yet been developed. These facilities are listed in Table 6 and shown in Figure 10. Approximately 1,353 acres have been acquired for these four planned Regional Parks System facilities, with an additional 3,767 acres to be acquired in the future.

**Table 6:** Planned Regional Parks Not Yet Open to the Public

Regional Park Implementing Agency	Regional Park or Park Reserve
Scott County	Doyle-Kennefick Regional Park
Scott County	Blakeley Bluffs Park Reserve
Three Rivers Park District	Lake Sarah Regional Park
Washington County	Grey Cloud Island Regional Park

Thirteen regional trails, totaling 147 miles, have Council-approved master plans, but are not yet developed or open to the public, as listed in Table 7 and shown in Figure 10.

**Table 7:** Planned Regional Trails Not Yet Open to the Public

Regional Park Implementing Agency	All Required Trails or Regional Trail	Park Agency
Dakota County	Lake Marion Greenway RT	20
Dakota County	Mendota-Lebanon Hills Greenway RT	8.5
Dakota County	Minnesota River Greenway RT	17
Dakota County	North Creek Greenway RT	14
Dakota County	Rosemount Greenway RT	13
Dakota County	Vermillion Highlands Greenway RT	13
Ramsey County/Washington County	Lake Links RT	5
Scott County	Spring Lake RT	13.5
Saint Paul	Trout Brook RT	4
Three Rivers Park District	Crystal Lake RT	11
Three Rivers Park District	Nokomis-Minnesota River RT	5
Washington County	Point Douglas RT	2
Washington County	St. Croix Valley RT	20.5

and preferences across social classes, age groups, racial, ethnic, and educational backgrounds, and ability status.

- Create a Regional Parks System ambassador program to assist with expanding awareness of the Regional Parks System and bring parks to the people.
- Convene stakeholder meetings with regional park implementing agencies, partners, community-based organizations, and advocacy groups to enhance knowledge and continuous improvement.
  - Information shared will be systematically collected and shared electronically
- Require regional park implementing agencies to incorporate a public engagement process that includes involvement from individuals representing diverse races, ethnicities, classes, ages, abilities, and national origin when developing a regional park or trail master plan.
  - To that end, the Council will provide staff assistance, where appropriate.
- Encourage regional park and trail design that conforms to changing recreational preferences. Examples of recreational preferences include:
  - Amenities suited for the aging population and those with limited mobility
  - Non-fee picnic areas that accommodate mid-sized groups (for example, 15-25 people)
  - Clustering of amenities for multigenerational family gatherings
  - Informal ball fields for pick-up games

#### **Recreation Activities and Facilities – Strategy 4: Bicycle and pedestrian facilities should be coordinated between the Regional Parks System and the transportation system.**

Safe, high-quality, continuous, barrier-free bicycle and pedestrian systems shall be developed, maintained, and improved to function as integral parts of the Council's Regional Parks System and transportation system. The Council is responsible for regional transportation planning, including bicycle transportation facilities. Since regional trails also serve commuters, it is important that the Regional Parks System and the transportation system work together when developing trail and transportation plans.

A comprehensive network of trails that serve both recreation and transportation needs is desirable. This network should link state, regional, county and local trails, and should be integrated with other transportation modes, including the transit system.

Regional trails are primarily multi-use recreation trails, although some regional trails also serve bicycle commuter functions. The majority of regional trail miles should be developed so they are off or away from roadways. However, in some instances it may be necessary for a short stretch of trail, to be adjacent to or on a road in order to bypass natural or man-made barriers or private property.



*Cedar Lake Regional Trail, Minneapolis Park & Recreation Board*



**Regional trails will primarily consist of these types of facilities:**

- Off-road facilities, which are paths within or adjacent to the road rights-of-way but separated from the roadway surface. They may be used for walking and inline skating as well as bicycling.
- Independent trails, such as trails using abandoned railroad corridors or utility easements that exist in their own independent rights-of-way.

**In addition to pedestrians and inline skaters, regional trails are intended to serve:**

- Casual or new adult and teenage bicyclists who prefer comfortable access, preferably by a direct route on low-speed or low-traffic streets. These bicyclists are most comfortable on designated bikeways, off-road facilities and independent trails, or having access to streets with low vehicle speeds and volumes.
- Pre-teen bicyclists whose roadway use is usually accompanied by a parent. They need access to local schools, libraries, recreation facilities, shopping, or other residential areas. These bicyclists have a strong preference for separation of bicycles from motor vehicles through off-road facilities or independent trails.

Regional trails may also serve the most experienced bicyclists, who want direct access to destinations at maximum speed with minimum delays. Highly experienced bicyclists primarily rely on the road system for routes, and value using roads like other vehicles for commuting, but occasionally enjoy independent trails if they are relatively continuous and not overly crowded.

### **Regional Bicycle Transportation Network**

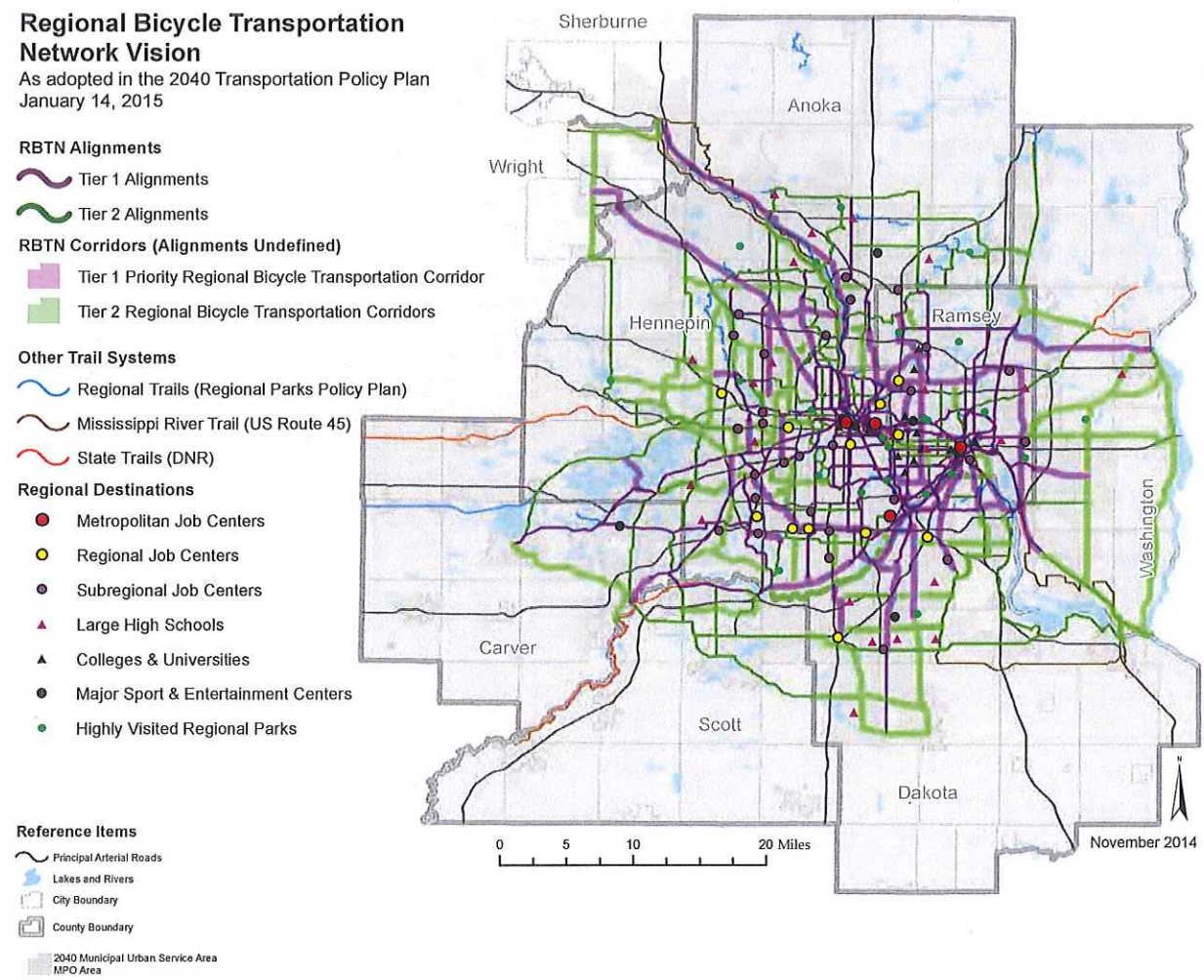
In preparing the 2040 Transportation Policy Plan, the Council conducted a Regional Bicycle System Study in 2013-2014. The purpose of the study was to develop a more complete understanding of how the region's on-street bikeways and off-road trails interact and how they serve regional transportation trips by bicycle. The primary outcome of the study was to identify a Regional Bicycle Transportation Network, which defined a two-tiered network for planning and implementation. The Tier 1 (high priority) network was identified where bicycle travel was greatest, population and job densities were highest, and where there were the most opportunities to connect regional job concentrations and activity centers with population centers and the regional transit system. Figure 15 shows the Regional Bicycle Transportation Network corridors.

The intent of the Regional Bicycle Transportation Network is to encourage planning and implementation of future bikeways by cities, counties, park agencies, and the state that will integrate a seamless network of on-street bikeways and off-road trails to most effectively improve conditions for bicycle transportation region-wide. The Regional Bicycle Transportation Network corridors are intended to serve as the "backbone" arterial system for biking in the region. Figure 16 shows existing and planned regional trails with regard to the Regional Bicycle Transportation Network corridors and also highlights the overlap between bicycle recreation and bicycle transportation networks.

Existing regional trails or segments of regional trails that serve a transportation function were included in the proposed Regional Bicycle Transportation Network, such as the Cedar Lake Regional Trail, the Samuel Morgan Regional Trail, and portions of the Luce Line Regional Trail.

For more information on the Regional Bicycle Transportation Network, please refer to the *2040 Transportation Policy Plan*.

**Figure 15:** Regional Bicycle Transportation Network Corridors





**Figure 16: Regional Bicycle Transportation Network Corridor and Regional Trails**

### Regional Bicycle Transportation Network and Regional Trail System

Regional Bicycle Transportation Network Corridors

Regional Trail System (Regional Parks Policy Plan)

Regional Trails

Planned Regional Trails

Other Trail Systems

Mississippi River Trail (US Route 45)

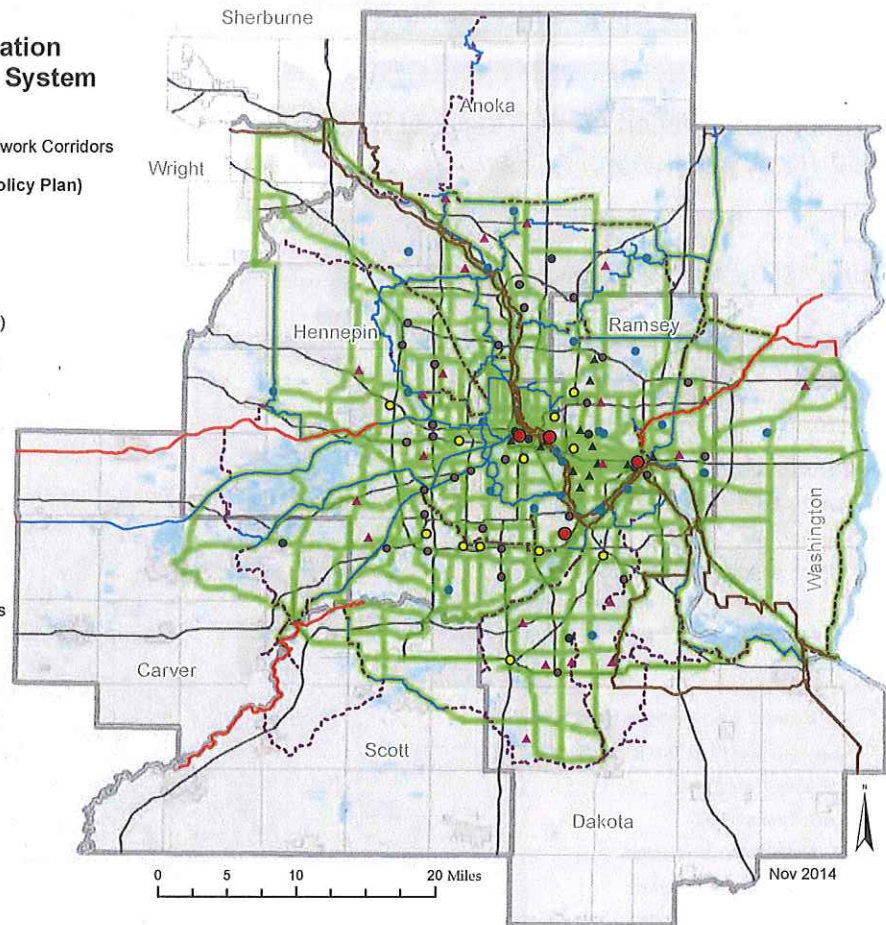
State Trails (DNR)

Regional Destinations

- Major Job & Activity Centers
- Regional Job & Activity Centers
- Subregional Job & Activity Centers
- Large High Schools
- Colleges & Universities
- Major Sport & Entertainment Centers
- Highly Visited Regional Parks

#### Reference Items

- Principal Arterial Roads
- Lakes and Rivers
- City Boundary
- County Boundary
- 2040 Municipal Urban Service Area
- MPO Area





# TRANSPORTATION POLICY PLAN

## Chapter 2: Transportation Strategies

2040



**Table 2-1:** Summary matrix of goals, objectives and associated strategies

Goal	Objectives	Strategies
<b>A. Transportation System Stewardship</b>  <i>Goal Statement</i>  <i>Sustainable investments in the transportation system are protected by strategically preserving, maintaining, and operating system assets.</i>	<ul style="list-style-type: none"> <li>Efficiently preserve and maintain the regional transportation system in a state of good repair.</li> <li>Operate the regional transportation system to efficiently and cost-effectively connect people and freight to destinations</li> </ul>	A1. Regional transportation partners will place the highest priority for transportation investments on strategically preserving, maintaining, and operating the transportation system.
		A2. Regional transportation partners should regularly review planned preservation and maintenance projects to identify cost-effective opportunities to incorporate improvements for safety, lower-cost congestion management and mitigation, transit, bicycle, and pedestrian facilities.
		A3. The Council and regional transit providers will use regional transit design guidelines and performance standards, as appropriate based on Transit Market Areas, to manage the transit network, to respond to demand, and balance performance and geographic coverage.
		A4. Airport sponsors will prepare a long-term comprehensive plan (LTCP) for each airport every five years and submit it to the Metropolitan Council for review to ensure that plans for preservation, management and improvement of infrastructure at each airport are consistent with the regional aviation system plan.

**Table 2-1:** Summary matrix of goals, objectives and associated strategies

Goal	Objectives	Strategies
<b>B. Safety and Security</b>  <i>Goal Statement</i>  <i>The regional transportation system is safe and secure for all users.</i>	<ul style="list-style-type: none"> <li>• Reduce crashes and improve safety and security for all modes of passenger travel and freight transport.</li> <li>• Reduce the transportation system's vulnerability to natural and man-made incidents and threats.</li> </ul>	B1. Regional transportation partners will incorporate safety and security considerations for all modes and users throughout the processes of planning, funding, construction, operation.
		B2. Regional transportation partners should work with local, state, and federal public safety officials, including emergency responders, to protect and strengthen the role of the regional transportation system in providing security and effective emergency response to serious incidents and threats.
		B3. Regional transportation partners should monitor and routinely analyze safety and security data by mode and severity to identify priorities and progress.
		B4. Regional transportation partners will support the state's vision of moving toward zero traffic fatalities and serious injuries, which includes supporting educational and enforcement programs to increase awareness of regional safety issues, shared responsibility, and safe behavior.
		B5. The Council and regional transit providers will provide transit police services and coordinate with public safety agencies to provide a collaborative approach to safety and security.
		B6. Regional transportation partners will use best practices to provide and improve facilities for safe walking and bicycling, since pedestrians and bicyclists are the most vulnerable users of the transportation system.
		B7. Airport sponsors and air service providers will provide facilities that are safe, secure and technologically current.

**Table 2-1:** Summary matrix of goals, objectives and associated strategies

Goal	Objectives	Strategies
<b>C. Access to Destinations</b>  <i>Goal Statement</i>  <i>People and businesses prosper by using a reliable, affordable, and efficient multimodal transportation system that connects them to destinations throughout the region and beyond.</i>	<ul style="list-style-type: none"> <li>• Increase the availability of multimodal travel options, especially in congested highway corridors.</li> <li>• Increase travel time reliability and predictability for travel on highway and transit systems.</li> <li>• Ensure access to freight terminals such as river ports, airports, and intermodal rail yards.</li> <li>• Increase transit ridership and the share of trips taken using transit, bicycling and walking.</li> <li>• Improve multimodal travel options for people of all ages and abilities to connect to jobs and other opportunities, particularly for historically under-represented populations.</li> </ul>	<p>C1. Regional transportation partners will continue to work together to plan and implement transportation systems 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.</p>
		<p>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 Streets principles.</p>
		<p>C3. The Council, working with MnDOT through their Enhancing Financial Effectiveness (EFE) efforts, and other relevant jurisdictions, will continue to maintain a Congestion Management Process for the region's principal arterials to meet federal requirements. The Congestion Management Process will incorporate and coordinate the various activities of MnDOT, transit providers, counties, cities and transportation management organizations to increase the multimodal efficiency and people-moving capacity of the National Highway System.</p>
		<p>C4. Regional transportation partners will promote multimodal travel options and alternatives to single-occupant vehicle travel and highway congestion through a variety of travel demand management initiatives, with a focus on major job, activity, and industrial and manufacturing concentrations on congested highway corridors and corridors served by regional transit service.</p>
		<p>C5. The Council will work with MnDOT and local governments to implement a system of MnPASS lanes and transit advantages that support fast, reliable alternatives to single-occupancy vehicle travel in congested highway corridors.</p>

**Table 2-1:** Summary matrix of goals, objectives and associated strategies

Goal	Objectives	Strategies
		C6. The Council will support an interagency approach to preserving right-of-way for future transportation projects that are consistent with the Transportation Policy Plan.
		C7. Regional transportation partners will manage and optimize the performance of the principal arterial system as measured by person throughput.
		C8. Regional transportation partners will prioritize all regional highway capital investments based on a project's expected contributions to achieving the outcomes, goals, and objectives identified in <i>Thrive MSP 2040</i> and the Transportation Policy Plan.
		C9. The Council will support investments in A-minor arterials that build, manage, or improve the system's ability to supplement the capacity of the principal arterial system and support access to the region's job, activity, and industrial and manufacturing concentrations.
		C10. Regional transportation partners will manage access to principal and A-minor arterials to preserve and enhance their safety and capacity. The Council will work with MnDOT to review interchange requests for the principal arterial system.
		C11. The Council and regional transit providers will expand and modernize transit service, facilities, systems, and technology, to meet growing demand, improve the customer experience, improve access to destinations, and maximize the efficiency of investments.
		C12. Regional transportation partners will invest in an expanded network of transitways that includes but is not limited to bus rapid transit, light rail, and commuter rail. Transitway investments will be prioritized based on factors that measure a project's expected contributions to achieving the outcomes, goals, and objectives identified in <i>Thrive MSP 2040</i> and the Transportation Policy Plan.



**Table 2-1:** Summary matrix of goals, objectives and associated strategies

Goal	Objectives	Strategies
		C13. The Council will provide paratransit service complementary to the region's regular route transit system for individuals who are certified by the Council under the Americans with Disabilities Act (ADA).
		C14. The Council and regional transit providers will provide coordinated transit options, including general public dial-a-ride and vanpool subsidies, in areas of the region not served by regular-route transit. Service levels for these options will be based on available resources and needs.
		C15. Regional transportation partners should focus investments on completing Priority Regional Bicycle Transportation Corridors and on improving the larger Regional Bicycle Transportation Network.
		C16. Regional transportation partners should fund projects that provide for bicycle and pedestrian travel across or around physical barriers and/or improve continuity between jurisdictions.
		C17. Regional transportation partners will provide or encourage reliable, cost-effective, and accessible transportation choices that provide and enhance access to employment, housing, education, and social connections for pedestrians and people with disabilities.
		C18. The Council, MnDOT, regional railroad authorities, and railroad companies will pursue short- and long-term improvements to accommodate future freight and passenger rail demand.
		C19. The Council and MnDOT should work together with cities and counties to provide efficient connections from major freight terminals and facilities to the regional highway system, including the federally designated Primary Freight Network.

**Table 2-1:** Summary matrix of goals, objectives and associated strategies

Goal	Objectives	Strategies
		C20. The Council and airport sponsors will maintain a system of reliever airports to augment the Minneapolis-Saint Paul International Airport that are accessible within reasonable travel times from all parts of the metropolitan area.
<b>D. Competitive Economy</b>  <i>Goal Statement</i>  <i>The regional transportation system supports the economic competitiveness, vitality, and prosperity of the region and state.</i>	<ul style="list-style-type: none"><li>• Improve multimodal access to regional job concentrations identified in <i>Thrive MSP 2040</i>.</li><li>• Invest in a multimodal transportation system to attract and retain businesses and residents.</li><li>• Support the region’s economic competitiveness through the efficient movement of freight.</li></ul>	D1. The Council and its transportation partners will identify and pursue the level of increased funding needed to create a multimodal transportation system that is safe, well-maintained, offers modal choices, manages and eases congestion, provides reliable access to jobs and opportunities, facilitates the shipping of freight, connects and enhances communities, and shares benefits and impacts equitably among all communities and users.
		D2. The Council will coordinate with other agencies planning and pursuing transportation investments that strengthen connections to other regions in Minnesota and the Upper Midwest, the nation, and world including intercity bus and passenger rail, highway corridors, air service, and freight infrastructure.
		D3. The Council and its partners will invest in regional transit and bicycle systems that improve connections to jobs and opportunity, promote economic development, and attract and retain businesses and workers in the region on the established transit corridors.
		D4. The Council, MnDOT, and local governments will invest in a transportation system that provides travel conditions that compete well with peer metropolitan areas.
		D5. The Council and MnDOT will work with transportation partners to identify the impacts of highway congestion on freight and identify cost-effective mitigation.

**Table 2-1:** Summary matrix of goals, objectives and associated strategies

Goal	Objectives	Strategies
		<p>D6. The Council, Metropolitan Airports Commission, MnDOT, and other agencies will work together to maintain a strong regional airport system, including maintaining the Minneapolis-Saint Paul International Airport as a major national and international passenger hub and reliever airports that serve business travel.</p> <p>D7. The Metropolitan Airports Commission should periodically update its airport economic impact studies and commercial air-service competition plan to determine facility and service improvements needed at the region's airports to foster a competitive regional economy.</p>
<p><b>E. Healthy Environment</b></p> <p><i>Goal Statement</i></p> <p><i>The regional transportation system advances equity and contributes to communities' livability and sustainability while protecting the natural, cultural, and developed environments.</i></p>	<ul style="list-style-type: none"> <li>• Reduce transportation-related air emissions.</li> <li>• Reduce impacts of transportation construction, operations, and use on the natural, cultural, and developed environments.</li> <li>• Increase the availability and attractiveness of transit, bicycling, and walking to encourage healthy communities and active car-free lifestyles.</li> </ul>	<p>E1. Regional transportation partners recognize the role of transportation choices in reducing emissions and will support state and regional goals for reducing greenhouse gas and air pollutant emissions. The Council will provide information and technical assistance to local governments in measuring and reducing transportation-related emissions.</p> <p>E2. The Council and MnDOT will consider reductions in transportation-related emissions of air pollutants and greenhouse gases when prioritizing transportation investments.</p> <p>E3. Regional transportation partners will plan and implement a transportation system that considers the needs of all potential users, including children, senior citizens, and persons with disabilities, and that promotes active lifestyles and cohesive communities. A special emphasis should be placed on promoting the environmental and health benefits of alternatives to single-occupancy vehicle travel.</p>

**Table 2-1:** Summary matrix of goals, objectives and associated strategies

Goal	Objectives	Strategies
	<ul style="list-style-type: none"><li>• Provide a transportation system that promotes community cohesion and connectivity for people of all ages and abilities, particularly for historically under-represented populations.</li></ul>	E4. Regional transportation partners will protect, enhance and mitigate impacts on natural resources when planning, constructing, and operating transportation systems. This will include management of air and water quality and identification of priority natural resources through the Natural Resources Inventory developed by the Council and Minnesota Department of Natural Resources.
		E5. Transportation partners will protect, enhance and mitigate impacts on the cultural and built environments when planning, constructing, and operating transportation systems.
		E6. Regional transportation partners will use a variety of communication methods and eliminate barriers to foster public engagement in transportation planning that will include special efforts to engage members of historically underrepresented communities, including communities of color, low-income communities, and those with disabilities to ensure that their concerns and issues are considered in regional and local transportation decision making.
		E7. Regional transportation partners will avoid, minimize and mitigate disproportionately high and adverse impacts of transportation projects to the region’s historically underrepresented communities, including communities of color, low-income communities, and those with disabilities.





# TRANSPORTATION POLICY PLAN

## Chapter 7: Bicycle And Pedestrian Investment Direction



2040





## Regional Bicycle Transportation Network

### Regional Bicycle Transportation Network Vision

The goal of the Regional Bicycle Transportation Network is to establish an integrated seamless network of on-street bikeways and off-road trails to most effectively improve conditions for bicycle transportation at the regional level and to encourage planning and implementation of future bikeways by cities, counties, parks agencies, and the state, in support of the network vision (see Figure 7-1). The network is subdivided into two tiers for regional planning and investment prioritization.

- **Tier 1 and Tier 2 Regional Bicycle Transportation Corridors**

- **Tier 1 Priority Regional Bicycle Transportation Corridors** are a subset of the Regional Bicycle Transportation Network and have been identified as the highest priority for regional transportation planning and investment. The full Regional Bicycle Transportation Network with Tier 1 and Tier 2 corridors is shown in Figure 7-1 below. An interactive version is being developed. The priority corridors/alignments are planned in locations where they can attract the most riders and where they can most effectively enhance mode choice in favor of biking, walking, and transit over driving alone. High rates of bicycle travel demand, as well as current and planned population and employment densities, were heavily weighted in the analysis of corridors described earlier. Tier 1 and Tier 2 corridors are further described under the [Bicycle / Ped Investment Direction](#).
- **Tier 2 Regional Bicycle Transportation Corridors** are the remaining corridors in the overall Regional Bicycle Transportation Network (green corridors in Figure 7-1); these corridors are assigned the second tier priority for regional transportation planning and investment.

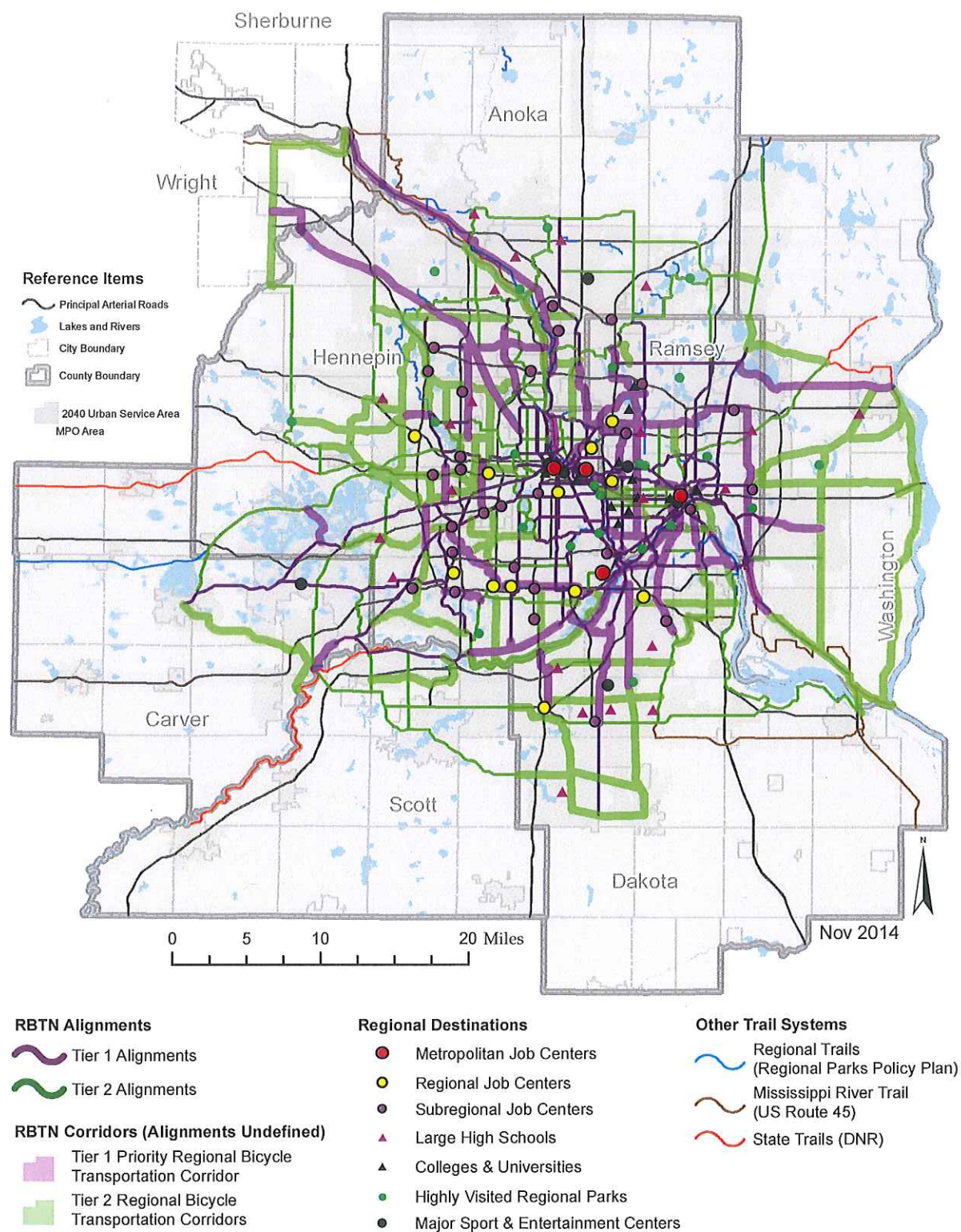
- **Tier 1 and Tier 2 Regional Bicycle Transportation Alignments**

Similar to the regional bicycle transportation corridors, there are Tier 1 and Tier 2 regional bicycle transportation alignments (shown as bold purple and green lines in Figure 7-1) where specific route alignments have been designated through the Regional Bicycle System Study process that included discussions with local agency staff. The designated Regional Bicycle Transportation Network alignments are based on local bicycle plans and in many cases (particularly in the core cities) already exist in some form and may need little or no improvement for the regional network. Other designated alignments have not been developed and are based on planned on-street and off-road route alignments or other factors as discussed with local agency staff. Those regional trails that provide direct transportation connections to and between regional destinations (as identified in the Regional Bicycle System Study) were included as Tier 1 alignments (purple lines in Figure 7-1).



Figure 7-1: Regional Bicycle Transportation Network Vision

## Regional Bicycle Transportation Network Vision



## Relationship to the Regional Trail System

Regional trail corridors are designated by the Council in its *2040 Regional Parks Policy Plan*. The specific alignment of a regional trail is determined by the regional park implementing agency during the development of a trail master plan, which must be consistent with the regional parks plan in order to be approved by the Council. The park plan requires that regional trails provide connections between components of the Regional Parks System and notes that they are primarily multi-use recreation trails, although many trails also serve bicycle transportation functions. Recreational bicycling, although not the focus of this Transportation Policy Plan, is significant to the region in that it represents an important entry point for many cyclists to become familiar with the regional system and because ultimately, many recreational cyclists will become users of the system for commuting and other transportation purposes.

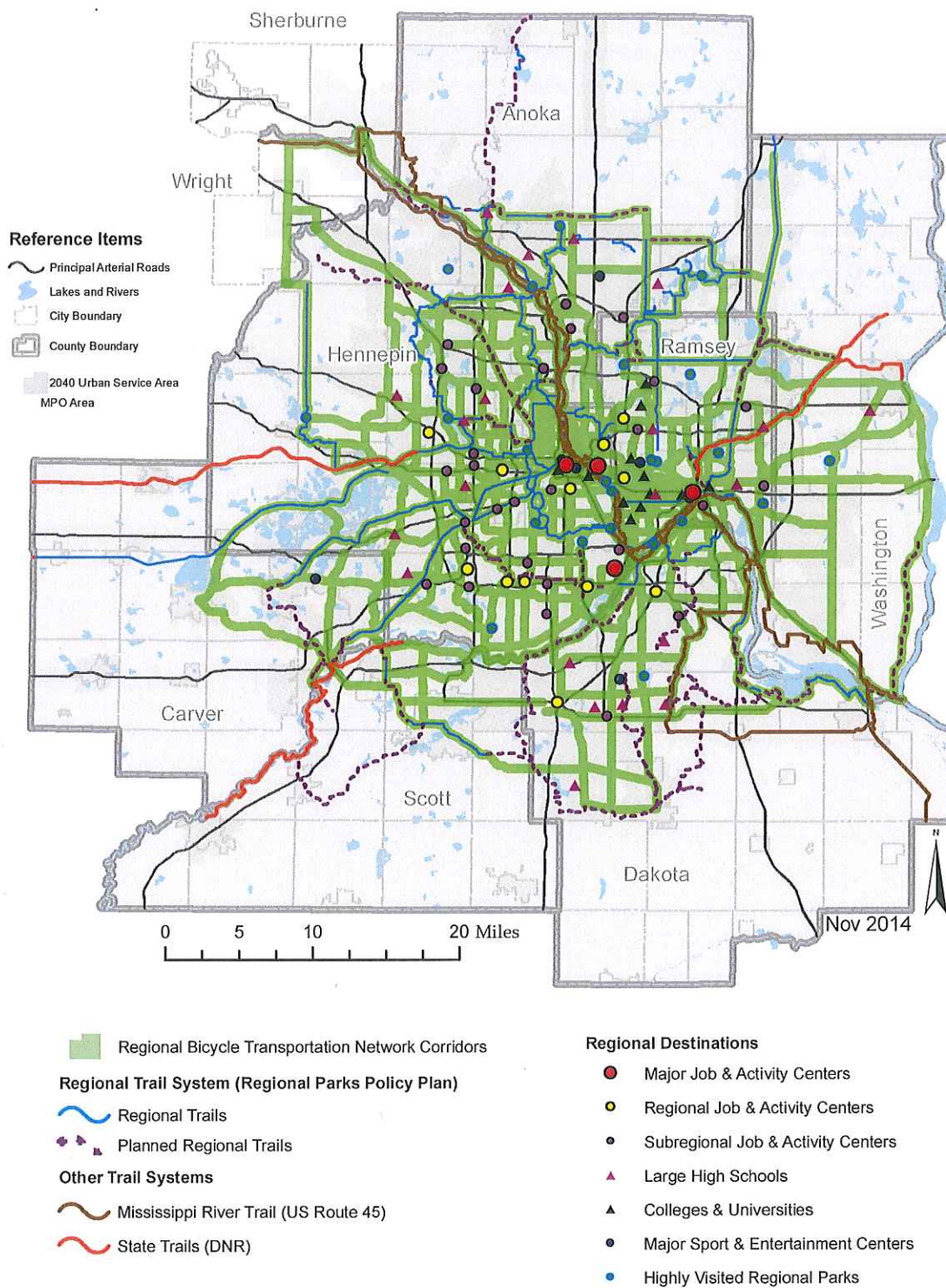
The role of regional trails in connecting to and between regional destinations, as identified in the Regional Bicycle System Study, was assessed and as a result, many regional trails were identified as important components of the Regional Bicycle Transportation Network. (See also [“Development of a Regional Bicycle Transportation Network”](#) for a more detailed discussion of study methodology.) It should be noted that there are regional trails outside of those that were included in the Regional Bicycle Transportation Network which may serve some transportation function at a more local level, just as there are many trails and on-street bikeways identified on the Regional Bicycle Transportation Network that will also serve recreation needs in the urban and suburban parts of the region. In practice, the Regional Bicycle Transportation Network, the regional trail system, and all local trail and bikeway networks will complement one another to serve the overall bicycle transportation and recreation needs of the region.

The proposed bicycle network corridors shown in Figure 7-2 are intended to serve as the “backbone” arterial system for biking in the region. Existing and planned regional trails are highlighted to depict their relationship to the Regional Bicycle Transportation Network corridors and to highlight the overlap between bicycle recreation and bicycle transportation networks. Cities and counties are encouraged to plan and implement local bicycle facilities that connect their local bikeway networks to the Regional Bicycle Transportation Network.



Figure 7-2: Regional Bicycle Transportation Network and Regional Trail System

## Regional Bicycle Transportation Network and Regional Trail System



## Defining Critical Bicycle Transportation Links

There are several types of barriers that can disrupt the connectivity of the Regional Bicycle Transportation Network and isolate communities from key destinations. The links overcoming these barriers are defined as Critical Bicycle Transportation Links.

**Critical Bicycle Transportation Links.** These perform one or more of the following:

- Serve to close a gap in the Regional Bicycle Transportation Network or connect a local bikeway to a major regional destination.
- Improve continuity and connections between jurisdictions (on or off the regional network)
- Improve or remove a physical barrier (on or off the regional network)

**Closing a Gap in the Regional Bicycle Transportation Network.** Gaps in the Regional Bicycle Transportation Network can be addressed by:

- Providing a missing link between existing or improved segments of the Regional Bicycle Transportation Network.
- Improving bikeability within a Regional Bicycle Transportation Network corridor to better serve all bicycling skill and experience levels within the corridor (for example, providing a safer, more protected on-street facility; improving traffic signals, signage, and pavement markings at busy intersections; or adding a bike route parallel to a highway or arterial roadway along a lower-volume neighborhood collector or local street).
- Providing a short (up to one mile) but critical link connecting a local bikeway to the Regional Bicycle Transportation Network, a major regional destination, a major transit-oriented development, or to a high-volume, multimodal transit station.

**Improving Continuity and Connections between Jurisdictions.** There are many cases around the region where an existing bikeway may stop at one city's border and not carry through to an adjacent city or county. Creating more consistent, continuous and connected bikeways will improve access to, and the overall bikeability and convenience of, local and regional bicycle systems.



**Removing or Circumventing a Physical Barrier.** Physical barriers to biking can be natural or man-made and include major rail corridors, rivers and streams, freeways or multi-lane arterial roadways. Projects that remove or provide more bikeable options around or across physical barriers (for example, providing grade-separated crossings where appropriate) can arise in a number of ways. Planning work may underscore the need for a local bikeway to improve options through a major barrier.

Additionally, major roadway infrastructure projects can provide opportunities to create bicycle connections across one or several barriers, particularly in instances where there is not a usable parallel alternative within a reasonable biking distance.

By their nature, projects to remove physical barriers can prove particularly costly and the potential to enhance such connections may be opportunity driven with respect to major highway, bridge, and transitway projects. Given the significant expense of building connections like bridges or underpasses and their anticipated long life, it is important to consider the inclusion of bicycle infrastructure in all projects that improve options to cross or get around these physical barriers, even if the full potential of the bicycle connection is not evident at the time of construction.





## Investment Direction

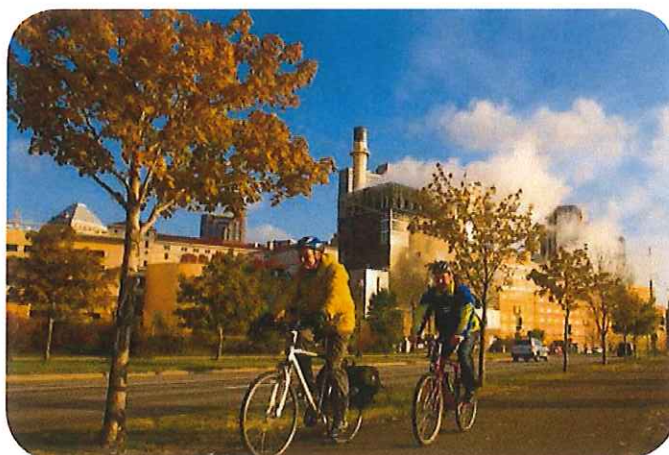
The Council, through its Transportation Advisory Board's Regional Solicitation process, makes specific categories of federal transportation funds available to local governments on a competitive basis for pedestrian and bicycle facilities and safety programs.

The Transportation Advisory Board solicits applications for federal funding for these improvements from the Transportation Alternatives Program (TAP) and Surface Transportation Program (STP) and can provide funds from the Congestion Mitigation/Air Quality program, if it chooses.

The sections that follow list and describe the basis for the region's priorities for investment in bicycle and pedestrian infrastructure through the Regional Solicitation for federal transportation funds. Additional funding for bicycle and accessible pedestrian highway infrastructure through MnDOT is described in the Highway Investment Direction and Plan under [current revenue](#) and [increased revenue](#) scenarios.

### Regional Bicycle Transportation Network

Projects proposed to enhance or complete new segments or connections of the Regional Bicycle Transportation Network will be given priority for federal transportation funding, provided that operations and maintenance commitments are made by the project applicant for the entire segment of proposed bikeway and any adjoining segments within the applicant's jurisdiction. The network is subdivided into two tiers for regional planning and investment prioritization:



- **Tier 1, Priority Regional Bicycle Transportation Corridors and Alignments** (as previously shown in [Figure 7-1](#)) should be given the highest priority for transportation funding; these are the corridors and alignments determined through the *Regional Bicycle System Study* (2014) to provide the highest transportation function by connecting the most regional activity centers through the developed urban and suburban areas of the region.
- **Tier 2, Regional Bicycle Transportation Network Corridors and Alignments** (also shown in [Figure 7-1](#)) should be given the second highest priority for transportation investment. These corridors and alignments provide transportation connectivity to outlying regional destinations within and beyond the urban/suburban areas and serve to connect priority regional bicycle transportation corridors/alignments.



## Critical Bicycle Transportation Links

Potential bicycle facility improvement projects can be defined as Critical Bicycle Transportation Links if the planned improvement performs one or more of the following functions:

1. Serves to close a gap in the Regional Bicycle Transportation Network; this includes improving bikeability and convenience for all age/experience levels within urban, high demand corridors that may already have a continuous bikeway facility (for example, adding an off-road trail where there is only an on-street bike lane in an urban high-demand corridor, or adding a bike lane where only a trail exists).
2. Improves continuity and/or connections between jurisdictions (whether it is on or off the regional network); this includes extending a specific bikeway facility treatment across jurisdictions to improve consistency and inherent bikeability and convenience for all cyclists.
3. Provides an alternative that crosses or gets around a physical barrier including a river or stream, railroad corridor, freeway, or multi-lane highway.

Bicycle facility improvements meeting any of the above criteria for Critical Bicycle Transportation Links will be considered a regional priority for planning and regional investment.

## Other Key Investment Prioritization Factors for Pedestrian and Bicycle Projects

**Opportunities for Pedestrian Improvements.** Regional funding priority will be geared toward stand-alone pedestrian projects that are connected to transit service or regional job concentrations. These include:

- Along existing or potential high-frequency arterial bus routes in the urban core and suburban communities
- Transit-oriented developments around existing or programmed transitway stations
- Existing transit stations, transit centers, or frequent-service park-and-ride locations that are within a reasonable walking distance to residential development or activity centers, or metropolitan job concentrations like the downtowns and the University of Minnesota
- Projects that are included as part of a community's Americans with Disabilities Act (ADA) transition plan and/or demonstrations of best practices in design for use by people of all ages and levels of mobility
- Metropolitan, regional, and sub-regional job concentrations defined in *Thrive MSP 2040*

**Safety.** Regional evaluation criteria will favor infrastructure projects that significantly improve safety for bicyclists and pedestrians while maintaining or enhancing the ease of bicycling or walking. Funding can also be provided to projects that do not improve network connectivity but significantly improve the safety of bicycling or walking (including users of all ages and levels of mobility) or that address an identified safety problem. An example of this type of project would be improvements to intersections that receive a high level of bicycle and/or pedestrian traffic but which were not originally designed with bicycle/pedestrian safety in mind.

**Cost Effectiveness.** Bicycle and pedestrian projects should be cost-effective to construct and to maintain. When determining the right solution for a safety or connectivity problem, local agencies should first consider methods that use existing right-of-way and infrastructure to improve the desirability of biking or walking before considering the construction of entirely new facilities that would require new right-of-way and/or increase operations and maintenance costs.

**Multimodal Projects.** Roadway projects submitted for federal funding should include features that benefit all users of the transportation system including pedestrians and bicyclists (including users of all ages and levels of mobility) in addition to vehicular modes. Regional evaluation criteria should favor roadway projects that meet the needs of pedestrians and bicyclists with an emphasis on safety and barrier removal. In addition, evaluation criteria for stand-alone bicycle and pedestrian improvements should favor projects that support compact mixed-use transit-oriented development within employment centers and those that provide direct connections to high-service transit facilities.

**Bicycle Connections to Transit.** Regional evaluation criteria should favor local bicycle projects that connect to an existing or planned regional transitway or a bus transit stop or station location. These potential connections should be emphasized in the project development process in order that local opportunities to facilitate multimodal trips via bicycles and transit can be maximized.

**Reconstruction of Existing Facilities.** In addition to building new facilities for bicyclists and pedestrians, local jurisdictions are encouraged to apply for Regional Solicitation funds for reconstructing existing facilities where the project would improve the bikeway or pedestrian path to a quality level superior to that of the existing facility and where facilities have been properly maintained. Projects considered for federal funding should also have an approved plan for maintenance or a maintenance agreement to ensure that the facility remains in good repair and is passable.





June 20, 2018

Scott Yonke, Director of Planning and Development  
Ramsey County Parks and Recreation  
2015 N. Van Dyke Street  
Maplewood, MN 55109-3796

RE: 2018 Regional Solicitation – Multiuse Trail and Bicycle Facilities  
Bruce Vento Regional Trail – Buerkle Road to Highway 96

Dear Scott Yonke:

This letter is to share with you our strong support for Ramsey County Parks and Recreation's plan to extend the Bruce Vento Regional Trail from Buerkle Road to Highway 96 in the City of White Bear Lake. This is a high priority trail that is in need of the Multiuse Trail and Bicycle Funds.

The Bruce Vento Regional Trail is a major-regional and extremely-popular multiuse trail corridor for Ramsey County residents and others in the region for years since the development of the Bruce Vento Regional Trail Master Plan in 1993. This important trail corridor is 13 miles in length. It extends from the east side of downtown St. Paul, where there is a high level of concentrated poverty, to the north County line in White Bear Township. The final segment of the southern seven miles of regional trail was completed in 2005 on former Burlington Northern Santa Fe (BNSF) railway ending at Buerkle Road in White Bear Lake. The north six miles of trail has remained undeveloped for years, and is a critical trail gap in the northern communities of Ramsey County.

With the encouragement of stakeholders, a major planning effort was initiated in 2014 to find an alternative trail alignment out of railway right of way in hopes to begin to fill the north six-mile trail gap. As a result of this planning effort, a three-mile extension of the Bruce Vento Regional Trail has been planned from Buerkle Road to Highway 96. This is a major step to provide increased opportunities for bicycle and pedestrian travel within the communities of the City of White Bear Lake's western boundary and in sections of Maplewood, Vadnais Heights, Gem Lake and White Bear Township as well as throughout the region. In addition, this project will provide a connection to the Highway 96 Regional Trail, Lake Avenue Trail and South Shore Trail. There are plans to include the Bruce Vento Regional Trail as part of United States Bicycle Route 41 from St. Paul to the Canadian border.

This trail improvement project is extremely important to the County and Regional system and helps create a connected and safe regional recreation and transportation bicycle and pedestrian system for all ages and abilities. Walking and biking are two of the most popular recreational activities in Minnesota and this trail will provide a critical segment in the regional trail system plan linking areas throughout Ramsey County, Washington County, the region and the State.

Sincerely,

Connie Bernardy  
Active Living Ramsey Communities Director  
2015 North Van Dyke  
Maplewood, MN 55109-3796



12 July 2018

Scott Yonke  
Director, Planning and Development  
Ramsey County Parks and Recreation  
2015 North Van Dyke Street  
Maplewood, MN 55109-3796

RE: TAB Application for Vento Trail Funding

Scott,

Lake Links Association is in full support of the County's submission for a TAB grant to extend the Bruce Vento Trail. In providing our support we wish to include background offering a sense of the history and vision behind this trail, its importance to the region and the critical role it plays in offsetting the systematic exclusion of bikes and pedestrians from the Highway #61 corridor and the value a completed Bruce Vento Trail brings to realizing a successful Rush Line corridor project.

The Lake Links Association is a 16 month-old Minnesota not-for-profit who has worked closely with public agencies of all levels and our state legislators in our area to advance completion of key uncompleted safe routes for non-motorized users. Our immediate focus is completing a safe route around White Bear Lake. Before we go on, let's go back a few years.

In the mid-late 1990's a stretch of abandoned Burlington Northern track from downtown St. Paul to Vadnais Heights, with history to the region dating back to the 1880's, were acquired by Ramsey County. The tracks were removed and the Burlington Northern Trail, renamed the Bruce Vento Trail in 2001, a year after the U.S. Representative's death, came to life.

In parallel during this 2000-2001 timeframe, the Minnesota Legislature considered and provided funding used to hire Hopkins-based consultant Brauer & Associates. Brauer's assignment was to work with multiple communities and two counties in the Washington-Ramsey County area around White Bear Lake and identify the barriers and opportunities en route to defining the alignment and design of separated trail segments.

When connected, these segments would lay the framework for a regional vision of non-motorized connectivity and link the region to popular state trails. In addition, the density of the network would also provide the backbone for advancing local non-motorized transportation network development for multiple communities, much like the Met Council's current RBTN concept. For reference, the final 2001 Brauer report was entitled the "Lake Links Trail Network Master Plan."

Scott Yonke  
Ramsey County Parks and Recreation  
RE: TAB Application, Bruce Vento Trail

A completed Bruce Vento Trail, meaning a fully connected trail from downtown St. Paul to Hugo's Hardwood Creek Trail, is one of the most vital uncompleted segments from the 2001 Lake Links Plan. It has long held the promise of being the single most important north-south regional trail connection in the area.

It's advancement from Buerkle Road to CSAH 96 is a big step not only to the regional vision in place since the 1990's, but in advancing USBR 41 from St. Paul to the Washington County trail system en route to the Canadian border, and providing safe walking and biking access to planned transit stations for Rush Line along the U.S. Highway 61 corridor and into downtown White Bear Lake.

We urge those considering TAB solicitations to provide the funding requested to stop the cycle of unsafe mobility through our regional and advance this decades old project.

Enjoy the day.

Mike Brooks & Steve Wolgamot  
Ramsey and Washington County Chairs,  
Lake Links Association



**Kevin P. Watson**  
*City Administrator*

**651.204.6010** Phone  
651.204.6110 Fax  
kevin.watson@cityvadnaisheights.com



**The City of Vadnais Heights**  
800 East County Road E  
Vadnais Heights, MN 55127

June 18, 2018

Scott Yonke, Planning Director Ramsey  
County Parks and Recreation 2015 N. Van  
Dyke Street Maplewood, MN 55109-3796

RE: 2018 Regional Solicitation - Multiuse Trail and Bicycle Facilities  
Bruce Vento Regional Trail - Buerkle Road to Highway 96

Dear Mr. Yonke:

This letter is to share the City of Vadnais Heights' support for Ramsey County Parks and Recreation's plan to extend the Bruce Vento Regional Trail from Buerkle Road to Highway 96 along the border of Vadnais Heights and White Bear Lake. We strongly encourage the selection committee to consider this project for Multiuse Trail and Bicycle Funds.

The Bruce Vento Regional Trail has been a highly popular multiuse trail corridor for Ramsey County residents for years since development of the Trail Master Plan in 1993. The trail corridor is 13 miles in length, and extends from the east side of downtown St. Paul to the north County line in White Bear Township. The final segment of the southern seven miles of regional trail was completed in 2005 on former Burlington Northern Santa Fe (BNSF) railway ending at Buerkle Road in Vadnais Heights. The remaining north six miles of trail was planned to be constructed on the north BNSF railway segment to the County line when this segment of railway is abandoned. The north six miles of trail has remained undeveloped for years, and is a critical trail gap for the northern communities of Ramsey County.

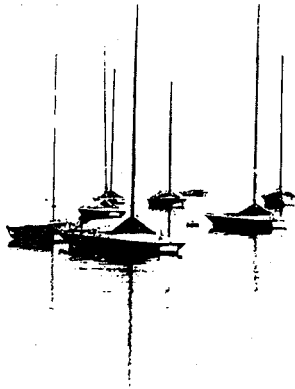
A major planning effort was initiated in 2014 to find an alternative trail alignment out of railway right of way in hopes of finishing the six-mile trail gap. Because of this planning effort, a three-mile extension of the Bruce Vento Regional Trail has been planned from Buerkle Road to Highway 96. This is a major step to provide increased opportunities for bicycle and pedestrian travel within the communities of White Bear Lake, Maplewood, Vadnais Heights, Gem Lake and White Bear Township. In addition, this project will provide a connection to the Highway 96 Regional Trail, Lake Avenue Trail and South Shore Trail. This will allow our residents to more readily access other regional trails too, such as the Gateway Trail. There are discussions in progress to include the Bruce Vento Regional Trail as part of United States Bicycle Route 41 from St. Paul to the Canadian border.

This trail will provide a critical segment in a complex regional trail system linking Vadnais Heights to the rest of Ramsey County and the Twin Cities metro. We are frequently contacted by residents seeking more trails for walking and biking. We hope this project moves forward and adds to the network. Please let me know if we may provide additional support for this project.

Sincerely,

A handwritten signature in black ink, appearing to be "KW" followed by a long horizontal stroke.

Kevin Watson  
City Administrator



# City of White Bear Lake

4701 Highway 61 • White Bear Lake, Minnesota 55110

Phone (651) 429-8526 • Fax (651) 429-8500

[www.whitebearlake.org](http://www.whitebearlake.org)

May 1, 2018

Scott Yonke, Director of Planning and Development  
Ramsey County Parks and Recreation  
2015 N. Van Dyke Street  
Maplewood, MN 55109-3796

RE: 2018 Regional Solicitation – Multituse Trail and Bicycle Facilities  
Bruce Vento Regional Trail – Buerkle Road to Highway 96

Dear Mr. Yonke:

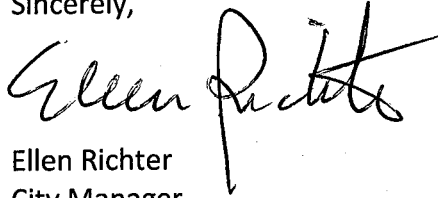
This letter is to share our support for Ramsey County Parks and Recreation's plan to extend the Bruce Vento Regional Trail from Buerkle Road to Highway 96 in the City of White Bear Lake. The selection committee should strongly consider this project for Multiuse Trail and Bicycle Funds.

The Bruce Vento Regional Trail corridor has been a highly popular multi use trail corridor for Ramsey County residents for years since the development of the Bruce Vento Regional Trail Master Plan in 1993. The trail corridor is 13 miles in length, and extends from the east side of downtown St. Paul to the north County line in White Bear Township. The final segment of the southern 7 miles of regional trail was completed in 2005 on former Burlington Northern Santa Fe (BNSF) railway ending at Buerkle Road in White Bear Lake. The remaining north 6 miles of trail was planned to be constructed on the north BNSF railway segment to the County line when this segment of railway is abandoned. The north 6 miles of trail has remained undeveloped for years, and is a critical trail gap for the northern communities of Ramsey County. At this time, it is undetermined when, or if, the north BNSF railway corridor will be abandoned.

A major planning effort was initiated in 2014 to find an alternative trail alignment outside of the railway right-of-way in hopes to begin to fill the north 6 mile trail gap. As a result of this planning effort, a three-mile extension of the Bruce Vento Regional Trail has been planned from Buerkle Road to Highway 96. This is a major step to provide increased opportunities for bicycle and pedestrian travel within the communities of the City of White Bear Lake's western boundary and in sections of Maplewood, Vadnais Heights, Gem Lake and White Bear Township. In addition, this project will provide a connection to the Highway 96 Regional Trail, Lake Avenue Trail and South Shore Trail. There are also discussions in progress to include the Bruce Vento Regional Trail as part of United States Bicycle Route 41 from St. Paul to the Canadian border.

The proposed trail improvement project is extremely important to the County and Regional system and helps create a connected and safe regional recreation and transportation bicycle and pedestrian system. Walking and biking are two of the most popular recreational activities in Minnesota and this trail will provide a critical segment in a complex regional trail system linking areas throughout Ramsey County, Washington County, the region and the State.

Sincerely,

A handwritten signature in black ink, appearing to read "Ellen Richter", with a stylized, flowing script.

Ellen Richter  
City Manager





**WHITE BEAR  
TOWNSHIP**

1858  
RAMSEY COUNTY  
MINNESOTA

1281 HAMMOND ROAD  
WHITE BEAR TOWNSHIP, MN 55110

651-747-2750

FAX 651-426-2258

Email: [wbt@whitebeartownship.org](mailto:wbt@whitebeartownship.org)

Board of Supervisors  
**ROBERT J. KERMES, Chair**  
**ED M. PRUDHON**  
**STEVEN A. RUZEK**

June 13, 2018

Scott Yonke  
Ramsey County parks & Recreation  
2015 Van Dyke Street  
Maplewood, Minnesota 55109

Dear Scott:

The latest leg of the Vento Trail which is planned from Buerkle Road to County Road 96 is partially located in White Bear Township. The Town has worked closely with Ramsey County regarding the location and construction of the trail.

The White Bear Town Board of Supervisors supports development of this trail and the County's regional role in construction of the trail corridor and fully supports application for grant funding to construct the project.

