

Twin Cities Regional Bicycle Barriers Study

Transportation Committee

September 11, 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

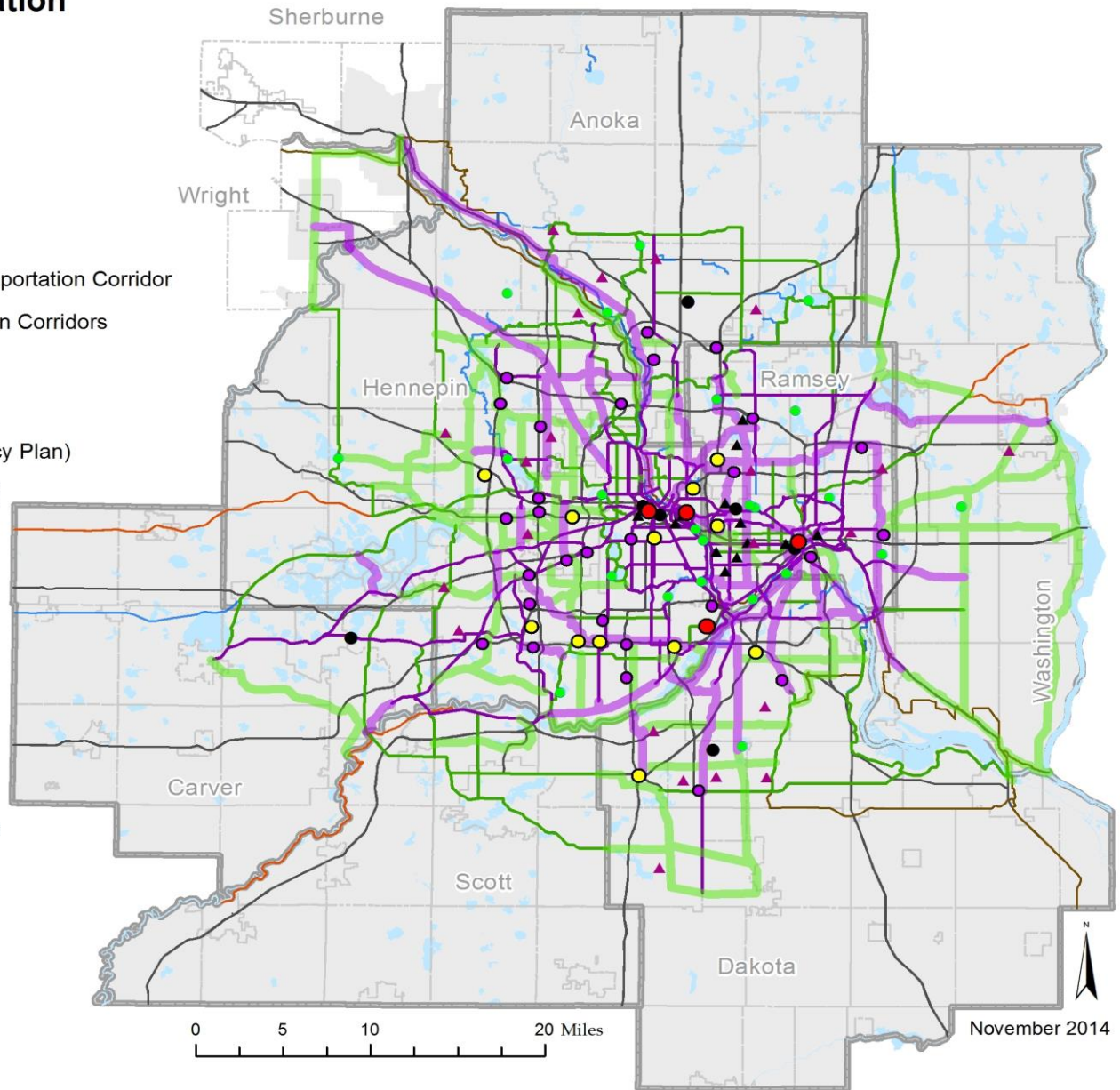
-  Regional Trails (Regional Parks Policy Plan)
-  Mississippi River Trail (US Route 45)
-  State Trails (DNR)

