

Regional Bicycle Transportation Network Facility Guidelines & Measures Study

Transportation Committee
August 28, 2020

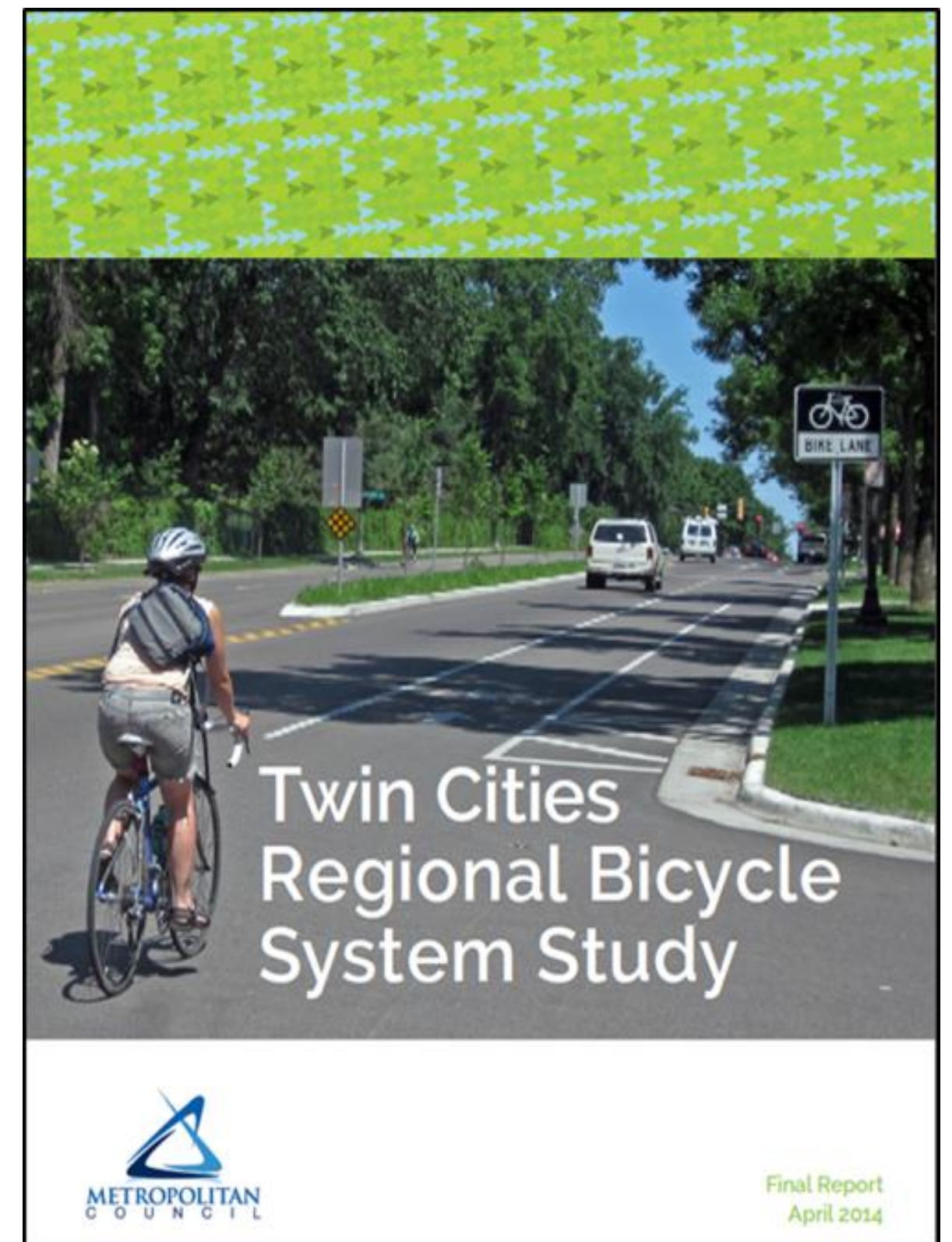


RBTN Background

Regional Bicycle Transportation Network (RBTN)

Regional Bicycle System Study (2014) Work Outcomes:

