Twin Cities
Regional Bicycle System Study

Developing a Regional Bicycle Network

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CTS Research Conference
May 21, 2014
Introduction

- Study Purpose
- Agency and Public Engagement
- Guiding Principles
- Regional Corridors Analysis Approach
- Regional Corridors Analysis Results
- Proposed Regional Bicycle Network
- Critical Bicycle Links
- Next Steps
Study Purpose

Improve knowledge base of regional bicycle transportation system and learn

• How on-street bikeways and off-road trails interact
• How on and off-road systems serve regional transportation trips

Study results will help to

• Develop the bicycle component for the region’s 2040 Transportation Policy Plan (TPP)
• Inform TPP in setting regional priorities
• Develop MnDOT’s Metro District Bicycle Plan
Agency & Public Engagement

- Project Advisory Committee
  - All 7 counties, 5 cities, bike/transit advocates, U of M, Three Rivers Parks District, Met Council & MnDOT

- Project Management Committee
  - Staff from Met Council/Metro Transit and MnDOT

- Four Listening Sessions in outlying suburbs
- Four Public Workshops/Open Houses
- On-line route preference tool
Guiding Principles

Regional Bicycle Corridors should.....

1. Overcome physical barriers & eliminate critical gaps
2. Facilitate safe and continuous trips to regional destinations
3. Function as arteries to connect regional destinations to the transit system
4. Accommodate a broad range of cyclist abilities/preferences
5. Integrate and/or supplement existing and planned infrastructure
6. Provide improved opportunities to increase the share of trips made by bicycle
Guiding Principles

Regional Bicycle Corridors should…..

• Connect to local, state and national bikeway networks
• Consider opportunities to enhance economic development
• Be equitably distributed throughout the region
• Follow spacing guidelines to reflect established development and transportation patterns
• Consider regional priorities reflected in adopted bicycle plans
Analysis Approach & Results

Used Cyclopath as background network

Bicycle Corridor Analysis factors included:

• Regional employment & activity centers
• Other regional destinations
• Bicycle travel demand
• Connections to regional transit system
• Population density
• System equity as measured by racially-concentrated areas of poverty
Analysis Approach - Cyclopath

Twin Cities Bicycle Transportation System Study
Cyclopath Network Assignment of User Route Requests

Legend
Cyclopath Unique Requests

- 10 or less
- Over 1,500

- 27,000 unique O/D
- 83,000 unique routes
- 2.3 million route segment assignments

October 2013
Analysis Approach - Stakeholder Input

- Interactive Web Map
- Listening Sessions
- Public Workshops
## Summary of Corridor Analysis and Scoring Methodology

<table>
<thead>
<tr>
<th>Scoring Category</th>
<th>Data Layer Analyzed</th>
<th>Points Possible</th>
<th>Pct of Total</th>
</tr>
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<tbody>
<tr>
<td>2030 Population Density</td>
<td>Met Council 2030 Population data</td>
<td>1.0</td>
<td>6.5%</td>
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<tr>
<td>RCAP</td>
<td>Met Council Racially Concentrated Areas of Poverty (RCAP) Layer</td>
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<tr>
<td>Cyclopath Requested Origins and Destinations</td>
<td>Cyclopath unique Origin Destination Requests</td>
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<td>12.9%</td>
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<tr>
<td></td>
<td>Cyclopath unique Origins and Destinations</td>
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<tr>
<td>Transitways</td>
<td>Met Council Transitways Layer (planned and proposed stations on transitways)</td>
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<tr>
<td>Major Job &amp; Activity Centers</td>
<td>Met Council Major Job and Activity Centers Layer</td>
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<td>Other Regionally Significant Destinations</td>
<td>Identified major Sports and Entertainment Centers</td>
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<td></td>
<td>Major High Schools (over 2k enroll)</td>
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<td></td>
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<tr>
<td></td>
<td>Colleges and Universities</td>
<td></td>
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<tr>
<td></td>
<td>Major Regional Parks (over 400k annual visits)</td>
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<td>Public Feedback Destinations</td>
<td>Listening Session identified destinations</td>
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<td></td>
<td>Wiki-map identified destinations</td>
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<td>Workshop identified destinations</td>
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<td>Workshop consensus priority destinations from break out groups</td>
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<td><strong>Cumulative Score</strong></td>
<td><strong>Aggregate of the 10 analysis categories</strong></td>
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Corridor Analysis Results

2030 Population Density

Future Population Density Analysis
Corridors Analysis Results

Legend
Network Score
RCAP
None
0.1% - 7.5%
7.6% - 13.5%
13.6% - 19%
19.1% - 31.2%
31.3% - 49.3%
49.4% - 77.1%
77.2% - 100%

Racially Concentrated Areas of Poverty (RCAP)
Corridors Analysis Results

Sub-Regional Centers Analysis

Legend
Network Score
Sub-Regional Job & Activity Center
0.00
0.01 - 0.10
0.11 - 0.13
0.14 - 0.17
0.18 - 0.28
0.29 - 0.40
0.41 - 0.55
0.56 - 1.00
Subregional Job & Activity Center

Sub-Regional Job & Activity Centers
Corridors Analysis Results

Existing and Future Transitways Analysis

Transitways
Proposed Regional Bicycle Transportation Network (RBTN)

- Serve as the regional “backbone” or trunk system
- Consists of on-road and off-road segments
- 1st step to a regional system
- Spaced appropriately for urban/suburban context
- Consist of “corridors” for implementation
Priority Regional Bicycle Transportation Corridors

- Subset Regional Network overlay map
- Will connect to major regional destinations and transit
- Will consist of high demand or potentially high demand corridors
- Serves the region’s urban and suburban areas
Regional Bicycle Transportation Network (RBTN) Corridors

PROPOSED

RBTN Corridors with 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 (50,000+ jobs)
- Regional Job Centers (15,000 - 50,000 jobs)
- Subregional Job Centers (7,000 - 15,000 jobs)
- Large High Schools (2000+ Students)
- Colleges & Universities (2000+ Students)
- Major Sport & Entertainment Centers
- Highly Visited Regional Parks (400,000+ visits per year)

Reference Items
- Principal Arterial Roads
- Lakes and Rivers
- City Boundary
- County Boundary
- 2040 Municipal Urban Service Area
- MPO Area

April 2014
Regional Critical Links

Definition for “Critical Bicycle Transportation Links”

• Serves to close a gap in Regional Network
• Provides short connecting trail between RBTN and local bikeway network.
• Improves continuity & connections between jurisdictions (on or off network)
• Improves or remove physical barrier (on or off regional network)
Next Steps

Regional Solicitation Review
• Revisions to Project Selection Criteria (ongoing)

Transportation Policy Plan
• Transportation Advisory Board Review (May/June)
• Council to approve Public Review Draft (July)
• Public Engagement & Comment Period (late summer to fall)
• Final Council Approval (late fall)