

# Twin Cities Regional Bicycle Barriers Study

Land Use Advisory Committee

July 20, 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

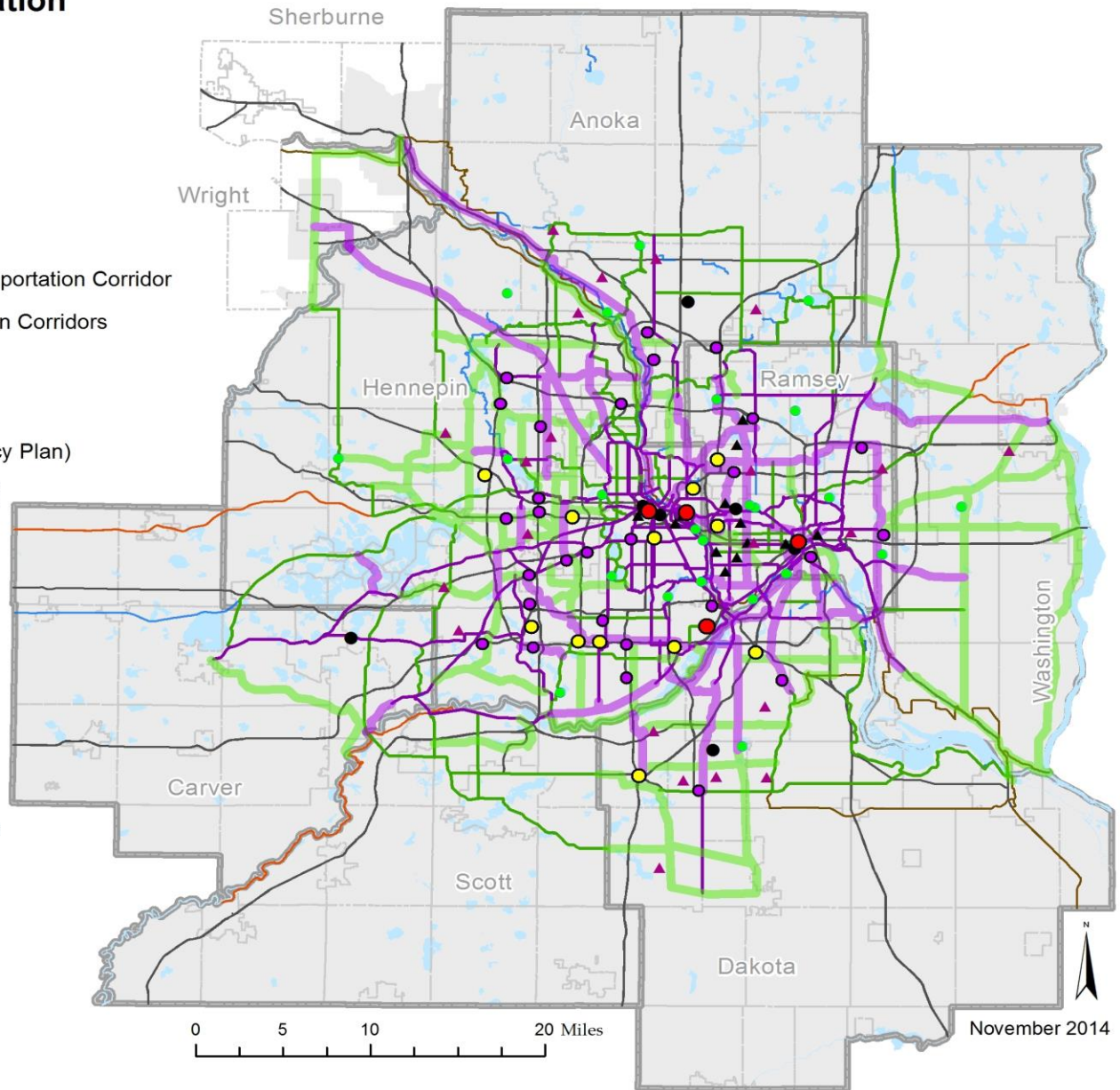
-  Regional Trails (Regional Parks Policy Plan)
-  Mississippi River Trail (US Route 45)
-  State Trails (DNR)