- Evaluated connectivity of existing networks
- Determined key regional destinations
- Developed guiding principles/criteria for defining regional bicycle corridors
- Developed a proposed regional bicycle network for transportation



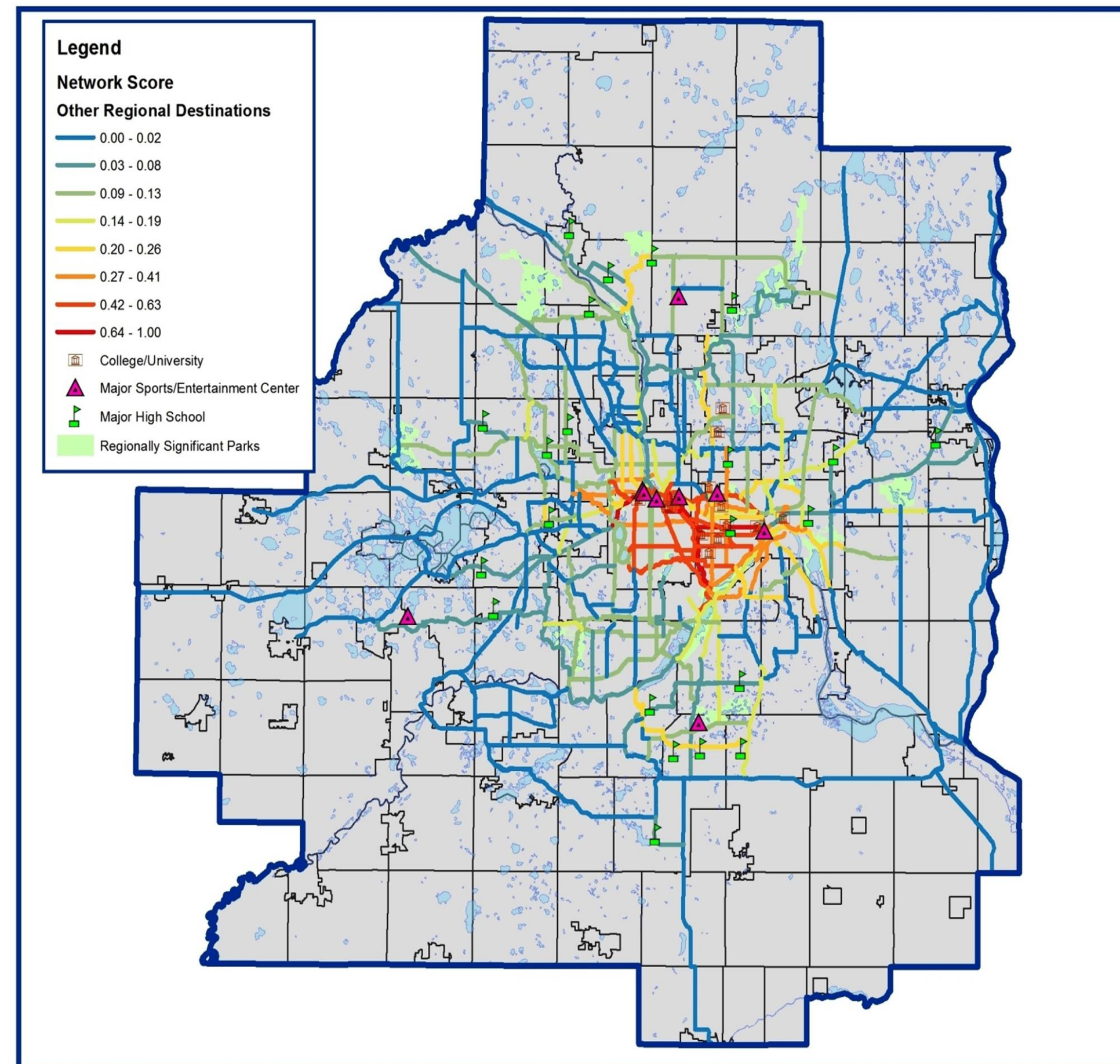
RBTN Guiding Principles

- *Overcome physical barriers* & eliminate system gaps
- Facilitate *safe and continuous trips* to regional destinations
- *Function as arteries* to connect regional destinations & transit system year round
- *Connect to local & state bikeways*
- Accommodate a broad *range of cyclist abilities and preferences*
- Integrate &/or *supplement existing & planned infrastructure*
- Provide improved opportunities to *increase bicycle mode share*
- Consider opportunities to *enhance economic development*
- Be *equitably distributed* throughout the region
- Follow spacing guidelines to *reflect established development and transportation patterns*
- *Consider priorities reflected in adopted plans*

