

A photograph of a bicycle path under a bridge. Two cyclists are riding away from the camera. The path is paved and has a metal railing on the right side. The bridge above is supported by concrete pillars. The background shows green foliage.

REGIONAL BICYCLE BARRIERS STUDY UPDATE

Technical Advisory Committee

June 5, 2019

Purpose of this Presentation

- Review the scope and purpose of original Regional Bicycle Barriers Study
- Report on the recently completed Technical Addendum Update to the RBBS
- Summarize results of Study Update and inform about implications for Council Plans and processes

Study Background

- Regional Bicycle Barriers Study (RBBS) began in Fall 2016
- Study process and results presented to TAC Committees during study process
- Study completed in March 2018
- Completed Technical Addendum to earlier study to
 - Integrate additional expressway barriers
 - Review and reassess spacing of bicycle barrier crossing points
 - Add & revise barrier crossing points to analysis

Study Background

General Study Tasks

- Define regional physical barriers to bicycling & analyze where they most impact continuity of regional and local bicycle networks
- Assess existing and potential bicycle crossing opportunities of regional barriers
- Prioritize barrier crossing improvement locations based on data-driven analysis

Technical Advisory Work Group

- Metropolitan Council, MnDOT
- Metro counties (7)
- Core cities (2)
- Suburban cities (4)
- Bicycle advocacy groups (2)
- Regional Park agencies (3)
- Active Living agency (1)

