

Twin Cities Regional Bicycle Barriers Study

TAC Planning

July 13, 2017




Regional Bicycle Transportation Network Vision

RBTN Alignments

-  Tier 1 Alignments
-  Tier 2 Alignments

RBTN Corridors (Alignments Undefined)

-  Tier 1 Priority Regional Bicycle Transportation Corridor
-  Tier 2 Regional Bicycle Transportation Corridors






Other Trail Systems

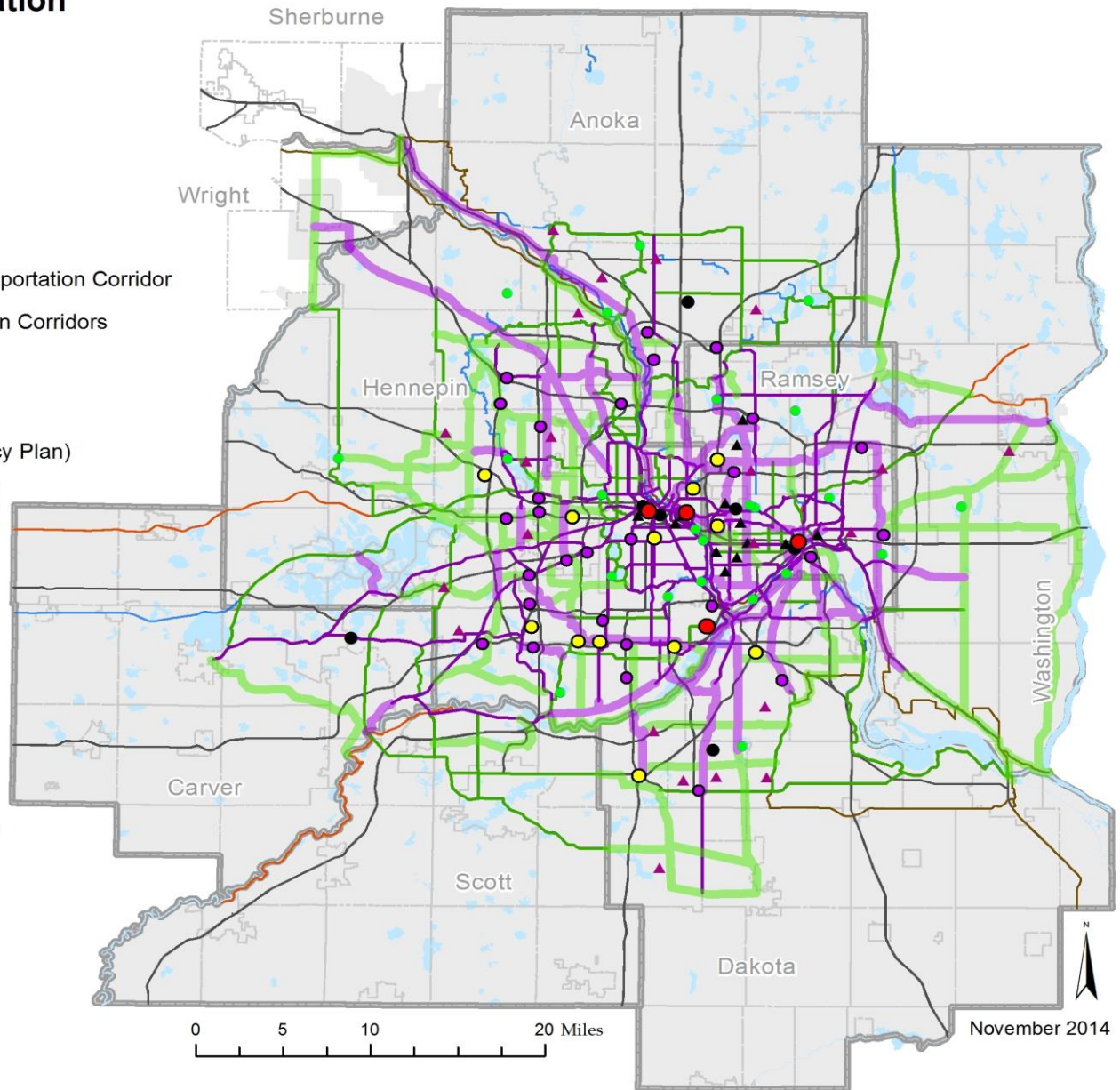
-  Regional Trails (Regional Parks Policy Plan)
-  Mississippi River Trail (US Route 45)
-  State Trails (DNR)

