



METRO Gold Line BRT Corridor Management Committee

June 3, 2021

A MOMENT TO CELEBRATE!

GOLD LINE ADVANCES TO ENGINEERING PHASE!



A MOMENT TO CELEBRATE!

**FTA RECOMMENDS GOLD LINE
FOR \$100,000,000 FY22 NEW
STARTS FUNDS!**



PROPOSED
FISCAL YEAR
2022 FUNDING
FOR THE
CAPITAL
INVESTMENT
GRANTS AND
EXPEDITED
PROJECT
DELIVERY
PILOT
PROGRAM
(May 28, 2021)

Existing New Starts Full Funding Grant Agreements		
South Central/Downtown Hub	Phoenix, AZ	\$100.0
Westside Subway Section 1	Los Angeles, CA	\$100.0
Westside Subway Section 2	Los Angeles, CA	\$100.0
Westside Subway Section 3	Los Angeles, CA	\$100.0
Mid-Coast Corridor Transit Project	San Diego, CA	\$100.0
Double Track	Northern Indiana	\$50.0
West Lake	Northern Indiana	\$100.0
Green Line Extension	Boston, MA	\$48.4
National Capital Purple Line	Maryland	\$94.8
Southwest Light Rail	Minneapolis, MN	\$100.0
Streetcar Main Street Extension	Kansas City, MO	\$24.4
Federal Way Link Extension	Seattle, WA	\$100.0
Lynwood Link Extension	Seattle, WA	\$100.0
Subtotal Existing New Starts Full Funding Grant Agreements		\$1,117.6
Existing Core Capacity Full Funding Grant Agreements		
Peninsula Corridor Electrification Project	San Carlos, CA	\$74.0
BART Transbay Core Capacity Project	San Francisco, CA	\$143.3
Portal North Bridge	Seacaucus, NJ	\$125.0
Red and Purple Line Modernization Project Phase 1	Chicago, IL	\$100.0
Subtotal Existing Core Capacity Full Funding Grant Agreements		\$442.3
Recommended New Starts Projects		
Northwest Extension Phase 2	Phoenix, AZ	\$58.1
METRO Gold Line Bus Rapid Transit	St. Paul, MN	\$100.0
Subtotal Recommend New Starts Projects		\$158.1
Recommended Small Starts Projects		
Rapid Transit	Rochester, MN	\$56.1
Expo Center Bus Rapid Transit	Austin, TX	\$17.8
Pleasant Valley Bus Rapid Transit	Austin, TX	\$18.3
RapidRide I Line	Seattle, WA	\$55.6
Pacific Avenue/SR 7 Bus Rapid Transit	Tacoma, WA	\$75.2
East-West Bus Rapid Transit	Madison, WI	\$80.0
Subtotal Recommended Small Starts Projects		\$303.0
Projects That May Become Ready for Capital Investment Grants or Expedited Project Delivery Pilot Program Funds (projects listed are illustrative)		
BART Silicon Valley Phase II Extension	San Jose, CA	\$427.2
Hudson Tunnels	New York-New Jersey	
Second Avenue Subway Phase 2	New York, NY	
RapidRide Roosevelt Project	Seattle, WA	
Oversight Activities		
		\$24.7
Grand Total		\$2,473.0

CMC Membership

Representative	Agency/County/City
Chair Charlie Zelle	Metropolitan Council
Councilmember Francisco Gonzalez	Metropolitan Council
Commissioner Jim McDonough	Ramsey County
Commissioner Rafael Ortega	Ramsey County
Commissioner Stan Karwoski	Washington County
Commissioner Lisa Weik	Washington County
Councilmember Jane Prince	Saint Paul
Councilmember Rebecca Cave	Maplewood
Mayor Stan Suedkamp	Landfall
Mayor Paul Reinke	Oakdale
Mayor Anne Burt	Woodbury
General Manager Wes Kooistra	Metro Transit
Deputy District Engineer Sheila Kauppi	MnDOT
Co-Chair Mary Brandt	Community and Business Advisory Committee (CBAC)
Co-Chair Darrell Paulsen	Community and Business Advisory Committee (CBAC)

CMC Agenda

- Welcome & Announcements
 - Review notes from December 3, 2020 meeting
- CBAC Update
- Project Update
 - Engineering Phase (60% Design) Scope, Schedule, and Budget
- Roadmap to Full Funding Grant Agreement (FFGA)
 - Discussion of inputs to 90% Scope, Schedule and Budget
- Engagement Update
- Next Steps