Sincerely,

Tom Riedesel  
Planner

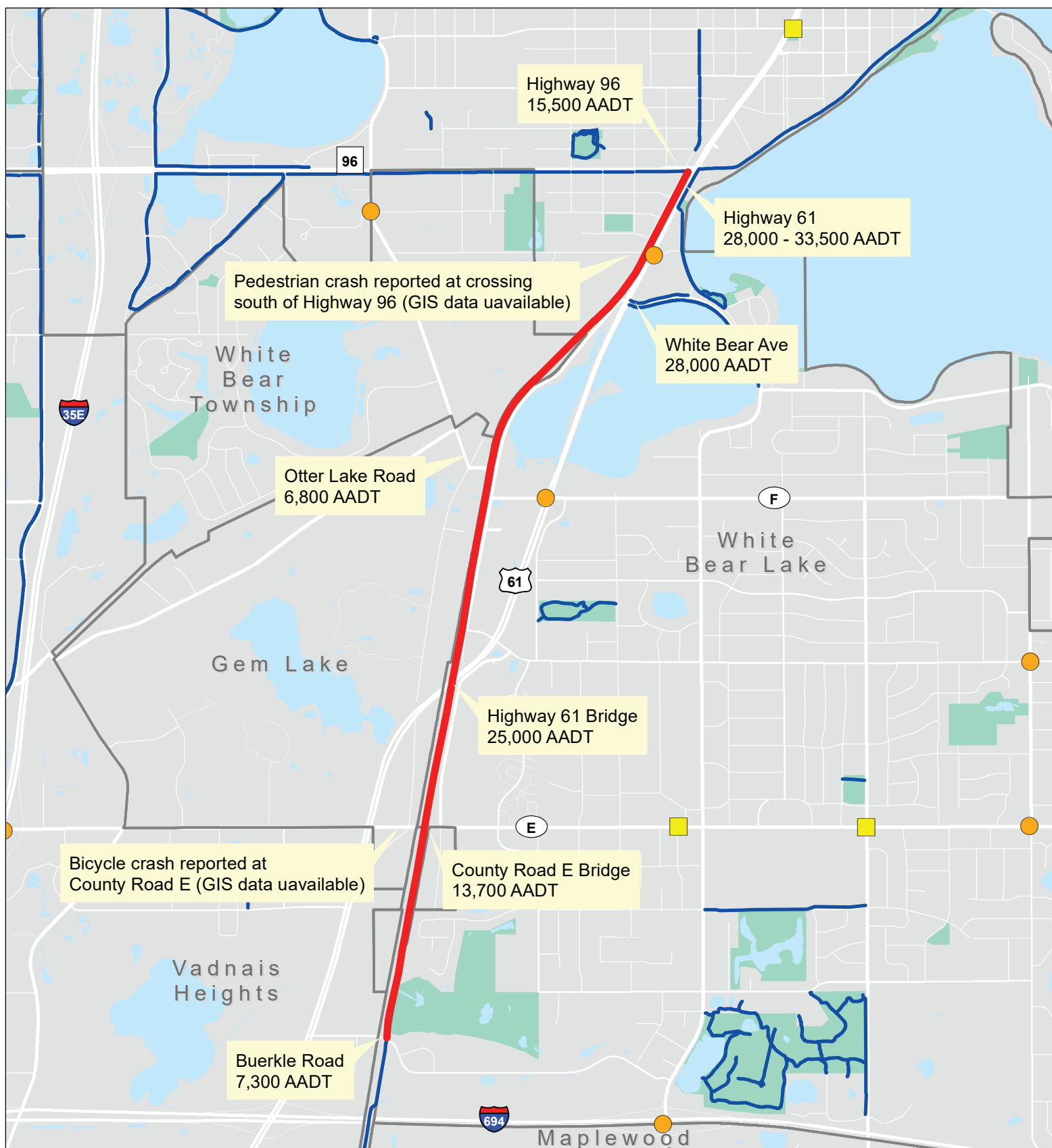
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cc:admin.file  
b:vento  
cc: TB Supervisor



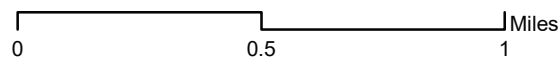




# Bicycle and Pedestrian Crashes in Project Area (2013 - 2015)

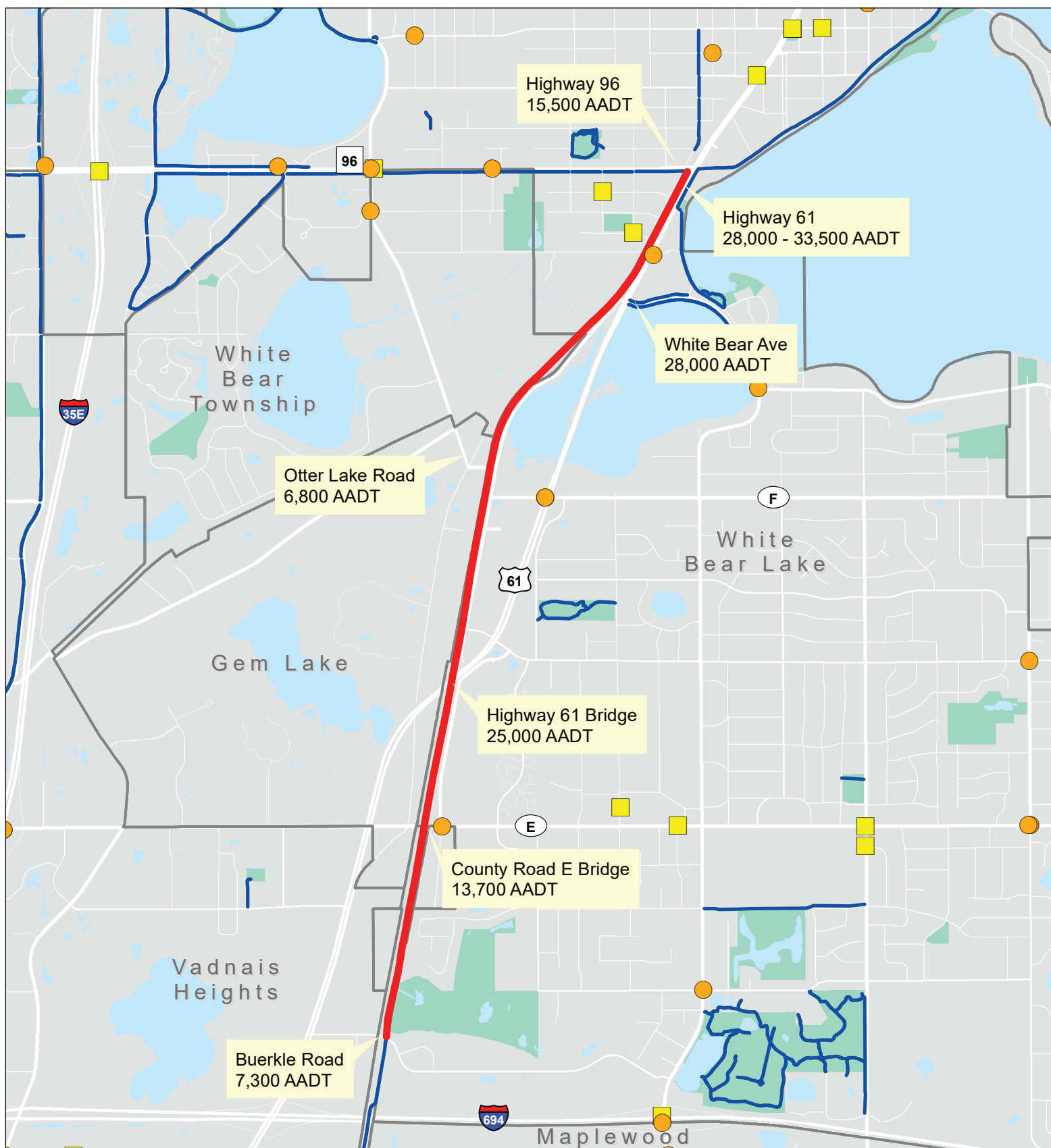


- Project
- Existing Trail or Bike Lane
- Crashes Involving Pedestrians
- Crashes Involving Bicyclists





# Bicycle and Pedestrian Crashes in Project Area (2010 - 2014)



- Project
- Existing Trail or Bike Lane
- Crashes Involving Pedestrians
- Crashes Involving Bicyclists



0 0.5 1 Miles

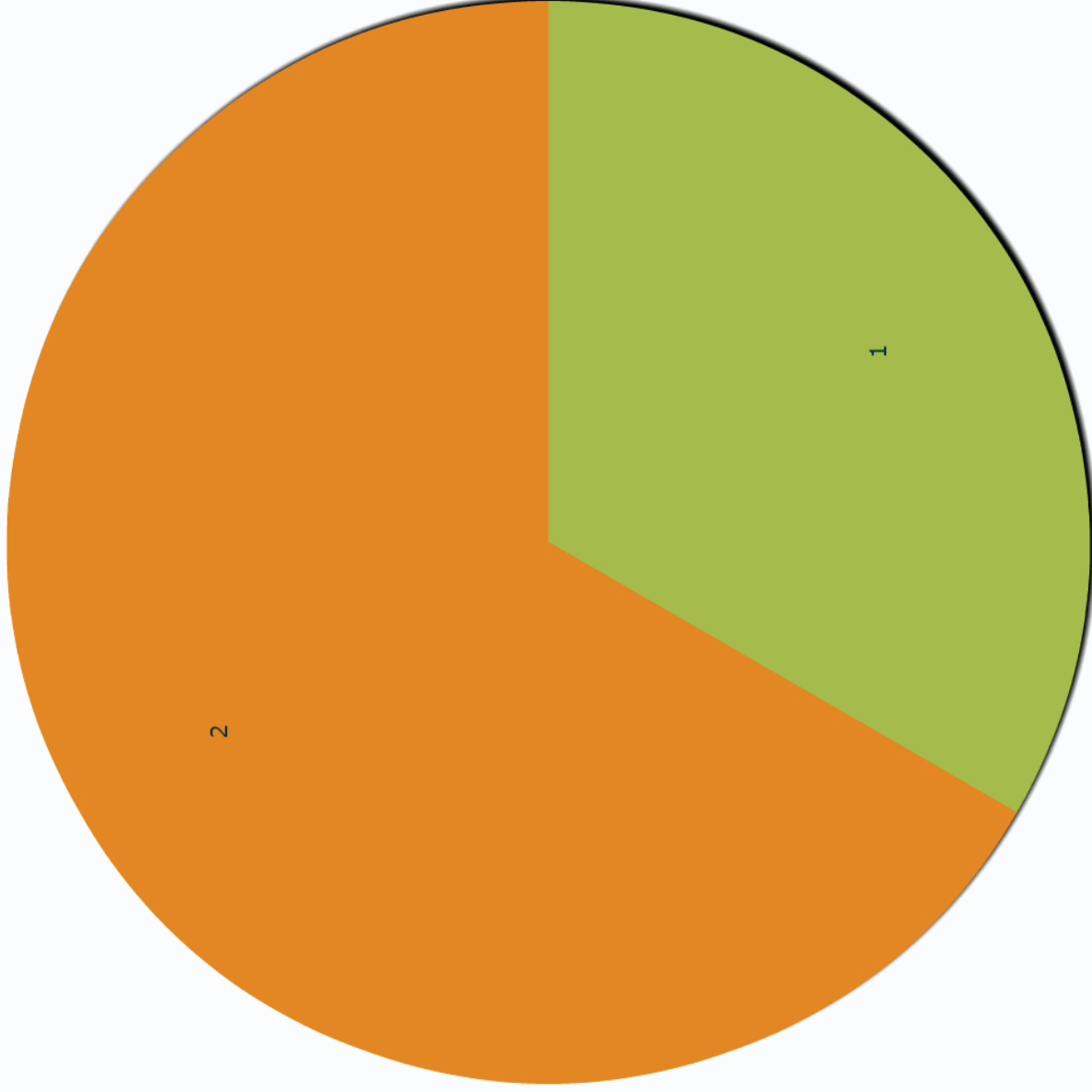




## Vento Trail Corridor- 2013, 2014, 2015 Bicycle Crash Severity

Layout Version 1.0 May 2010

■ NON-INCAPACITATING INJURY



**Notes:** CRASH COUNT: 3 - WORK AREA: COUNTY\_CODE('62') - FILTER: CRASH\_YEAR('2013','2014','2015'), CRASH\_TYPE\_CODE('06') - SPATIAL FILTER APPLIED

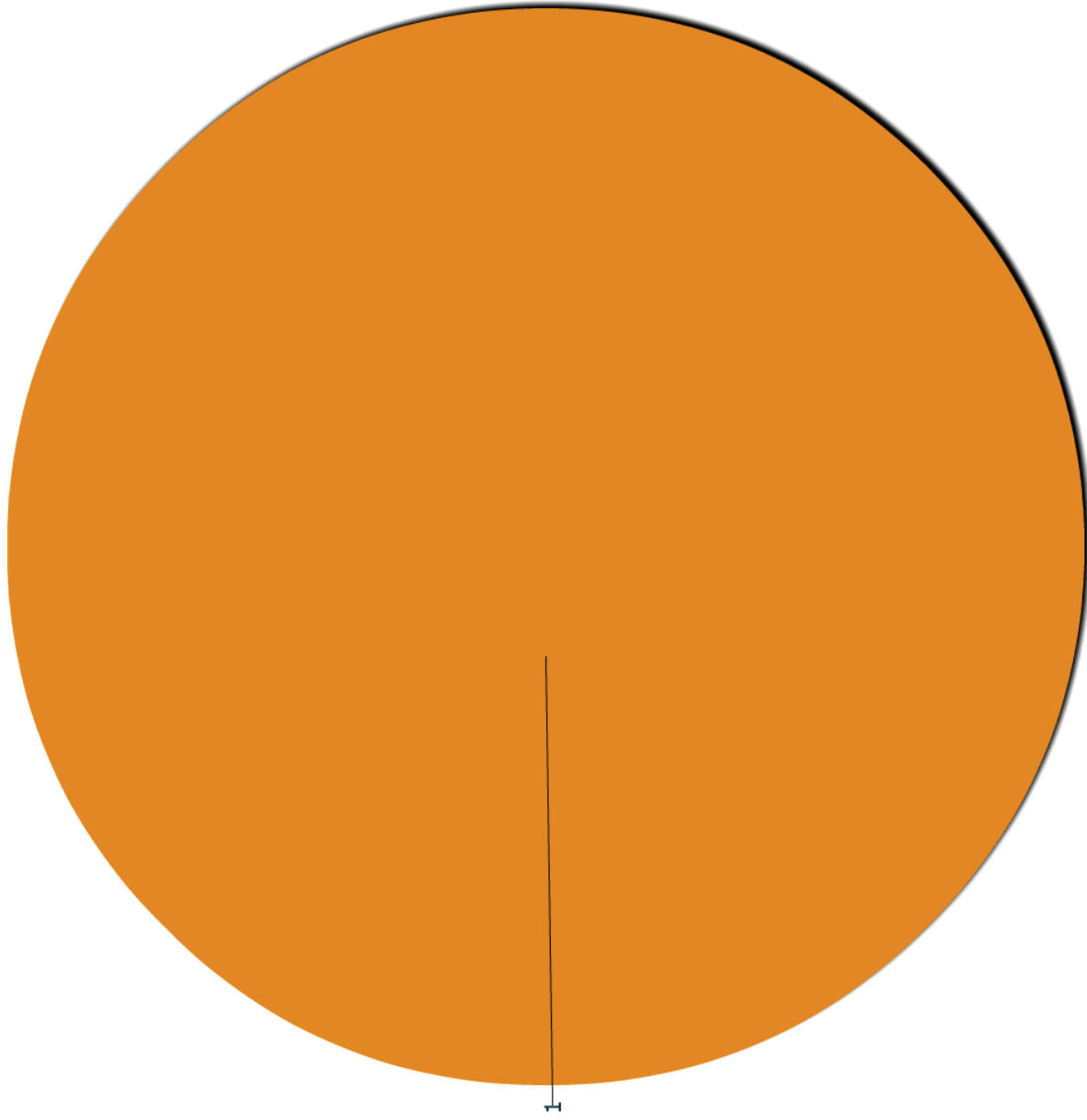




# Vento Trail Corridor Pedestrian Crash Severity 2013, 2014, 2015

Layout Version 1.0 May 2010

■ INCAPACITATING INJURY



**Notes:** CRASH COUNT: 1 - WORK AREA: COUNTY\_CODE('62') - FILTER: CRASH\_YEAR('2013','2014','2015'), CRASH\_TYPE\_CODE('07') - SPATIAL FILTER APPLIED



# IMPLEMENTATION PLAN

## BRUCE VENTO REGIONAL TRAIL – NORTH EXTENSION

**Prepared For:**

Ramsey County Parks and Recreation Department  
2015 North Van Dyke Street  
Maplewood, MN 55109-3796



**Prepared By:**

Loucks Associates  
55 East Fifth Street, Suite 910  
Saint Paul, MN 55101

June 17, 2016

### BACKGROUND

The purpose of the Bruce Vento Regional Trail – North Extension Implementation Plan is to provide trail design and related information to be used in the pursuit of funding and development of a 3 mile extension to the existing Bruce Vento Trail. The added segment begins at Buerkle Road and terminates at Highway 96 and is located primarily within street and BNSF railroad corridors near the City of White Bear Lake's western boundary. The existing alignment of the Bruce Vento Regional Trail is 13 miles long and passes through the cities of St. Paul, Maplewood, Vadnais Heights, Gem Lake, White Bear Lake and White Bear Township. The Implementation Plan for the trail extension includes the following components:

- Layout and Grading Plans
- Property Easement and Acquisition Plans
- Cost estimate for construction, land acquisition, land surveying, testing, permits and design and engineering

### DEVELOPMENT PLANS

Plans showing the layout and grading proposed for the Vento Trail – North Extension are included on attached Sheets 1 through 5. Plan Sheet 6 includes cross-sections, at several key locations along the trail, showing trail relationships to railroad and street corridors. Plan Sheet 7 includes enlarged plans and cross-sections at County Road E and Hwy. 61 underpasses.

The development plans include the following design considerations:

1. The trail extension is designed to conform to Federal Standards for bicycle trails.



2. The Vento trail surface will be 12' wide bituminous generally flanked by 4' clear zones beyond the pavement edges. Minimum clear zone widths are 2'.
3. The slope on the trail, along its length, does not exceed 5%, to conform to American Disabilities Act (ADA) requirements.
4. Burlington Northern Railroad has approved location of the trail segments shown within its' right-of-way. Fencing is used to separate trail users from railways.
5. Hoffman Road is a Ramsey County road and the trail, within its' corridor, is designed to be separate from the road pavement with a 6' wide buffer distance between the road and trail pavement edges.
6. Redesign of the Lincoln Ave. corridor includes a parking lane on the west side, two driving lanes and bike lanes on the east side of the street.
7. Bridge underpass designs allow a 12' clearance between the trail surface and the underside of the bridges.
8. The trail will eventually link to the South Lake Shore Trail at White Bear Avenue, the Lake Links Trail at Highway 96 and the Highway 96 trail.
9. The City of White Bear Lake is considering the possibility of constructing connections to the Vento Trail with proposed park and neighborhood trails just north of Buerkle Road.
10. It is expected that the Bruce Vento Trail Extension will be constructed within the next 5 years.

#### **PROPERTY EASEMENT AND ACQUISITION PLANS**

The following list includes estimated land quantities within in proposed trail corridor boundaries that must be controlled by acquisition, agreements, permits or easements to enable construction, operation and maintenance of the proposed Vento Trail – North Extension. The numbers are approximate but provide quantities that can be used in early discussions with property owners and others regarding methods and costs of land control for the trail. Plans showing the location of the properties are included on attached Sheets 8 through 12.

1. Total BNSF Railroad corridor encroachment length = 7,380'
2. Total BNSF Railroad corridor encroachment area = 3.4 acres
3. Total trail length on City of White Bear Lake property = 4,220'
4. Total trail corridor area on City of White Bear Lake property = 2.2 acres
5. Trail corridor length on private property north of Elm St. = 200'
6. Trail corridor area on private property north of Elm St. = 12,000 sq.ft.
7. Trail corridor length on private property north of County Rd. E = 50'
8. Trail corridor area on private property north of County Rd. E = 2,250 sq.ft.
9. Total trail length within MnDOT Road corridor = 50'
10. Total trail corridor area within MnDOT right-of-way = 1,000 sq.ft.
11. Total trail length within County Road corridor = 7,850'
12. Total trail corridor area within County Road right-of-way = 3.6 acres

The trail corridor area measurements are generally based on the width of the land area required to maintain the completed trail facility. A minimum trail corridor width of 20' is used, assuming a 12' pavement width and 4' wide clear zones flanking the pavement.

Land areas beyond the anticipated trail corridor boundaries will be disturbed by grading and other construction activities in some locations. It is understood that temporary easements, land use



agreements or permits, not included in the quantities noted above, may be secured to allow disturbance in these areas.

## **PROJECT COST ESTIMATE**

The spread sheet below includes estimated costs for construction, land acquisition, land surveying, testing, permits and design and engineering. Permanent easements and temporary construction easements are required on several properties and are included on the spread sheet. Expenses associated with easements will be identified after additional discussion with affected property owners regarding the terms of the agreements.

The following list includes additional descriptions of cost items that are included on the spread sheet:

1. Replacement of wetland existing White Bear Lake Park Land north of Buerkle Road is expected to be accomplished by expanding the existing wetland in a different location.
2. The layout of the trail at the old White Bear Lake Pub. Wks. facility is designed to avoid wetland disturbance in this area.
3. A pedestrian bridge will be included at Buerkle Rd. It is assumed that bridge clearance required over the road pavement is 17' and the clear width of the bridge deck will be 14'. The grades on the north and south sides of Buerkle are such that structural support would likely be required for the full length of the ramps. The longitudinal slope on ramps will be 5% to conform to ADA standards.
4. A small triangular piece of a privately-owned land parcel on the north side of County Rd. E may be acquired. There will be a node for trail information signs but no trail head in this location.
5. Structural retaining walls (as opposed to modular concrete block) will be required to protect the abutments at the County Rd. E. and Hwy. 61 underpasses. Construction drawings for the bridges and/or detailed analysis of the bridges will be required to prepare final designs.
6. Flashing amber lights will be installed to enhance safety at the Scheuneman Road crossing.
7. The old White Bear Township Town Hall site provides an opportunity for a trail head. The Township may be asked to provide the County an easement for construction of a 20 car (or so) parking lot, bike parking area, benches, portable toilet pads, wayfinding signs and monument sign. The trail head is included on the spread sheet but associated costs are not included in this plan.
8. The Hwy. 61 crossing at the Hoffman Rd. intersection will be improved to provide access to the South Lake Shore Trail. The intersection design and existing conditions will dictate the scope of improvements there.
9. Trail construction within the Lincoln Ave. corridor may be a joint effort between Ramsey County and the City of White Bear Lake because the City of White Bear Lake is planning to reconstruct Lincoln Ave. within the next 5 years.
10. A rest stop, including wayfinding signs, monument sign, benches and bike parking will be constructed at Hwy. 96, but improvements will be located outside of the BNSF right-of-way.
11. The crosswalk on Hwy. 96 will be improved at the Vento Trail location and a path and pedestrian ramp will be constructed to connect to Bald Eagle Avenue
12. A path will be added along Hwy. 96 to connect the trail to Hwy 61 and the crosswalk on Hwy. 61 will be improved to enhance the connection to the Lake Links Trail.

(Refer to the spread sheet beginning on the following page)



**PRELIMINARY COST ESTIMATE****Bruce Vento Regional Trail - North Extension**

ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QTY.	TOTAL
1	<b>GENERAL CONDITIONS</b>	ls	\$225,000.00	1	\$225,000.00
2	<b>STAKING AND LAYOUT</b>	ls	\$50,000.00	1	\$50,000.00
<b>SUBTOTAL</b>					<b>\$275,000.00</b>
3	<b>SITE PREP</b>				
4	Miscellaneous demolition and site clearing	ls	\$300,000.00	1	\$300,000.00
5	Traffic control and site protection	ls	\$75,000.00	1	\$75,000.00
6	Erosion control	ls	\$60,000.00	1	\$60,000.00
<b>SUBTOTAL</b>					<b>\$435,000.00</b>
7	<b>EARTHWORK</b>				
8	Common excavation and haul-off	cy	\$12.00	15,000	\$180,000.00
9	Rough grading	cy	\$5.00	17,500	\$87,500.00
10	Fine grading	sy	\$1.50	14,000	\$21,000.00
11	Topsoil stockpile and respread	cy	\$5.00	3,000	\$15,000.00
12	Topsoil import and place	cy	\$35.00	1,000	\$35,000.00
<b>SUBTOTAL</b>					<b>\$338,500.00</b>
13	<b>SITE IMPROVEMENTS</b>				
14	Signs and display panels at intersections with roads and along trail length	ls	\$25,000.00	1	\$25,000.00
15	Add a path on Hwy. 96 from the trail to Hwy. 61 and improve crosswalk on Hwy. 61 to connect to Lake Links Trail.	ls	\$2,500.00	1	\$2,500.00
16	Improve the crosswalk on Hwy. 96 at the Vento Trail location and add a path connection and pedestrian ramp to connect to Bald Eagle Avenue	ls	\$8,000.00	1	\$8,000.00
17	White Bear Ave. and Hwy. 61 intersection reconstruction. Redesign southbound right turn on 61 and improve crosswalk on 61 to link with South Lakeshore Trail	ls	\$200,000.00	1	\$200,000.00
18	Improve pedestrian crossing on Scheuneman Road including flashing amber lights	ls	\$15,000.00	1	\$15,000.00
19	Pedestrian/bicycle bridge over Buerkle Rd. (17' clearance over roadway, 14' clear width, with structural ramps at 5%)	lf	\$1,500.00	835	\$1,252,500.00



ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QTY.	TOTAL
20	8' high vinyl-coated chain link fence between trail and railroad tracks where trail is within or adjacent to the railroad corridor	lf	\$32.00	11,120	\$355,840.00
21	Construction access locations (miscellaneous restoration of pavements, turf, etc.)	ls	\$10,000.00	1	\$10,000.00
22	Rest-stop at Hwy. 96 including wayfinding and trail information signs, bike racks and benches.	ls	\$15,000.00	1	\$15,000.00
23	Future Trail head construction at old White Bear Ave. Town Hall site including 20 car parking lot, trail wayfinding and information signs, benches, portable toilet pads and landscaping.				\$0.00
24	4' high metal guard rail above retaining wall at townhouses on Elm St.	lf	\$75.00	320	\$24,000.00
25	Modular concrete block retaining wall at townhouses on Elm St.	sf	\$30.00	1,800	\$54,000.00
26	Structural retaining wall at Hwy. 61 underpass	lf	\$200.00	50	\$10,000.00
27	Structural retaining wall at Co. Rd. E underpass	lf	\$200.00	50	\$10,000.00
28	Modular concrete block retaining wall at Co. Rd. E, north and south of bridge	sf	\$30.00	6,000	\$180,000.00
29	Modular concrete block retaining wall at Hwy. 61, north and south of bridge	sf	\$30.00	5,460	\$163,800.00
30	Storm water management	ls	\$75,000.00	1	\$75,000.00
31	Wetland restoration/replacement (10,000 sq.ft.) at White Bear Lake Park north of Buerkle	ls	\$25,000.00	1	\$25,000.00
<b>SUBTOTAL</b>					<b>\$2,425,640.00</b>
32	<b>BITUMINOUS &amp; CONCRETE WORK</b>				
33	12' Bit. Trail - Buerkle to north edge of Co. Rd. E.	lf	\$30.00	3,620	\$108,600.00
34	Bit. Trail - North edge of Co. Rd. E. to Cedar Ave. CL	lf	\$30.00	3,180	\$95,400.00
35	Bit. Trail - Cedar Ave. CL to Scheuneman Rd. CL	lf	\$30.00	2,630	\$78,900.00



ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QTY.	TOTAL
36	Bit. Trail - Scheuneman Rd. CL to north end of bar building at Goose Lake	lf	\$30.00	2,560	\$76,800.00
37	Bit. Trail - North end of bar building at Goose Lake to Hwy. 96	lf	\$30.00	3,800	\$114,000.00
38	Lincoln Ave. bit. Reconstruction	lf	\$12.00	1,400	\$16,800.00
39	Lincoln Ave. concrete curb	lf	\$16.00	1,400	\$22,400.00
40	Concrete curb ramps at trail and street intersections	ea	\$1,500.00	6	\$9,000.00
<b>SUBTOTAL</b>					<b>\$521,900.00</b>
41	<b>UTILITIES</b>				
42	Light standards/fixtures at intersections and bridge underpasses	ea	\$4,800.00	20	\$96,000.00
<b>SUBTOTAL</b>					<b>\$96,000.00</b>
43	<b>LANDSCAPING</b>				
44	Turf Seeding	sy	\$1.50	18,000	\$27,000.00
45	Include landscape enhancements at selected locations throughout the project area	ls	\$25,000.00	1	\$25,000.00
<b>SUBTOTAL</b>					<b>\$52,000.00</b>
<b>SUBTOTAL (all improvements)</b>					<b>\$4,144,040.00</b>
<b>20% CONTINGENCY</b>					<b>\$828,808.00</b>
46	<b>CONSTRUCTION RELATED TESTING AND PERMITS</b>				<b>\$60,000.00</b>
47	<b>ALTA/EASEMENT/ACQUISITION SURVEY WORK (inc. Topographic Survey)</b>				<b>\$100,000.00</b>
48	<b>PERMANENT LAND USE AGREEMENTS (legal fees, etc.)</b>				
49	BNSF Railroad property (3.4 acres)	ls	\$2,500.00	1	\$2,500.00
50	City of White Bear Lake property	acre		2.2	NA
51	Ramsey County property	acre		3.6	NA
52	MnDOT property (limited use permit)	sq.ft.		1,000	NA
53	White Bear Lake Township Town Hall property	acre		1.8	NA
54	<b>SHARED LAND USE AGREEMENT</b>				
55	Xcel Energy				NA
56	<b>TEMPORARY CONSTRUCTION EASEMENTS</b>				
57	BNSF Railroad property (2.3 acres)	ls	\$2,500.00	1	\$2,500.00
58	City of White Bear Lake property	acre		1.1	NA
59	Private property on Elm St. - approximately .03 acres on townhouse parcel	ls	\$1,000.00	1	\$1,000.00
60	<b>ACQUISITION</b>				
61	Private property north of Elm St.	sf	\$7.20	12000	\$86,400.00



ITEM #	DESCRIPTION	UNIT	UNIT PRICE	QTY.	TOTAL
62	Private property north of County Rd. E	sf	\$6.12	2250	\$13,770.00
63	DESIGN AND ENGINEERING (including transition from design development plans to construction documents, Project Memorandum, construction documents, bidding, construction administration and project close-out)				\$500,000.00
TOTAL					\$5,739,018.00

ea-each; sy-square yard; cy-cubic yard; lf-linear foot; ls-lump sum

If permanent easements, as opposed to a land use agreements or permits, are obtained on affected BNSF Railroad properties, the added cost may be as much as \$4.00/square foot or approximately \$600,000.00.

If temporary construction easements are required, as opposed to a temporary land use agreements or permits, on BNSF Railroad properties, the added cost may be as much \$1.00/square foot or approximately \$150,000.00

## **PUBLIC OPEN HOUSE ATTENDANCE AND PUBLIC COMMENTS**

Two public houses were held to offer an opportunity for residents and other stakeholders to provide input on the proposed trail alignment and design considerations. The public meetings were advertised on the Ramsey County Parks Department Website, City Municipal Websites and in the White Bear Press. In addition, about 375 postcard invitations were sent to addresses located within 500' of the proposed trail corridor.

The first open house was held in the City of White Bear Lake on May 18, 2016 and was attended by about 35 stakeholders. The second was held in the City of Vadnais Heights on May 25, 2016 and was attended by about 20 stakeholders. Comment cards and plans were available at the meetings to solicit written comments. The following is a complete list of comments written by meeting attendees:

1. Like using rail line
2. Stay west of Hoffman – avoid crossing road
3. Make easy access to White Berar Lake at Hwy 61 and White Bear Lake Ave to get docks and food at Lake Ave.
4. Make extension from White Bear Ave. and 61 to east side of 61 up through White Bear Lake and Lake Ave.
5. Don't finish White Bear Ave. to 96 until all funding to connect past White Bear Lake to Hugo.
6. Residents who own homes that will be extremely near the proposed trail should be provided specific notice and further opportunity to comment. The small post card type notice would only be overlooked.
7. There is no plan for parking and trail access will be in a neighborhood with a lot of small children. The increased traffic could be problematic.
8. There may be other upkeep and issues with additional people (non-residents) in the area that should be identified by residents and given consideration before a final plan is determined. Buerkle Road is dangerous to cross due to tight S curve you and cars can't see around, especially early in the morning early or late in year when it's dark and during rush hours (lots of fast moving traffic).



9. Orchard St. is the best east/west connector.
10. Consider Orchard St. as a major east-west route.
11. If Buerkle connected to Orchard somewhere it would give good access (to the trail).
12. Like staying by rail line.
13. There is currently no good access to trail north of 694 and South of Cedar. Current access at Buerkle requires White Bear and Buerkle which is terrible. Any access starting from Orchard is needed. The neighborhood connection shown is acceptable.
14. County Rd. E is OK if connected from south.
15. (Like) County Rd. E bike lane from trail to Centerville Road.
16. Need access to trail from County Rd. E.
17. Is there adequate space for the trail between Hoffman Rd. and the power poles?
18. Scheuneman Rd. is a busy shortcut at Hoffman Rd.
19. Trail option B is better because you don't have to cross Hoffman.
20. I would vote for the west side of Hoffman because of the water ski show and better connection to the north.
21. Favor trail option B on west side of Hoffman.
22. Stay on west side of Hoffman so you don't have to cross the road with little benefit.
23. Option B gives access to a possible trail head at the old Town Hall site.
24. Stay west of Hoffman – no crossings.
25. Difficult crossing at White Bear Ave. (Hwy. 61 intersection).
26. Make good crossing at 61 to get to White Bear Lake and food.

Ramsey County Parks Department staff and consultants held one on one discussions about the Vento trail plans with stakeholders at the open houses. Comments were generally supportive of the trail design and proposed links to existing and proposed trails including the Lake Links, Hwy. 96, South Lake Shore and County Rd. E trails. The overall connection to the greater Saint Paul area offered to residents along the Vento North Extension was frequently mentioned by the stakeholders as a major advantage of the proposed trail segment.

**END**

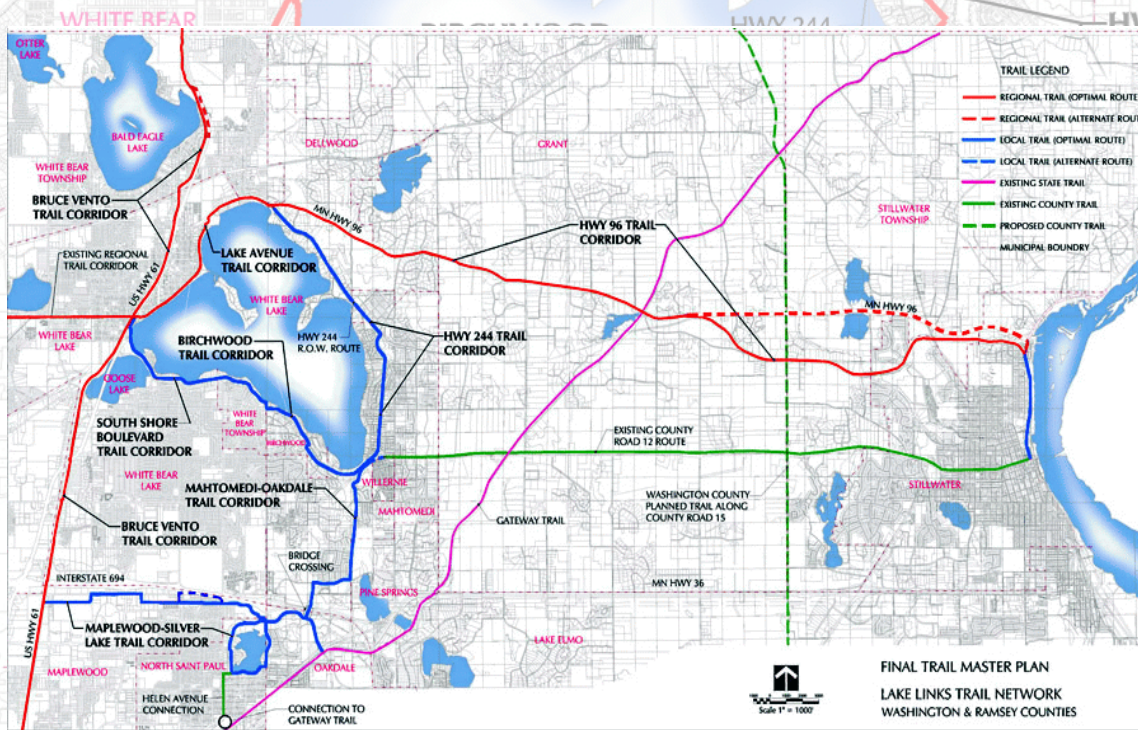
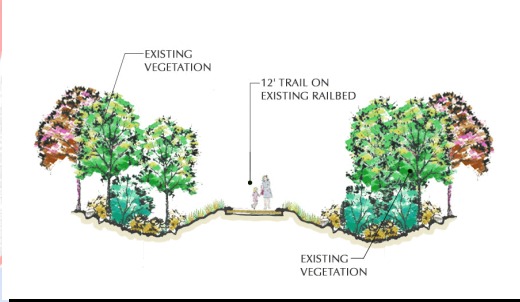
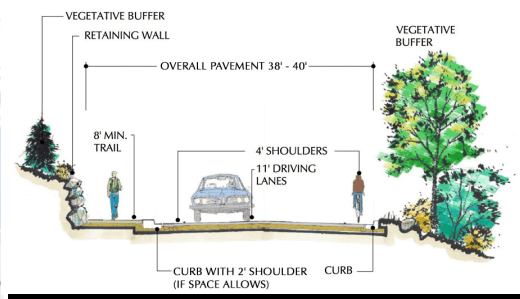


# Lake Links Trail Network Master Plan

Prepared For:  
Washington County Parks  
Ramsey County Parks

January 1, 2001

Prepared By:  
Brauer & Associates, Ltd.





## Section III

# Trail Network Master Plan

### Master Plan Overview

*The final plan represents a network of trails that fulfill the objectives set for the study.*

*The trail network consists of eight trail corridors, which tie into several existing or planned corridors at the State, regional, and county level.*

The trail network master plan is the end result of the planning and public process. The final plan represents a network of trails that fulfill the objectives set for the study. The master plan also represents a trail network that was molded as much by the limitations of the planning area as it was by the opportunities it offered. In spite of the challenges, it is believed that the trail network presented here offers very high recreational value to the surrounding communities and greatly improves pedestrian safety along the trail corridors.

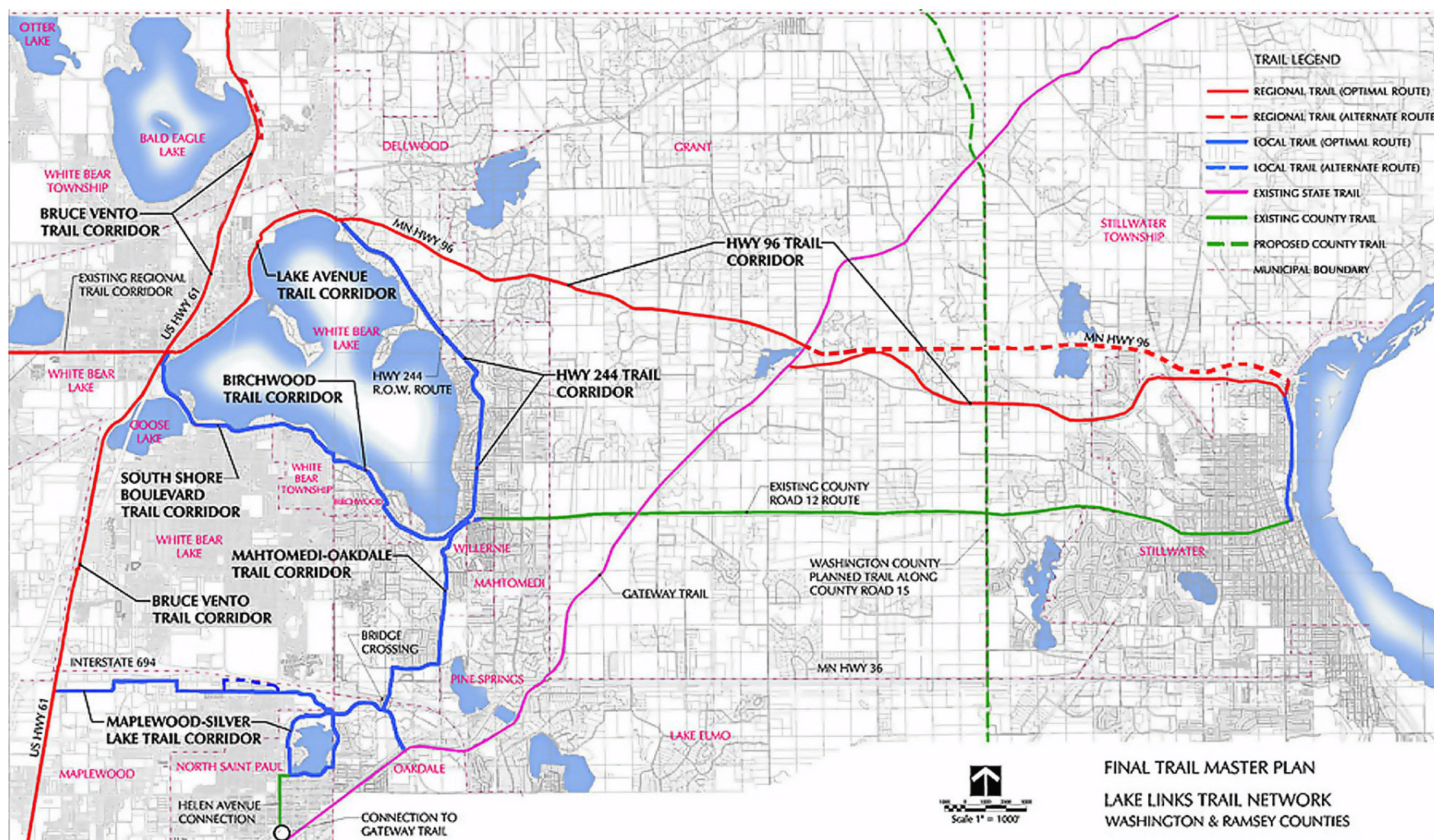
The trail network consists of eight trail corridors, which tie into several existing or planned corridors at the State, regional, and county level. In addition, the trail network interlinks with a series of existing and planned local trails that, ultimately, will provide a seamless and expansive system of trails within the study area. The following table provides an overview of the trail corridors defined under the master plan. Total trail mileage is 34.1.

Trail Corridor	Description
Bruce Vento Trail Corridor (7.3 miles)	North-south regional trail that extends the existing trail from Beam Avenue in Maplewood north into Hugo, where it will continue on to link with other regional-level trails. The corridor generally follows the Burlington Northern railroad alignment, as well as existing adjacent roadways.
Lake Avenue Trail Corridor (2.1 miles)	Regional trail corridor that follows an existing trail corridor from Lions Park north along Lake Avenue on the west side of White Bear Lake in the City of White Bear Lake.
Hwy. 96 Trail Corridor (10.3 miles)	Regional trail corridor that follows the Hwy. 96/Zephyr Line rights-of-way from Ramsey Beach all the way to Stillwater.
Hwy. 244 Trail Corridor (3.5 miles)	Trail corridor that follows the Hwy. 244 right-of-way from Hwy. 96 south to the downtown area of Mahtomedi and Willernie.
Birchwood Trail Corridor (1.7 miles)	Trail corridor that follows Wildwood and Lake Avenues through the City of Birchwood. Given limited road right-of-way through this area, an on-street bike route is proposed for this segment.
South Shore Blvd. Trail Corridor (1.5 miles)	Trail corridor that follows South Shore Blvd. from East County Line to Goose Lake area.
Mahtomedi-Oakdale Trail Corridor (3.1 Miles)	Trail corridor that starts in downtown Mahtomedi and heads south to connect with an existing trail in Oakdale. This corridor includes a proposed pedestrian bridge across I-694.
Maplewood- Silver Lake Trail Corridor (4.6 Miles)	Trail corridor that provides a loop around Silver Lake and then heads west along the northern edge of Maplewood following a powerline easement and local streets to make a connection with the Bruce Vento trail corridor.

Figures 3.1 and 3.2 on the next two pages provide an overview of the Lake Links Trail Network.



## Overall Trail Network Master Plan Map





## Bruce Vento Trail Corridor Technical Review

### Overall Corridor Description / Character

The Bruce Vento trail corridor begins with a connection to the existing trail that currently ends at Beam Avenue in Maplewood. The existing trail is located within the railroad right-of-way. From there, the trail corridor proceeds north generally following the railroad corridor until it ultimately makes a connection with the existing Hardwood Creek Trail in Hugo, which also lies within the railroad right-of-way. This trail corridor offers a variety of settings, ranging from a fairly rural character along the southern half of the trail, to an urbanized character in the White Bear Lake area, and then to a park setting in the Bald Eagle Lake area. Although various at-grade and separated road crossings will be required, this trail corridor offers a relatively uninterrupted experience for the trail user.

### Trail Route and Design Options and Recommendations

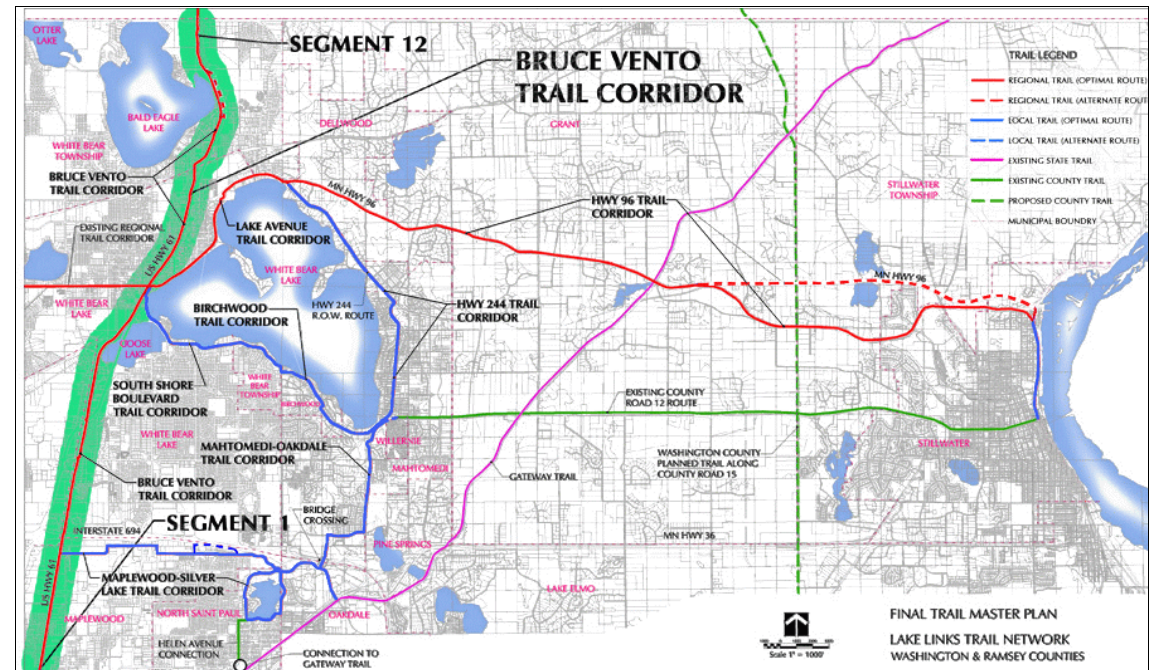
The trail route along this corridor is fairly straightforward, with the trail being located either within the railroad rights-of-way or that of an adjacent road, depending on which is the most cost effective and technically feasible at the time the trail plan is implemented. As a regional level facility, a separated trail with a 12' wide cross-section is recommended to accommodate heavy use and a variety of users, including walkers, bicyclists, and in-line skaters. However, in some situations a narrower trail width might be required where space is too limited. Also, retrofitting the trail into some of the developed areas where space is limited will be a bit more of a challenge, albeit a manageable one. Given the uncertainty of future multi-modal transportation needs along this rail corridor, locating the trail on the edge of the railroad right-of-way or within adjoining roadway rights-of-way is also recommended to reduce the potential for conflicts.

### Overall Trail Values Gained

Given the character of this corridor, along with its interconnection with numerous existing trails and overall continuity, this trail offers very high recreational value and is worthy of being a high implementation priority.

**Total Trail Mileage this Corridor:** 7.3 miles.

### Location Map of Trail Corridor



### Summary of Public Input/Implementation Expectations

Public input into this trail corridor was generally very positive, with most considering it to be of high recreational value. The more difficult challenge lies with impacts to private property on the northern end of the trail where the SOO Line and Burlington Northern rail lines cross each other and near Bald Eagle Lake along Hugo road. In both cases, the main issue is dealing with limited road and railroad rights-of-way, which in turn pose some encroachment issues that will have to be addressed.

As for implementation expectations, the most critical factor is making sure that those that are directly affected by the trail have an opportunity to give input into the design process and have a clear understanding of options available to address their concerns. Also, aesthetic qualities and privacy issues are concerns requiring detailed review with affected property owners.







## Hwy. 96 Trail Corridor Technical Review

### Overall Corridor Description / Character

The Hwy. 96 trail corridor starts at Ramsey County Beach and heads east toward Stillwater. From the beach to the Gateway trail, the trail would stay within the highway right-of-way. Once there, the primary route would shift to the Zephyr Line railroad right-of-way, which is privately owned. Although acquiring the rail corridor is far from certain, that alignment is so compelling that it is shown as the preferred route. Given the uncertainties of acquiring this corridor, Hwy. 96 is shown as the alternative route from the Gateway on into Stillwater. With respect to the highway corridor, the biggest challenge lies with the eclectic right-of-way width and the location of the road within that right-of-way. This is especially the case from Ramsey Beach to about the Grant-Dellwood city line, where the right-of-way is highly variable. Once into Grant, the right-of-way opens up. However, ponds, wetlands, and vegetation along the way will require some creativity to get past. Also note that Hwy. 96 is on a turn-back schedule between the State and Washington County, which is an important factor in the implementation strategy for this trail corridor.

### Trail Route and Design Options and Recommendations

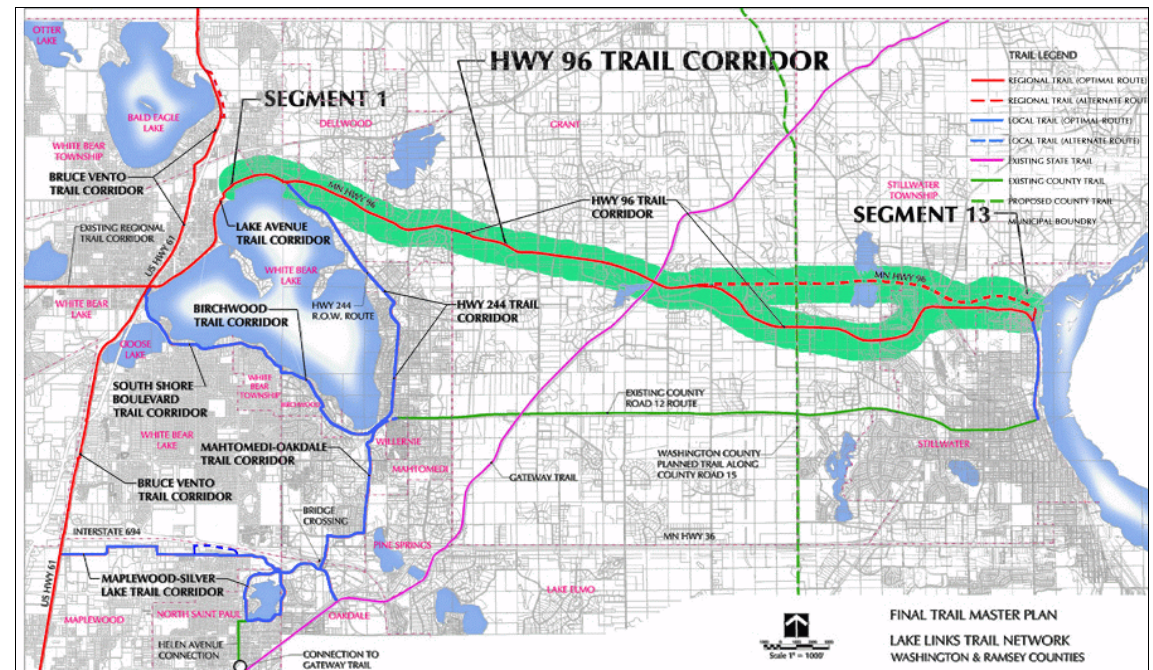
Aside from the issues defined above, the actual trail route along this corridor is fairly straightforward, as defined in the forthcoming pages. As for trail width, a 10' wide trail is recommended for the entire length of the corridor. In fact, a 12' wide trail would be desirable along the Zephyr Line corridor given the setting and potential for heavier use.

### Overall Trail Values Gained

This trail corridor is an important link in the overall Lake Links Network and offers high recreational value. It also would provide a much safer environment for pedestrians and bicyclists than currently exists. The Zephyr Line corridor in particular would be an outstanding recreational trail, assuming that it can be acquired at some point.

**Trail Mileage this Corridor:** 10.3 miles.

### Location Map of Trail Corridor



### Summary of Public Input/Implementation Expectations

Whereas support for the trail along Hwy. 96 through the local communities was gained, even enthusiastically, after much public input, it comes with high expectations and a good faith understanding that implementation will be done following the parameters defined by this master plan. A key part of that understanding is that the implementation process will continue to include public input to address the detailed concerns that adjacent property owners have as they relate to the trail and the road.

While the majority attending the public meeting showed support for the trail, some opposition does remain from those along the north shore of the lake. The most pressing concerns here relate to issues about encroachment into private property and potential for an increase in trespassing. Maintaining access from the highway was also a concern shared by most of the property owners. An issue raised by the City of Grant relates to the need to accommodate horses along the roadways in the Grant area. Also, concern was expressed about who would be responsible for potential increased costs associated with emergency services for incidents happening along the trail. Likewise, operations and maintenance responsibility also needs to be clearly defined prior to development. The CAC was respectful of these perspectives and issues and directed the planning team to address as many of them as possible as part of the master planning process.



## Hwy. 244 Trail Corridor Technical Review

### Overall Corridor Description / Character

The Hwy. 244 trail corridor starts at the intersection of Hwy. 96 and proceeds south to its junction with County Road 12 in downtown Mahtomedi. With the exception of the Briarwood segment, the trail will be located directly adjacent to the east side of the roadway for its entire length. Critical to this trail alignment is the necessity of upgrading the road itself to an urban road section in order to accommodate the trail in an area with limited rights-of-way and where adjacent property owners have expressed concern about encroachment issues, loss of aesthetic qualities, and other direct and indirect impacts to their private properties. In consideration of these issues, the master plan calls for the combined road and trail cross-section to be as narrow as technically feasible to minimize the built footprint and maintain the character, aesthetic qualities, and sense of place that residents hold in very high regard. The character sketches on the following pages define the design parameters discussed with the public and generally define their expectations as to how the upgraded road/trail cross-section will look. Also note that Hwy. 244 is on a turn-back schedule between the State and Washington County, which is an important factor in the implementation strategy for this trail corridor.

### Trail Route and Design Options and Recommendations

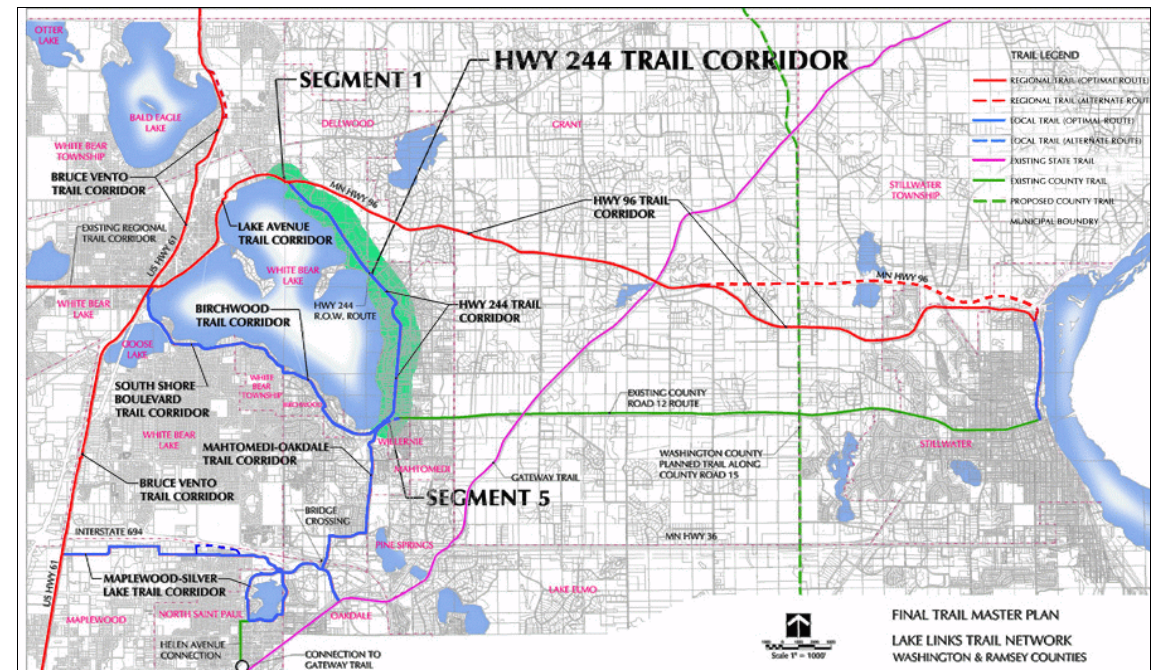
Aside from the issues defined above, the actual trail route along this corridor is fairly straightforward, as defined in the forthcoming pages. It should be noted, however, that a number of other routes through Dellwood and Mahtomedi were also considered (as defined earlier in this section), but ultimately found by the CAC to be less desirable than the Hwy. 244 corridor. Whereas a 10' wide trail would be ideal for the entire length of the corridor, local sentiment in Dellwood and limited space in certain areas suggest that an 8' width may be better suited for the segment from Hwy. 96 down to the District Center.

### Overall Trail Values Gained

This trail corridor is an important link in the overall Lake Links Network and offers high recreational value. It also would provide a much safer environment for pedestrians and bicyclists than currently exists.

**Trail Mileage this Corridor:** 3.5 miles.

### Location Map of Trail Corridor



### Summary of Public Input/Implementation Expectations

Whereas support for the trail along Hwy. 244 through Dellwood and Mahtomedi was ultimately gained, even enthusiastically, after much public input, it comes with high expectations and a good faith understanding that implementation will be done following the parameters defined by this master plan. A key part of that understanding is that the implementation process will continue to include public input to address the detailed concerns that adjacent property owners have as they relate to the trail and the road.

While the majority attending the public meeting showed support for the trail, some opposition does remain for a variety of reasons, most namely the feeling that the trail is being forced upon them, perceived loss of privacy, and concerns about safety of the trail at driveway interfaces. Whereas the opposing view was ultimately held by a minority of those attending the meetings, the CAC was respectful of varying perspectives and directed the planning team to address as many of the issues as possible as part of the master planning process – including on-site reviews with property owners to address individual concerns and follow up on issues such as crime and safety (which are defined in Section II).



## South Shore Trail Corridor Technical Review

### Overall Corridor Description / Character

The South Shore Trail corridor follows South Shore Blvd. from East County Line to Goose Lake area. The road receives fairly heavy traffic and is perceived by residents to be unsafe to walk along. Although there are numerous driveways, vegetation, and other built features adjacent to the road, the right-of way is adequate to accommodate a separated trail under both a one-way and two-way configuration, although the latter would require a wider cross-section than the former. Whereas there is adequate space, adjacent property owners have expressed concerns about encroachment issues, loss of aesthetic qualities, and other direct and indirect impacts to their private properties. Also of importance is maintaining access to lake shore property that lies directly adjacent to the roadway.

### Trail Route and Design Options and Recommendations

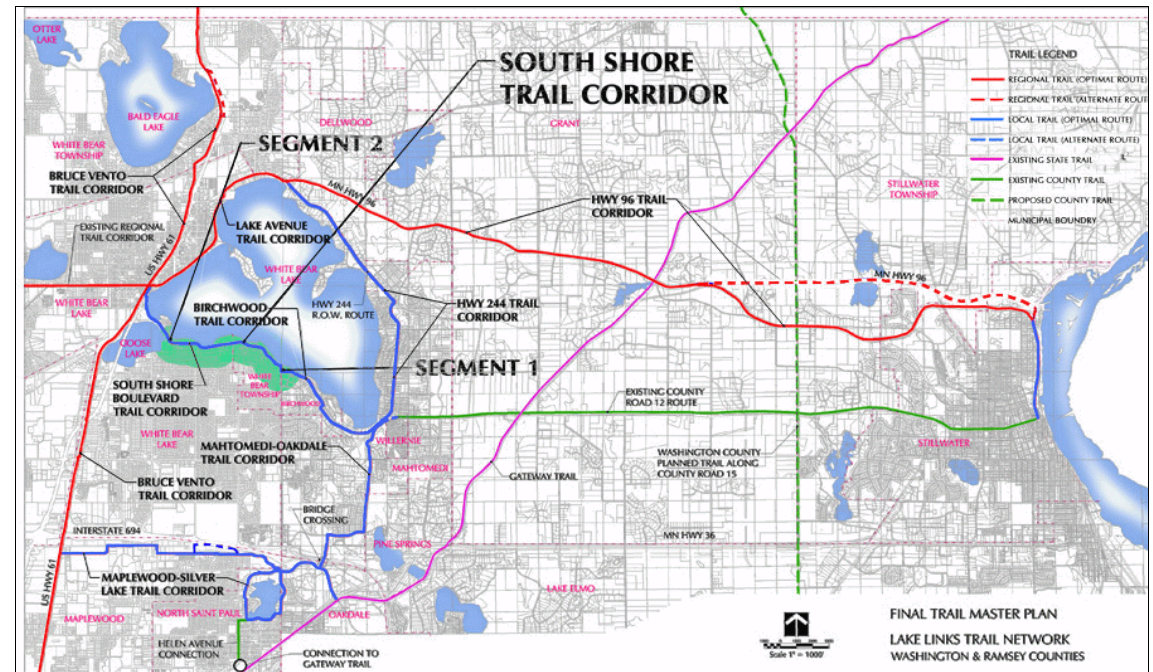
Based on public input, a one-way configuration with a separated trail (similar to Lake Avenue) was the most desired and offers certain advantages from the standpoint of minimizing the road/trail cross-section and creating an appealing parkway-type setting with a boulevard and trees. Whether there are advantages to this configuration from a traffic standpoint is an issue that needs further investigation (see Traffic Impact Assessment latter in this section.) If a one-way configuration is not found to be acceptable from a traffic perspective, a two-way urban section with a separated trail behind the curb would be the second most desirable scenario in that its overall cross-section would be less than that of a rural section (which exists today) with a separated trail. The rural cross-section requires the most space and would likely have the greatest impact on the character of the roadway.

### Overall Trail Values Gained

This trail corridor is an important link in the overall Lake Links Network and vital to making a complete loop around the lake. Equally important, a separated trail along this corridor would offer high recreational value and provide a much safer environment for pedestrians and bicyclists than currently is the case.

**Trail Mileage this Corridor:** 1.5 miles.

### Location Map of Trail Corridor



### Summary of Public Input/Implementation Expectations

Based on public focus groups at the city and township level, there was a strong consensus that a one-way road with a separated trail was the most desired option because it was perceived that it would make South Shore Boulevard much safer at both a pedestrian and vehicular level. Interestingly, this opinion was held by some of those that would be most impacted by the one-way configuration. Second to this approach was going with an urban road section with a separated trail directly adjacent to it. Finally, a rural section with a separated trail is still preferred over the existing condition, but concern about encroachment and direct impacts to adjacent property was much more of an issue.

Whereas public support for the trail along South Shore Boulevard was strong, even enthusiastic, it comes with the good faith understanding that implementation will continue to include public input to address the detailed concerns that adjacent property owners have as they relate to the trail and the road. Also, while the majority attending the public meetings were in support of the trail, given the range of options, additional public input is warranted to allow those not in attendance to voice their concerns and express their opinions, especially about the roadway configuration.





July 13, 2018

Elaine Koutsoukos  
TAB Coordinator  
Transportation Advisory Board  
390 North Roberts St  
St. Paul, MN 55101

RE: 2018 Regional Solicitation for Multi-Use Trail and Bicycle Facilities - Bruce Vento Regional Trail

Dear Ms. Koutsoukos:

Ramsey County Parks and Recreation Department (RPCRD) is excited about the opportunity to submit the 2018 Regional Solicitation Application for funding to extend the Bruce Vento Regional Trail from Buerkle Road to Highway 96 in White Bear Lake. The project is being submitted in the Multi-Use Trails and Bicycle Facilities Category. RPCRD is committed to providing the local match; and operation and maintenance of the Bruce Vento Regional Trail from Buerkle Road to Highway 96 in White Bear Lake. Local match funds are anticipated to be provided by Ramsey County to complete construction in 2021. Ramsey County is in the process of completing final design/construction plans, project memorandum, and supplemental documents. It is anticipated these documents will be complete by the end of 2019 to make this a shovel ready trail project.

This project is the first of two steps to eliminate half of the six-mile trail gap in the regional and national trail system. This will set the stage for future connections north of Highway 96 to County Road J, provide connections to the Highway 96 Regional Trail, Lakes Line Regional Trail, South Shore Lake Trail, provide future connections to the Hardwood Creek Trail in addition, to completing a major gap in the National US Bike Route 41 (USBR 41) for connections north of Ramsey County to the Canadian border, since the Bruce Vento Regional Trail is the designated USBR 41 route through Ramsey County.

Another important aspect for this project is providing critical pedestrian connections and removing significant barriers to the proposed Rush Line Bus Rapid Transit (BRT) between Buerkle Road and Highway 96. Rush Line BRT station stops are planned at Buerkle Road, County Road E and Highway 61, Cedar Avenue and Highway 61, and Marina Triangle and Whitaker Street along Highway 61. The Bruce Vento Trail will provide access to these station stops.

Enclosed are the required materials for the 2016 Regional Solicitation Application. If you have any questions or require additional information please do not hesitate to call me at 651-363-3786 or [scott.yonke@co.ramsey.mn.us](mailto:scott.yonke@co.ramsey.mn.us).

A handwritten signature in black ink, appearing to read "Scott Yonke". The signature is fluid and cursive, with the first name "Scott" and last name "Yonke" clearly distinguishable.

**Scott Yonke, ASLA, PLA** | Director of Planning and Development  
Ramsey County Parks and Recreation Department  
2015 Van Dyke Street  
Maplewood, MN 55109-3796  
651-363-3786, [www.co.ramsey.mn.us](http://www.co.ramsey.mn.us)



RAMSEY COUNTY-WIDE

## Pedestrian & Bicycle Plan

# Executive Summary



## Introduction

For over 10 years, Active Living Ramsey Communities (ALRC), with all of its community partners, has facilitated change to create environments that make it safe and easy for everyone of all ages and abilities to be physically active in their daily routine. Active Living Ramsey Communities encourages healthy lifestyles by bringing people and resources together to build active, bikeable and walkable communities. Their vision and collaborative efforts inform all aspects of this plan and support active transportation in Ramsey County.

This plan is a resource and a framework for development of a connected Ramsey County where communities and residents are engaged in the process of building a great place for walking and bicycling.

This is not a typical plan focused on specific projects for an individual jurisdiction, but rather a set of tools, analyses and actions to engage community members at all levels in supporting a place where people of all ages and abilities can safely and comfortably walk and bicycle.

Active Living Ramsey Communities (ALRC) encourages healthy lifestyles by bringing people and resources together to build active, bikeable and walkable communities that make it safe and convenient for people to integrate physical activity in their daily routine.





## Vision And Goals

### VISION:

Pedestrians and bicyclists move freely on a safe and well integrated system that connects people and places in Ramsey County.

Walking and bicycling is a comfortable and integral part of daily life in Ramsey County for people of all ages and abilities.

### GOAL 1

Healthy and Active Mobility for all

### GOAL 2

A Complete and Connected Multi-Modal Network

### GOAL 3

A Safe Transportation System for Pedestrians and Bicyclists of all Ages and Abilities

### GOAL 4

Equity and Social Justice in Transportation System Development

### GOAL 5

A Coordinated Approach to Filling Gaps in the Pedestrian and Bicycle System

### GOAL 6

A Transportation System that Contributes to Sustainable and Prosperous Communities

A walkable and bikable community is one that people of all ages and abilities are able to enjoy.

All ages means that children as young as 8 can walk and bike independently from their parents. It means that the elderly can get around comfortably without a car. Facility needs vary by age and there is no “one size fits all” solution.

All abilities means that those using mobility devices or those with vision impairments are not faced with barriers. Crossings, intersections and facilities must be designed with users of all abilities in mind.



## Gaps + Barriers Analysis

The Gaps and Barriers Analysis identifies the areas in Ramsey County that are most deficient in walking and bicycling infrastructure and that would benefit the most from investment. Key findings include the following:

- While there is good sidewalk coverage in parts of Ramsey County, such as St. Paul, downtown White Bear Lake and areas of Falcon Heights, other parts of the county have, particularly in lower density residential areas.
- For bicycling, county-wide network connections along local roadways may be considered candidates for speed management. By lowering vehicle speeds on local roads, streets may become lower stress and be considered suitable for bicyclists of all ages and abilities.

## Building A Common Language

### PRIMERS

#### Infrastructure Design

- Discusses the infrastructure needed to support a walkable and bikable community for all ages and abilities. (see example below)

#### Transportation Funding

- An overview of how bike and pedestrian facilities are funded.

#### Legal Primer

- Describes the legal framework for non-motorized transportation at the local, state and federal levels.

#### Community Engagement

- Shares meaningful strategies for engaging with a diverse set of stakeholders in the transportation planning process. The primers are located in Section 3 of the plan.

### THE STATE OF WALKING & BICYCLING ENVIRONMENT

The document is a reference to the current conditions related to walking and biking in Ramsey County and explores how population, land use, safety, and infrastructure work together to influence everyday choices related to transportation. This section is located in Section 2 of the plan.

