West Broadway Transit Study
Community Advisory Committee
September 17, 2015
Agenda

• Introductions
• Community Engagement
  – Summer Outreach
  – Fall Outreach
• Technical Analysis
  – Process Update
  – Alternatives Review
  – Economic Development
  – Key evaluation factors
• Small Group Discussion
• Next Steps
COMMUNITY ENGAGEMENT
Phase 1 Activities in June-August (20 events)

- Bus Stops (7)
- North Loop Whole Foods (2)
- North Memorial Hospital
- Downtown Robbinsdale
- FLOW
- Juneteenth (Metro Transit)
- Whiz Bang Days
- Cedar Lake Trail
- Farmer’s Market
- National Night Out
- Open Streets (2 - Metro Transit)
- Urban League Family Day
Engagement to Date

• Engaged 450-500 people (plus 3 Metro Transit events)

• Transit ridership (7 bus stops)
  – Frequently – 76%
  – Sometimes – 14%
  – Rarely – 10%
Assets in Corridor

Robbinsdale
• Downtown Robbinsdale “small town” character
• Restaurants (both Robbinsdale and West Broadway)
• Connections to downtown Minneapolis

West Broadway
• Businesses, stores and shopping
• Food and food stores

North Loop
• Close to downtown
• Bike/walk access
Priorities for the Future Development

Robbinsdale
• Neighborhood scale development
• Vibrant downtown

West Broadway
• Vibrancy
  – More restaurants and places with healthy food
  – More businesses (local/independently owned)
  – Physical environment improvements (buildings, trees/plants)
  – Activities for families and kids
• Peace, less violence

North Loop
• Economic development (along West Broadway)
Phase II Activities Planned for September - October

• 15 Events Planned:
  – Bus stops (8)
  – Farmers Market (4)
  – Open Streets (1)
  – Mosque Day of Dignity
  – North Memorial Vendor Fair

• Focus of Engagement
  – Importance of Evaluation Criteria
  – Importance of Transit Improvements
Public Open House #2

November 3, 6:00-8:00 p.m.
Capri Theatre
Red Carpet Event

Showcase New Video
Provide Results of Evaluation
TECHNICAL ANALYSIS
<table>
<thead>
<tr>
<th></th>
<th>Streetcar</th>
<th>Arterial Bus Rapid Transit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Runningway</td>
<td>Typically operates in mixed-traffic lanes, but can also be in streetcar-exclusive right-of-way</td>
<td>Enhanced bus vehicles operate in mixed traffic</td>
</tr>
<tr>
<td>Station Spacing</td>
<td>Station located every ¼ to ½ mile</td>
<td>Stations can be located every ¼ to ½ mile</td>
</tr>
<tr>
<td>Station Amenities</td>
<td>Stations can range from basic stops with minimal passenger amenities to LRT-like stations</td>
<td>Stations can range from basic stops with minimal passenger amenities to LRT like stations</td>
</tr>
<tr>
<td>Vehicle Type</td>
<td>Electrically powered vehicles with overhead wires. Some vehicles are testing on-board batteries for short distances</td>
<td>Diesel or diesel-electric hybrid vehicles. Some vehicles testing battery electric-only operation.</td>
</tr>
<tr>
<td>Passenger Capacity</td>
<td>Between 115 and 160 passengers per vehicle. Unlike LRT, vehicles operate as single units.</td>
<td>Between 60 and 105 passengers per vehicle.</td>
</tr>
<tr>
<td>Example Operating Locations</td>
<td>Portland, Seattle, Toronto</td>
<td>Kansas City, Oakland, Seattle</td>
</tr>
<tr>
<td>Locally Planned Projects</td>
<td>Nicollet-Central Streetcar</td>
<td>A-Line (Snelling Avenue), C-Line (Penn Avenue)</td>
</tr>
</tbody>
</table>
Streetcar from Nicollet Mall to North Memorial Hospital

- 19 stations
- 4.9 miles long
- 33 minute travel time
Arterial BRT from downtown to Robbinsdale Station

- 23 stations
- 7 miles long
- 44 minute travel time
## Service Plan – Route Frequencies (minutes)