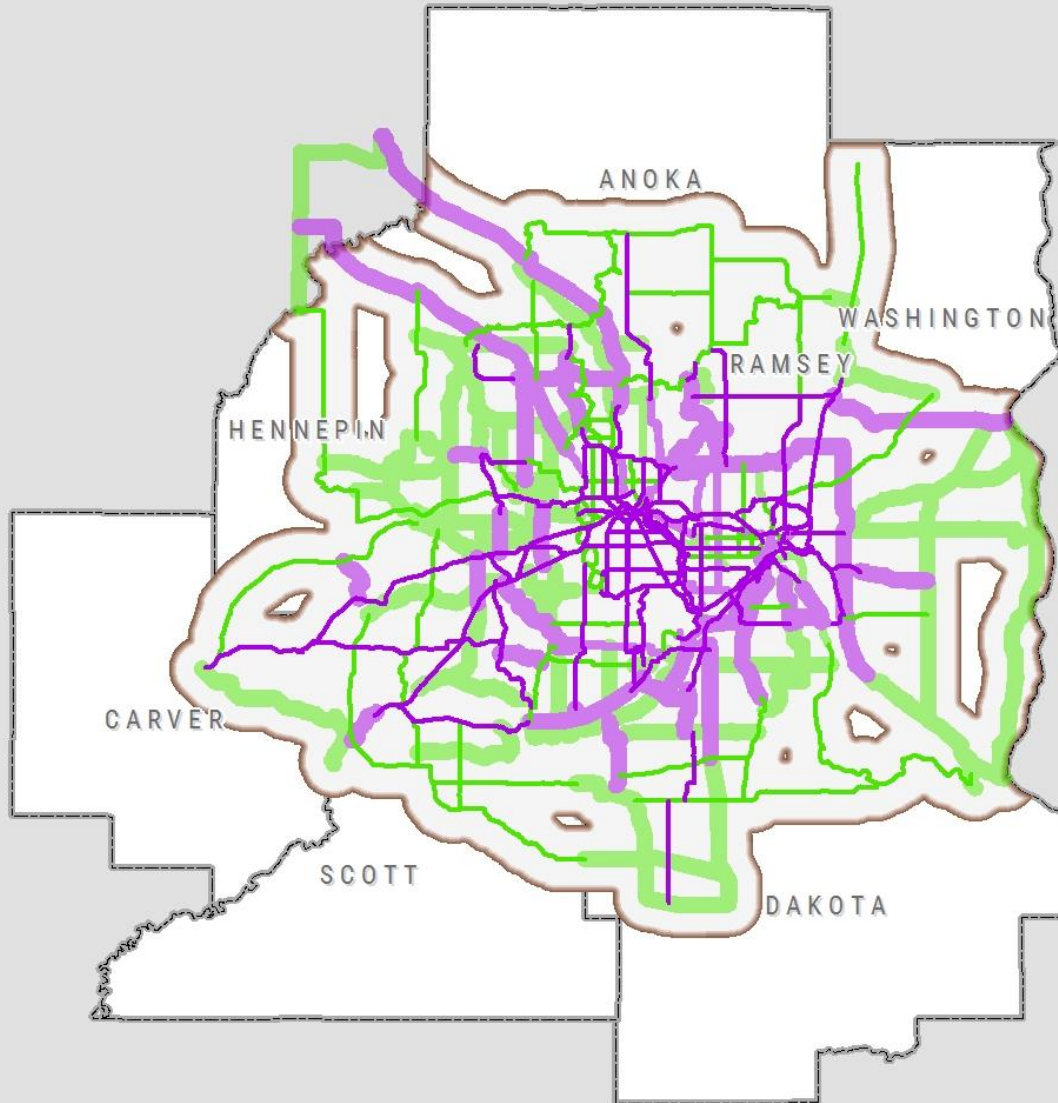
Study Background

Study Work Scope

Considered major *physical* regional barriers to bicycle travel including:

- Freeways and expressways
- Railroad corridors
- Secondary rivers & streams

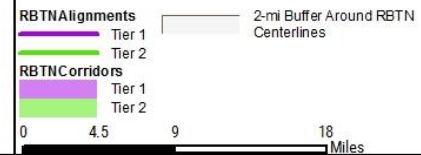




Twin Cities Metro Region

Study Area

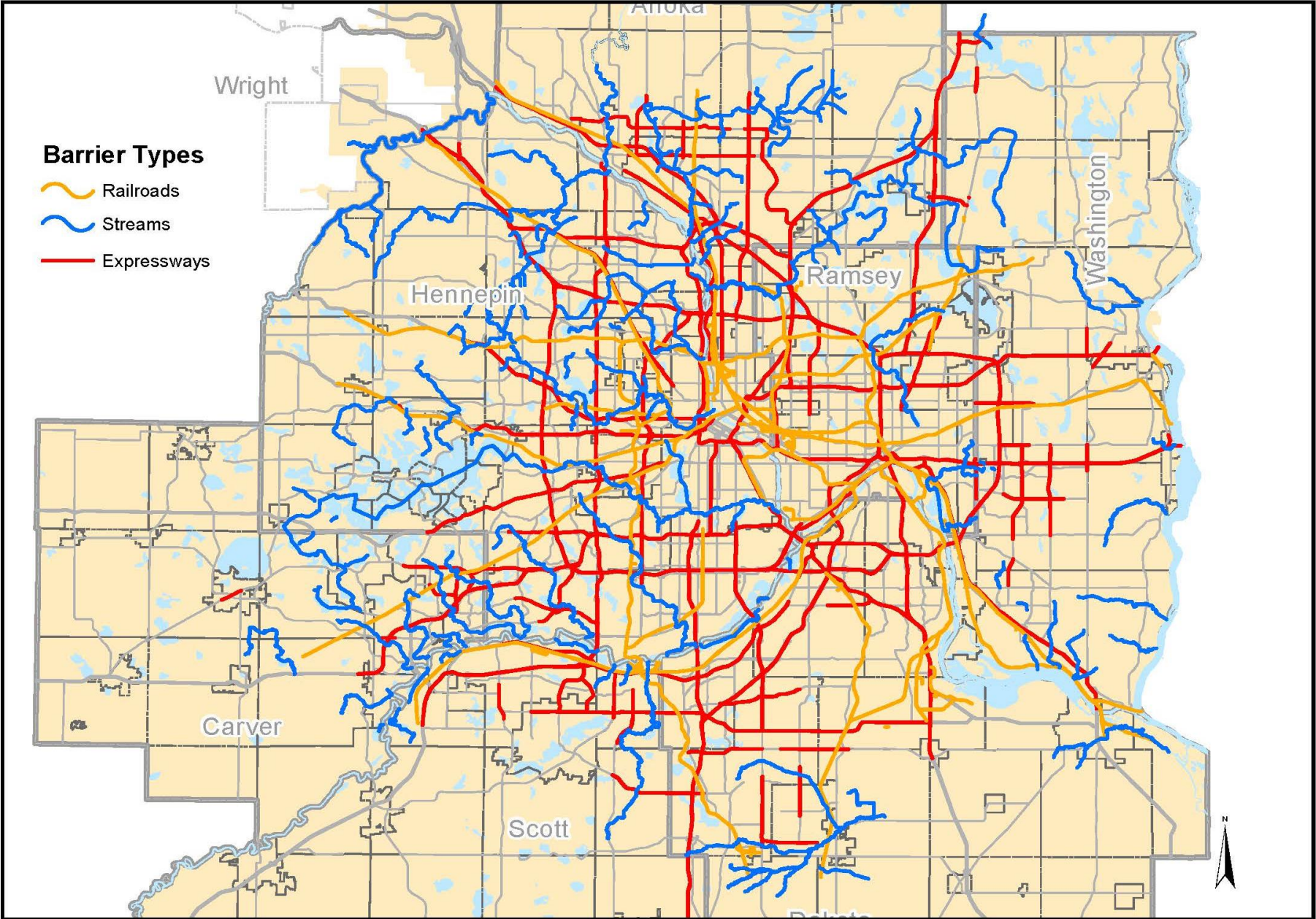
Regional Bicycle Barriers Study



Date: 11/1/2016



Regional Bicycle Barriers

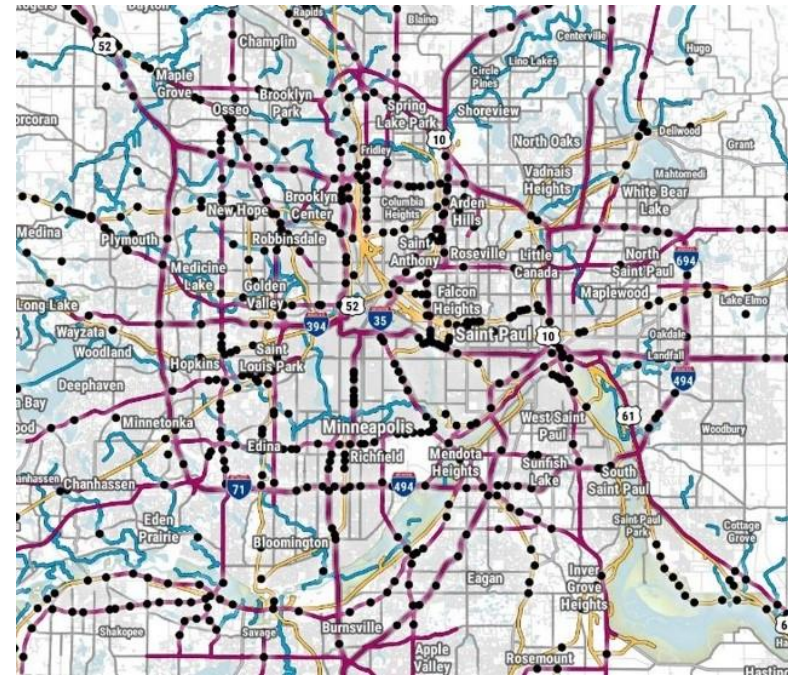


Reg. Barriers Study Crossing Points

Four Barrier Crossing Point Types

- Identified in local plans
- On RBTN corridors/alignments or on planned regional trails
- Opportunity crossings from public workshops & on-line wikimap survey
- To maintain adequate spacing

Equal consideration given to points on local and regional systems



Study Analysis Factors

Network connectivity (5)

- Proximity to local networks
- Proximity to regional facilities
- Distance to nearest crossing