## 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:

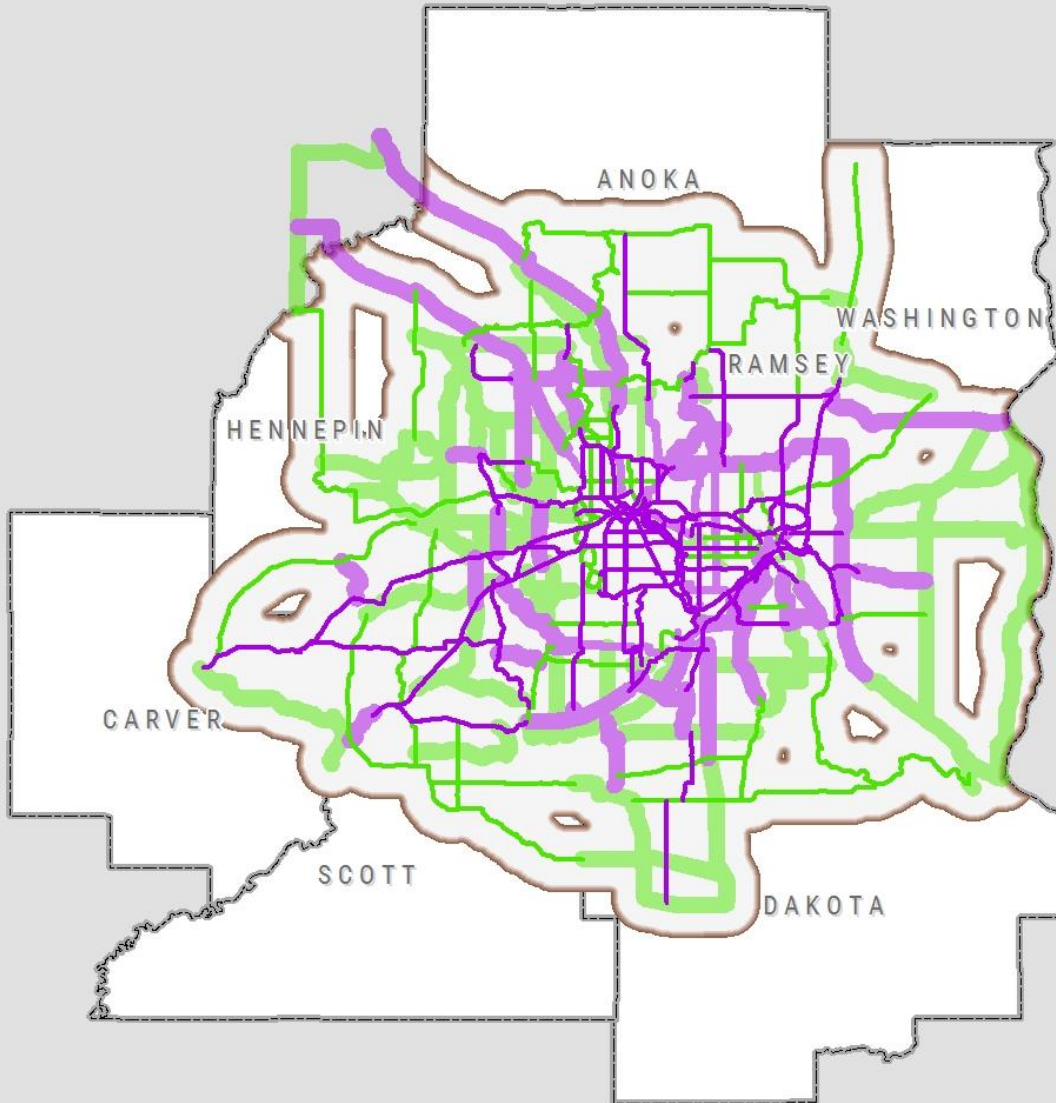
1. Identify existing & planned barrier crossings
2. Determine preferred maximum spacing of barrier crossings
3. Identify deficiencies in barrier crossing opportunities
4. Evaluate and rank potential new crossing locations
5. Identify 5 high potential demo sites for planning level concept development

# Study Opportunities

1. Increase awareness of barrier crossing needs on the RBTN and local networks
2. Identify and highlight new barrier crossing improvement locations
3. Highlight six high-potential barrier crossing improvement sites for planning level analysis
4. Elevate visibility of local barrier crossing opportunities in local bicycle plans and potential for implementation.

