Arterial Bus
Rapid Transit
System Policy
Oversight Committee

May 31, 2013
Today’s meeting

• Project Overview
  – Arterial BRT Concept Background & Meeting Purpose
  – First Corridor (Snelling) Plan, Funding & Schedule
  – Stakeholder Engagement & Public Involvement
  – Arterial BRT System Branding

• Discussion: Brand Elements

• Discussion: SPOC Interest Areas

• Next Meeting
Arterial Bus Rapid Transit

CONCEPT BACKGROUND
12 corridors studied for arterial BRT

- Arterial Transitway Corridors Study completed April 2012
- Developed arterial BRT concept
- Prioritized corridors for near-term implementation
  - Snelling (2015)
  - West 7th (2016)
### Arterial Transitway Corridors Study Outcomes

<table>
<thead>
<tr>
<th>Corridor</th>
<th>Technical Score</th>
<th>Readiness</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago-Fremont</td>
<td>86.3</td>
<td>No</td>
<td>Resolve Dwtn Mpls Issue and Implement in Near Term</td>
</tr>
<tr>
<td>Lake</td>
<td>81.4</td>
<td>Yes</td>
<td>Implement in Near Term</td>
</tr>
<tr>
<td>Snelling</td>
<td>75.3</td>
<td>No</td>
<td>Hold until conclusion of AA study</td>
</tr>
<tr>
<td>Central</td>
<td>74.2</td>
<td>Yes</td>
<td>Hold until conclusion of AA study</td>
</tr>
<tr>
<td>Hennepin</td>
<td>72.5</td>
<td>No</td>
<td>Hold and develop corridor bus plans</td>
</tr>
<tr>
<td>Nicollet</td>
<td>72.1</td>
<td>Yes</td>
<td>Hold until conclusion of AA study</td>
</tr>
<tr>
<td>Broadway</td>
<td>69.3</td>
<td>No</td>
<td>Hold and develop transit market</td>
</tr>
<tr>
<td>Penn</td>
<td>67.1</td>
<td>Yes</td>
<td>Implement in Near Term</td>
</tr>
<tr>
<td>American</td>
<td>64.7</td>
<td>No</td>
<td>Hold until conclusion of AA study</td>
</tr>
<tr>
<td>West 7th</td>
<td>61.4</td>
<td>No</td>
<td>Proceed with further study</td>
</tr>
<tr>
<td>East 7th</td>
<td>55.8</td>
<td>No</td>
<td>Hold until conclusion of AA study</td>
</tr>
<tr>
<td>Robert</td>
<td>48.9</td>
<td>Yes</td>
<td>Resolve Dwtn Mpls Issue and Implement in Near Term</td>
</tr>
</tbody>
</table>

**TECHNICAL SCORE**

- 86.3: Chicago-Fremont
- 81.4: Lake
- 75.3: Snelling
- 74.2: Central
- 72.5: Hennepin
- 72.1: Nicollet
- 69.3: Broadway
- 67.1: Penn
- 64.7: American
- 61.4: West 7th
- 55.8: East 7th
- 48.9: Robert

**Readiness**

- **Upcoming studies for other modes?**
  - No: Chicago-Fremont, Snelling, Broadway, American, East 7th, Robert
  - Yes: Lake, Central, Hennepin, Nicollet, Penn, West 7th,Resolve Dwtn Mpls Issue and Implement in Near Term

- **Dependent on other investment?**
  - No: Chicago-Fremont, Lake, Snelling, Central, Hennepin, Nicollet, Broadway, Penn, American, East 7th, Robert
  - Yes: Hold until conclusion of AA study

- **More planning needed?**
  - Yes: Chicago-Fremont, Lake, Central, Hennepin, Nicollet, Broadway, Penn, American, East 7th, Robert
  - No: Hold until conclusion of AA study

**Recommendation**

- Resolve Dwtn Mpls Issue and Implement in Near Term
- Implement in Near Term
- Hold until conclusion of AA study
- Hold and develop corridor bus plans
- Hold until conclusion of AA study
- Hold and develop transit market
• Engage metro area policy makers on arterial BRT system decisions to be made in 2013.