Weight
48%

Bicycle trip demand (8)

- 2040 Pop. & employment density
- Proximity to schools & colleges
- Proximity to Regional Parks

24%

Safety/existing conditions(5) 15%

- Bicycle or pedestrian crashes w/in 500 ft
- Biking and walking mode share
- 2014 Pop. & employment density

Social equity (8)

- % Population under age 15 & over 65
- % Zero-car households
- Areas of Concentrated Poverty

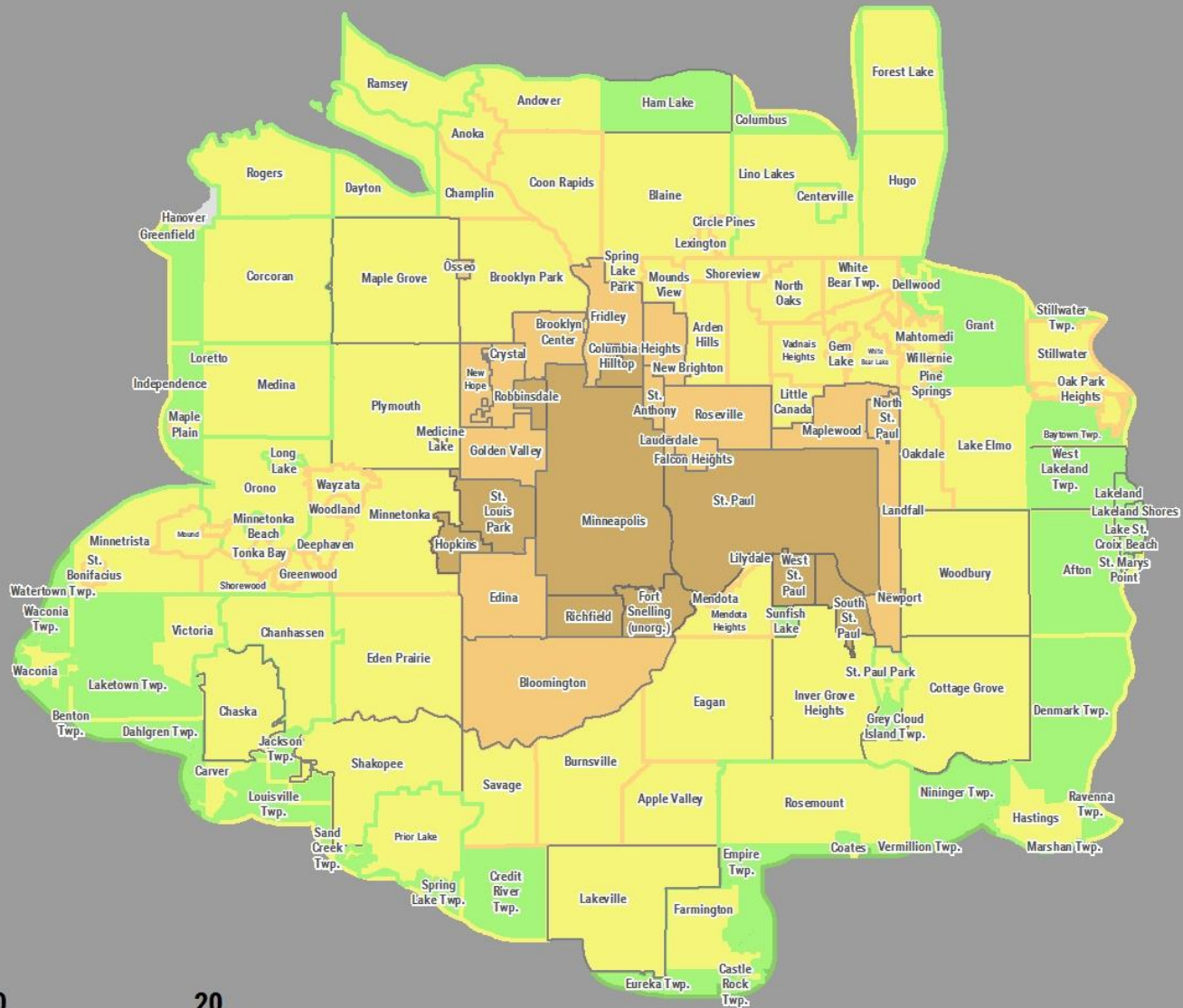
12%



Reg. Bike Barrier Crossing Spacing

Thrive Planning Areas	Preferred Maximum Distance bet. regional bike barrier crossings	Example Cities