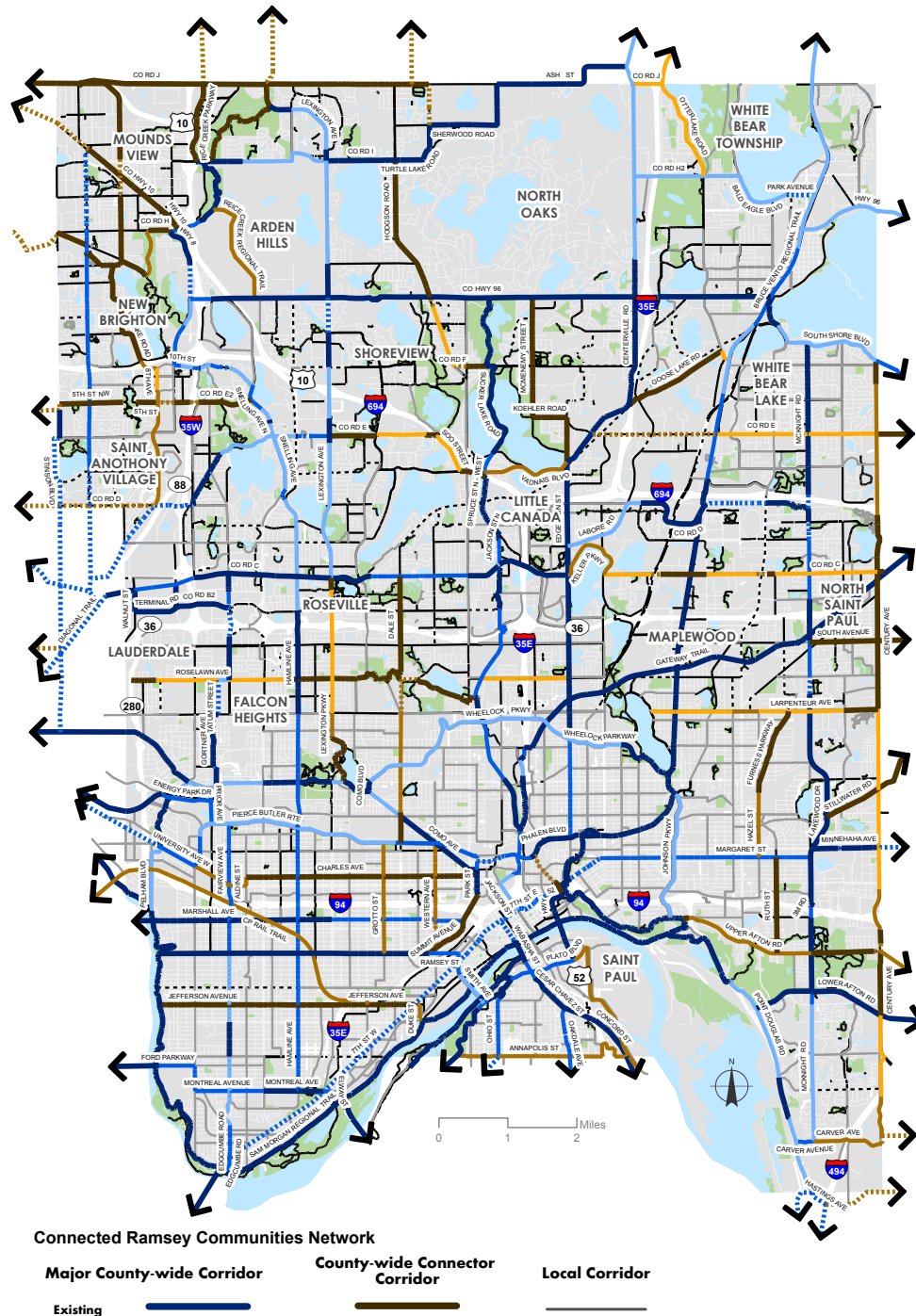




# Connected Ramsey Communities Network

The Connected Ramsey Communities network is a planning framework for the County and local jurisdictions to refer to when planning, prioritizing and designing an active transportation network.

These are the countywide connections that bring people from important place to important place throughout Ramsey County, and when built out to a high quality, will act as a county-wide backbone between communities.





# Implementation

## SIX PRIMARY RECOMMENDATIONS

### Connected Ramsey Communities Network

Through collaboration with Ramsey County stakeholders and implementing agencies, establish and build a connected network of pedestrian and bicycle facilities. The emphasis is on building high quality transportation and recreation facilities.



### All Ages and Abilities Network

Active Living Ramsey Communities will identify specific opportunities to support local communities in developing design guidance that support all members of the community. This will include developing walkable and bikeable communities that offer easier access and connections to transit.



### Performance Monitoring Report

Active Living Ramsey Communities will publish an annual report to help raise the profile of successes and challenges for walking and bicycling in Ramsey County. The report will focus on safety, connectivity, health equity, social and economic development, and the quality of life improved by the county-wide active transportation system.



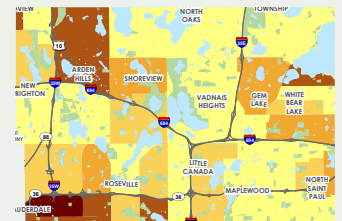
### Annual Performance Evaluation Summit

Facilitated by Active Living Ramsey Communities, this annual forum is an opportunity for communities to evaluate their efforts, share best practices, and collaborate on priorities for the coming year. This annual meeting will serve as an opportunity to identify successes and discuss challenges.



### GIS Clearinghouse

Geographic Information Systems (GIS) is a mapping tool that can represent all kinds of spatial and geographic data. It is used to map, visualize, analyze and interpret data to better understand relationships, patterns and trends.



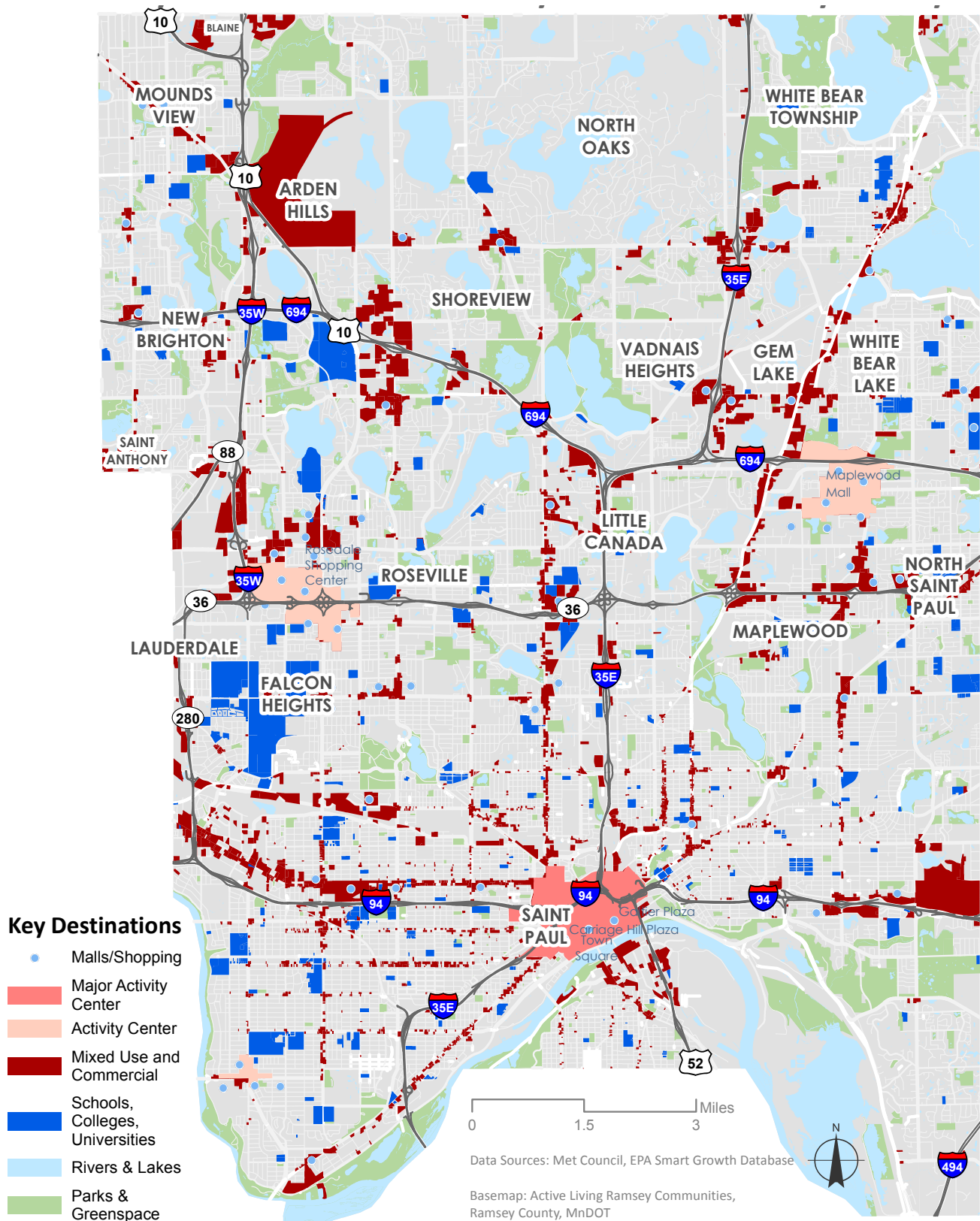
### Coordinated Count Program

A count program documents the numbers of people using bicycle and pedestrian infrastructure, such as sidewalks, trails or particular intersections. Understanding how people are using existing facilities can help to prioritize future projects and help evaluate the success of investments.



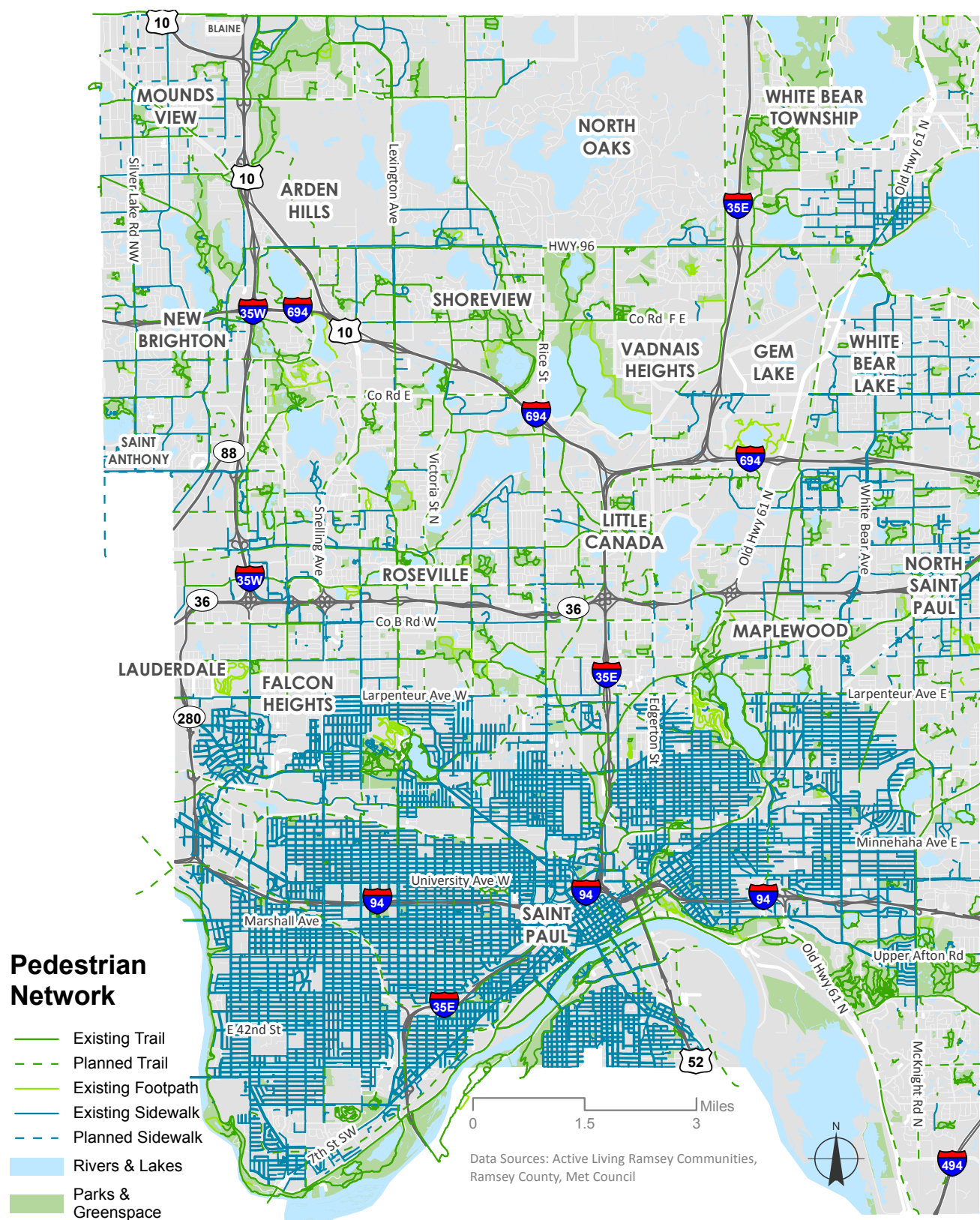


Map 2A-5: Key Destinations and Activity Centers in Ramsey County



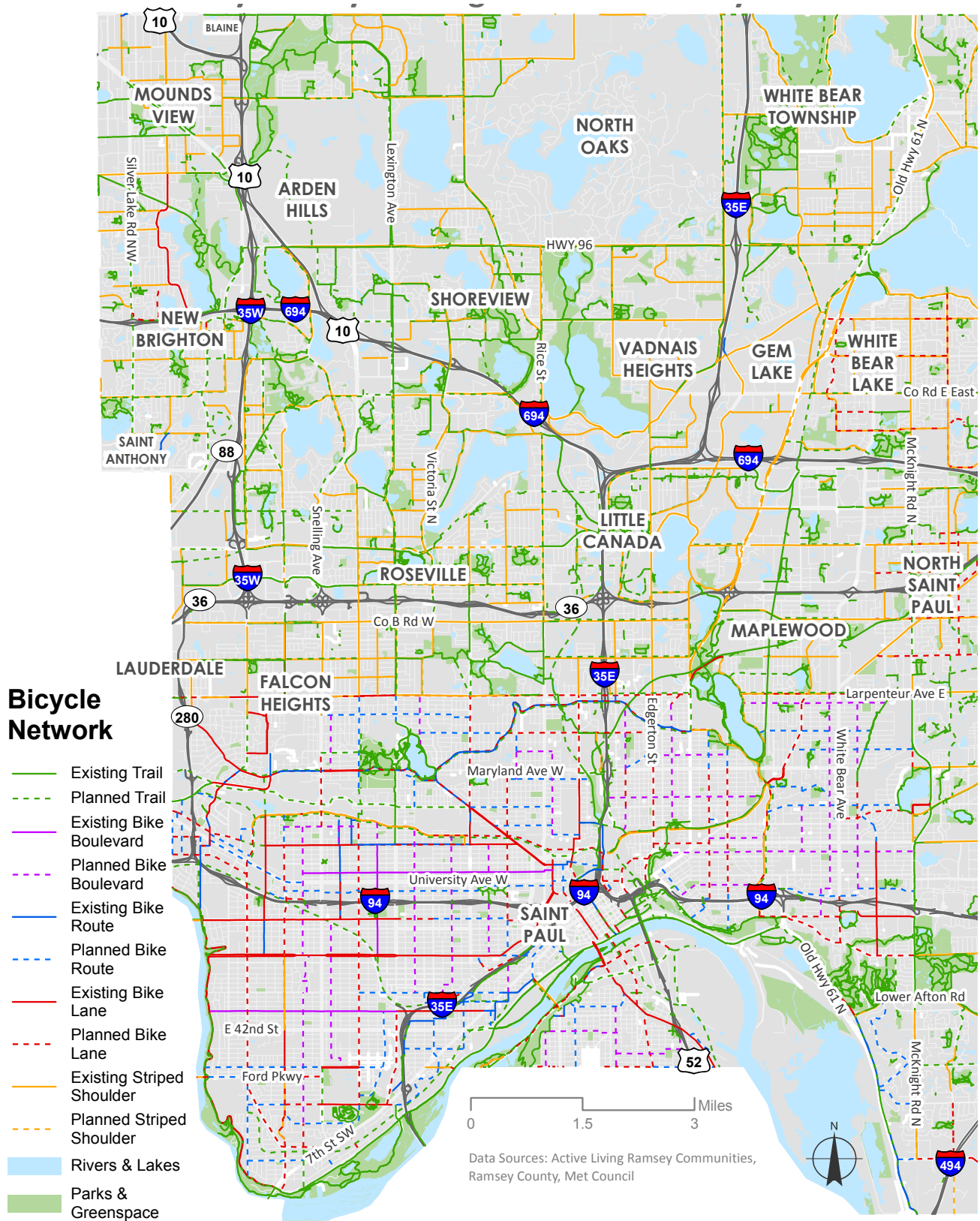


Map 2A-9: Ramsey County Existing and Planned Pedestrian Network



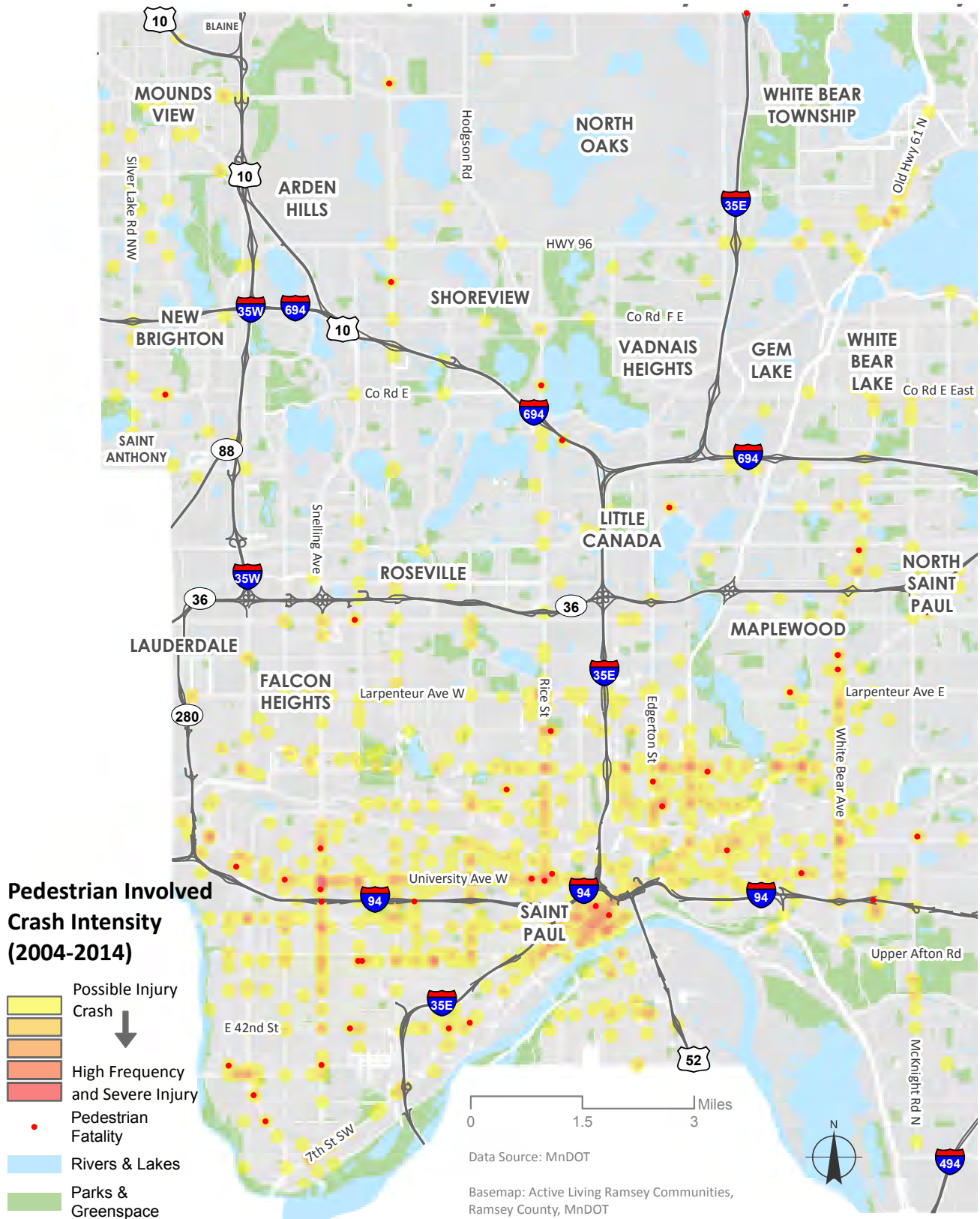


Map 2A-10: Ramsey County Existing and Planned Bicycle Network



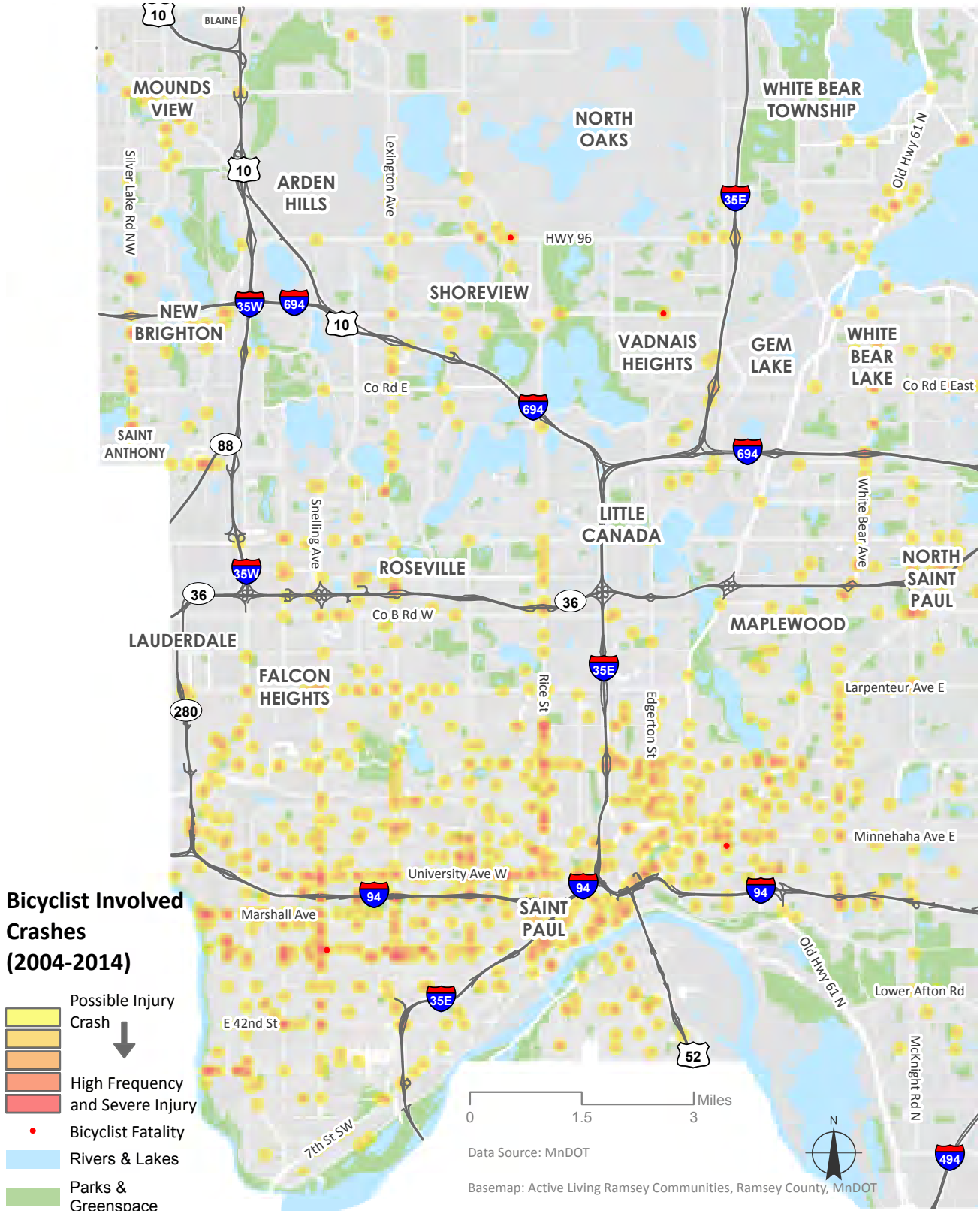


Map 2A-12: Pedestrian Crash Frequency and Severity in Ramsey County



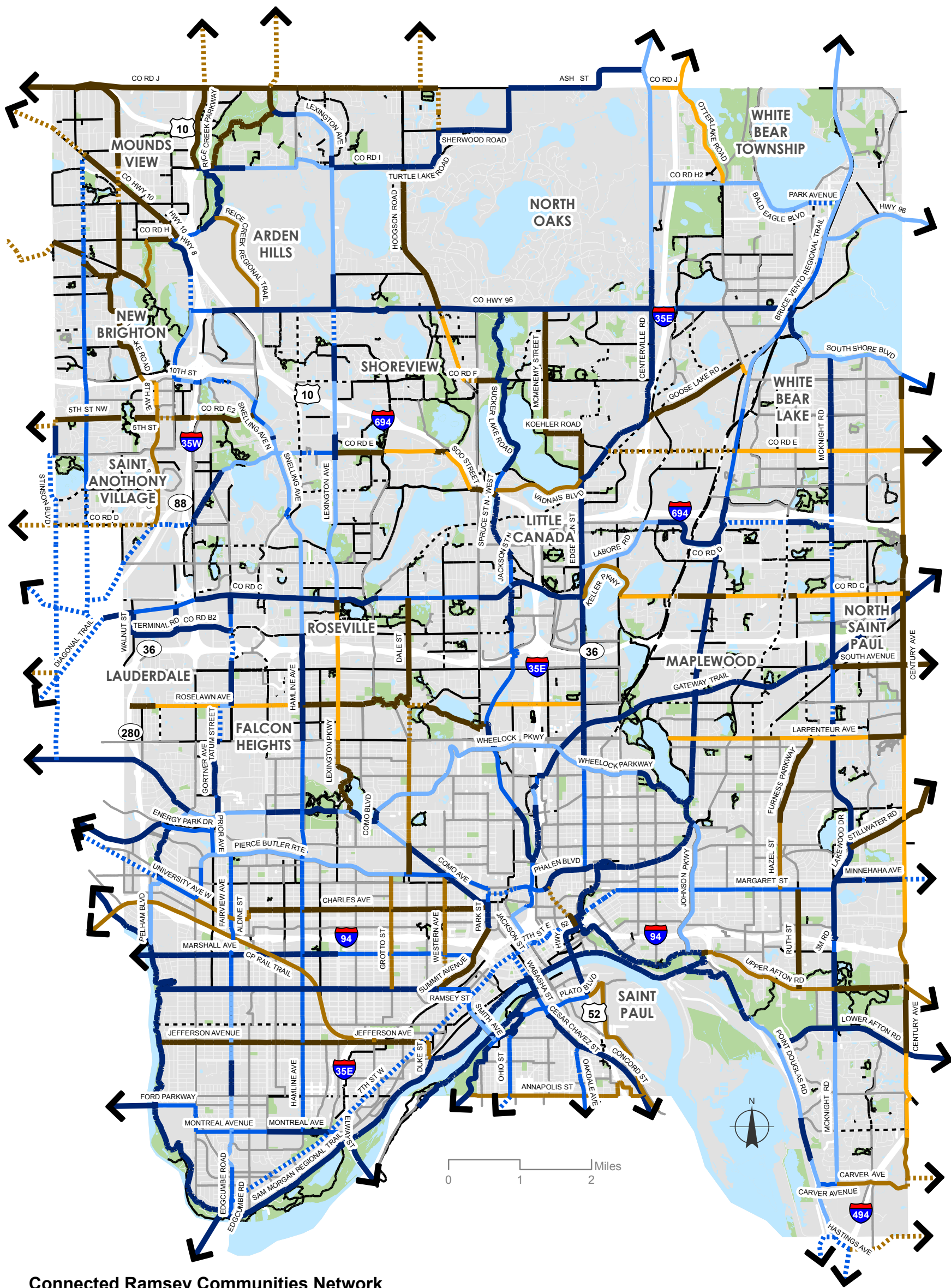


**Map 2A-13: Bicycle Crash Frequency and Severity in Ramsey County**





Map 4-1: The Connected Ramsey Communities Network



Connected Ramsey Communities Network

Major County-wide Corridor		County-wide Connector Corridor		Local Corridor	
Existing					
Planned Upgrade					
Planned					
Identified Need					
Inter-county Connection					



RAMSEY COUNTY-WIDE

# Pedestrian & Bicycle Plan



  
**Active Living**  
Ramsey Communities

A Program of  
 RAMSEY COUNTY



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RAMSEY COUNTY-WIDE

## Pedestrian & Bicycle Plan

# Executive Summary



## Introduction

For over 10 years, Active Living Ramsey Communities (ALRC), with all of its community partners, has facilitated change to create environments that make it safe and easy for everyone of all ages and abilities to be physically active in their daily routine. Active Living Ramsey Communities encourages healthy lifestyles by bringing people and resources together to build active, bikeable and walkable communities. Their vision and collaborative efforts inform all aspects of this plan and support active transportation in Ramsey County.

This plan is a resource and a framework for development of a connected Ramsey County where communities and residents are engaged in the process of building a great place for walking and bicycling.

This is not a typical plan focused on specific projects for an individual jurisdiction, but rather a set of tools, analyses and actions to engage community members at all levels in supporting a place where people of all ages and abilities can safely and comfortably walk and bicycle.

Active Living Ramsey Communities (ALRC) encourages healthy lifestyles by bringing people and resources together to build active, bikeable and walkable communities that make it safe and convenient for people to integrate physical activity in their daily routine.





## Vision And Goals

### VISION:

Pedestrians and bicyclists move freely on a safe and well integrated system that connects people and places in Ramsey County.

Walking and bicycling is a comfortable and integral part of daily life in Ramsey County for people of all ages and abilities.

### GOAL 1

Healthy and Active Mobility for all

### GOAL 2

A Complete and Connected Multi-Modal Network

### GOAL 3

A Safe Transportation System for Pedestrians and Bicyclists of all Ages and Abilities

### GOAL 4

Equity and Social Justice in Transportation System Development

### GOAL 5

A Coordinated Approach to Filling Gaps in the Pedestrian and Bicycle System

### GOAL 6

A Transportation System that Contributes to Sustainable and Prosperous Communities

A walkable and bikable community is one that people of all ages and abilities are able to enjoy.

All ages means that children as young as 8 can walk and bike independently from their parents. It means that the elderly can get around comfortably without a car. Facility needs vary by age and there is no “one size fits all” solution.

All abilities means that those using mobility devices or those with vision impairments are not faced with barriers. Crossings, intersections and facilities must be designed with users of all abilities in mind.



## Gaps + Barriers Analysis

The Gaps and Barriers Analysis identifies the areas in Ramsey County that are most deficient in walking and bicycling infrastructure and that would benefit the most from investment. Key findings include the following:

- While there is good sidewalk coverage in parts of Ramsey County, such as St. Paul, downtown White Bear Lake and areas of Falcon Heights, other parts of the county have, particularly in lower density residential areas.
- For bicycling, county-wide network connections along local roadways may be considered candidates for speed management. By lowering vehicle speeds on local roads, streets may become lower stress and be considered suitable for bicyclists of all ages and abilities.

## Building A Common Language

### PRIMERS

#### Infrastructure Design

- Discusses the infrastructure needed to support a walkable and bikable community for all ages and abilities. (see example below)

#### Transportation Funding

- An overview of how bike and pedestrian facilities are funded.

#### Legal Primer

- Describes the legal framework for non-motorized transportation at the local, state and federal levels.

#### Community Engagement

- Shares meaningful strategies for engaging with a diverse set of stakeholders in the transportation planning process. The primers are located in Section 3 of the plan.

### THE STATE OF WALKING & BICYCLING ENVIRONMENT

The document is a reference to the current conditions related to walking and biking in Ramsey County and explores how population, land use, safety, and infrastructure work together to influence everyday choices related to transportation. This section is located in Section 2 of the plan.

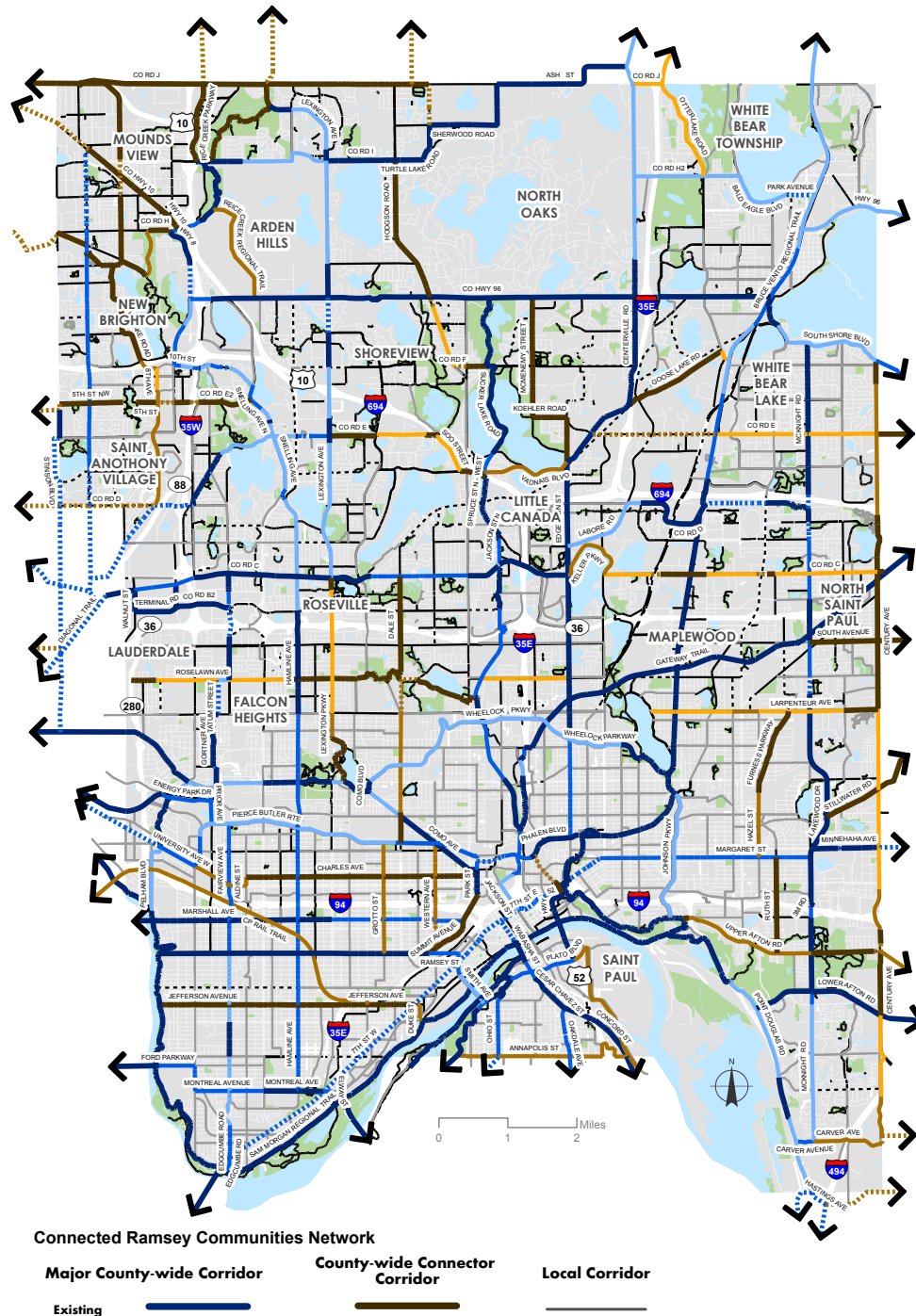




# Connected Ramsey Communities Network

The Connected Ramsey Communities network is a planning framework for the County and local jurisdictions to refer to when planning, prioritizing and designing an active transportation network.

These are the countywide connections that bring people from important place to important place throughout Ramsey County, and when built out to a high quality, will act as a county-wide backbone between communities.





# Implementation

## SIX PRIMARY RECOMMENDATIONS

### Connected Ramsey Communities Network

Through collaboration with Ramsey County stakeholders and implementing agencies, establish and build a connected network of pedestrian and bicycle facilities. The emphasis is on building high quality transportation and recreation facilities.



### All Ages and Abilities Network

Active Living Ramsey Communities will identify specific opportunities to support local communities in developing design guidance that support all members of the community. This will include developing walkable and bikeable communities that offer easier access and connections to transit.



### Performance Monitoring Report

Active Living Ramsey Communities will publish an annual report to help raise the profile of successes and challenges for walking and bicycling in Ramsey County. The report will focus on safety, connectivity, health equity, social and economic development, and the quality of life improved by the county-wide active transportation system.



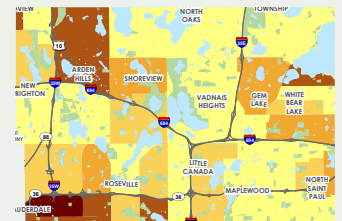
### Annual Performance Evaluation Summit

Facilitated by Active Living Ramsey Communities, this annual forum is an opportunity for communities to evaluate their efforts, share best practices, and collaborate on priorities for the coming year. This annual meeting will serve as an opportunity to identify successes and discuss challenges.



### GIS Clearinghouse

Geographic Information Systems (GIS) is a mapping tool that can represent all kinds of spatial and geographic data. It is used to map, visualize, analyze and interpret data to better understand relationships, patterns and trends.



### Coordinated Count Program

A count program documents the numbers of people using bicycle and pedestrian infrastructure, such as sidewalks, trails or particular intersections. Understanding how people are using existing facilities can help to prioritize future projects and help evaluate the success of investments.













RAMSEY COUNTY-WIDE

## Pedestrian & Bicycle Plan

# Purpose, Vision & Goals



## Introduction

For over 10 years, Active Living Ramsey Communities, with all of its community partners, has facilitated change to create environments that make it safe and easy for people of all ages and abilities to be physically active in their daily routine. Active Living Ramsey Communities encourages healthy lifestyles by bringing people and resources together to build active, bikeable and walkable communities. Their vision and collaborative efforts inform all aspects of this plan and support active transportation in Ramsey County.

This plan is a resource and a framework for development of a connected Ramsey County where communities and residents are engaged in the process of building a great place for walking and bicycling.

This is not a typical plan focused on specific projects for an individual jurisdiction, but rather a set of tools, analyses and actions to engage community members at all levels in supporting a place where people of all ages and abilities can safely and comfortably walk and bicycle.

## Active Living Ramsey Communities Background

State, county, municipality, school, business, health care and nonprofit representatives, community groups and local residents came together to create Active Living Ramsey Communities in December 2004. Community engagement formed the core of the organization's mission. The organization promotes and creates environments that make it safe and easy for everyone to integrate physical activity into their daily routine.

The graphic below illustrates many highlights of Active Living Ramsey Communities accomplishments over the past ten years.





## ACTIVE LIVING RAMSEY COMMUNITIES HIGHLIGHTS INCLUDE:

- Engaging the community to improve health by collaborating with nearly 19 Ramsey County municipalities, leaders, practitioners and residents to create and promote environments to make it safe and easy for everyone to be physically active in their daily routine.
- Developing the Go Ramsey mapping portal for residents and visitors to find all the green spaces and fun places to be active in Ramsey County. <http://goramsey.co.ramsey.mn.us/Pages/default.aspx>
- Building pathways to health through the Be Active! Be Green! Recycling Bench Initiative. <https://parks.co.ramsey.mn.us/alrc/Pages/benches.aspx>
- Incorporating health and active living into County and municipal comprehensive plans. [https://parks.co.ramsey.mn.us/Documents/working\\_with.pdf](https://parks.co.ramsey.mn.us/Documents/working_with.pdf)
- Developing comprehensive, county-wide Geographic Information Systems (GIS) data layers and maps of all the pedestrian and bicycle facilities and connectivity gaps. <https://parks.co.ramsey.mn.us/alrc/Pages/gapmaps.aspx>
- Creating a Ramsey County parks and trails wayfinding master plan. <https://parks.co.ramsey.mn.us/alrc/Documents/Ramsey%20County%20Wayfinding%20Masterplan.pdf>
- Facilitating the Active Living Ramsey Communities Biking and Walking Team which works to create a safe, efficient and accessible recreation and transportation system for pedestrians, bicyclists and transit users.
- Implementing an Active Living policy initiative in Ramsey County departments which resulted in bike parking, Sheriff's Cross-fit training program, library bike lock check out and the Ramsey County Employees Committed to Health Steering Committee (REACH).
- Sponsoring the Active Minds! Active Lives! summer reading program at Ramsey County libraries.
- Developing a Bicycle and Pedestrian System Gap Analysis to create a safe, efficient and accessible biking and walking system.
- Conducting a community survey on physical activities, safety issues, city-suburb differences, walking and bicycling.
  - Initial Findings, Fall 2005  
[https://parks.co.ramsey.mn.us/Documents/2005\\_residential\\_survey\\_initial.pdf](https://parks.co.ramsey.mn.us/Documents/2005_residential_survey_initial.pdf)
  - Full Report, Spring 2006  
[https://parks.co.ramsey.mn.us/Documents/2005\\_residential\\_survey\\_complete.pdf](https://parks.co.ramsey.mn.us/Documents/2005_residential_survey_complete.pdf)
- Winning awards from the Association of Minnesota Counties, Blue Cross Blue Shield, Minnesota Recreation and Parks Association and League of American Bicyclists.



## Active Living Ramsey Communities Identified Four Overlapping Strategies:

### TRANSFORM SYSTEMS

Creating change in organizations and advancing broad efforts.

### IDENTIFY POLICY

Effecting change through identifying evidence based internal and external policies and practices.

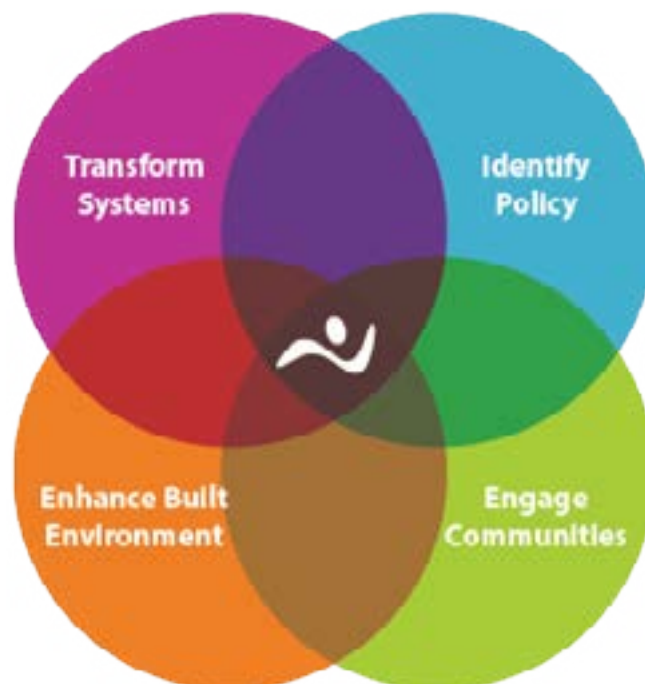
### ENHANCE BUILT ENVIRONMENT

Through smart decisions about transportation infrastructure, land use, zoning and community design.

### ENGAGE COMMUNITIES

Involving leaders, practitioners and residents in improving health by creating and promoting environments, so it is safe and easy for everyone to be physically active in their daily routine.

Projects in the areas of overlap across these strategies have the highest potential for impact and will help advance the mission in multiple ways. For example, developing this plan to support cities in implementing walking and cycling infrastructure and programs lies directly in the overlap area of all four strategies. This effort influences each strategy directly and clearly.





## Planning Process

The purpose of this plan is to develop a county-wide resource that integrates with Ramsey County municipalities to provide a seamless transition of pedestrian and bicycle facilities across the communities.

Active Living Ramsey Communities recognizes that disparities exist in how its residents access and use transportation and recreation resources. Recommendations in this plan support the elimination of these disparities by focusing additional attention toward improving conditions for walking and biking in communities experiencing disparities.

The tools and resources provided in this plan were developed through a collaborative process. The collaborative activities included public outreach and engagement, involvement of two advisory committees, coordination with local groups and agencies and technical analysis. The analyses and discussions take a county-wide view and envision a web of communities fully connected with safe and comfortable facilities for pedestrians and bicyclists throughout the county.

## STAKEHOLDER ADVISORY TEAMS

Active Living Ramsey Communities enlisted its partners aligned with the overall mission, those with a key stake in or responsibility for implementation of pedestrian and bicycle facilities and programs as well as community members who are impacted by safe, efficient and accessible walking and biking facilities. Two advisory committees were engaged throughout the planning process and are described below.

### PROJECT ADVISORY TEAM

The Project Advisory Team included community advocates, agency and community group representatives and County staff. This team advised the planning team on process and methods and served as liaisons to their representative groups, sharing information about the plan.

### SYSTEM ADVISORY TEAM

The System Advisory Team included representatives from municipalities and implementation partners throughout the county, with representatives focused on community and economic development, parks and recreation and public works. This team provided peer review on strategies and analysis.



# Purpose Of Creating Vibrant, Livable, Walkable & Bikeable Communities

A walkable and bikeable community is one where people walk and ride bicycles, because it is a convenient, fun, safe and healthy choice. It is a community in which people of all ages and abilities walk and bicycle in their daily routine for many types of trips. This plan provides a framework for Ramsey County communities to come together to create vibrant, livable, walkable and bikeable neighborhoods.

There is tremendous opportunity to increase physical activity in our daily routine through recreation and active transportation like walking, biking and using transit. A connected network for walking and bicycling can help support health and prosperity for all people in Ramsey County.

## Improve The Overall Quality Of Life For All

*by creating a community where it is easy to walk and bike, engage in physical activity, access resources, enjoy nature and interact with others.*



*Studies show that walkable neighborhoods “foster greater social cohesion and a sense of community,” than auto-oriented neighborhoods.<sup>1</sup>*



**40%**  
*of Minnesotans do not drive.<sup>2</sup>*

## Increase Mobility For All People

*by considering the transportation needs of people of all ages, abilities and preferences.*

## Increase Social Interaction & Physical Movement In Public Spaces

*which can support improved health for Ramsey County community members.*



*Currently, only*

**44%**

*of Ramsey County residents report engaging in any physical activity.<sup>3</sup>*



*According to a recent survey,*

**86%**

*of Millennials want to live in a city that offers opportunities to live and work without relying on a car.<sup>4</sup>*

## Foster Economic Prosperity & Growth

*by attracting a diverse and educated workforce and creating jobs and economic development that all community members will benefit from.*



## Increase Opportunities For Active Transportation

*by creating safe, convenient and enjoyable places for walking and biking. This includes increasing connections to public transportation.*



*In Ramsey County,*

**9%**

*of adults bike or walk to work.<sup>5</sup>*

*While only 9% of all trips are made by walking and biking nationally,*

**13%**

*of all vehicle crash deaths are cyclists and pedestrians.<sup>6</sup>*



## Increase Bicycle & Pedestrian Safety

*through the design and implementation of safe and convenient active transportation corridors and crossing locations. This includes educating all road users on how to act safely and responsibly.*

## Improve Community & Individual Health

*by creating a place with increased opportunities to engage in healthy activities that reduce the burden of chronic disease and increase positive health outcomes for everyone in Ramsey County.*

*Residents in a  
HIGHLY WALKABLE NEIGHBORHOOD  
complete about*



**70**

**MORE  
MINUTES  
PER WEEK**

*of moderate & vigorous physical activity than residents in low-walkability neighborhoods.<sup>7</sup>*

*Every*

**10**

**MILE  
BIKE TRIP**



*saves*

**1/2**

**GALLON  
OF GAS**

*Reducing 10 miles of driving every week would eliminate about 500 pounds of carbon dioxide emissions a year.<sup>8</sup>*

## Improve The Health Of The Natural Environment

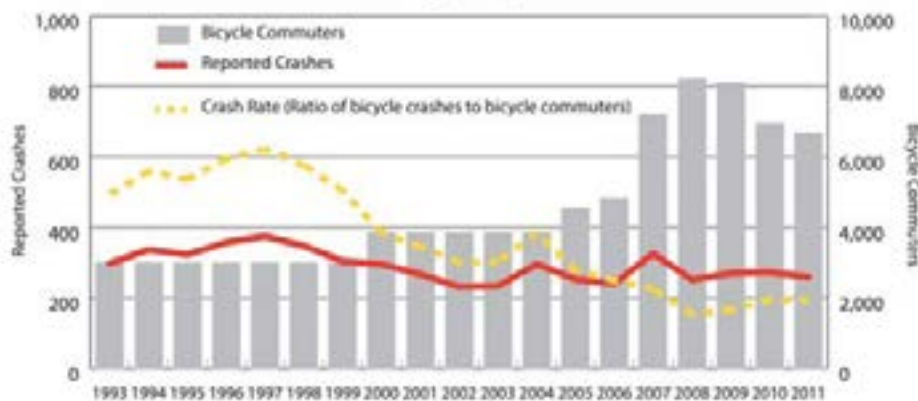
*and reduce greenhouse gas emissions from the transportation system by encouraging the use of energy-efficient, non-polluting and healthy forms of transportation.*



## The Vision For Ramsey County

Communities within Ramsey County are not alone in the effort to become walkable and bikeable places. Other communities have achieved success in transforming from auto-oriented places into places where walking and biking are safe and normal daily activities. Cities like neighboring Minneapolis and Portland, Oregon have seen a large increase in the cycling mode share, while experiencing a decrease in crash rates.

### Bicycle Ridership Increase and Crash Rate Decrease in Minneapolis, MN



## CREATING WALKABLE & BIKEABLE PLACES

Ramsey County can look to other communities as a precedent for creating walkable and bikeable places. As seen in the US and worldwide, there are several important components that all successful walkable and bikeable cities share:

- Dedicated infrastructure for biking and walking, including on-street bike lanes, physically separated bike lanes, sidewalks, trails and wayfinding systems.
- A connected system that creates access to key destinations and public transportation.
- Fun events that create opportunities to get out and ride or walk, make social connections and get familiarized with existing infrastructure.



## Minneapolis, MN



- As part of the 2005 federal transportation funding bill, Minneapolis and the surrounding area received \$24 million to participate in the Non-motorized Transportation Pilot Program to fund local bicycle and pedestrian investments.
- While cycling rates have increased, the number of bicycle involved crashes has stayed the roughly the same since 1993, resulting in a decreased crash rate.
- Extensive investment in bicycle networks, in particular, the off street path system
- 4.1% of commuters bike to work, six times the national average of 0.6% .
- In some neighborhoods, over 12% of commuters bike to work.

## Portland, OR



- Bicycle ridership rates have tripled since 2001.
- While cycling rates have increased, the number of bicycle involved crashes has stayed the same since 1995, resulting in a decreased crash rate.
- Extensive investment in bicycle networks, including bike boulevards and on-street bike lanes
- The country's first bike/pedestrian/transit only bridge - no cars, Tilikum Crossing, which opened in September 2015
- 6% of commuters bike to work, about 10 times the national average.
- In some neighborhoods, over 20% of commuters bike to work.



## *Boulder, CO*



- Installed more than 300 miles of dedicated bikeways
- Consistent, long-term community efforts and urban planning
- Designated Gold-Level Walk Friendly Community
- Pedestrian-only Pearl Street Mall attracts residents and tourism.
- 10% of commuters walk to work.
- Comprehensive transit system with 90% of bus stops accessible by wheelchair
- 78 bicycle and pedestrian underpasses to create a more connected network.

## *Houten, The Netherlands*



- Suburban town of about 49,000 people
- 26% of all commuter trips are taken by bike.
- Lowest bike fatality rate in the world, 5 times less than in the U.S.
- Almost every major street features safe and protected bicycle facilities.
- Bike facilities include separated bike lanes, bike signals and bike highways.



## Vision And Goals

### VISION:

PEDESTRIANS AND BICYCLISTS MOVE FREELY ON A SAFE AND WELL INTEGRATED SYSTEM THAT CONNECTS PEOPLE AND PLACES IN RAMSEY COUNTY.

WALKING AND BICYCLING IS A COMFORTABLE AND INTEGRAL PART OF DAILY LIFE IN RAMSEY COUNTY FOR PEOPLE OF ALL AGES AND ABILITIES.

Turning the vision into action can be simplified into a process of establishing clear goals, identifying key objectives and tracking measurable benchmarks to keep on the right track.

GOALS	The goals provide guidance for achieving the vision.
OBJECTIVES	Objectives achieve and measure progress toward realizing each goal.
PERFORMANCE MEASURES	Potential measurable targets describe progress and performance towards plan implementation.

### BUILDING ON 10 YEARS OF ACTIVE LIVING RAMSEY COMMUNITIES

Built on 10 years of history, engagement and collaboration, the goals and objectives on the next page offer communities in Ramsey County a starting point for framing their local efforts to implement plans, improve walking and biking conditions and collectively develop a world class, county-wide walking and biking system.



## GOAL: HEALTHY AND ACTIVE MOBILITY FOR ALL

Increased walking and bicycling has the potential to increase physical activity levels and improve health and quality of life for people in Ramsey County.

Objectives:

- Increase walking and bicycling for short trips as part of people's daily routine
- Increase the number of trips made by walking and bicycling for recreation and transportation in the county.
- Improve connectivity, quality and reliability of pedestrian and bicycling facilities
- Develop locally-oriented design guidelines for the transportation system that support safety and mobility for the most vulnerable users
- Improve opportunities for people to commute to work and school by walking and bicycling

## GOAL: A COMPLETE AND CONNECTED MULTI-MODAL NETWORK

In order for a pedestrian and bicycle system to be heavily used, it must be connected and get people conveniently to their destinations: work, shopping, school, parks and transit stations.

Objectives:

- Build and enhance pedestrian and bicycle connections to transit
- Support development of links between communities to create a complete network
- Coordinate with transit and leverage transit lines and stops
- Improve system efficiency through connected networks for all modes
- Employ best practices and context sensitivity to design bicycling and walking facilities for as many people as possible

## GOAL: A SAFE TRANSPORTATION SYSTEM FOR PEDESTRIANS AND BICYCLISTS OF ALL AGES AND ABILITIES

Bicyclists and pedestrians are particularly vulnerable users of the transportation system. Improving facilities and design standards can enhance safety and increase predictability, not only for pedestrians and people riding bicycles, but also for transit users and drivers of cars and trucks.



Objectives:

- Reduce the number and severity of crashes involving bicyclists and pedestrians

## GOAL: EQUITY AND SOCIAL JUSTICE IN TRANSPORTATION SYSTEM DEVELOPMENT

Objectives:

- Comply with civil rights laws for all transportation projects
- Support inclusive public participation for transportation system and project planning
- Incorporate an equity framework in transportation policy and project implementation in the County
- Engage vulnerable communities in discussions about walking and bicycling and their transportation needs

## GOAL: A COORDINATED APPROACH TO FILLING GAPS IN THE PEDESTRIAN AND BICYCLE SYSTEM

Objectives:

- Create a shared understanding and common language about pedestrian and bicycle planning issues
- Engage community leaders, practitioners and residents to contribute, review, buy into and help implement the pedestrian and bicycle system plan, especially those who live in underrepresented and underserved communities
- Improve coordination between communities in support of bicycling and walking
- Improve coordination and communication among responsible governmental units, as well as with the public
- Create aspirational vision for walking and cycling among the general public

## GOAL: A TRANSPORTATION SYSTEM THAT CONTRIBUTES TO SUSTAINABLE AND PROSPEROUS COMMUNITIES

Objectives:

- Create educational resources on bicycle and pedestrian benefits, laws, definitions and best practices
- Support transportation that responds to disparities and helps to close the opportunity gap



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6. B.E. Saelens et al., "Neighborhood Based Differences in Physical Activity: An Environmental Scale Evaluation." *Am. J. PH.* 93 (2003):1552-1558
7. University of Michigan. Green Facts.  
<http://hr.umich.edu/mhealthy/programs/activity/pdf/green-facts.pdf>











RAMSEY COUNTY-WIDE

## Pedestrian & Bicycle Plan

# State of Walking & Biking Environment



# State of Walking and Biking

The following report serves as a reference to the current conditions related to walking and biking in Ramsey County. Population, land use, safety and infrastructure work together to influence everyday choices related to transportation. While many things influence our travel choices, some factors can be adjusted through public policy, engineering and community engagement to better support safe and comfortable walking and bicycling.



## Planning Context

State, county and local planning and policy documents support the Ramsey Communities Countywide Pedestrian and Bicycle Plan. Some documents provide a policy basis for the plan, while others provide specific design and safety objectives that support the plan goals and objectives.

The targeted plan review focused on policy support, performance evaluation and benchmarking to understand and track progress toward community goals. The following plans are included in the review:

### LOCAL MUNICIPAL PLANS

[City of Maplewood Living Streets Policy](#)  
[Country Drive Off-Street Walk Feasibility Study](#)  
[Lauderdale Parks and Open Space Plan](#)  
[Maplewood Parks, Trails and Open Space Plan](#)  
[North St. Paul Living Streets Plan](#)  
[Roseville Pathway Master Plan](#)  
[St Paul Bicycle Plan](#)  
[St Paul Street Design Manual](#)  
[St. Paul Great River Passage Master Plan](#)  
[White Bear Lake Parks Trails and Open Space Plan](#)

### CORRIDOR PLANS AND REPORTS

I-694 Crossing Study\*  
[Mississippi National River and Recreation Area  
Alternative Transportation Implementation Plan](#)  
[Snelling Avenue Multi-Modal Transportation Plan](#)

### HEALTH IMPACT ASSESSMENTS

[Arden Hills Healthy City Planning Workshop](#)  
[Gateway Corridor Health Impact Assessment\\*](#)  
[Making Strides: Last Mile to the Green Line](#)

### TRANSIT PLANS

[Gateway Corridor Alternatives Analysis Study](#)  
[Northeast Diagonal Land Use and Transit Study](#)  
[Riverview Corridor Pre-Project Development Study](#)  
Rush Line Transit Study\*

### RAMSEY COUNTY PLANS

[Ramsey County Parks and Recreation System Plan \(Including the  
Regional Park Master Plan and Regional Trail Master Plan\)](#)  
[Ramsey County Parks and Recreation Wayfinding Master Plan](#)

### REGIONAL PLANS

[2040 Regional Parks Policy Plan](#)  
[Bicycle and Pedestrian Connections to Transit Infrastructure  
Study](#)  
[Lake Links Regional Trail Plan](#)  
[Met Council Regional Bicycle System Study](#)  
[Met Council Choice, Place and Opportunity: An Equity  
Assessment of the Twin Cities Region](#)  
[MetCouncil 2040 Transportation Policy Plan](#)

### STATEWIDE PLANS AND REPORTS

I-35E MnPASS\*  
[Minnesota Towards Zero Deaths Initiative](#)  
[MnDOT Complete Streets Plan, Policy, and Tech Memo](#)  
MnDOT Ramsey County Pedestrian Crash Study\*  
MnDOT Statewide Bicycle Plan and Policy Plan\*  
[Statewide Multimodal Transportation Plan Bicycle and  
Pedestrian Connections to Transit Infrastructure Study](#)  
[Ramsey County Pedestrian Facility and Serious Injury Study](#)

\*Reports marked with an asterisk were under development during the creation of the Ramsey Communities Pedestrian and Bicycle Plan. Where possible and appropriate, the project team referred to available draft project materials in these cases.



## Subset of Planning Documents Informing the Ramsey Communities' Pedestrian and Bicycle Plan

### Ramsey County Plans



Ramsey County  
*Parks and Recreation  
System Plan*  
2006



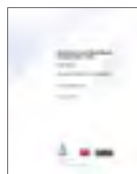
Ramsey County  
*Ramsey County Wayfinding  
Master Plan*  
2011

### Local Community Plans

★ **Local Community Comprehensive Plans** with trails, pedestrian, or bicycle elements.



### Corridor Plans



MnDOT  
*Snelling Avenue Multimodal  
Transportation Plan*  
2013



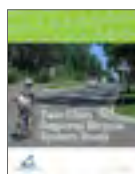
District Council  
Collaborative  
*Last Mile to the  
Green Line*  
2014



National Park Service  
*Mississippi National River and Recreation  
Area Alternative  
Transportation Plan*  
2013



### State and Regional Plans



Met Council  
*Twin Cities Regional Bicycle  
System Study*  
2014



Met Council  
*2040 Regional Parks  
Policy Plan*  
2015



Metropolitan Transit  
*Bicycle and Pedestrian  
Connections to Transit  
Infrastructure Study*  
2009



MnDOT  
*Statewide Multimodal  
Transportation Plan*  
2012



MnDOT  
*Complete Streets Technical  
Memorandum: Complete Streets  
Guidance and Procedures*  
2014



## Our Unique Opportunities

The communities of Ramsey County have a hidden, untapped potential for establishing themselves as premier walking and biking communities. The population and employment density, geographic size, and tight-knit community centers, connected with St Paul as a strong regional destination offer a recipe for lifestyles compatible with active transportation. With a length of approximately 16 miles and width of 12 miles, most activity centers are accessible to residents from all parts of the County.

### The Hidden Potential

Walking and biking can be easy everyday means of traveling around the community. The average walking speed is three miles per hour, which lets people travel to the store, park or community destination a mile away in under 20 minutes.

Bicyclists can extend that range and go farther and faster, while still benefiting from increased activity. Most people, regardless of age, can ride at nine miles per hour. In 20 minutes, bicyclists can travel three miles. That is almost one third of the way across Ramsey County.

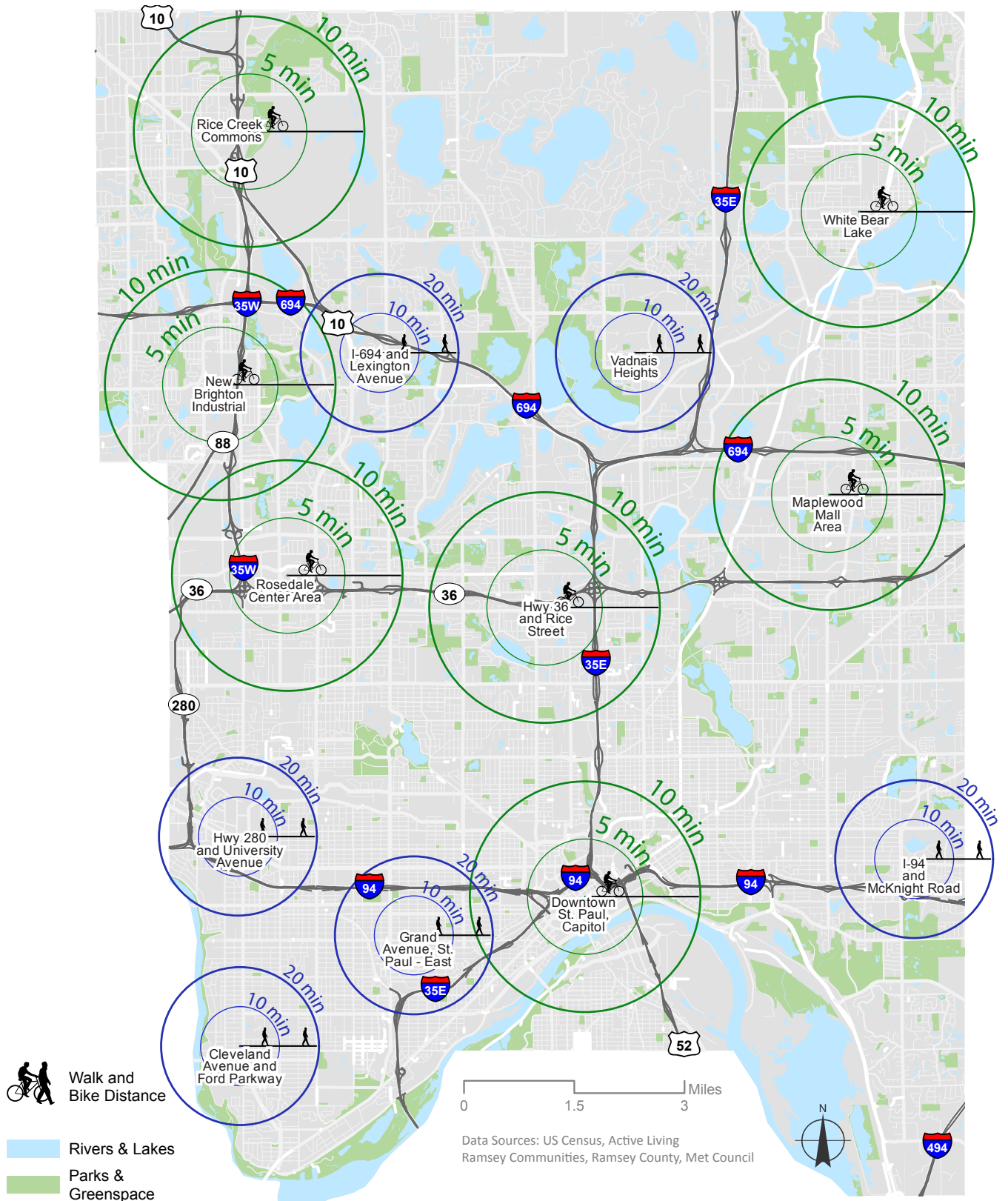


The map on the following page illustrates walking and bicycling distances from various activity centers in Ramsey County. Each activity center has parks, greenspace and waterways within a 20 minute walk or ride. Even areas that seem spread out are accessible to a significant portion of the surrounding neighborhoods.

It's not just the distance to these activity centers that is easily walkable or bikeable. Distances between these activity centers is often less than 3 miles, which translates into a leisurely 20 minute bicycle ride. Based on national averages, over 40% of trips are 3 miles or less.<sup>1</sup> Today, these short trips are often done in a single occupancy vehicle, but offer a huge potential for future active transportation trips.



