Transit Investment Direction and Plan Introduction

Technical Advisory Committee - Planning Subcommittee
June 8, 2017
Today’s Topics - Transit

• Where are we now, what are the current issues?

• Where are we headed?

• How will we get there?

• What are the changes expected in this plan update?
What Feedback are We Looking for Today?

• Your reactions to high-level concepts
• Your ideas for clarifying the “story”
• Your ideas on things that should change
• Things you’d like to bring back for future discussion
Where are We Now?
Where are We Now?

*Ridership*

- Ridership up in the last decade
- Investment are paying ridership dividends

Recent major investments:
- 2013 – 1st Highway BRT
- 2014 – 2nd Light Rail
- 2016 – 1st Arterial BRT
Where are We Now?

Return on Investment

Recent Case Studies:

- A Line
  - 33% more riders in corridor
- METRO Green Line
  - $5+ billion in development
  - 50%+ more riders in corridor
- Route 11 High-Frequency
  - 20% more riders on route
- METRO Red Line Cedar Grove Station
  - Lower cost, faster trip, more riders

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Where are We Now?

*Return on Investment*

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Optimal Investments:

\[ \text{\$} \downarrow = \text{\$} \uparrow \]
Where are We Now?

Transit Market Areas

- Market Areas broadly quantify & estimate transit demand
- Return on investment; Guiding investment levels relative to demand
- Much of the region currently not well suited for high-level of service
- …BUT land use is changing! Opportunities exist, implementation takes time!
Where are We Now?

Travel and Density

- VMT per Household
- Population per Acre
Where are We Now?

Travel and Density

![Graph showing commute to work as a percentage of transit and population density per acre across different areas.]

- Commute to Work - % Transit
- Population per Acre

Legend:
- Blue line: Percent Transit Commute to Work
- Orange line: Population Density
Where are We Now?

*Diminishing Returns, Park-and-Ride Example*

- Growth in park-and-ride capacity has outpaced use
- Built for 2030 demand

![Graph showing supply and demand comparison](chart.png)
Where are We Now?

Land Use Planning Coordination

Design for a pedestrian-friendly environment

All transit users are pedestrians for at least some portion of the beginning and end of their trip. A pedestrian-friendly environment encourages transit use by providing a comfortable walking environment and minimizing the walking distance from the transit stop to front doors.

More Transit Supportive

Less Transit Supportive
Where are We Now?

Land Use Planning Coordination

Design for a pedestrian-friendly environment

More transit supportive  Less transit supportive
Where are We Now?
Land Use Planning Coordination

Encourage a mixed-use land use pattern
Transit is most effective when it serves a variety of trip purposes and destinations. Mixed-use development patterns encourage travel patterns with many origins and destinations throughout the day, making transit more effective and easy to provide for a variety of purposes.

More Transit Supportive

Less Transit Supportive
Where are We Now?
Land Use Planning Coordination

Encourage a mixed-use land use pattern

More transit supportive

Less transit supportive
Where are We Headed?
# Where are We Headed?

**Current TPP Planning Framework**

<table>
<thead>
<tr>
<th>Goals</th>
<th>Objectives (Transit-related Only)</th>
</tr>
</thead>
</table>
| Transportation System Stewardship                                     | • State of good repair *(Maintain what we have!)*  
• Operate *efficiently and cost-effectively*                                                                                |
| Safety and Security                                                   | • Improve safety and security                                                                                                                                           |
| Access to Destinations                                                | • More multimodal options (esp. in congested corridors)  
• Increase *reliability* and *predictability*  
• Increase *transit ridership* and transit mode share                                                                 |
| Competitive Economy                                                   | • Improve multimodal *access to job* concentrations  
• Invest in multimodal to *attract and retain* businesses and residents                                                     |
| Healthy Environment                                                   | • Reduce *air emissions*  
• Increase availability and *attractiveness* of transit, encourage *healthy communities* and *car-free lifestyles*                                                  |
| Leveraging Investments to Guide Land Use                              | • *Focus growth* to support multimodal travel  
• Encourage local land use to *integrate all modes*                                                                       |
Key Transit Outcomes

Efficient
Cost Effective
Reliable, Predictable, and Attractive
Attract More Transit Riders
Provide More Access to Jobs
Attract Businesses and Residents
Support Focused Growth that Integrates Modes
Support Equity, Clean Air, and Healthy Communities
How Will We Get There?
Metro Area Transit Funding

Motor Vehicle Sales Tax

State General Fund

Fares

CTIB/County Sales Tax

Transit Operating
- Routes
- Drivers
- Fuel

Transit Capital
- Buses & Trains
- Garages
- Stops & Stations

Federal Formula

Regional Transit Capital Bonds

Federal Competitive (New Starts, Reg Sol.)

County Regional Railroad Auth.