CBAC Update

Darrell Paulsen and Mary Brandt
CBAC Co-Chairs



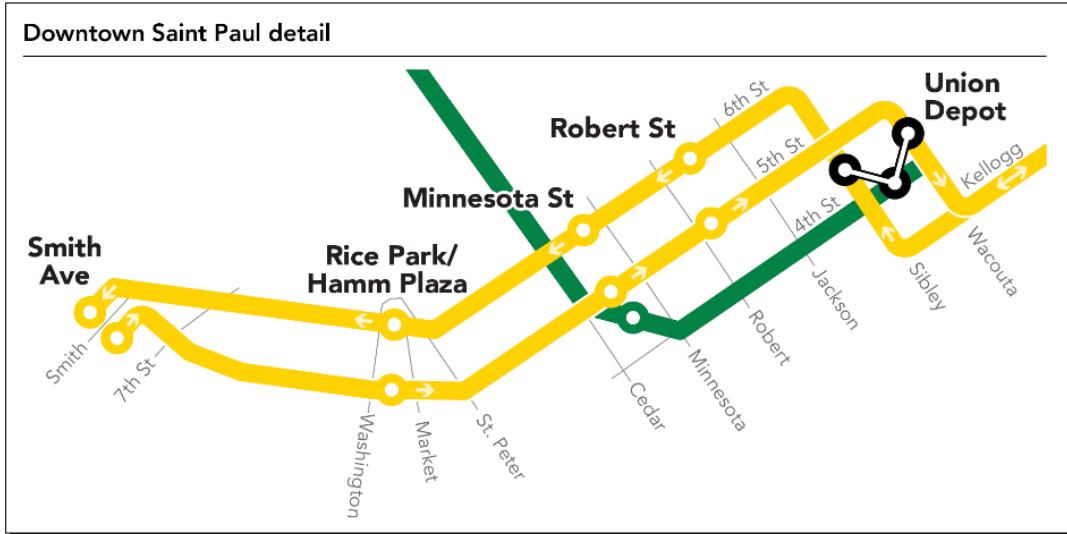
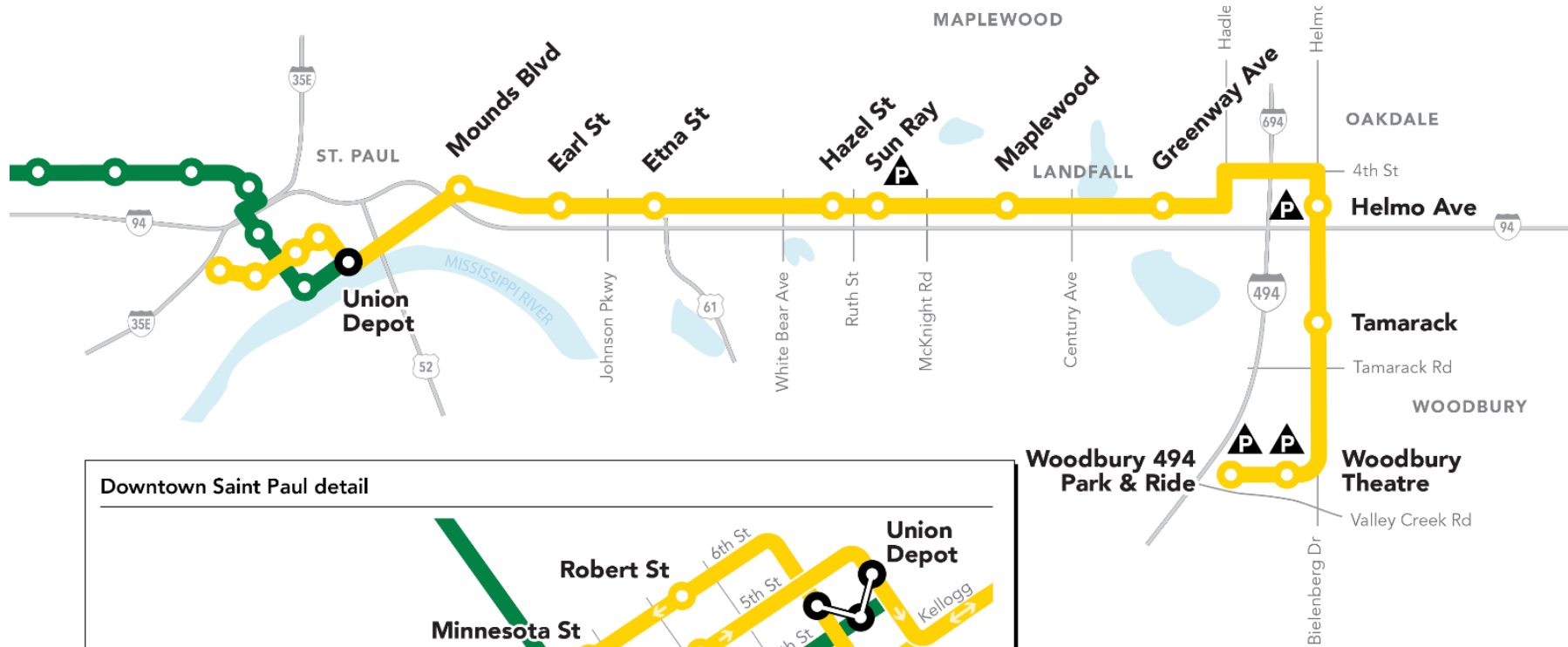
Project Update