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)*

Scope of Study

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

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

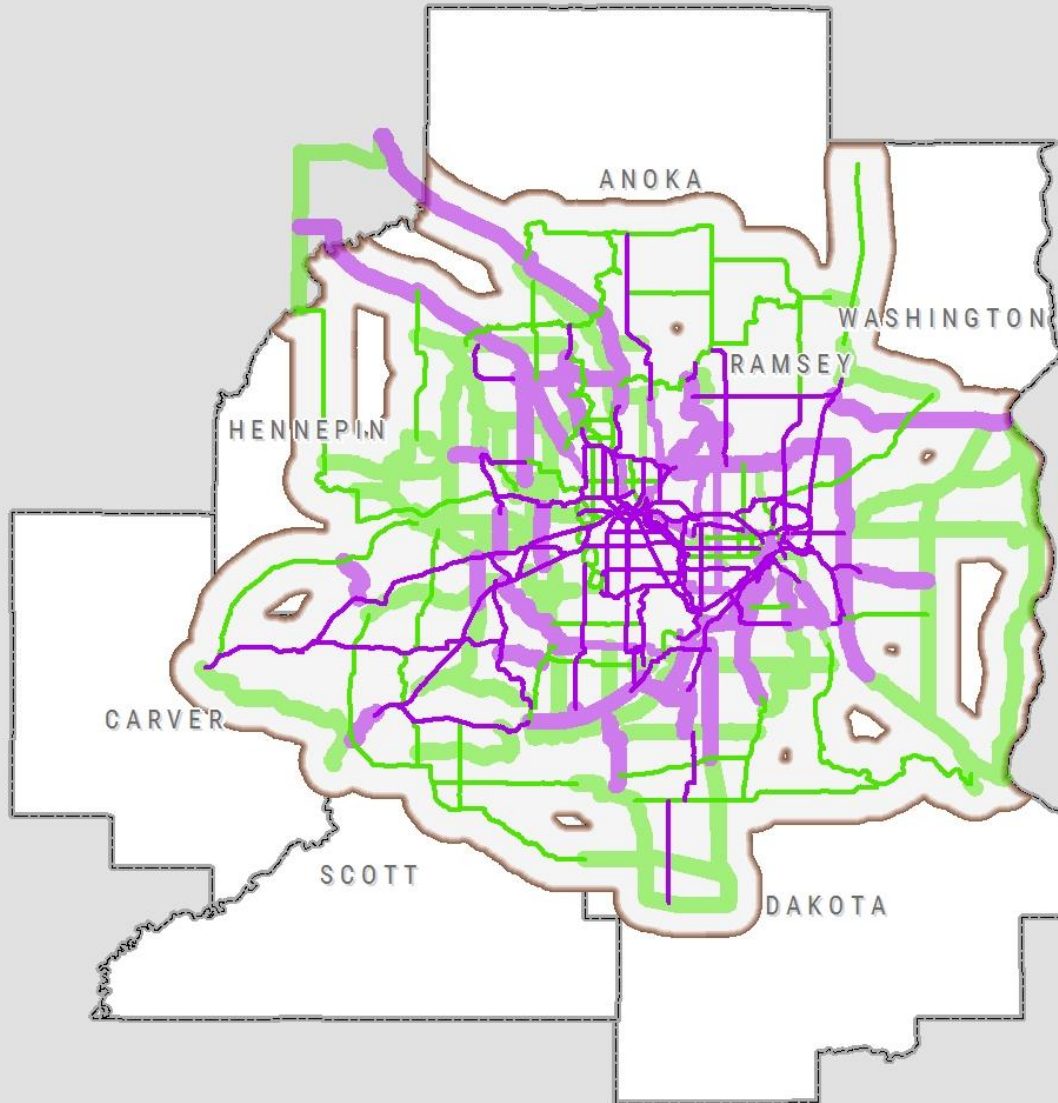
Scope of Study

Key Technical Tasks:

1. Identify existing & planned barrier crossings
2. Determine preferred maximum spacing of bicycle barrier crossings
3. Identify deficiencies in barrier crossing opportunities
4. Evaluate, rank, and map potential new or existing crossing improvement locations