# Technical Advisory Work Group

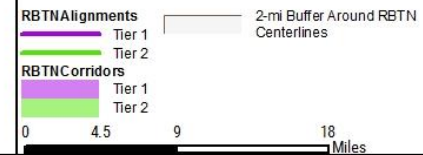
- Metropolitan Council, MnDOT
- Each of 7 MPO counties
- Saint Paul & Minneapolis
- Suburban Cities: Richfield, Maplewood, Chaska, New Brighton
- Bloomington Bicycle Alliance
- Transit for Livable Communities
- Parks Agencies: Anoka County, Three Rivers Park Dist., Carver County



Twin Cities Metro Region

## Study Area

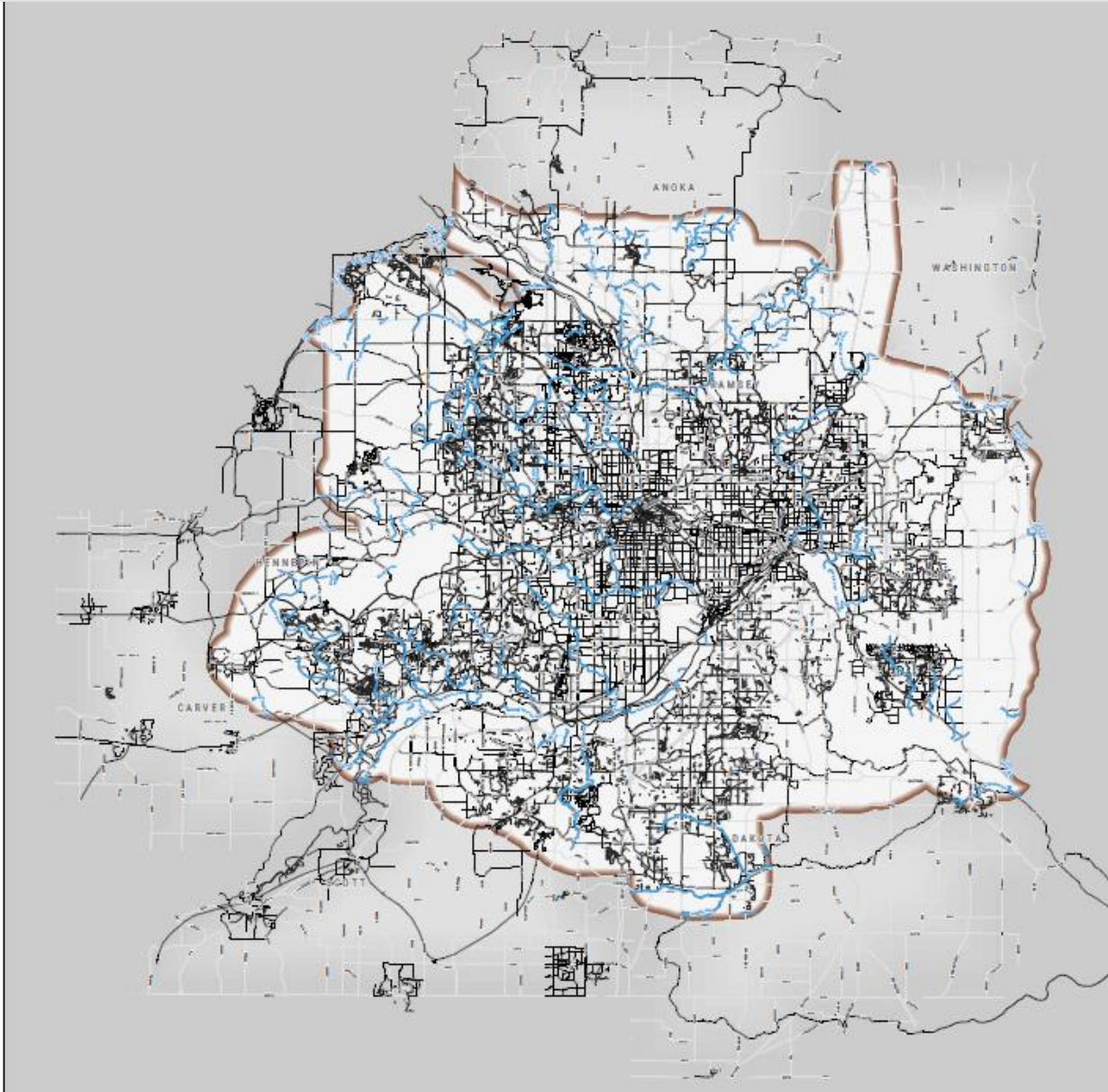
### Regional Bicycle Barriers Study



Date: 11/1/2016







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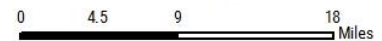
## Potential Barrier Streams