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Route 14</th>
<th>Streetcar</th>
<th>Arterial BRT</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Peak</td>
<td>Midday</td>
<td>Peak</td>
</tr>
<tr>
<td>Existing</td>
<td>20</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>Streetcar</td>
<td>30</td>
<td>30</td>
<td>15</td>
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<tr>
<td>Arterial BRT</td>
<td>60</td>
<td>60</td>
<td>15</td>
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</table>
# Service Plan – Trips per hour

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Route 14</th>
<th></th>
<th>Streetcar</th>
<th></th>
<th>Arterial BRT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Peak</td>
<td>Midday</td>
<td>Peak</td>
<td>Midday</td>
<td>Peak</td>
<td>Midday</td>
</tr>
<tr>
<td>Existing</td>
<td>3</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streetcar</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arterial BRT</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
## Daily Ridership (2040)

<table>
<thead>
<tr>
<th></th>
<th>Local Bus (Existing-2014)</th>
<th>(No Build)</th>
<th>Streetcar</th>
<th>Arterial BRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Station-to-Station</td>
<td></td>
<td></td>
<td>3,900</td>
<td>4,800</td>
</tr>
<tr>
<td>Local Bus</td>
<td>8,410*</td>
<td>11,300*</td>
<td>9,600</td>
<td>8,900</td>
</tr>
</tbody>
</table>

*Includes ridership on Routes 7, 30, 32 and northern portion of 14
Daily Ridership Summary

- Ridership balanced between peak and off-peak and work and non-work
- 30% of the 2040 ridership is dependent on development
- 40% of the 2040 daily ridership is associated with zero car households
## Cost Estimates

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Capital</th>
<th>Operating (annual)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streetcar</td>
<td>$229*</td>
<td>$9.6</td>
</tr>
<tr>
<td>Arterial BRT</td>
<td>$40</td>
<td>$5.5</td>
</tr>
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</table>

(figures in millions)

* Cost increases to $256 million when Nicollet Mall Streetcar stations are included
ECONOMIC DEVELOPMENT
IMPACTS OF ALTERNATIVES
Analyzed the projected impact of enhanced bus versus streetcar service with regards to:

- Real estate value appreciation
- Quantity and timing of new real estate development
- Form of new development
- Employment growth
To assess the impacts of transit investment, we:

- Analyzed corridor real estate market conditions
- Assessed local developer perceptions of the corridor and transit investment
- Analyzed actual real estate impacts of existing transit systems
- Synthesized findings to build model of streetcar and enhanced bus impacts
Literature review and case study findings: *New transit-oriented development*

- Transit investment is most likely to catalyze development when coordinated with **supportive public policy** and when located in corridors with **favorable market conditions**.

- Generally, fixed rail is more impactful than BRT, but **market strength** and **public interventions** are the strongest predictors of development.

- In weak markets, institutional or **philanthropic investment** can catalyze growth.
Literature review and case study findings: *Value premiums*

- **Light rail systems and streetcars** have generated significant value premiums for multifamily and commercial uses.

- **BRT** with dedicated lanes can create value premiums comparable to fixed rail premiums. However, BRT without a dedicated lane will be less impactful.
Developer interview findings

• Developers generally believe both streetcar and BRT would have a positive impact, but 6 out of 9 developers thought that streetcar would be more transformative.

• The permanence of the infrastructure associated with streetcar as well as their stronger brand is a driving factor for developers.

• Transit investment would affect each submarket differently, with West Broadway standing to benefit. However, transit is not a “silver bullet.”
Baseline and alternative development scenarios for the corridor were established

1) Project total corridor land-use capacity for redevelopment

2) Estimate portion of capacity built-out in baseline scenario over 25 years

3) Estimate additional build-out of corridor given BRT or streetcar investment

4) Determine present value of real estate value created over 25 years in baseline vs. BRT vs. streetcar scenario
Streetcar is expected to drive more residential development than BRT

<table>
<thead>
<tr>
<th>Residential Units</th>
<th>North Loop</th>
<th>West Broadway</th>
<th>Central Robbinsdale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>8,050</td>
<td>8,800</td>
<td>9,300</td>
</tr>
<tr>
<td>BRT</td>
<td>8,800</td>
<td>8,800</td>
<td>9,300</td>
</tr>
<tr>
<td>Streetcar</td>
<td>9,300</td>
<td>9,300</td>
<td>9,300</td>
</tr>
</tbody>
</table>

