Today’s Topics

- 90% Cost Estimate
- Olson Memorial Highway Design
- City of Crystal Update
- 2018 Look Ahead
- Co-Chair Selection
90% Cost Estimate
Cost Uncertainty By Project Phase

% Design Complete | Cost Uncertainty
---|---
DEIS 1% | 15%
Municipal Consent 15% | 30%
Project Development 30% | 60%
Engineering 60% | 100%
Construction 100% |
## Project Budget: 90% Engineering

<table>
<thead>
<tr>
<th></th>
<th>60% Estimate (IMPS Rev 02)</th>
<th>90% Estimate (IMPS Rev 03)</th>
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</thead>
<tbody>
<tr>
<td>Project Budget</td>
<td>$1.536 B</td>
<td>$1.536 B</td>
</tr>
<tr>
<td>Total Project Contingency</td>
<td>25%</td>
<td>21%</td>
</tr>
<tr>
<td>Escalation Factor</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Base Year Estimate</td>
<td>2017</td>
<td>2018</td>
</tr>
<tr>
<td>Forecast Year</td>
<td>$YOE (2018, 2019 and 2020)</td>
<td>$YOE (2019, 2020 and 2021)</td>
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## Project Budget (YOE$) (X,000)

<table>
<thead>
<tr>
<th>FTA SCC Description</th>
<th>60% Estimate</th>
<th>90% Estimate</th>
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<tbody>
<tr>
<td>10 Guideway and track</td>
<td>$292,306</td>
<td>$296,083</td>
</tr>
<tr>
<td>20 Stations, stops, terminals</td>
<td>$89,695</td>
<td>$80,445</td>
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<tr>
<td>30 Support facilities</td>
<td>$84,419</td>
<td>$89,060</td>
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<tr>
<td>40 Sitework and special conditions</td>
<td>$229,769</td>
<td>$229,357</td>
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<tr>
<td>50 Systems</td>
<td>$211,334</td>
<td>$220,650</td>
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<tr>
<td>60 ROW, land &amp; existing improvements</td>
<td>$65,927</td>
<td>$63,760</td>
</tr>
<tr>
<td>70 Vehicles</td>
<td>$131,930</td>
<td>$130,394</td>
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<tr>
<td>80 Professional services</td>
<td>$262,000</td>
<td>$260,755</td>
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<tr>
<td>90 Unallocated contingency</td>
<td>$138,794</td>
<td>$125,671</td>
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<tr>
<td>100 Finance charges</td>
<td>$30,000</td>
<td>$40,000</td>
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<tr>
<td><strong>Total Project Budget</strong></td>
<td>$1,536,175</td>
<td>$1,536,175</td>
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## Contingency: Allocated/Unallocated

<table>
<thead>
<tr>
<th>Type</th>
<th>60% Estimate (Millions)</th>
<th>90% Estimate (Millions)</th>
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<tbody>
<tr>
<td>Allocated ($YOE)</td>
<td>$158</td>
<td>$137</td>
</tr>
<tr>
<td>Unallocated ($YOE)</td>
<td>$139</td>
<td>$125</td>
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<tr>
<td>Total ($YOE)</td>
<td>$297</td>
<td>$262</td>
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90% Cost Estimate Primary Cost Drivers

• Design Refinement: $10-15M
  ▪ Bridges/retaining walls
  ▪ Brooklyn Park OMF
  ▪ Contaminated soil
  ▪ Systems integration

• Schedule Refinement: $15-20M
  ▪ Revenue service date from 2021 to 2022

• Finance Charges: $10M
  ▪ Revised local funding disbursement schedule
Contingency and Risk

- Contingency is budget set aside to account for project risks

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Design</th>
<th>Market</th>
<th>Construction</th>
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<tbody>
<tr>
<td>• BNSF Negotiations</td>
<td>• Floodplains</td>
<td>• Construction Bids</td>
<td>• Unforeseen Conditions</td>
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<tr>
<td>• Xcel Transmission Towers</td>
<td>• Poor Soils</td>
<td>• Right-of-Way</td>
<td>• Contaminated Soils</td>
</tr>
<tr>
<td></td>
<td>• Utilities</td>
<td>• Schedule Delay</td>
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Olson Memorial Highway Design
Olson Memorial Highway (OMH) Design

- Roadway Design
- Pedestrian Facilities
- Median and Landscaping
- Stations
- Overhead Contact System (OCS) Poles
OMH Design: Roadway Design

- Six lane roadway
- 35 mph speed limit with geometry to help slow down traffic
- Traffic signals and left turn lanes at:
  - Lyndale Ave
  - Bryant Ave
  - Van White Memorial Blvd
  - Humbolt Ave
  - Morgan Ave
  - Penn Ave
  - Thomas Ave (new)
OMH Design: Roadway Design