Technical Advisory Work Group

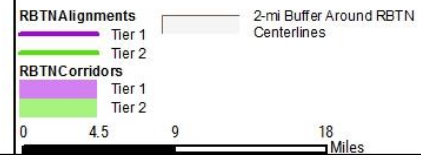
- Metropolitan Council, MnDOT
- Each of the 7 metro counties
- Saint Paul & Minneapolis
- Suburban Cities: Richfield, Maplewood, Chaska, New Brighton
- Bloomington Bicycle Alliance
- Transit for Livable Communities
- Parks Agencies: Anoka County, Three Rivers Park Dist., Carver County



Twin Cities Metro Region

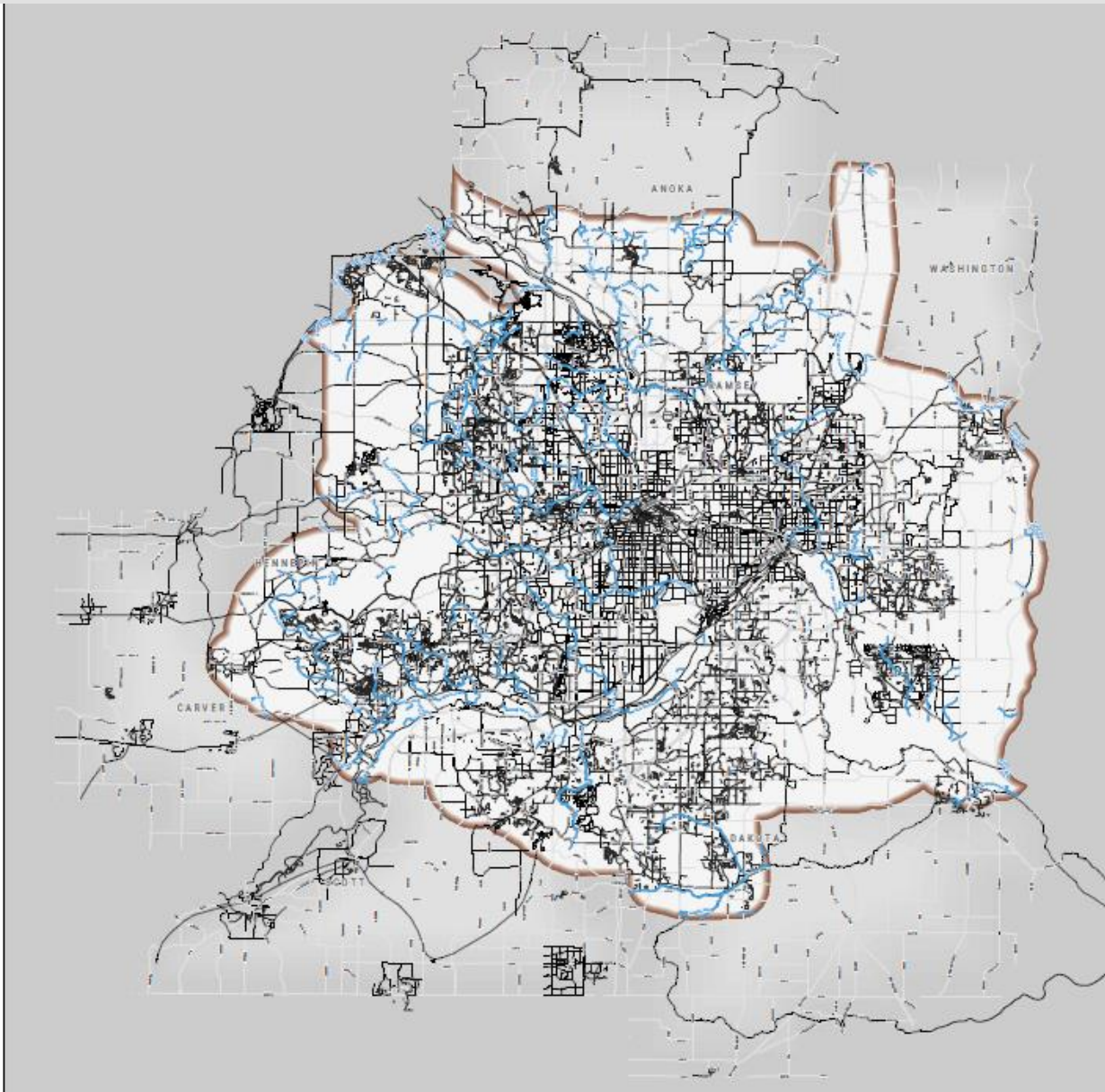
Study Area

Regional Bicycle Barriers Study



Date: 11/1/2016





Twin Cities Metro Region



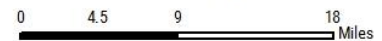
Potential Barrier Streams

Regional Bicycle Barriers Study

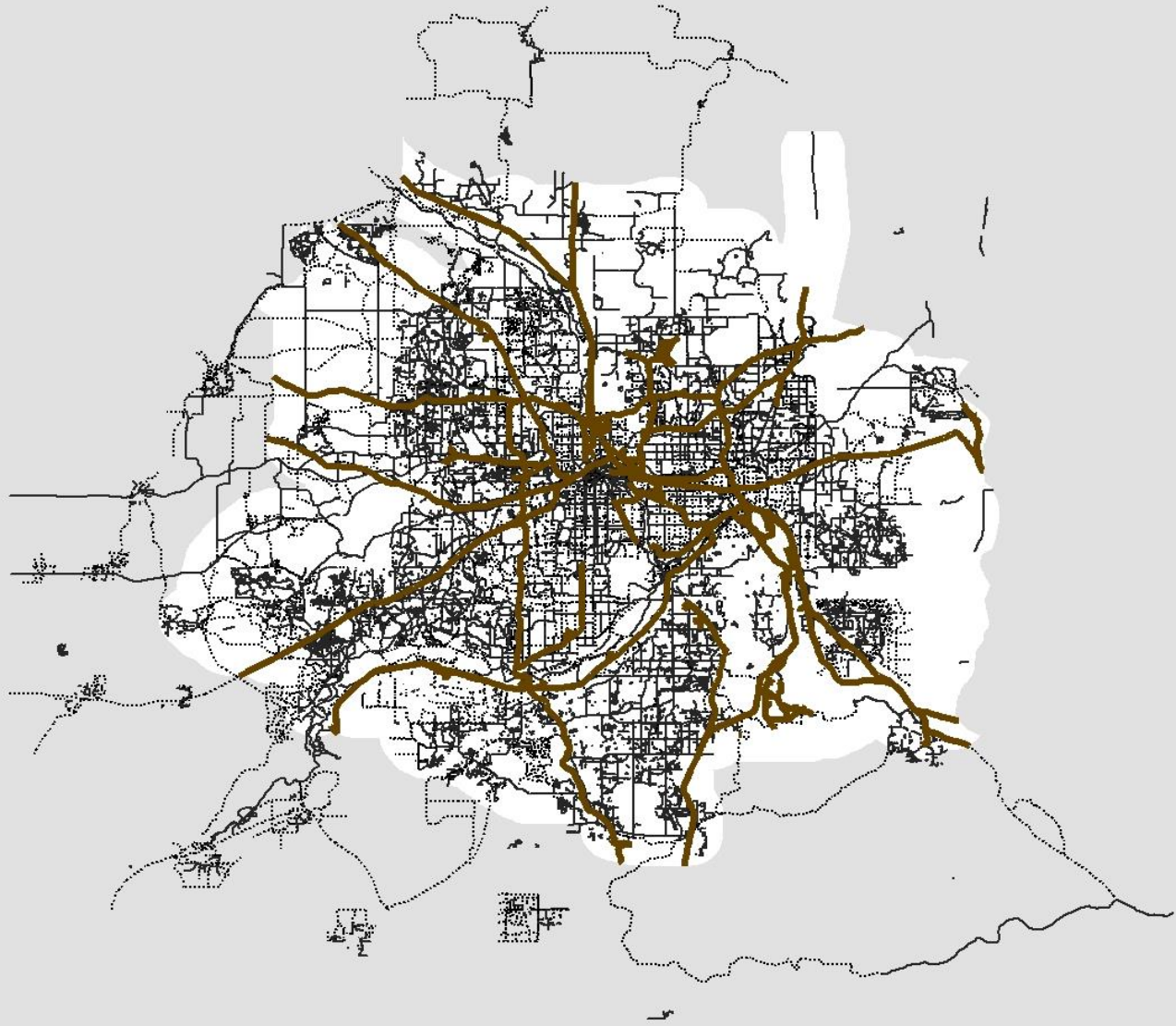
Legend

 Barrier Streams

Secondary and tertiary streams, except Minnesota and Mississippi Rivers.



