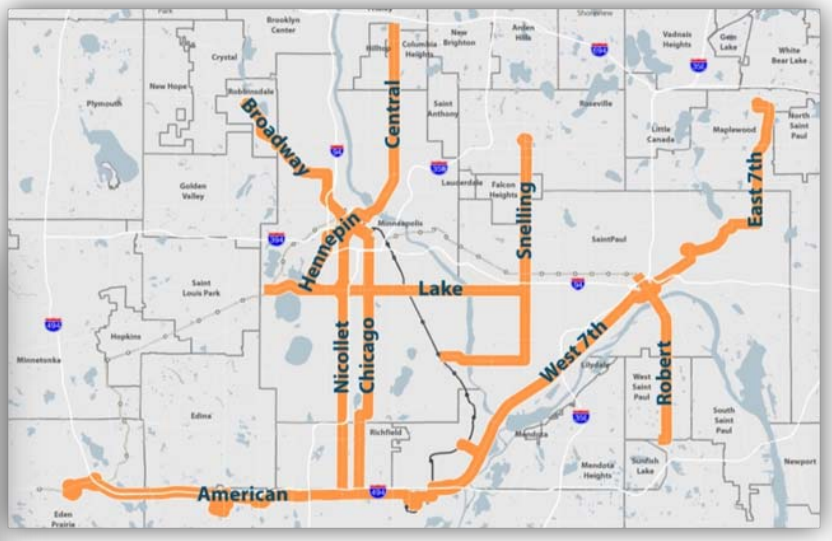
Arterial Transitway Corridors Study

Minneapolis City Council

Transportation & Public Works Committee



October 11, 2011