• Pedestrian crossings located at mid-block crossings and traffic signals:
  ▪ Russell Ave
  ▪ Secondary station access at Penn Ave Station
  ▪ James Ave

• Lighting includes high/low fixtures based on City of Minneapolis standards
OMH Design: Roadway Design

Additional Proposed Signalized Intersection

Proposed Mid-block Crossing (3 total)

Penn Avenue LRT Station

Van White Blvd LRT Station

Match Line – See Above
OMH Design: Proposed Ped & Bike Facilities

• Continuous two-way bike facility from Wirth Park to 7th Street
  ▪ 8’ multi-use trail on westbound OMH bridge over BNSF
  ▪ 10’ multi-use trail from OMH bridge to Thomas
  ▪ 10’ separated bike lane from Thomas to Van White
  ▪ 10’ multi-use trail from Van White to 7th Street, including widening sidewalk on OMH bridge over I-94
• Bike racks at Penn and Van White station areas
• Bike facilities connect users to 7th Street bike lane on the east and to Wirth Park trails on the west
OMH Design: Proposed Ped & Bike Facilities

Separated Bike Lane and Sidewalks

Separated Bike Lane: Integrally colored concrete only at station area

Separated Bike Lane Buffer

Toolled Concrete: Between intersections

Design: Proposed Ped & Bike Facilities
OMH Design: Medians

- Median design includes:
  - Permeable pavers for stormwater treatment
  - Plantings with irrigation at station areas and mid-block crossings
  - Use of aggregate and intertrack fence to deter pedestrian crossings
OMH Design: Medians

**Shrubs**
- Gro-Low Sumac: *Rhus aromatica* ‘Gro-Low’
- Ruby Stella Daylily: *Hemerocallis* ‘Ruby Stella’
- Stella Supreme Daylily: *Hemerocallis* ‘Stella Supreme’
- May Night Salvia: *Salvia nemorosa* ‘May Night’
- Sensation Deep Rose Salvia: *Salvia nemorosa* ‘Sensation Deep Rose’

**Grasses**
- Prairie Dropseed: *Sporobolus heterolepis*
- Karl Foerster Feather Reed Grass: *Calamagrostis x acutiflora* ‘Karl Foerster’

**Perennials**
- Goldflame Spirea: *Spiraea x bumalda* ‘Goldflame’
- Neon Flash Spirea: *Spiraea japonica* ‘Neon Flash’
- Dwarf Bush Honeysuckle: *Diervilla* lonicera

**Additional Shrubs**
- Apricot Sparkles Daylily: *Hemerocallis* ‘Apricot Sparkles’
- Passionate Returns Daylily: *Hemerocallis* ‘Passionate Returns’
- Goldsturm Black-Eyed Susan: *Rudbeckia* ‘Goldsturm’
- Strawberry Seduction Yarrow: *Achillea millefolium* ‘Strawberry Seduction’
OMH Design: Medians

West of Midblock at James Ave N

Paver Band Color: Tan
Pattern: Running bond

Aggregate Color: Charcoal
Size: 3/4” to 1-1/2” diameter

Full Corridor

Paver Band Color: Charcoal / tan blend
Pattern: Running bond

East of Midblock at James Ave N

Paver Band Color: Charcoal
Pattern: Running bond

Aggregate Color: Tan
Size: 3/4” to 1-1/2” diameter
OMH Design: Trees

• Boulevard trees
  ▪ 240+ trees
  ▪ Working with MPRB on a planting plan to:
    o Plant trees in the boulevard frame the street and provide urban canopy
    o Use assortment of trees for better tree health and variation
    o Not overuse any one tree variety as compared to the area

• Median trees
  ▪ 120+ trees
  ▪ Working with MPRB for relocation of 50+ existing median trees to nearby parks in North Minneapolis
OMH Design: Van White Blvd Station
View looking southwest from Van White Boulevard
OMH Design: Penn Ave Station

View looking northeast from Penn Ave
OMH Design: OCS Poles

- OCS provides power to LRT trains
- Typical OCS pole spacing is every 120’, or about 50 poles on OMH between Sheridan and Bryant
- OMH OCS pole treatment to enhance and tie stations together
OMH Design: OCS Poles

• Community input to determine OCS pole treatment:
  ▪ Round 1: Mid-Summer 2017
    o Shared framework in small community meetings, received feedback on initial concept treatments
  ▪ Round 2: Late-Summer 2017
    o Shared concepts at open house, received feedback, narrowed down options
  ▪ Round 3: Spring 2018
    o Will share final concept with stakeholders and how public input informed design
OMH Design: OCS Poles Concept A

46 poles with design
(* indicates a double in elevation or 3 in close proximity)

Transitions + Localized Pattern
- Range of complimentary colors along corridor
- Pattern emphasis at mid-block crossings
OMH Design: OCS Poles Concept B