• Decisions made in 2013 design process for Snelling BRT will affect future lines in:
  – 16 cities
  – 4 counties
Arterial BRT goals

Enhance **efficiency, speed, reliability, customer experience, and transit market competitiveness**

- Faster transit service with less waiting
- Identifiable, high-amenity transitway stations
● Faster service with less waiting

Limited stop service
+ More frequent service
+ Off-board fare payment
+ All-door boarding
+ Geometry changes
+ Signal timing & priority

Does NOT include:
- Dedicated lanes
- Extensive ROW acquisition
Estimated Travel Time Savings

Current Local Route

- 47-48 minutes
- 6 minutes (Red Light)
- 12 minutes (Boarding)
- 29 minutes (Moving)

- 11 buses to run service every 10 minutes

Arterial BRT

- 36 minutes
- 4 minutes (Red Light)
- 7 minutes (Boarding)
- 25 minutes (Moving)

- 9 buses to run service every 10 minutes

- 2 buses to use elsewhere
Identifiable, high-amenity transitway stations

CONCEPTUAL DESIGN
Actual station to be designed in 2013

Distinctive Branding
Station Name
Real-Time “Next Bus” Information
Ticket Machine
Shelter
Heaters & Lights
Destination Sign
Trash Receptacles
Typical Current Condition:
4 Lanes with Parking
Concept:
Farside Curb Extension Station
## Different Kinds of BRT

<table>
<thead>
<tr>
<th>Example</th>
<th>Dedicated Busway</th>
<th>Highway BRT</th>
<th>Arterial BRT</th>
<th>Local bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gateway (planned)</td>
<td>METRO Red Line</td>
<td>Snelling, etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Service mix

<table>
<thead>
<tr>
<th>Service mix</th>
<th>Dedicated Busway</th>
<th>Highway BRT</th>
<th>Arterial BRT</th>
<th>Local bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station-to-station (S2S)</td>
<td>S2S + express</td>
<td>Primarily S2S</td>
<td>Local bus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lots of express</td>
<td>Minimal local</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Runningway

<table>
<thead>
<tr>
<th>Runningway</th>
<th>Dedicated Busway</th>
<th>Highway BRT</th>
<th>Arterial BRT</th>
<th>Local bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separate, dedicated road</td>
<td>Bus shoulders and managed lanes</td>
<td>Mixed traffic, spot locations with priority</td>
<td>Mixed traffic</td>
<td></td>
</tr>
</tbody>
</table>

### Typical environment

<table>
<thead>
<tr>
<th>Typical environment</th>
<th>Dedicated Busway</th>
<th>Highway BRT</th>
<th>Arterial BRT</th>
<th>Local bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rail corridors, new ROW</td>
<td>Freeways and Expressways</td>
<td>Developed urban streets</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Estimated Ridership/line

<table>
<thead>
<tr>
<th>Estimated Ridership/line</th>
<th>Dedicated Busway</th>
<th>Highway BRT</th>
<th>Arterial BRT</th>
<th>Local bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>9,000 –17,000</td>
<td>1,000 –8,000</td>
<td>3,000 –25,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>on BRT line</td>
<td>4,000–20,000</td>
<td>100 – 15,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Cost per mile

<table>
<thead>
<tr>
<th>Cost per mile</th>
<th>Dedicated Busway</th>
<th>Highway BRT</th>
<th>Arterial BRT</th>
<th>Local bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25-$50M</td>
<td>$10-$20M</td>
<td>$2 to $6M</td>
<td>Under $1M</td>
<td></td>
</tr>
</tbody>
</table>

### Distance Between Stations

<table>
<thead>
<tr>
<th>Distance Between Stations</th>
<th>Dedicated Busway</th>
<th>Highway BRT</th>
<th>Arterial BRT</th>
<th>Local bus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1+ mile</td>
<td>1-2 miles</td>
<td>1/4 to 1/2 mile</td>
<td>1/8 mile or closer</td>
<td></td>
</tr>
</tbody>
</table>
Arterial Bus Rapid Transit

SNELLING LINE DEVELOPMENT
2013 Corridor & System Development

Snelling Corridor Development
- Traffic Study
- Corridor Outreach
- Corridor Concept Plan

System Development
- Vehicle Procurement
- Fare Collection
- Branding Development
- Technology Study