### Regional Bicycle Barriers Study

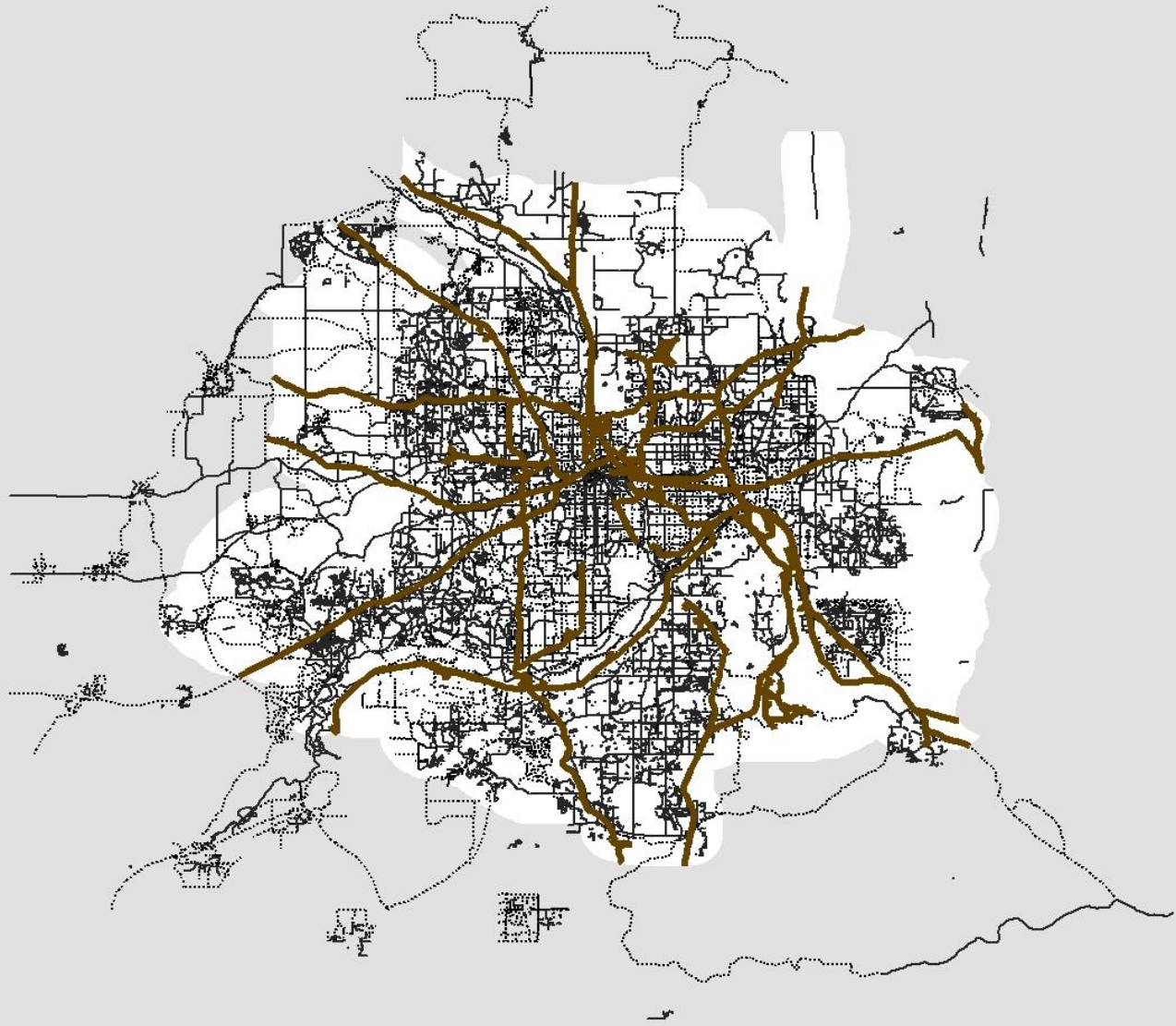
#### Legend

 Barrier Streams

*Secondary and tertiary streams, except Minnesota and Mississippi Rivers.*



Date: 10/31/2016



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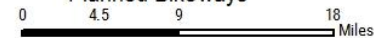