46 poles with design
(*) indicates a double in elevation or 2 in close proximity

Movement + Continuous Pattern-Alternative
- Emphasis on one vibrant color, varies bottom-up along corridor to show movement
- Pattern stripe repeats consistently along the top of the poles throughout corridor

DRAFT WORK IN PROGRESS
City of Crystal Update
Bass Lake Road Station Area Update

Blue Line Extension Committees
- Technical Project Advisory
- Business Advisory
- Community Advisory
- Corridor Management

April 9-12, 2018
Bass Lake Road Streetscape (2018)

Becker Park (2019)

City Policy Changes

• New Zoning Ordinance (UDC)
• Proposed TOD Ordinance
Bass Lake Road Streetscape

- Construction May-September 2018

- Total construction cost $600,000 (65% city, 35% county)

- Major elements:
  - On-street parallel parking (12 spaces) in front of larger block of buildings
  - Reconstructed sidewalk
  - Mini-plaza at NW corner at Elmhurst
  - Landscape beds with irrigation
  - Colored concrete boulevard where there isn’t space for landscaping
  - Pedestrian crossing improvements at Sherburne intersection (new APS, curb ramps, and crosswalk markings)
  - Retrofit existing HPS replaced with LED to improve light levels and security (some new lights too)
  - 5 benches, 6 bike racks, 4 dual trash receptacles, etc.
Bass Lake Road Streetscape
Bass Lake Road Streetscape

BASS LAKE ROAD (COUNTY ROAD 10)

PLANTING BED (TYP), SEE ENLARGED PLANTING PLANS SHEETS P-2 & P-3

CONCRETE CURB V4 (TYP), SEE 1/SD-1

RELOCATED METRO TRANSIT BUS STOP, SEE SIGNING & STRIPING PLAN

SEE PED RAMP STANDARD PLANS, TYP

4" CONCRETE WALK SPECIAL (TYP), SEE SHEET SD-2 FOR DETAILED LAYOUTS AND NOTE 1

ING BED (TYP), SEE ENLARGED PLANTING SHEETS P-2 & P-3

RELOCATED STREET LIGHT FIXTURE (TYP), SEE NOTE 7
Bass Lake Road Streetscape
Becker Park

- Construction late 2018 - fall 2019
- Two major elements:
  1. Stormwater infiltration system ($2.5 million)
     - Reduce flooding in adjacent commercial area
     - Improve water quality in Twin Lake
     - Half city funds, other half BWSR & Met Council
  2. Becker Park reconstruction ($2+ million)
     - Transition to destination “Town Square” park
     - Performance area, improved trails, active water feature and accessible, barrier-free playground
     - Mostly city funds but assistance sought from Hennepin County (TOD & CDBG) and MN-DNR
New Zoning Ordinance

- Generally less restrictive
- Focused on regulating the right things
- Greater flexibility in response to changing market and residential needs

- Maximum apartment density increased from 22 to 40 units/acre
- Maximum height for apartment buildings increased from 3 to 5 stories
- Minimum single-family lot width to be reduced from 60 to 50 feet
  - Will allow some oversized lots to be split for another house to be built
  - Will allow more compact infill development
- Minimum two-family lot width to be reduced from 100 to 80 feet
  - An opportunity for more NOAH while preserving neighborhood character
- Allows accessory dwelling units
  - Can be attached or detached (basement apartment, “tiny house”, etc.)
  - Rental houses may also have ADUs (no owner occupancy requirement)
  - Another opportunity for more NOAH while preserving neighborhood character
Markets are unpredictable
- Willing sellers?
- Res/Comm mix?
- Types of space?
- Technology?

Focus on the form of new development in relation to other properties and the public realm (streets, sidewalks, Becker Park)

“We don’t want our zoning ordinance to stand in the way of transit oriented development, if that’s what the market wants.”
2018 Look Ahead
Peer “New Starts” Projects (February 2018)

Source: Feb 2018 FTA CIG Report
FTA Capital Investment Grant Program
Federal Funding Levels 2010 to 2018

Note: Horizontal axis represents federal fiscal years
FTA Capital Investment Grant Program
2018 Funding by Subprogram

- **Existing New Starts**: $1,108
- **New New Starts**: $399
- **Core Capacity**: $716
- **Small Starts**: $401
- **Oversight**: $26

Total: $2,645

In Millions
2018 Look Ahead: Major Milestones

- Complete Critical 3rd Party Agreements
- FTA Financial Capacity Assessment
- FTA Risk Assessment
- Complete 90% Franklin OMF Design
- Complete 100% Civil Design
- Complete 100% Systems Design
- Complete 100% Brooklyn Park OMF Design
- Complete 100% Franklin OMF Design
- Submit Advanced Construction LONP request to FTA
- Application for Full Funding Grant Agreement
More Information

Website: BlueLineExt.org
Email: BlueLineExt@metrotransit.org
Twitter: @BlueLineExt