State Bonds

Dashed lines are possible uses but rare
How Will We Get There?
Transit Investment Direction and Plan

• Regional Solicitation Transit Criteria

<table>
<thead>
<tr>
<th>Solicitation Criteria</th>
<th>Key Transit Outcomes</th>
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</thead>
<tbody>
<tr>
<td>Role in the Regional Transportation System and Economy</td>
<td>Access to Jobs</td>
</tr>
<tr>
<td>Usage</td>
<td>Attract More Transit Riders</td>
</tr>
<tr>
<td>Equity and Housing Performance</td>
<td>Equity and Healthy Communities</td>
</tr>
<tr>
<td>Emissions Reduction</td>
<td>Clean Air</td>
</tr>
<tr>
<td>Service and Customer Improvements</td>
<td>Reliable, Predictable, and Attractive</td>
</tr>
<tr>
<td>Multimodal Elements and Existing Conditions</td>
<td>Integrate Modes</td>
</tr>
<tr>
<td>Risk Assessment</td>
<td></td>
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<tr>
<td>Cost Effectiveness</td>
<td>Cost Effective</td>
</tr>
</tbody>
</table>
How Will We Get There?

Transit Investment Direction and Plan

• **Build a Common Understanding:**
  - Transit Planning Basics – Principles for understanding transit and land use relationship
  - Transit Market Areas – Framework for evaluating potential return on investment
  - Regional Transitway Guidelines – Build out a transitways system that is consistent for the user and equitable across the region
How Will We Get There?

*Transit Investment Direction and Plan*

*Bus and Support System*

- **Manage Performance on the Transit System:**
  - Appendix G: Regional Transit Design Guidelines and Performance Standards
  - Route Performance Analysis – Evaluate regular route service to ensure it is **efficient** and **cost-effective**
  - Provide service alternatives to regular route bus in lower demand areas
How Will We Get There?

*Transit Investment Direction and Plan*

*Bus and Support System*

- **Identify Opportunities to Expand Service:**
  - Service Improvement Plans
  - Transit providers responsible for coordinating input on service improvement opportunities
  - Regional Service Improvement Plan will prioritize short-term expansion opportunities with *investment factors:*
    - Cost-effectiveness
    - Access to destinations and people served
    - Equity
    - Peak-period transportation benefits
How Will We Get There?

*Transit Investment Direction and Plan*

*Bus and Support System*

$ = \text{People} \quad \text{Tweaking Services and Harvesting and Reinvesting Inefficiencies}
How Will We Get There?

Transit Investment Direction and Plan

Bus and Support System

• Strategically Expand and Modernize Facilities:
  - Regional solicitation funding available: ≈$21 M/year + inflation
  - Modernize
    • Improved amenities at bus stops
    • Improved maintenance and care of facilities
    • Upgraded transit centers
    • Technology improvements
  - Expand
    • Expansion of bus shelters
    • New or expanded capacity at transit centers or park-and-rides
    • Expanded garage or maintenance facilities
How Will We Get There?

Transit Investment Direction and Plan

Bus and Support System

Existing and Potential High-Frequency Routes

2040 Transit Advantages
How Will We Get There?

Transit Investment Direction and Plan

Bus and Support System

Maintain and Operate Existing System*

Expand and Modernize System

2015-2040

$18.5 Billion

$0.6 Billion

(Through Regional Solicitation)

*Includes Metro Mobility
How Will We Get There?

Transit Investment Direction and Plan

Transitways

- Transitways are investments in existing and potential high-demand transit corridors:
  - Bus Rapid Transit (BRT)
    - Dedicated BRT
    - Highway BRT
    - Arterial BRT
  - Light Rail
  - Commuter Rail
  - Potential future modes (Streetcar)
How Will We Get There?

Transit Investment Direction and Plan

Transitways

• Set Expectations for Regional Transitway Priorities
  – Technical Factors:
    • Ridership
    • Access to Jobs and Activity
    • Cost-Effectiveness
    • Existing Land Use
    • Future Land Use and Development
    • Equity
    • Environment
  – Policy Factors:
    • Regional Balance
    • Funding Viability
    • Community Commitment
    • Risk Assessment and Technical Readiness
Current Revenue Scenario
Transitways (Funded Projects In the Plan)
How Will We Get There?

Transit Investment Direction and Plan

Transitways

• Gold Line Dedicated BRT (new)
• Highway BRT
  – Red Line (existing)
  – Orange Line (new)
• Arterial BRT
  – Snelling Ave (new/now existing)
  – Penn Ave (new)
  – Chicago-Emerson-Fremont (new)
• Light Rail
  – Blue Line (existing) and Blue Line Extension (new)
  – Green Line (existing) and Green Line Extension (new)
• Northstar Commuter Rail (existing)

CTIB Priority Corridors under study:
Riverview
Red Rock
Robert Street
How Will We Get There?