Date: 10/31/2016



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Railways Regional Bicycle Barriers Study

— Railways with Study Area

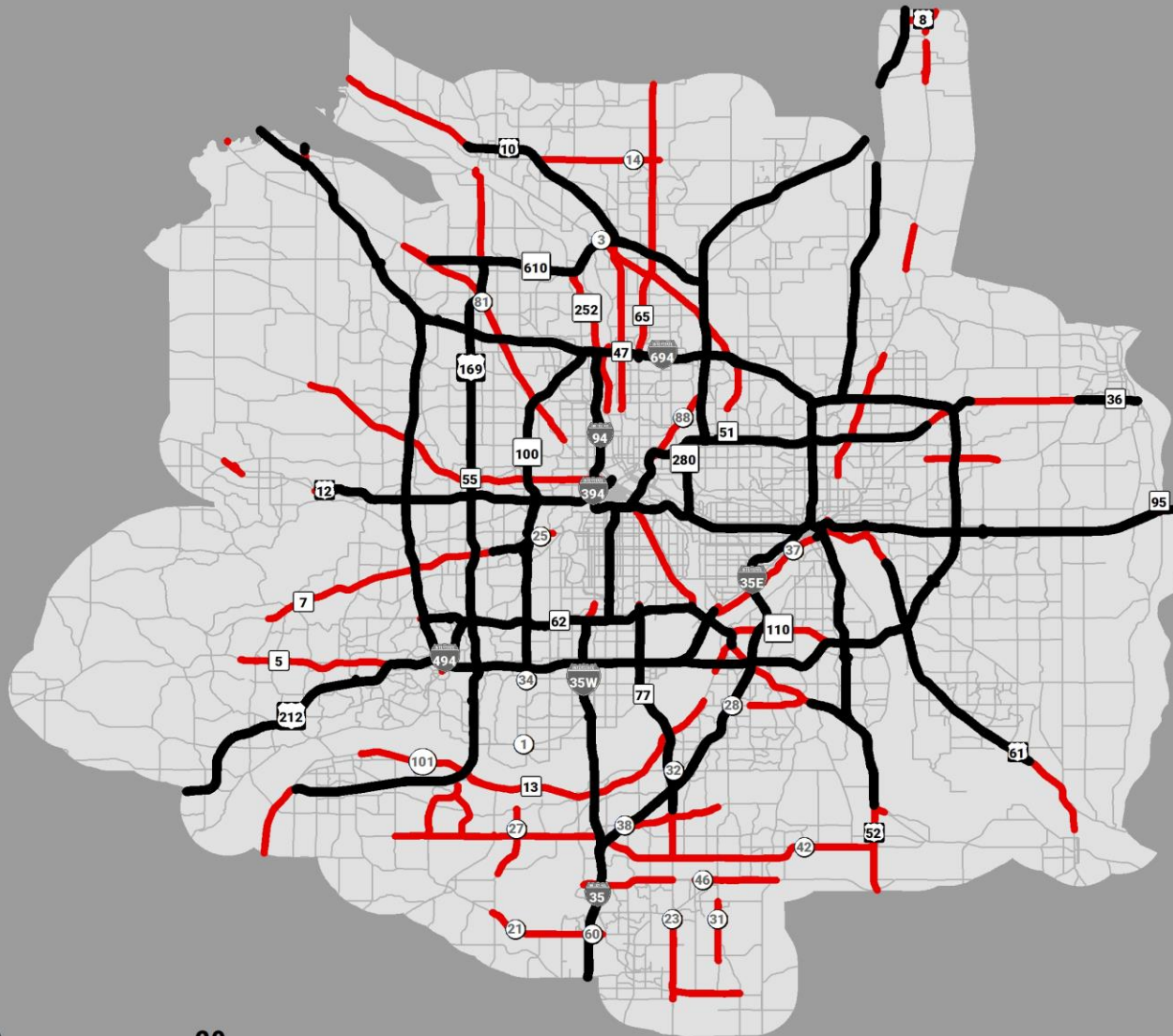
— Existing Bikeways

..... Planned Bikeways

0 4.5 9 18 Miles



Date: 12/19/2016



0 10 20 Miles

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Freeways and Expressways*

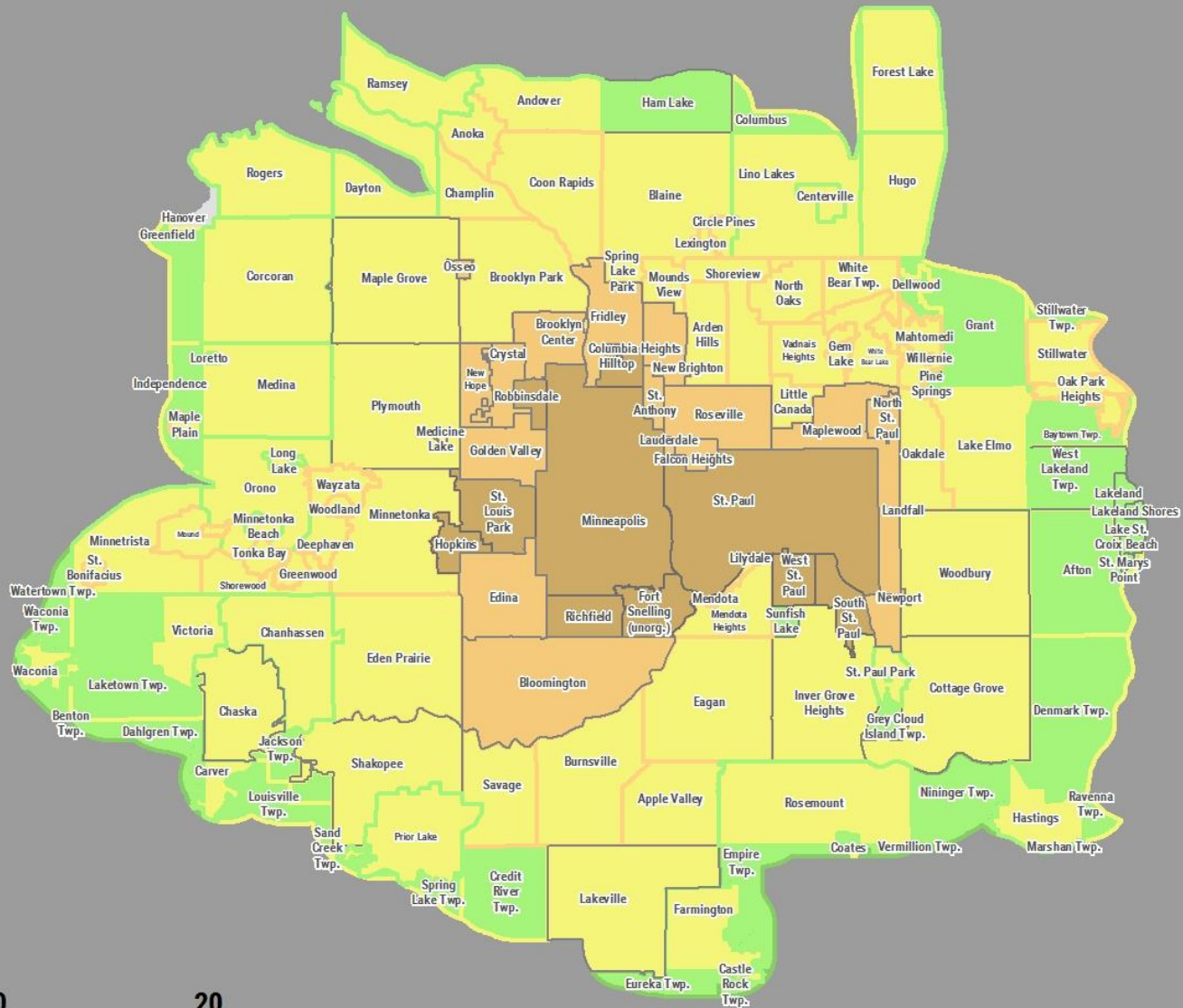
Regional Bicycle Barriers Study

- 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



Twin Cities Metro Region



ThriveMSP 2040 Community Designations

color coded by categories used to
apply barrier crossing spacing criteria

Urban Center	Suburban	Rural
23: Urban Center	25: Suburban	51: Diversified Rural
Urban	35: Suburban Edge	52: Rural Residential
24: Urban	36: Emerging Suburban Edge	53: Agricultural