**Map 2A-1: Potential for Walking and Biking in Ramsey County**





## The Challenges

Achieving the vision will not be easy. It will require coordination across jurisdictional boundaries and transformative change in the way agencies approach the creation of sidewalks, bike lanes and streets.

For many reasons, from safety, to health, to the natural environment, it is important to enhance everyone's ability to walk and bike.

### Fatality & Injury from Vehicle Collision

The rates of injury and death to people walking and riding bikes in Ramsey County are notably higher than other parts of Minnesota.<sup>2</sup>

*In Ramsey County,*

**40%**

*of all crash fatalities are pedestrians*

**3%**

*of all crash fatalities are bicyclists*

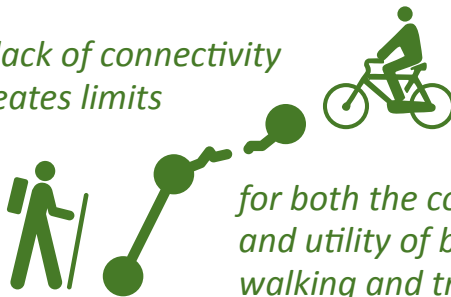
**4x**

*the state average*

**1.5x**

*the state average*

*A lack of connectivity creates limits*



*for both the comfort and utility of biking, walking and transit facilities.*

### Disconnected Bike & Pedestrian System

A lack of coordination in the planning process has resulted in a system that lacks connection and cohesion. Features of the built and natural environment, such as railroad tracks, interstates, lakes and rivers can further limit access across the county.

### Disparities & Gaps Related to Income, Education & Health

A diverse transportation system can reduce disparities by improving opportunities for access to education, employment, and critical services, such as health care, across Ramsey County.

*Top Barriers to Receiving Health Care in Ramsey County:*

- 1** *Lack of Transportation*
- 2** *Lack of Health Insurance*
- 3** *Lack of Access to Mental Health Services*





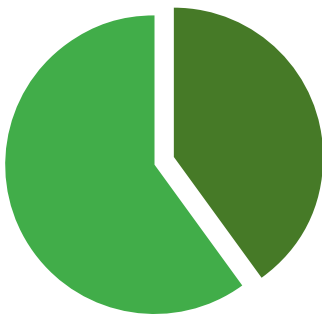
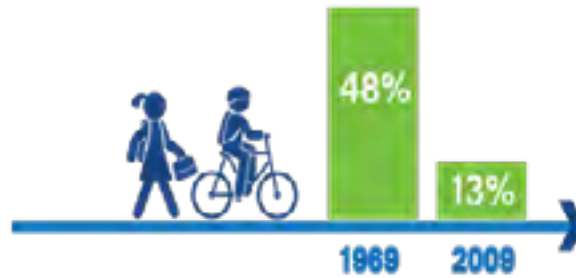
**17%**  
*of people in Ramsey County live in poverty, compared to 11.5% in Minnesota overall.<sup>3</sup>*

### Poverty

In Ramsey County, there are concentrations of poverty where residents want and need better connections to jobs, schools, libraries and recreational activities. Improved bicycle and pedestrian access can help residents enhance their lives.

### Youth and Learning

Children who use active modes to get to school are more attentive and able to concentrate in class, have advanced mental alertness and gain additional minutes of physical activity each day.



**44%**  
*of people in St. Paul identify as people of color, compared to 33% in Ramsey County.<sup>4</sup>*

### Diversity

Its diverse population reflects Ramsey County's dynamic urban nature. However, the diversity also indicates the need to respond to different social and cultural needs. These communities typically include communities of color, immigrants and low income households who have less access to transportation systems. They may also include people from countries where walking and cycling are more common forms of transportation.



## Transportation costs

Transportation costs affect all people, particularly those with the fewest options. It is also important to consider the time costs associated with different modes and how the increased transportation time impacts daily life. Additionally, there are 23,666 households in the county with no access to a vehicle.<sup>5</sup>

*According to AAA, it costs*

**\$8,698**



*annually to own and operate a vehicle.*

*Ramsey County earned an*

**“F”**

*grade for air quality in a recent American Lung Association report.<sup>6</sup>*



## Environmental Concerns

Ramsey County air quality is the worst in the entire metro area, and has been declining since 2009. Pollution has particularly negative consequences for Environmental Justice populations in the region, who already bear a disproportionate burden.



# Atlas of Existing Conditions

The following section is a collection of datasets, facts and influential factors related to walking and biking. It is meant to serve as a resource for all Ramsey County communities. These conditions can influence an active lifestyle, and through examination may reveal opportunities to enhance, grow and shift the direction of Ramsey County communities toward a vibrant, walkable and bikeable future.

## Using this Document

On the pages that follow, each content topic is presented in map or graphic form, paired with a description of what the dataset shows and what value it brings to the exploration of walking and biking in Ramsey County.



## Population and Land Use Characteristics

A successful walking and biking plan recognizes that the people of Ramsey County are the most important aspect of the decision to walk and bike. Where people live, work and play can determine whether walking and biking are feasible transportation options.

Key Points of Interest that produce higher levels of travel demand include schools, healthcare facilities, recreation facilities, arts/museums, shopping and employment centers.<sup>7</sup> Walking and biking networks should connect to and between these destinations.

Over 95% of Ramsey County residents agree that opportunities for physical activity such as trails, contribute to the quality of life in Ramsey County.<sup>8</sup>

The 2009 National Household Travel Survey tells us that a large percentage of people walk to destinations, but only if they are close. When distances are under one mile, walking becomes an easier transportation option.





## Ramsey County Land Uses

Ramsey County is the most densely populated county (3,464 people per sq. mile) in the state and one of the most densely populated in the country. It is also has the highest number of jobs per square mile (2,102) in Minnesota. This creates a great potential for transportation by walking and bicycling. However, much of the county's land is separated into areas with dedicated uses, with little mix of zoning and land uses.

### Map Highlights

The Land Use Designation Map displays the varied land uses across Ramsey County. This map shows land uses in eight categories; industrial and undeveloped, institutional, parks and open spaces, major highway, water, residential, office/commercial and mixed use. The most prominent land uses across Ramsey County are residential, parks and open spaces, and water. Along major highways, land uses include office and commercial, mixed use and industrial. In downtown Saint Paul, the most prominent land uses include mixed use, office/commercial and institutional.

### The Foundation for Connecting Ramsey Communities

A singular land use, such as a residential only area, creates a place where residents are dependent on motor vehicles for every trip and errand. Separating types of land uses creates greater distances between housing, workplaces, retail, businesses and other destinations.

### What Are The Impacts Of Zoning On Walking And Bicycling?

Having a zoning code that allows for a mix of land uses creates destinations for walking and biking. Absence of nearby destinations of interest is a major barrier to walking and bicycling for people of all ages. Mixed land uses promotes the use of active transportation for daily activities and errands.

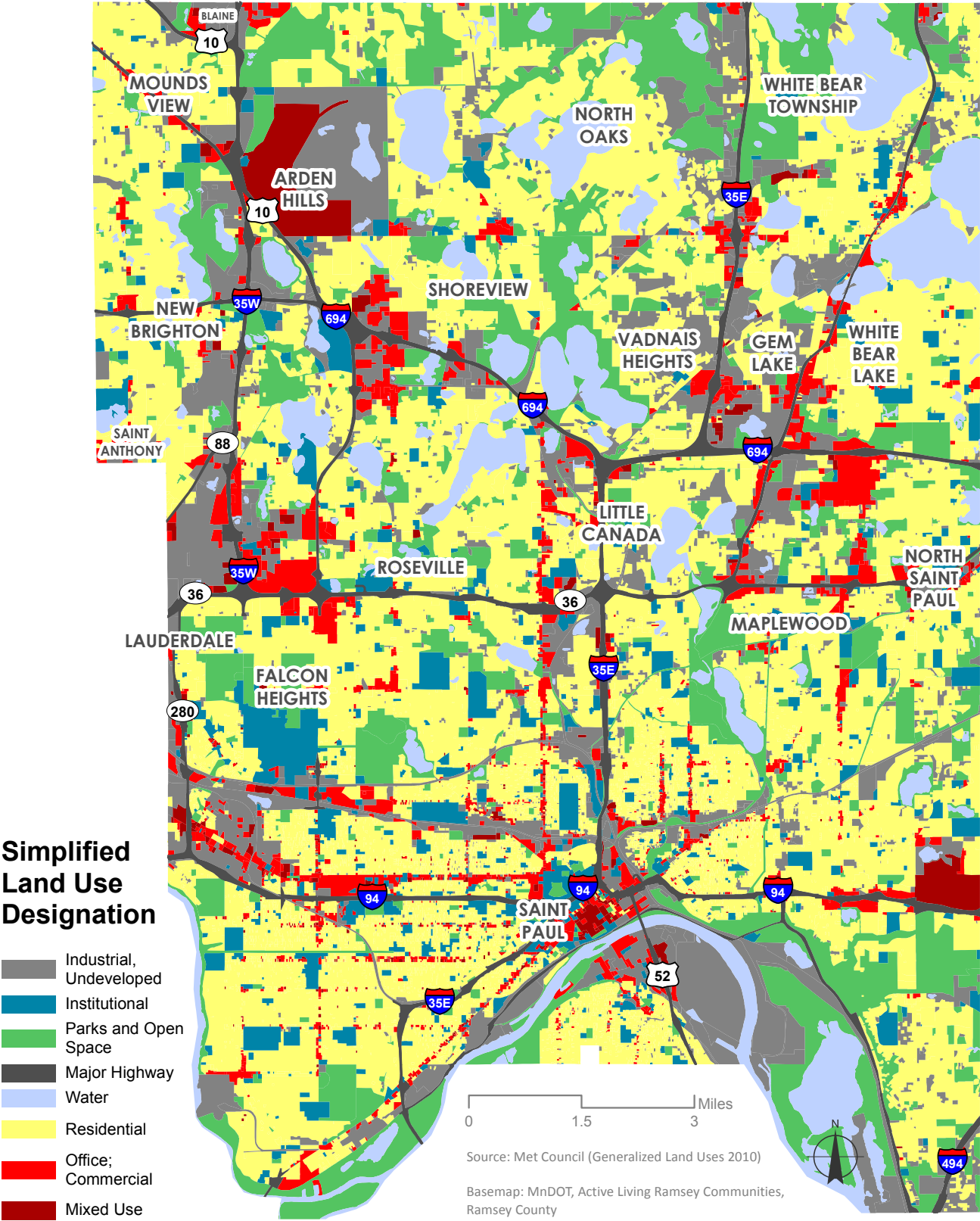
A diversity of activities and destinations not only encourages biking and walking for daily trips, but also gets residents outside and encourages social interaction. This type of active community is especially attractive to young populations; 50% of Millennials prefer living within an easy walk of other places, and 51% prefer living in attached housing, such as a townhouse or condo, where they can walk to shops and have a shorter commute.<sup>9</sup> Millennials are moving to places that create these kinds of environments.

### Implications for the Future Vision

Integrating different land uses throughout Ramsey County has many positive impacts on communities throughout the county, including reduced distance and travel time between residential areas and destinations, more compact development and less sprawl and more convenient and comfortable bicycling and pedestrian environments.



Map 2A-2: Ramsey County Land Uses





## Ramsey County Residential Population Density

Ramsey County is the most densely populated county (5.4 people per acre) in the state and one of the most densely populated in the country.<sup>10</sup> Areas with high levels of residential density will see all-day travel demand, and concentrated trip making during commute hours.

### Map Highlights

The Residential Population Density Map displays the number of people per acre living in Ramsey County. The areas with the highest population density are the inner neighborhoods of Saint Paul that ring downtown. These neighborhoods reach densities of 20-40 people per acre. Suburban communities reach up to ten residents per acre, and the outer suburban residential areas are under five people per acre. Downtown Saint Paul itself has low residential density similar to outer suburban areas, due to a high concentration of single-use employment buildings and a lack of residential units.

### The Foundation for Connecting Ramsey Communities

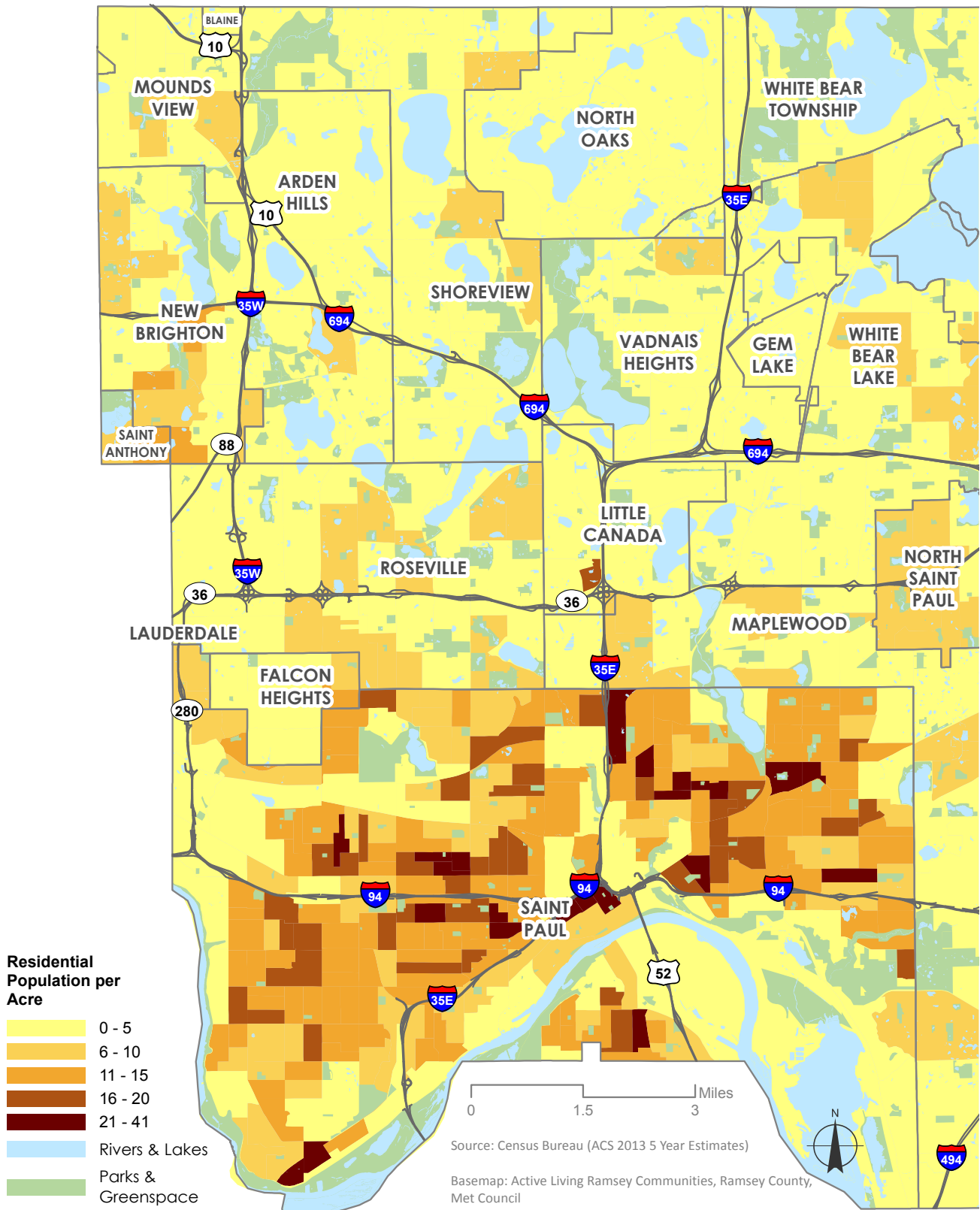
Higher population densities typically have a greater mix of land uses, shorter distances between destinations and better connectivity, making these areas more attractive places to bike and walk. The Connected Ramsey Communities network should join these dense areas of activity and integrate well with local walking and biking networks to maximize the level of use and usefulness to Ramsey County residents.

### Implications for the Future Vision

While the County's overall population density is high, it varies between urban areas with higher densities and lower density suburban areas. These pockets of higher densities offer great potential for transportation by walking and bicycling. Rates of walking and bicycling increase in areas with higher density.<sup>11</sup> The concentrated areas of high residential density support current and future infrastructure demand for pedestrians and bicyclists, while the very low density areas will need to focus their investments carefully to increase levels of walking and biking for transportation.



Map 2A-3: Ramsey County Residential Population Density





## Ramsey County Employment Density

Employment density can reach much higher concentrations than residential density, bringing many workers into one area during the workday. These areas will see high levels of mid-day travel demand. Employment areas with mixes of retail, commercial and employment have the potential for short trips on foot or by bike.

### Map Highlights

The Employment Density Map shows the number of jobs per acre across Ramsey County. Downtown Saint Paul stands out clearly with the highest employment density in the county. Other commercial centers in suburban communities also stand out from the neighboring single-use residential areas. Downtown Census tracts with office buildings hold over 100 jobs per acre. Concentrated employment areas such as the 3M Campus reach up to 25 jobs per acre. Suburban commercial centers such as Roseville or Maplewood Malls have five to ten jobs per acre.

### The Foundation for Connecting Ramsey Communities

Like residential population density, high employment densities typically have a greater mix of land uses, shorter distances between destinations and better connectivity, making these areas more attractive places to bike and walk. There are only a few highly concentrated employment areas in Ramsey County. These are important destinations for the Connected Ramsey Communities network to provide access to so that commuting by bicycle can become a viable option.

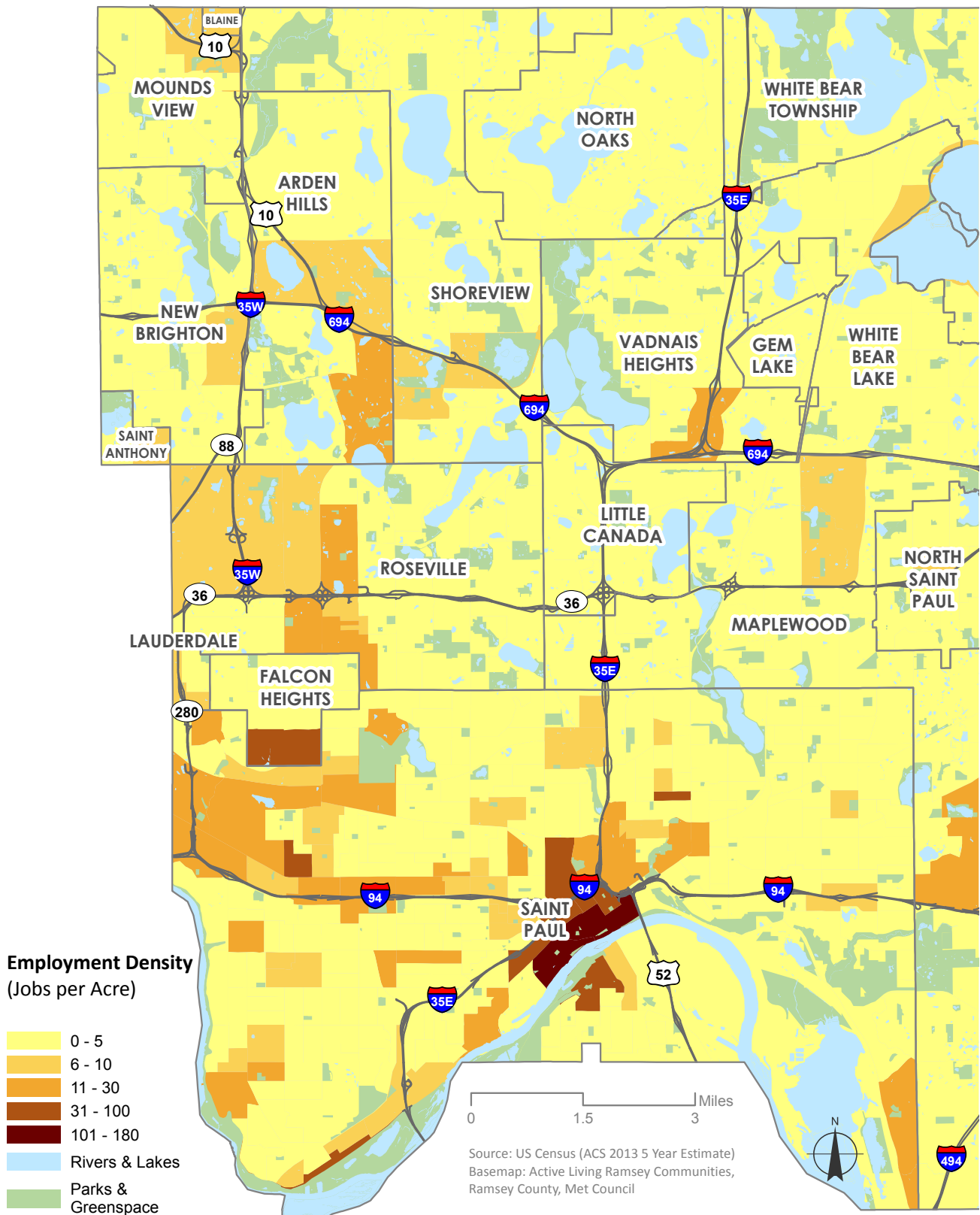
### Implications for the Future Vision

Because of longer distances, bicycling may be the preferred mode of active transportation to reach high employment density areas.

Within these high density employment areas, walking is likely to be the most important mode. Walking between destinations during the day can be supported through infrastructure such as sidewalks and paths, and amenities such as benches and tree canopies. In the larger high density employment areas bicycling can be supported by bike share systems such as Nice Ride.



Map 2A-4: Ramsey County Employment Density





## Key Destinations and Activity Centers in Ramsey County

Activity centers provide a density of commercial, retail and other key destinations throughout Ramsey County. Even in less dense, less active areas, schools, colleges and universities are located in communities throughout Ramsey County.

### Map Highlights

The Key Destination and Activity Centers Map displays the varied destinations and activities across Ramsey County. This map shows destinations and activities in six categories; malls and shopping, academic institutions, major activity centers, rivers and lakes, and parks and greenspaces. The map shows downtown Saint Paul as a major activity center with multiple malls and shopping destinations such as Carriage Town Square, Hill Plaza and Galtier Plaza. Activities centers are identified between Roseville and Falcon Heights, and near White Bear Lake. Academic institutions, which includes schools, colleges and universities, are the next prominent feature on the map and are spread throughout Ramsey County, with the University of Minnesota campus in Falcon Heights and Bethel University being the most prominent.

### The Foundation for Connecting Ramsey Communities

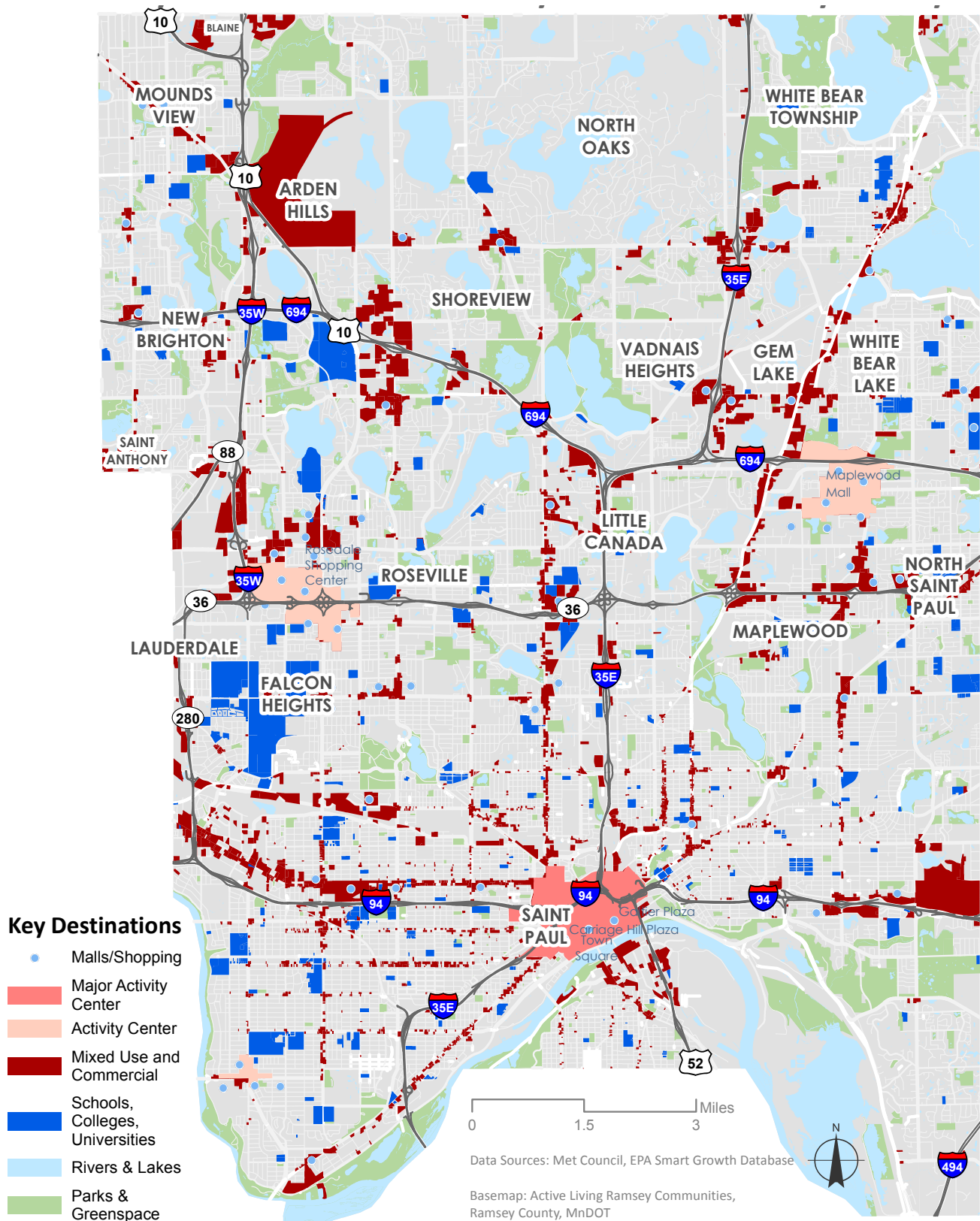
Walkable activity centers that are compact and easy to navigate on foot or by bike create a more interesting and safe environment for all people. The large number of colleges and universities in Ramsey County is an asset for biking and walking. Colleges and universities have high rates of bicycling, walking, and transit use. The culture of active commuting on campuses, combined with the high population density, makes them enjoyable and safe places to bike and walk.

### Implications for the Future Vision

Activity centers, core commercial areas and concentrations of educational institutions are the critical destination centers of the Connected Ramsey Communities network.



Map 2A-5: Key Destinations and Activity Centers in Ramsey County





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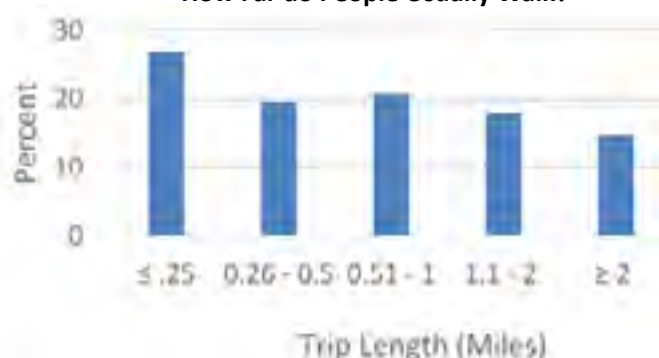
## Walking And Biking Activity And Facilities

Safe, comfortable facilities are needed to promote active transportation. If the physical infrastructure is missing, incomplete or uncomfortable, the trip is unlikely to be made on foot or by bike.

A complete network of walking and biking routes that connects people from where they live to where they work, shop and play is the cornerstone of a walking and biking community. These facilities should be constructed to a high standard and be provided in response to the adjacent roadway context. Streets with increased levels of traffic should have a more separated walking and biking facility to maintain user comfort.

A study of the Twin Cities reported that the sidewalk length, streetlights, traffic calming and other measures of connected street patterns correlate to increases in walking in walking.<sup>12</sup>

**How Far do People Usually Walk?**



**How Far do People Usually Bike?**



**Table 2-1: Walking Mode Share in Ramsey County Communities (Largest to Smallest)**

City	Average Walk Mode Share (%)
Lauderdale	10.06
Falcon Heights	7.37
Saint Paul	4.31
Roseville	3.24
Spring Lake Park	2.90
Arden Hills	2.60
New Brighton	2.04
North Saint Paul	1.67
Mounds View	1.64
Vadnais Heights	1.57
Maplewood	1.35
Blaine	1.25
Little Canada	1.24
Saint Anthony	1.22
White Bear Township	1.10
Gem Lake	1.07
White Bear Lake	1.07
Shoreview	0.98
North Oaks	0.67

**Table 2-2: Cycling Mode Share in Ramsey County Communities (Largest to Smallest)**

City	Average Bike Mode Share (%)
Lauderdale	4.62
Falcon Heights	3.81
Roseville	1.93
Saint Paul	1.31
Spring Lake Park	1.30
Mounds View	1.23
New Brighton	0.64
Saint Anthony Village	0.62
White Bear Lake	0.47
Little Canada	0.40
Arden Hills	0.38
Gem Lake	0.37
White Bear Township	0.35
North Saint Paul	0.34
Maplewood	0.33
Vadnais Heights	0.31
Shoreview	0.31
Blaine	0.25
North Oaks	0.13



## Ramsey County Walking for Transportation

Walking is a valuable form of transportation to work in some parts of Ramsey County. Commute to work by walking is as high as 36% in the downtown core of Saint Paul and reaches around 20% near the University of Minnesota. In the majority of Ramsey County, walking to work is under five percent of trips.

### Map Highlights

The Percent Commuters Who Walk to Work Map displays the percentage of people who walk to work per census tract across Ramsey County. Ten to 36% of commuters walk in downtown Saint Paul, neighborhoods west of downtown Saint Paul, and in some neighborhoods in Falcon Heights and Arden Hills. One to ten percent of commuters walk in the neighborhoods that surround downtown Saint Paul and in section of Roseville.

### The Foundation for Connecting Ramsey Communities

Because walking is most suitable for short trips, it will not become a common method of transportation between different Ramsey communities. However, no matter what mode is taken, everyone is a pedestrian upon reaching the destination. Providing for a walkable environment with walking-compatible densities can let residents, visitors and workers walk during their time in Ramsey County.

### Implications for the Future Vision

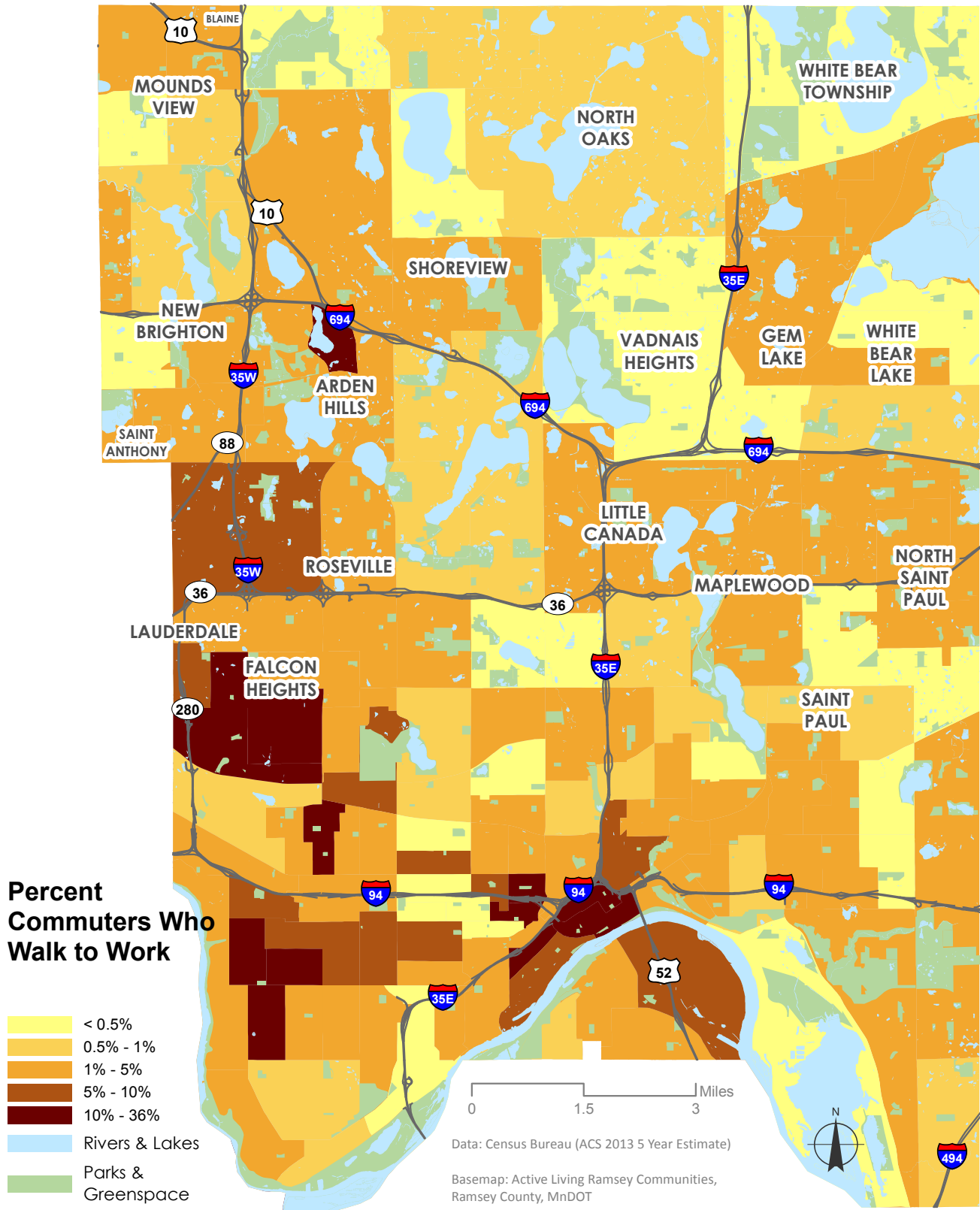
For short trips within communities, walking has the potential to become a primary mode of transportation.

Schools have the potential to become central focus points for walking. With targeted Safe Routes to School (SRTS) programs, walking mode shares may be able to increase to 1960s levels, when over 40% of children walked or biked to school.

Walkable commercial centers like the historic Downtown White Bear Lake are immensely walkable places, even though the majority of visitors arrive by car. Building more walkable commercial centers, with a grid of small-scaled streets, human-scale buildings and unobtrusive parking can help create a walkable fabric for communities to build upon.



Map 2A-6: Percent Commuters Who Walk to Work in Ramsey County





## Ramsey County Bicycling for Transportation

Bicycling is a growing form of transportation. In 1990, no areas within Ramsey County had a bicycle commute mode share greater than five percent. Today, pockets of activity that great are scattered across the County in parts of Saint Paul, Falcon Heights and Roseville.

### Map Highlights

The Percent Commuters Who Bike to Work Map displays the percentage of people who bike to work per Census tract across Ramsey County. Commuting by bike to work is highest west of downtown Saint Paul and in Falcon Heights at one to eight percent. Neighborhoods in Mounds View also show relatively high percentage of bike commuters at one to five percent.

### The Foundation for Connecting Ramsey Communities

Building a strong bicycling network between communities can transform how people get around Ramsey County. Connecting current moderate ridership areas can boost their activity level even higher, and build a strong constituency for a connected bike network across the county.

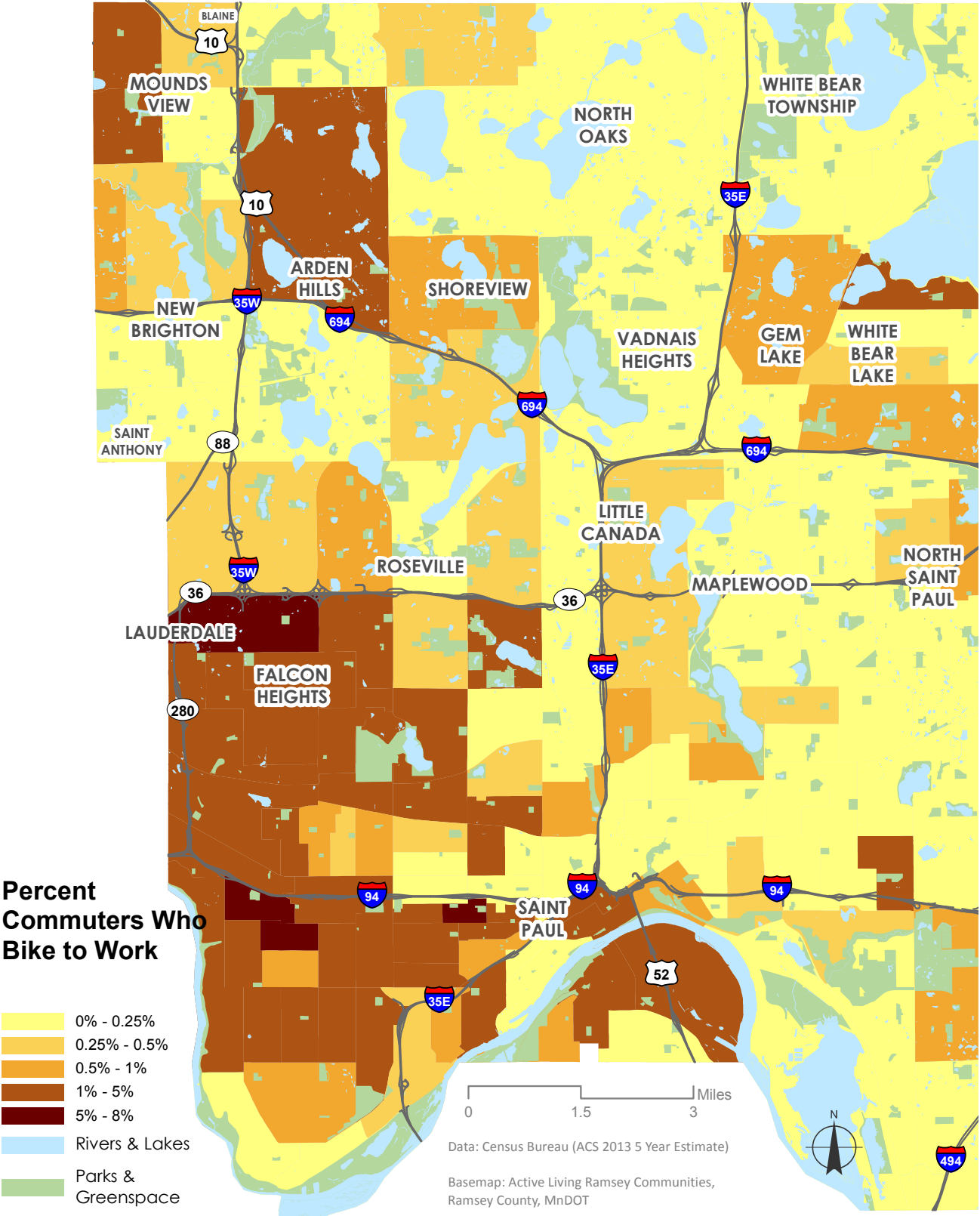
### Implications for the Future Vision

The Ramsey County bicycling network today only accommodates one to five percent of today's population, as evidenced by the commute mode share data reported by the Census Bureau. A fully built county wide network of all ages and abilities routes should expect to see a commute mode share five times that amount. (Central neighborhoods in Portland, Oregon see modes shares of 20-15% commute by bicycle).

Establishing a target commute mode share for the County and its communities can be a good way to target and track progress toward goals. Establishing this target will involve detailed discussion with communities and transportation departments to come to a shared understanding of the level of investment and trade offs necessary to achieve increased mode shares.



Map 2A-7: Percent Commuters Who Bike to Work in Ramsey County





## Ramsey County Transit Use For Transportation

Parts of Falcon Heights achieve 30% commute by transit mode share. Falcon Heights is uniquely positioned to take advantage of transit for commuting due to its location near the University of Minnesota and between the two downtowns. It also has pedestrian access in some areas. The relatively high use of transit, walking and bicycling indicate that they may be relatively competitive with driving.

Other close-in communities, such as southern Maplewood, have up to five percent transit mode share. In communities further from Saint Paul, transit commute mode share drops to less than 2.5%.

### Map Highlights

The Percent Commuters Who Take Transit to Work Map displays the percentage of commuters who take public transit to get to work per Census tract across Ramsey County. Transit use is highest in the neighborhoods that ring downtown Saint Paul, particularly to the west of downtown. In the neighborhoods west of downtown, 5-30% of commuters use transit to get to work.

### The Foundation for Connecting Ramsey Communities

All transit trips are also pedestrian trips between the transit stop and the destination. Transit service allows pedestrians to travel longer distances than they could on foot.

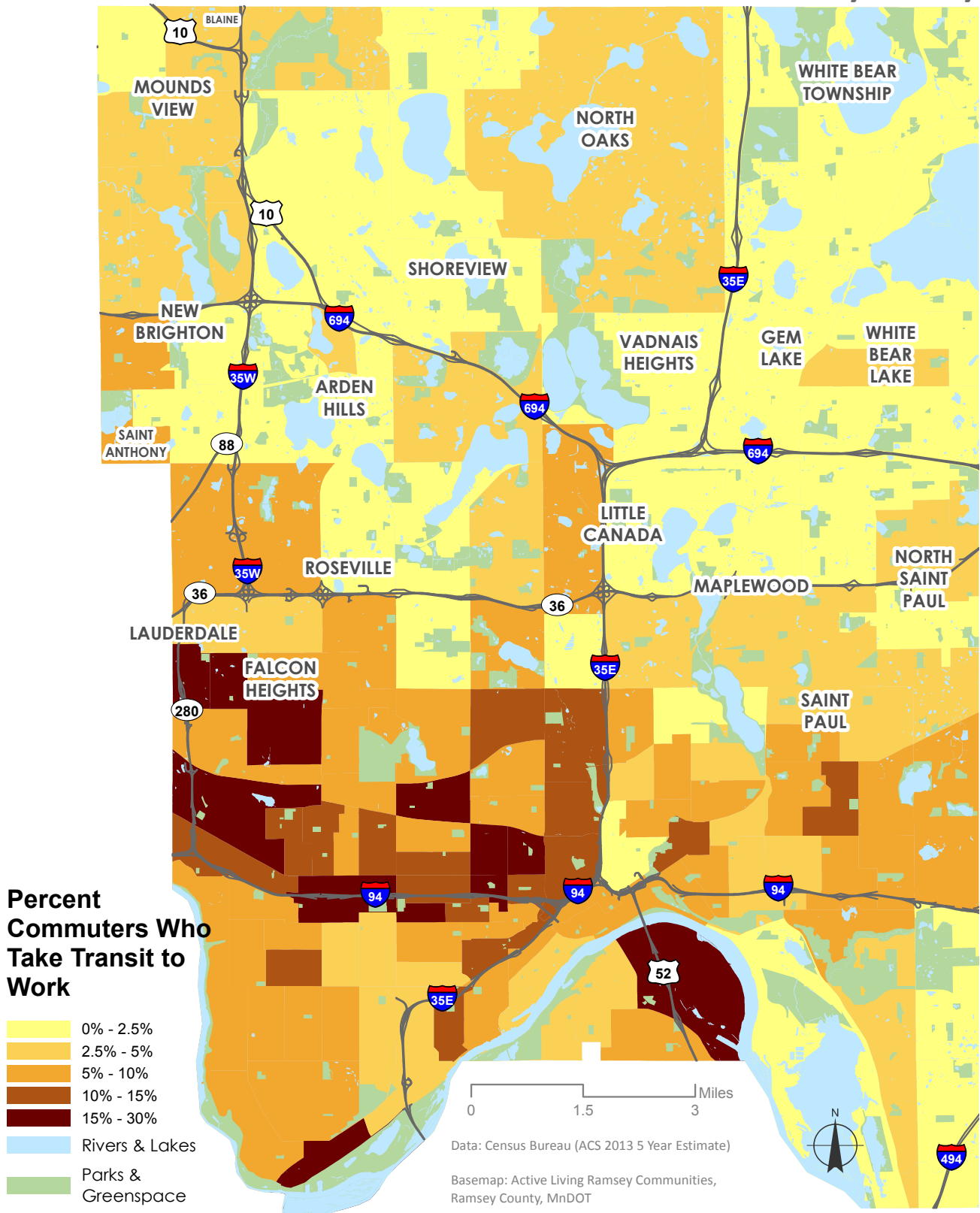
### Implications for the Future Vision

Supporting walking investments around the transit network can leverage their complementary nature and increase both walking and transit use simultaneously.

Lower density areas, where few people are within walking distance to transit stops, may instead focus on bicycling as a method to support and connect to transit.



Map 2A-8: Percent Commuters Who Take Transit to Work in Ramsey County





## Ramsey County Pedestrian Network

Understanding where sidewalks and trails currently exist and where there are gaps in coverage is an important first step in creating a more connected Ramsey County. Existing facilities are shown in solid lines, and proposed routes identified in other planning efforts show the pedestrian network's planned expansion.

### Map Highlights

Ramsey County's pedestrian network consists of sidewalks and trails. Trails cover the county, connecting natural areas, bordering lakes and rivers, and running along busy arterial streets. Notable areas with significant sidewalk coverage include Saint Paul, downtown White Bear Lake, and parts of North Saint Paul and Falcon Heights. Across the county, sidewalks are often provided along major commercial streets.

Planned sidewalks and trails are illustrated on the Existing and Planned Pedestrian Network Map, identifying where local or regional planning efforts hope to implement future infrastructure.

### The Foundation for Connecting Ramsey Communities

By analyzing the existing sidewalk and trail network, it is clear to see where the gaps are located, as well as the progress the communities in Ramsey County have made toward creating a cohesive network. A sidewalk and trails map can show the disparities that exist throughout the county and where additional investment may be needed.

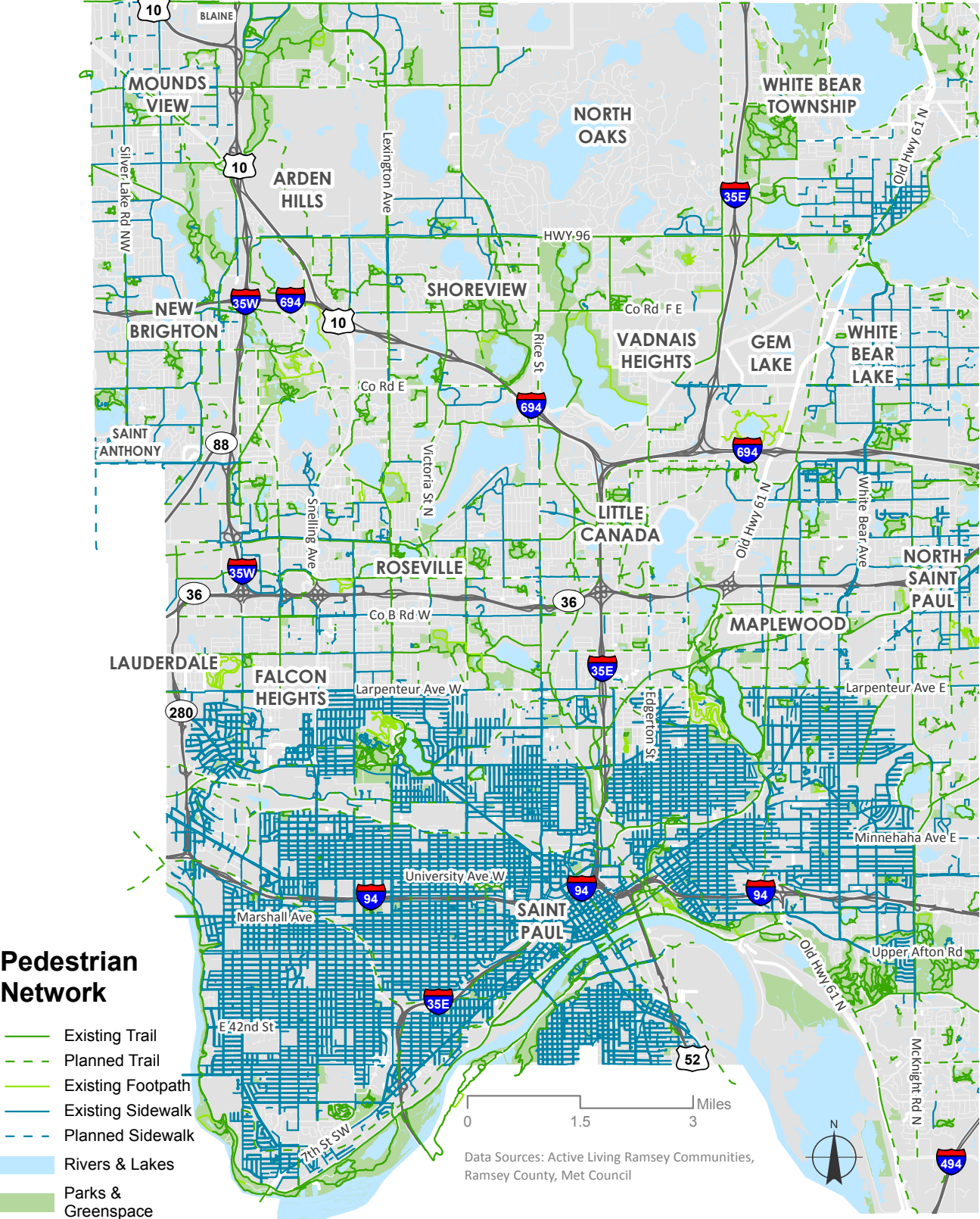
### Implications for the Future Vision

Walking networks support county-wide travel by providing a way to get around on foot within a city or destination area. Some communities, such as Saint Paul, offer a mature sidewalk network within their city, while others, such as Roseville, limit sidewalks to only a few primary corridors.

White Bear Lake offers a model for smaller communities within Ramsey County, an integrated network of sidewalks in the downtown, supporting walking and short trips within a highly walkable defined area.



Map 2A-9: Ramsey County Existing and Planned Pedestrian Network





## Ramsey County Bicycle Network

The bicycle network in Ramsey County is comprised of various bicycle infrastructure types related to the degree of separation from moving traffic. Most of the county is covered by existing or planned routes, although the level of comfort of many routes may not be adequate for users of all ages and abilities.

### Map Highlights

The Existing and Planned Bicycle Network map shows existing and planned bicycle facilities in communities across Ramsey County. Existing facilities are shown in solid lines, and proposed routes identified in other planning documents are shown in dashed lines.

Saint Paul has the most mature planned and existing bicycle network, with a combination of facility types forming a grid across Saint Paul. Saint Paul has more bike lanes than any other city in Ramsey County, and is the only community with existing bicycle boulevards.

Outside of Saint Paul, striped shoulders are the most common form of bicycle facility. Most of these shoulders are part of the existing network, providing connectivity for some types bicyclists today. Some of the corridors, such as parts of Snelling Ave and County Rd B, have dual designations as an existing shoulder facility and a future planned trail.

### The Foundation for Connecting Ramsey Communities

If completed, the proposed bicycle network would blanket Ramsey County. No part of Ramsey County is completely abandoned by current bicycle network plans, and a connected Ramsey County network can be built upon these past planning efforts.

### Bicycle Infrastructure Types

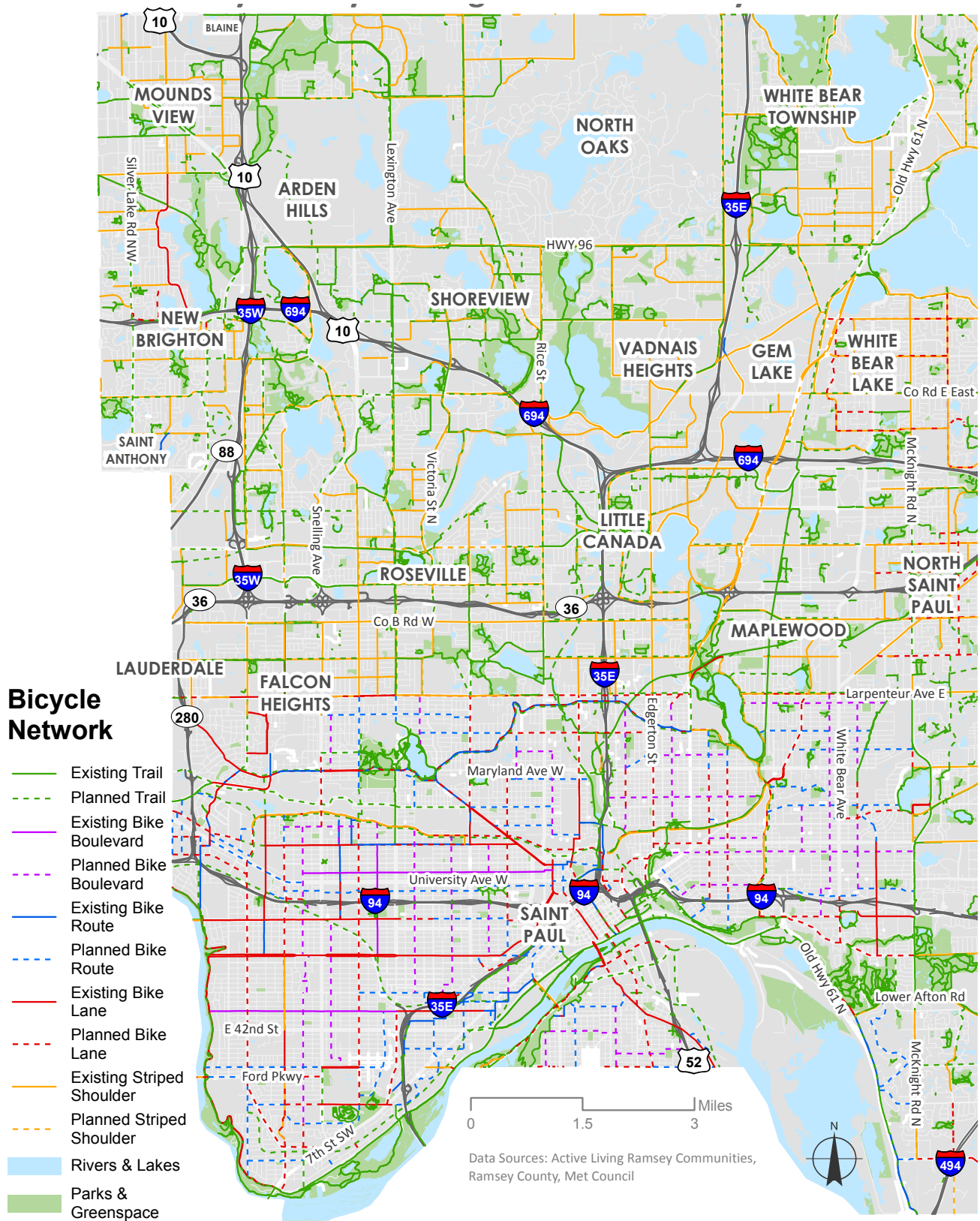
Trails (also called shared use paths) are pedestrian and bicycle facilities separated from traffic by a curb or landscaping. Bike lanes are narrow lanes designated exclusively for bicycle travel, separated from vehicle travel lanes by striping, pavement stencils and signs. Bicycle-friendly treatments are used on bike lanes at intersections to maintain comfort and priority for bicyclists. Shoulders are similar to bike lanes, but are found in more rural areas. Shoulders are not designed specifically for bicyclists and may be used for parking, broken down vehicles, or right turn lanes at intersections. Bike routes are shared roadway streets bicyclists and motor vehicles mix within the same roadway space. This may include a wide outside travel lane where bicyclists and motor vehicles travel side-by-side, or a narrow lane where motor vehicles must use the adjacent lane to pass. Bicycle boulevards are a special class of shared roadways designed for a broad spectrum of bicyclists. They are low-volume local streets where motorists and bicyclists share the same travel lane.

### Implications for the Future Vision

While current coverage of bicycle facilities in general is functional to reach Ramsey County residents, the design of particular facility types may not be. Some parts of Ramsey County rely on paved shoulders to connect the bicycle network. While these facilities do function as a type of facility for bicyclists, they are generally not adequate for people of all ages and abilities.



Map 2A-10: Ramsey County Existing and Planned Bicycle Network



## Ramsey County Public Transit Stops

Every public transit rider is a pedestrian at some point during their journey. As such, it is important to create walkable communities with convenient access to public transportation.

### Map Highlights

The Transit Stops and Centers Map displays public transit stops and transit centers located throughout Ramsey County. There are a total of eleven transit centers, five of which are located in downtown Saint Paul. Transit stops are most dense in Saint Paul. Transit stops are shown to the north of Saint Paul into Shoreline, New Brighton, and White Bear Lake, but the network of transit stops is not as dense as in the city.

### The Foundation for Connecting Ramsey Communities

A well connected bicycle and pedestrian network helps to solve the “first and last mile” problem of public transit, where users have difficulty getting from their starting and ending point to transit stops. Addressing gaps in the bicycle and pedestrian infrastructure, in addition to potential barriers to biking and walking, are important to creating a more complete network.

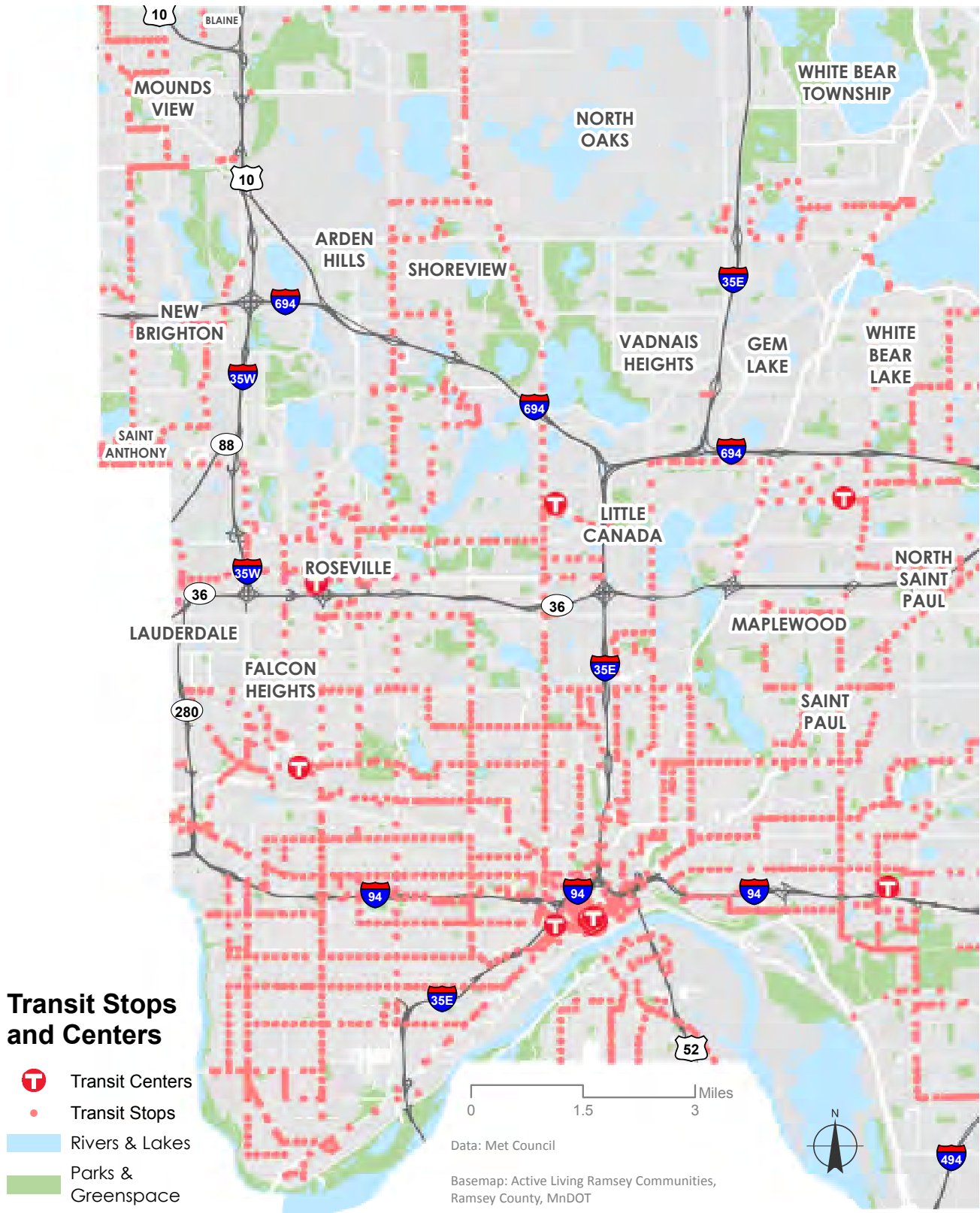
### Implications for the Future Vision

Low density and suburban land use patterns often create communities where transit users have difficulty accessing transit stops. Encouraging higher density development will create a larger population to support the transit investments.

While the majority of the region’s residents are able to access one of these stops within a roughly five minute walk (0.25 mile), residents may encounter difficulty accessing transit, due to missing or poorly maintained biking and walking infrastructure, even though it is located a short distance away.



Map 2A-11: Transit Stops and Centers in Ramsey County



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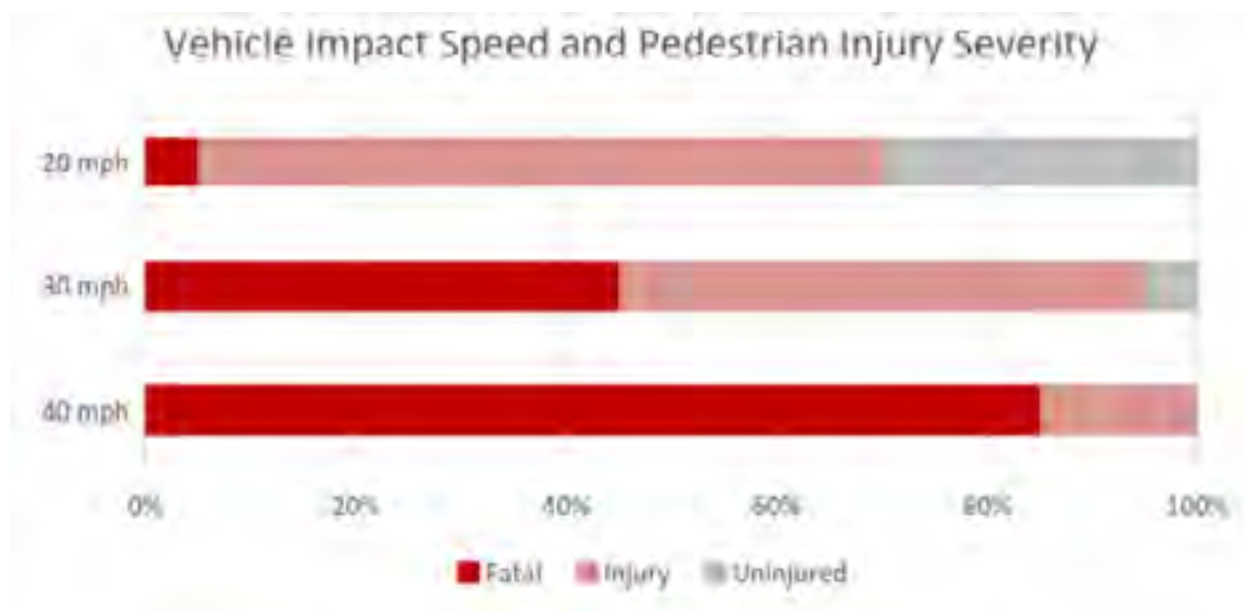


## Traffic Safety

One of the top reasons people cite for not walking and biking more is concern about safety. The threat of collision is real, and years of collision data show us that some places are safer than others.

Ramsey County is not meeting the Healthy People 2020 goal for motor vehicle injuries among adults ages 20-30 years old.<sup>13</sup> Among the many factors to consider in addressing this issue, especially concerning pedestrian and bicyclist crashes, is vehicle speed. Lowering speed limits, changes to roadway design and increasing enforcement slows drivers and keeps people safer.

A person struck by a car traveling at 40 miles per hour has an 85% chance of dying. At 30 miles per hour, they have a 45% chance of dying and at 20 mph, they have only a 5% chance of dying.<sup>14</sup>



## Ramsey County Pedestrian Involved Collisions

Understanding where vehicle and pedestrian collisions have occurred throughout Ramsey County provides insight into potentially unsafe conditions.

### Map Highlights

The pedestrian involved collisions map displays the locations of collisions and fatalities across Ramsey County. The result shows clear corridors where pedestrian-involved collisions appear to be a frequent occurrence. These tend to be streets with high volumes of car traffic and higher levels of pedestrian activity, such as:

- Downtown Saint Paul
- University Avenue W
- Snelling Avenue
- Summit Avenue
- Minnehaha Avenue E
- White Bear Avenue
- US 61 through White Bear Lake

### The Foundation for Connecting Ramsey Communities

A well connected pedestrian network must also be a safe pedestrian network. Analyzing the location, frequency and severity of pedestrian collisions is a first step in creating a safer environment for all road users. When deciding where infrastructure investments are to be made, locations with a high rates of collisions should be prioritized.