## Railways Regional Bicycle Barriers Study

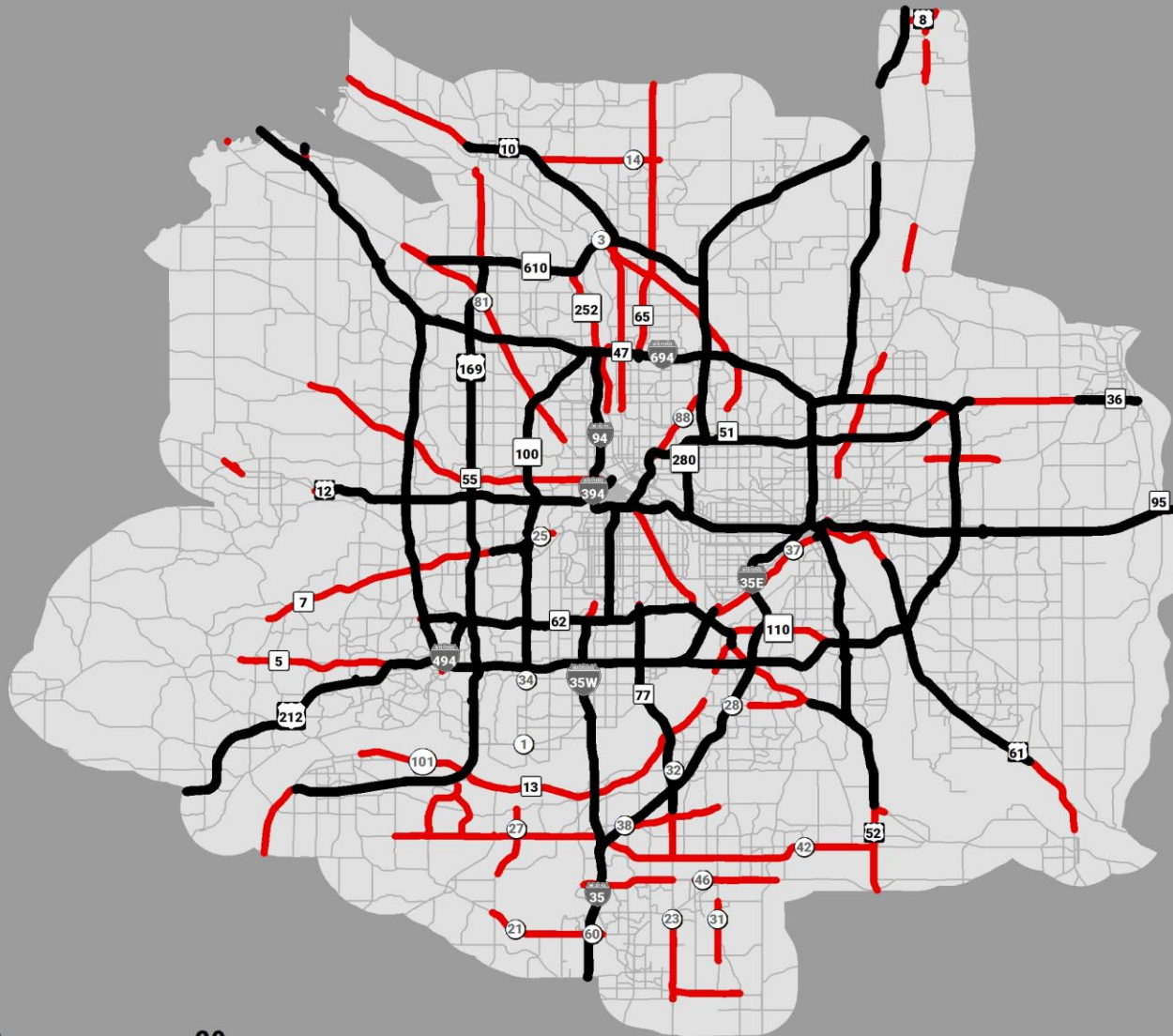
— Railways with Study Area

— Existing Bikeways

..... Planned Bikeways



Date: 12/19/2016



0 10 20 Miles

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# Freeways and Expressways\*