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

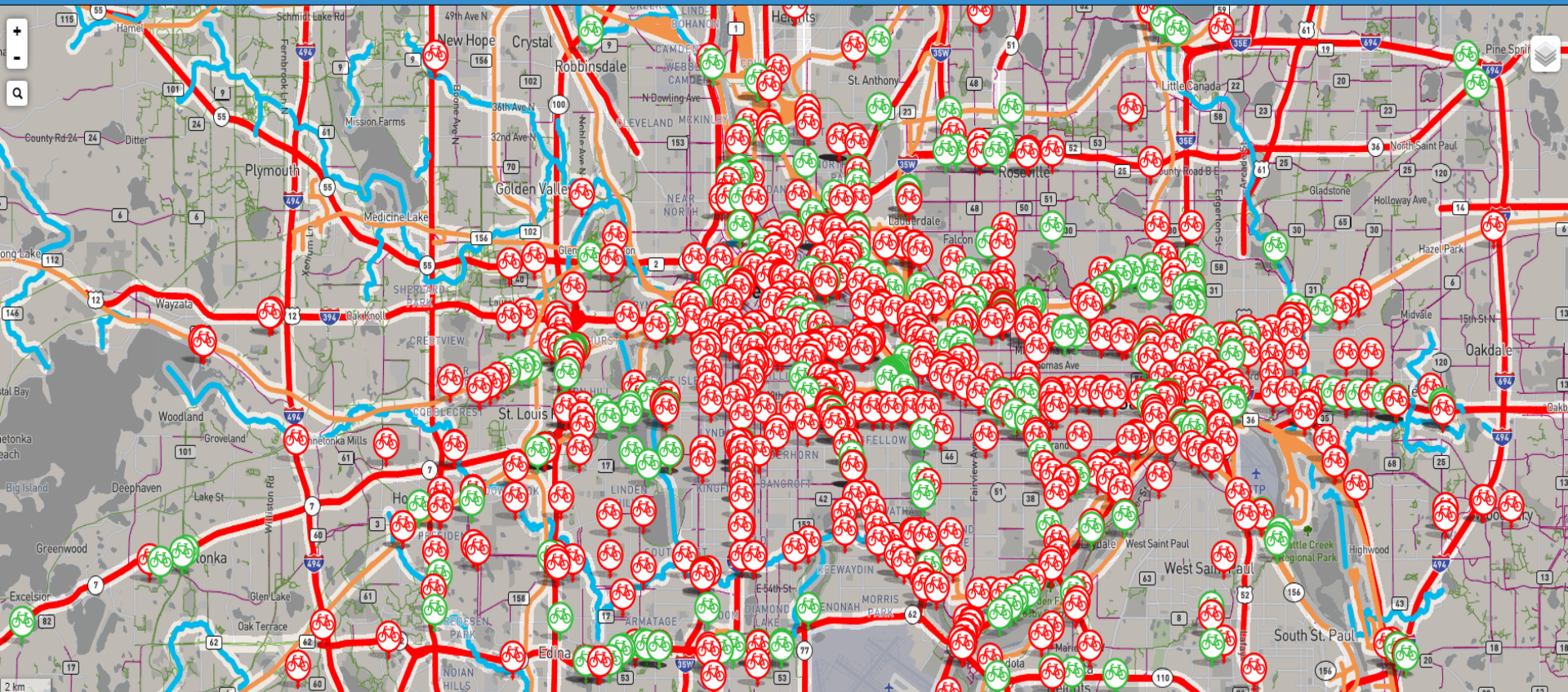
click on "add point to provide input on the map"

complete the pop-up survey after adding your point.

For instructions, see "About & Help" below.

About & Help add point

mhernandez@tooledesign.com



Anticipated Outcomes

- Map of regional bicycle barriers with prioritized crossing improvement locations
 - To be ranked and tiered
 - Proposed in TPP as regional bicycle barrier crossings
- Barrier crossing location tiers may be applied for Regional Solicitation project funding

RBBS Next Steps

- Complete barrier crossings analysis (late Sept-Oct)
- Map regional barriers w/high-scoring crossing points identified
- TAWG Meeting mid-late October
 - will review top ranked crossing locations to discuss priority tiering
- Incorporate study background and barriers concept into draft TPP
- Complete final study by end of year

Questions/Comments

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