Regional Destinations

-  Metropolitan Job Centers
-  Regional Job Centers
-  Subregional Job 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



November 2014

Study Background

Critical Bicycle Transportation Links serve one or more of the following functions:

- *Close a gap in the RBTN or connect a local bikeway to a major regional destination.*
- *Improve continuity and connections between jurisdictions (on or off the RBTN)*
- *Improve or remove a physical barrier (on or off the RBTN)*

Study Purpose

- Assess existing and potential bicycle crossing opportunities of regional barriers
- Analyze regional physical barriers to bicycling and where they impact continuity of regional and local bicycle networks
- Inform the TPP update

Scope of Study

Study will consider major physical regional barriers to bicycle travel including:

- Secondary rivers & streams
- Mainline railroad corridors
- Freeways and expressways

Scope of Study

Key Technical Tasks:

1. Identify existing & planned barrier crossings
2. Determine preferred maximum spacing of barrier crossings
3. Identify deficiencies in barrier crossing opportunities
4. Evaluate and rank potential new crossing locations
5. Identify 5 high potential demo sites for planning level concept development

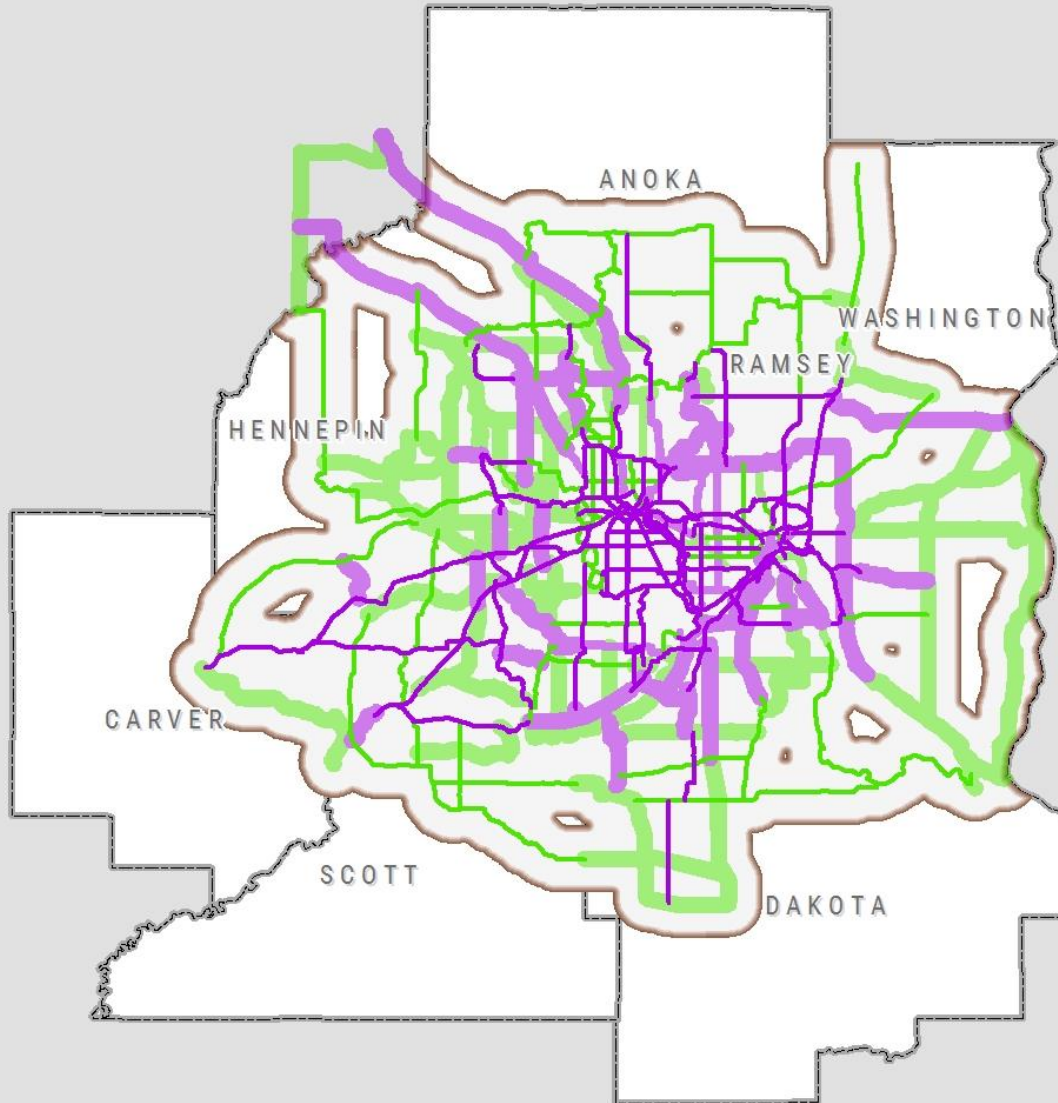
Technical Advisory Work Group

- Metropolitan Council, MnDOT
- Each of 7 MPO counties
- Saint Paul & Minneapolis
- Suburban Cities: Richfield, Maplewood, Chaska, New Brighton
- Bloomington Bicycle Alliance
- Transit for Livable Communities
- Parks Agencies: Anoka County, Three Rivers Park Dist., Carver County

Study Area

Analysis parameters:

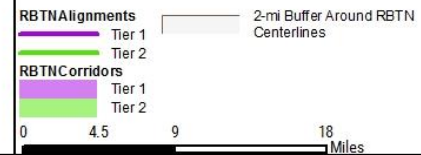
- Generally, within RBTN coverage area
- Analyze barrier segments having bicycle facilities w/in one half-mile on both sides of the barrier



