Transit - Keeping the Twin Cities Moving

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Overview

• Where we are
  – Regional Transit Summary
  – Service Planning Basics
  – Park & Ride System

• Where we are going
  – 2030 Transportation Policy Plan
  – Transitway Project Development & Progress
  – Transit Funding Outlook
Regional Transit Summary

- 94.6 million rides in 2008
  - Up 6.5% over 2007
  - Up 17.5% over 2005
- Over 1,000 buses in service in peak hour
Service Planning Basics

- Role of transit
- Transit market areas
- Sector study process
- Park & Ride planning
Reasons for Providing Transit

• Provide mobility, travel options
• Support efficient land use
• Add capacity in congested corridors
• Maximize public investment in transportation network
80 percent of transit users are going to or from work or school
What makes transit successful

- Match transit service to demand
  - Density drives transit demand
  - Define regional market areas
- Transit that serves customers
  - Cost savings: vehicle, fuel, parking
  - Travel time competitive
  - Convenient
    - Frequent service
    - Direct route
Employment Density
Residential Density
Transit Market Areas

• Market area reflects estimated demand for transit based on density of:
  – Total Population
  – Transit dependent population
    (Total population over 16 – number of cars)
  – Number of jobs

• Determines level of service appropriate for a given area
Market Area	Typical Services
Area 1	Express, Urban Radial, Urban Crosstown, Downtown Circulator
Area 2	Express, Urban Radial, Urban Crosstown, Suburban Local
Area 3	Express, Urban Radial, Suburban Local, Circulators, General Public Dial-a-Ride*
Area 4	Peak Period Express, General Public Dial-a-Ride
Area 5	General Public Dial-a-Ride

* Market Area 3 Dial-a-Ride is appropriate in some circumstances

 ADA paratransit service follows federal and state regulations in the fixed route service area

 Additional details on market areas and service standards are available in Appendix G

 Market area geography was calculated at the census block group level.
Transit Improvement Planning

- Routine route maintenance
- Sector Study approach
- Short-term Service Improvement Plan
- Transit Master Study and Transportation Policy Plan
  - Transitway network
Sector Study Key Objectives

• Simplify system
• Faster service to major destinations
• Improve connections & reliability
  – Enhanced timed transfers (esp. off-peak)
  – Better neighborhood connections
  – Grid route network where appropriate
• Optimize efficiency of routes & schedules
• Integrate new facilities & future plans
Sector Planning Approach

- Evaluate existing service
- Integrate local plans
- Include local communities and stakeholders
- Incorporate regional transit standards and objectives
- Identify service delivery strategies to improve reliability, speed and convenience
Twin Cities Park & Ride System

• Today’s System
  – 106 facilities
  – Over 25,000 spaces
  – Over 18,000 users
  – Tripled usage, doubled capacity since 1999

• Tomorrow’s Need
  – 2020: 30,000 users
  – 2030: 40,000 users
  – New/expanded facilities
  – More structures
  – Earlier land acquisition
Park & Ride Planning

• Understanding Existing & Potential Markets
  – License Plate Surveys
  – Downtown, UofM commuters

• Estimating Demand
  – Population → Labor Force → Downtown Commuters → Transit Riders → Park & Riders

• Properly Locating & Sizing Facilities
  – Location, Location, Location
  – Size Matters
Keys to Successful Park and Rides

- Location
  - access to regional highways
  - “upstream” from congestion
- High parking costs, limited parking at destination
- Unmet demand
- Facility size & service levels
- Transit advantages, non-stop service
2030 Park-and-Ride System

Symbol size - Capacity scaled by projected 2030 capacity (existing spaces plus expansion)
- U - 150
- P - 151 - 400
- P - 401 - 800
- P - 801 - 1600

Symbol Color - Status
- Existing / Planned Build / Expansion
  - Existing
  - Planned 2013 - 2030
  - Existing location with funded expansion by 2013
  - Existing location with planned expansion by 2030
  - New location funded by 2013 with additional expansion through 2030

*Park-and-Ride Lots excluded
Long Range Transit Planning

• Metro Council is region’s designated Metropolitan Planning Organization (MPO)
• Responsible for region’s long range plan
• Council is also major regional transit provider through:
  — Metro Transit bus
  — Metro Transit Rail
  — Metro Mobility
  — Contracted transit services
What is the Transportation Policy Plan (TPP)?