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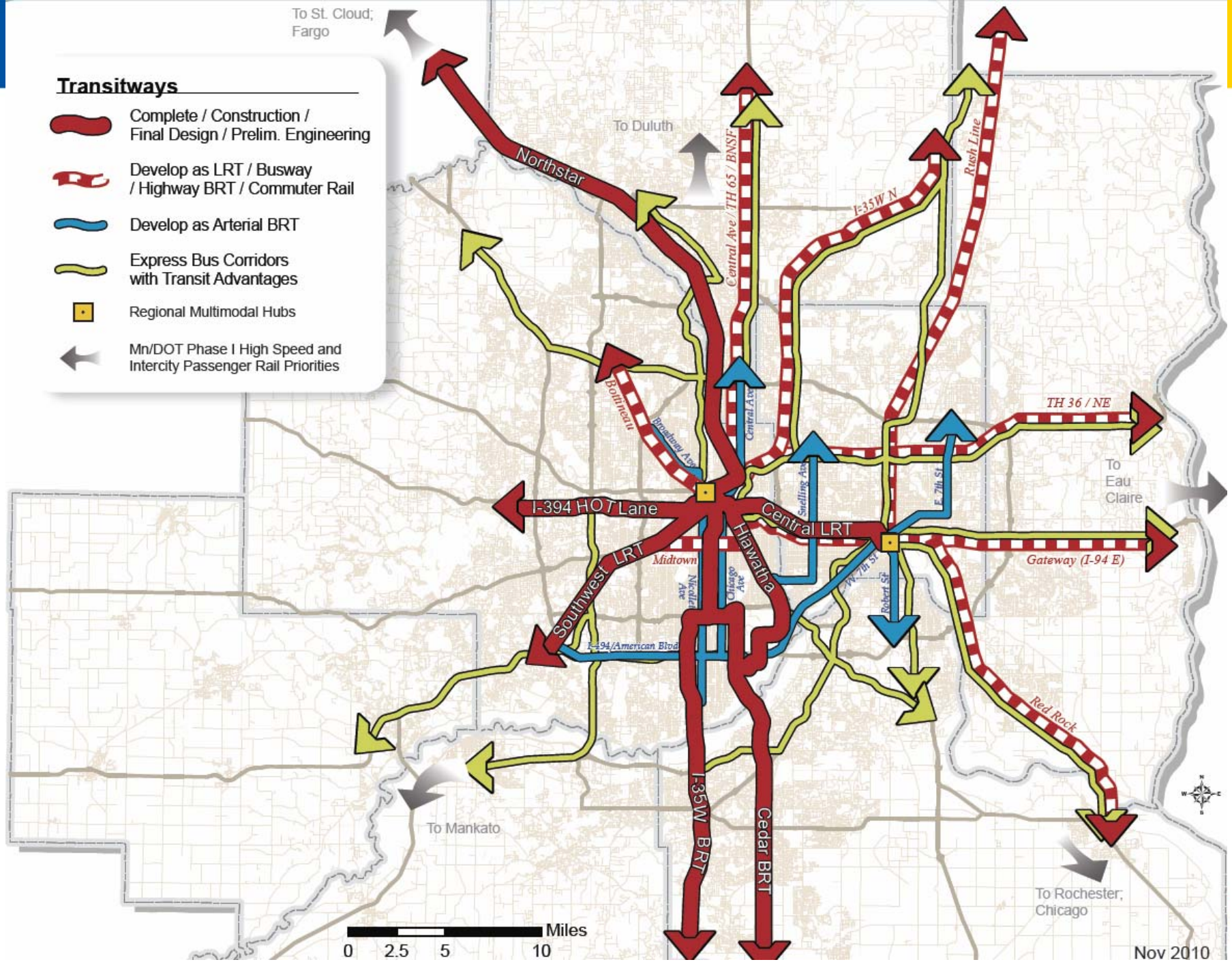
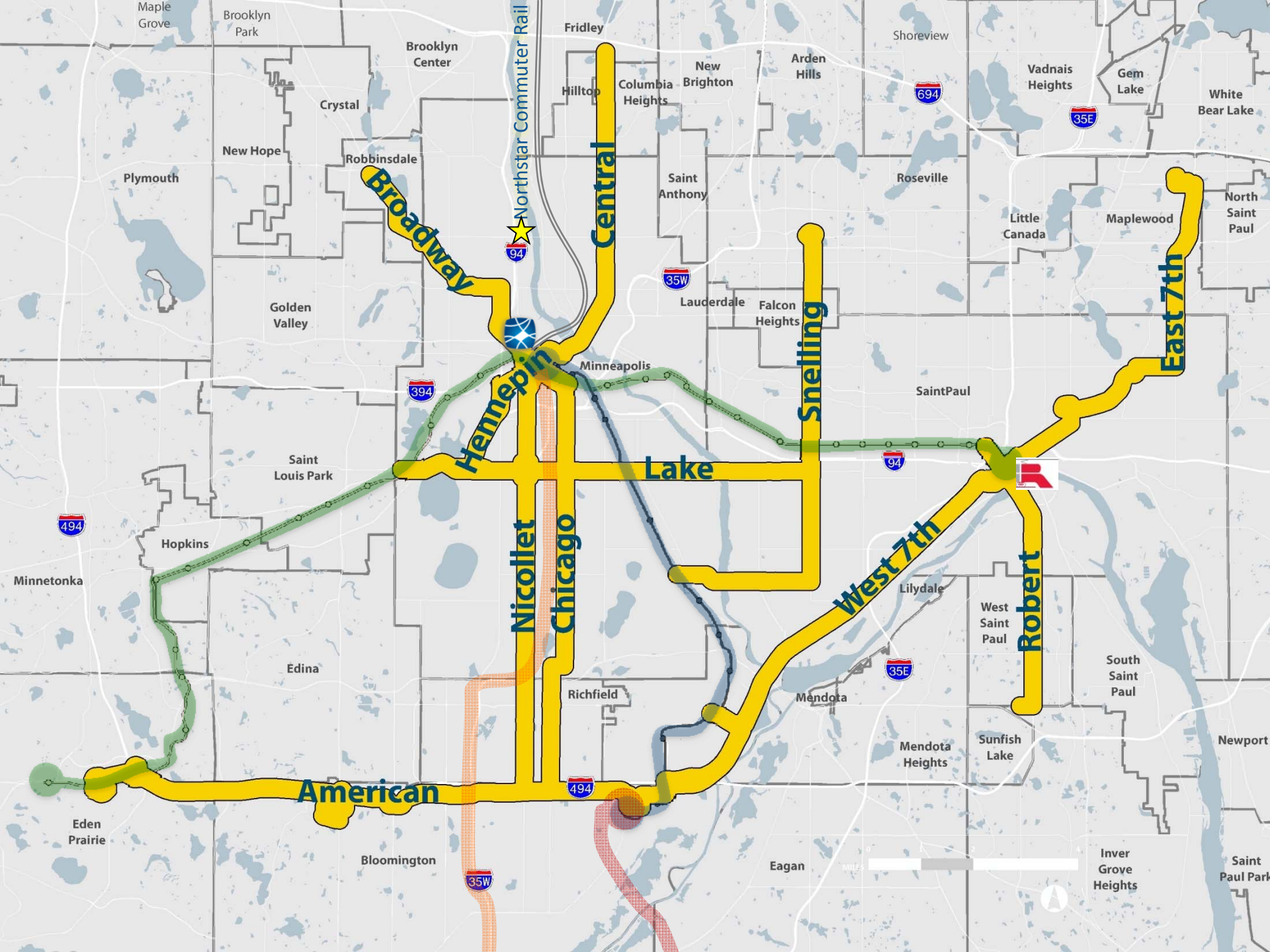
Purpose of Study