Twin Cities Metro Region

Study Area

Regional Bicycle Barriers Study



Date: 11/1/2016





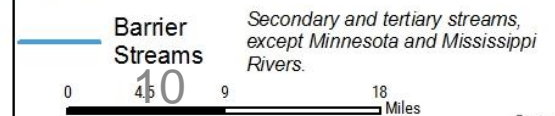
Twin Cities Metro Region



Potential Barrier Streams

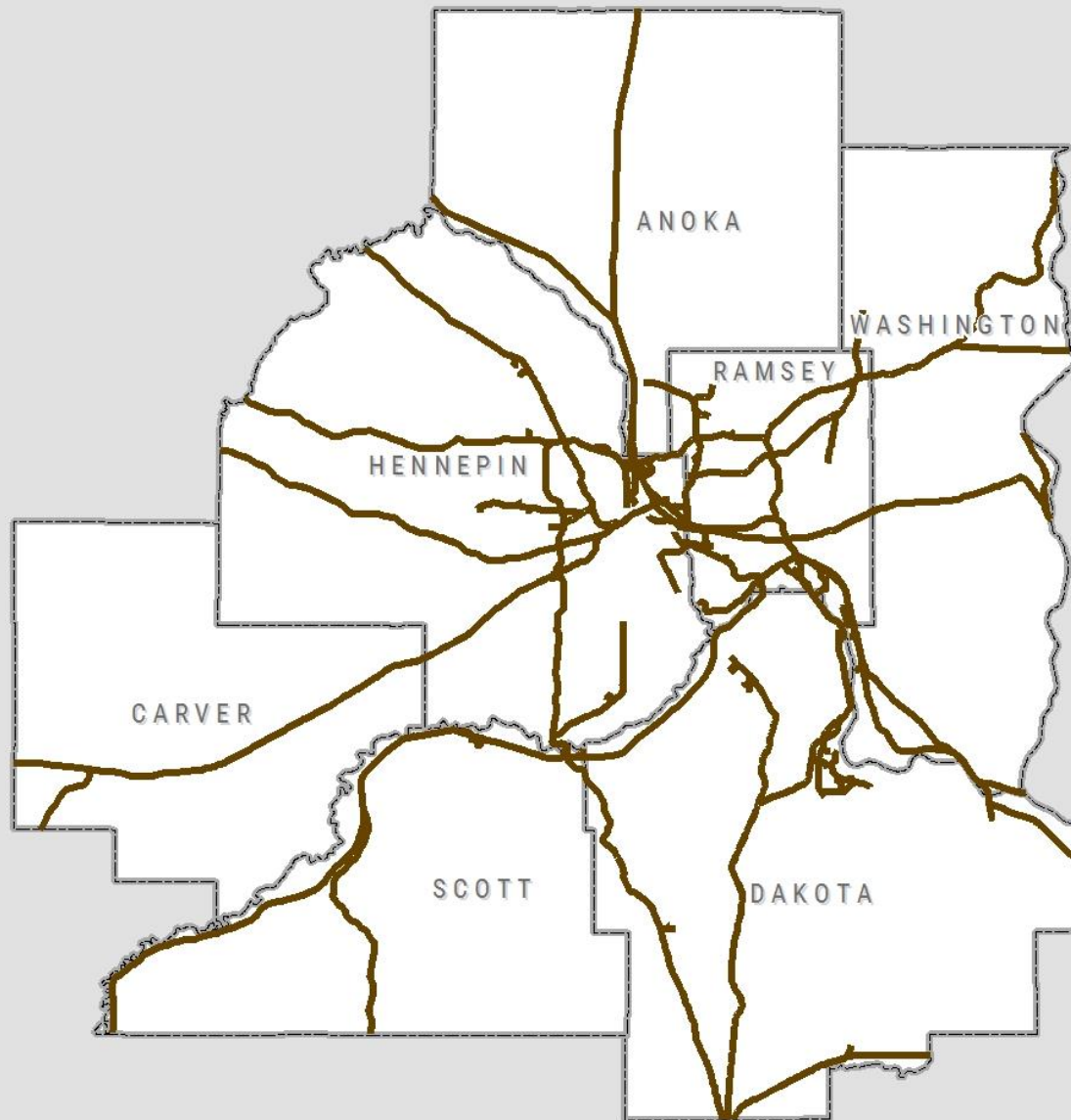
Regional Bicycle Barriers Study

Legend



Date: 10/31/2016





Twin Cities Metro Region

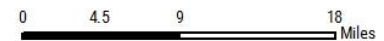


All Railways

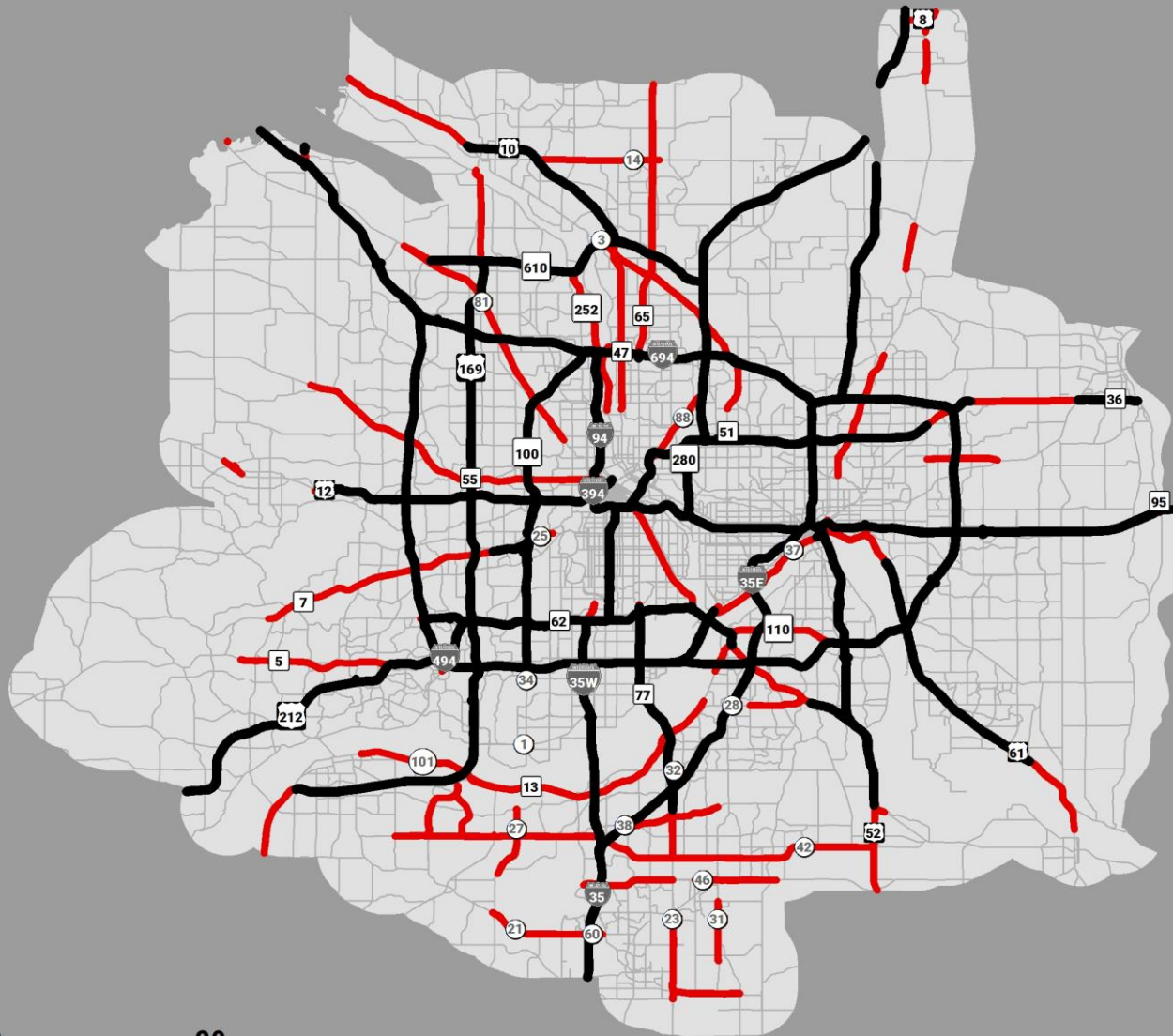
Regional Bicycle Barriers Study

Legend

 Railways



Date: 10/31/2016



0 10 20 Miles

Twin Cities Metro Region



Freeways and Expressways

Regional Bicycle Barriers Study

