Business Advisory Committee

July 7, 2015
Today’s Topics

• Outreach Update
• TI #1 and 2: Target Field Station Connection to I-94: Recommendation
• 85th Station Configuration
• 93rd Station Configuration
• DEIS Scope and Cost Estimate Update
Outreach Update
June 1 Community Advisory Committee
June 2 Business Advisory Committee
June 4 Minneapolis/Golden Valley Open House
Station area planning update
Community Advisory Committee – July 6, 2015
Business Advisory Committee – July 7, 2015
What is station area planning?
Station area planning

“Sets the table” for the look, feel and fit of the station into the community

AND …

Results in recommendations for local communities and agencies to consider
Station area planning is...

Community-based planning that considers:

• ½ mile area surrounding proposed LRT station
Transit supportive plans that consider:

- Land use
- Types and character of buildings
- Access and circulation (bike, walk, car, bus)
- Public spaces, including streets and trails
Station area planning and health equity

Strive to improve community health and health equity by planning for:

Housing, transportation, jobs, parks, and land uses that are safe, accessible and affordable to all.
Station area planning

- Local effort with Hennepin County and partners
- 11 stations total
  - Minneapolis – 2
  - Golden Valley/Minneapolis – 2
  - Brooklyn Park – 5
  - Robbinsdale – 1
  - Crystal – 1
Technical Issues Update
Technical Issues
Technical Issue #1 and #2: Target Field Station Connection to I-94 Interchange: Recommendation
Technical Issue #1: Target Field Station Connection Background

- Plan view from Target Field Station through I-94 Interchange
Technical Issue #1: Target Field Station Connection

- Key Issues:
  - Connection requires coordination with SWLRT
  - 7th Street intersection has a unique geometry
  - Intersection is challenging for safe pedestrian and bike access
Technical Issue #1: Target Field Station Connection - Existing Configuration
Technical Issue #1: Target Field Station
SWLRT Connection
Technical Issue #1: Target Field Station SWLRT and BLRT Connection
Technical Issue #1: Target Field Station
Connection viewed through 7th St. Intersection
Technical Issue #1: 7th St and Olson Memorial Highway Intersection

- Key movements are Olson Memorial Highway EB right-turn in the AM and 7th Street NB left-turn in the PM
- Existing signal operations have 2-stage pedestrian crossings
- With recommended lane geometry, LRT will operate on its own phase
- EB right-turn will be allowed to be green with LRT phase
- All other phases will be red
- Pedestrian crossings are proposed to be 1-stage
- Intersection is expected to have acceptable operations in 2040 with recommended geometric changes and the addition of LRT
Technical Issue #1: 7th St and Olson Memorial Highway Intersection
Technical Issue #1: 7th St and Olson Memorial Highway Intersection

- 7th Street design to include:
  - 7th Street intersection design as proposed in presentation
  - BLRT crossing east of 7th Street to center median
  - Center running LRT on TH55/Olson Memorial Highway
Technical Issue #2: I-94 Interchange

- Key Issues:
  - LRT center running on existing bridge
  - Bridge requires structural reinforcement under LRT guideway
  - Bridge left intact outside of guideway
  - New signals systems installed at intersections
Technical Issue #2: I-94 Interchange
Technical Issue #2: I-94 Interchange

• Cross section of existing bridge
Technical Issue #2: I-94 Interchange

- Cross section of proposed improvements (removal)

![Diagram of proposed improvements for I-94 Interchange](image-url)
Technical Issue #2: I-94 Interchange

• Cross section of proposed improvements
Technical Issue #2: I-94 Interchange Recommendation

- Center running LRT on existing I-94 bridge
- Continue coordination with the MnDOT and City of Minneapolis on final design of interchange
85th Station Configuration
85th Station from DEIS
85th Station Configuration

- Issues to be resolved:
  - Platform configuration
  - Pedestrian access
  - Bus stop locations
  - Passenger drop off
85th Station Configuration

• Platform configuration
  - Changed from split side platform to center platform
• Pedestrian access from 85th Ave and from pedestrian crossing at southern end of station platform
• Bus stops on West Broadway and on 85th Ave
• Passenger drop off
  - Continue to analyze in conjunction with City
85th Station Configuration
93rd Station Configuration
93rd Station from DEIS
93rd Station Configuration

• Issues to be resolved:
  • Track layout and platform location
    o Private development on DEIS park and ride location
      ų Track continuing on West Broadway
      ų Modified station platform location
  • Pedestrian access
  • Bus stop locations
  • Passenger drop off without park and ride
93rd Station Configuration

- Track layout and platform location
  - Track remains on West Broadway
  - Center platform on south side of 93rd
- Pedestrian access from 93rd and from pedestrian crossing at southern end of station platform near 92nd Ave
- Bus stops on West Broadway and on 93rd Ave
- Passenger drop off
  - Continue to analyze in conjunction with City
93rd Station Configuration
Overview of DEIS Scope and Cost Estimate
Cost Uncertainty By Project Phase

- **DEIS**: 1% Design Complete, 15% Cost Uncertainty
- **Municipal Consent**: 15% Design Complete, 30% Cost Uncertainty
- **Project Development**: 30% Design Complete, 60% Cost Uncertainty
- **Engineering**: 60% Design Complete, 100% Cost Uncertainty
- **Construction**: 100% Design Complete, 100% Cost Uncertainty
Cost Estimate vs. Budget