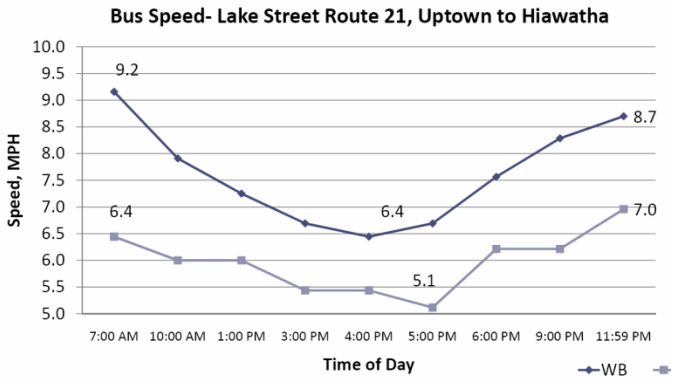
- Study eleven urban corridors in Minneapolis, St. Paul, and surrounding communities

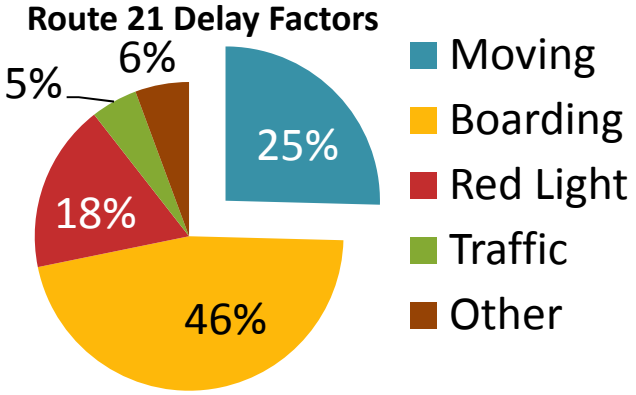
- Develop service and facilities plan to improve
  - Transit Speed
  - Service Reliability
  - Customer Experience
  - Connections Between Major Destinations


Transitways
Complete / Construction / Final Design / Prelim. Engineering
Develop as LRT / Busway / Highway BRT / Commuter Rail
Develop as Arterial BRT
Express Bus Corridors with Transit Advantages
Regional Multimodal Hubs
Mn/DOT Phase I High Speed and Intercity Passenger Rail Priorities
To St. Cloud; Fargo
To Duluth
Northstar
Central Ave / TH 65 / BNSF
I-35W N
Rush Line
Bottineau
Broadway Ave
Central Ave
TH 36 / NE
To Eau Claire
Snelling Ave
E. 7th St
I-394 HOT Lane
Central LRT
Hiawatha
Midtown
Nicollet Ave
Chicago Ave
W. 7th St
Robert St
Gateway (I-94 E)
Southwest LRT
I-94/American Blvd
Red Rock
I-35W BRT
Cedar BRT
To Mankato
To Rochester; Chicago
Miles
0 2.5 5 10
Nov 2010