Urban Center	1/2-mile	Minneapolis, St Paul, Richfield, Hopkins, South St Paul
Urban	3/4-mile	Golden Valley, Roseville, Maplewood, Crystal, Edina, North St Paul
Suburban, Suburban Edge, Emerging Suburban Edge	1 mile	Blaine, Woodbury, Maple Grove, Eagan, Lakeville
Rural Residential, Diversified Rural, Agriculture	2 miles	Grant, Afton, Ham Lake, Empire Twp., Columbus





Twin Cities Metro Region



ThriveMSP 2040 Community Designations

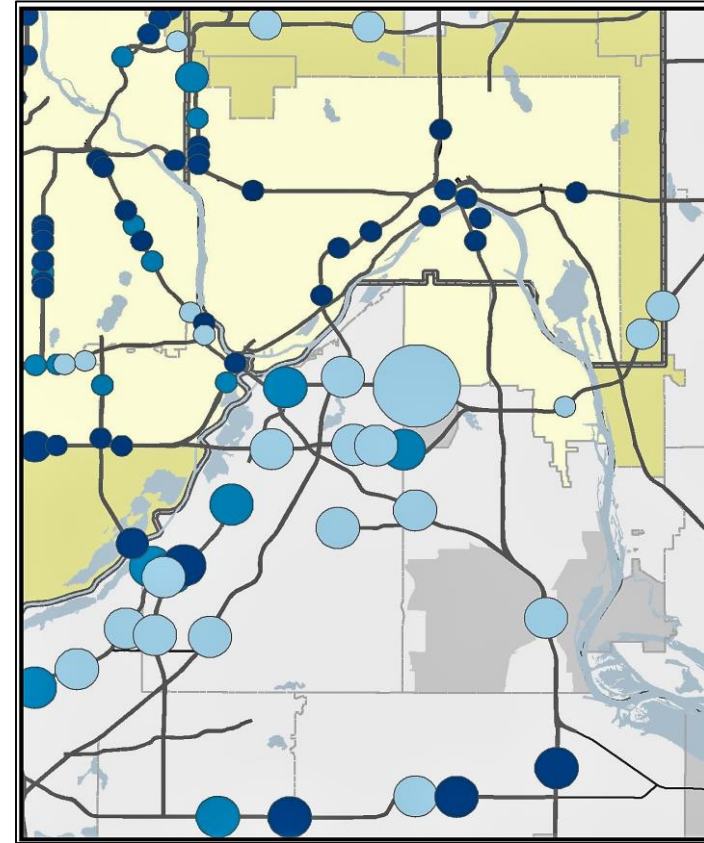
color coded by categories used to
apply barrier crossing spacing criteria