The locations of pedestrian fatalities are identified on the map. These locations indicate a potential problem area, although specific analysis of the crash details is necessary to understand the circumstances surrounding the particular incident.

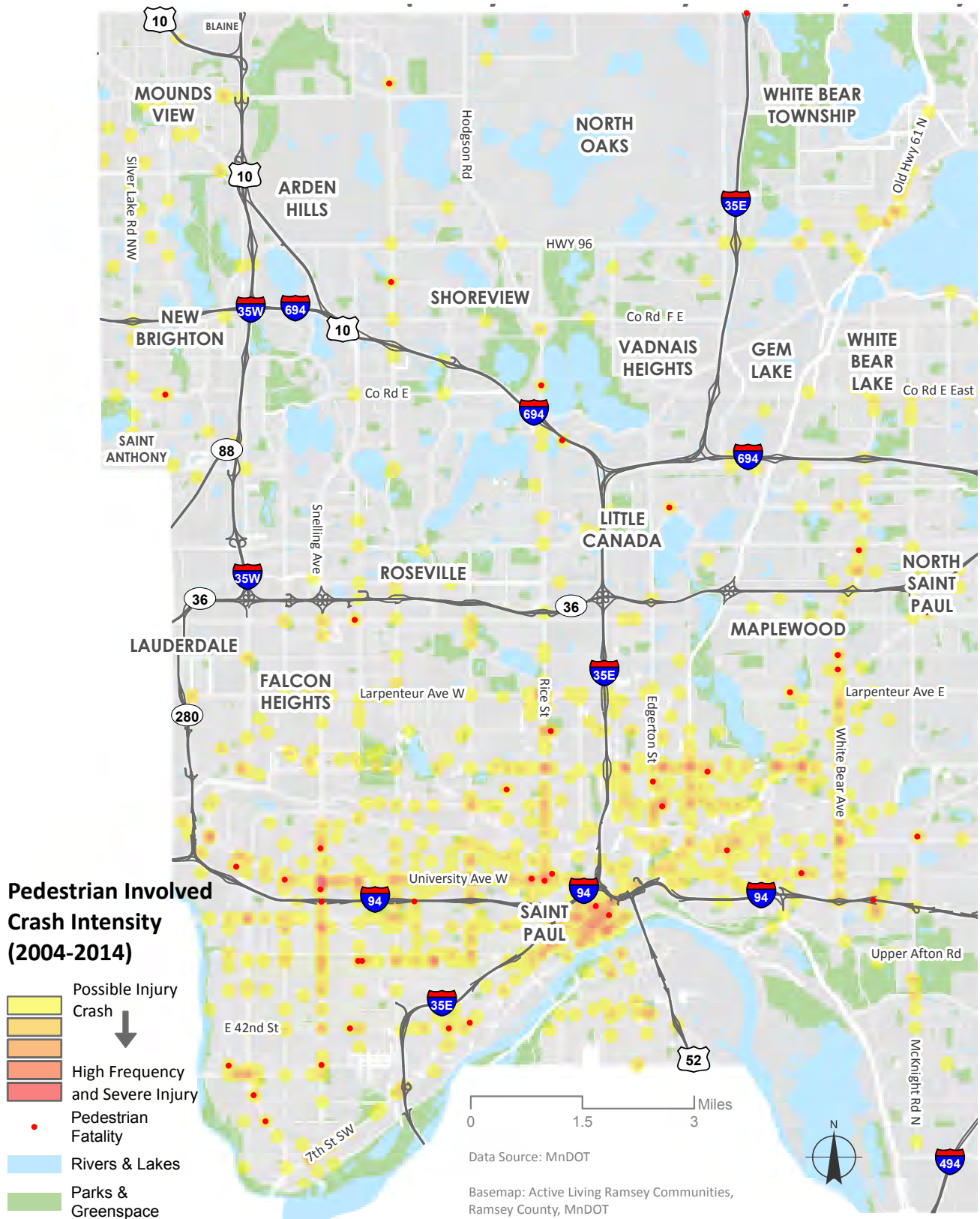
### Implications for the Future Vision

Safety concerns are one of the leading reasons people decide not to walk or bike. This analysis indicates that in some parts of Ramsey County the safety risk is real. Corridors with high levels of crash activity act as barriers to increased walking and local jurisdictions should explore investments to improve pedestrian conditions in these areas.

In some cases, such as University Avenue or Snelling Avenue, the high-crash corridor is a commercial corridor. These areas see high levels of pedestrian activity and the traffic environment should be improved to reflect a pedestrian-priority. This may include lower design speeds, enhanced marked crossings and improved signal timing at intersections.



Map 2A-12: Pedestrian Crash Frequency and Severity in Ramsey County



## Ramsey County Bicycle Collisions

Understanding where vehicle and bicycle collisions have occurred throughout Ramsey County provides insight into unsafe conditions that need to be addressed.

### Map Summary

The bicycle involved collisions map displays the locations of collisions and fatalities across Ramsey County. The result shows clear corridors where bicycle-involved collisions appear to be a frequent occurrence. These tend to be streets with high volumes of cars and higher levels of bicycle activity, such as:

- University Avenue W
- Snelling Avenue
- Rice Street
- Summit Avenue

### The Foundation for Connecting Ramsey Communities

The Connected Ramsey Communities network has an opportunity to overcome the barriers of high-crash corridors. The network alignments can act as a bridge across these high crash areas, or if they run along them, can transform the safety of an entire corridor.

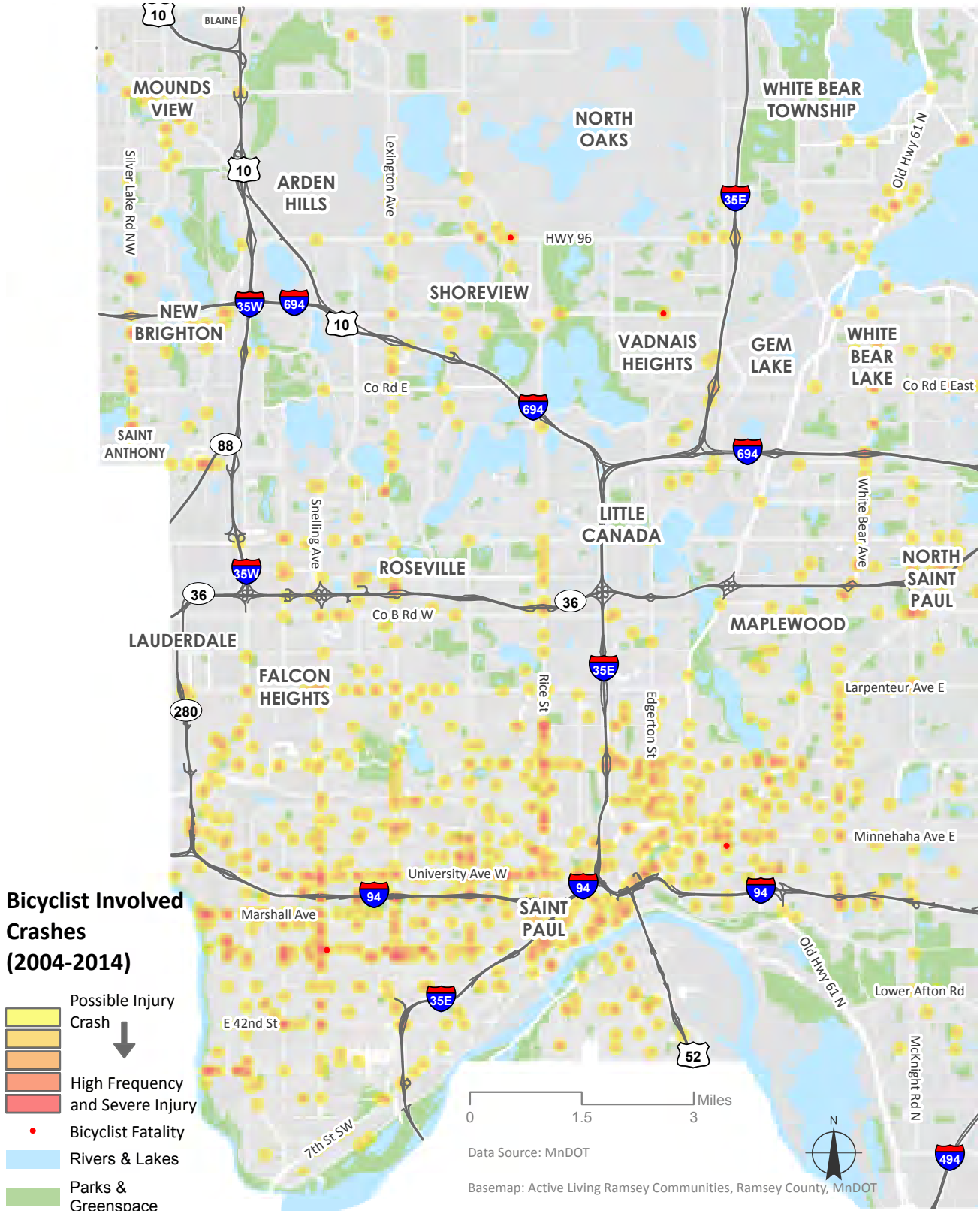
Even if a high-crash corridor is not a part of the county-wide network, local communities will see benefits from removing risks and improving safety for the most vulnerable users of these roads.

Note: For the pedestrian and bicyclist crash analysis, both collision frequency (number of collisions) and severity of injury have been combined. Crashes with injuries, serious injuries or fatalities are weighted more heavily, resulting in a composite safety ranking.

The composite provides an at-a-glance view of the traffic safety conditions on Ramsey County Streets.



Map 2A-13: Bicycle Crash Frequency and Severity in Ramsey County



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## Health

Active transportation is an easy way for people to integrate health into their daily lives. Jogging and walking are fun activities that promote health. Regular physical activity, such as walking, jogging and bicycling reduces the risk of many chronic diseases, including cardiovascular disease, diabetes and some cancers.<sup>15</sup>

Surveys indicate that childhood obesity is ranked fourth among top public health concerns in Ramsey County.<sup>16</sup> According to 2007 YRBS data from the four Steps to a HealthierMN communities, 45 percent of St. Paul high school students meet federal recommendations for physical activity per week. As a further area of concern, far fewer high school girls meet the requirements than high school boys.<sup>17</sup>

Walking and biking can be part of a solution to inactivity. Living near recreation facilities such as trails and parks leads to higher levels of physical activity.<sup>18</sup>

### Incorporating active living into daily life

Daily physical activity is important for all people, particularly children and adolescents. Establishing healthy habits at a young age is important for life-long healthy living. County-wide, less than half of all 6th, 9th, and 12th graders report engaging in 30 minutes of moderate physical activity five or more days a week.<sup>19</sup>



### Creating Opportunities for Activity

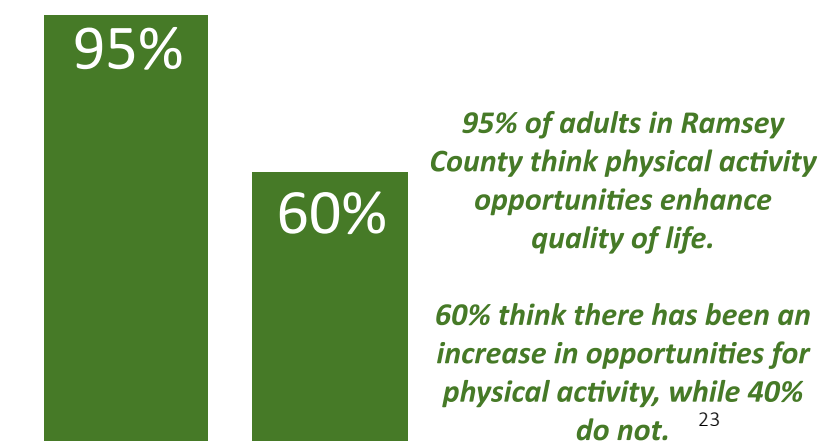
In a 2005 survey of Ramsey County residents, the following key barriers to biking, walking and physical activity were identified: poor street lighting, fear of crime, lack of sidewalks and heavy traffic.<sup>22</sup> A safe and connected active transportation system creates more opportunities for physical activity by addressing these barriers.

**50%** OF ADULTS IN MINNESOTA



### Physical Activity & Quality of Life

Physical activity has a positive impact on overall health, including physical, mental and emotional well-being.



## Recreational Running Activity In Ramsey County

In order to improve the active transportation networks throughout Ramsey County, it is important to understand the routes people are currently utilizing for both recreation and transportation trips.

### Map Highlights of Recreational Running Activity in Ramsey County

This map displays the usage of streets and trails for recreational running. Popular streets and trails are highlighted in colors ranging from light blue to bright red. Light blue indicates moderate use while bright red indicates high use. High use corridors in Saint Paul are located along the Mississippi River and Summit Avenue. High running activity occurs throughout Ramsey County primarily along or near lakes, parks and natural areas.

### The Foundation for Connecting Ramsey Communities

Analyzing the running routes that people are currently using shows where people are running, both in urban and less urbanized areas of the county. This provides insight into how people are using the network, as many of these trails are short segments or small loops. A system of disconnected segments and loops may be acceptable for recreational trips, but would not be useful as an active transportation network.

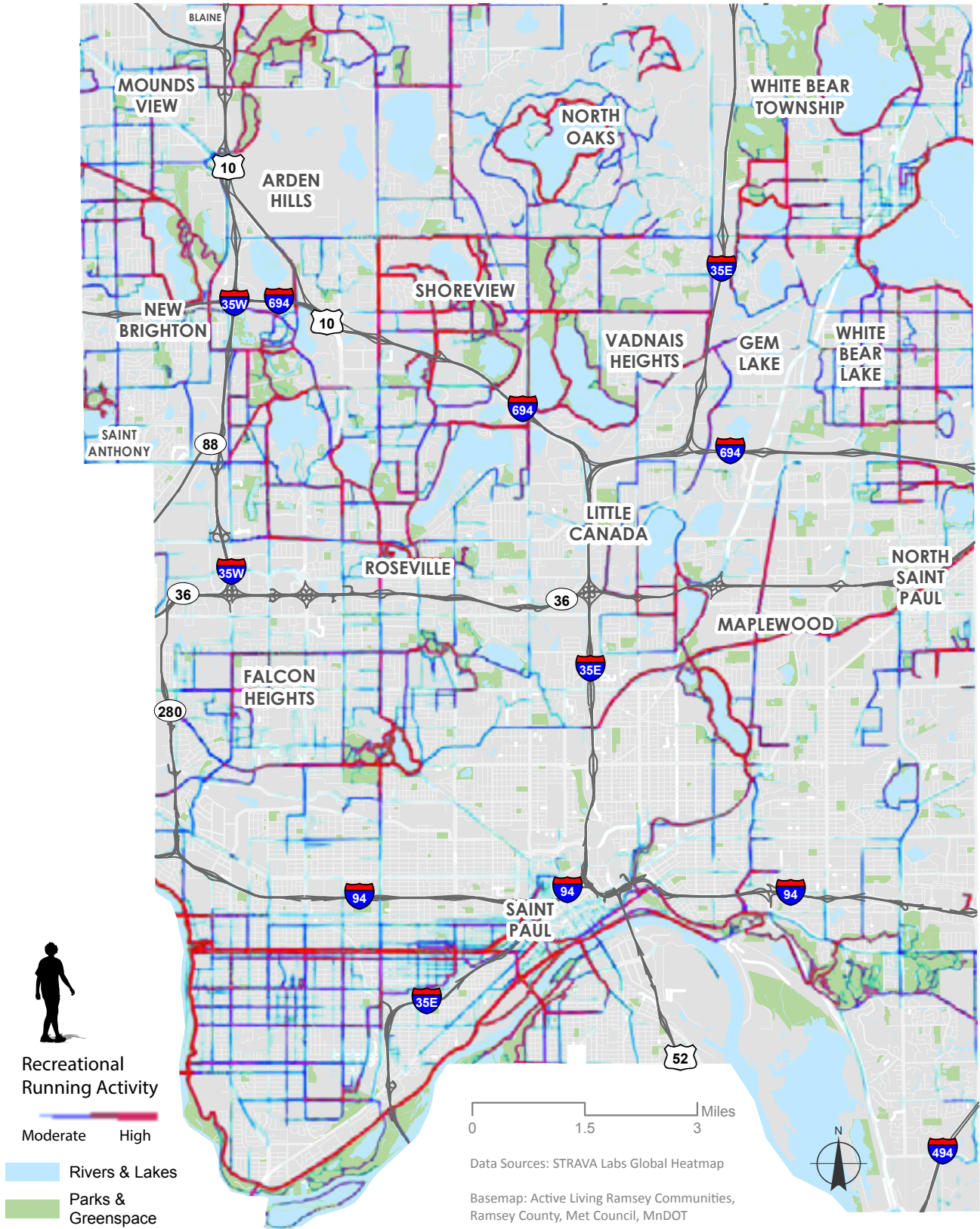
Data from the STRAVA activity tracking software used to create this map relies on self reported datasets and requires users to own a smart phone and as such, is subject to sample bias.

### Implications for the Future Vision

Recreation is a visible element of the lives of Ramsey County residents. The mature system of recreational routes offers many community members an option for outdoor recreation and fitness, although people may need to drive to reach the trailheads and parks with these amenities. One strategy for building support for future investment in walking and biking is to promote the benefits of non-motorized access to the existing amenities of the parks and regional trail systems.



Map 2A-14: Recreational Running Activity in Ramsey County



## Recreational Bicycling Activity In Ramsey County

In order to improve the active transportation networks throughout Ramsey County, it is important to understand the routes people are currently utilizing for both recreation and transportation trips.

### Map Highlights of Recreational Bicycling Activity in Ramsey County

This map displays the usage of streets and trails for recreational bicycling. Popular streets and trails are highlighted from in colors ranging light blue to bright red. Light blue indicates moderate use while bright red indicates high use. High use corridors are shown in Saint Paul along the Mississippi River, in downtown and along Summit Avenue. In north Ramsey County, high use corridors are found near lakes and natural areas, and along Shoreview Avenue from Arden Hills to White Bear Lake. Overall, several corridors are moderately used throughout the county for recreational bicycling.

### The Foundation for Connecting Ramsey Communities

Data from the STRAVA activity tracking software<sup>24</sup> offers a glimpse at the most popular locations for running/walking for recreation. Bold red lines indicate high volume routes, and blue lines indicate popular secondary routes.

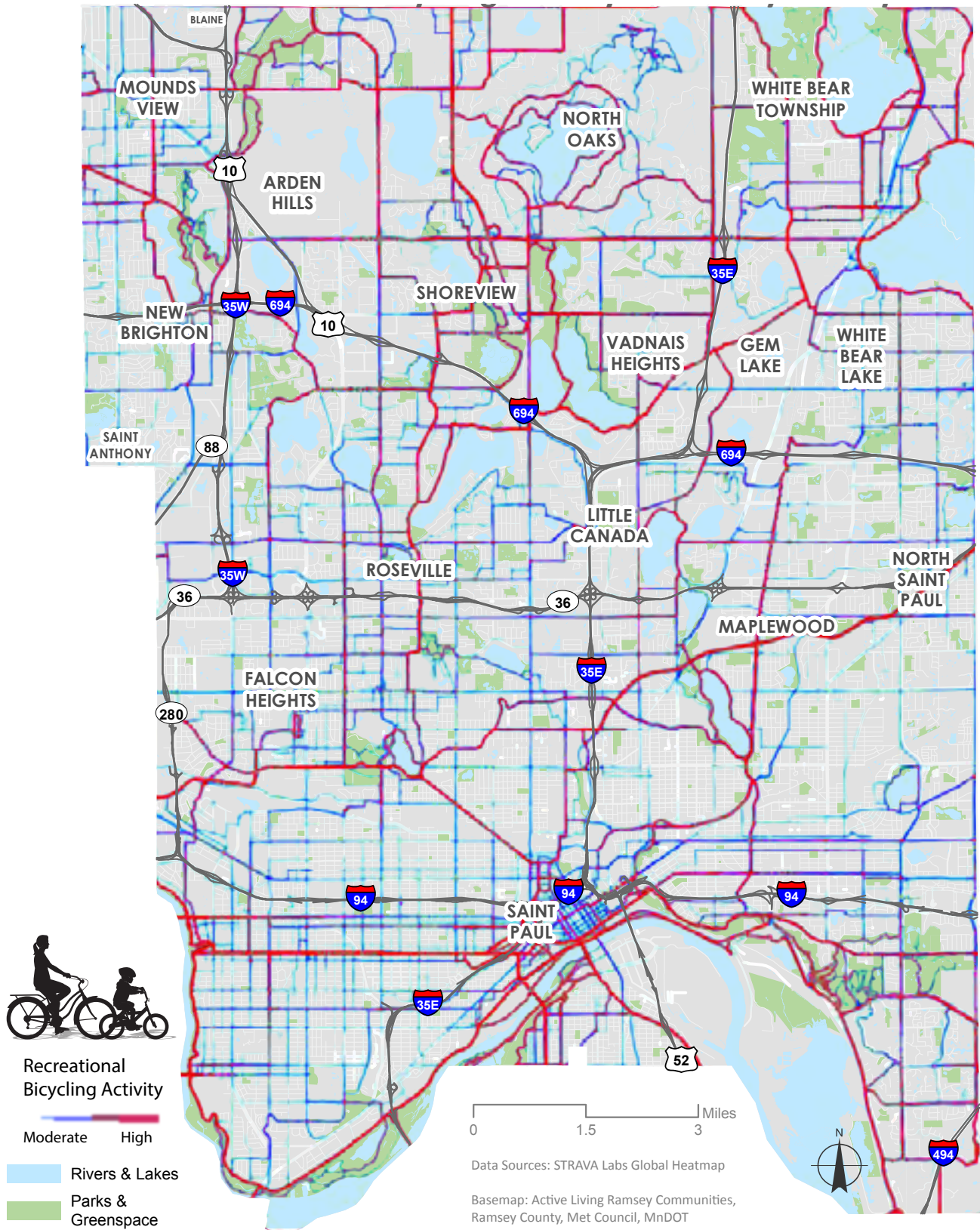
Data from the STRAVA activity tracking software used to create this map relies on self reported datasets and requires users to own a smart phone and as such, is subject to sample bias.

### Implications for the Future Vision

Recreation is a visible element of the lives of Ramsey County residents. The mature system of recreational routes offers many community members an option for outdoor recreation and fitness, although today they may need to drive to reach the trailheads and parks with these amenities. One strategy for building support for future investment in walking and biking is to promote the benefits of non-motorized access to the existing amenities of the parks and regional trail systems.



Map 2A-15: Recreational Bicycling Activity in Ramsey County



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## EQUITY

Good transportation is vital for access to activities and essential services that are needed to fully participate in our society. In automobile dependent communities, those who do not have the ability to drive or do not have access to vehicles can be at a great economic and social disadvantage. Many experts note that approximately 40% of all-age populations do not drive for various reasons.

Communities without adequate quality and quantity of transportation, including facilities for bicycling and walking, place residents at a distinct disadvantage when trying to access jobs, school, medical services or other daily needs.

MnDOT has identified the following populations as possible priorities for pedestrian-level improvements throughout Minnesota:<sup>25</sup>

- Small Rural Core Communities
- American Indian populations
- Low-Income Urban Populations
- Older Adults
- Persons with Disabilities
- Children and Youth

## High Impact Populations In Ramsey County

The aggregate data for equity populations shows areas where bicycling and walking infrastructure investment would have the most impact on people with the least transportation options. Considering the planning process through an equity lens will create a different outcome than a more traditional approach, as it strives to serve those who have historically been left out of the planning process and under-served by investments.

### Percent of Population at or Below Poverty Level in Ramsey County

The Population at or Below Poverty Map displays the percentage of people in poverty per Census tract across Ramsey County. The poverty level is a measure of income issued annually by the U.S. Department of Health and Human Services. The percentage of population at or below the poverty level in Ramsey County is highest in the inner neighborhoods of Saint Paul that ring the downtown. In these neighborhoods, 20-65% of the residents are living at or below the poverty level. Suburban communities show a lower percentage of poverty at 20% or less.

Bicycling and walking are no cost or low cost transportation options that ought to be provided for all people in Ramsey County. Ramsey County has the largest contiguous area of concentrated poverty in the metro area and a large share of people in poverty are workers: 8% worked full-time and 40% worked at least part-time. Many of the poor are young, with 26% of kids under age 5 years living in poverty. The largest proportions of low-income people as a percentage of the population are clustered in Saint Paul and other portions of the County's southern area. The percentage of people living in poverty in these areas exceeds 30% of the population. Suburban census tracts located in Maplewood, Roseville, Falcon Heights, New Brighton and other municipalities also have high concentrations of people living below the Federally-established poverty line.

### Percent of Population over 65 Years Old in Ramsey County

This map displays the percentage of people over the age of 65 per Census tract across Ramsey County. The percentage of population over 65 years old is highest in the northern parts of Ramsey County, with Roseville, North Oaks and a portion of Arden Hills having 20-35% the population over age 65. Saint Paul shows a lower concentration of people over the age of 65. Neighborhoods around downtown Saint Paul show that 0-15% of the population is 65 years of age or older. However, there is one exception in Saint Paul; directly south of downtown across the Mississippi River there is one neighborhood where 16-20% of the population is over the age of 65.

As people age, they are more likely to use more medications and develop physical cognitive disabilities. According to the AAA, "Seniors are outliving their ability to drive safely by an average of 7 to 10 years." Ramsey County has the highest percentage of residents who are 65 and older (12.4%) among counties in the metro area. With a few notable exceptions, people older than 65 years old live outside of the region's downtown core of Saint Paul.

### Percent of Population with a Disability in Ramsey County

The Population with a Disability Map displays the percentage of people with a disability per Census tract across Ramsey County. Across most of Ramsey County, 6-15% of the population lives with a disability. There are high concentrations of populations with a disability located within six Census tracts in Saint Paul.



Each of these Census tracts has a population of 21-30% with a disability, which is higher than the national average of 19%.<sup>26</sup> These populations are located along or near Interstates 94 and 35E.

An equitable transportation system is one that addresses the needs of all residents, regardless of ability. Pedestrian facilities significantly affect the way that individuals with disabilities navigate the built environment. In a sample of disabled adults, 60% reported that lack of sidewalks influenced their daily activity.<sup>27</sup>

### **Youth Aged population in Ramsey County**

The Youth Aged Population Map displays the percentage of people 15 years of age or younger per Census tract across Ramsey County. North Oaks, Arden Hills, Gem Lake and Roseville have the lowest percentage of youth at 15% or less. The highest percentage of youth can be found in Saint Paul. Several neighborhoods in Saint Paul have 25-35% of the population being people aged 15 years old or younger. These areas of concentrated youth are found in the inner neighborhoods of Saint Paul that ring downtown.

Children perceive traffic and traffic safety different than adults do, making them particularly susceptible to traffic related injuries and death. Designing a pedestrian and bicycle network with children in mind may result in a safer environment for users of all ages. Youth and children age 15 and under live in the area surrounding Saint Paul's downtown. The Census tracts with higher proportions of young people have low numbers of elderly residents.

### **Native American Population Share in Ramsey County**

The Native American Population Map displays the percentage of people that identify as Native American per Census Tract across Ramsey County. The percentage of the population that identifies as Native American is most prominent in Saint Paul. This population is located in the inner neighborhoods that ring downtown. Three to five percent of the populations in these neighborhoods identify as Native American and one neighborhood shows that five to six percent of the population identifies as Native American. The next prominent city to show a significant population of Native Americans is White Bear Lake with some neighborhoods at two to five percent Native American.

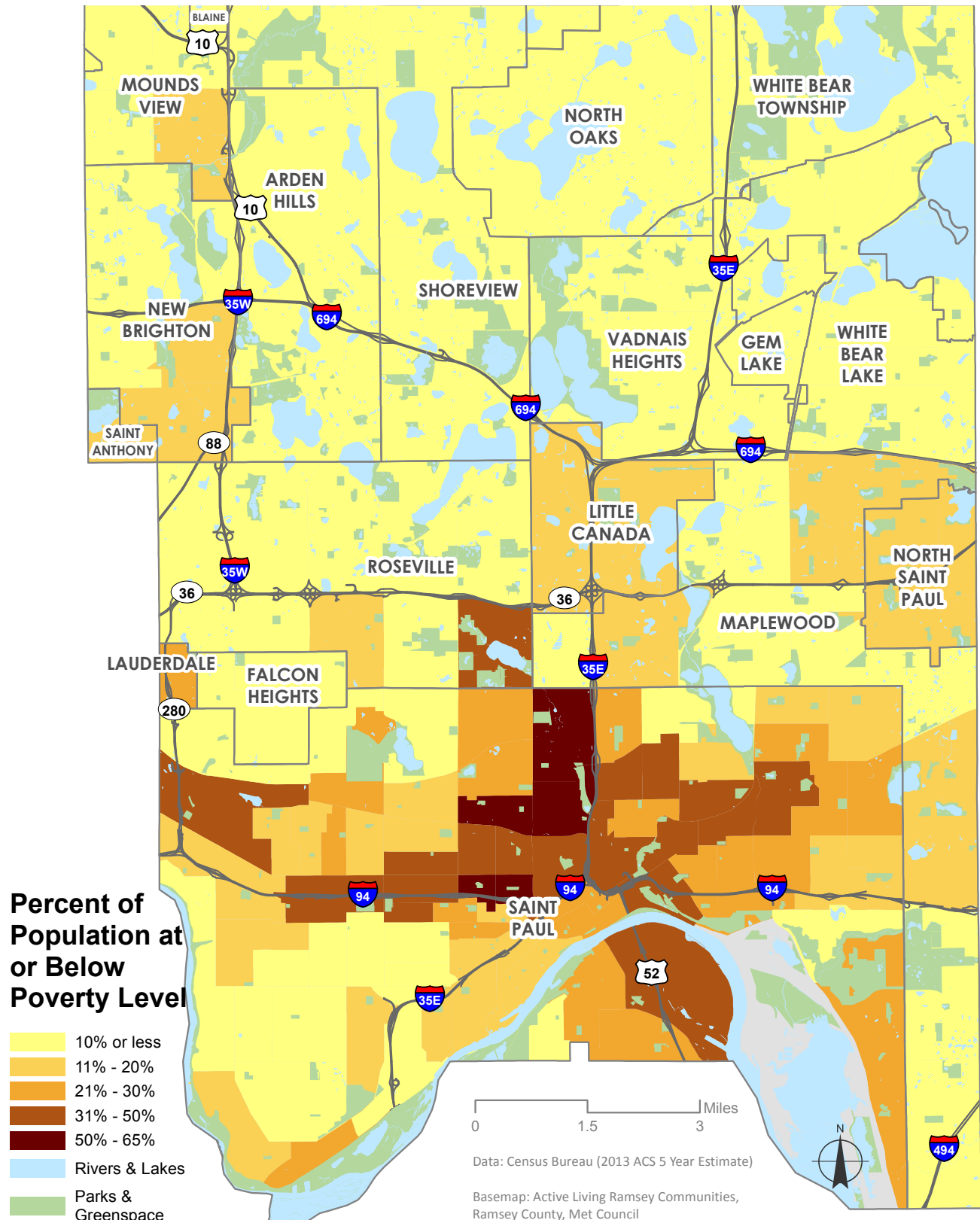
### **Non-White Population Share in Ramsey County**

The Non-White Population Map displays the percentage of people that identify as non-white per Census tract across Ramsey County. The percentage of the population that identifies as non-white is highest in Saint Paul. Downtown Saint Paul shows a 26-40% non-white population, while neighborhoods located to the northwest and northeast of downtown show the highest concentrations of non-white population, with 26-64 percent non-white. North Saint Paul shows the second highest concentration of non-white populations clustered towards the northeast at 41-50%. Parts of Little Canada, Roseville, Arden Hills, New Brighton and Mounds View have neighborhoods with 11-40% non-white population.

### **Composite Ranking of High Impact Population Concentrations in Ramsey County**

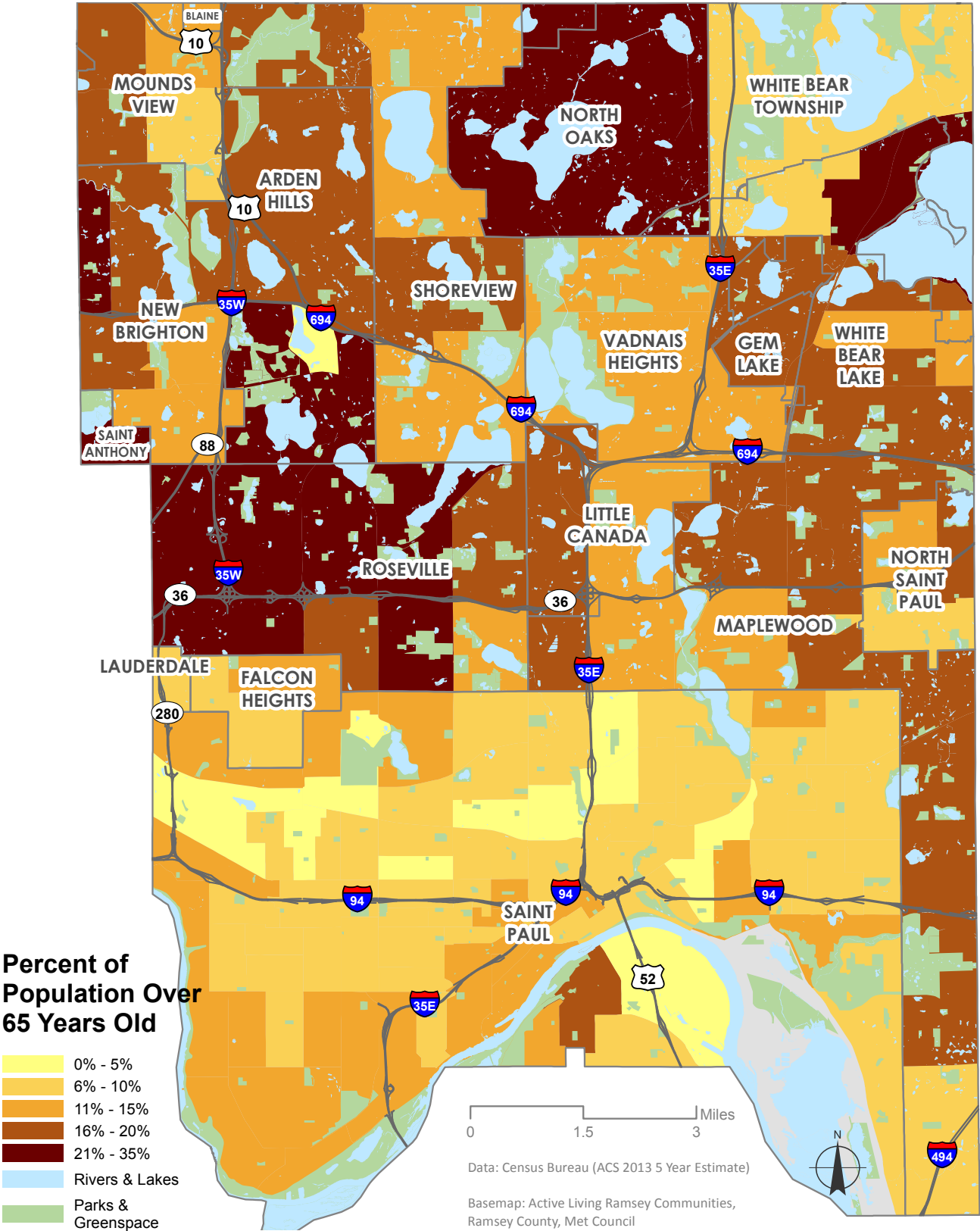
This map displays a composite of tracts with concentrations of high impact equity populations. These include populations with disabilities, low-income populations, youth and elderly populations and non-white populations. When these populations are combined, they show the percentage of high impact populations per acre across Ramsey County. High impact populations are concentrated within the neighborhoods that surround downtown Saint Paul.

Map 2A-16: Percent of Population at or Below Poverty Level in Ramsey County

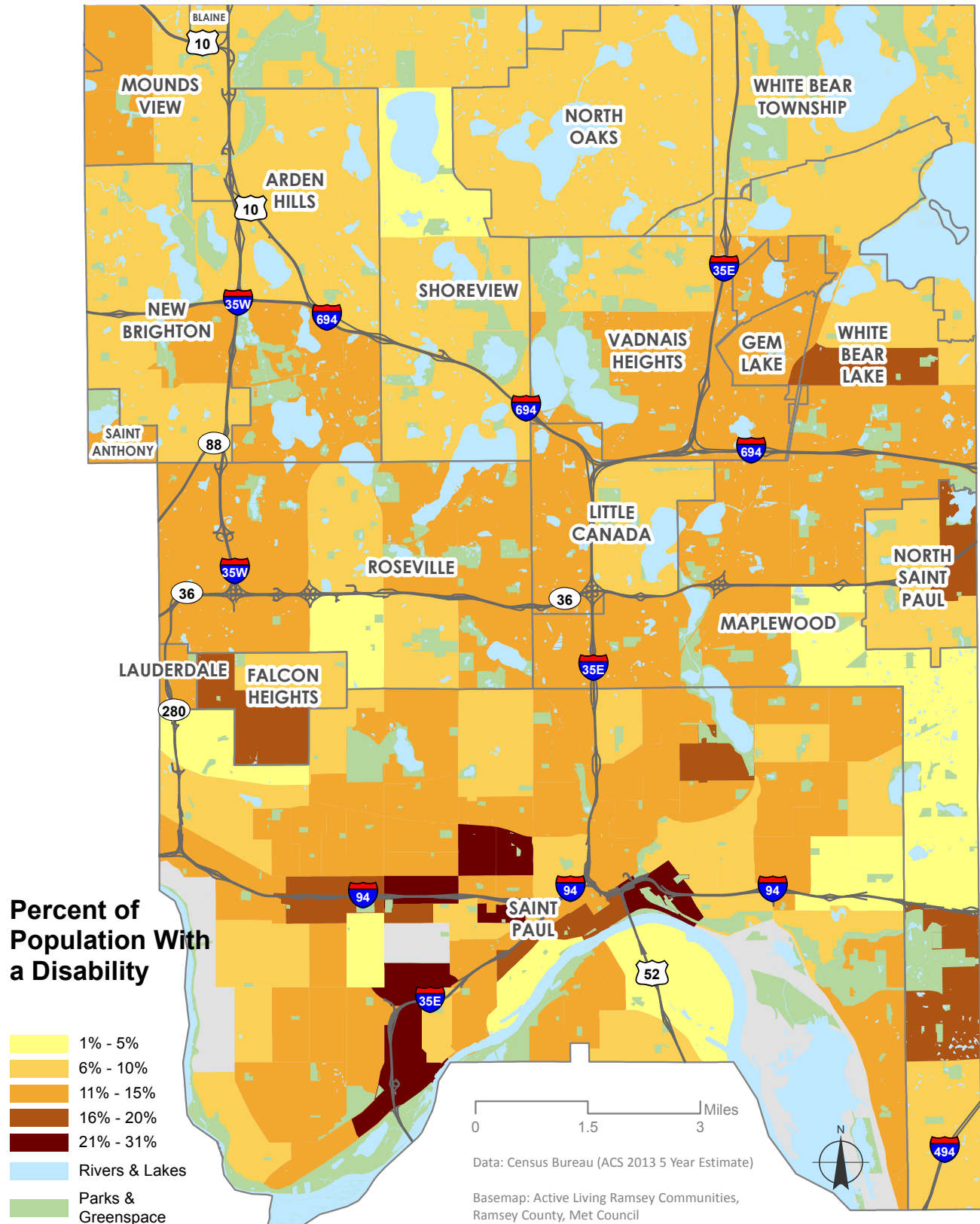




Map 2A-17: Percent of Population Over 65 Years Old in Ramsey County

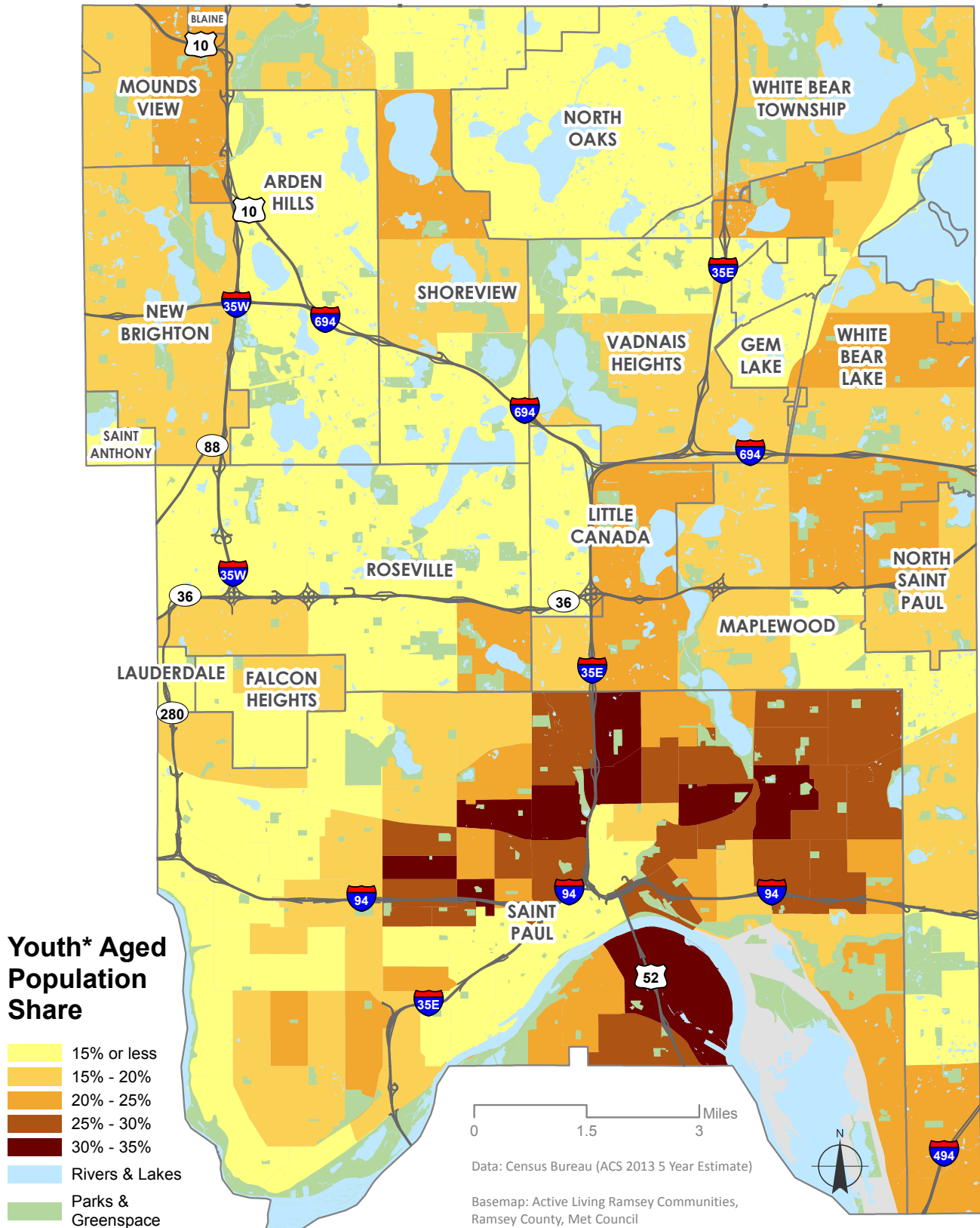


Map 2A-18: Percent of Population With a Disability in Ramsey County

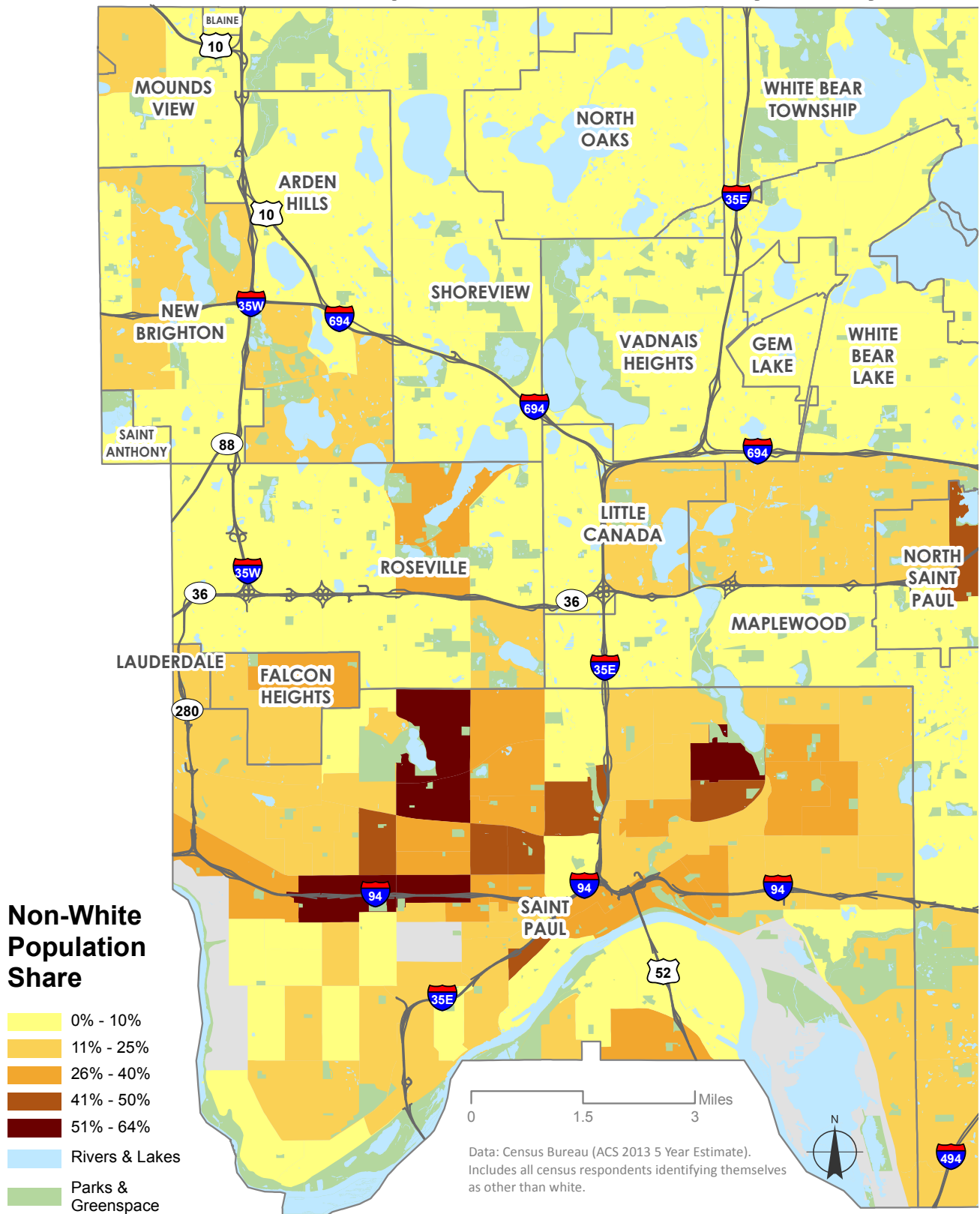




Map 2A-19: Youth Aged Population Share in Ramsey County

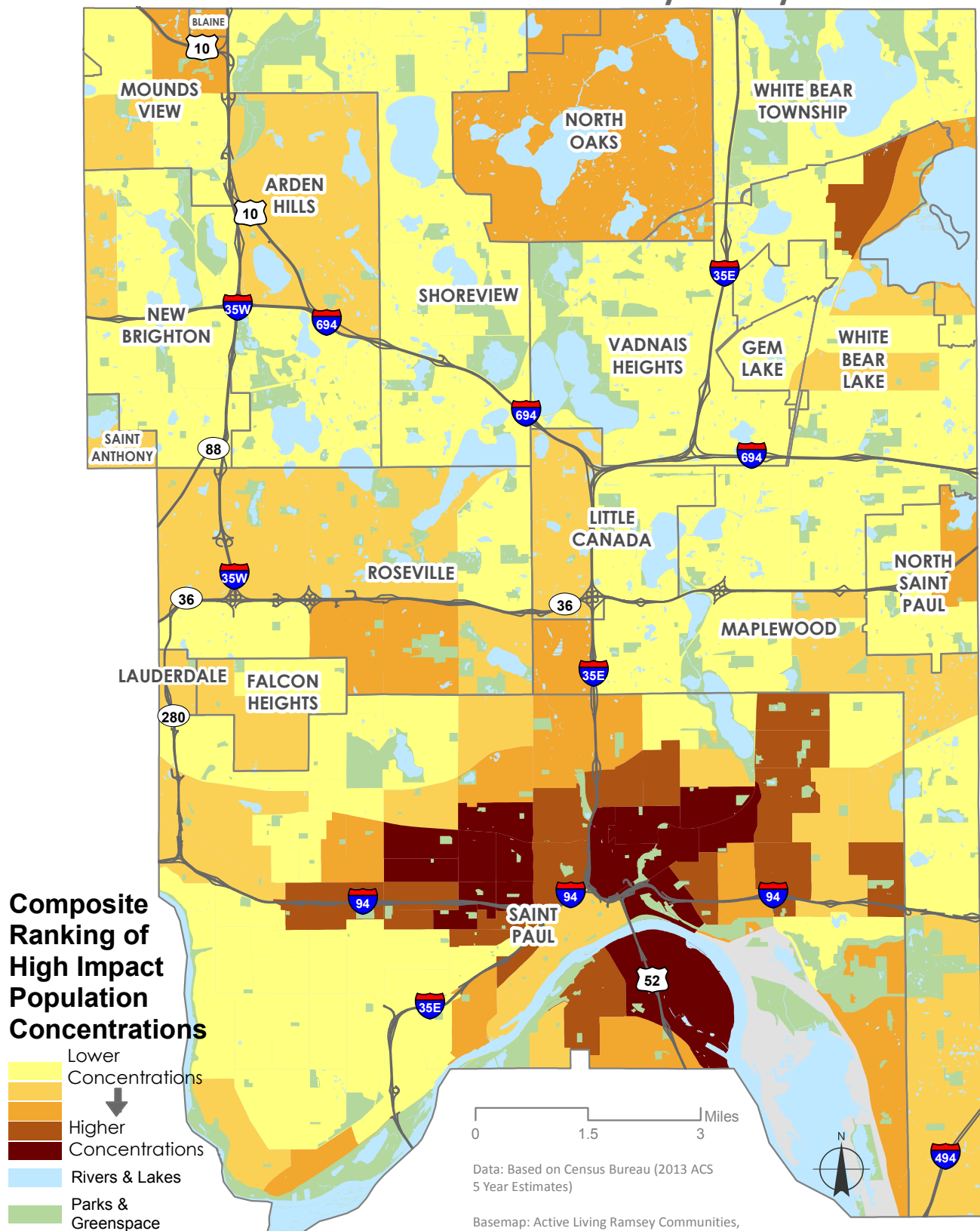


Map 2A-20: Non-White Population Share in Ramsey County





Map 2A-21: Composite Ranking of High Impact Population Concentrations in Ramsey County



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## ECONOMIC PROSPERITY

A community that supports prosperity for all of its residents and businesses must have a thriving network of resources that build a web of opportunity. Transportation and health are key parts of the web.

Walking and biking infrastructure can pay back dividends in the form of increasing access to jobs and education, improving health, increasing attractiveness and real estate development, adding value to home prices and attracting talented workers to local communities and companies.

Bicycling trails and routes for commuting can bring economic development benefits that are felt by individuals and entire communities. More trails can translate into more recreation and economic development. By encouraging employees to commute by bike, the Minnesota company QBP saved \$170,000 in health care costs over three years and \$301,136 in employee productivity every year.<sup>28</sup>

### Active Living as an Income Generator

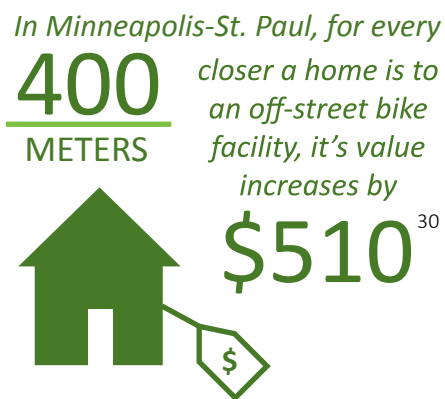
Walking and biking facilities have the ability to become destinations and draw visitors, who in turn spend money at local businesses. Studies have found that trails are used “as an important recruiting tool by local businesses, chambers of commerce, and public agencies. In addition, the trails attract people with special skills or talents, and encourage new and expanding businesses.”<sup>29</sup>

### Adding Value

Ramsey County and Hennepin County residents already know the value of trail amenities, and the local real estate market is responding accordingly, with homes adjacent to trails increasing in value faster than those further from trail amenities.

### Economic Benefits of Bike Share

Bike share users, like those who use their personal bikes or who walk to work, spend less money on commuting per year, freeing up budget for entertainment, household purchases and more. Increasing the ease of walking and biking in equity focus areas means these benefits can easily reach those in most need of such economic support.



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RAMSEY COUNTY-WIDE

## Pedestrian & Bicycle Plan

# Gaps & Barriers in Ramsey County

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## System Analysis Introduction and Overview

Budgets are not unlimited, needs are not equal and some places may see more net benefits than others in a given time period. The system analysis described below identifies those areas most deficient in walking and biking infrastructure as those areas of most potential for benefit.

A county-scale, data-driven approach was used to identify network gaps throughout Ramsey County. This analysis identified barriers to connectivity and put them in the context of community need and potential demand.

### Analysis Approach

The report analyzes where people are, where they want to travel and what kind of system facilities they need. The analysis performed here is based on the principles of supply and demand.

The supply side represents the provision of pedestrian and bicycle facilities and the safety history of the streets in Ramsey County. Most often, this is a *lack* of supply of safe and comfortable facilities for walking and biking.

The demand side represents where people are located, where they want to travel and concentrations of historically disadvantaged populations that may have greater needs for transportation options and investment.

Balancing supply and demand can help guide investments, identify priorities and get the most community value for funding when upgrading or implementing facilities.

### Mapping Street-by-Street

Each analysis area and data point is mapped and assigned to the individual street itself, even if these are not traditionally thought of as street characteristics. For example, population density data from the Census Bureau is translated from the census tract level geography and assigned to the streets within the area. This doesn't identify the individual block-by-block population density, but it does allow a block-by-block analysis using the general density in the vicinity of a particular street.

## Outcomes

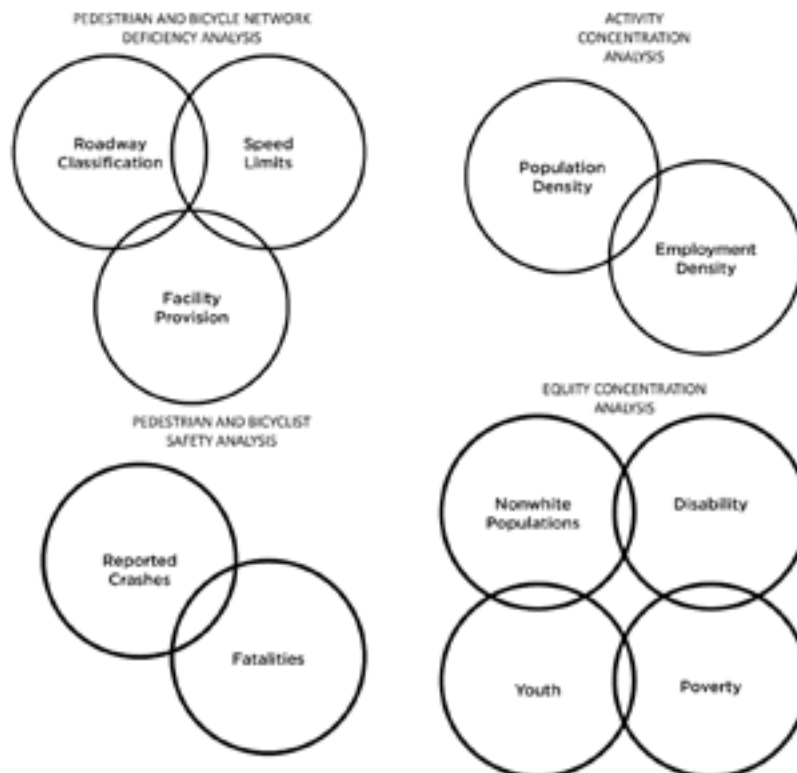
The analysis provides an overview of conditions for pedestrians and bicyclists on streets within the County. The result reflects the quality of streets and the experience for walking and cycling rather than a simple documentation of the existing facilities. Maps showing existing and planned facilities are available in the State of Walking and Biking Environment Report.

In addition, the system analysis provides additional information to inform future implementation of the Connected Ramsey Communities network. Evaluating network quality, barriers and key population concentrations supports both the route identification process and knowledge about needs for improvement or new facilities.

## Four Analysis Areas

The technical analysis of the Ramsey County walking and biking network covers four areas. These analysis areas can be referenced independently to better understand the street-by-street conditions or can be combined to understand a comprehensive picture of street by street gaps, barriers and opportunities.

Each analysis area is composed of two or more factors. The Pedestrian and Bicyclist Safety Analysis, for example, is built upon datasets of reported crashes and locations of fatalities. Each analysis area is depicted below, identifying the primary inputs used in the analysis.





## ACTIVITY CONCENTRATION

Constructing new facilities in locations where there will be higher levels of use helps make effective use of resources as the larger network is built out over time.

Trip making demand is tied to residential and employment population density, mix of land uses and trip length. Residential and employment population density is very important for walking and biking demand because as density increases, trip lengths tend to decrease.<sup>1</sup> The shorter the trip, the more likely it can be made by walking and biking.

High residential and employment population densities also result in more viable transit service and use.<sup>2</sup> Most people making a trip by transit start and end as a pedestrian, relying on sidewalks and crosswalks to get them to their final destination.

Employment is also a significant trip generator and attractor. The journey to work is one of the most consistent trips in a person's day. It is a standard measure tracked by the Census Bureau and is one of the most common ways to report and track the levels of walking and biking in local communities.

To represent trip demand in the analysis, the Population Density Index measures the composite density of population and employment, representing the general level of potential activity on a particular street.

## Activity Concentration Analysis Results

While Saint Paul shows the highest level of activity concentration across the county, other communities have their own local areas of concentrated activity, such as Roseville Mall or employer campus areas. Not every community in Ramsey County has areas of high levels of activity. These locations are places where residents and employees are likely to make frequent short trips, ideal for increased walking and biking.

### Activity Concentration Analysis Map Summary

The activity concentration analysis map displays a street-by-street assessment of surrounding residential and employment density. Color intensity indicates overall activity concentration on a relative scale of “Lower Activity” to “Higher Activity.” Absolute values for density factors are displayed and discussed in detail in the **State of Walking and Biking Report**.

Limited access highways are displayed in gray and are excluded from this analysis.

### Findings and Notable Results

The major population center in Ramsey County is the City of Saint Paul. The downtown core is filled with dense employment activity. Other notable population activity areas include the 3M campus in Maplewood and along the Snelling Avenue corridor in Falcon Heights and Roseville.

Pockets of activity areas are also concentrated in the historic downtown White Bear Lake, the neighborhood around Berwood Park in Vadnais Heights and areas in St. Paul such as University Avenue, Energy Park Drive and the University of Minnesota St. Paul Campus.

Future development areas, such as Rice Creek Commons in Arden Hills, the New Brighton Exchange in New Brighton and the Ford Plant in St. Paul, are identified on the map. While these areas today are not yet developed to their future potential, these sites are planned for new residential and employment development. This will result higher activity levels than the surrounding areas.



## Implications to the Future Vision

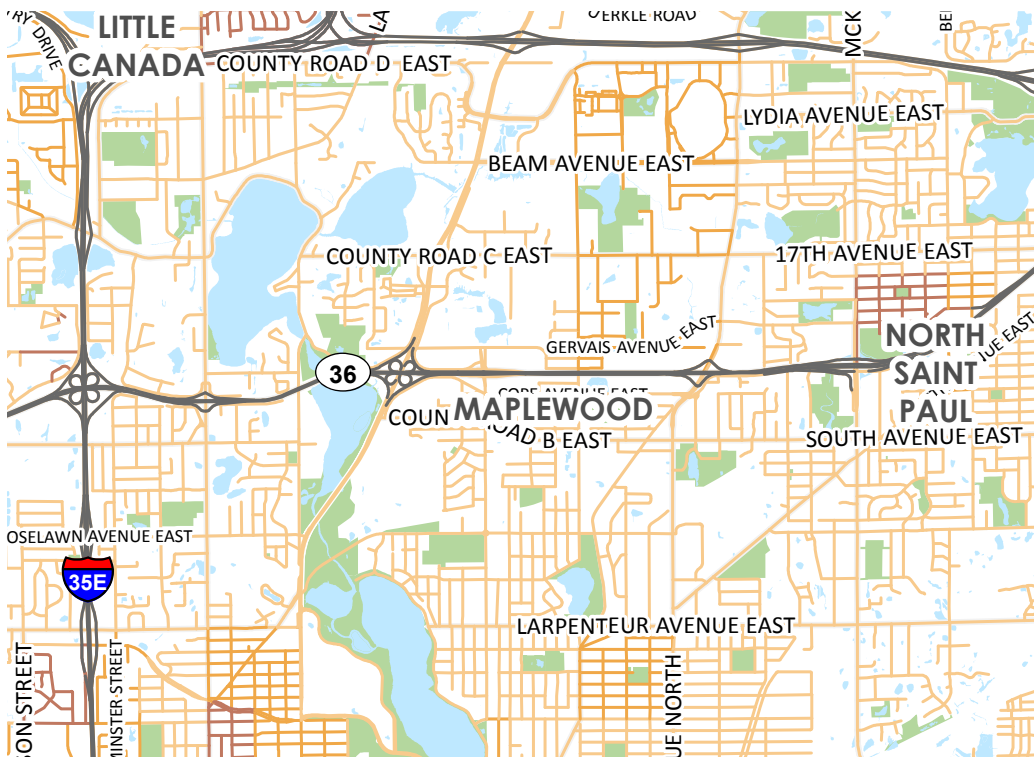
Areas with high levels of activity concentration are the backbone of the Connected Ramsey Community networks. These locations represent the most common origins and destinations for county-wide transportation trips and are most likely to have high demand for internal short-distance trips.

Not all areas with high activity concentration have the same needs for leveraging that activity. Downtown Saint Paul has the street grid, sidewalks and crossing opportunities to promote high levels of walking activity between destinations.

The high levels of activity around Roseville Mall lack the developed street grid and complete sidewalks of Saint Paul. Promoting walking and biking here should emphasize county-wide connections to the mall area, include high quality bike parking and provide comfortable walking corridors for trips between commercial developments.

## Analysis Details and Data

The activity concentration analysis is based on 2013 Census five-year ACS data of employment density and residential density. Both factors were assigned a one to five scale from least dense to most dense, and those scales were combined to identify areas of both high residential and employment density.



There are areas within Ramsey County that have high concentrations of activity, including in North St. Paul. For the full map, see page 2B-36.

## PEDESTRIAN AND BICYCLE NETWORK DEFICIENCY

Not every street is safe or comfortable for walking and biking in its current form. Missing sidewalks and curb ramps or a lack of separated bike facilities on busy streets can easily prevent people from walking or biking.

Measures of pedestrian and bicycle deficiencies are analyzed by comparing the provision of walkways and bikeways with the roadway characteristics.

The Pedestrian Deficiency Index was measured by comparing the presence of a separated sidewalk or path to the type of roadway next to it. Busy streets without a separated walkway or with a walkway on only one side of the street are considered deficient.

Not all streets need a separated sidewalk to be comfortable for walking. On low-speed, low-volume local streets, the lack of a sidewalk may not be a barrier and is not considered deficient.

The Bicycle Deficiency Index measures streets in a similar way, by comparing the level of motorized traffic to the type of bikeway provided. In this analysis, street segments are classified into one of four levels of traffic stress based on the anticipated user comfort.



## Pedestrian Network Deficiency Analysis Results

The analysis results illustrate a diverse Ramsey County street network formed by historic roadway standards. Facility quality varies widely across Ramsey County. Some local streets have complete sidewalks or paths on both sides while some large streets with significant levels of traffic are lacking any sort of pedestrian facilities.

### Pedestrian Network Deficiency Analysis

#### Map Summary

The Pedestrian Network Deficiency Analysis map displays the analysis results of the pedestrian level of service calculation. Different colors indicate different levels of completeness. Streets considered most deficient are illustrated in red. These tend to be fast arterial streets with missing or incomplete sidewalks.