Transit Investment Direction and Plan

Transitways

• **Other Transitway Considerations:**
  – Current plan has aggressive assumptions for competitive federal funding
  – There are opportunities to do more, faster:
    • Lower-cost Arterial BRT
    • Modern Streetcar local funding (City of Minneapolis)
  – A number of corridors under study, but uncertain funding moving forward
How Will We Get There?

Transit Investment Direction and Plan

Transitways

Maintain and Operate Existing System

Build and Operate Expanded System

2015-2040

$3.6 Billion

2015-2040

$8.5 Billion

*Includes $2.5 B undesignated CTIB revenue
How Will We Get There?

Transit Investment Direction and Plan

Bus and Transitways

• Increased Revenue Scenario
  - Originated with Governor’s Transportation Finance Advisory Committee (TFAC) analysis in 2012
  - Identified a need for transit system that would keep the region economically competitive

Bus Expansion

+$2-3 Billion

Transitway Expansion

+$5-6 Billion
Increased Revenue Scenario

- 1% annual bus expansion
- Additional and accelerated transitway investments

- Transitways can move from Increased Revenue Scenario to Current Revenue Scenario with viable funding plan
How Will We Get There?

Land Use and Local Planning

- Residential density requirements supporting transit investment stewardship
  - Depends on community designation level that relates to “stage of development” from Thrive MSP 2040
  - Minimums
    - Rail/Dedicated BRT stations: 20-50 units per acre
    - Highway BRT stations: 10-25 units per acre
    - Arterial BRT: 15 units per acre
  - Targets
    - Rail/Dedicated ROW stations: 40-150+ units per acre
    - Other BRT stations: 20-75+ units per acre
    - Arterial BRT: 15-60+ units per acre
  - Activity guideline of 7,000 people, jobs, or students per station
What Changes are Expected in the Plan?
What are the Changes Expected in this Plan?

• Counties Transit Improvement Board Dissolution
  – 5-county 1/4 cent = $120 M/year
  – Major current source of capital and operating funding for existing and future transitways

• Counties intend to implement individual sales taxes (1/4-1/2 cent) for transportation, all modes eligible

• Expected to replace unreliable state share of transitway capital

• May allow for additional projects to be funded
What are the Changes Expected in this Plan?

*Project Updates*

- METRO Gold Line
- Revised LPA alignment adopted in early 2017
- Updated costs
What are the Changes Expected in this Plan?

*Project Updates*

- METRO Green Line Extension (Light Rail): Updated costs and station locations
- METRO Blue Line Extension (Light Rail): Updated costs
- METRO Red Line Future Stages (Highway BRT): Updated implementation plan
- METRO Orange Line (Highway BRT): Updated alignment and stations
- C Line/Penn Ave (Arterial BRT): Updated alignment and station plan
What are the Changes Expected in this Plan?

_Corridor Study Updates_

- **Nicollet-Central**: Environmental work
- **Red Rock**: Implementation Plan updates
- **West Broadway**: LPA recommendation
- **Rush Line**: LPA recommendation
- **Riverview**: LPA recommendation
- **Highway 169**: Transit recommendations
What Changes are Expected?

**Arterial Bus Rapid Transit Discussion**

- A Line opening and success story
- Progress on multiple corridors (Penn Ave, Chicago-Emerson-Fremont, Lake St, Hennepin Ave)
- Additional funding secured through Regional Solicitation, other sources
- Incremental phased build-out possible
  - Stations
  - Buses
  - Service
  - Other amenities
What Changes are Expected?

Arterial Bus Rapid Transit Discussion
What Changes are Expected?

Arterial Bus Rapid Transit Discussion

• Projects open or with (mostly) full funding plan:
  – Snelling Ave
  – Penn Ave

• Projects with partial funding for elements of Arterial BRT that can be done independently:
  – Chicago-Emerson-Fremont Ave
  – Lake St
  – Hennepin Ave
What Changes are Expected?  
*Work Program Items*

**Changes Expected:**
- Park-and-Ride Plan
  - 2040 demographic updates
  - Model refinement
- Bus Stop Facility Guidelines

**Minimal Changes Expected:**
- Setting Transitway Priorities
- Streetcar Policy
- Regional Transitway Guidelines
- Regional Service Improvement Plan
What Changes are Expected?

Other Items

Changes Expected:

• Shared Use/First Last Mile
• Role of Regional Solicitation Funding
• Asset Management/State of Good Repair Federal Requirements
## What’s Next?  
*Future Meeting Schedule*

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<th>Month</th>
<th>Topic(s)</th>
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<td>June</td>
<td>Transit</td>
</tr>
<tr>
<td>July</td>
<td>Highway and Freight</td>
</tr>
<tr>
<td>August</td>
<td>Bike/Ped and Other</td>
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<tr>
<td>September</td>
<td>Aviation and Other</td>
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