Maple Grove
Brooklyn Park
Brooklyn Center
Fridley
Northstar Commuter Rail
Shoreview
Arden Hills
New Brighton
Hilltop
Columbia Heights
Vadnais Heights
Gem Lake
White Bear Lake
Crystal
New Hope
Robbinsdale
Plymouth
Broadway
Central
Saint Anthony
Roseville
Little Canada
Maplewood
North Saint Paul
East 7th
Golden Valley
Lauderdale
Falcon Heights
Snelling
Minneapolis
SaintPaul
Hennepin
Lake
Saint Louis Park
Hopkins
Minnetonka
Nicollet
Chicago
West 7th
Lilydale
West Saint Paul
Robert
South Saint Paul
Edina
Richfield
Mendota
Mendota Heights
Sunfish Lake
Newport
American
Eden Prairie
Bloomington
Eagan
Inver Grove Heights
Saint Paul Park
694
35E
94
35W
394
494

Purpose and Need Elements on Arterial Corridors





1. Speed and reliability improvements are required to decrease costs and improve ridership

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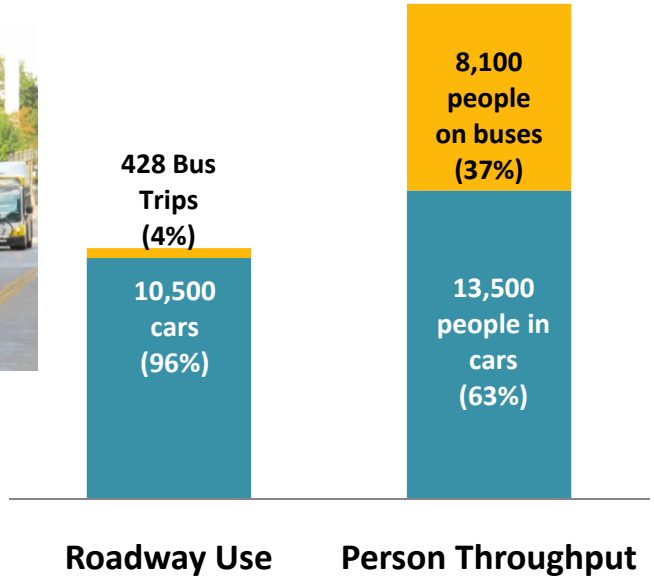
Purpose and Need Elements on Arterial Corridors

