Corridor Investment Management Strategy

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Minnesota Department of Transportation
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Minnesota GO

A Collaborative Vision for Transportation

Minnesota's multimodal transportation system maximizes the health of people, the environment and our economy.









Policy Objective: Critical Connections

Strategy #1: Apply multimodal solutions that ensure a **high return-on-investment**, given constrained resources, and that complement the unique social, natural and economic features of Minnesota





CIMS Solicitation

- MnDOT's 2014-2015 biennial budget included use of \$30 million for pilot solicitation
- Highway projects that advance the Minnesota GO objectives of Quality of Life, Economic Competitiveness and Environmental Health
- Solutions that ensure a high return-oninvestment





Interagency Advisory Group

- Helped develop the evaluation criteria and reviewed projects
- Membership included: Tourism, Commerce, Education, Employment & Econ Dev, Health, Natural Resources, Public Safety, MnDOT, and Pollution Control





Scoring Criteria

Points	Criteria
60	 Benefit/Cost Ratio Includes social, economic and environmental factors Cost includes life cycle costs
30	 Other Factors: Local Economic Impacts (7.5 points) System Considerations (6.3 points) Multimodal Impacts (6 points) Community Health and Access (5.6 points) Context Sensitivity (4.6 points)
10	Consideration for projects with >10% non-MnDOT \$





Community Health

 Improves access to preventative and clinical health care facilities or recreational facilities

 Avoids/minimizes negative impacts to or positively improves access for low-income or disadvantaged populations





PRISM – B/C Analysis

Economic

Travel Time
Reliability
Vehicle Operating Costs
Pavement Maintenance
Ag Land

Social

Safety ★
Health (physical activity)★
Noise ★

Environmental

Emissions ★
Wetlands
Runoff

Costs

Construction
Operations and Maintenance
Rehabilitation and Reconstruction
Remaining Value after 20 years



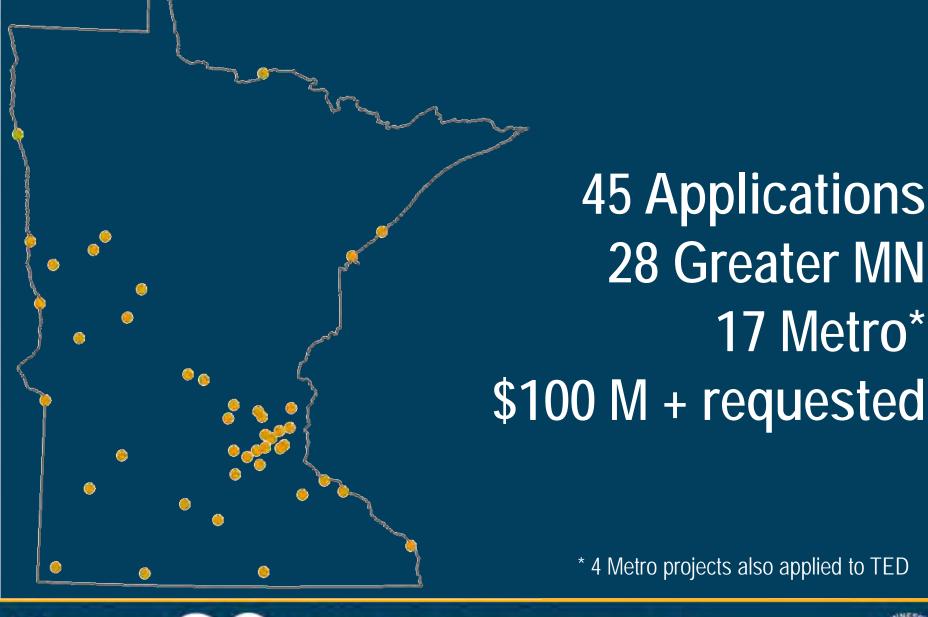
B/C Ratio & NPV

20 year analysis 2.5% discount rate

★Indicates public health measure

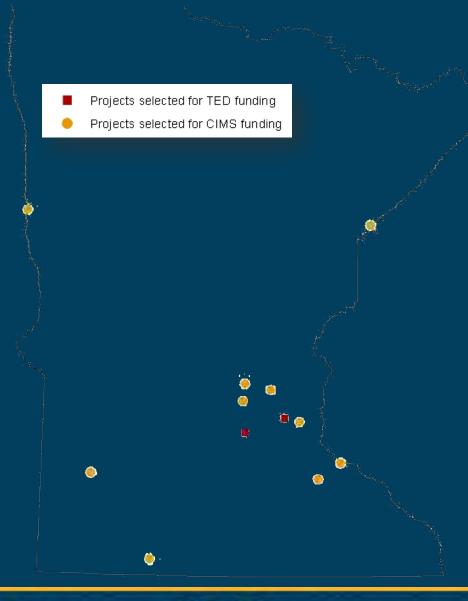












Funded 8 Greater MN (55%) 2 Metro (45%)

Leverages ~\$65 M*

* ~ \$12 M is other MnDOT funding





Successful Project Types

- Generally 3 types of projects did well:
 - Addresses a significant safety issue
 - Low-cost operational improvement
 - Multifaceted urban complete/main streets projects