• Cost Estimate
  - Preliminary cost of project based on DEIS scope, minimal engineering, and initial risk identification
  - As level of design increases and risks are further defined the cost estimate is updated and refined
  - Includes soft costs (engineering, project office, etc.), right-of-way, construction (YOE$), vehicles, and contingency

• Project Budget
  - Cost of the project based on:
    - Scope - revised and approved
    - Risk - identified and accounted for
    - Contingency – unknown unknowns
  - Prepared for FTA New Starts application into Engineering Phase (anticipated June 2016)
# Project Delivery Process

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<th>DEIS</th>
<th>Municipal Consent</th>
<th>Project Development</th>
<th>Engineering</th>
<th>Construction Bid Packages</th>
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<td>% Design</td>
<td>1%</td>
<td>15%</td>
<td>30%</td>
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# Capital Cost Overview: DEIS Assumptions

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<td><strong>DEIS Cost Estimate</strong></td>
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<td><strong>Total Project Contingency</strong></td>
<td>34%</td>
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<td><strong>Escalation Factor</strong></td>
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<td><strong>Base Year Estimate</strong></td>
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<td><strong>Forecast Year</strong></td>
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<td>(mid-point of construction)</td>
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# Contingency and Risk

- Contingency is budget set aside to account for project risks

## Requirements
- Xcel Transmission Towers
- BNSF Negotiations
- Municipal Consent

## Design
- Floodplains
- Poor Soils
- Wetlands

## Market
- Construction Bids
- Right-of-Way
- Finance Costs
- Schedule Delay
- Light Rail Vehicles

## Construction
- Unforeseen Conditions
- Contaminated Soils
Cost Contingency Targets

Contingency

- BLRT Cost Contingency

DEIS, Project Development, Entry into Engineering, Engineering, Construction Bids, Mid Construction, End Construction/Rev Ops

Cost Contingency Targets
Guideway and Track: Included in DEIS Cost Estimate

• Ballasted track

• Guideway structures
  – TH 610 LRT bridge (Brooklyn Park)
  – TH 100 LRT bridge (Robbinsdale)
  – TH 100 BNSF bridge (Robbinsdale)
  – LRT bridge over existing CP Rail Line (Crystal)
  – I-94 bridge modifications
  – HERC LRT bridge (Minneapolis)

• Soil mitigation costs: at exploration level
Guideway and Track: Not Included in DEIS Cost Estimate

• Embedded track
• Grade separation at intersections
  ß 42nd Ave
  ß 73rd Ave
• Corridor protection: BNSF

Embedded track
Stations

• Included in DEIS cost estimate:
  β 10 stations
  β 1 elevator at Golden Valley Rd Station

• Not included in DEIS cost estimate:
  β Plymouth Ave Station that requires vertical circulation and bridge replacement
  β Pedestrian Overpass at 63\textsuperscript{rd} Ave Station
Support Facilities

- Included in DEIS cost estimate:
  - Operations and Maintenance Facility (OMF) for routine maintenance
  - Storage space for 26 vehicles

- Not included in DEIS cost estimate:
  - OMF site roadway realignment
  - Space and equipment for major repairs
Sitework and Special Conditions: Included in DEIS Cost Estimate

• Roadway bridge reconstruction
  β TH 55

• Roadway bridge minor modifications
  β 36th Ave
  β Golden Valley Rd
  β Theodore Wirth Pkwy
  β Plymouth Ave

• Partial reconstruction of Olson Memorial Highway

• Reconstruction of all at-grade crossings
Sitework and Special Conditions: Included in DEIS Cost Estimate (cont.)

• Park-and-Ride sites
  • 93rd Ave(structure)/Oak Grove Parkway (surface): 800 stalls
  • 63rd Ave: 725 stalls
    565 existing
    160 additional stalls with a 3rd level to existing facility
• Robbinsdale: 500 structured stalls
• Xcel Energy Transmission relocation of 14 towers
Sitework and Special Conditions: Not Included in DEIS Cost Estimate

• Park and Ride
  ⚫ Golden Valley Rd Station
  ⚫ Bass Lake Rd Station

• Roadway reconstruction on West Broadway
  ⚫ Candlewood to 93rd Ave (Funded by Hennepin County Capital Improvement Program)

• Full reconstruction of Olson Memorial Highway

• Grade separated pedestrian crossings
Systems

• Included in DEIS Cost Estimate:
  ● 13 Traction Power Substations
  ● Grade crossing protection gates for LRT and/or freight
    o 10 at-grade crossing
    o 12 signalized intersections

• Not Included in DEIS Cost Estimate:
  ● Gated crossings along West Broadway
Right-of-Way

• Included in DEIS Cost Estimate:
  β 17 full acquisitions
  β 56 partial acquisitions
  β Acquisition of 50-feet of BNSF right-of-way

• Not Included in DEIS Cost Estimate:
  β Acquisition for additional Park and Ride sites
Vehicles

• Included in DEIS Cost Estimate:
  β 26 vehicles
  β 15% spare ratio
  β Assumption of 2-car consists

• Not Included in DEIS Cost Estimate:
  β 3-car gap train
  β 20% spare ratio
Next Steps

• July-Aug 2015: Review DEIS cost estimate and scope with advisory committees, Met Council
• Nov 2015: Refine project scope for Municipal Consent and update cost estimate
• June 2016: Prepare project budget for request to enter engineering
Next Meeting: August 4, 2015
Website: BlueLineExt.org
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