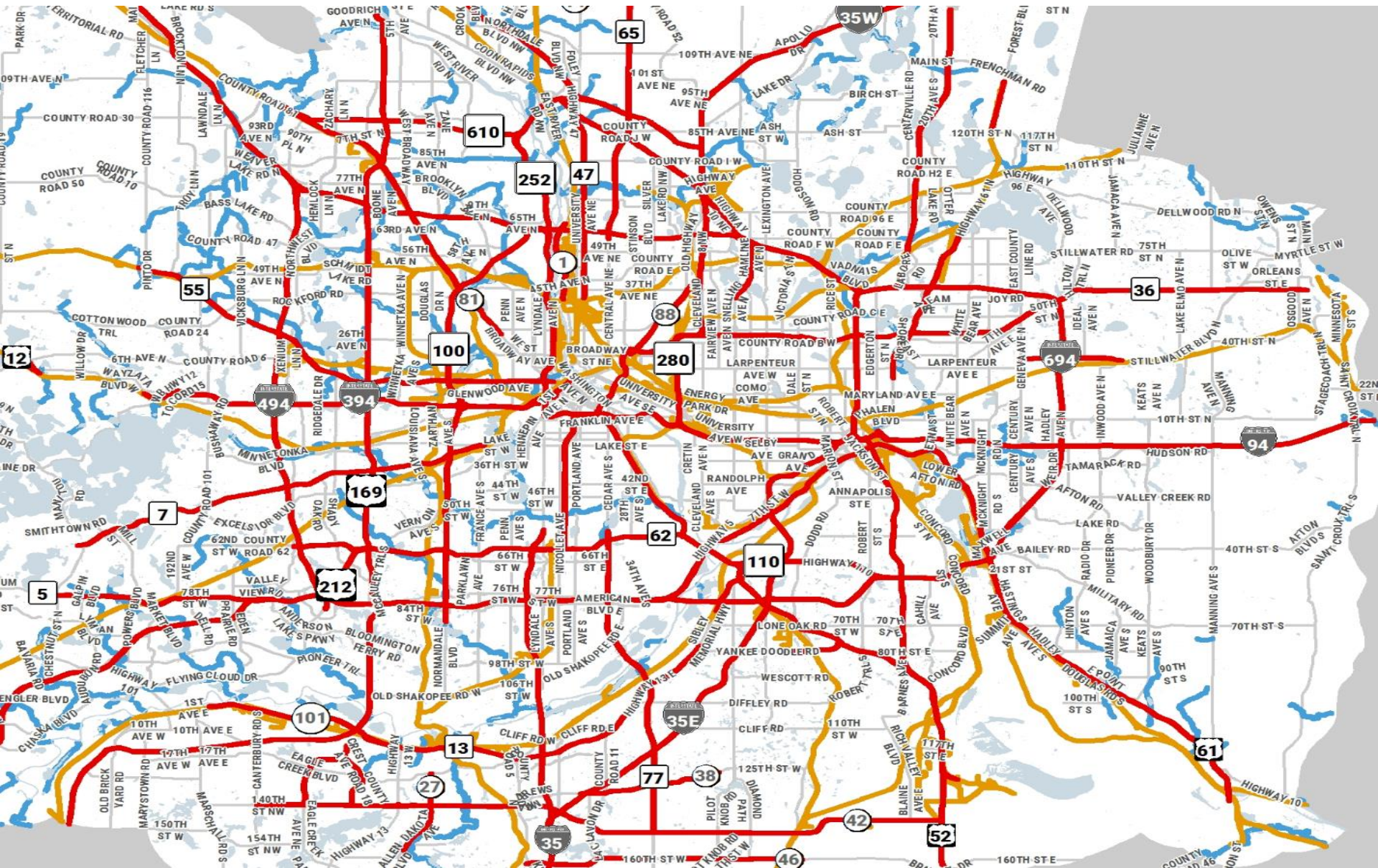
- Freeways
- Expressways*

* Expressways selected for analysis consist of all divided Council-defined Principal Arterials, along with high-speed, divided minor arterials with limited crossing opportunities identified based on feedback from the study Technical Advisory Work Group.



Date: 1/17/2017

Regional Bicycle Barriers



Barrier Crossing Spacing Criteria

TAWG Spacing Criteria		
Thrive Planning Area	Preferred Max. Spacing	Example Cities
Urban Center	½ mile	Mpls, St Paul, Richfield, Hopkins, West St Paul
Urban	¾ mile	Most 1 st ring suburbs