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			

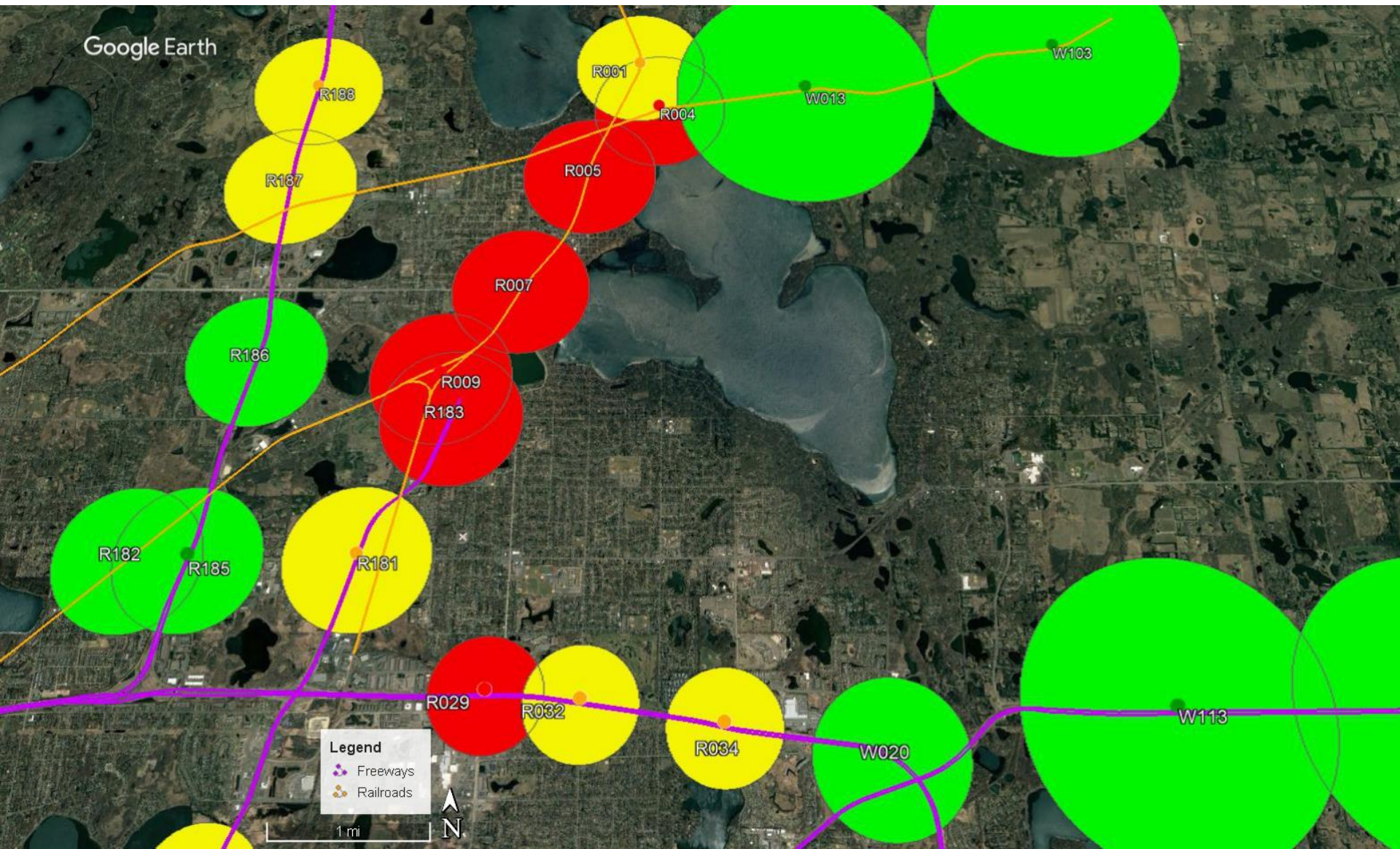


Barrier Crossing Improvement Areas

- Diameters vary by Thrive community designation grouping
- Diameters correspond to preferred spacing criteria
- Barrier segments passing thru area circles are where future crossing projects may be desired
- Circle areas prioritized into 3 tiers based on analysis factors