2. Corridor transit services are a critical element of the region's transportation system



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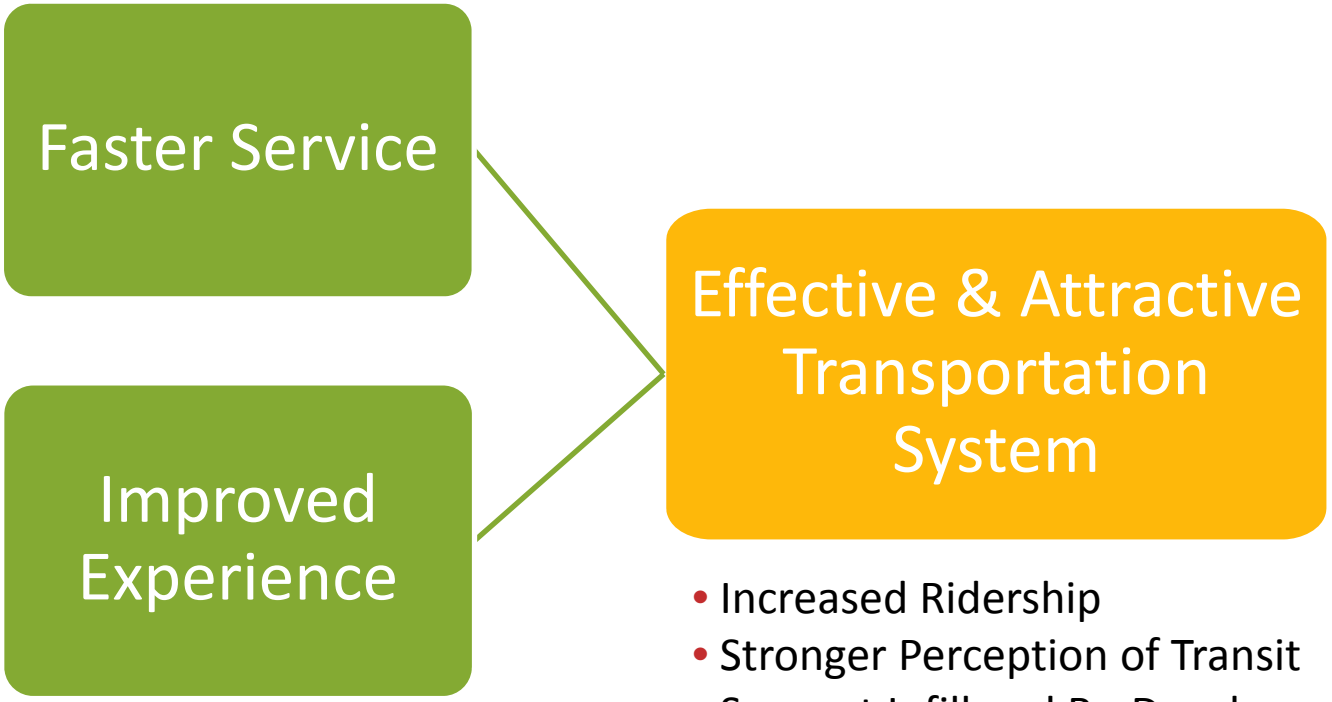
Study Goals:



- Increased Ridership
- Stronger Perception of Transit
- Support Infill and Re-Development

Arterial Transitway Corridors Study

WHAT IS RAPID BUS?

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Rapid Bus Improvements

- System Consistency
  - Station Design
  - Fare Collection
  - Vehicle Branding
  - System Identity

… to provide a consistent system identity & experience

- Corridor/Stop Level
  - Station Size
  - Runningway
  - Traffic Signals/Systems
  - Service Levels

… to respond to local conditions and demand

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How does Rapid Bus achieve faster service?

Faster Service

Less Waiting

- Improved frequency
- Better on-time performance

Signal & Traffic Delay

- Signal priority
- Far-side stops
- Curb Extensions

Boarding Delay

- Pre-pay boarding
- All-door boarding
- Raised curbs

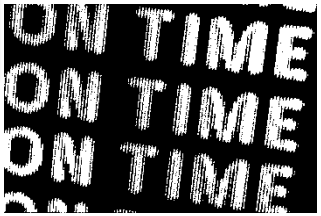
Fewer Stops

- 2-3 stations per mile
- Serve activity centers

How does Rapid Bus achieve an improved experience?

Improved Experience

Service Reliability



- Better on-time performance

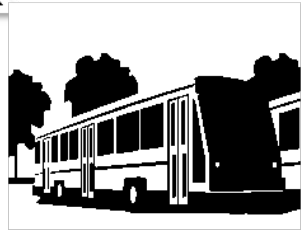
Customer Information

- Real time signs
- Schedule info and wayfinding signs
- On bus information
- Branding

Transitway Stations

- Enhanced maintenance
- Security features & station-level lighting
- Heated shelters
- Curb extensions
- Ticket Vending Machines

Specialized Vehicles



- Dedicated fleet
- Low floor buses
- Clean emissions
- Unique look

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Rapid Bus Vehicles in Other Regions

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Station Pylon Study Concept

Station Marker

Light/Heat

Station Signage

Real Time Sign

Schedule & Wayfinding Info

Ticket Vending

Additional features in concept stations:

- Security Cameras
- Bike Parking Racks
- Trash Receptacles
- Emergency Call Button
- Seating/Lean wall