Corridor 50% Design
Environmental Documentation

Station Prototype
Station Final Design

Environmental Clearance & Full Funding

2014 Final Design

Metro Transit: a service of the Metropolitan Council
Snelling Avenue BRT

- 9.7 miles, Rosedale to 46th St Station
- 20 stations, every ½ mile
- 72% of existing customers at stations
- 97% of customers within 1 stop of a station
- 4,000 daily rides today, 8,700 daily rides by 2030 with arterial BRT
Snelling BRT Costs & Funding

• **Total Project Cost: $24.8 million**
  – 50% stations & technology
  – 25% vehicles
  – 10% transit signal priority/corridor technology
  – 15% design & soft costs

• **$14.6 million identified to date**
  – $6.0 million MnDOT Trunk Highway Bonds
  – $6.5 million Federal CMAQ, formula funds
  – $2.1 million Council funds

• **Seeking $10.2 million TIGER V grant**
## Snelling BRT Schedule

<table>
<thead>
<tr>
<th>Event</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning &amp; Pre-design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concept Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final Design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction, Installation &amp; Testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Open for Service</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAC</td>
<td>MONTHLY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAC</td>
<td>Initial commitment of 4 meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPOC</td>
<td>Initial commitment of 3-4 meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Open Houses</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Potential system build-out

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Snelling Avenue</strong></td>
<td>Advanced Planning</td>
<td>Concept Design</td>
<td>Final Design</td>
<td>Construction &amp; Testing</td>
<td>OPEN</td>
<td>Advanced Planning</td>
<td>Concept Design</td>
</tr>
<tr>
<td><strong>West 7th Street</strong></td>
<td>Advanced Planning</td>
<td>Concept Design</td>
<td>Final Design</td>
<td>Construction &amp; Testing</td>
<td>OPEN</td>
<td>Advanced Planning</td>
<td>Concept Design</td>
</tr>
<tr>
<td><strong>Penn Avenue</strong></td>
<td>Advanced Planning</td>
<td>Concept Design</td>
<td>Final Design</td>
<td>Construction &amp; Testing</td>
<td>OPEN</td>
<td>Advanced Planning</td>
<td>Concept Design</td>
</tr>
<tr>
<td><strong>Chicago-Fremont</strong></td>
<td>Advanced Planning</td>
<td>Concept Design</td>
<td>Final Design</td>
<td>Construction &amp; Testing</td>
<td>OPEN</td>
<td>Advanced Planning</td>
<td>Concept Design</td>
</tr>
<tr>
<td><strong>Fifth Line</strong></td>
<td>Advanced Planning</td>
<td>Concept Design</td>
<td>Final Design</td>
<td>Construction &amp; Testing</td>
<td>OPEN</td>
<td>Advanced Planning</td>
<td>Concept Design</td>
</tr>
<tr>
<td><strong>Sixth Line</strong></td>
<td>Advanced Planning</td>
<td>Concept Design</td>
<td>Final Design</td>
<td>Construction &amp; Testing</td>
<td>OPEN</td>
<td>Advanced Planning</td>
<td>Concept Design</td>
</tr>
<tr>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>
Initial corridors anticipated

Potential Years of Opening

- 2015: Snelling Avenue
- 2016: West 7th Street
- 2017: Penn Avenue
- 2018: Chicago-Fremont
Arterial Bus Rapid Transit

BRAND ELEMENTS
### Regional Brand Position

<table>
<thead>
<tr>
<th>Service Type</th>
<th>Name</th>
<th>Logo</th>
</tr>
</thead>
<tbody>
<tr>
<td>LRT &amp; Hwy BRT</td>
<td>Metro</td>
<td><img src="image" alt="Metro Logo" /></td>
</tr>
<tr>
<td>Local, Limited, Express Bus</td>
<td>Metro Transit</td>
<td><img src="image" alt="Metro Transit Logo" /></td>
</tr>
<tr>
<td>Arterial BRT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commuter Rail</td>
<td>Metro Transit Northstar</td>
<td><img src="image" alt="Metro Transit Northstar Logo" /></td>
</tr>
<tr>
<td>Regional ADA</td>
<td>Metro Mobility</td>
<td><img src="image" alt="Metro Mobility Logo" /></td>
</tr>
<tr>
<td>Regional Dial-a-Ride</td>
<td>Transit Link</td>
<td><img src="image" alt="Transit Link Logo" /></td>
</tr>
<tr>
<td>Regional Vanpool</td>
<td>Metro Vanpool</td>
<td><img src="image" alt="Metro Vanpool Logo" /></td>
</tr>
</tbody>
</table>
Vehicle Design Recommendation
Family of Vehicles