Corridor Residential Build-Out Achieved

- Baseline: 76%
- BRT: 82%
- Streetcar: 88%

Corridor build out is over 25 years
Streetcar is also expected to drive more office development than BRT

Office SF

Corridor Office Build-Out Achieved

Corridor build out is over 25 years
Retail build-out is anticipated to coincide with residential build-out

**Retail SF**

- Baseline: 144k
- BRT: 155k
- Streetcar: 163k

**Retail Build-Out Achieved**

- Baseline: 57%
- BRT: 61%
- Streetcar: 63%

*Corridor build out is over 25 years*
Projected development impacts: Value and Jobs

• Incremental Real Estate Value Generated*:
  • BRT: $280-$390M
  • Streetcar: $480-$640M

• Incremental Jobs Supported:
  • BRT: 1,400
  • Streetcar: 2,600

*Applies discount rate of 3% to 7% to future incremental real estate value
EVALUATION MEASURES
Evaluation Measures

• Tie back to goals and objectives identified in the Problem Statement as adopted by PAC on April 8, 2015
• Are a mix of qualitative and quantitative information
• Used to differentiate amongst alternatives

– See Evaluation Measure handout
Evaluation Measures

• Little difference in:
  – Demographic factors
  – Service improvements (span, frequencies, station amenities)
Differentiating Evaluation Measures

- New commercial development/job creation
- Underused land available for TOD
- Connections to existing and planned transitways
- Potential business impacts
- Potential impacts to historic and cultural resources, and parkland
- Potential right-of-way impacts
- Capital costs
- Ridership
<table>
<thead>
<tr>
<th>Criteria</th>
<th>Streetcar Alternative</th>
<th>Arterial BRT Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal 1: Catalyze and support housing and economic development along the corridor</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunities for new commercial development/job creation</td>
<td>★★★★</td>
<td>★</td>
</tr>
<tr>
<td>Foster transit-oriented development</td>
<td>★★★★</td>
<td>★</td>
</tr>
<tr>
<td><strong>Goal 2: Improve local and regional mobility with improved access to jobs and activities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connections to existing &amp; planned transitways</td>
<td>★★★★</td>
<td>★</td>
</tr>
<tr>
<td>Forecasted change in employment</td>
<td>★★</td>
<td>★★</td>
</tr>
<tr>
<td>Number of jobs within a 45 minute transit ride</td>
<td>★★★</td>
<td>★</td>
</tr>
<tr>
<td><strong>Goal 3: Address equity issues in the West Broadway Corridor to ensure that corridor residents as well as patrons of area businesses and institutions have access to opportunities for success, prosperity, and quality of life</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential business impacts</td>
<td>★</td>
<td>★★★</td>
</tr>
<tr>
<td>Potential impacts to business revenue</td>
<td>★★</td>
<td>★</td>
</tr>
<tr>
<td>Employment and population densities served</td>
<td>★★★★</td>
<td>★</td>
</tr>
<tr>
<td><strong>Goal 4: Build upon the vibrancy and diversity of the corridor by supporting healthy, active communities and the environment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential impacts to historic and cultural resources</td>
<td>★</td>
<td>★★★</td>
</tr>
<tr>
<td>Potential impacts to park land</td>
<td>★★</td>
<td>★</td>
</tr>
<tr>
<td>Potential right-of-way impacts</td>
<td>★★★</td>
<td>★</td>
</tr>
<tr>
<td><strong>Goal 5: Improve upon existing transit service in the corridor</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital cost of the Project</td>
<td>★★</td>
<td>★</td>
</tr>
<tr>
<td><strong>Goal 6: Increase transit use among corridor residents, employees, and visitors</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Trips on West Broadway and connecting transit routes</td>
<td>★★</td>
<td>★</td>
</tr>
<tr>
<td>Daily Trips by new transit riders</td>
<td>★</td>
<td>★★</td>
</tr>
<tr>
<td>Daily Trips by transit-dependent riders</td>
<td>★</td>
<td>★★</td>
</tr>
</tbody>
</table>
STUDY NEXT STEPS
Study Next Steps

• Fall community engagement
  – November 3, 2015 Open House
  – CAC meetings on October 20, 2015 and November 30, 2015

• Recommend locally preferred alternative at December 11th PAC meeting