Regional Bicycle Barriers Study

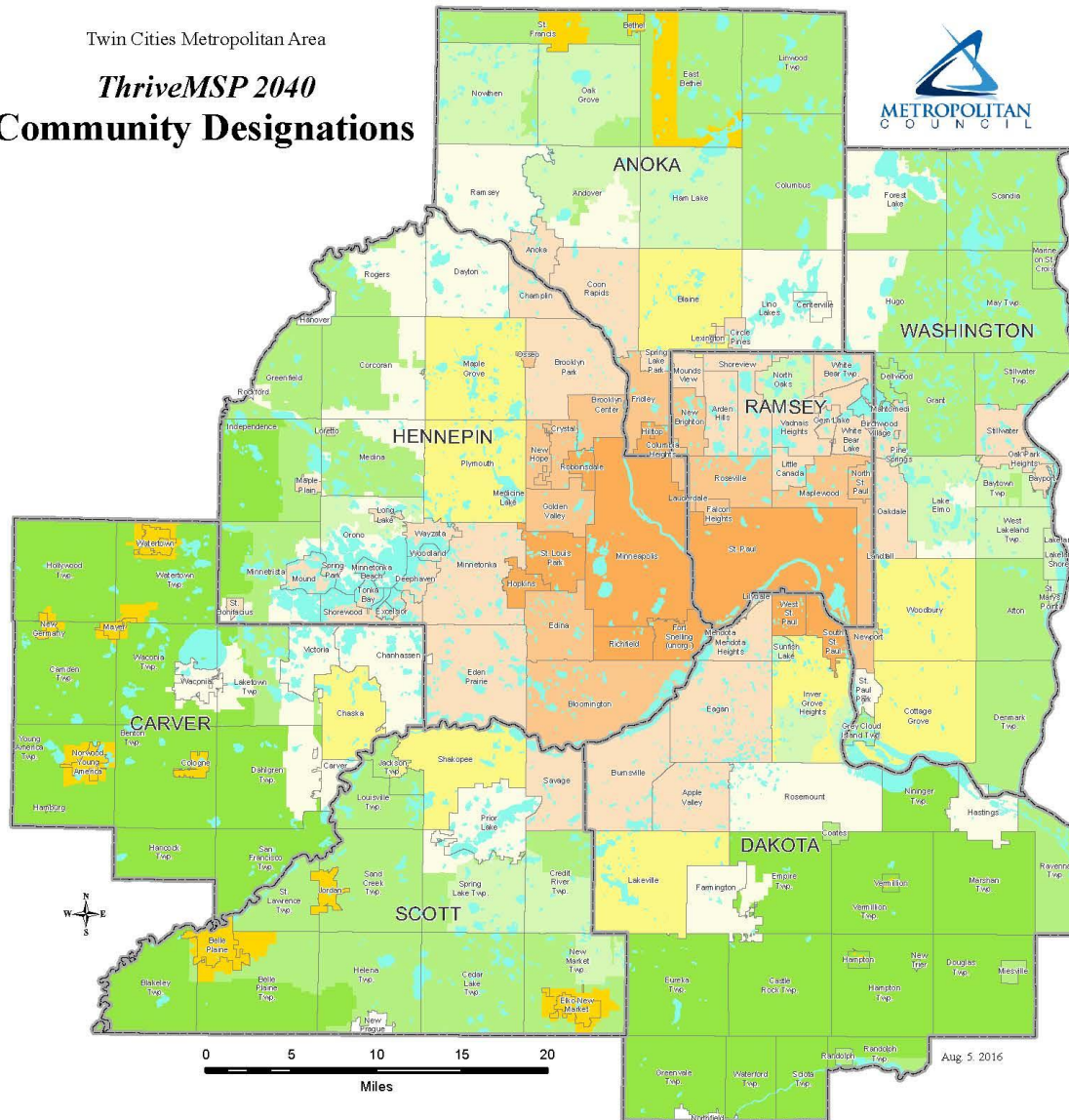
- Freeways
- Expressways\*

\* 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

# ThriveMSP 2040 Community Designations



## Community Designations

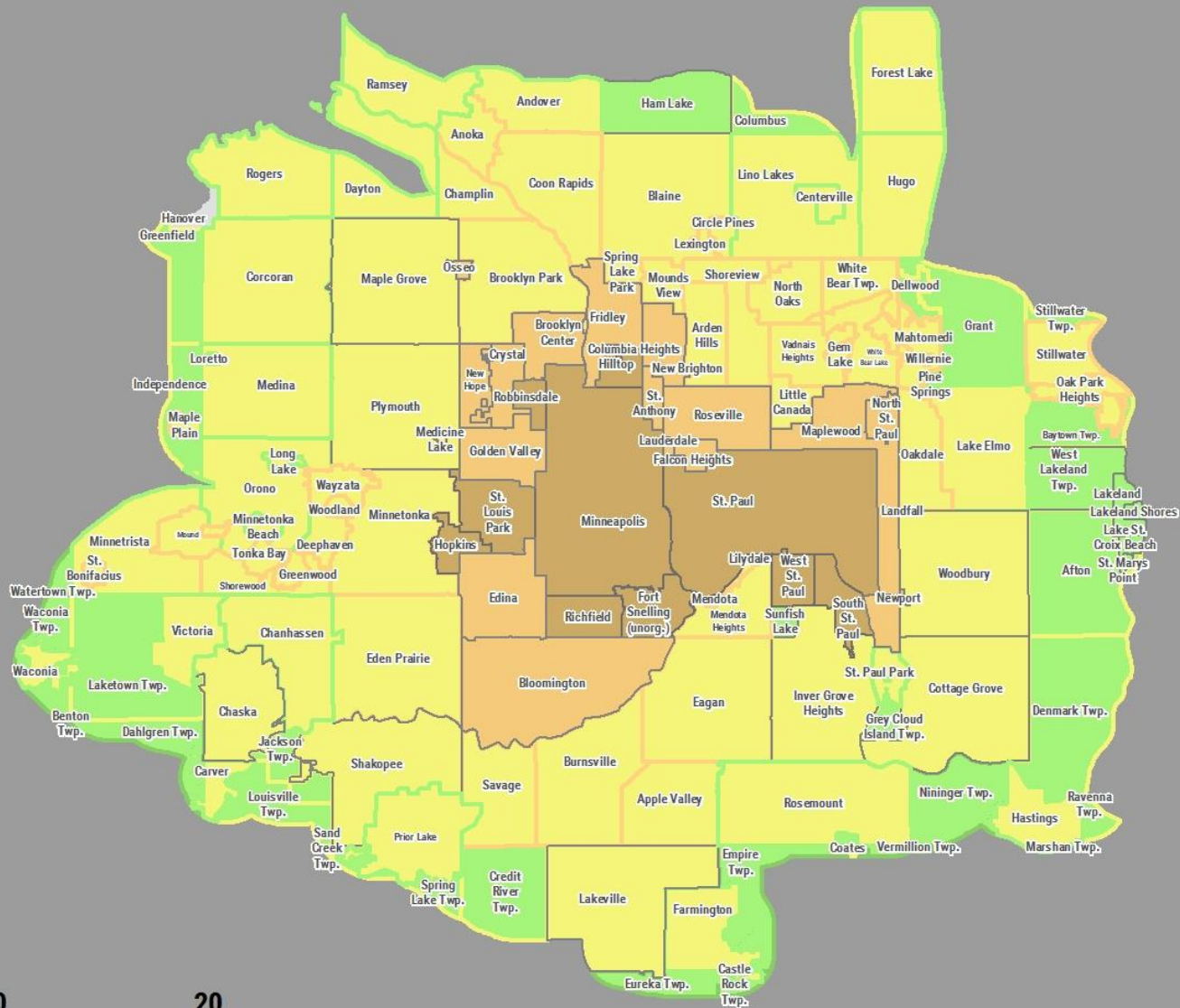
### Urban Service Areas

- Urban Center
- Urban
- Suburban
- Suburban Edge
- Emerging Suburban Edge

### Rural Service Areas

- Rural Center
- Diversified Rural
- Rural Residential
- Agricultural

- County Boundaries
- City and Township Boundaries
- Lakes and Rivers



# 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 <sup>st</sup> ring suburbs
Suburb/Suburb. Edge	1 mile	2 <sup>nd</sup> 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