Suburb/Suburb. Edge	1 mile	2 nd ring sub's, Blaine, Woodbury, Maple Grove, Eagan, Lakeville
Emerging Suburb Edge, Rural, Rural Center	2 miles	Hastings, Rosemount, L. Elmo, Forest Lake

Analysis Factors

Factor	Example Measures	Weight
Connectivity	<ul style="list-style-type: none"> • Exist/planned local bikeways • RBTN corridors/alignments • Exist/planned regional trails • Proximity to existing crossing 	48%
Demand	<ul style="list-style-type: none"> • 2040 Pop/emp densities • Transit ridership • Schools/colleges • Wiki-map new crossing points 	24%
Safety/Existing Conditions	<ul style="list-style-type: none"> • Current Pop/emp densities • Bike/Ped crashes (w/in 500') • Bike/Walk mode share • Wiki-map "problem" crossings 	15%
Equity	<ul style="list-style-type: none"> • ACP & ACP-50s • Minority pop density (census) • Pop of seniors/children • Zero car households 	12%

Wiki-Map Data Points



Twin Cities Regional Bicycle Barriers Study

user
comments

- improvement needed
- new crossing needed

existing
facilities

- off-street bikeway
- on-street bikeway
- Met Council defined barrier
- freeways & expressways
- railways
- streams

instructions

log in on the Welcome page to provide input on existing and future barrier crossings