Light brown segments are the next level of deficiency in the analysis. These may be local streets with intermittent sidewalk coverage, or arterial streets with a sidewalk on only one side of the street.

Light green segments are those calculated to have minor deficiencies. These segments include moderate speed streets with a sidewalk on one side of the street, or local streets lacking sidewalks.

Dark green segments indicate the streets considered least deficient and least stressful. To qualify for this categorization, the street must have sidewalks on both sides of the street, and have traffic operating at low speeds.

Limited access highways are displayed in gray and are excluded from this analysis.

#### Findings and Notable Results

Streets with full sidewalk coverage are concentrated in the parts of Ramsey County with older development. This includes most of St Paul, the historic center of White Bear Lake and areas of Falcon Heights south of Larpenteur such as University Grove. These streets were built in an era when sidewalk provision was standard on all types of streets and the presence of sidewalks supports walking in these communities to this day.

Neighborhood development in areas outside of Saint Paul followed less consistent design standards and did not require sidewalks as a part of construction. This is particularly noticeable in lower density single family home neighborhoods. Most of these streets are considered deficient in the analysis because of the lack of sidewalks combined with a 30 mph default speed limit.

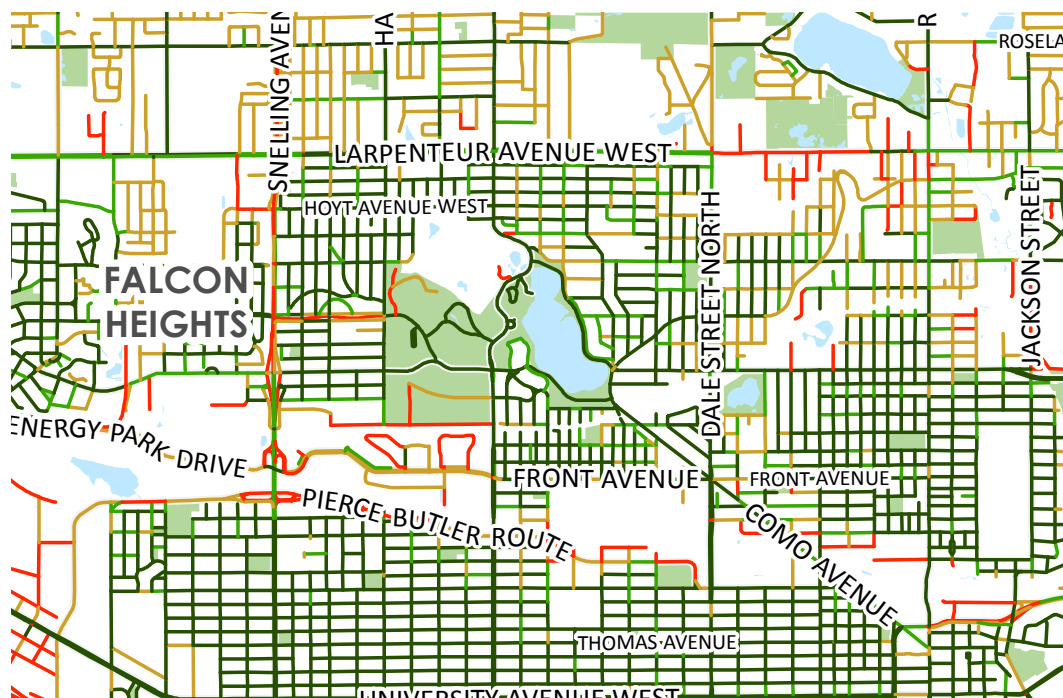
In outer suburban parts of Ramsey County, streets with paths are often the most complete street segments available for pedestrians because of their separated space for people to walk. While the analysis includes recreational paths in independent corridors less suitable for transportation purposes, this category also includes large streets with adjacent paths.

## Implications to the Future Vision

The current design of a street has a dramatic influence over the potential for future investments to support pedestrian activity. To create safe and comfortable conditions high levels of traffic must be mitigated either with traffic calming or with increased separation between pedestrians and moving motor vehicles.

These investments in complete streets are most needed in the lower density suburban areas of Ramsey County.

However, unimproved streets that currently lack curbs, gutters and drainage may offer a future opportunity. Because these streets have little investment today, they offer a lower cost opportunity to construct to a high quality pedestrian facility than an existing complete street which would need to be reconstructed.



Sidewalk coverage varies across the county, with higher concentrations of sidewalks in areas like Falcon Heights. For the full map, see page 2B-37.



## Analysis Details and Data

The pedestrian facility deficiency analysis is based on 2014 MnDOT street data describing speed limit, sidewalk data identifying the location and completeness of sidewalks, shoulder data indicating some form of walkable shoulder space and street classification for identifying local roadways.<sup>3</sup>

Shoulders are not considered a significant walking facility in this analysis. Providing a shoulder on these streets is considered a minor improvement over no shoulder, but is generally not enough to provide a high level of service for pedestrians.

The scoring matrix for the pedestrian level of service analysis is displayed below. Higher values are considered more deficient.

**Table 2B-1: Scoring Matrix for Pedestrian Level of Service Analysis**

Speed Limit	Pedestrian Facility Provision*			
	Complete sidewalk	Sidewalk on one side	Partial sidewalk	No sidewalk
25 mph or Less	0	3	4	5
30 mph	1	4	5	6
35-40 mph	2	5	6	7
45 mph or higher	3	6	7	8

\* If the street is residential, the deficiency level decreases by 2 points and provision of a shoulder decreases the score by 1 point. Streets with paths are assigned a score of zero (not deficient).<sup>4321</sup>

## Bicycle Network Deficiency Analysis Results

The bicycle network deficiency analysis shows that much of Ramsey County is traversable by skilled adult riders. Less skilled, more traffic averse riders, such as children or casual riders, are faced with network gaps, stressful situations and other barriers to bicycling.

### Bicycle Network Deficiency Analysis Map Summary

The Bicycle Network Deficiency Analysis map identifies those streets that are most and least suitable for traveling by users of all ages and abilities as determined by the level of traffic stress analysis, described at the end of this section. A color scale of red to green reports the overall stress level.

Those streets classified as extreme stress are displayed in red. These are street segments that lack facilities or contain facilities inadequate for the intensity of traffic on the street. This classification is common on portions of state or county highways, and on portions of arterial streets with high levels of traffic.

Streets classified as high stress are displayed in orange. These street segments are arterial or collector roads with high speeds and volumes, often with a minimum width conventional bicycle lane.

Moderate stress streets are displayed in light green and include most local streets. The analysis considers most local streets to be stressful due to the default 30 mph speed limit. Because most bicyclist travel between 10 and 15 mph, the high speed limit indicates that motor vehicle speed differentials are too high for riders of all ages and abilities to be comfortable.

Low stress streets are displayed in dark green. These are considered to be functional for users of all ages and abilities. This includes recreational trails, streets with paths running adjacent to them, and some local streets with speed limits below 30 miles per hour.

Limited access highways are displayed in gray and are excluded from this analysis.

Other streets that are more than ¼ mile from the bicycle network are also displayed in gray to indicate the lack of convenient access to the network.



## Findings and Notable Results

Most state or county highways are classified as extreme stress due to multiple lanes of fast moving traffic, with minimal separation from bicycle users. Arterial streets with high levels of traffic and no bicycle facilities are also classified as extreme stress, such as portions of Snelling Avenue and Larpeneur Ave.

Arterials streets with a separated shared use path running along them achieve a stress rating appropriate for users of all ages and abilities. Highway 96 is an example of an otherwise stressful street that achieves a low-stress rating due to the adjacent path.

Most streets in downtown Saint Paul are classified as high stress along with arterial streets such as portions of Como Avenue and University Ave W. These streets have too many lanes or traffic traveling too quickly to permit comfortable travel by bicycle, even if a bicycle lane is provided.

While local streets are often considered low stress, this analysis classifies most local segments in Ramsey County as moderate stress. Because the default speed limit is 30 mph, travel speeds are assumed to be too high for users of all ages and abilities to ride in mixed traffic.

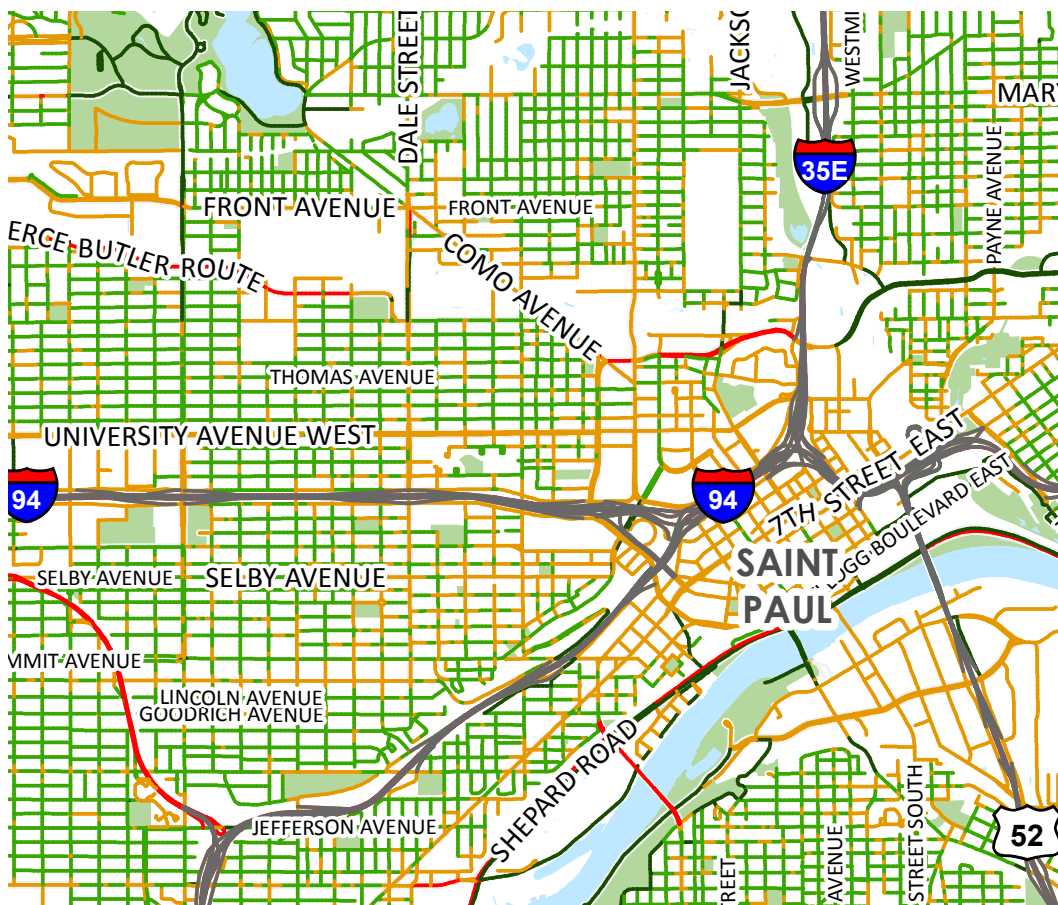
Residential street segments are occasionally classified as low stress when speed limits are below 30 mph. Collector streets such as Fairview Ave S through St. Catherine University are classified as low stress when a wide bicycle lane is present, traffic speeds are low and the roadway configuration includes only one lane in each direction.

## Implications to the Future Vision

The results of the bicycle network deficiency analysis help identify gaps in the Connected Ramsey Communities network. If a county-wide network corridor is classified as extreme or high stress, it indicates a segment in need of improvement.

These network deficiency gaps may be present even if a street currently has a bicycle facility provided. Communities may need to upgrade existing facilities to something more comfortable if accessibility for users of all ages and abilities is desired.

In particular, county-wide network connections along local roadways may be considered candidates for speed management treatments and speed limit reductions. Achieving an average operating speed below 20 mph would reduce the difference in speed between bicyclists and motor vehicles and reduce exposure to passing cars. This modification would change the classification to low stress, which is considered suitable for bicyclists of all ages and abilities.



Levels of traffic stress vary from street to street throughout the County; many low volume and low speed streets are appropriate for most cyclists. For the full map, see page 2B-38.

## Analysis Details and Data

The methods used for the Level of Traffic Stress Analysis were adapted from the 2012 Mineta Transportation Institute (MTI) Report 11-19: Low-Stress Bicycling and Network Connectivity.<sup>4</sup> The approach outlined in the MTI report uses roadway network data including — posted speed limit, the number of travel lanes, and the presence and character of bicycle lanes — as a proxy for bicyclist comfort level. Road segments are classified into one of four levels of traffic stress based on these factors.

The lowest level of traffic stress 1 (LTS 1), is assigned to roads that would be tolerable for most children to ride and to multi-use paths that are separated from motorized traffic. Level of traffic stress 2 (LTS 2) roads are those that could be comfortably ridden by the mainstream adult population.



The higher levels of traffic stress 3 & 4 (LTS 3 and LTS 4) correspond to types of cyclists characterized by the Four Types of Cyclists framework.<sup>5</sup> This categorization of cyclist types is accepted throughout the bicycling planning practice across the U.S. Level of traffic stress 3 (LTS 3) is the level assigned to roads that would be acceptable to current “enthused and confident” cyclists and level of traffic stress 4 is assigned to segments that are only acceptable to “strong and fearless” bicyclists, who will tolerate riding on roadways with higher motorized traffic volumes and speeds. The definitions for each level of traffic stress are shown below:

**Table 2B-2: Bicycle Deficiency Analysis Scoring and Characteristics**

Level of Traffic Stress (LTS)	Description	Suitability	Traffic Speed	Typical Locations
1	Little traffic stress and requires less attention	All cyclists (age 10 or higher)	Low	Residential local streets and separated bike paths/cycle tracks
2	Little traffic stress but requires more attention and skill	Adult cyclists with adequate bike handling skills	Low	Collector-level streets with bike lanes or a central business district
3	Moderate stress	Most observant adult cyclists	Moderate	Low-speed arterials with wide bike lanes or moderate speed roadways with one lane in each direction
4	High stress	Experienced and skilled cyclists	Moderate to high	High-speed or wide roadways with narrow or no bike lanes

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## SAFETY

One of the top reasons people cite for not walking and biking more is concern about safety. The threat of collision is real, and 10 years of collision data shows that some places are safer than others. Intersections and streets that have a history of motor vehicle collisions act as barriers to walking and biking. The safety analysis identifies these locations to identify geographic patterns that might be overcome with targeted investments.

## Pedestrian Safety Analysis Results

Ramsey County has the highest estimated pedestrian fatality rates in the State of Minnesota.<sup>6</sup> Clusters of pedestrian involved crashes reveal key corridors with pedestrian safety concerns. These streets tend to combine a large amount of fast moving traffic with a high level of pedestrian activity and often have disastrous results.

### Pedestrian Safety Analysis Map Summary

The pedestrian safety analysis identifies streets with a high concentration of crashes involving pedestrians. Segments with multiple crashes are highlighted with increasing intensity and the result shows clear corridors where pedestrian-involved collisions are a frequent occurrence.

Street segments in gray had no reported collisions. The locations of pedestrian fatalities are identified on the map. These locations indicate a potential problem area, although specific analysis of the crash details is necessary to understand the circumstances surrounding the particular incident.

### Findings and Notable Results

When displayed visually, clear corridors appear with concerning levels of crashes. These tend to be streets with high volumes of cars and higher levels of pedestrian activity, such as:

- Downtown Saint Paul
- University Avenue W
- Snelling Avenue
- Summit Avenue
- Minnehaha Avenue E
- White Bear Avenue
- US 61 through White Bear Lake



### Fatal or Serious Injury Crashes<sup>7</sup>

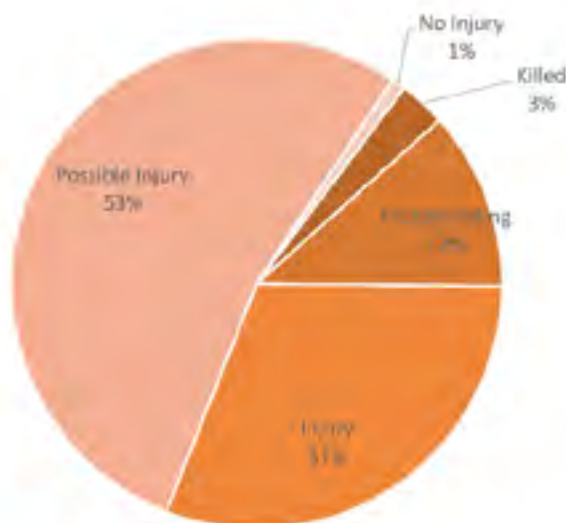
- Most pedestrian crashes resulting in an injury or fatality occurred in St Paul.
- Maplewood and White Bear Lake have the second highest number of pedestrian crashes resulting serious injury or fatality. In these communities, fatal and serious injury pedestrian crashes account for 29 and 26 percent of the community's pedestrian crashes, respectively.
- In Vadnais Heights, over two-thirds of all pedestrian crashes resulted in a fatal or serious injury.

Only **reported** crashes were used in this analysis. These crashes were severe enough to warrant reporting and data collection. Data concerning less severe crashes or near-miss events that may indicate a safety problem is not available and is not included on this map.

The likelihood of a pedestrian fatality is directly tied to the impact speed of a crash. This relationship is well documented nationally and is illustrated by the experiences within Ramsey County communities.

This can be seen based on an analysis of Ramsey County crash data.<sup>8</sup> On streets with speed limits of 50 mph or below, the rate of fatal or serious injuries in crashes involving pedestrians is under 20%. On streets with speed limits of 55 mph or higher, this number jumps to 40%. It is important to note that the posted speed limit does not indicate the actual travel speed of the motor vehicle involved in the crash.

### Injury Level of Pedestrian Involved Crashes in Ramsey County (2004-2014)



## Implications to the Future Vision

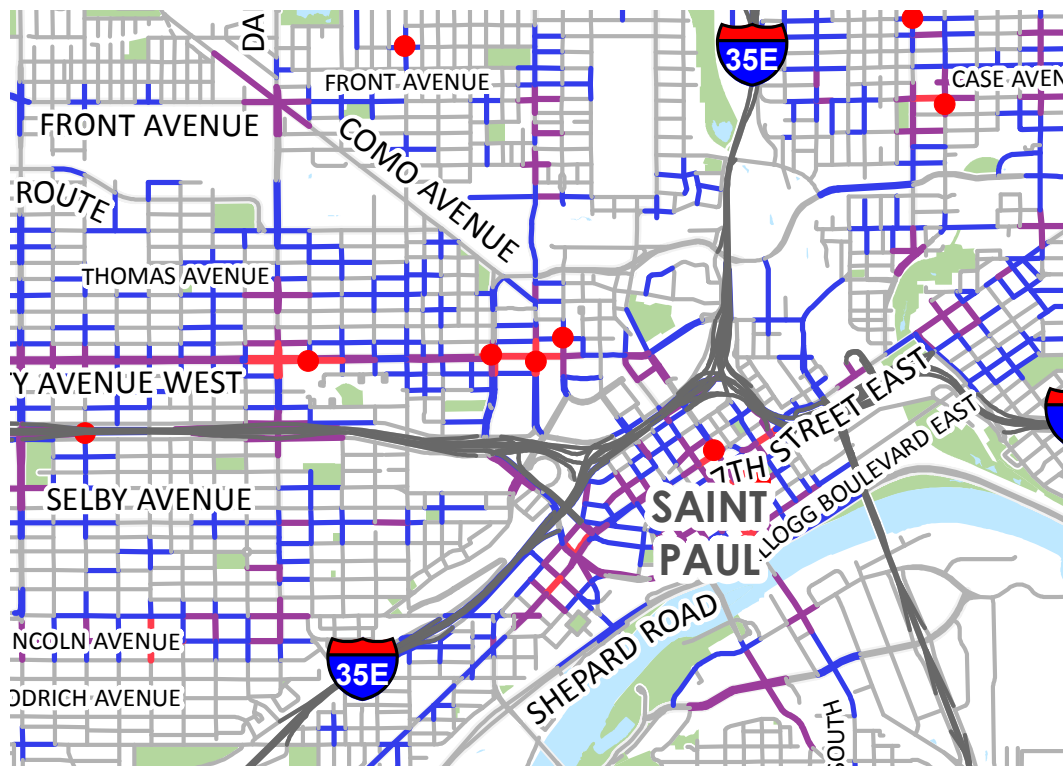
Concern over safety is one of the leading reasons people decide not to walk or bike. This analysis indicates that in some parts of Ramsey County the safety risk is real. Corridors with high levels of crash activity act as barriers to increased walking and local jurisdictions should explore investments to improve pedestrian conditions in these areas.

In some cases, such as University Avenue or Snelling Avenue, the high-crash corridor is a commercial corridor. These areas see high levels of pedestrian activity, and the traffic environment should be improved to reflect a pedestrian-priority. This may include lower design speeds, enhanced marked crossings and improved signal timing at intersections.

## Analysis Details and Data

Crash data comes from MnDOT, including crashes from 2004-2014.

A detailed analysis of all pedestrian crashes in Ramsey County is available from MnDOT in the report *Pedestrian Safety: An Exploratory Analysis Minnesota and Ramsey County Preliminary Findings (2009 - 2014)*.<sup>9</sup>



Crashes involving pedestrians occur most frequently on streets with high volumes of cars and higher levels of pedestrian activity, such as in downtown St. Paul. For the full map, see page 2B-39.



## Bicyclist Safety Analysis Results

It is estimated that Ramsey County has the second highest serious injury rate of bicyclists in the State of Minnesota.<sup>10</sup> Overcoming these unsafe conditions will do much to remove a barrier to increase bicycling. The bicyclist safety analysis identifies those areas and streets where most bicycle involved crashes occur.

### Bicyclist Safety Analysis Map Summary

The bicyclist safety analysis identifies streets with a high concentration of crashes involving bicyclists. Segments with multiple crashes are highlighted with increasing intensity, and the result clearly shows corridors where bicyclist-involved collisions are a frequent occurrence.

Street segments in gray had no reported collisions.

The locations of bicyclist fatalities are specifically identified on the map. These locations indicate a potential problem area, although specific analysis of the crash details is necessary to understand the circumstances surrounding the particular incident.

### Findings and Notable Results

When the crash history data is displayed visually, clear corridors appear with concerning levels of crashes. Fewer high-crash corridors stand out than did on the pedestrian analysis, but those that do correlate with those identified in the pedestrian analysis:

- University Avenue W
- Snelling Avenue
- Rice Street
- Summit Avenue

Only *reported* crashes were used in this analysis. These crashes were severe enough to warrant reporting and data collection. Data concerning less severe crashes or near-miss events that may indicate a safety problem is not available and is not included on this map.

There were five bicyclist fatalities in Ramsey County within the ten year period examined in this analysis. This dataset is too small to get an accurate understanding of the causes or type of crash that resulted in a bicyclist fatality. To get better understanding, a national study was referred to that analyzed hundreds of bicyclist fatalities. This study identified “rear end” collisions as the major crash type resulting in bicyclist fatality. This information can be used to support facilities such as protected bike lanes, which can reduce rear-end collisions when compared to conventional on-street bike lanes.

**Table 2B-3: Crash Type in Bicyclist Fatality Crashes in the United States<sup>11</sup>**

Crash Type	%
Rear End	40%
Cyclist Side/Car Front	11%
T-Hit	10%
Head On	8%
None	7%
Right Hook	6%
Driver Failure to Yield	6%
Other	5%
Sideswipe	4%
Cyclist Failure to Yield	2%

## Implications to the Future Vision

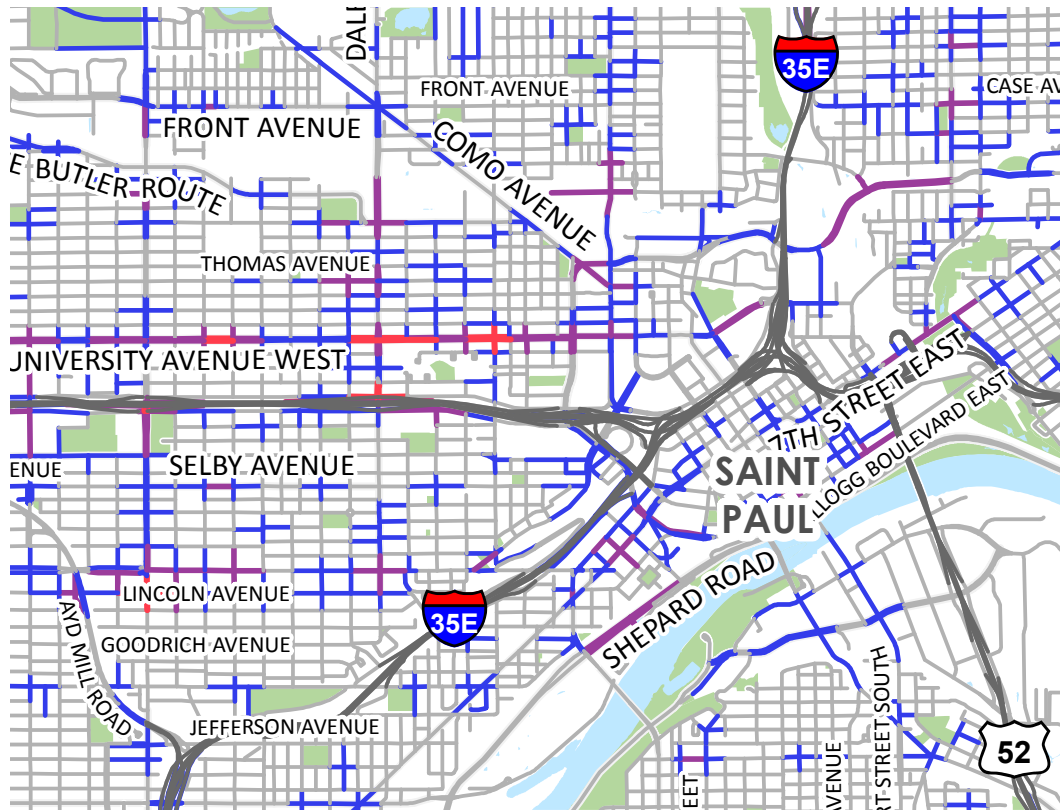
The Connected Ramsey Communities network has an opportunity to overcome the barriers of high-crash corridors. The network alignments can act as a bridge across these high crash areas, or if they run along them, can transform the safety of an entire corridor.

Even if a high-crash corridor is not a part of the county-wide network, local communities will see benefits from removing risks and improving safety for the most vulnerable users of these roads.



## Analysis Details and Data

Crash data comes from MnDOT, including crashes from 2004-2014.<sup>12</sup>



Crashes involving cyclists occur most frequently on streets with high volumes of cars and higher levels of bicycle activity, such as in downtown St. Paul. For the full map, see page 2B-40.

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## EQUITY

Good transportation is vital for access to activities and essential services that are needed to fully participate in society.

In automobile dependent communities, people who do not have the ability to drive or do not have access to vehicles can be at a great economic and social disadvantage. Forty percent of Minnesotans are not able to drive due to youth, old age, income or disability.<sup>13</sup>

Communities without adequate quality and quantity of transportation, including facilities for bicycling and walking, place residents at a distinct disadvantage when trying to access jobs, school, medical services and other daily needs.

Equity in transportation planning looks to more fairly distribute resources, particularly to those who have the least access to critical resources, including jobs, education, affordable housing, health care resources and other destinations important to daily life. When using an equity lens, it is possible to identify where transportation investments can improve health and accessibility for populations in need, including low-income households, communities of color and people with disabilities.

Many factors in the built environment contribute to the inequitable distribution and availability of resources to populations including the inadequate distribution, accessibility and quality of biking and walking facilities, the concentration and limitation of affordable housing options and the construction of high speed, high volume roads through low-income neighborhoods. Communities of color and low income residents are disproportionately represented in pedestrian and bicycle crashes and are at the highest risk.

Inequitable distribution of resources impacts vulnerable populations, through increased travel costs, worse health outcomes and higher health care costs and decreased accessibility and mobility.<sup>14</sup>

## Equity Analysis Results

Understanding where and how particularly vulnerable populations live is an important aspect to any transportation planning process.

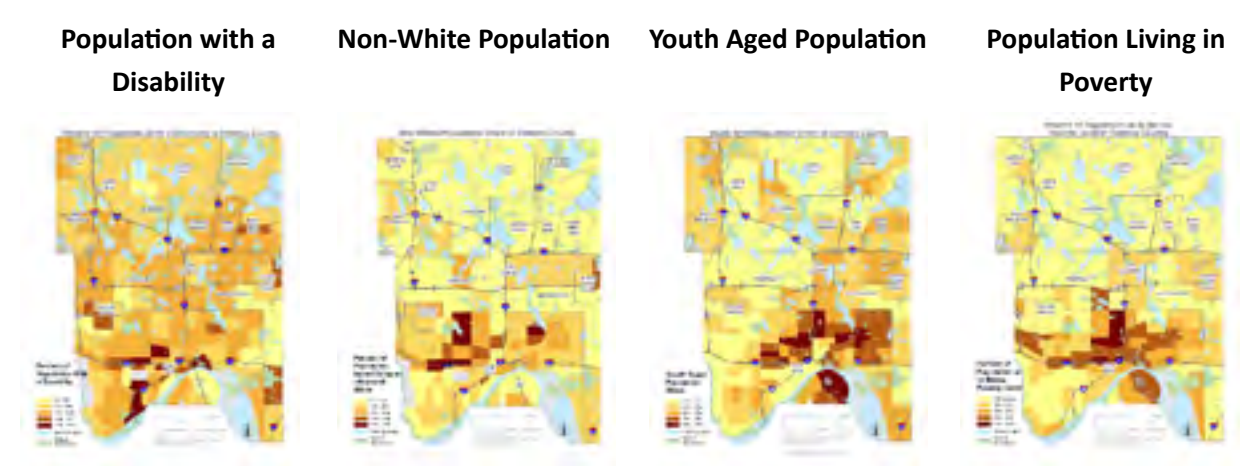
### Equity Analysis Map Summary

The equity analysis map presents the equity population concentration of a particular street segment, displayed in increasing intensity as the degree of concentration increases. General intensity is noticeable in the central core of Ramsey County, but clusters of equity population concentrations are spread across the county. These clusters tend to be in the commercial core areas of each community.

Based on a Ramsey County-specific subset of MnDOT recommendations for priority populations, the equity index creates a consolidated map of concentrations of these populations in Ramsey County. This score is generated as a combination of four primary equity populations:

- Disabled population
- Non-white population
- Youth population
- Population in poverty

These maps are displayed in detail in the **State of Walking and Biking Environment Report**, and reproduced as thumbnails below.





## Findings and Notable Results

Outside of Saint Paul, some communities stand out with more significant concentrations of equity populations:

- Mounds View
- White Bear Township
- Roseville
- Falcon Heights
- Maplewood
- North Saint Paul

## Implications to the Future Vision

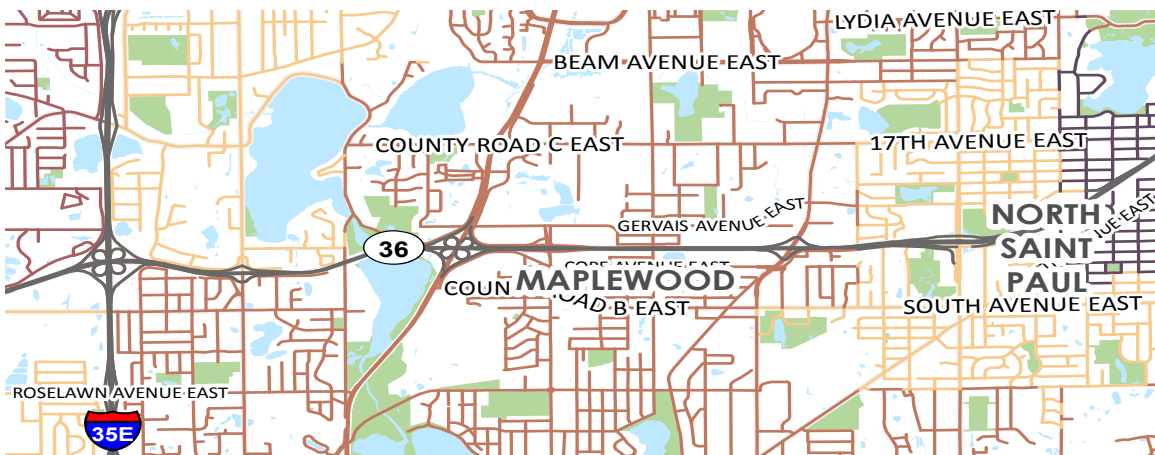
The Connected Ramsey Community network must connect the residents most in need of active transportation facilities. By distributing the network equitably across the county and connecting into the core of equity population concentration areas, the county-wide network can function as a lifeline for regional travel.

The information in this analysis can be used along with the other analysis areas to evaluate and prioritize alignments along the Connected Ramsey Communities network.

## Analysis Details and Data

Data used for the equity analysis was Census Bureau ACS 2013 5-year estimate data.<sup>15</sup>

Data was retrieved at the tract level and mapped down to individual street segments for analysis purposes. It is important to note that while this accurately represents the demographics of the overall tract-level area, it does not necessarily indicate the level of population concentration on a particular block.



High concentrations of equity populations live in North St. Paul and Maplewood. For the full map, see page 2B-41.

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## SYSTEM ANALYSIS CONCLUSIONS

Combining the four analysis areas results in a composite system analysis. The resulting hot spots identify network and service gaps where improvements may be needed the most.

To interpret the resulting maps, it may be necessary to refer back to the specific analysis areas. A particular hot-spot might arise due to a strong crash history in a particular location, or perhaps due to a high concentration of target equity populations. Understanding the reason for the hot spot can orient agencies and jurisdictions toward an appropriate response.

On these maps, all indices have been given 'equal' weighting. The particular balance should be adjusted to reflect the goals and objectives of the plan, and communities referencing this analysis should always review the individual index layers themselves to understand what factor may be influencing the final priority scoring.

## Pedestrian and Bicycle System Analysis Results

Combining all levels of the system analysis reveals the areas that rank highest across each analysis area. The highest scoring locations combine high population densities and high concentrations of equity populations with a poor safety record and lower quality facilities. Improving these areas can do the most good for the most people.

### Pedestrian and Bicycle System Analysis Map Summary

The system analysis maps presents the overall combined results of all previous analysis areas. Each street is ranked from low to high, representing the overall level of population demand and facility need. Moderate scores on this map, such as North Saint Paul or Roseville, indicate that an area may have scored highly on one analysis, but not on another. High scores, such as downtown Saint Paul, indicate an area that scores highly in many analysis areas.

### Findings and Notable Results

Downtown Saint Paul stands out as the highest ranking area in the overall system analysis. The downtown core ranks highly across every analysis area, and improvements there would benefit many people and improve currently inadequate conditions.

### Differences in Pedestrian and Bicycle Results

In general, the system analysis results for the bicycle system match those for the pedestrian system. This is because of the similar conditions and factors used for each mode. Some factors, such as a population density and equity concentration, are identical in the analysis for each mode. The safety analysis is unique for bicyclists or pedestrians, but the overall concentration of crashes involving these users tends to be clustered around the same areas and streets.

Areas ranked slightly higher on the bicycle system analysis are:

- Northern neighborhoods in Saint Paul
- The highland neighborhood in Saint Paul
- The Baker-Annapolis neighborhood in Saint Paul

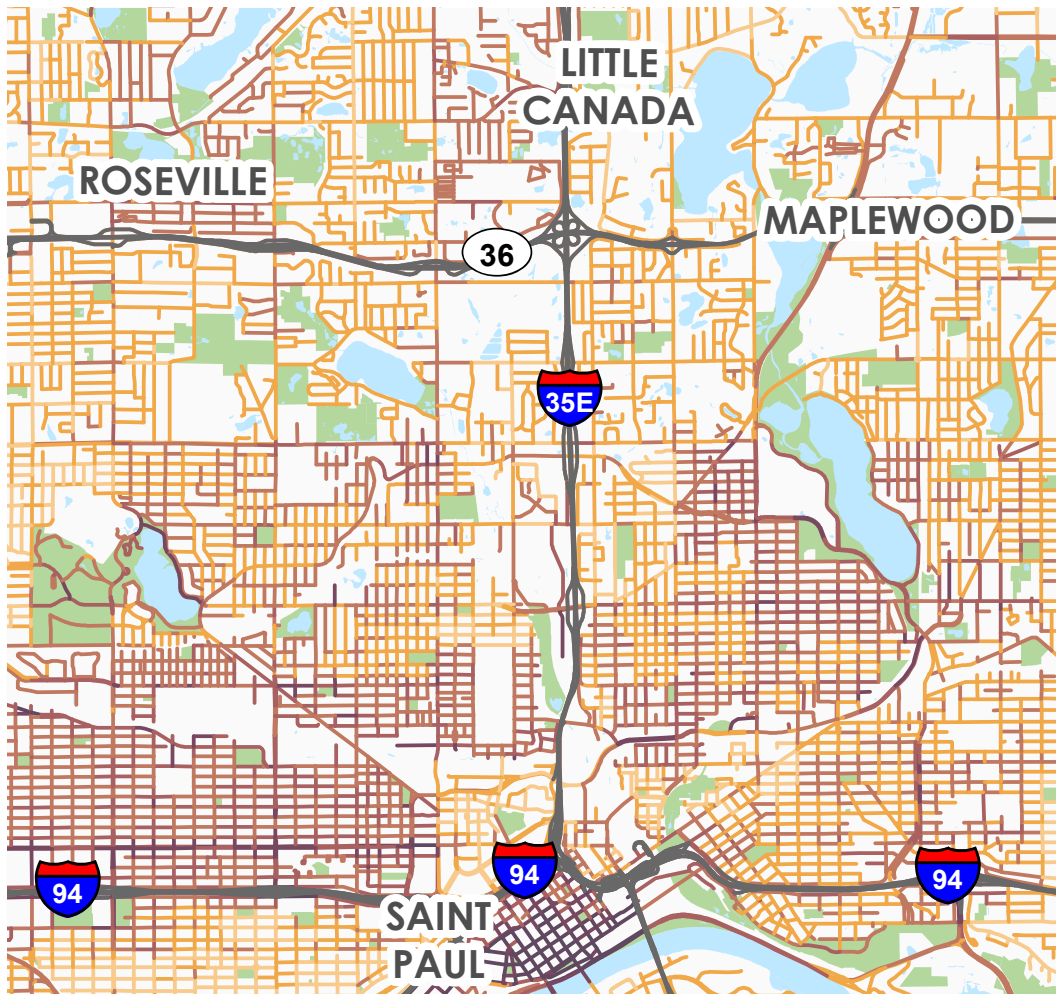
Areas ranked slightly higher on the pedestrian system analysis are:



- Little Canada
- Roseville
- Neighborhoods south of the White Bear Lake

## Implications to the Future Vision

This overall system analysis can be used to identify prioritization of Connected Ramsey Communities corridors or to focus local efforts for improvements to the walking environment.



Maps were created for both the pedestrian and bicycle system analysis, which illustrate the differences in the two systems. For the full maps, see pages 2B-39 and 2B-40.

## Building the Connected Ramsey Communities Network

The results of the system analysis, combined with an understanding of Met Council regional networks and local community networks, helps identify the corridors of the Connected Ramsey Communities network of county-wide bikeways. Some corridors will stand out as the preferred route between communities, due to high population densities or access through and to equity populations. Others will emerge because of the potential to enhance the quality and safety of the network.

### Connections with Met Council Regional Networks

The Met Council identifies two related regional networks, the Regional Bicycle Transportation Network and the Regional Trail Network. Both of these networks will be included in the Connected Ramsey Communities network as either Major County-wide Corridors or County-wide Connector Corridors in response to their Met Council classifications.

### Connections with Local Networks

Communities within Ramsey County maintain their own local networks of biking routes. Based on local interests and needs, these routes will be represented as Local Corridors in the Connected Ramsey Communities Network. No new routes will be proposed as local network connections.

### Identified Needs

Where local plans do not correspond with county-wide alignments, or where key local connections are missing from local plans, the Connected Ramsey Communities network will call out “identified needs.” These should be incorporated into local plans.

### Route Prioritization and New County-wide Connections

New Major County-wide Bikeways and County-wide Bikeways will be proposed to fill gaps and achieve an overall density of network coverage necessary to reach all communities in the county:

- New Major County-wide Bikeways will be established as needed to create



- a 1.5 mile grid of Major County-wide Bikeway alignments to provide high-quality regional access.
- New County-wide Bikeways will be established to connect neighborhoods to the Major County-wide Bikeway alignments.

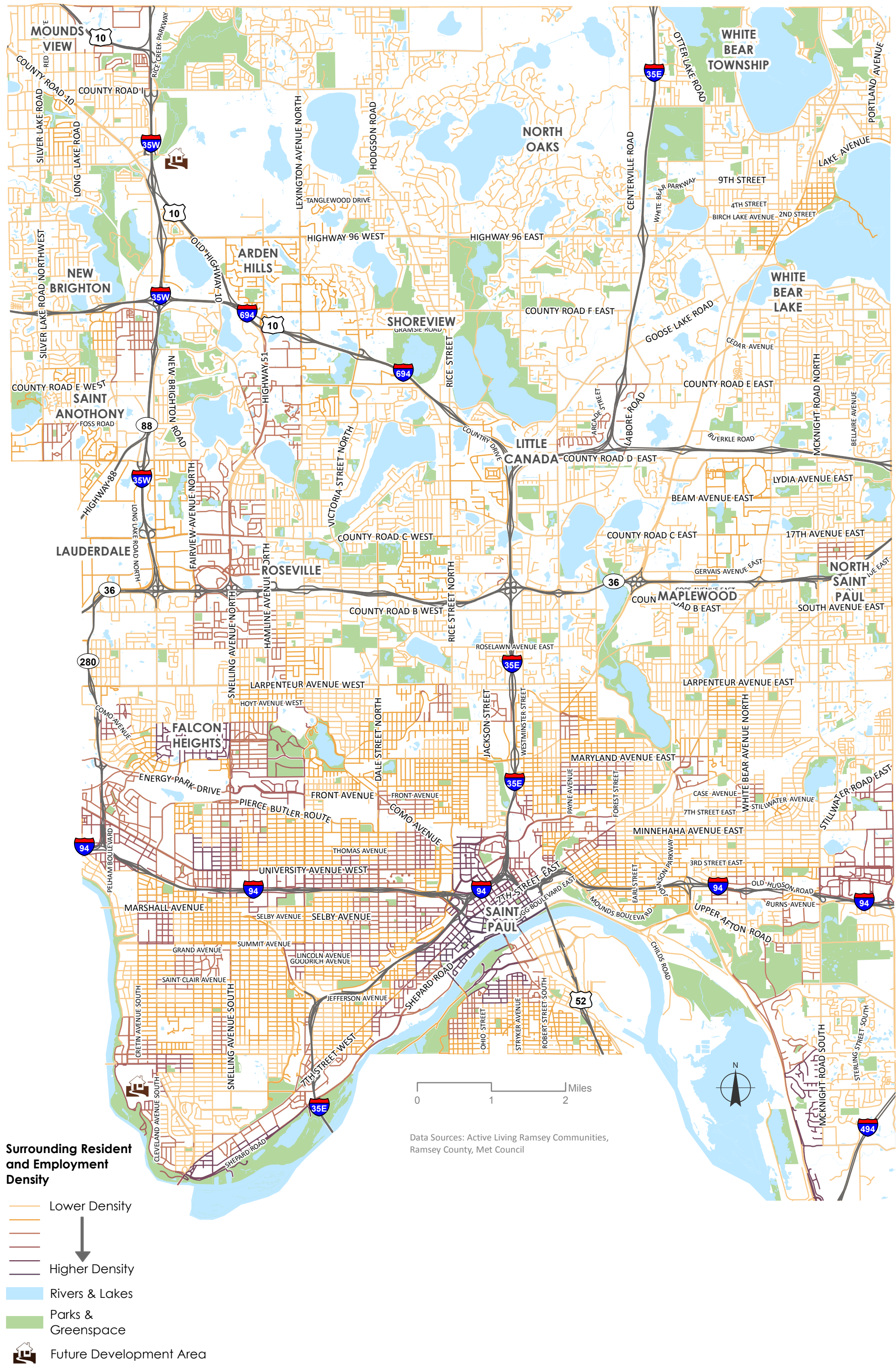
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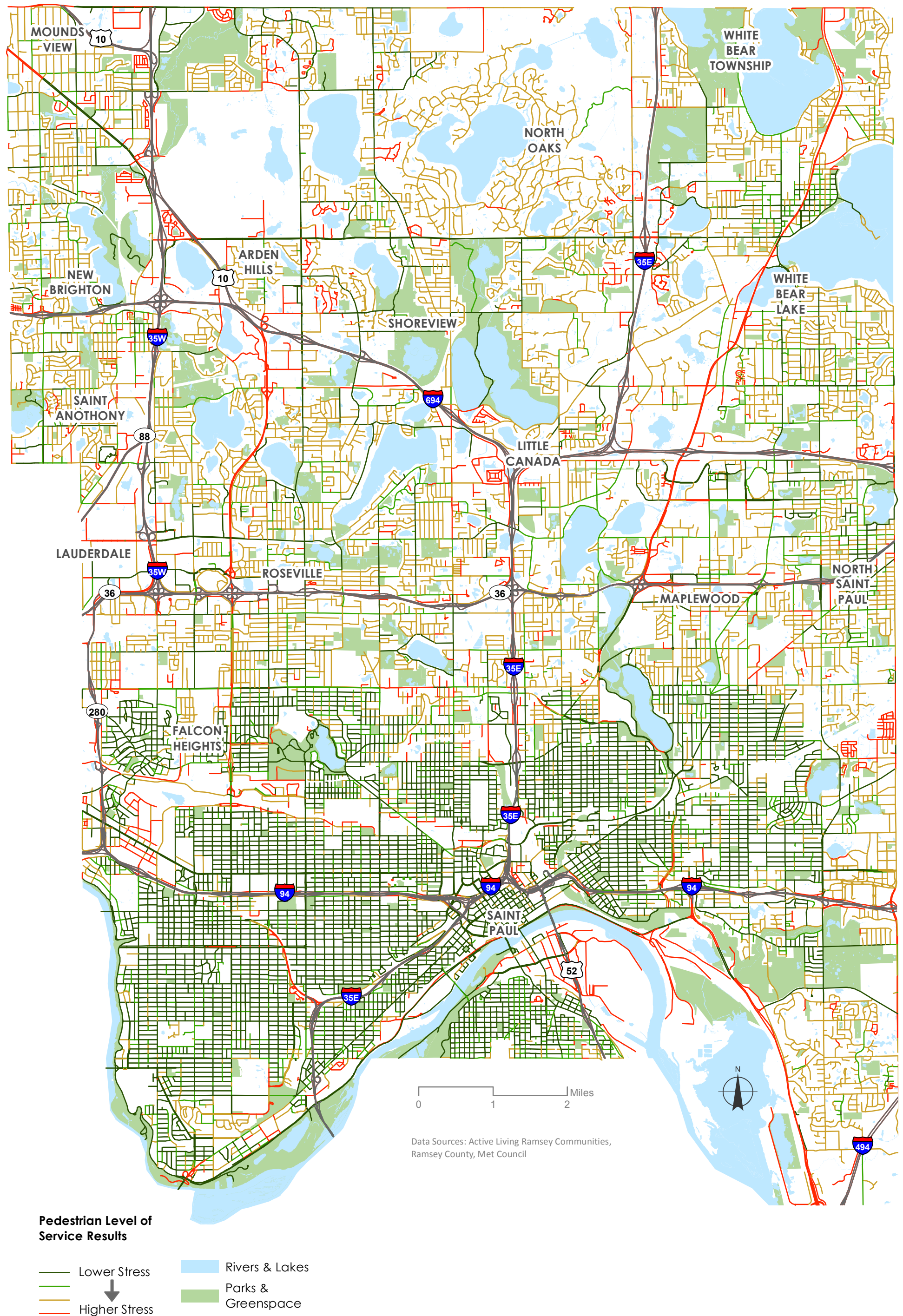


Map 2B-1: Activity Concentration Analysis Results



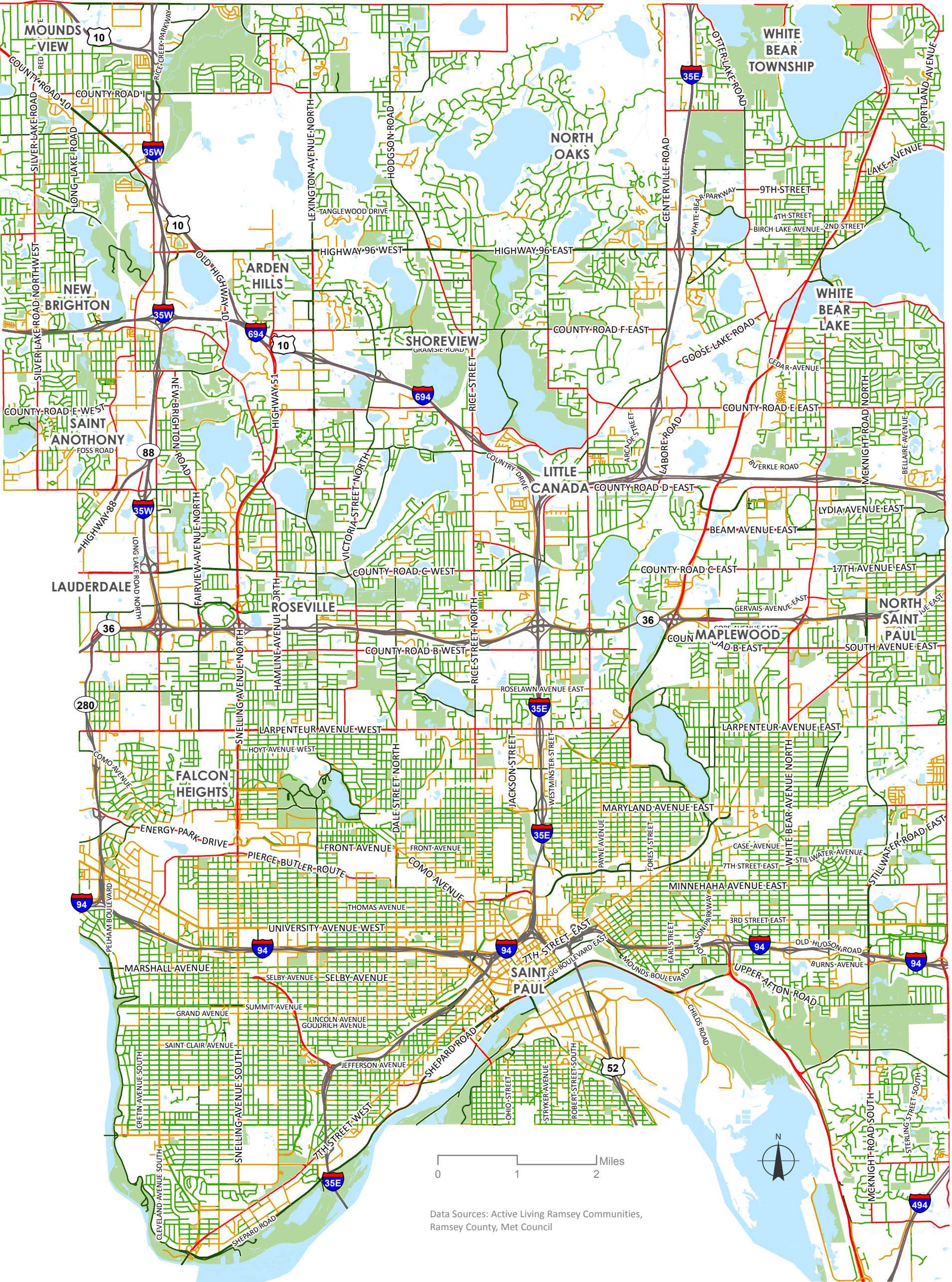


Map 2B-2: Pedestrian Network Deficiency Analysis Results



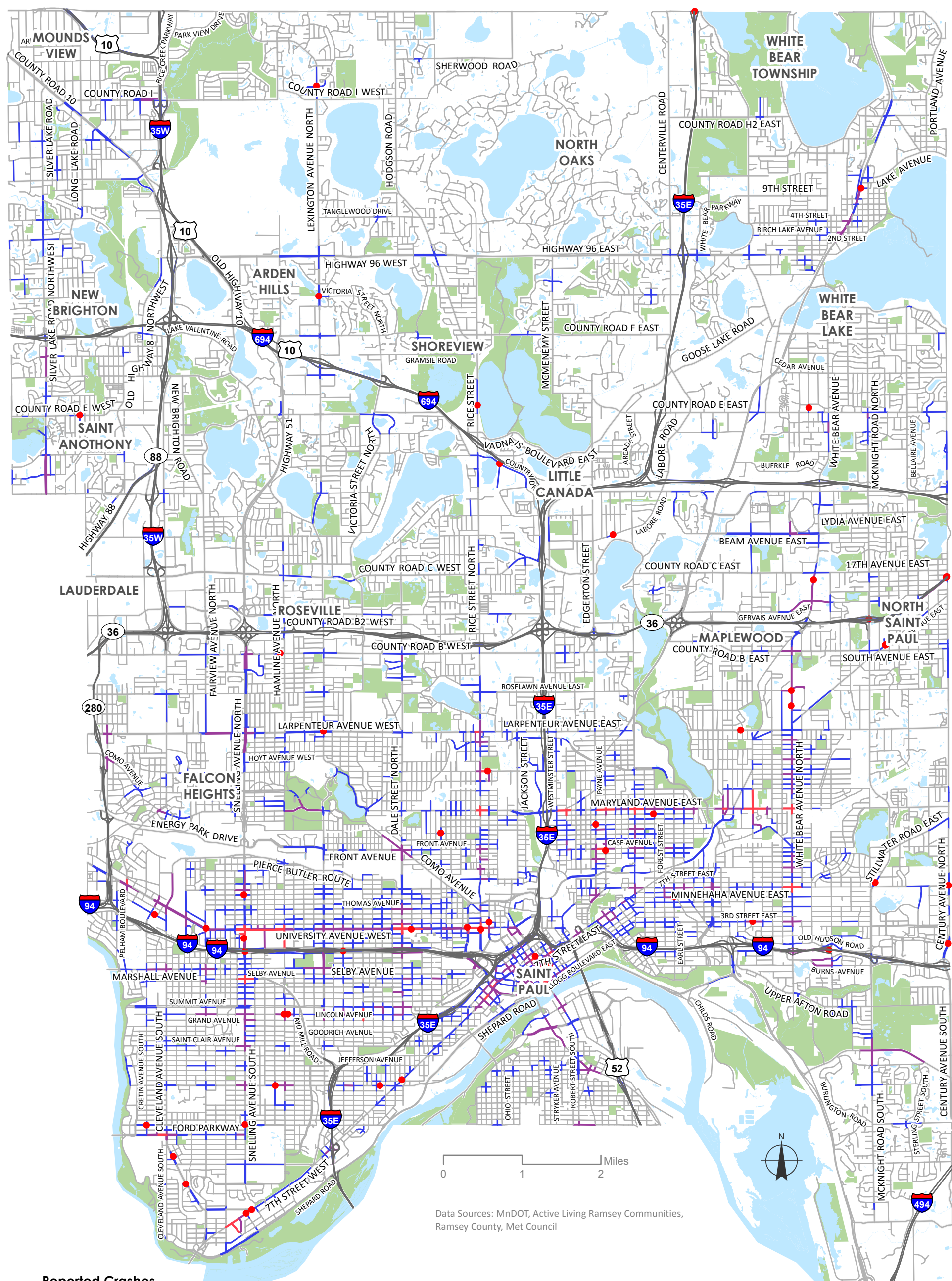


Map 2B-3: Bicycle Network Deficiency Analysis Results





Map 2B-4: Pedestrian Safety Analysis Results



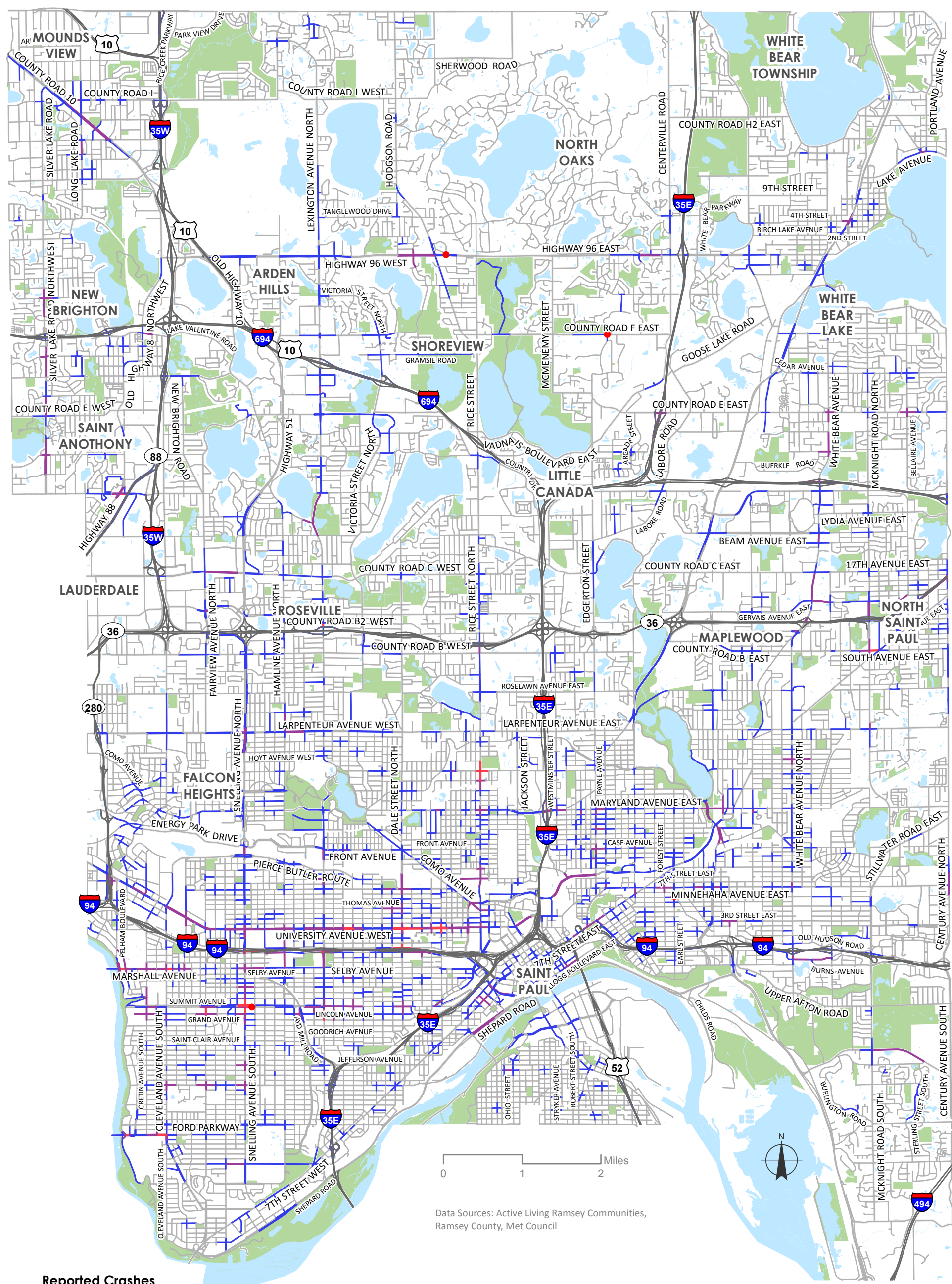
**Reported Crashes Involving Pedestrians (2004-2014)**

- |                       |                      |
|-----------------------|----------------------|
| — 0                   | — Rivers & Lakes     |
| — 1 - 2               | — Parks & Greenspace |
| — 3 - 8               |                      |
| — 9+                  |                      |
| ● Pedestrian Fatality |                      |

Data Sources: MnDOT, Active Living Ramsey Communities, Ramsey County, Met Council



Map 2B-5: Bicycle Safety Analysis Results



Data Sources: Active Living Ramsey Communities, Ramsey County, Met Council

Reported Crashes Involving Bicyclists (2004-2014)

- 0

1 - 2

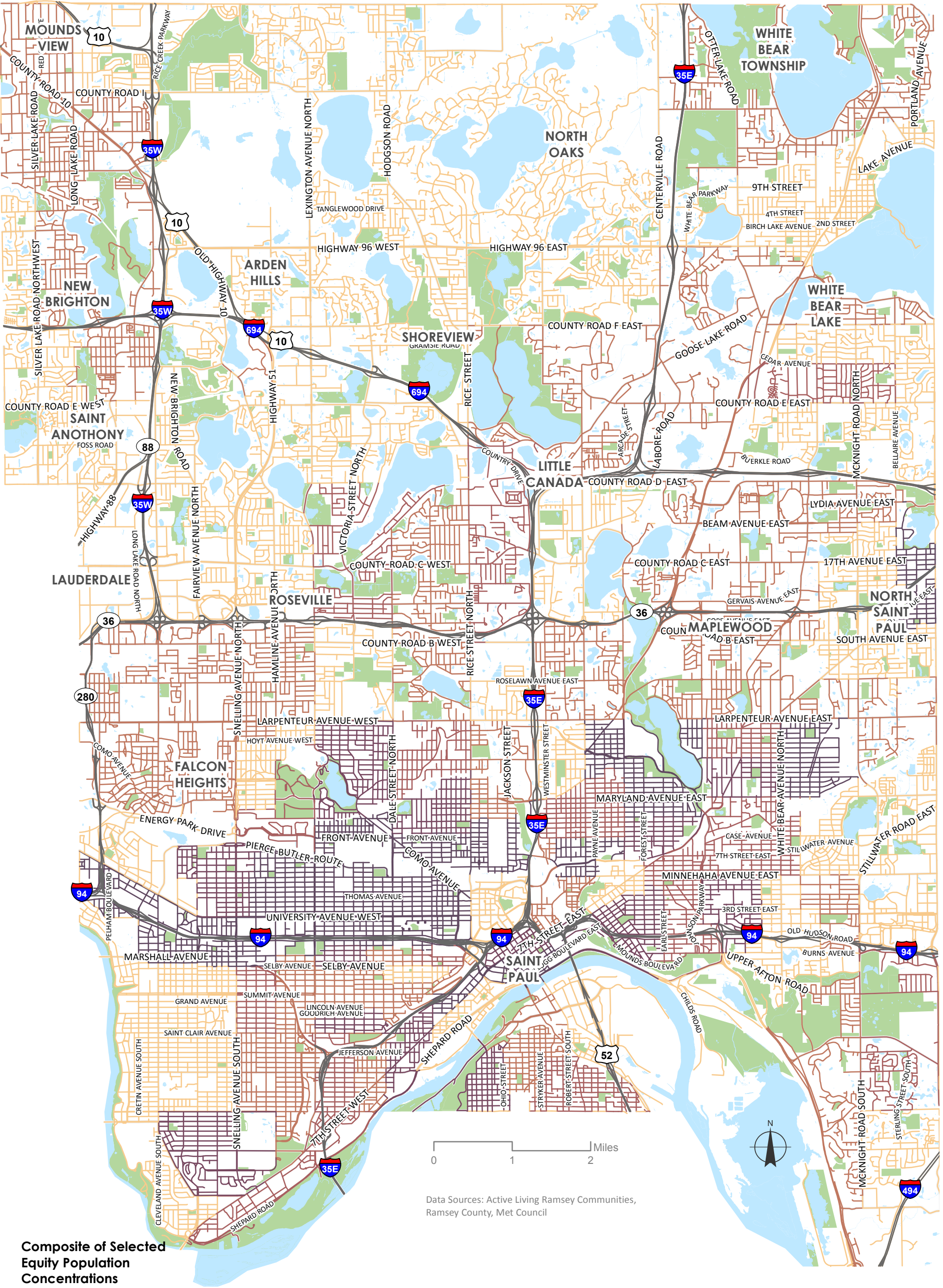
3 - 6

7+
- Rivers & Lakes

Parks & Greenspace
- Pedestrian Fatality



Map 2B-6: Equity Analysis Results



Composite of Selected Equity Population Concentrations

Lower Concentrations

Higher Concentrations

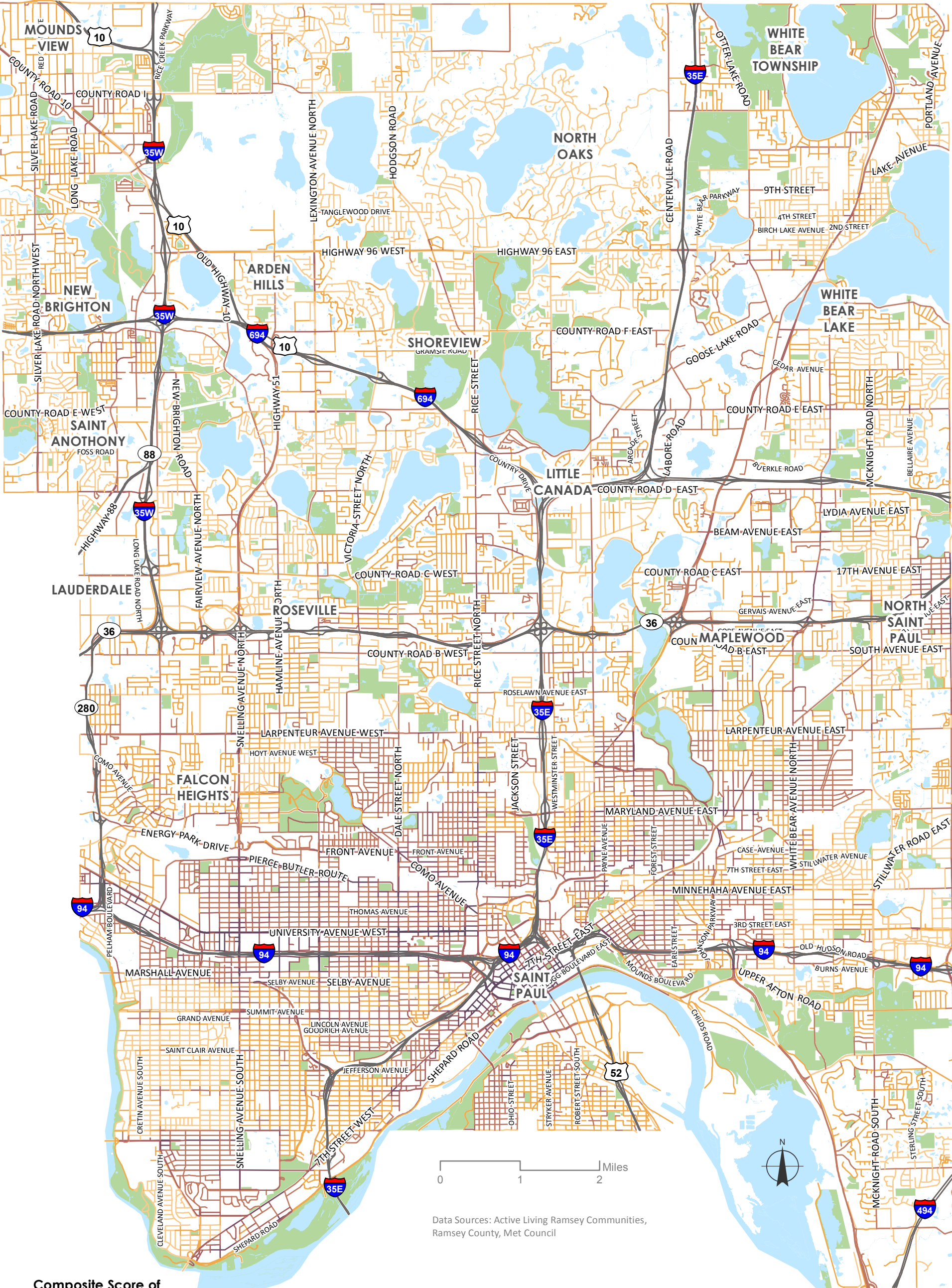
Rivers & Lakes

Parks & Greenspace

SYSTEM ANALYSIS | 2B-41



Map 2B-7: Bicycle System Analysis



Composite Score of  
Deficiency, Safety,  
Equity and Density  
Analysis

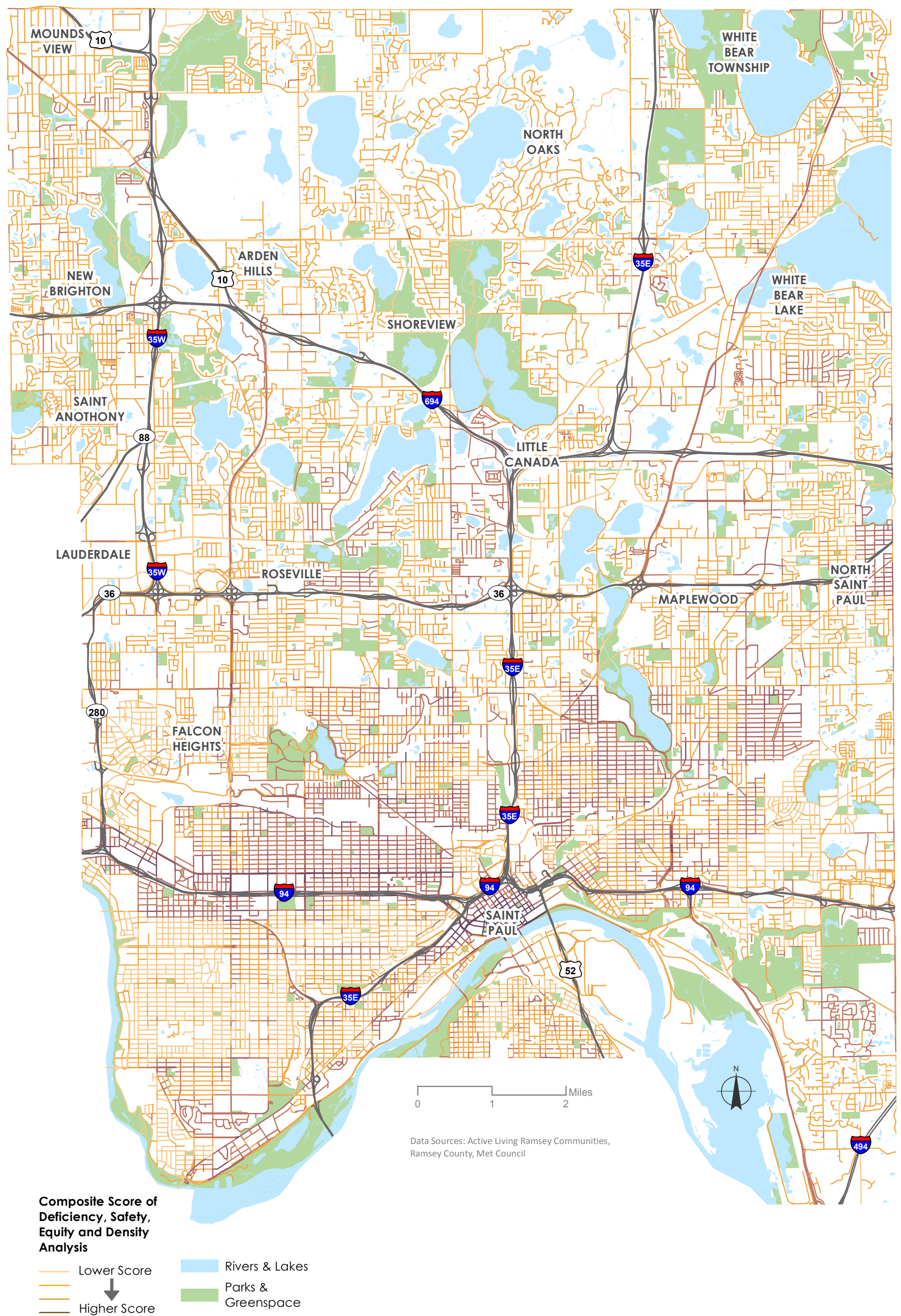
- Lower Score

Higher Score
- Rivers & Lakes

Parks & Greenspace



Map 2B-8: Pedestrian System Analysis







RAMSEY COUNTY-WIDE

## Pedestrian & Bicycle Plan

# Community Engagement Report

# Community Engagement Report

Active Living Ramsey Communities worked to intentionally expand the number and diversity of voices providing guidance for the plan's development.