Bicycle Barrier Crossing Segments

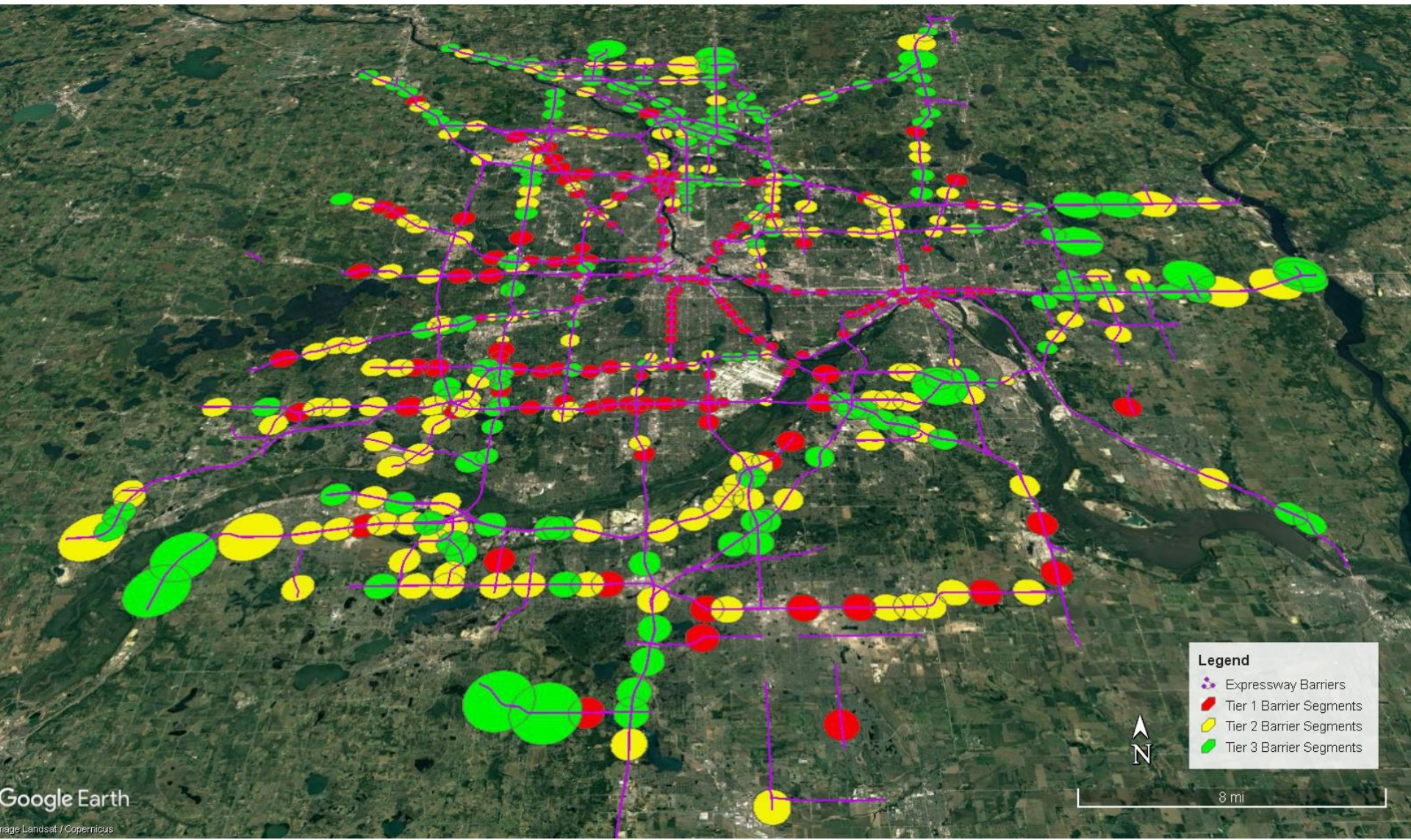


RBBS Update Analysis Results

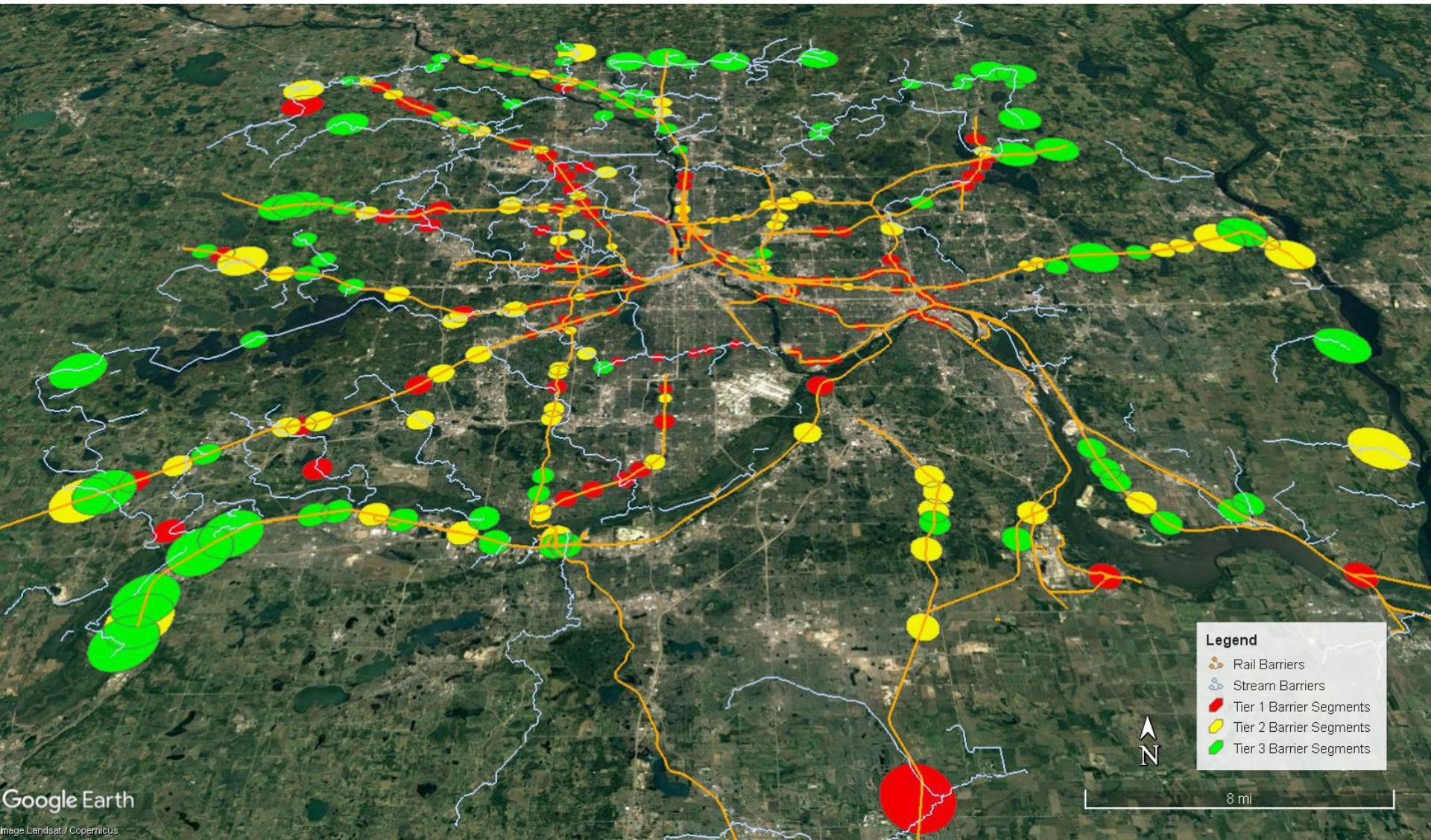
Final Tiering Results

- **Tier 1** – crossing areas ranked 1 to 267
- **Tier 2** – crossing areas ranked 268 to 519
- **Tier 3** – crossing areas ranked 520 above

Regional Bicycle Barrier Crossing Improvement Areas: **Freeways/Expressways**



Regional Bicycle Barrier Crossing Improvement Areas: Railroads & Streams



Relevance to Local Plans and Council Processes

- Updated regional bicycle barriers and prioritized barrier crossing improvement area segments:
 - Will be proposed to supplement Regional Solicitation criteria to select projects for federal transportation funds
 - May inform future local and park agency bikeway and trail plans
 - Will be proposed for inclusion in next TPP update