Study Massing Concept Only: Design to be completed in future engineering stage

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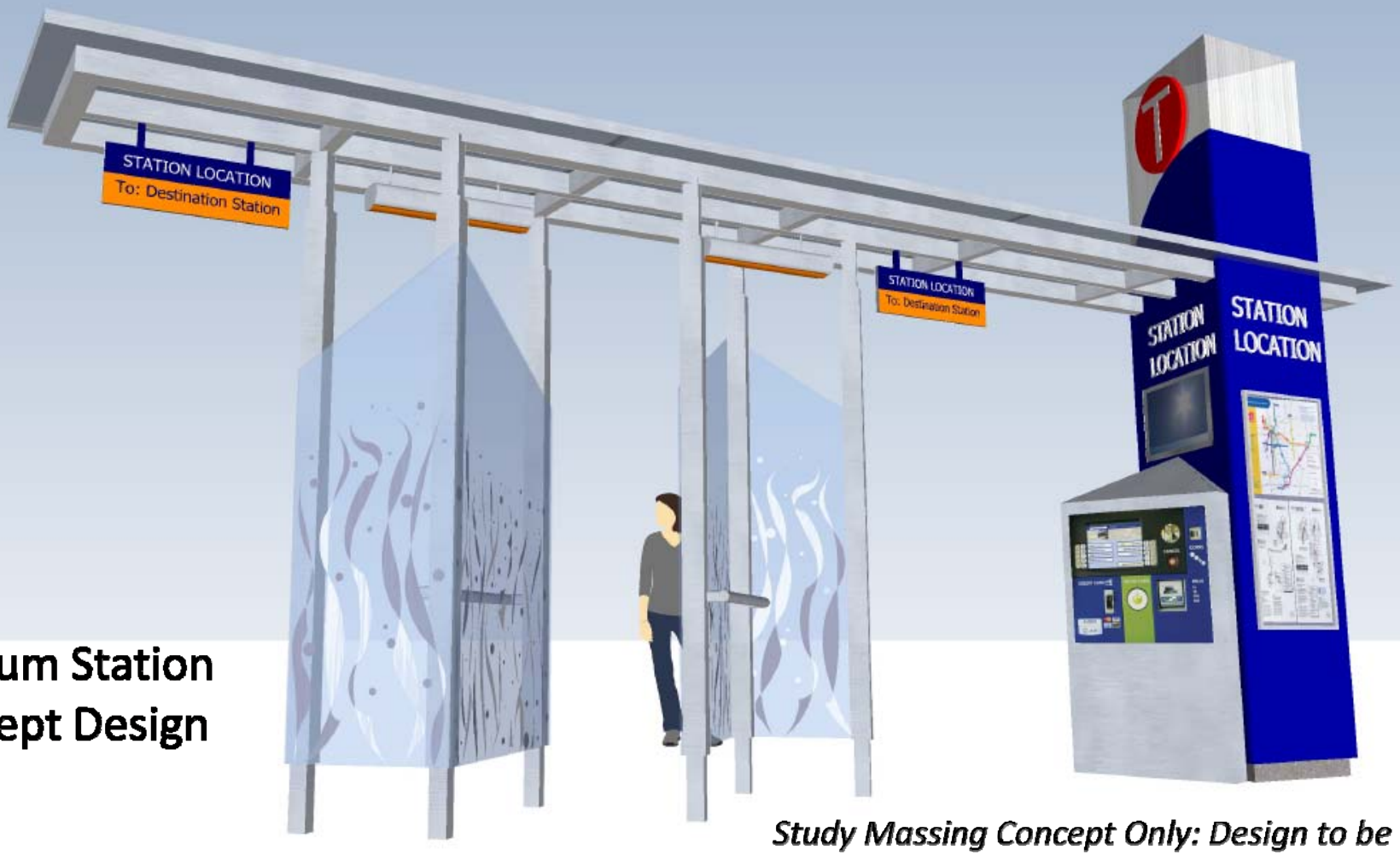

Medium Station Concept Design

Study Massing Concept Only: Design to be completed in future engineering stage

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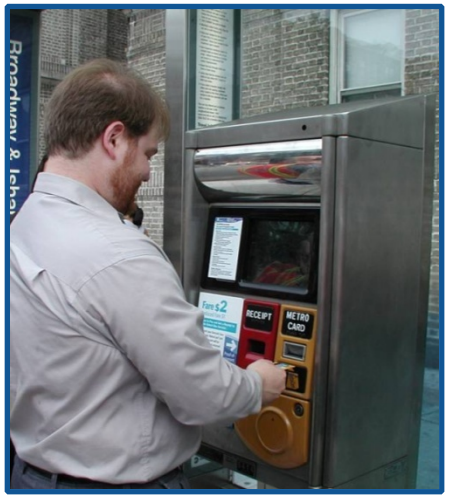
Rapid Bus Experiences in Other Regions