Engineering Phase (60% Design)

Scope, Schedule, and Budget

Chris Beckwith, Gold Line Project Director

METRO Gold Line

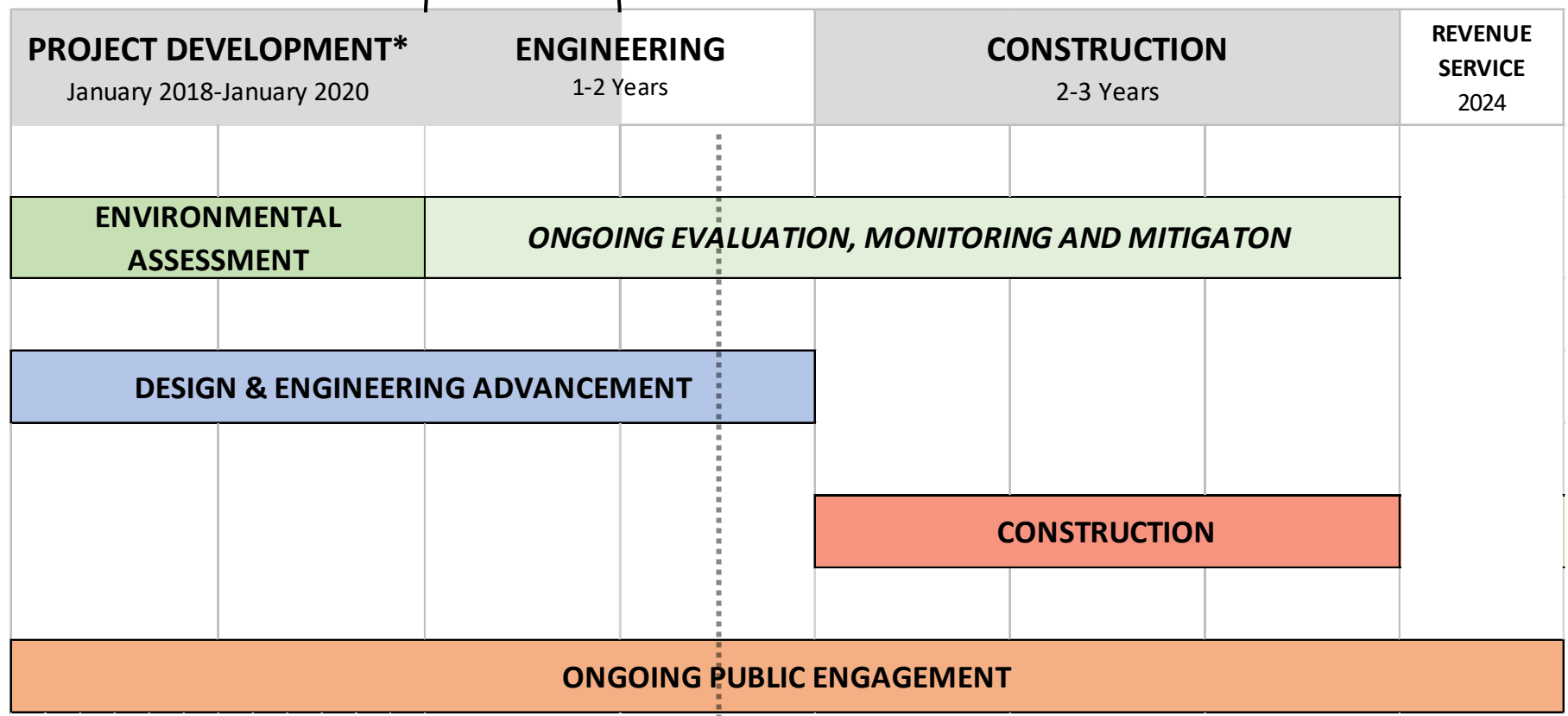


-  METRO Gold Line (Bus Rapid Transit)
-  METRO Green Line (Light Rail)
-  Transfer Station
-  Park & Ride