<b>Connectivity</b>	<ul style="list-style-type: none"> <li>• Exist/planned local bikeways</li> <li>• RBTN corridors/alignments</li> <li>• Exist/planned regional trails</li> <li>• Proximity to existing crossing</li> </ul>	48%
<b>Demand</b>	<ul style="list-style-type: none"> <li>• 2040 Pop/emp densities</li> <li>• Transit ridership</li> <li>• Schools/colleges</li> <li>• Wiki-map new crossing points</li> </ul>	24%
<b>Safety/Existing Conditions</b>	<ul style="list-style-type: none"> <li>• Current Pop/emp densities</li> <li>• Bike/Ped crashes (w/in 500')</li> <li>• Bike/Walk mode share</li> <li>• Wiki-map "problem" crossings</li> </ul>	15%
<b>Equity</b>	<ul style="list-style-type: none"> <li>• ACP &amp; ACP-50s</li> <li>• Minority pop density (census)</li> <li>• Pop of seniors/children</li> <li>• Zero car households</li> </ul>	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

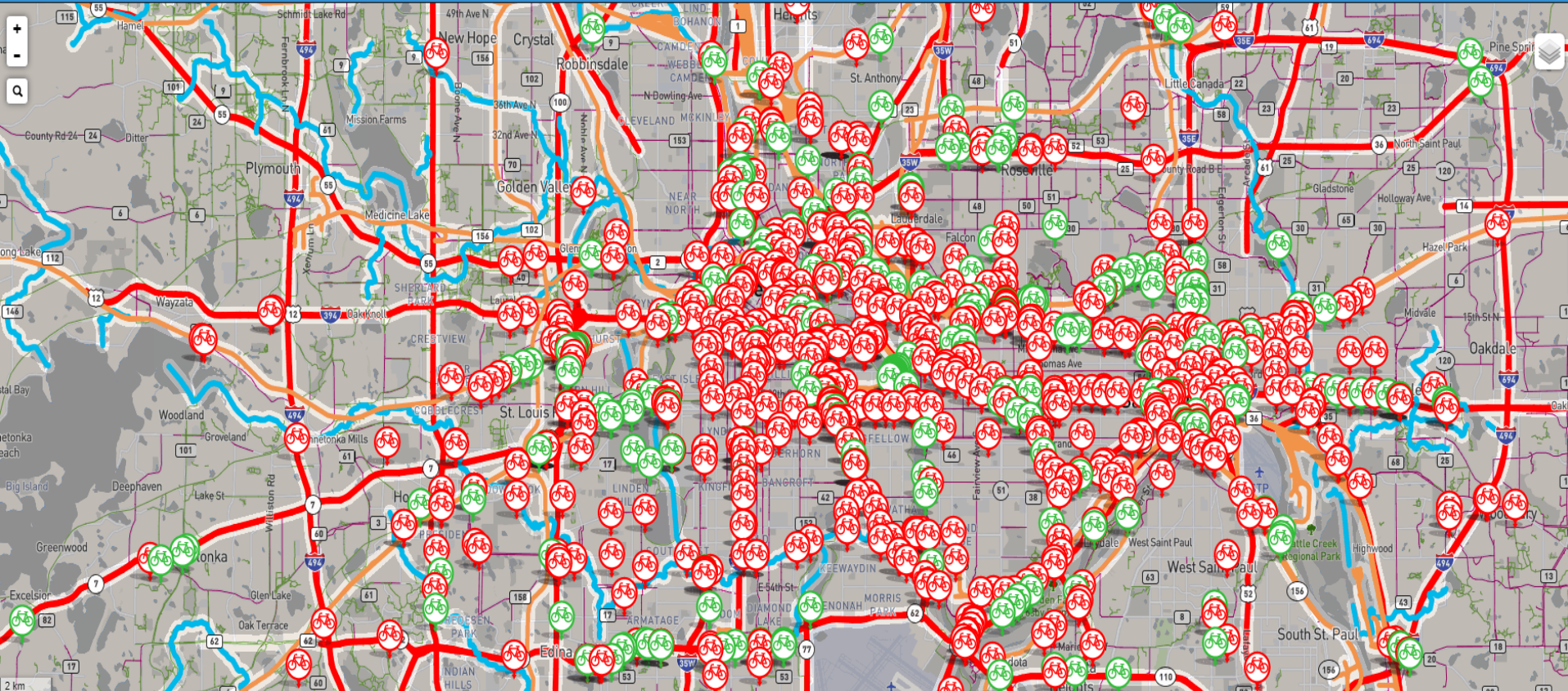
**click** on "add  
point to provide  
input on the map

**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

# 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

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Metropolitan Council

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