Component	Typical Results
Travel Time	15 – 25+% faster travel
Ridership	20 – 40+% increase
Capital Costs *w/ similar features*	$1 – $3 million/mile *$2 – $7 million/mile*



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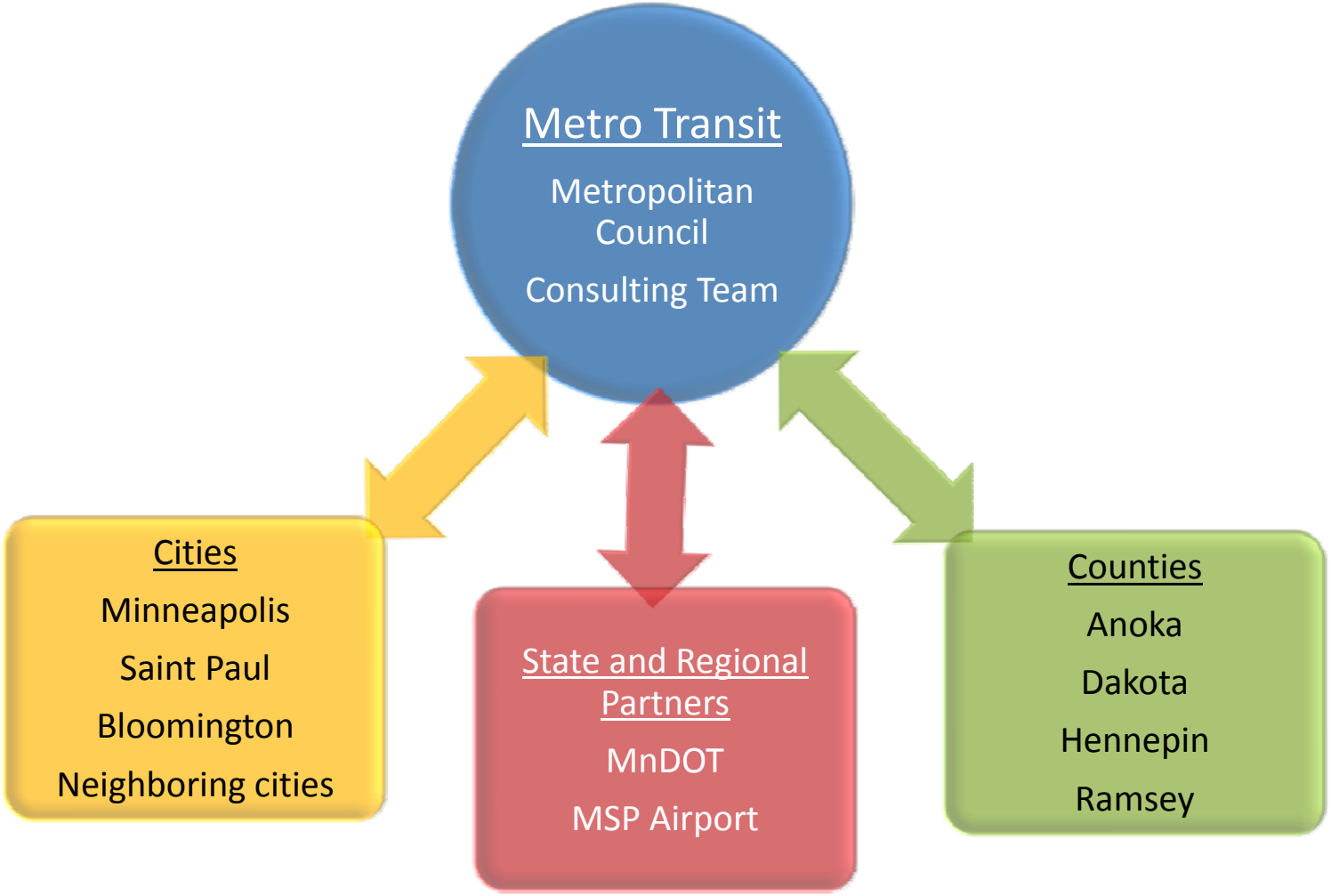
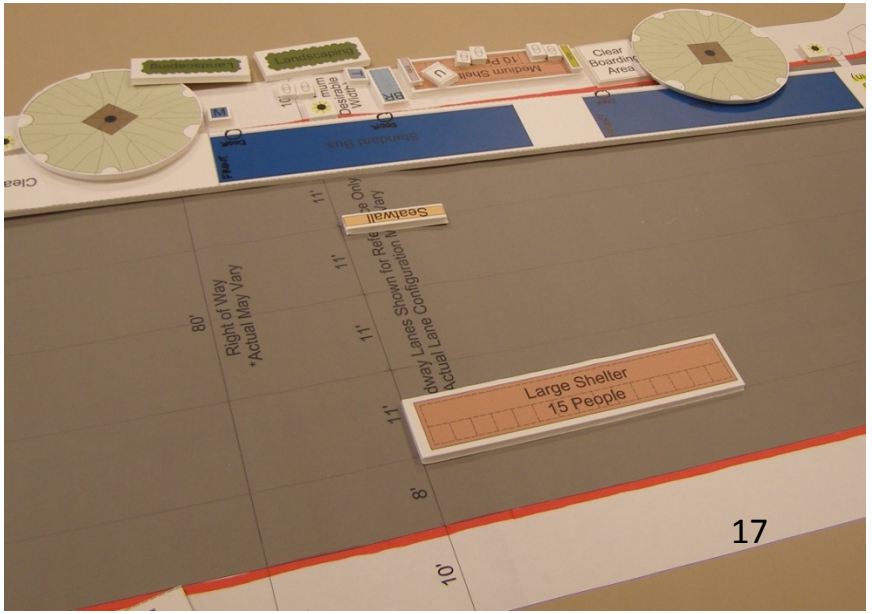
Study Team and Project Partners