New Starts Status/Entry to Engineering Update



*FTA Postponed
Entry into Engineering*



June 2021

Current Baseline Project Budget

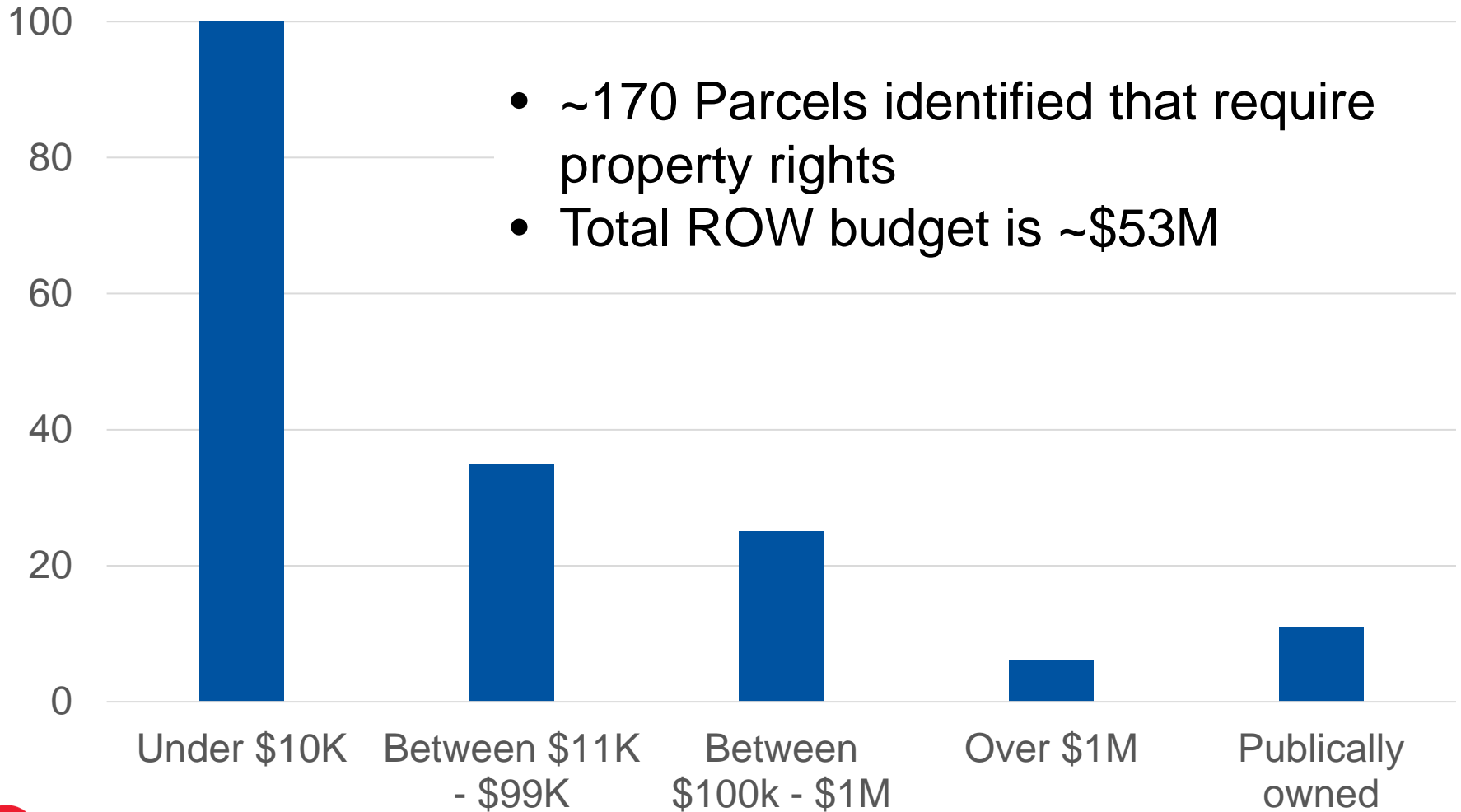


	Entry to Engineering (60% Cost Estimate - Entry to Engineering)
Project Budget	\$531.9 M
Total Project Contingency	32.7%
Escalation Factor	3.5%
Base Year Estimate	2019
Forecast Year	\$YOE (2022-2024)