Working alongside community partners, the project brought engagement to the places where people congregated - setting up booths at neighborhood and community events to make participation easy and fun, and organizing and facilitating meaningful and fun small-group activities.

Robust online engagement, including a project website, online survey and an interactive map helped expand the project's reach.

Engagement with city and agency stakeholders helped to improve coordination and start the groundwork for buy-in and implementation.





## Introduction

This document is a summary of what we have learned through in-person and online engagement opportunities throughout 2015. It includes an overall summary of information received, as well as summaries of individual events. Appendices include summaries of practitioner listening sessions, attendance lists, and a detailed summary of survey questions and results.

To learn about and respond to residents' needs and aspirations for the plan, the project team conducted extensive engagement with Ramsey County residents throughout 2015.

An important consideration for engagement efforts was connecting with underrepresented and health-disparity populations. The public comments and recommendations received during the community engagement were brought back into the plan development process and inform multiple aspects of the plan.

### **COMMUNITY ENGAGEMENT EFFORTS CONDUCTED IN 2015 INCLUDE:**

- In-person engagement
- Pop-up workshops
- Listening sessions
- Community open house
- Internal advisory group meetings
- Online engagement
- Project website
- Public survey
- Interactive online map

## Approach

The purpose of the engagement was to intentionally solicit input from a broad range of Ramsey county residents, in particular the populations that have historically been underrepresented in the planning process. To accomplish the goal of equitable engagement the team “took the meetings to the people” and created materials that are easily accessible.

### **INTENTIONAL EFFORTS TO EXPAND DIVERSITY AND GROW PARTICIPATION**

Meaningful engagement requires community connections. Active Living Ramsey Communities worked to intentionally expand the number and diversity of voices providing guidance for the Plan’s development.

Engagement efforts were conducted with a focus on equity to connect with a broader cross-section of the county’s population, including people of different socioeconomic status. These efforts included focusing on reaching underrepresented and health-disparity populations, offering diverse opportunities for stakeholder involvement, and disseminating outreach marketing in a targeted and strategic manner.

Efforts included working closely with organizations and other partners working with specific populations and communities, participating at neighborhood and community events to make it easier for people to contribute their ideas and insights to the plan, and offering multiple opportunities in a variety of formats for residents and other stakeholders to share their experiences and ideas for the project.

#### **WE WORKED WITH:**

- Comunidades Latinas Unidas en Servicio (CLUES)
- Cycles for Change
- Metropolitan Area Agency on Aging
- Olmstead Implementation Office
- Ramsey-Washington Metro Watershed District
- Rondo Avenue Inc.
- Roseville Area Senior Program
- Saint Paul Public Housing Authority



## TAKE THE MEETING TO THE PEOPLE

One of the keys for building public engagement is to make it easier and more convenient for more people to participate. The project team took engagement to places where people were already congregating, setting up tabling and pop-up workshops at community events and popular destinations. This made it easier for community members to provide their comments and guidance without having to attend a separate meeting.

## USER-FRIENDLY MATERIALS

To effectively communicate with members of the public, we developed welcoming, user-friendly, jargon-free project materials. These materials are visually-attractive and written with easy-to-understand language. The materials were oriented to residents who may not be familiar with planning processes and projects. Bright stickers, post-it notes, pens, and markers were provided for people to share comments.

## Key Themes From Engagement

Several key themes emerged through this engagement effort. They are summarized here, with additional explanation and supporting quotes from the public in the next sections.

- People walking and biking want more **separation from motor vehicle traffic**.
- People walk and bike for both **transportation and recreation**.
- Participants want a **connected network across barriers**.
- People who have not been involved in planning processes in the past - including people of color and people with disabilities - want **more opportunities for meaningful engagement**.
- **Maintenance**, especially in winter, is important to allow people to walk and bike safely.

## Overview Of Process

Engagement activities for the plan included:

- Engagement with advisory and stakeholder groups
- Public engagement at in-person events
- Online engagement

A brief description of each is included in this section.

### Advisory And Stakeholder Groups

Two advisory groups comprised of project partners, stakeholders, and governing agencies were established at the beginning of the project to provide recurring guidance at various stages in the planning process. These groups were comprised of the Project Advisory Team and the System Advisory Team.

#### PROJECT ADVISORY TEAM

The Project Advisory Team (PAT) was composed of community representatives and stakeholder partners from throughout Ramsey County, who were actively involved in guiding the work of the consultant team. The PAT met four times over the course of the project. A complete list of PAT members is provided in this report's appendix.

##### PRIMARY ROLES OF THE PAT INCLUDED:

- Advising on project process and methods.
- Playing an active role in shaping the plan and its recommendations.
- Providing a multidisciplinary, well-rounded perspective to ensure the plan reflects priorities and approaches that extend beyond simply addressing engineering considerations.
- Providing guidance on the plan implementation process.
- Assisting in disseminating information and serving as a liaison to community members.

#### SYSTEM ADVISORY TEAM

The System Advisory Team (SAT) was composed of representatives from municipalities and other units of government throughout Ramsey County. The SAT met with the consultant team and internal project management team three times during the planning process to guide project process and plan development. A complete list of SAT members is available in this report's appendix.



#### **PRIMARY ROLES OF THE SAT INCLUDED:**

- Providing input from and serving as a liaison to municipal partners and partner agencies/organizations.
- Validating current systems inventory and current governmental plans.
- Providing a peer review function.
- Facilitating communication with municipalities and other stakeholders to expand project reach and engagement throughout Ramsey County.
- Helping to develop effective implementation strategies as a partnership between Active Living Ramsey Communities and the cities and agencies in Ramsey County.

### **In-Person Public Engagement**

A range of in-person engagement activities were coordinated as part of this planning process including small- and large-format, and formal and informal workshops.

#### **POP-UP WORKSHOPS**

Pop-up workshops are informal engagement opportunities strategically located in places where people are already congregating including community events, near parks and trails, or other popular destinations. Pop-up workshops are designed to fit within a single tent and include eye-catching visuals, children's activities, and user-friendly materials that make learning about the project and sharing ideas easy and inviting. Pop-up workshops enable people to share comments quickly, provide materials for participants to engage with online materials on their own time, and capture the perspectives of people who may not ordinarily attend more traditional workshops.

#### **POP-UP WORKSHOPS FOR THIS PROJECT INCLUDED:**

- WaterFest
- Rondo Days

#### **LISTENING SESSIONS**

Listening sessions, like pop-up workshops, take the meeting to the people. However listening sessions typically take place at a regular meeting of pre-existing group within the community. For example, a listening session may take place with young people during a school leadership meeting, with bicycle commuters at a brown bag lunch, or with minority populations at a meeting of a community organization. Listening sessions enable people to participate in the planning process at meetings they already attend regularly, and provide an opportunity for in-depth discussion with specific demographic or special interest groups within the

community.

#### **LISTENING SESSIONS FOR THIS PROJECT INCLUDED:**

- Olmstead Implementation Office with people with disabilities
- Cycles for Change with Saint Paul youth

#### **OPEN HOUSE**

Open House meetings provide an opportunity to share project results and discuss the process and steps taken to develop the plan, and allow participants to ask questions and share comments and guidance for next steps. One large-format open house was held as part of this planning process. The open house was broadly advertised and open to the public, and also included the participation of project partners, and stakeholder and agency representatives. The open house was held at the Roseville Library from 6:00 pm to 8:00 pm on Wednesday, October 7, 2015.

### **Materials Used and Questions Asked**

A set of questions and materials were developed for use at pop-up and listening session workshops to easily gather information about routes, barriers, destinations, and opportunities for improvement from participants. The following questions are representative of those posed to participants at pop-up workshops and listening sessions:

#### **MAPPING REGIONAL DESTINATIONS AND CONNECTIONS**

Using a map of Ramsey County, users were invited to identify important destinations and connections to those destinations. Participants were then asked to prioritize destinations and connections to highlight links of high importance to users.



#### **MAPPING LOCAL DESTINATIONS, ROUTES, AND CHALLENGES**

Using a map of the community or city where a workshop was held, participants used stickers and markers to identify destinations, specific walking and biking routes, and barriers to walking and biking. Participants were able to provide more detailed information about how they typically travel to particular destinations,





## PRIORITIZING IMPROVEMENTS AND OPPORTUNITIES

Two boards posed the following questions to participants: “What are the top 3 improvements or amenities that would help you or your family walk or bike more often?” and “What would make it easier for you to walk or bike more often?” Each board contained a list of potential answers, as well as an “other” category for participants to share their own ideas for priorities. Using stickers, participants selected their top three choices from the list. Participants who agreed with priorities provided by peers were able to use their dots to vote on participant-generated priorities.

## DISCUSSING POTENTIAL FACILITIES

An “infrastructure toolbox” consisting of images and descriptions of walking and biking infrastructure facilities and treatments was provided at all the events. These boards and banners helped to generate discussions about treatments that are currently existing in the county, to get an understanding on people’s attitudes towards different treatments, and to reference as new concepts introduced to participants.



## Online Engagement

The Plan's online engagement strategy included three principal components:

- Project website
- Public survey
- Interactive online map

### PROJECT WEBSITE

A project website was developed and used to communicate general project information, announce events and engagement opportunities, and house online engagement tools including the project survey and interactive online map. The project website also provided an area for people to share open-ended comments related to the plan, and opt into the project mailing list to receive email updates.

### SURVEY

An online survey was developed and was accessible directly or through the project website. The survey was available from April through mid-October 2015 and was completed by a total of 463 individuals. An additional 115 individuals partially completed the survey.

Survey questions were split into categories with questions specifically about walking and specifically about biking. Participants were given the option of completing questions only pertaining to walking or biking, or both. Participants were asked to share current walking and biking habits, and to help prioritize destinations, barriers, and opportunities related to walking and biking, and ADA accessibility. Participants were also invited to share general comments about walking and biking in Ramsey County, about the plan, or about the survey in general. The survey concluded with basic demographic questions to help the team understand how well they were doing at reaching a representative population of Ramsey County residents, employees, and visitors.

### WIKIMAP

An interactive online map was developed using a Wikimap platform. The tool allowed users to identify routes, locations, or issues throughout the county, including their walking and biking routes, destinations, issues or problem locations for walking or biking, and ideas for improvement. Follow-up questions gathered additional information about entries that were made on the Wikimap.

The Wikimap was accessible directly and from the project website. It was available for public comment from April through mid-October 2015, during which 174 unique users entered a total of 439 original routes or locations.



## KEY THEMES FROM ENGAGEMENT

Thousands of individual comments were received through this engagement effort. By grouping similar or related comments, a number of key themes became evident. These include:

- People walking and biking want more **separation from motor vehicle traffic**.
- People walk and bike for **both transportation and recreation**.
- Participants want a **connected network across barriers**.
- People who have not been involved in planning processes in the past - including people of color and people with disabilities - want more **opportunities for meaningful engagement**.
- **Maintenance**, especially in winter, is important to allow people to walk and bike safely.

Additional explanation for each theme and a brief sample of comments received from the public is provided below.

### More Separation From Motor Vehicle Traffic

At most events, participants said they feel unsafe walking and bicycling next to cars, trucks, and buses. “More separation from motor vehicles” was a top priority for participants who answered the online survey. Walkers preferred sidewalks over shoulders. People who ride bikes preferred off-street trails and protected bike lanes (bike lanes that are separated from motor-vehicle traffic by a curb, planters, or plastic bollards) over conventional bike lanes and shared travel lanes.

#### WHAT WE HEARD:

- “More off-street trails!”
- “I don’t like bike lanes in the door zone”
- “...bike lanes are nice but not comfortable-want more separation and a barrier”
- “We don’t want to ride on the street — afraid of cars”
- “Sidewalks on one side only are very difficult. I have to cross street with my kids more than needed...provide sidewalks both sides!”
- “Don’t want to be next to cars-need separate trails”

## Walking And Biking For Recreation And Transportation

Among survey participants, one-half walk to go shopping at least once a week, and one-half bike to school or work at least once a week. Park and recreational opportunities were also popular destinations for walking and biking trips. Ramsey County has many regional parks, and arriving at those parks and enjoying them as a pedestrian or on a bike is important.

### WHAT WE HEARD:

- “[Want a] Trail around White Bear Lake! :)”
- “Run and walk to get places”
- “I like the freedom that [my bike] gives me. Otherwise I would have to rely on my mom to drive me around, but now I get to go places on my own.”

## A Connected Network Across Barriers

Highways, railroad tracks, and bodies of water can act as barriers and prevent people from walking or biking where they want. Participants expressed a desire for a connected network with seamless facilities across barriers and providing access to destinations countywide.

### WHAT WE HEARD:

- “None of the North South streets in this area have sidewalks. It is literally where the sidewalk ends”
- “Need a safe way for bikes to go back into downtown”
- “Right now, there is not sufficient connectivity between the Como Neighborhood and Midway Neighborhood for bicycle commuters. Snelling is unsafe, even on the sidewalks. Lexington is great, but remote from the west end of Midway. I know this proposal might be a pipe dream but it would be amazing if a bike lane across the industrial complex were possible.”
- “Need easier way to cross 94 & Snelling”

### MORE OPPORTUNITIES FOR MEANINGFUL PUBLIC ENGAGEMENT

Many participants at plan engagement events - especially people with disabilities and young people of color - expressed strong interest in becoming meaningfully involved in planning and implementation decisions. Youth apprentices from Cycles for Change expressed interest in opportunities for engagement, and career opportunities in urban planning. During the listening session coordinated with the Olmstead Implementation Office for people with disabilities, participants expressed frustration that decision-makers design streets without learning from the experiences of people who use a wheelchair.



**WHAT WE HEARD:**

- “People with disabilities should be in leadership roles”
- “Want to know how to get involved and saying what we want”

## Consistent and Reliable High-Quality Maintenance

Maintenance, especially in winter, is important to allow people to walk and bike safely. Snowbanks and icy surfaces, as well as uneven sidewalks any time of year, can make everyday activities inconvenient and dangerous for seniors and for people with mobility and sight limitations. Survey respondents prioritized removing snow and ice from sidewalks and trails for people walking, and creating level and smooth road and trail surfaces for bicyclists.

**WHAT WE HEARD:**

- “Sidewalk is very uneven for this entire stretch, even for those not in walkers or wheelchairs!”
- “Park paths should be cleared for people using wheelchairs. If trails are open to some, they should be open to all.”
- “Sweep away glass in street”

## Summaries From Engagement Activities

Brief summaries for each of the engagement events conducted, including key ideas received, are provided in this chapter. Additional information can be found in this report's Appendix.

### Summary: Internal Advisory Groups

#### PROJECT ADVISORY TEAM & SYSTEM ADVISORY TEAM MEETINGS

Beginning in March 2015 and ending in September 2015, the Project Advisory Team (PAT) met four times and the System Advisory Team (SAT) met three times. The PAT and SAT are composed of community leaders and staff of municipal, regional, and state public works and planning departments from across Ramsey County.

The early meetings involved visioning exercises, while the midpoint meetings guided strategy and development of project materials, while in later meetings the PAT and SAT reviewed materials prepared by the project team.



#### KEY POINTS:

- The plan's vision statement was developed and reviewed in collaboration with both the PAT and SAT.
- Both PAT and SAT supported a transparent and accessible approach and meaningful community engagement for the Plan.
- The SAT met together to discuss a list of performance measures that would help different municipalities coordinate the development of a low-stress walking and biking network.
- Staff from each municipality reviewed the proposed walking and bicycling routes and their network classification.

By including a variety of partners from the beginning of the plan and incorporating their knowledge as the plan was developed, the project team helped to more efficiently coordinate recommendations across jurisdictions and helped lay the groundwork for plan support and implementation. Involving key partners throughout the planning process has laid the groundwork for future collaboration between Active Living Ramsey Communities, Ramsey County departments, municipal departments, and other agencies and organizations toward implementation.



## Summary: Waterfest Pop-Up Workshop

Members of the project team held a pop-up workshop on May 30, 2015 from 11:00 AM to 4:00 PM at Lake Phalen in Saint Paul. WaterFest is an outdoor festival hosted by the Ramsey-Washington Metro Watershed District for residents. Hundreds of people attended the family-friendly event, with many parents attending with their children.



WaterFest celebrates Minnesota's clean lakes and offers outdoor fun and opportunities for hands-on learning about the water quality, wildlife, and special ecological features of our beautiful watershed. Many organizations had tables with information, giveaways, entertainment, and food options for the attendees. People for Bikes (a national advocacy with the mission of "putting more people on bikes more often") was also present at WaterFest. Project team members spoke to approximately 60 residents about the Ramsey County-wide Pedestrian and Bicycle Plan.

### KEY POINTS:

- Many people do not like biking in the roadway, and wanted bicycle facilities that separates cyclists from vehicles.
- Many would like to reduce points of conflicts between pedestrians and cyclists by having separate infrastructure.
- Many desire more amenities on trails to improve the experience:
  - Clear wayfinding indicating mileage to popular destinations
  - Bicycle parking
  - Lighting, especially for pedestrians

## Summary: Rondo Days Pop-Up Workshop

Members of the project team held a pop-up workshop at the Rondo Days Festival on Saturday, July 18 from 9:00 AM to 5:30 PM. Rondo Days took place outside the Benjamin E. Mays International Magnet School, near Dale St. N and Concordia Avenue in Saint Paul.



Rondo Days is a yearly celebration of a historically Black neighborhood that was divided and displaced by the construction of Interstate 94. The event includes music, food, community information and family activities. Project team members spoke to more than 50 event participants.

### KEY POINTS:

- Most people had not heard of the Ramsey County Pedestrian and Bicycle Plan - participating at the event helped to increase community awareness about the plan.
- People are concerned about gaps in the bicycling network.
  - People wish there were more north-south bike routes in Saint Paul, including Snelling and Lexington Avenues.
  - People would like connections between neighborhoods to parks and natural amenities, like Lake Phelan and Gervais Lake.
  - People would like connections between downtown and surrounding neighborhoods.
  - Increased separation from cars for people who are walking or biking.
- Amenities for pedestrians and cyclists would make walking and biking more convenient:
  - More places to park bikes
  - More restrooms
- Create a more complete sidewalks and bicycle facilities network.



## Summary: Olmstead Implementation Office Listening Session

Members of the project team held a listening session at the Rondo Community Outreach Library on June 3, 2015 with people with disabilities who were invited to participate by the Olmstead Implementation Office, which works to implement a broad series of federally-mandated key activities Minnesota must accomplish to ensure people with disabilities are living, learning, working, and enjoying life in the most integrated setting.

The goal of the listening session was to hear about participants' experiences using existing infrastructure and their ideas for improvement, with the goal of making the Plan more responsive to the needs of all of Ramsey County's residents, including people with disabilities. Twelve participants shared their experiences with the project team.

### KEY POINTS:

- Many trails and paths are inaccessible to people with disabilities:
  - Park paths are sometimes not cleared to be accessible for people using wheelchairs.
  - Trees or bushes that grow over sidewalks can be inconvenient and dangerous for people with limited mobility and sight.
- Current winter roadway maintenance techniques like plowing can reduce accessibility for pedestrians.
  - Snow banks can make daily tasks, like boarding a bus or crossing the street, impossible for a person with limited mobility.
  - Icy surfaces and sidewalks reduce convenience, comfort, and safety.
- There is a need for a streamlined complaint system to report accessibility violations.
- Improving data collection practices so incidents like an individual's fall on an inadequately-maintained sidewalk or trail are recorded.
- People with disabilities need to be included and involved in decision making to ensure that their experiences are taken into account. Participants suggested conducting walkability and bikeability audits with a person with limited mobility as part of the audit group.

## Summary: Cycles For Change Listening Session

Members of the project team held a listening session on September 10, 2015 at Cycles for Change on University Avenue and Garland in Saint Paul. The listening session's goal was to hear about the experiences of Cycles for Changes youth apprentices in biking and walking in their neighborhoods and other areas in Ramsey County.

Many of Cycles for Changes youth apprentices were from the Frogtown and Rondo neighborhoods. They spoke about their experiences as youth bicycling, the perceptions of biking in their communities, and their desires for creating better infrastructure in their communities.



### KEY POINTS:

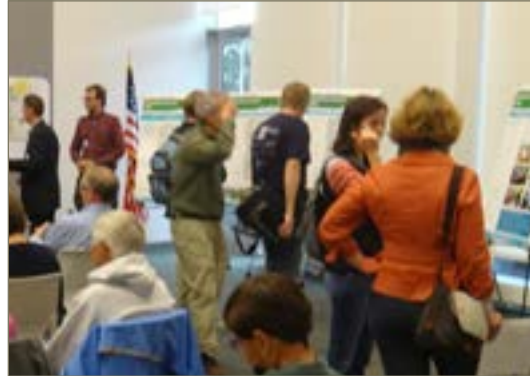
- Biking offers young people a freedom of movement they would not otherwise have. They are able to explore the city without relying on a parent to drive them around.
- Biking within communities of color is not often thought of as a viable alternative form of transportation.
- Youth of color face numerous barriers to using active forms of transportation:
  - Overcoming perception of biking as a “white” form of transportation.
  - Lack of other youth cyclists means bicycling becomes less popular and less safe.
  - High cost of buying gear, especially winter gear.
- Their involvement in Cycles for Change and their use of biking as a form of transportation is positively changing the perception of biking in their families and the wider community.
- Improving bicycle infrastructure and facilities, especially if they help to connect other facilities and expand the existing network, is needed.
- Participants expressed a strong desire to be participants in and engage in the planning process.



## Summary: Open House

The plan's Open House was held at the Roseville Library from 6 to 8pm on October 7th. The open house was an opportunity to share the countywide Vision 2030 map and the processes and steps that were taken in the development of the plan.

The evening began with Ramsey County representatives welcoming members of the public and giving a brief presentation on the 2030 vision plan and next steps to move from the planning stage to implementation. After the presentation, participants went to three stations that were designed to help guide them through the planning process.



### STATION 1

Station one introduced members of the public to the concept of active transportation and the engagement strategies used to gather information from the community.

#### **BOARD 1: CONTEXT & VISION**

- Illustrate the positive impact active transportation has on the community and individuals.

#### **BOARD 2: BUILDING A COMMON LANGUAGE FOR WALKING AND CYCLING**

- Share and define important words with short descriptions of critical parts of the plan.

#### **BOARD 3 & 4: COMMUNITY ENGAGEMENT**

- Describe the process of engagement and the influence on recommendations in the plan.

### STATION 2

The second station's purpose was to share the planning team's technical analysis with the public.

#### **BOARD 5: CONNECTED RAMSEY COUNTY NETWORK**

- The map illustrates the framework for the county and local jurisdictions to refer to when planning, prioritizing, and designing an active transportation network.

#### **BOARD 6: BICYCLE NETWORK DEFICIENCY ANALYSIS**

- Describe the accessibility of various streets for cyclists of all ages and abilities, as determined by the Level of Traffic Stress analysis.

#### **BOARD 7: PEDESTRIAN NETWORK DEFICIENCY ANALYSIS**

- Describe the accessibility of various streets for pedestrians of all ages and abilities, as determined by the Level of Traffic Stress analysis.

#### **STATION 3**

- Station three detailed suggested steps and key recommendations for successful implementation of the plan.

#### **BOARD 8: IMPLEMENTATION PROCESS**

- Illustrate the process and action steps required to implement the 2030 plan.

#### **BOARD 9: PERFORMANCE MEASUREMENT**

- Diagram the performance measures to improve the implementation process.

#### **BOARD 10: KEY RECOMMENDATIONS**

- Show the key recommendations for successful implementation.

#### **GENERAL COMMENTS AND DISCUSSION**

Members of the public were given the opportunity to ask questions after the presentation. Some of the questions raised at the open house included:

- How Ramsey County is coordinating its efforts with other important stakeholders:
- Transit providers, in particular providing better integration of transit with bicycle and pedestrian users.
- Bicycle and pedestrian planning with other county plans, this is particularly important for communities that are located in several different counties.
- What effort has been made to work with the Minnesota Department of Public Safety to ensure that drivers are made aware of the law as it pertains to pedestrians and people who bike.
- What is the timeline for implementation of the plan?

Members of the public also had the opportunity to provide their comments and opinions by using comment cards and the online survey and WikiMap.



## Summary: Key Stakeholder And Staff Listening Sessions

Five separate listening sessions with key stakeholders were held in March and April of 2015 at the Ramsey County Public Library in Roseville. A detailed summary of these listening sessions is available in this report's appendix.

### THE FIVE SESSIONS WERE:

- March 9: Ramsey County Active Living Coalition
- March 31: Ramsey County Bike/Walk Team
- April 7: Social and Educational Services
- April 8: Health and Safety Services
- April 10: Community and Economic Development Services

At each session the project's goals, objectives, process and schedule were



explained, and two types of exercises were conducted: a visioning exercise and a listening exercise. At the end of each listening session, participants summarized and shared their findings, and concluded the exercise by developing a set of suggested performance measures for the plan. The primary purpose of the listening sessions was to develop a collective vision and the set of performance measures that would guide the implementation of that vision. In total, more than 75 people participated in the sessions.

### KEY POINTS:

Several themes and key points emerged over the course of engagement. Responses highlighted participants' desire for safety, connectivity, equity, and sociability as part of an active transportation system that is responsive to user preference, is enjoyable to use, fosters economic and community development, and enhances quality of life for the county's residents.

Participants expressed preference for:

- Separate facilities for pedestrians and bicyclists
  - For pedestrians, sidewalks and trails that are separate both from bicyclists and motorized traffic
  - For bicyclists, off-road trails are preferred although buffered bike lanes or wide shoulders on roadways are acceptable for (and sometimes preferred by) more experienced bicyclists
- A regional and local network that connects cities to each other and to local destinations, i.e., schools, work, parks, retail stores, and restaurants
- Equitable opportunity to access enjoy the pedestrian and bicycle network for people of all ages and abilities
  - All communities (ethnic, cultural, economic status) have access to the networks' pedestrian and bicycle assets
  - Especially important for residents of neighborhoods with low levels of car ownership
- An active transportation network that is responsive to the preferences of bicyclists and pedestrians and equally accommodates both recreational and commuter use
  - For commuters, changes to laws allowing bicyclists to continue through red traffic lights or stop signs when prudent
- The enhanced experience of moving along sidewalks, trails, and roadways that would foster sociability, community identity, and social understanding by facilitating opportunities to engage in conversations with friends, neighbors, and even strangers through strategically placed benches, tables, shelters, sidewalk cafes, and outdoor amphitheaters
- An increase in the quantity, frequency, and variety of destinations along pedestrian and bicycle routes, i.e., restaurants, retail, entertainment
  - A strong belief exists that active transportation can be a major catalyst for economic development, especially for smaller, locally-grown enterprises
- An enhanced quality of life that can result from the reduction in crashes that involve pedestrians and bicyclists, and a reduction in rates of obesity, heart disease, and other chronic ailments associated with physical inactivity

A full report of these Key Stakeholder and Staff Listening Sessions is provided in the appendix. This report includes all materials, worksheets and responses from participants, as well as performance measures developed through the sessions.



## Summary: Engagement With Residents Of Saint Paul Public Housing Agency

Saint Paul Public Housing engaged several communities of public housing residents around the Ramsey Communities Pedestrian and Bicycle Plan over the summer. The project team provided materials and guidance to the Housing Agency, who led engagement coordination and facilitation.

### **THE AGENCY PARTNERED WITH SEVERAL OTHER ORGANIZATIONS AND PROGRAMS IN THIS ENGAGEMENT:**

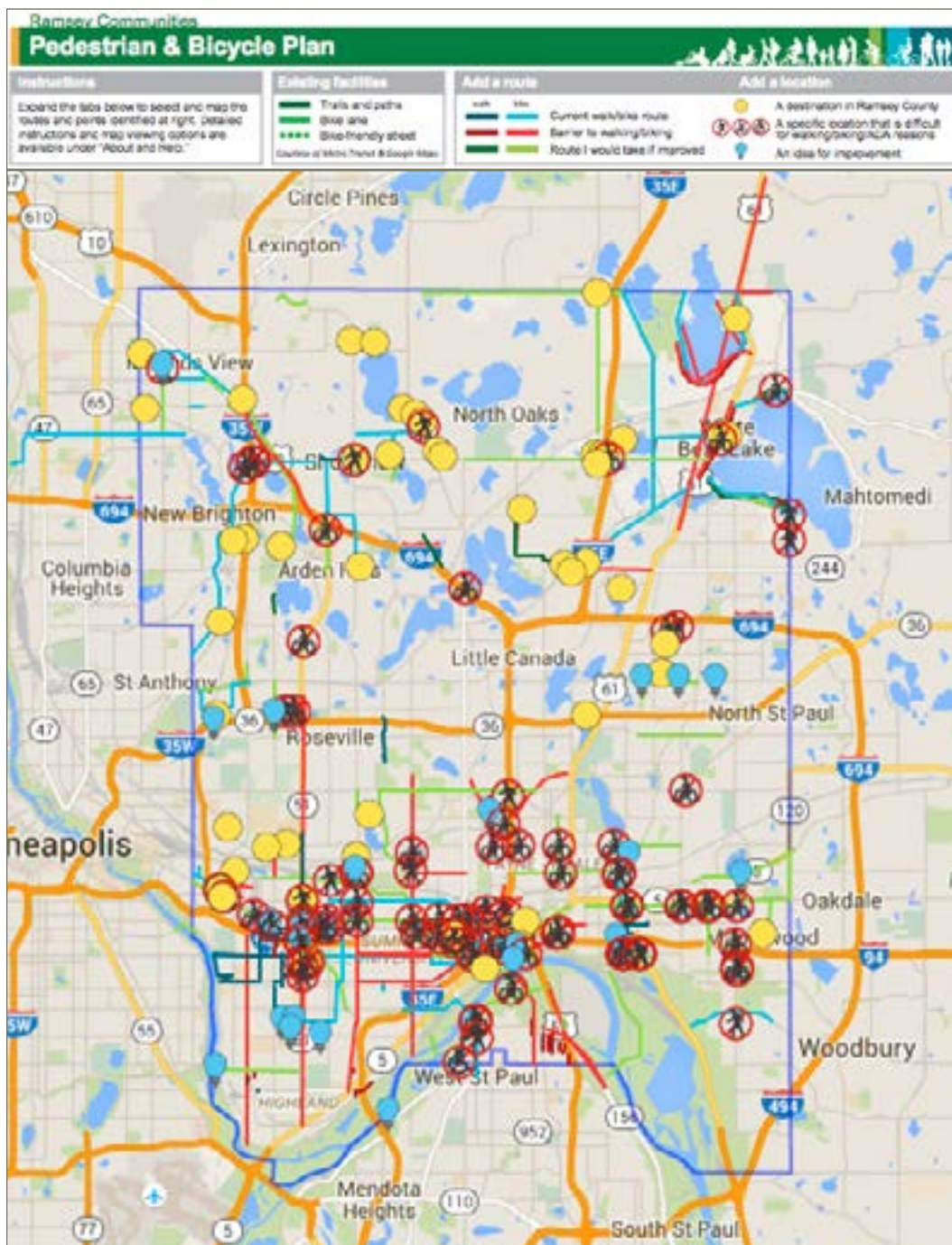
- Nice Ride Minnesota Community Partners Program
  - Participants went on a group ride with Nice Ride Minnesota staff and won a free one-year membership
  - A brief survey was provided to participants after the ride
- Minnesota Statewide Health Improvement Program (SHIP)
  - SHIP staff collaborated with walking groups to conduct walking audits with residents at the following sites:
    - Cleveland
    - Montreal
    - Ravoux
    - Valley
    - Mt. Airy
    - Wilson
- Resident Councils
  - The Citywide Council Meeting occurred on August 25
  - The Council received an update on the Plan and received links to the survey and WikiMap to distribute through their networks

### **KEY POINTS:**

- Public housing residents would like to bike for recreation and transportation
  - Transportation destinations include local stores, the University and Snelling commercial node, and community events like the Minnesota State Fair
  - Recreational destinations include neighborhood and regional parks, Summit Avenue, and the Mississippi River

## Summary: Interactive Wikimap

The Wikimap online tool collected a rich set of data about people's experiences walking and biking in Ramsey County. A total of 466 comments were received from online users on the map. Of these 141 were related to pedestrian use, and 231 focused on bicycle use, the remaining 81 comments identified destinations, identified areas without ADA accessibility, and general suggestions for improvement. The Wikimap allowed participants to identify specific destinations they frequent, current walking and biking routes, barriers that inhibit use as well as routes that they would use if the routes were improved.





## SCOPE OF INPUT

The Wikimap facilitated collection of data on locations and routes from 19 of Ramsey County's 20 zipcodes. The distribution of comments were not evenly distributed, zip codes 55104 and 55106 received the highest number of comments, while zip codes 55105, 55155 and 55102 received the fewest and zip code 55116 did not receive any comments. The majority of the comments were based in the southern urban section of Ramsey County, with approximately half of the comments in this section addressing locations in Saint Paul.

In total thirteen different municipalities had at least one comment on the wikimap. The majority of the comments received addressed locations within Saint Paul. A more detailed analysis on the type of comments and the corresponding municipality can be found in the appendix.

## KEY POINTS

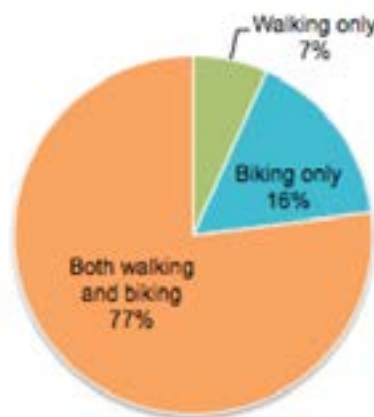
- There are numerous barriers that inhibit walking and biking in for Ramsey County residents
  - The lack of separation between fast moving vehicles and bicyclists (and sometimes pedestrians) is generally seen as a barrier
  - The lack of connectivity within the network reduced individual's ability to walk and bike in Ramsey County
  - The ability to cross roadways in a safe and timely manner is problem for pedestrians and people who bike
- Primary destinations identified by participants are commercial and recreational
- Residents that currently walk or bike do so despite inadequate infrastructure. To increase the numbers and types of people using active transportation, more has to be done to provide facilities that feel comfortable to use

## Summary: Survey

A total of 578 surveys were received from participants and were processed for analysis; this includes 463 fully completed surveys and 115 partially completed surveys. The survey asked participants to share information regarding walking and biking habits, to prioritize destinations and barriers, and to identify opportunities to improve conditions for walking and biking in Ramsey County. The survey additionally asked basic demographic questions including age, gender, income, and ethnicity to gather information about the reach of the survey.

A sample of results for the survey are provided over the next pages. Links to online version of charts is provided for legibility. Full results are provided in this report's appendix.

### QUESTION: "I WOULD LIKE TO ANSWER QUESTIONS ABOUT"



- Respondents were able to answer questions about only walking, only biking, or both walking and biking.
- 445 respondents answered questions about both walking and biking.



## Sample: Responses About Walking in Ramsey County

### QUESTION: “FROM MAY TO OCTOBER, HOW OFTEN DO YOU WALK TO GO TO THE FOLLOWING DESTINATIONS?”

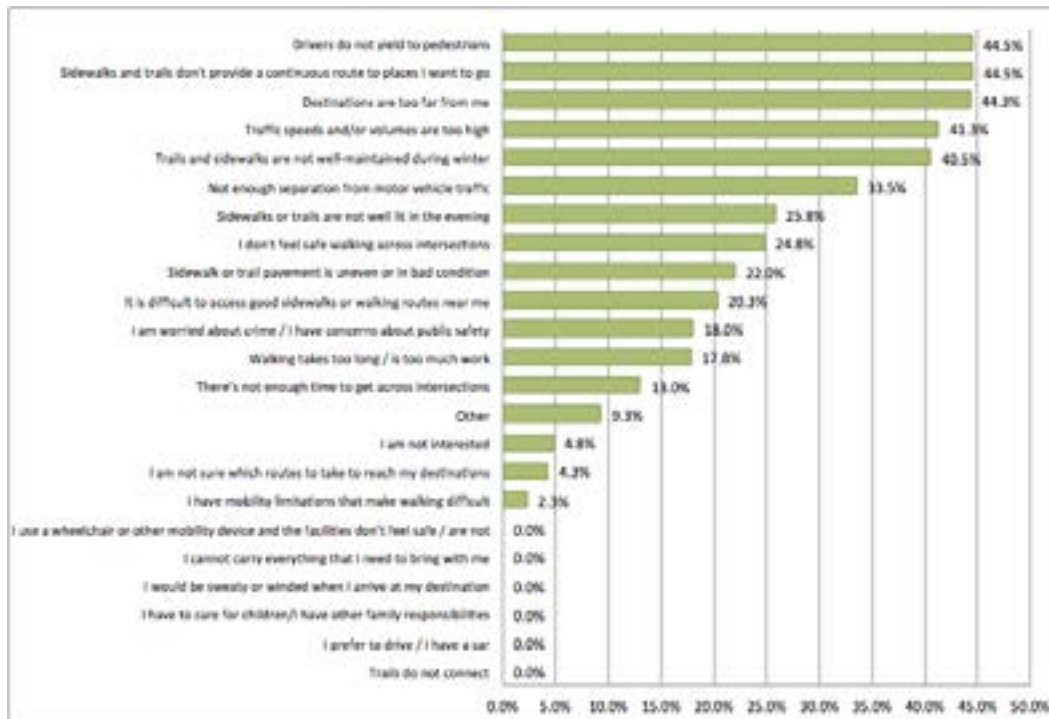
- Almost half of respondents (48%) indicated that they walked for recreation, health, or exercise 4 or more days a week
- Opportunities for growing biking in Ramsey County: About 64% of respondents (about 2 out of 3) indicated that they never walk to school or work, and nearly half (49%) indicated that they never walk to the bus stop or train station

### QUESTION: “WHAT TYPES OF DESTINATIONS SHOULD BE PRIORITIZED IN RAMSEY COUNTY WHEN DECIDING WHERE TO IMPROVE WALKING CONDITIONS?”

Destinations	Overall Rank
Schools	1
Transit stops / stations	2
Parks and other recreational destinations	3
Community centers, libraries, and other community destinations	4
Shopping, dining, entertainment	5
Employment centers	6

- Respondents were asked to rank the types of destinations from most to least important
- A total of 396 respondents answered this question
- Overall, schools were ranked as the number one priority when deciding where to improve walking conditions in Ramsey County, followed by transit stops and stations

**QUESTION: “WHAT KEEPS YOU FROM WALKING IN RAMSEY COUNTY MORE OFTEN?”**

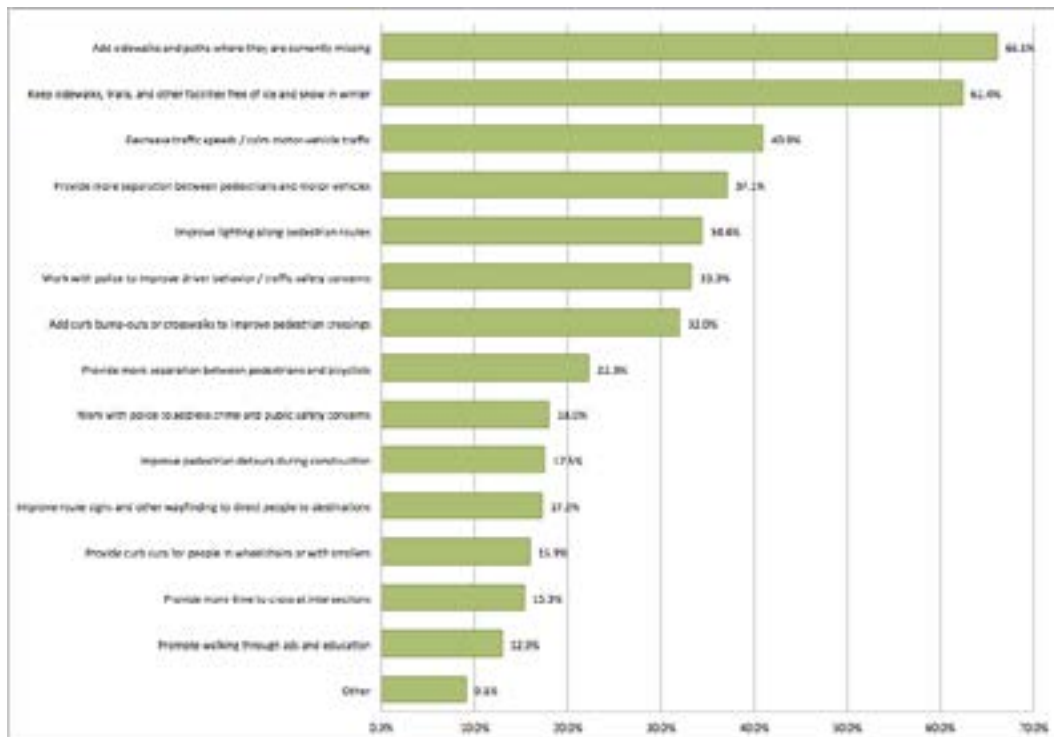


[Click here to see the the chart online](#)

- Respondents were asked to select their top five choices from the list, in no particular ranked order
- A total of 400 respondents answered this question
- Overall, the top five barriers to walking in Ramsey County are:
  - Sidewalks and trail don't provide a continuous route to places I want to go
  - Drivers do not yield to pedestrians
  - Destinations are too far from me
  - Traffic speeds and/or volumes are too high
  - Trails and sidewalks are not well-maintained during winter



**QUESTION: “WHICH OF THESE IDEAS WOULD MAKE IT EASIER AND MORE CONVENIENT FOR MORE PEOPLE TO CHOOSE TO WALK MORE OFTEN IN RAMSEY COUNTY?”**



[Click here to see the the chart online](#)

- Respondents were asked to select their top five choices from the list, in no particular ranked order
- A total of 372 respondents answered this question
- Overall, the top five opportunities to make walking easier and more convenient in Ramsey County are:
  - Add sidewalks and paths where they are currently missing
  - Keep sidewalks, trails, and other facilities free of ice and snow in winter
  - Decrease traffic speeds/calm motor-vehicle traffic
  - Provide more separation between pedestrians and motor vehicles
  - Improve lighting along pedestrian routes

## Sample: Responses About Biking in Ramsey County

### QUESTION: “FROM MAY TO OCTOBER, HOW OFTEN DO YOU RIDE A BIKE TO GO TO THE FOLLOWING DESTINATIONS?”

- Almost a quarter of respondents (24%) indicated that they biked for recreation, health, or exercise 4 or more days a week, and 23% indicated that they biked to school or work 4 or more days a week
- Opportunities for growing biking in Ramsey County: About 45% of respondents (about 1 out of 2) indicated that they never bike to school or work, and another 69% (about 2 out of 3) indicated that they never bike to the bus stop or train station

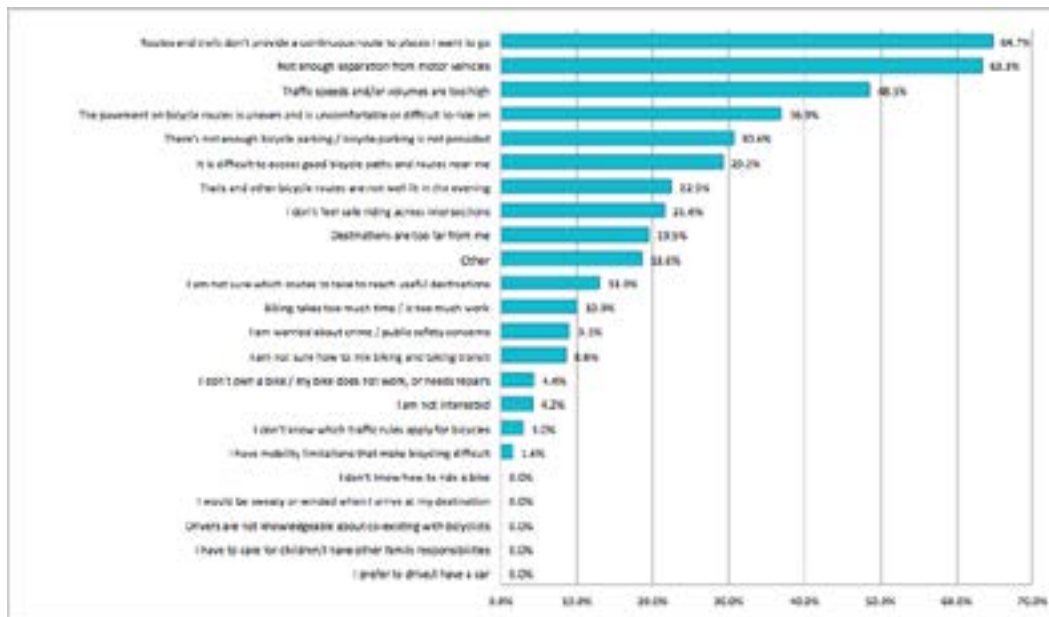
### QUESTION: “WHAT TYPES OF DESTINATIONS SHOULD BE PRIORITIZED IN RAMSEY COUNTY WHEN DECIDING TO IMPROVE BIKING CONDITIONS?”

Destinations	Overall Rank
Parks and other recreational destinations	1
Schools	2
Community centers, libraries, and other community destinations	3
Shopping, dining, entertainment	4
Transit stops / stations	5
Employment centers	6

- Respondents were asked to rank the types of destinations from most to least important
- A total of 423 respondents answered this question
- Overall, parks and other recreational destinations were ranked as the number one priority when deciding where to improve biking conditions in Ramsey County, followed by schools
- Transit stops/stations, which was ranked number two for walking, is ranked fifth for biking



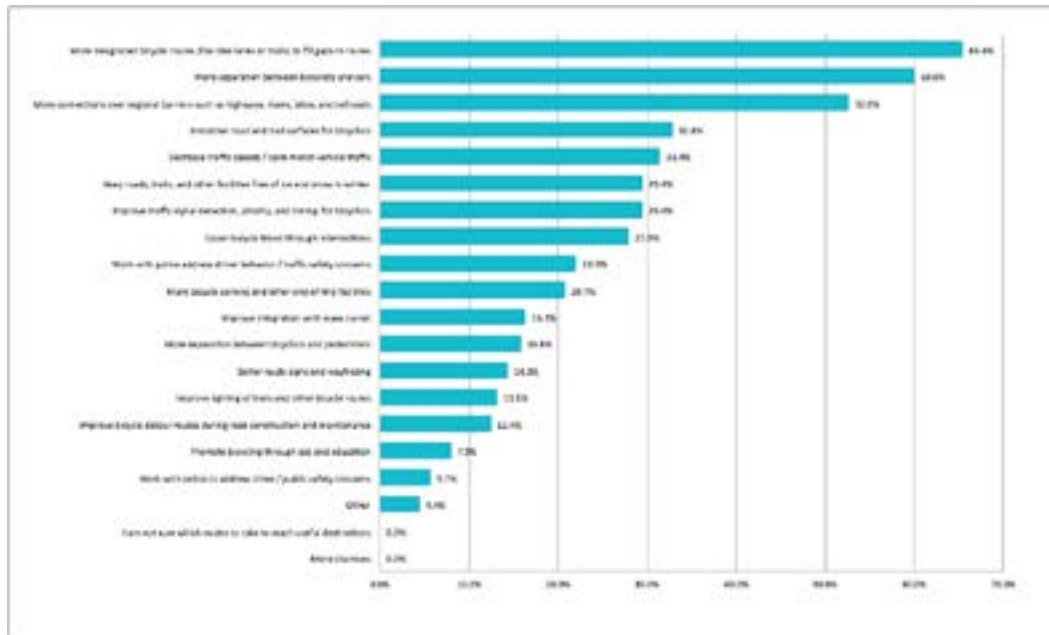
## QUESTION: “WHAT KEEPS YOU FROM RIDING YOUR BIKE MORE?”



[Click here to see the the chart online](#)

- Respondents were asked to select their top five choices from the list, in no particular ranked order
- A total of 431 respondents answered this question
- Overall, the top five barriers to biking in Ramsey County are:
  - Routes and trails don't provide a continuous route to places I want to go
  - Not enough separation from motor vehicles
  - Traffic speeds and/or volumes are too high
  - The pavement on bicycle routes is uneven and is uncomfortable or difficult to ride on
  - There's not enough bicycle parking / bicycle parking is not provided

**QUESTION: “WHICH OF THESE IDEAS WOULD MAKE IT EASIER AND MORE CONVENIENT FOR MORE PEOPLE TO CHOOSE TO RIDE A BICYCLE FOR AT LEAST SOME OF THEIR TRIPS IN RAMSEY COUNTY?”**



[Click here to see the the chart online](#)

- Respondents were asked to select their top five choices from the list, in no particular ranked order
- A total of 405 respondents answered this question
- Overall, the top five opportunities to make biking in Ramsey County easier and more comfortable are:
  - More designated bicycle routes (like bike lanes or trails) to fill gaps in routes
  - More separation between bicyclists and cars
  - More connections over regional barriers such as highways, rivers, lakes, and railroads
  - Smoother road and trail surfaces for bicyclists
  - Decrease traffic speeds/calm motor-vehicle traffic



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RAMSEY COUNTY-WIDE

## Pedestrian & Bicycle Plan

# The Connected Ramsey Communities Network

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## Introduction

Active Living Ramsey Communities seeks to empower local communities with the tools and framework to enhance their local network with county-wide benefits.

Built from local networks and inspired by regional planning efforts, the Connected Ramsey Communities network links all of the communities in Ramsey County through high quality long-distance and connector routes. These are the countywide connections that will bring people from place to place throughout Ramsey County, and will act as a county-wide backbone between communities.

## The County-wide Planning Framework

The Connected Ramsey Communities network is a planning framework for the County and local jurisdictions to refer to when planning, prioritizing and designing an active transportation network.

Three types of bikeways work together in the Connected Ramsey Communities network:

### Major County-wide Corridors

Major routes are optimized for long-distance travel between communities. They act as bicycle freeway corridors, and are envisioned as high quality facilities that can accommodate large volumes of users of all ages and abilities.

These routes require wider-than-standard bikeway widths, separate pedestrian treads where pedestrian use is expected and enhanced crossings of streets where bicyclists receive protected traffic signals or upgraded crosswalks designed for motor vehicles to yield to bicyclists.

### County-wide Connector Corridors

Connector routes provide frequent links between major routes to provide a dense level of connectivity and minimize out of direction travel.

These routes are also designed for all ages and abilities use, but may not require the high-capacity design elements desired on major routes. Intersection crossing safety and comfort are very important on the connector routes in order to maintain a high-quality experience.

### Local Corridors

Local bikeways are the adopted networks endorsed by the communities within Ramsey County. These may be included in local bikeway plans such as the [Saint Paul Bicycle Plan](#), community-wide active transportation plans such as the City of White Bear Lake's [Lake Links Trail Plan](#) or routes identified in the transportation element of local comprehensive plan documents.

### “Identified Need” Planning Gaps

Most of the Connected Ramsey Communities network aligns with existing and planned bikeway routes. In some cases, small portions of the recommended alignments are not included in local plans. These non-planned locations are called “Identified Needs” and will need further local coordination to adopt these missing links into local transportation system plans.



## The Connected Ramsey Communities Network

The Connected Ramsey Communities network is 328 miles of bikeways connecting every corner of Ramsey county. Map 4-1 at the end of this section displays the full Connected Ramsey Communities network, and brief statistics are below:

**Built from:**

<b>216</b>	<b>+</b>	<b>111</b>
<b>miles</b>		<b>miles</b>
<i>of Major County-wide Corridors</i>		<i>of County-wide Connector Corridors</i>

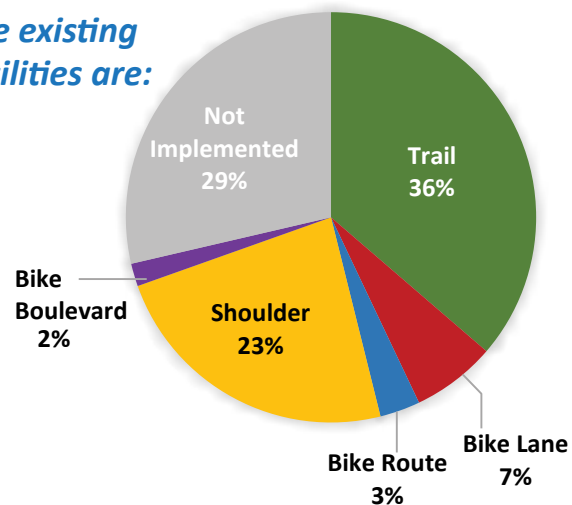
**Made up of:**

**71%**

**existing facilities**

*based on planned facility types.*

*The existing facilities are:*



### **Although upgrades are needed**

*Some “complete” facilities are still too stressful for users of all ages and abilities. Today, the network is made up of:*

<b>37%</b>	<b>Low Stress</b> segments, appropriate for users of all ages and abilities.
<b>19%</b>	<b>Moderate Stress</b> segments, appropriate for most adult bicyclists.
<b>14%</b>	<b>High Stress</b> segments, appropriate for confident, trained, adult bicyclists.
<b>25%</b>	<b>Extreme Stress</b> segments, not appropriate for most people.

Map 4-2 at the end of this section displays the level of traffic stress on all county-wide links of the Connected Ramsey Communities network.

## Relationship with the Metropolitan Council Networks

The Connected Ramsey Communities network is complementary to other regional-scale planning networks.

The Metropolitan Council networks define a connected regional-scale system of on-street and off-street bikeways and were informed by local partners and community outreach. The Metropolitan Council has identified two primary regional bicycle transportation systems across the twin-cities region:

- Regional Bicycle Transportation Network (RBTN)
- Regional Trail System (RTN)

To support these plans, most RBTN and RTN corridors in Ramsey County are included within the Connected Ramsey Communities network:

### **Tier 1 Alignments and Corridors**

Most Tier 1 RBTN alignments and corridors are included as Major County-wide Corridors. If an RTN Connection fills a clear gap in the Tier 1 network, it is also included here. This classification also includes alignment recommendations as determined by the advisory teams for the planning effort with the goal of establishing a roughly 1.5 mile grid across the county.

### **Tier 2 Alignments and Corridors**

Most Tier 2 RBTN alignments and corridors as well as all remaining, non-redundant, RTN alignments are included in the County-wide Connector Corridors.

In some cases, county-wide classifications differ from RBTN tiers. These classification and alignment recommendations were informed by suggested by the advisory teams and public outreach effort for the plan.

## Route Alignment

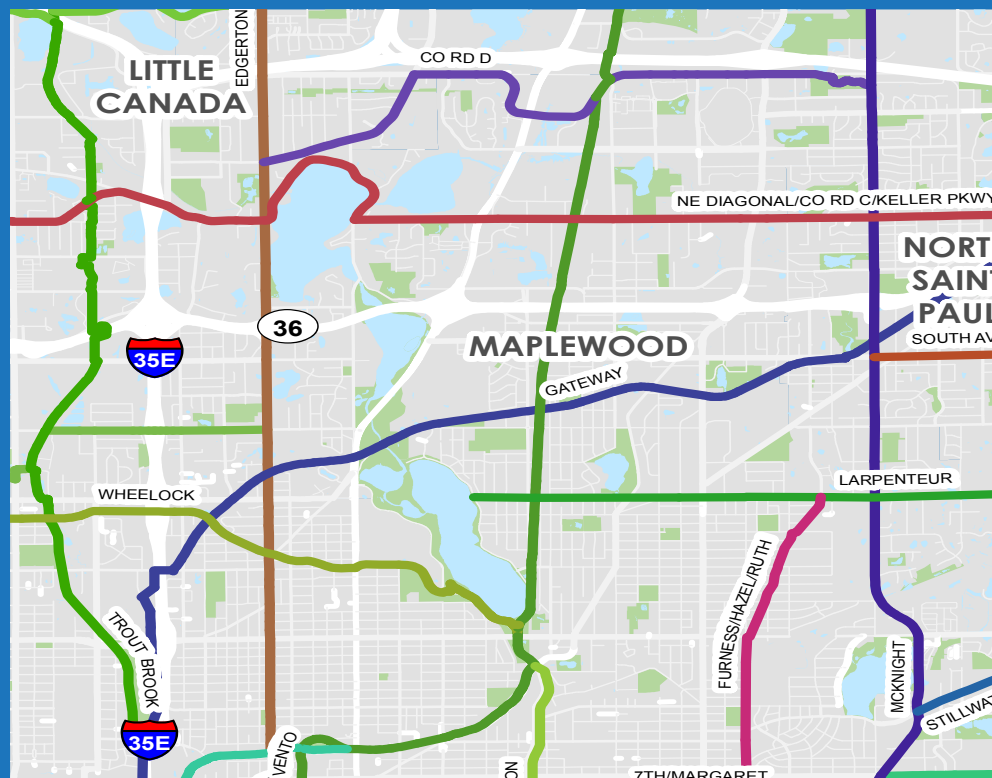
Alignments of specific corridors shown on the Connected Ramsey Communities map have been identified in conformance with local and regional bikeway networks. Upon implementation, these routes should be subject to further study and analysis of opportunities and constraints.



## Ramsey Community Corridors

The Connected Ramsey Communities network is consolidated across 62 distinct community corridors. These corridors offer a convenient way to organize and understand the Connected Ramsey Communities network and may provide a rational way to group an alignment for implementation.

Each corridor has been briefly summarized in Table 4-1, with information on the extents, level of completion and level of traffic stress of the current alignment. Full summary tables for each corridor are included in the project library, available online.



Community corridors are long-distance routes crossing the county. Some corridors, such as Gateway, follow along a single bicycle facility across the county (in this case, the Gateway Trail). Others, such as Hamline/Co Rd 10, use a combination of on- and off-street alignments along multiple different street segments to connect communities.

See the full map of corridors on Map 4-3 at the end of this section.