METRO (Highway BRT)

Arterial BRT (will use mix of 40’ and 60’ buses)

Metro Transit Standard Bus
<table>
<thead>
<tr>
<th>Approach</th>
<th>Example</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color-coded lines</td>
<td>Green Line, Blue Line, etc.</td>
<td>Used by METRO System</td>
</tr>
<tr>
<td>Append letter to existing route number</td>
<td>Oakland – AC Transit 1R (Rapid)</td>
<td>Terminal letters already used in bus system; lines will not always replicate current routes</td>
</tr>
<tr>
<td>Corridor/area names</td>
<td>Hiawatha LRT</td>
<td>Confusing if multiple streets or areas served</td>
</tr>
<tr>
<td></td>
<td><em>Snelling/Ford</em></td>
<td></td>
</tr>
<tr>
<td></td>
<td><em>Chicago/Fremont-Emerson</em></td>
<td></td>
</tr>
<tr>
<td>Unique route number series</td>
<td>50, 51, 52, etc.</td>
<td>Weaker brand connection if standalone identifier</td>
</tr>
<tr>
<td></td>
<td>911, 912, 913, etc.</td>
<td></td>
</tr>
<tr>
<td>Line letters</td>
<td>A Line, B Line, C Line, etc.</td>
<td>Recommended</td>
</tr>
</tbody>
</table>

Metro Transit
a service of the Metropolitan Council
Station Names

• Recommendation: [street] & [intersecting street]
  – Snelling Avenue & Randolph Avenue
  – West 7th Street & Randolph Avenue
  – Snelling Avenue & Minnehaha Avenue
  – 46th Street & Minnehaha Avenue

• Use existing transit center / station identifications
  – Rosedale Transit Center
  – 46th Street Station

• Consistent with bus stop identification today

• Allows for multiple uses of common names throughout system
190 initial names

6 were tested in a public survey

4 underwent market testing

2 front-runners emerged

Rapid

Connect

Conveys faster brand promise

Does not convey faster brand promise

Concerns about confusion with METRO Red Line

Further research of 6 additional names conveying speed

Go
Dash
Wave
Zip
Zoom

Metro Transit Direct
Recommended Brand Elements

System Brand Name

Vehicle Design

Line Identifiers

Station Names

A Line, B Line, C Line

Snelling Avenue & Randolph Avenue
# Project Decision Making

Decided through 2013 design process for Snelling, System components applied to all corridors

<table>
<thead>
<tr>
<th>System name</th>
<th>Station locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line names</td>
<td>Station configurations</td>
</tr>
<tr>
<td>Station names</td>
<td>Station sizing</td>
</tr>
<tr>
<td>Vehicle design (paint scheme)</td>
<td>Service plan</td>
</tr>
<tr>
<td>Typical station design</td>
<td>Transit Signal Priority plans</td>
</tr>
<tr>
<td>Station “core” technology</td>
<td>Integration with streetscape</td>
</tr>
<tr>
<td>Station “kit of parts”</td>
<td>Vehicle size</td>
</tr>
<tr>
<td></td>
<td>Technology improvements over time</td>
</tr>
</tbody>
</table>
• Next SPOC Meeting
  – Focus: Preliminary Station Design
  – Fall 2013
• Meeting to be scheduled once design contract is underway, later this summer
Ongoing Steps

• Project Committees
  – **May 13** Snelling BRT TAC, meeting monthly
  – **May 15** Snelling BRT CAC, meeting quarterly
  – **May 31** System Policy Oversight Committee (SPOC)

• Transportation Committee
  – **June/July** business item to adopt brand elements

• Incorporate branding into project communication
  – Snelling BRT → A Line planning & design

• Public Outreach
  – **July 9, 15, 17** open houses

• Station & corridor design beginning **summer 2013**

• Second line planning beginning **summer 2013**
For more information:

metrotransit.org/snelling-brt

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BRT/Small Starts Project Office

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