Design and Environmental Update

- Environmental Re-evaluation signed by FTA based on 90% design
- Field work is complete (geotechnical and survey)
- Right of way acquisition process continues to advance
- 90% plans in March 2021
- Final design coordination meetings in April and May
- Scope and Cost Refresh in June
- 100% plans in Q3 2021

Real Estate Overview

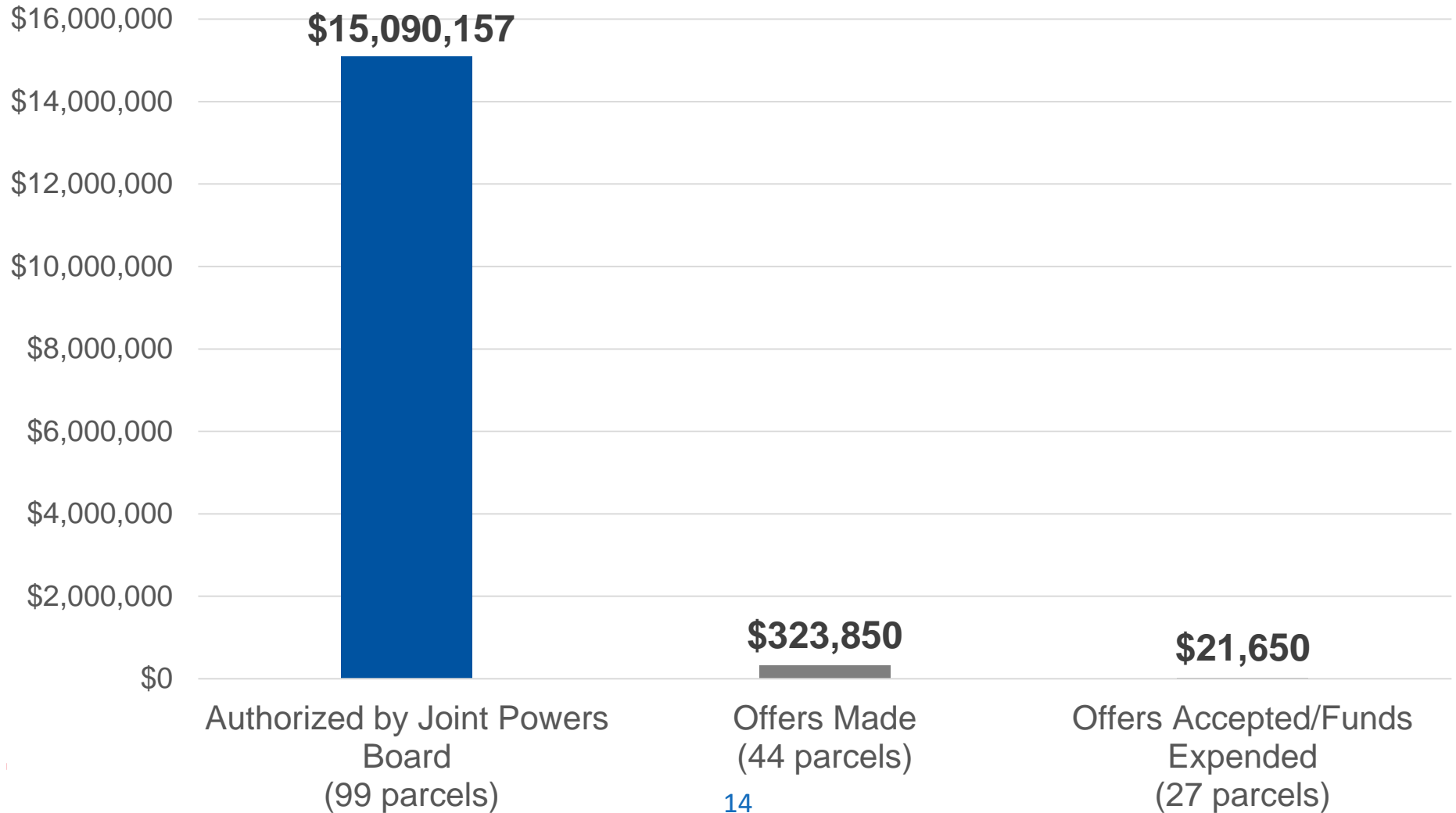


- ~170 Parcels identified that require property rights
- Total ROW budget is ~\$53M