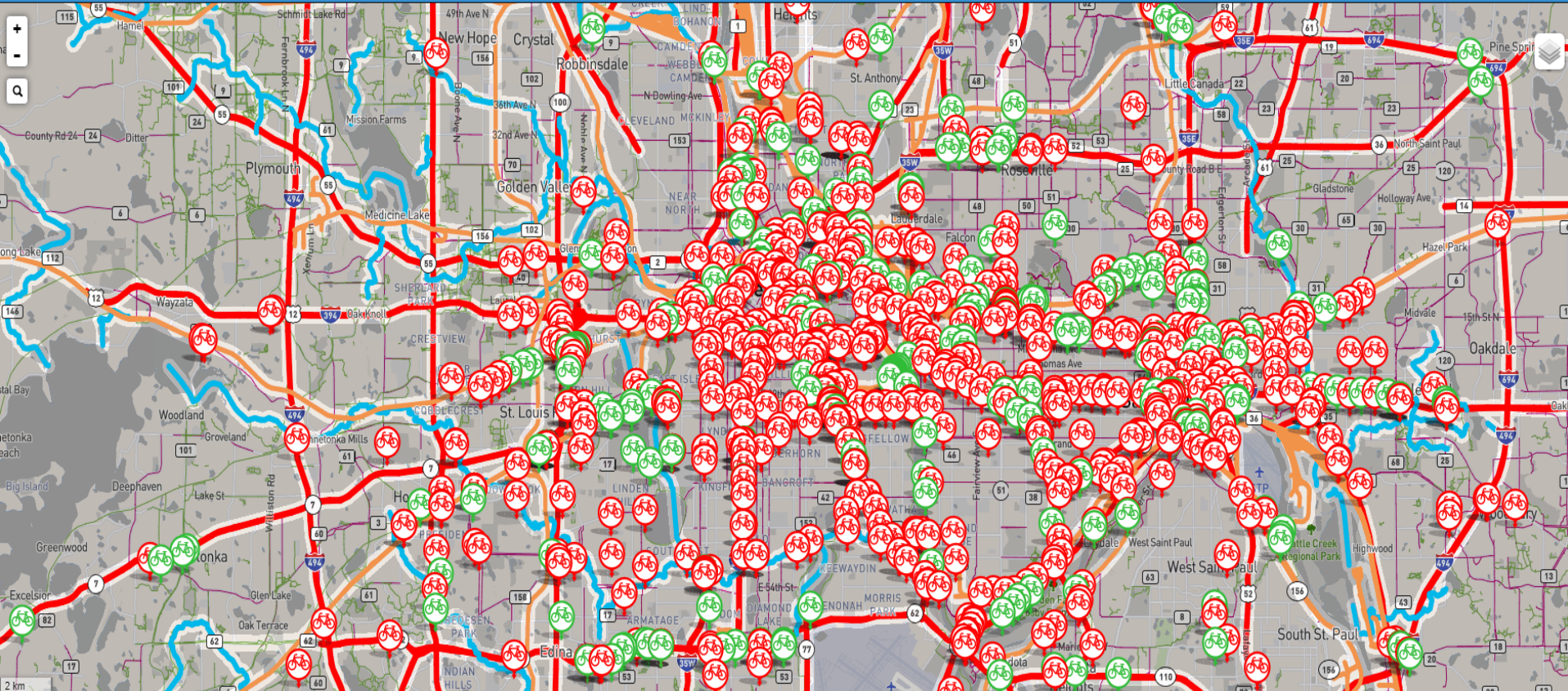
click on "add point to provide input on the map"

complete the pop-up survey after adding your point.

For instructions, see "About & Help" below.

About & Help add point

mhernandez@tooledesign.com



Anticipated Outcomes

- List and map of critical barrier crossing improvement locations
 - Will be ranked and tiered
 - Proposed in TPP
- Crossing point rankings may be applied in project selection criteria for Regional Solicitation
- Crossing site planning concepts
 - Five high-potential demonstration locations
- Final Study report

RBBS Next Steps

- TAWG Meeting July 20
 - will determine five sites for planning concept development
- Complete barrier crossings analysis
- Crossing planning concept development (Aug-Sept)
- Public workshops/agency reviews
 - crossing location concepts late Sept/Oct.
- Final Study complete by late fall

Questions/Discussion

Steven Elmer, AICP
Metropolitan Council

Steven.Elmer@metc.state.mn.us

651-602-1756