RBTN Background

RBTN Analysis Factors

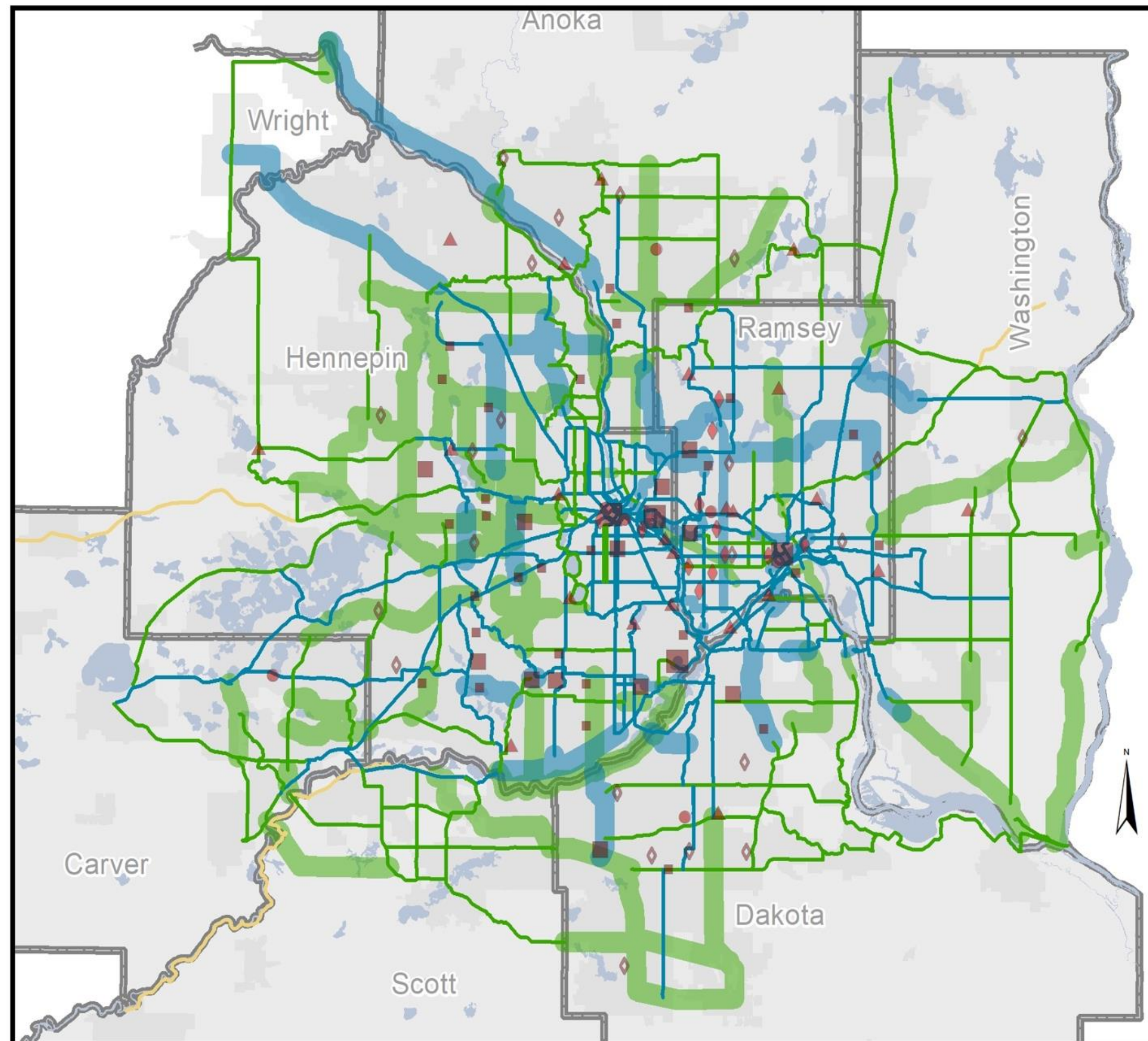
- Existing/future population density
- Connectivity to regional destinations
 - Metropolitan, regional & sub-regional job centers
 - Regional sport and entertainment venues
 - High schools & universities
 - Popular regional parks
- Public feedback routes & destinations
- Bicycle travel demand
- Connectivity to regional transitways
- Social/economic equity