Stakeholder Workshop- June 30, 2011



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Upcoming Public Meetings and Presentations

- Public meetings hosted by study team:
  - October 11, 6pm – 8:00pm - Metro State University (St. Paul)
  - October 12, 6pm – 8:00pm- Midtown Exchange (South Minneapolis)
  - October 13, 11am – 1:00pm- Central Library (Downtown Minneapolis)

- Second round of meetings with results and prioritization in January 2012

- Participation in meetings by others:
  - Bottineau Transitway- October-November 2011?

Next Steps in Arterial Transitway Corridors Study

- Evaluate Performance (Fall 2011)
  - Costs, ridership and mobility benefits
  - Develop and apply evaluation criteria
- Prioritize and Rank (Nov 2011 – Feb 2012)
  - Identify best-fit corridors for Rapid Bus improvements
  - Share draft results and then Complete ATCS study
- Post-Study Development and Implementation (2012)
  - Refine and incorporate concept in other upcoming studies
  - Pursue funding and implementation in best-fit corridors

Integration with other studies:

- Four+ corridors slated for more study and Alternatives Analysis
  - Nicollet/Central AA (Minneapolis)
  - Midtown AA (Metro Transit)
  - Robert Street AA (Dakota County)
  - Potential St. Paul Streetcar Study

- ATCS/Rapid Bus Concept will inform these studies:
  - Existing conditions information
  - Enhanced bus alternative concept

EB Lake Street at Nicollet Avenue- 1,000 boardings/day

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Next Steps Toward Rapid Bus Implementation

Implementation Step	Potential Timeline
Complete Arterial Transitway Corridors Study	February 2012
Select first corridor(s) for implementation	Early 2012
Advanced planning, design, and construction of first Rapid Bus corridor(s)	2012 – 2014
Begin operations of first corridor(s)	Late 2014
Implement service on additional corridor(s)	2015 – 2030