The region’s long range transportation plan

Includes all modes of transportation highways, transit, airports, freight, biking, pedestrians

Meets the federal requirements for a long-range, fiscally constrained plan (Cannot assume projects beyond expected funding streams)

Prepared in coordination with stakeholders Mn/DOT, MAC, Transportation Advisory Board (TAB) and its Technical Advisory Committee (TAC) and task forces, public participation

Metropolitan Council
Focus on Regional Mobility

- Additional one million residents expected
- Travel has been increasing much faster than highway expansion
- Solving congestion would require 20x more highway funding than currently projected to be available
- Maintenance and preservation (including bridge rehab) will take up most available road funding

Need to shift emphasis from fixing congestion to managing congestion

Metropolitan Council
Managing Congestion

- Optimize highway investments to move the largest number of people, not cars
- Invest in strategic localized highway expansion
- Invest in transit
- Promote transportation-efficient land use
- Promote alternatives to driving alone such as walking, biking, carpooling, telecommuting, etc
- Provide more travel choices beyond driving alone in an automobile
Transit already contributes to moving people on highways. This map shows people moving in cars (yellow) and on transit (red) at the peak hour of congestion.
Transit Vision
Ridership Progress Since Last Plan

16 million transit rides added since 2003
On track to double ridership by 2030
Major Transit Issues

- Demand for service increasing
- Declines in major revenue source (MVST)
- On-going transit operating deficits
- Continued need for new transit funding source
- Much land use is not supportive of transit
- Congestion hinders fast, reliable transit
Transit Plan

Continue progress toward regional ridership goal of doubling ridership by 2030 through:

- Strengthening the region’s bus system
- Building a network of transitways
Transit Master Study

- Began in summer 2007, preliminary work to update Transportation Policy Plan
- Evaluated/recommended:
  - Improvements to expand bus system
  - Transitway corridors with most potential for major investments
- Examined land use issues affecting transit
- Became the basis for transit chapter of the 2030 Transportation Policy Plan
Strengthened Bus Service

- Local Bus improvements to:
  - Support Transitway Investments
  - Meet growing demand on local routes
  - Expand service coverage

- Arterial transit corridor improvements

- Express bus improvements

- Demand for ADA Services projected to grow

- Long distance express service
  - Acknowledges potential for new routes
  - Requires coordination with adjacent counties and MnDOT
Proposed Bus Routes in 2030

- New / Improved Local Bus Routes
- Current Local Routes
- Arterial Network
  - New / Improved Arterial Routes
  - Current Arterial Network
- Express
  - New / Improved Express
  - Current Express
- Transit Centers / Stations
  - Future Transit Station
  - Transit Station
  - Future Transit Center
  - Transit Center
- Park-and-Ride Lots
  with greater than 100 spaces
  - Existing
  - Future
- Existing Principal Arterials
- 2030 Municipal Urban Service Boundary

July 2008
Transitway Modes

Commuter Rail: 5 mile station spacing, diesel locomotive power, rural or suburban

Light Rail: 1 mile station spacing, electric power, urban or suburban, all day service

Bus Rapid Transit: $1/2$ - 5 mile station spacing, urban or suburban, on arterial streets, highways or dedicated Busways

Express Bus with Transit Advantages: transit advantages include HOV/HOT lanes, bus-only shoulder lanes, priced lanes or dynamic shoulder lanes

Intercity passenger rail development is led by MnDOT, but could leverage investments in regional transitways
Transitway Corridor Analysis

- Assumed corridors in implementation would continue (Central, Northstar, I-35W, Cedar)
- Results from other detailed studies incorporated (Southwest, Robert, Red Rock)
- Regional Railroad Authorities, Mpls., St. Paul, MnDOT, transit providers identified 30 corridors for analysis
- Agreed on mode for each corridor
- Agreed on criteria to evaluate corridors
  - Operating and Capital cost
  - Ridership
- Consultant conducted cost and ridership analysis
Potential LRT Corridors Modeled
Potential Commuter Rail Corridors Modeled
LRT/Busway Corridors without I-494/I-694

- Ridership
- Annualized Cost

Legend:
- LRT
- Busway

Corridors:
1. LRT-6B
2. LRT-21
3. LRT-30
4. LRT-26
5. LRT-17B1
6. LRT-17B2
7. Busway-1
8. Busway-2
9. Busway-9
10. Busway-11
11. Busway-12
12. Busway-13
13. Busway-14
14. Busway-22
15. Busway-19
16. Busway-23
17. Busway-17
18. Busway-3
Transitway Recommendations

- **Complete/Construction/Final Design/PE:**
  - 394 HOT Lane  - Hiawatha  - Central Corridor LRT
  - Cedar Ave BRT  - 35W BRT  - Northstar Commuter Rail

- **Develop as LRT/Busway/BRT/Commuter Rail:**
  - Southwest Corridor  - Bottineau Corridor
  - I-35W North Corridor  - TH 36/NE Corridor
  - I-94 East Corridor  - Rush Line
  - Central Avenue/TH65/BNSF  - Red Rock