RBTN Background

Regional Bicycle Transportation Network

- Consists of a series of designated alignments & planned corridors
- Grouped into two priority tiers based on analysis factors applied in original study
- Used in Regional Solicitation to distribute federal transportation dollars



Alignments

- ~ Tier 1
- ~ Tier 2

Corridors

- Tier 1
- Tier 2

Regional Destinations

- Metropolitan Job Centers (>50,000 jobs)
- Regional Job Centers (15,000 to 50,000 jobs)
- Subregional Job Centers (7,000 to 15,000 jobs)
- ◆ Colleges & Universities
- ◆ Large High Schools (>2000 students)
- Major Sport & Entertainment Centers

Reference Items

- ☁ Lakes and Rivers
- ▭ County Boundary
- ▭ 2040 Urban Service Area
- ▭ MPO Area



RBTN Background

RBTN establishes regional “backbone” arterial network to serve daily bicycle transportation needs by connecting regional destinations and local bicycle networks.

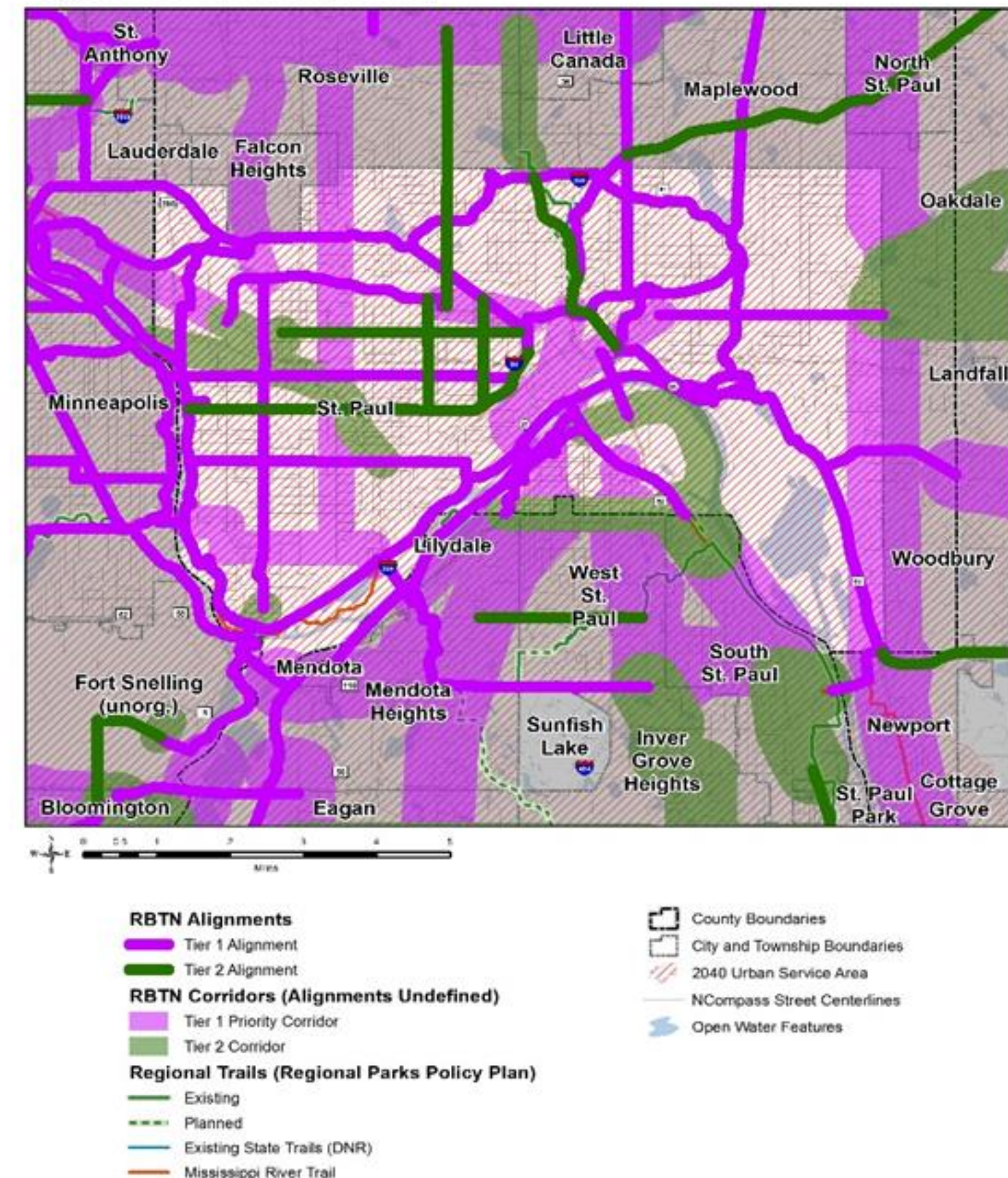
Corridors

- Specific alignments not yet designated
- Provide connections to & between regional destinations

Alignments

- Identified existing or planned trails and on-street bikeways within corridors

Regional Bicycle Transportation Network (RBTN)
City of St Paul, Ramsey County



RBTN Study (2020-2021)

RBTN Bikeway Facility Guidelines and Quantitative Measures Study

Process for Updating the RBTN

- Prior to each Regional Solicitation, given local agencies opportunity to request minor changes to RBTN corridors or alignments
- Requests reviewed qualitatively in context with the 11 Guiding Principles
- Currently working to formalize the process to allow for more significant RBTN changes to be considered prior to each Regional Solicitation (every 2 years)
- Desirable to have more quantitative means to evaluate proposed updates to the RBTN

RBTN Study (2020-2021)

RBTN Bikeway Facility Guidelines and Quantitative Measures Study

Purpose of Study

1. To develop recommended quantifiable measures to assist Met Council in evaluating agency-proposed changes to RBTN corridors & alignments