Project Example





US 61 Main Street in Red Wing

- Improved pedestrian facilities
 - curb extensions, crossings, ADA

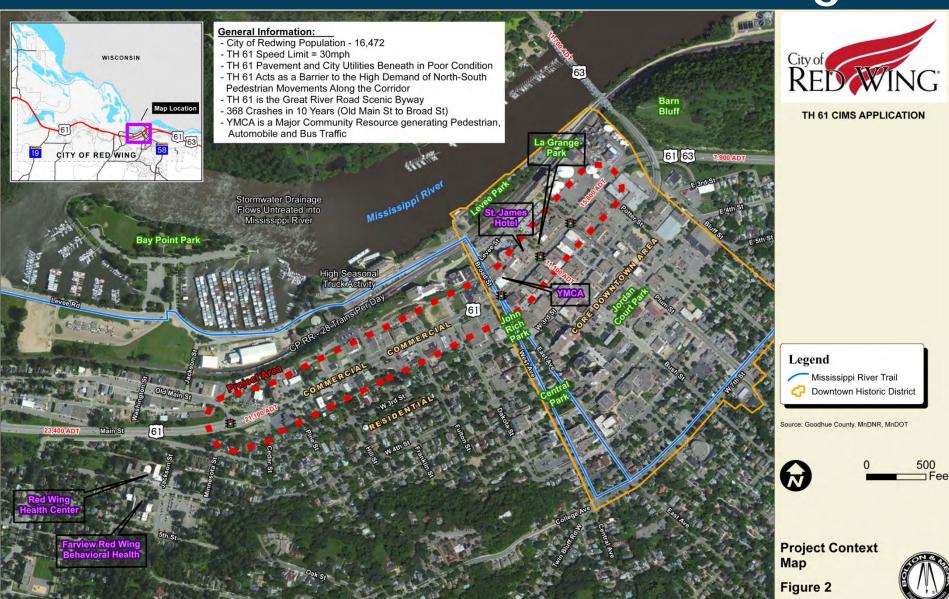
CIMS Award: \$2.45 M Total Project: \$5.4 M Fiscal Year: 2015

- New/extended raised medians
- Closure of 12 driveway access points
- Narrower travel lanes
- Streetscaping
- Utility replacement and pavement reconstruct

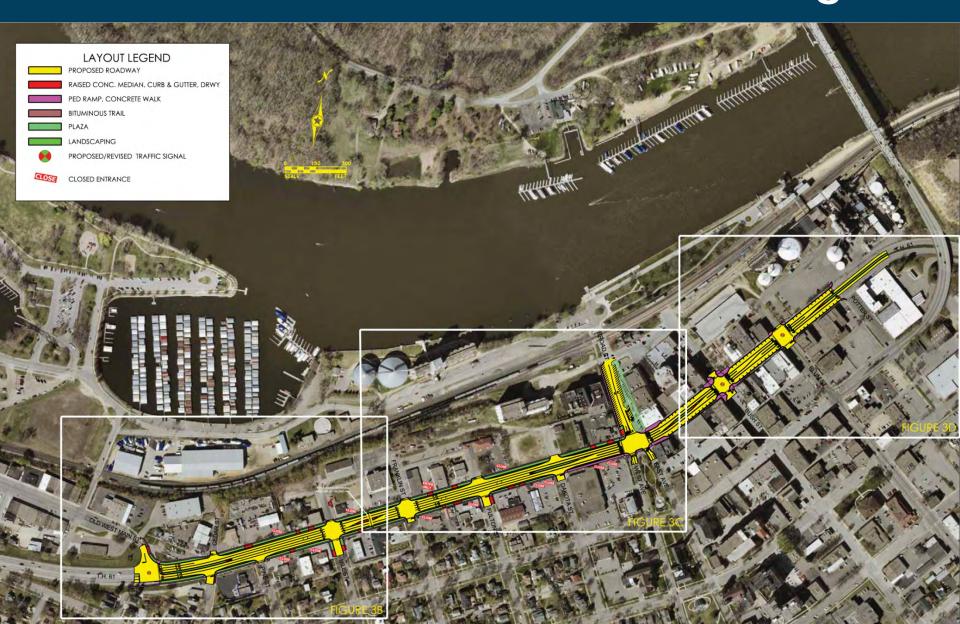




US 61 Main Street in Red Wing



US 61 Main Street in Red Wing



US 61 Main Street in Red Wing – PRISM Analysis

	Value	Distribution	Summary by Year	Totals by Category
Benefits (2011\$)				
Environmental	1,898,145	**	<u></u>	
Social	5,582,959	**	<u></u>	
Economic	3,020,988	**	<u></u>	
Total Benefits	10,502,092	**	<u>.11</u>	Lat.
Costs (2011\$)				
Capital	4,883,074		<u></u>	
O&M	0		<u></u>	
Rehabilitation Costs	-26,307		<u></u>	
Residual Value	-2,495,024			
Total Costs	2,361,743		<u>l</u>	<u>.11</u>
NEW (00448)	8,140,349	**		
NPV (2011\$)	91,7 × 33 × 55, (3.5)	** \		
B/C (ratio)	4.45	**		





Reflections

- An expanded or enhanced Benefit-Cost Analysis helps translate broad goals into comparable and common metrics
 - In particular elevates environmental impacts
 - Answers a different set of questions than INVEST or other LEED-like systems
- Data and forecasting not always reliable/available
 - Example: Bike/ped forecasting methodologies aren't well developed and data is largely absent





Current/Future Activities

- Ongoing partnership with Dept of Health
 - Multiple efforts (SRTS, TAP, research, etc.)
 - Jointly developing first statewide pedestrian plan
 - Pilot HIA
- Developing standard guidance for including emissions and physical activity in BCA
 - Discussing other factors





Questions? www.mndot.gov/cims

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