- **Develop as Arterial Street BRT:**
  - Central Ave  - Nicollet Ave  - Robert Street
  - Snelling Ave  - Chicago Ave  - West 7th Street
  - Broadway Ave  - East 7th Street  - I-494/American Blvd

- **Express bus corridors with transit advantages**
  - Enhance service and facilities on various express corridors

- **Intermodal Hubs:**
  - Implementation of transitways will require development of intermodal hubs at the Union Depot in St. Paul and the Intermodal Station in Minneapolis.
2030 Transitways

- Capital funding assumptions result in completing:
  - Central Corridor by 2014, three additional LRTs by 2030, one completed by 2020, second started before 2020 and completed soon after, third completed by 2030
  - One commuter rail (completed 2020 – 2030)
  - Four highway BRT (two by 2020, two post 2020)
  - Nine arterial BRT
- Operating costs not fully funded
## Transit Plan Costs and Revenues

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<th>Costs</th>
<th>Maintain</th>
<th>Expand</th>
<th>Total</th>
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<tbody>
<tr>
<td>Capital 2020 - 2030</td>
<td>$700 M</td>
<td>$1,950 - $2,385 M</td>
<td>$2,650 - $3,025 M</td>
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<td>2020 Annual Operating Subsidy</td>
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<td>$75 M - $110 M</td>
<td>$350 – $380 M</td>
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<td>$40 M – $60 M unfunded*</td>
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<tr>
<td>2030 Annual Operating Subsidy</td>
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<td>$195 M – $240 M</td>
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<td>$115 M to $150 M unfunded*</td>
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*Revenues and costs calculated in 2008 dollars

*Bus system and bus transitway expansion operating costs are not fully funded
Transitway Progress

- Hiawatha LRT opened 2004, current ridership exceeds 2030 forecast
- Northstar Commuter rail scheduled to open in 2009
- Central Corridor LRT completing preliminary engineering, planned 2014 opening
- Urban Partnership Agreement advancing I-35W and Cedar Avenue BRTs in 2009
- Southwest Transitway completed AA/beginning EIS work
- Red Rock corridor completed Alternatives Analysis
- Bottineau and Rush Line corridors undergoing Alternatives Analysis
Transitway Project
Development Process

• New Starts
  – A discretionary program of the Federal Transit Administration (FTA) for fixed guideway transit.
    • Alternatives Analysis (AA)
    • Preliminary Engineering (PE)
    • Final Design (FD)
    • Full Funding Grant Agreement (FFGA)
    • Construction

• National Environmental Policy Act (NEPA)
  – Requires federal agencies to integrate environmental values into their decision making processes by considering the environmental impacts of their proposed actions and reasonable alternatives to those actions.
    • Draft Environmental Impact Statement (DEIS)
    • Final Environmental Impact Statement (FEIS)
    • Record of Decision (ROD)
Project Development Process
New Starts and NEPA

FTA News Starts

Alternatives Analysis (AA)

Draft Environmental Impact Statement (DEIS)

Preliminary Engineering (PE)

Final Environmental Impact Statement (FEIS)

Record of Decision (ROD)

Final Design (FD)

Right-of-Way Acquisition

Full Funding Grant Agreement (FFGA)

Construction/Operations

National Environmental Policy Act (NEPA)

Metropolitan Council
Transit Finance
Funding Pressures

- Demand for Bus and Rail Transitway Expansion
- Increasing Ridership and Park and Ride Usage
- Fluctuation in Fuel Pricing
- Expiration of One-Time CTIB Grant $30.8 M
- Operations and Capital Funding Imbalances
- Unreliable Operations Funding
Transit Finance

- Regional transit operating budget is almost $400 M annually (CY 2009)
- Projected 2010-11 biennial budget is $834 M
- MVST typically is 36% of budget or more
- Recent drops in MVST funding has created budget deficits
- Projected $60 M biennial transit operating deficit
FY 2010-2011 Budget

MVST $272M  
32%

CTIB $28M  
3%

Federal $65M  
8%

Other $21M  
3%

Fares $230M  
28%

State $158M  
19%

Bus Shortfall  
$18M 2%

Rail Shortfall  
$19M 2%

Shortfall From November 08 Forecast  
$23M 3%

Total 2010-11  
$834 M

Metropolitan Council
Forecasted Met Council MVST Revenues

- Actual: $124.1 M, $112.5 M
- Forecasts:
  - 2003: 21.5%
  - 2004: 21.5%
  - 2005: 21.5%
  - 2006: 24%
  - 2007: 27.75%
  - 2008: 30%
  - 2009: 33.75%
  - 2010: 36%
  - 2011: 36%
  - 2012: 36%
  - 2013: 36%
Thank you