2. To provide recommendations for preferred bicycle facility types on RBTN alignments in urban and suburban cities, and in rural areas hosting the RBTN

RBTN Study (2020-2021)

RBTN Bikeway Facility Guidelines and Quantitative Measures Study

Study to be conducted in two phases

Phase 1: Development of Quantitative Measures

Phase 2: Development of Bikeway Facility Types for RBTN
Alignments

Technical advisory role will be done by the Bicycle-
Pedestrian Peer Discussion Group consisting of bike and ped
planners/engineers from:

- Each of 7 counties
- Key cities
- Regional Park Implementing Agencies
- MnDOT
- Metro Transit

RBTN Study (2020-2021)

Phase I: Development of Quantitative Measures

Key work tasks:

- Create a methodology to measure spacing between RBTN alignments & corridor centerlines across multiple jurisdictions.
- Create a methodology to compare the “route directness” of a proposed RBTN segment with existing & planned bikeway network segments within the same transportation corridor
- Review the RBTN Guiding Principles and develop up to 4 new measures to quantify their application in evaluating proposed RBTN facilities
- Develop guidelines for how the new measures can be applied in evaluating potential RBTN alignments.

RBTN Study (2020-2021)

Phase II: Development of Bikeway Facility Types for RBTN Alignments

Key work tasks:

- Review relevant bicycle facility guidelines, studies & plans from state & national sources for possible adaptation to Twin Cities region.
- Consider 3 approaches to defining bicycle facility type planning guidelines:
 - Land use/development patterns emphasis
 - Roadway corridor characteristics emphasis
 - Hybrid approach combining the two and considering other factors cited in reviewed state & national studies/plans
- Select best approach with guidance from the BPPDG and draft RBTN bikeway facility guidelines.

RBTN Study

Project Timeline

Phase I—Sept 2020 to Feb 2021

- Draft quantitative measures January '21
- Final quantitative measures February '21

Phase II—Feb to July 2021

- Draft bikeway facility treatment types May '21
- Final bikeway treatment types July '21

Questions or Comments?