**Table 4-1: Community Corridors of the Connected Ramsey Communities Network**

Corridor Name	Total Miles	Percent Existing*	Percent Planned**	Percent Low Stress
5th	2.70	83%	17%	23%
7th/Margaret	10.98	11%	89%	6%
Annapolis	2.82	0%	100%	0%
Ash/Sherwood/Co Rd I	7.13	100%	0%	27%
Bald Eagle/H2	2.85	86%	14%	0%
Bruce Vento	13.61	81%	19%	55%
Carver	1.28	0%	100%	0%
Centerville	4.91	100%	0%	43%
Century Ave	11.51	71%	29%	15%
Cherokee	1.87	90%	10%	90%
Co Rd 96/Lake Links South	10.68	94%	6%	78%
Co Rd D	5.43	78%	22%	37%
Co Rd E	4.10	56%	44%	0%
Co Rd J	5.39	100%	0%	97%
Como	5.91	99%	1%	18%
CP Rail Trail	4.41	0%	100%	0%
Edgerton/McMenemy	8.39	83%	17%	20%
Elmer Andersen/Co Rd E/Goose Lake	10.80	67%	33%	21%
Fairview	8.88	52%	48%	10%
Ford/Montreal	3.15	35%	65%	7%
Furness/Hazel/Ruth	3.64	74%	26%	60%
Gateway	8.70	91%	9%	79%
Grotto/Dale	5.59	36%	64%	28%
Hamline/Co Rd 10	16.23	49%	51%	18%
Hodgson	5.19	82%	18%	65%
Indian Mounds/Upper Afton	5.08	60%	40%	41%
Jefferson	4.05	91%	9%	0%
Johnson	1.92	100%	0%	0%
Lafayette	1.81	73%	27%	73%
Lake Links North	1.25	100%	0%	0%
Larpenteur	3.30	88%	12%	0%
Lexington	11.24	91%	9%	89%
Lilydale	2.17	100%	0%	100%
Lower Afton	1.95	100%	0%	100%
Marshall	4.51	57%	43%	0%
McKnight	11.78	79%	21%	45%



**Table 4-1 (Continued)**

Corridor Name	Total Miles	Percent Existing*	Percent Planned**	Percent Low Stress
Mississippi River	5.42	100%	0%	100%
NE Diagonal/Co Rd C/ Keller Pkwy	14.57	74%	26%	40%
Oakdale	0.72	0%	100%	0%
Ohio	0.88	0%	100%	0%
Old Hwy 8/Long Lake	6.98	58%	42%	27%
Otter Lake	1.53	100%	0%	0%
Park/John Ireland	1.73	88%	12%	15%
Pelham/Raymond	2.19	100%	0%	15%
Pierce Butler/Phalen	6.67	63%	37%	17%
Plato/Airport	3.13	0%	100%	0%
Point Douglas	4.81	100%	0%	41%
Rice Creek	5.93	80%	20%	76%
Rice Creek Commons	2.82	42%	58%	42%
Roselawn/Reservoir Woods	6.65	96%	4%	50%
Sam Morgan	8.60	100%	0%	100%
Silver Lake Rd	5.18	0%	100%	0%
South Ave	0.99	100%	0%	0%
Stillwater Blvd	0.86	100%	0%	100%
Stinson	1.77	27%	73%	0%
Summit/High Bridge	5.24	86%	14%	10%
Trout Brook	8.95	63%	37%	63%
U of M Transitway	1.32	45%	55%	45%
University Ave/Charles	5.46	62%	38%	0%
Wabasha/Cesar Chavez/Concord	2.78	78%	22%	21%
Western	1.53	0%	100%	0%
Wheelock	5.62	100%	0%	21%

\* “Percent Existing” includes segments identified as complete according to local plans. This may include facilities that are completed as once facility type, such as a shoulder, but are also planned to receive future upgrades, such as conversion to a shared used path.

\*\* “Percent Planned” includes segments identified for future implementation in local plans and segments classified as “identified needs” in this plan.

## Local Integration of the Connected Ramsey Communities Network

At the county level, this plan is a vision. At the local level it becomes reality.

To move forward, local communities can commit to prioritizing the Major and Connector routes as an important part of their bikeway network and aim to construct the routes to a high quality that serves all ages and abilities. Building for all ages and abilities may require exceeding current local design standards for trails and bikeways.

### Local Next Steps

Local jurisdictions should support the development of the Connected Ramsey Communities network through an adopted resolution. The implementation section of this plan includes two sample resolutions. The first, supporting coordination in development of the network and the second, adoption of Major County-wide Corridors and County-wide Connector Corridors as Major Bikeways [in the transportation element of a comprehensive plan].

Other specific options for support through resolution include:

- Incorporate “identified needs” into local and major route alignments. These segments complete missing links or direct gaps between facilities and will strengthen a local bikeway network regardless of full adoption of the Connected Ramsey Communities network.
- Establish a Major Bikeway classification in the transportation element of the comprehensive plan, in addition to local bikeway classifications. This classification type does not specify the precise type of bikeway, but should include policy support for creating a low-stress, high-quality facility appropriate for the prevailing traffic conditions.
- Integrate the Major Bikeway classification into project prioritization and public works street design processes. These routes are important and should be given a high degree of attention and interest.
- Create local design guides for the community based on the Ramsey Communities Infrastructure primer. There is no one-size fits all solution, but these designs should create facilities that serve users of all ages and abilities.



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## The Maps

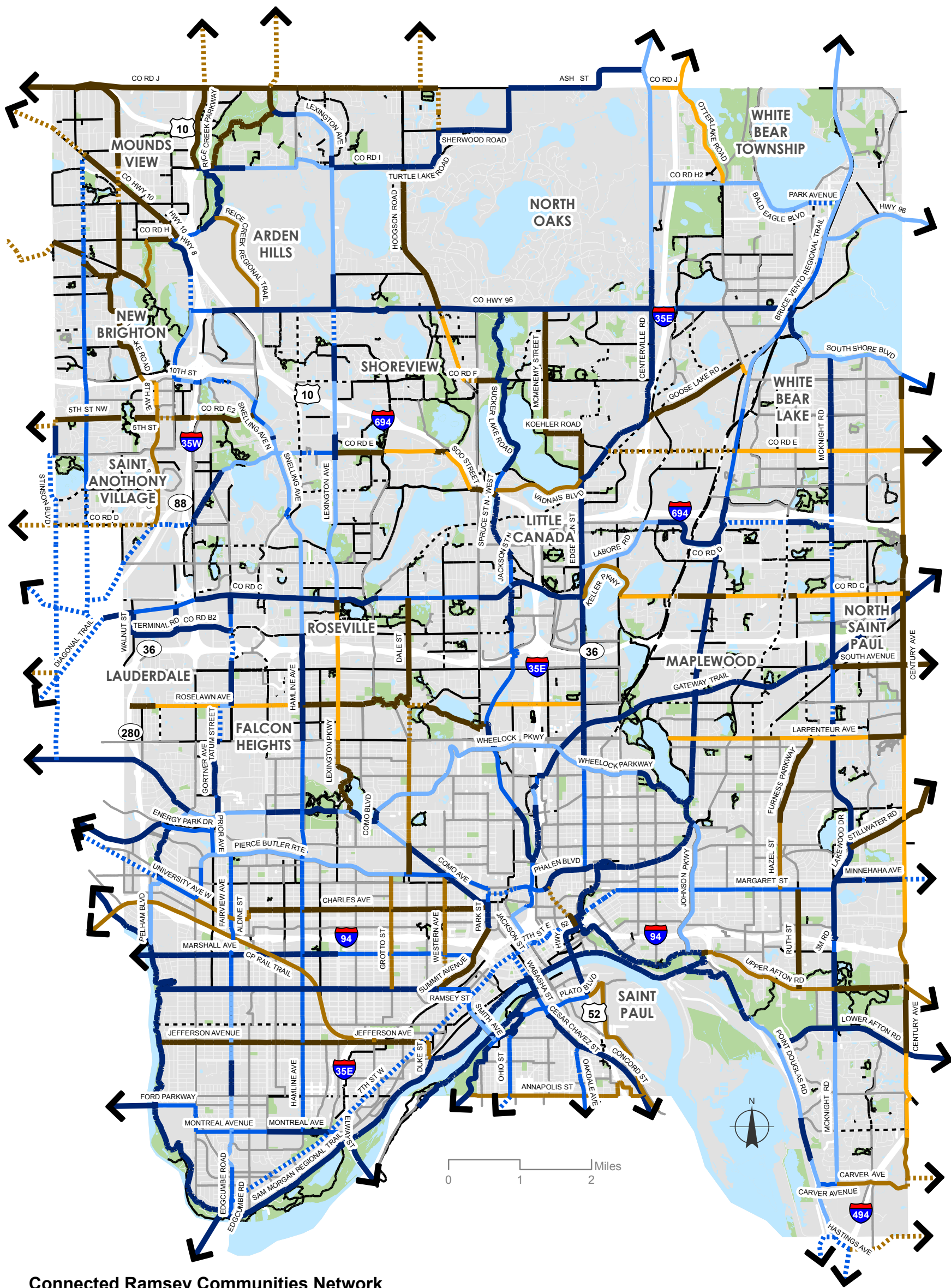
Map 4-1: The Connected Ramsey Communities Network

Map 4-2: Level of Traffic Stress of the Connected Ramsey Communities Network

Map 4-3: Corridors of the Connected Ramsey Communities Network



Map 4-1: The Connected Ramsey Communities Network



Connected Ramsey Communities Network

Major County-wide Corridor

- Existing
- Planned Upgrade
- Planned
- Identified Need
- Inter-county Connection

County-wide Connector Corridor

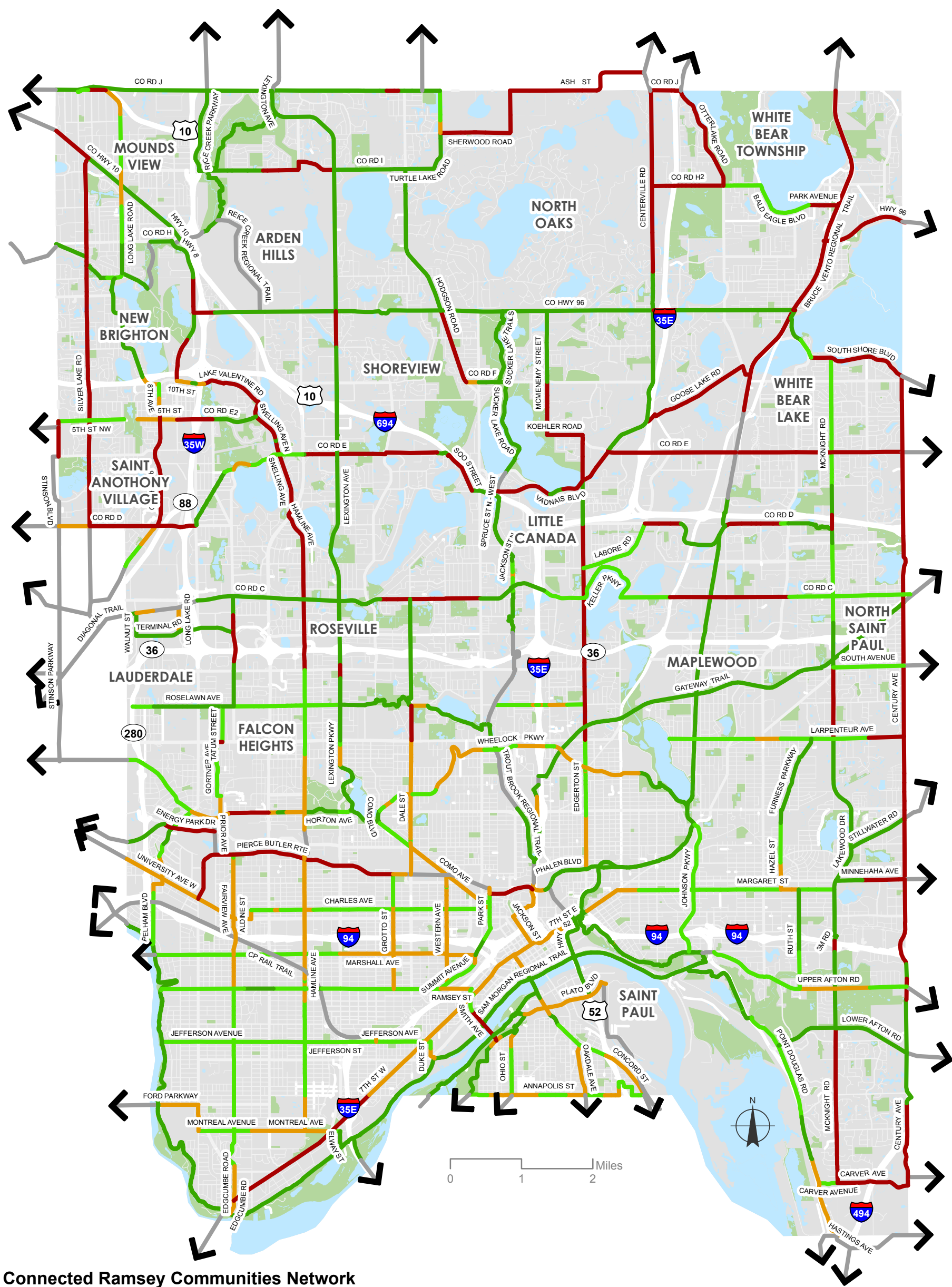
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Local Corridor

- 
- 
- 
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Map 4-2: Level of Traffic Stress of the Connected Ramsey Communities Network



Connected Ramsey Communities Network

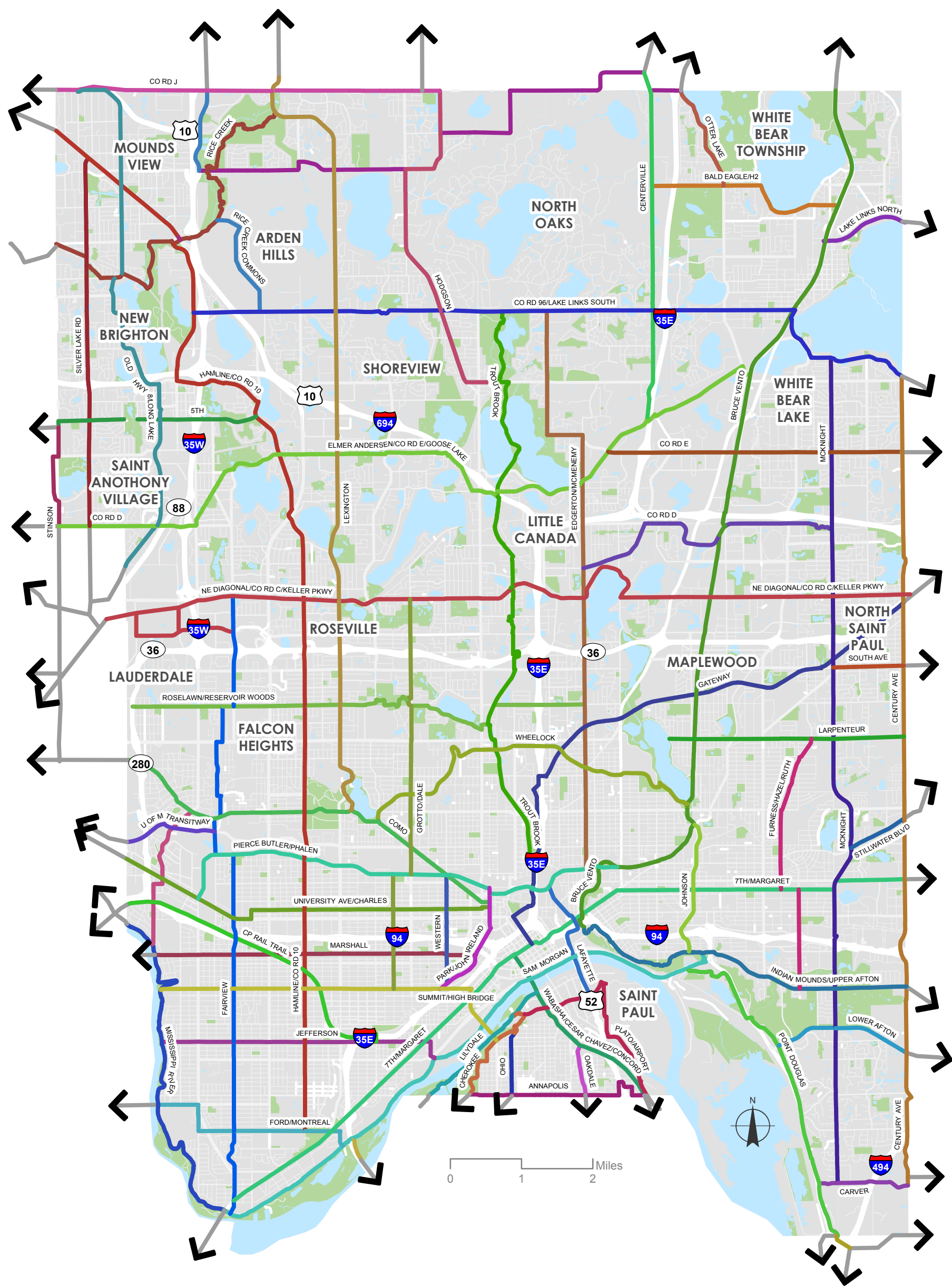
Level of Traffic Stress

- Low Stress
- Moderate Stress
- High Stress
- Extreme Stress
- Non Applicable

Note: Level of Traffic Stress (LTS) analysis displayed here applies to street segments only and does not included a detailed analysis of intersections or street crossings. The quality of crossings is critical and should be evaluated for further improvement.



Map 4-3: Corridors of the Connected Ramsey Communities Network



\*Note that varied colors are used on the map to show the alignment of named coordi-dors used to generate summary statistics shown in Table 4-1.





RAMSEY COUNTY-WIDE

## Pedestrian & Bicycle Plan

# Implementation Plan

## Introduction

Active Living Ramsey Communities and its partners have identified a network of pedestrian and bicycle connections that, when fully developed, will create an integrated system of walkable and bikeable corridors that will connect the people of Ramsey County with desirable destinations in and outside of the county. Active Living Ramsey Communities has also identified deficiencies in the existing system that currently inhibit that connectivity. Implementing the Ramsey County-Wide Pedestrian and Bicycle Plan will be process of improving pedestrian and bicycle facilities throughout the county and monitoring progress toward an integrated network.

Although Active Living Ramsey Communities does not have jurisdiction over individual roadways or trails, it is able to act as a facilitator supporting communication and collaboration for creating a safe and comfortable network for pedestrians and bicyclists to use throughout the county.

## Key Recommendations

Six key recommendations related to implementation came out of the Ramsey County-Wide Pedestrian and Bicycle Plan, including:

- *Connected Ramsey Communities Network*—Through collaboration with Ramsey County stakeholders and implementing agencies, establish and build a connected network of pedestrian and bicycle facilities. The emphasis is on building high quality transportation and recreation facilities that serve a wide range of people.
- *All Ages and Abilities County-wide Design*—Active Living Ramsey Communities will identify specific opportunities to support local communities in developing design guidance that support all members of the community. This will include developing walkable and bikeable communities that offer easier access and connections to transit.
- *Performance Monitoring Report*—Active Living Ramsey Communities will publish an annual report to help raise the profile of successes and challenges for walking and bicycling in Ramsey County. The report will focus on safety, connectivity, health equity, social and economic development and the quality of life improved by the county-wide active transportation system. Some of the measures may be quantified while others can be assessed through discussions with communities.
- *Annual Performance Evaluation Summit*—Facilitated by Active Living Ramsey Communities, the annual gathering is an opportunity for communities to to evaluate their efforts, share best practices and collaborate on priorities for the coming year. This annual meeting will serve as an opportunity to identify successes and discuss challenges.
- *GIS Clearinghouse*—Geographic Information Systems (GIS) is a mapping tool that can represent all kinds of spatial and geographic data. It is used to map, visualize, analyze and interpret data to better understand relationships, patterns and



- trends. Active Living Ramsey Communities is in a unique position to gather data from all communities and keep an updated clearinghouse of current bicycle and pedestrian related data for the whole county.
- Coordinated Count Program—A count program documents the numbers of people using bicycle and pedestrian infrastructure, such as sidewalks, trails or particular intersections. Understanding how people are using existing facilities can help to prioritize future projects and help evaluate the success of investments. Active Living Ramsey Communities can coordinate with efforts at the state, regional and local level to establish a count program that supports the Connected Ramsey Communities Network.

## Actions For Active Living Ramsey Communities

The following steps for Active Living Ramsey Communities will be crucial in institutionalizing active transportation within Ramsey County, including:

1. Create a permanent position within the County to focus on Active Transportation.
2. Support the adoption of a resolution in support of the Ramsey County-wide Pedestrian and Bicycle Plan by the County and local jurisdictions within the county.
3. Distribute the plan to adjoining jurisdictions outside of the county, including both departments of parks and recreation and public works.
4. Establish a GIS Clearinghouse for active transportation data.
5. Facilitate the development of a coordinated counting program.
6. Develop and coordinate a performance measure reporting cycle with the County and other partners.
7. Organize and facilitate a Performance Evaluation Summit.

## Implementation Process

The implementation process consists of three phases: inventory, analysis and planning. The first phase of the process is for individual jurisdictions (usually municipalities but also county, regional, state, and federal agencies owning or operating pedestrian or bicycle facilities within Ramsey County) to conduct an annual inventory of their existing system. Municipalities and other units of government will be asked to identify the type and number of miles of on-road and off-road pedestrian and bicycle facilities they have under their jurisdiction. The inventory will also identify the level of use and issues with safety and connectivity. A Performance Evaluation Worksheet has been developed to assist jurisdictions in conducting and recording their inventory.

During the analysis phase of the implementation process, Active Living Ramsey Community will evaluate the extent to which the current pedestrian and bicycle network meets the communities' goals outlined in this plan. During the final phase, jurisdictions in partnership with each other and facilitated by Active Living Ramsey Communities will develop strategies for further improvements to the county-wide network of pedestrian and bicycle facilities. These strategies will be documented in an annual Performance Monitoring Report prepared by Active Living Ramsey Communities in coordination with the affected jurisdictions.

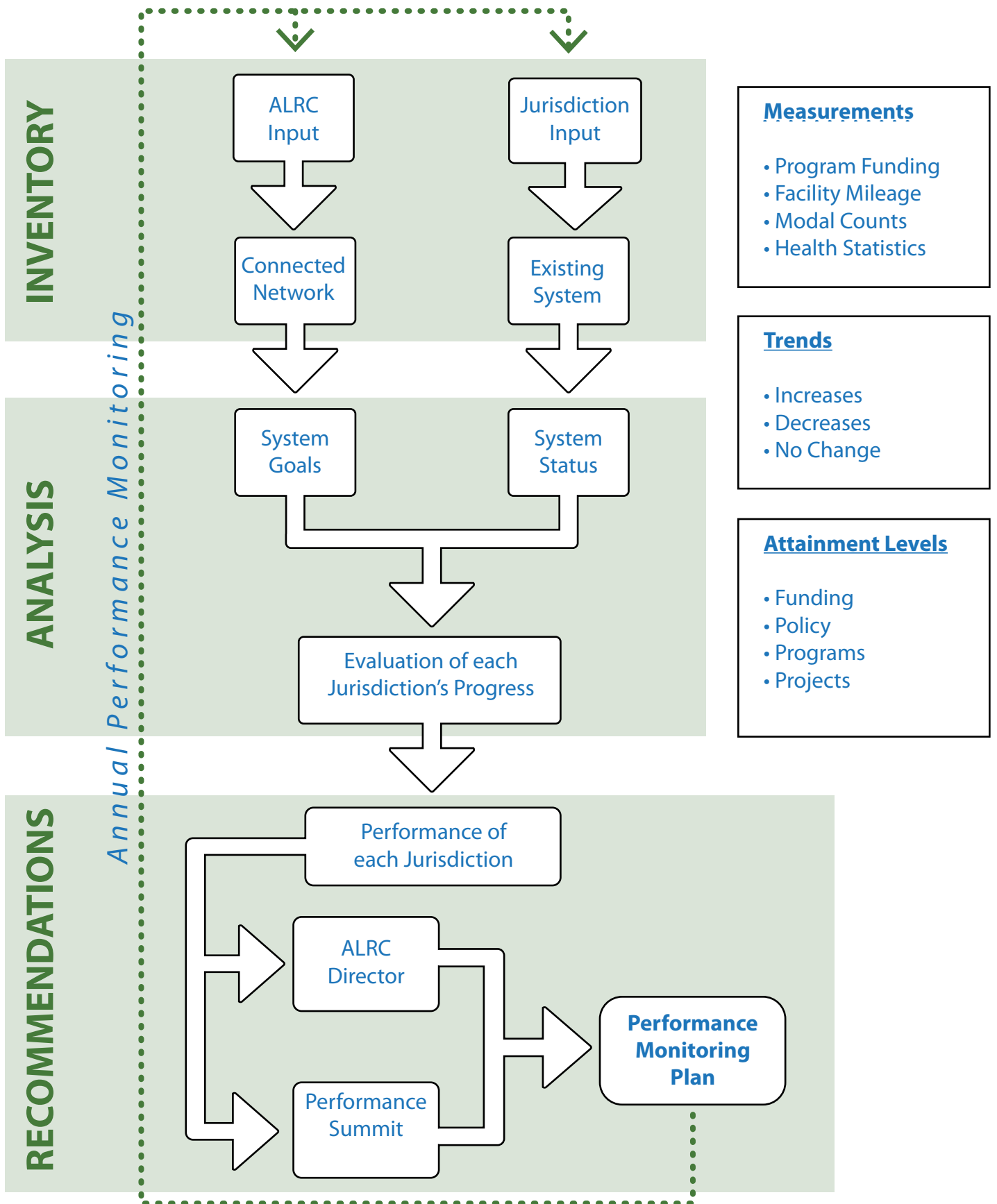
The Performance Monitoring Report is intended to be a summary of the findings of the inventory and analysis and an action plan, detailing a set of proposed actions that local jurisdictions plan to take in the next two years.

This report will be used to communicate and coordinate throughout Ramsey County. The report will be developed by the Active Living Ramsey Communities Director who will review all local information and help identify opportunities for communities to leverage their funding, resources, and outcomes by coordinating their actions. The Active Living Ramsey Communities Director will organize the Performance Evaluation Summit, where each jurisdiction can share findings in the report and outline their proposed set of scheduled improvements to the walking and bicycling network.

At the Summit, attendees will discuss ways to collaborate and build out the Connected Ramsey Communities Network. It is anticipated that the annual inventory and analysis will be conducted in late fall following the construction season, and that the annual planning and coordination activities will be developed during the winter, prior to a new construction season.



# IMPLEMENTATION PROCESS



## Performance Evaluation

To achieve the benefits identified in the Ramsey County-wide Pedestrian and Bicycle Plan, it is essential that the performance of the system be measured annually as part of the Implementation process. The performance evaluation measures five key system attributes, including:

- Safety
- Connectivity and Network Quality
- Equity
- Social and Economic Development
- Quality of Life—including health indicators

Each of these attributes is composed of several defining and measureable items. Safety, for example, is typically defined and measured by the type, frequency, and severity of the crashes that occur. It could also include the crimes that are committed on pedestrians or bicyclists, the modal conflicts that hinder active transportation or the operational conflicts which impede it. What is measured depends on the needs of the jurisdiction.

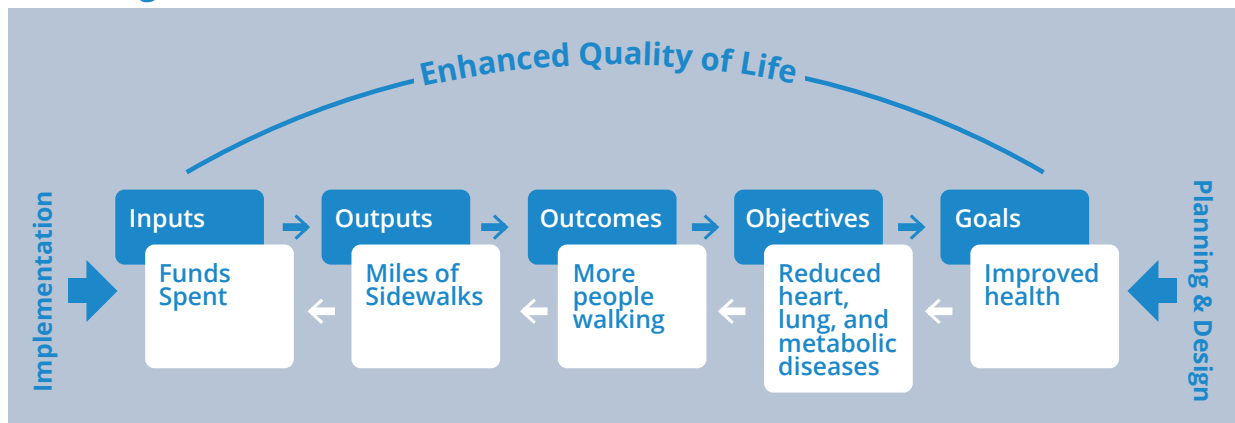
To assist jurisdictions in evaluating the performance of their pedestrian and bicycle system, two versions of a Performance Evaluation Worksheet have been created. Both worksheets are included as separate downloadable materials in the project library on the website.

A short form version evaluates the basic attributes of an active transportation system. Usually the short form provides sufficiently refined information to adequately evaluate the performance of a jurisdiction's active transportation network. A long form version of the worksheet is available for a more nuanced evaluation. The short form focuses on safety and connectivity. The long form is intended to be used as data on equity, social and economic development and quality of life attributes become more available. Usually, the short form will provide enough information to identify needed improvements. The long form is available for those jurisdictions that want to study a particular aspect—for example how active transportation affects health or the local economy. It is not necessary to use the long form in its entirety. It is suggested that jurisdictions use only those items they care to investigate to augment their use of the short form.

The five stages of performance measures—inputs, outputs, outcomes, objectives, and goals—are essential components of the Performance Evaluation Worksheet. Each stage represents a point at which data can be collected during the implementation process or the planning and design process. The planning and design process begins with goals and concludes with identifying the inputs needed to achieve the goals. The implementation process begins with inputs and concludes by evaluating whether the goals have been met. The overarching vision both processes strive for is an enhanced quality of life for the community and its people. The diagram Five Stages of Performance Measures illustrates the directional flow of the two processes.



## Five Stages of Performance Measures



Source: Avenue Design Partners

The worksheet is essentially a table, composed of columns and rows. The worksheet consists of ten columns. Column headings are color-coded. The first four columns are pink and record information gathered as part of the Inventory. The middle four columns are gold; they record information generated as part of the Analysis. The last two colored columns record information developed during the planning phase. Suggestions on what type of information needs to be gathered, where the information can be found and how to analyze it are offered in the worksheet. Note that some of the information requested is currently available while some will only become available in future years. Some information and analysis will require collaboration with other agencies outside of the Responsible Governmental Unit (RGU). Active Living Ramsey Communities will be actively involved supporting local governments in gathering available information.

Each column of the worksheet is expandable to record the following information:  
**INVENTORY**

Item—the attribute being inventoried and analyzed

Data Source—source and type of data used to measure the item

Existing Status—data on the existing state of the item

Goal—the desired state of the item as established by the ALRC 2030 Network Plan

**ANALYSIS**

Discrepancy—the measureable difference between status and goal

Objective—a measurable incremental step toward the goal

Action—action planned or taken in an effort to achieve the objective

Outcomes—an evaluation of the success or failure of the action to achieve objective

**PLANNING**

Outputs—Next year's desired physical changes to active transportation network

Inputs—Next year's suggested funding or policy changes to maintain or improve outcomes

The rows of the worksheet are divided into five sections corresponding to the five key system attributes: safety, connectivity and network quality, equity, social and economic development and quality of life safety

The first division of the worksheet evaluates the safety of the system, including the prevalence of crashes, crime, modal conflicts and operational conflicts. The second division evaluates connectivity and network quality, including counts and gaps. The third division evaluates items related to the equity of the system, including the demographic information about the users. The fourth division of the worksheet evaluates items related to the social and economic development of the county, including land values and economic activity. The fifth division of the worksheet evaluates items related to quality of life attributes.



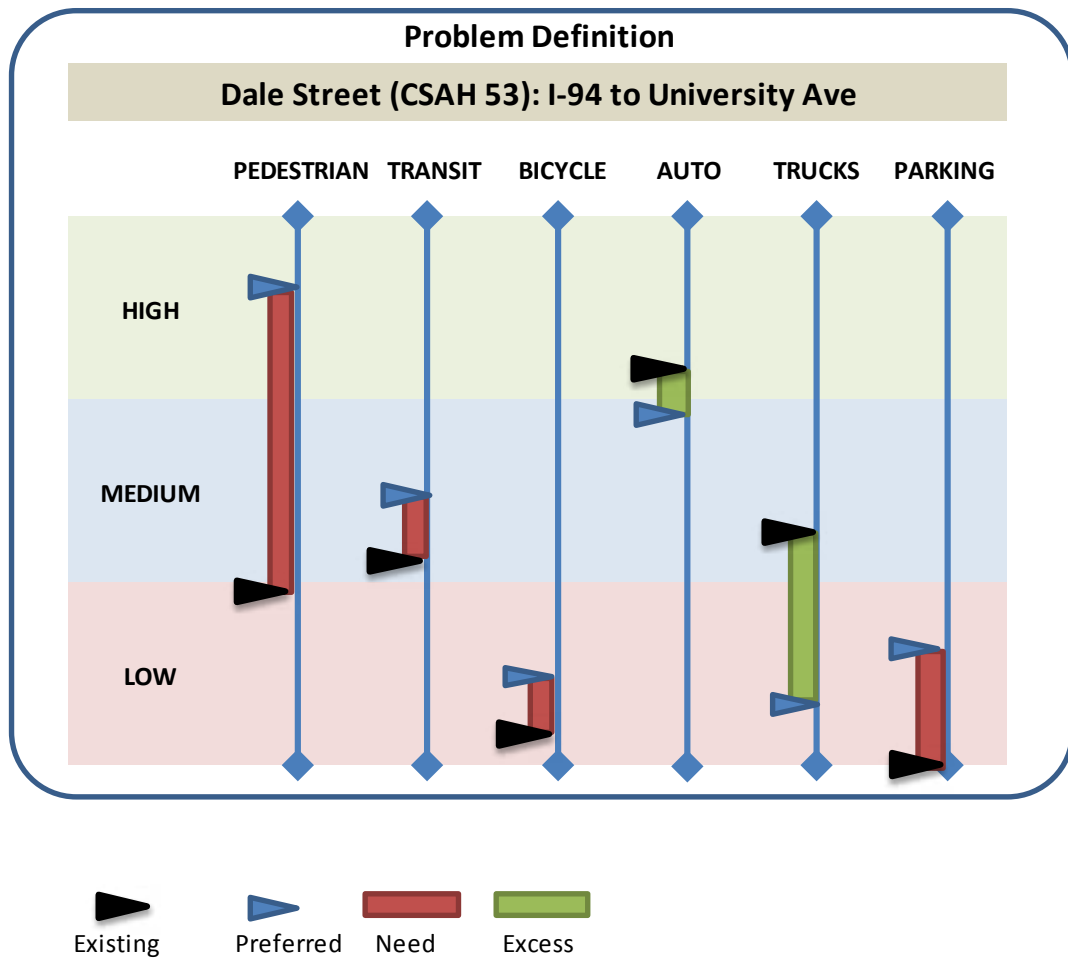
## Adoption Materials and Process Resources

### Slider Bar Tool

The Slider Bar tool uses a qualitative approach to evaluate multimodal tradeoffs. It is primarily used in combination with the Performance Evaluation Worksheet to measure the discrepancy or difference between the status and goal of a specific attribute. Each mode is individually evaluated with the following steps:

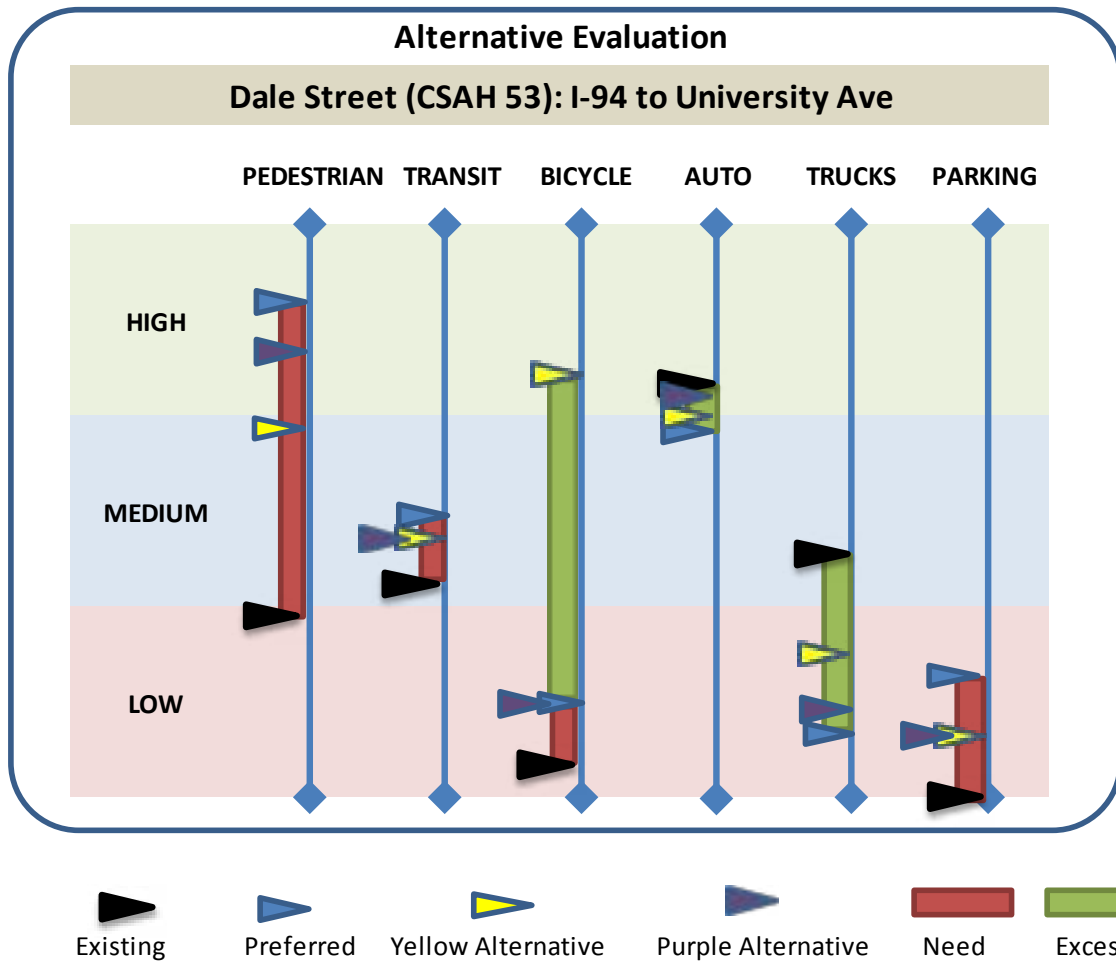
- Rating priority within the individual modal network (High, medium or low)
- Rating of the existing condition with performance measures
- Compare existing condition to priority. This can be a problem if existing is lower than priority and an opportunity if the existing is higher than the priority
- Rate various alternatives with performance measures
- After each mode is evaluated, compare the strengths and weakness of each alternatives

For example, a slider bar could be used to evaluate existing and preferred conditions on Dale Street in St. Paul between I-94 and University Avenue. As illustrated on the Problem Definition slider bar below, black pointers indicate the existing condition. Blue pointers indicate the preferred condition. A red bar between the pointers indicates a need to improve service—the service is in under-supply. A green bar between pointers indicates that there is an excess or over-supply of the service. Frequently, the space currently allocated to providing services that are over-supplied can be re-allocated to provide space for services that are under-supplied. This is especially useful where existing right-of-way is limited. Pointers can be placed either by transportation professionals or through a public involvement process. If pointers are placed by professionals, it is essential that the placement be verified by the public.



Similarly, the slider bar can be used to evaluate and compare the effectiveness of various alternative strategies for improving the corridor. As shown on the Alternative Evaluation slider bar, the yellow alternative improves the condition of pedestrians, transit, bicycling, and parking while decreasing the oversupply of services for automobiles and trucks. The purple alternative also improves pedestrian, transit, bicycling, and parking while decreasing the over-supplying of services for automobiles and trucks. Comparing the yellow and purple alternatives, it becomes apparent that the purple alternative provides a better solution by improving pedestrian services more than the yellow alternative; providing the same level of transit and parking services as the yellow alternative, and not creating an over-supply of services for bicycling while still reducing but not eliminating the oversupply of services for automobiles and trucks.





The slider bar gives the public and decision makers a quick, graphic and intuitive tool to improve active transportation on any level of project throughout Ramsey County.

## Draft Resolutions

Each community should consider how best to approach to coordination with the Ramsey County-wide Pedestrian and Bicycle Plan. The Connected Ramsey Communities Network intersects with local planning and the bicycle and pedestrian network of local communities. The following draft resolutions provide language to formally support the connections to the network and coordination with the vision of a connected Ramsey county.

### **Resolution for support of the Ramsey County-wide Pedestrian and Bicycle Plan.**

**Resolution No.** \_\_\_\_\_

#### **A RESOLUTION OF THE RAMSEY COUNTY BOARD OF COMMISSIONERS IN SUPPORT OF COORDINATING DEVELOPMENT OF CONNECTED RAMSEY COMMUNITIES NETWORK**

WHEREAS, an integrated and well-planned transportation system benefits citizens and business by providing a safe, convenient and economical system for vehicles, bicycles, pedestrians and freight; and

WHEREAS, a connected pedestrian and bicycle network enhances mobility and opportunity for residents and businesses; and

WHEREAS, increased opportunities for physical activity contribute to and strengthen individual and community health and well being; and

WHEREAS, Active Living Ramsey Communities and partners have identified a network of pedestrian and bicycle facilities that, when fully constructed, will create an integrated system of walkable and bikeable corridors connecting the people of Ramsey County with desirable destinations in and outside of the county; and

WHEREAS, transportation facilities that cross municipal boundaries require cross-jurisdictional coordination and planning;

#### **NOW, THEREFORE, RAMSEY COUNTY BOARD OF COMMISSIONERS RESOLVES AS FOLLOWS:**

1. The Board of Commissioners supports staff coordination on development of the Connected Ramsey Communities Network
2. The Board of Commissioners supports the Connected Ramsey Communities Network as a bikeway planning framework in future plans.

#### **2. This resolution is effective upon adoption**



## **Resolution in support of the Plan and Connected Ramsey Communities Network**

**Resolution No. \_\_\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF \_\_\_\_\_ IN SUPPORT OF THE Ramsey County-wide Pedestrian and Bicycle Plan.**

WHEREAS, a connected, comfortable and safe pedestrian and bicycle network will support health and prosperity; and

WHEREAS, the planning process for the Connected Ramsey Communities Network was inclusive of local planning for pedestrians and bicyclists; and

WHEREAS, an integrated and well-planned transportation system benefits residents and business by providing a safe, convenient and economical system for vehicles, bicycles, pedestrians and freight; and

WHEREAS, Active Living Ramsey Communities and partners have identified a network of pedestrian and bicycle facilities that, when fully constructed, will create an integrated system of walkable and bikeable corridors connecting the people of Ramsey County with desirable destinations in and outside of the county; and

WHEREAS, transportation facilities that cross municipal boundaries require cross-jurisdictional coordination and planning; and

WHEREAS, the region will be able to more effectively implement the plan and seek funding for projects with support of local partners;

**NOW, THEREFORE, THE CITY OF \_\_\_\_\_ RESOLVES AS FOLLOWS:**

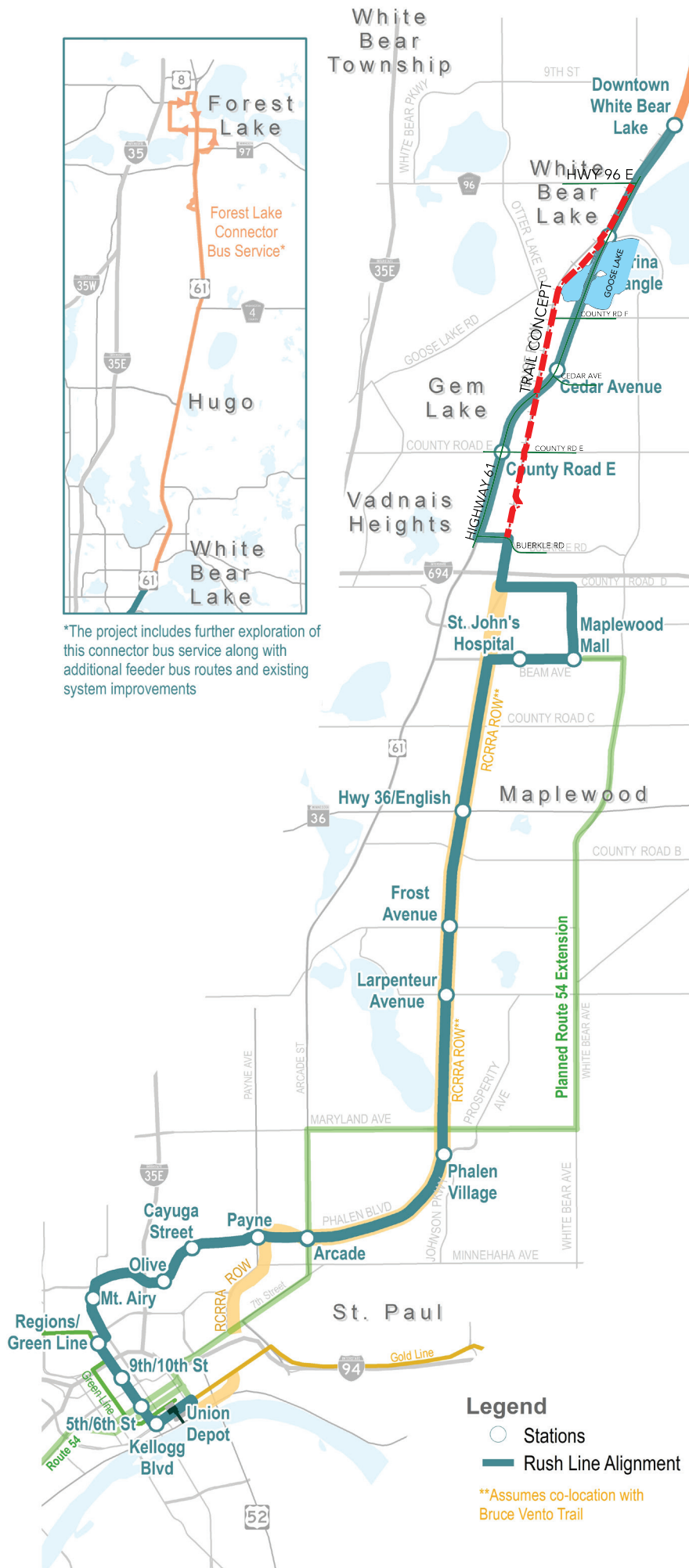
1. The City Council supports staff coordination on development of the Connected Ramsey Communities Network
2. The City Council supports Major County-wide Bikeways as a bikeway planning designation in future plans.
3. This resolution is effective upon adoption







\*The project includes further exploration of this connector bus service along with additional feeder bus routes and existing system improvements

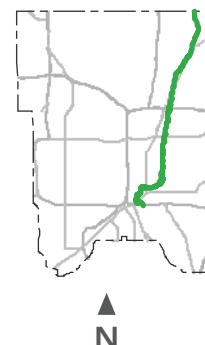


### Legend

- Stations
- Rush Line Alignment

\*\*Assumes co-location with Bruce Vento Trail

## BRUCE VENTO REGIONAL TRAIL



### EXISTING SITE CONDITIONS

MASTER PLAN DATE: 1993



#### LOCATION AND SIZE

The Bruce Vento Regional Trail is 13 miles in length and extends from the east side of downtown St. Paul northwestward to the north County line in White Bear Township. The trail is located on the former right of way of the Burlington Northern Santa Fe (BNSF) Railroad. The trail passes through the cities of St. Paul, Maplewood, Vadnais Heights, Gem Lake, White Bear Lake and White Bear Township. Although the designated trail extends the entire length of the BNSF Railroad right of way, only the southern 7 miles have been acquired for public use. The Ramsey County Regional Rail Authority has acquired the abandoned sections of the right of way for future light rail and transit use. A joint powers agreement between the Ramsey County Regional Rail Authority, Ramsey County and the City of St. Paul provides for continued use of a portion of the right of way for regional trail.



#### SITE CHARACTERISTICS

The BNSF Railroad right of way varies in width from 60 to 150 feet. It passes through a variety of areas, each with different character depending on the land use of adjacent property. It varies from a narrow industrial corridor on the east side of St. Paul to a wider, more natural corridor in suburban sections.



#### RECREATION DEVELOPMENT

The trail has been developed from East Seventh Street in the City of St. Paul to Buerkle Road in the City of White Bear Lake, a distance of 7 miles. The section south of Phalen Regional Park was constructed by the City of St. Paul. The sections north of Phalen Regional Park were constructed by Ramsey County. Larpenteur Ave is identified in the Joint Powers Agreement as the separation of maintenance responsibilities between Ramsey County and the City of Saint Paul. The completed section of the Bruce Vento Regional Trail intersects the Gateway Section of the Willard Munger State Trail and other local trails.

### PLANNING CONSIDERATIONS

The BNSF Railroad right of way north of Buerkle Road is currently licensed to the Minnesota Commercial Railroad for operations and maintenance. The Minnesota Commercial Railroad provides delivery and transloading service to a limited number of customers. Consolidation of the delivery and transloading at the M and D junction located in the City of White Bear Lake would enable the BNSF Railroad to abandon the railroad right of way south of that point. Once abandoned, the Ramsey County Regional Rail Authority would be in a position to purchase the right of way and provide



easement access for trail purposes. North of that point, the railroad right of way is immediately adjacent to the Highway 61 right of way. With the anticipated return of Highway 61 from the State of Minnesota to Ramsey County, it is possible that a future trail north of M and D junction could be located within the right of way of Highway 61. Redevelopment of Highway 61 should incorporate the regional trail extension to the north County line.

The abandoned railroad right of way was acquired by the Ramsey County Regional Rail Authority for future light rail or transit use. The majority of the trail constructed to date was placed in the center of the right of way in the former track bed. The trail utilizes former railroad bridges crossings on major roadways, including Highway 36, Beam Avenue and Interstate 694. Future transit improvements will likely require that the trail be relocated within the corridor. The specific design of the future transit improvements should incorporate the trail including accommodation for grade separated crossing at major roadway intersections.

Segments of the BNSF Railroad right of way have been abandoned in Washington and Chisago counties. Washington County has constructed the Hardwood Creek Trail and Chisago County has constructed the Sunrise River Trail on this right of way. Collectively, these trails extend from the City of Hugo to the City of North Branch, a total distance of 25 miles. The connection between the Bruce Vento Regional Trail and these trail segments, within the City of Hugo, will be coordinated with Washington County.

There is also a proposed connection from the Vento Trail westward/southward and northward which would connect the Trillium Trail to the Trout Brook Regional Trail and Lake McCarron's County Park. As the County has participated in the Trillium Trail procurement, the Parks & Recreation department will work in partnership with the city of St. Paul, community groups and the Minnesota Department of Transportation to complete this connection.



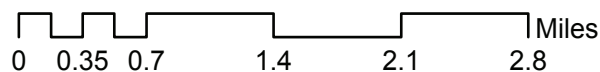
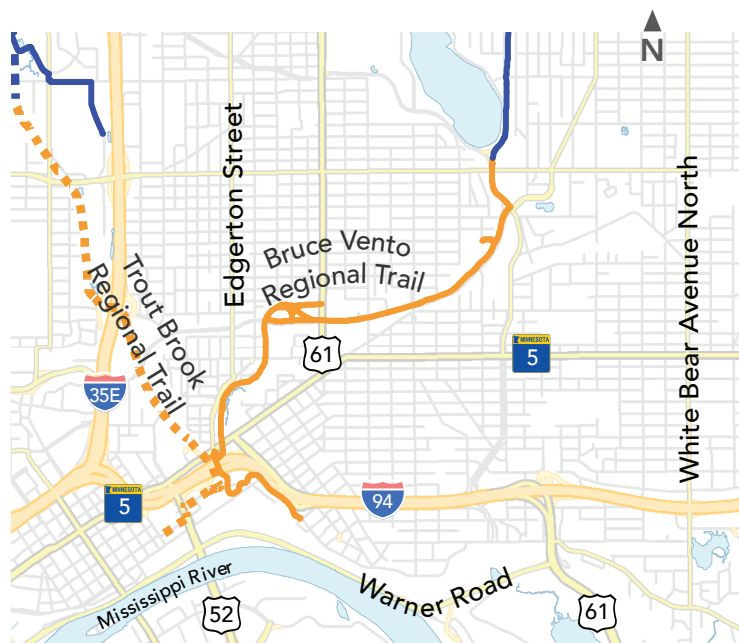
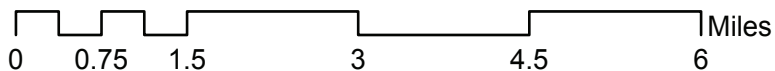
## MAINTENANCE

### Winter Maintenance:

- Plow trail from Lake McCarron's County Park to Arlington Ave E.

SECTION TITLE: BRUCE VENTO REGIONAL TRAIL

EXISTING CONDITIONS



Legend

Park Border	---	Park Paved Trail	—	Regional Trail	—
Proposed Development	3	Park Turf Trail	—	Proposed Regional Trail	---
Proposed Development Node	1	Municipal Trail	—	Proposed Paved Park Trail	---
Metro Tranist Stop	T	Municipal Ped/Bike Facility	—		



## SECTION TITLE: BRUCE VENTO REGIONAL TRAIL

### PROPOSED DEVELOPMENT

**1. Master Planning** - The master plan for Bruce Vento Regional trail is a joint regional trail master plan between Ramsey County and the City of Saint Paul and was approved in 1989 by Ramsey County Board of Commissioners, City of Saint Paul, and the Metropolitan Council. Several changes to the existing regional trail and additional development is proposed throughout the regional trail corridor which will require additional master planning activities.

- A master plan amendment is planned for 2018 due to proposed changes within the regional corridor and recreational development opportunities. Currently the railway lines north of Buerkle Road in the City of White Bear Lake to Hugo are active. It is undetermined how long this section of railway will stay active. As a result the master plan will address trail realignment for areas north of Buerkle Road to County Road J in the Cities of White Bear Lake and Vadnais Heights, and White Bear Township to County Road J. Improvements throughout the corridor for recreational needs due changing trends, demographics, and improved recreational amenities will also be addressed.. Continued development of the regional trail corridor will follow items addressed within the 2018 master plan amendment until future changes are required to the regional trail as redevelopment needs arise.
- Develop partnerships with Ramsey County Regional Rail, the Cities of Saint Paul, Maplewood, Vadnais Heights, Gem Lake, White Bear Lake, and White Bear Township, the Minnesota Department of Transportation (MNDOT), Washington County Park & Recreation department, local schools adjacent to the corridor, Burlington Northern Santa Fe (BNSF) and Minnesota Commercial Railway, and Rice Creek Watershed District (RCWD), Ramsey Washington Metro Watershed District (RWMWD), and private properties adjacent to the corridor for increased recreational opportunities and funding strategies for proposed improvements throughout the regional trail.

### 2. Rush Line Bus Rapid Transit (BRT)

Ramsey County Regional Trail started master planning activities in 2014 for development of the Rush Line BRT from downtown Saint Paul to the downtown area of White Bear Lake. The majority of the Rush Line BRT is proposed to be located within the existing former BNSF right-of-way from downtown Saint Paul to Buerkle Road in the City of White Bear Lake. The north extension of the Rush Line BRT is planned to follow Buerkle Road and Highway 61 to the downtown area within the City of White Bear Lake. Dependent on the outcome of the Rush Line BRT master planning process, realignment of the existing trail will likely be required within the former railway corridor, connections to bus terminals and parking areas, and other potential recreational development opportunities in conjunction with the Rush Line BRT.

### 3. Trail Development

- **Pedestrian Trail Connections:** increase pedestrian access points into the regional trail corridor for improved trail connections to adjacent residential and commercial areas.
- **Access points at Roadway Corridors:** Several access points to the regional trail are in existing roadway corridors. There has been a demand to redevelop many of these access points for improved access and safety while crossing roads. Proposed improvements may consist of redevelopment of existing at-grade crossings, realignment of access points, safety signaling, and trail transition areas. A planning study may be required to identify necessary improvements for these crossings.
- **New Access Points:** There has been a demand to increase access points to adjacent residential neighbors and commercial areas. Additional access points will be proposed for undeveloped trail sections as trail development occurs. A planning study may be required to identify additional trail connections to the corridor.

## SECTION TITLE: BRUCE VENTO REGIONAL TRAIL

**Existing Regional Trail:** Redevelop existing sections of regional trail for more direct and user-friendly trail connections to amenities. Redevelopment of the existing trail will be required during implementation of the Rush Line BRT within the regional trail corridor. The regional trail is proposed to be shifted to allow construction of the Rush Line BRT, bus line terminals, and parking areas. Improvements shall consist of trail repaving and the re-alignment of trail sections to reduce sharp corners and steep slopes adjacent to trail sections.

**New Trail Sections:** Trail development is proposed for undeveloped sections of the Bruce Vento Trail. A preliminary design study was completed in 2016 to identify the proposed trail alignment, preliminary design/engineering, impacts, cost and potential site amenities for additional recreation opportunities for a trail extension from Buerkle Road to Highway 96 West in the City of White Bear Lake. Additional planning activities started in 2016 for possible trail alignment corridors for the extension of trail from Highway 96 West to County Road J. Additional planning activities will be required to determine the location of the regional trail corridor and will require and master plan amendment for proposed trail locations, and improvements.

### 4. Trailhead Parking Lots

There are no trailhead parking lots. There has been a demand to increase parking for access to the regional trail corridor. Additional trailheads are proposed for new sections of trail to be developed from Buerkle Road to County Rd J. Additional planning studies may be required to determine parking opportunities for existing sections of trail, partnerships, and potential new trailhead locations.

### 5. Wayfinding

Improve pedestrian signage for improved wayfinding to trail accesses, trail crossings and other amenities. Provide interpretive signage in natural areas for increased nature education opportunities.

### 6. Recreation Opportunities

**Public Art:** Provide opportunities and appropriate infrastructure to accommodate local public art for improved connections to adjacent communities.

**Culturally Significant Areas:** Provide cultural connections and interpretive education for areas along the railway corridor. Proposed cultural improvements would consist of interpretive educational signage and pedestrian connections for viewing opportunities.

**Programming:** Increase recreation and nature programming activities. This may be accomplished through interpretive and educational signage.

**Endangered Wildlife Areas:** Provide visual and interpretive education for wildlife such as waterfowl, nesting songbirds, and raptors. If sensitive or endangered wildlife is discovered, protection and education should be provided for park users.

### 7. Acquisitions

Identify proposed properties for future regional trail acquisition when properties become available.





6/15/2018

**Support for Bruce Vento Trail Extension Project**

To whom it may concern,

This letter is to share our support for funding for Ramsey County Parks and Recreation's plan to extend the Bruce Vento Regional Trail from Buerkle Road to Highway 96 in the City of White Bear Lake.

The Task Force is a joint powers board of city, county and township elected officials, which is planning transportation improvements to enhance mobility, promote economic development and preserve community assets within the 80-mile transportation corridor between Saint Paul and Hinckley. The Task Force provides technical and policy guidance to transportation agencies, raises public awareness, builds support and advocates for improved transportation service in the corridor

The current Bruce Vento Trail and the extension will complement the planned 14 mile Rush Line BRT transit route by adding additional multi-modal transportation options to the Rush Line Corridor. In addition, the proposed extension project will not impact the ability of Minnesota Commercial Railway to continue to provide service in the corridor and bring economic benefits to the communities it serves.

Sincerely,

A handwritten signature in blue ink that reads "Victoria A. Reinhardt". The signature is written in a cursive style with a large, stylized "V" and "R".

Victoria Reinhardt  
Chair, Rush Line Corridor Task Force

Centerville  
Chisago County  
Forest Lake  
Harris  
Hinckley  
Hugo  
Little Canada  
Maplewood  
North Branch  
Pine City  
Pine County  
Ramsey County  
Rock Creek  
Rush City  
Saint Paul  
Sandstone  
Stacy  
Washington County  
White Bear Lake  
White Bear Township  
Wyoming

214 4th St. E.  
Suite 200  
St. Paul, MN 55101  
651-266-2760



**Richard Scott**  
*Manager Public Projects*  
MN, ND, SD

**BNSF Railway Company**  
80—44th Avenue NE  
Minneapolis, MN 55421  
Phone: (763) 782-3492  
richard.scott2@bnsf.com

July 9, 2018

Scott Yonke  
Director of Planning and Development  
Ramsey County Parks and Recreation Department  
2015 Van Dyke Street  
Maplewood, MN 55109

Re: Ramsey County Bruce Vento Regional Trail Paralleling BNSF Right-of-Way

Mr. Yonke:

Please find enclosed the formal BNSF position paper regarding At-Grade Trails and Parallel Roadways in response to the proposed plans for the Bruce Vento Regional Trail through Ramsey County.

In general, parallel roadways and trails are not allowed on BNSF property. BNSF right-of-way is reserved for railroad infrastructure and expansion to ensure that current and future customer demands can be met. BNSF is not in support of parallel trail projects, but is willing to consider accommodating parallel trails within the right-of-way when the project includes the elimination of one or more at-grade crossings.

In addition, the trail must meet the guidelines and requirements of the Manual on Uniform Traffic Control Devices (MUTCD), and the trail owner is responsible for entering into the proper licensing agreement with BNSF prior to construction. BNSF may require other features at its discretion as plans are further developed, including fencing, signage, pavement marking, etc.

BNSF will not permit a trail which plans include a new public at-grade pedestrian crossing.

We will continue to work with the County on plans for the trail to work toward solutions for accommodating your request.

Should you have any questions, please feel free to contact me.

Sincerely;

Richard Scott  
BNSF Railway  
*Manager Public Projects*  
MN, ND, SD



## ***BNSF Position on At-Grade Trails and Parallel Roadways***

This generally addresses Agency Sponsored projects that include parallel roadways or pedestrian, bicyclist, or multi-use trails on or adjacent to BNSF right-of-way (ROW).

Parallel trails and roadways:

- In general, public parallel roadways or trails are not allowed on BNSF property. BNSF ROW is reserved for railroad infrastructure to ensure that current customer demands are met and to support future expansion needs.
- BNSF's maintenance and inspection roads are for the duties of operating, maintaining, and inspecting track. Public uses of railroad service roads are not acceptable for public roadway or trail use.
- BNSF rail bridges are designed to carry train traffic and are not designed for multimodal use. Trails parallel and/or attached to railroad bridges are not allowed.
- If trail is adjacent to BNSF property, fencing should be installed along the trail to keep users off of BNSF property.
- Trail construction and maintenance shall not reduce the BNSF ROW or adversely impact train operations during construction.
- Increased pedestrian activity adjacent to active track increases exposure points to train movement and potential for trespassing. Efforts to deter trespassing should be included in any trail project.

BNSF will consider accommodating parallel roadways within BNSF ROW when the new roadway will eliminate one or more at-grade crossings.

Trails crossing BNSF tracks at-grade:

- BNSF may accommodate trails that cross the tracks or BNSF ROW.
- Trails crossing the tracks at-grade must cross adjacent to an existing public at-grade crossing. Stand-alone at-grade trail crossings are not allowed.
- The trail should cross the railroad tracks at a 90-degree angle.
- Trail crossing must meet the requirements of the Manual on Uniform Traffic Control Devices, (MUTCD).
- Trail owners must enter into the proper license agreement with BNSF and be responsible for the ownership and maintenance of the trail.
- BNSF may require specific trail features at its discretion.

Trails combined with drainage structures are not allowed. For guidance on grade separated trails, refer to the Union Pacific Railroad – BNSF Railway Guidelines for Railroad Grade Separation Projects.

*BNSF publishes position statements to clarify BNSF's position on the subject matter. The information contained in a position statement is neither exhaustive nor exclusive to all circumstances or individuals. The relevance and implementation of these recommendations may be affected by local, state, or federal statutes, other rules or regulations, and differing project conditions. Position statements are not intended to provide any approval of a public agency project. Nothing in this position statement, supersedes or supplements the terms of a governing agency agreement with BNSF. The position statement should not be relied upon as being inclusive of all BNSF's policies on the subject matter, but only as a resource. BNSF takes great care in publishing position statements and reserves the right to rescind or modify these statements at any time.*

*Approved by Craig Rasmussen, AVP Engineering Services and Structures  
Date Approved: August 16, 2017*