Real Estate Update

(as of 6/1/21)



Roadmap to Full Funding Grant Agreement (FFGA)

Chris Beckwith, Gold Line Project Director
Charles Carlson, Director of BRT Projects
Brian Funk, Deputy Chief Operating Officer - Bus

Summer 2021 inputs for FFGA application*

- Removal of Joint Development
- 494 Park and Ride Site Design
- Timing of Federal Appropriations required for FFGA
- FTA Risk Assessment Recommendations
- Bus Propulsion Recommendation
- Scope and schedule inputs to updated cost
- Cost contingency drawdown

*will inform the 90% Design Scope, Schedule and Budget

494 Station/Park-and-Ride Update

- Joint Development Update
 - County Service Center will not be pursued within the Gold Line Project
 - 90% Design cost update will remove Service Center costs
- 494 Park and Ride Design
 - Ongoing coordination with Woodbury, Washington Co & Metro Transit to advance site design
 - Structured parking and 512 stalls required at the site to maintain Medium-High project rating
 - Flexibility for future consolidation of express route park and rides
 - Separate design schedule and construction package



FFY22 Federal Budget and Annual Report

(published May 28, 2021)

- METRO Gold Line is one of just two New Starts projects recommended for new funding agreements in FFY2022
- \$100M recommended
- Medium-High rating



Full Funding Grant Timeline

- Funding recommendation critical first step towards Full Funding Grant Agreement
- Grant application will follow congressional appropriations and FTA allocation process
- After allocation, grant review begins
- Expected duration into 2022



US Capitol. Photo: Kevin McCoy

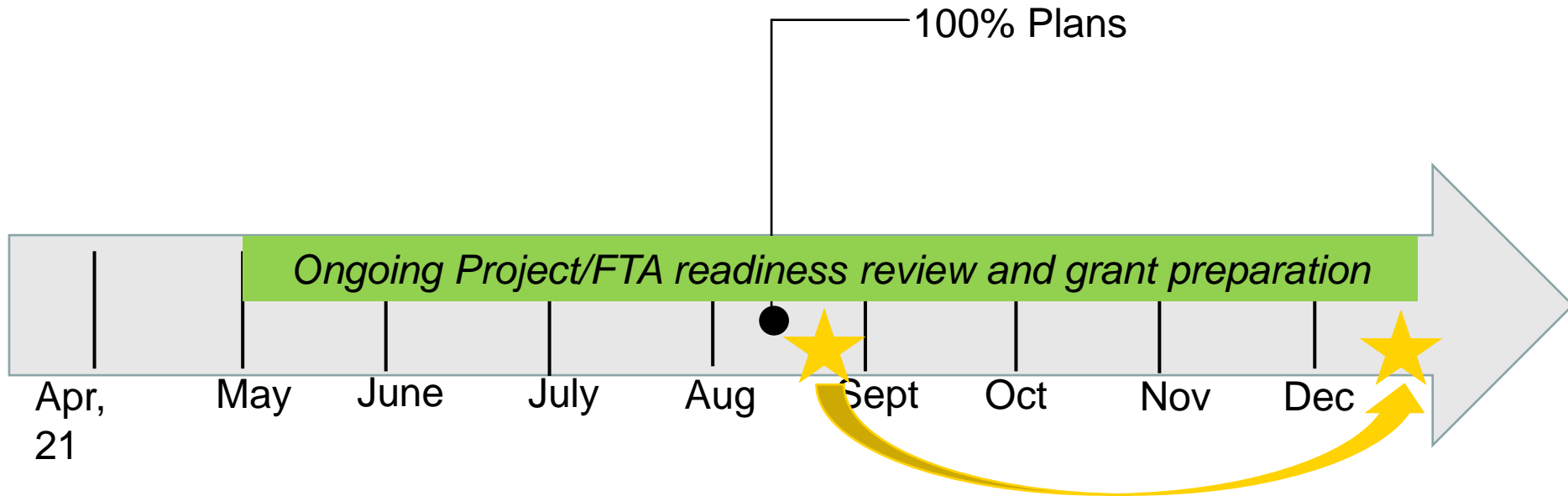
May 2021:
Proposed
Funding (FTA)

Late 2021:
FFY 2022
Appropriations
(Congress)

Early 2022:
Funding
Allocation
(FTA)

2022: Grant
Review and
Award (FTA)

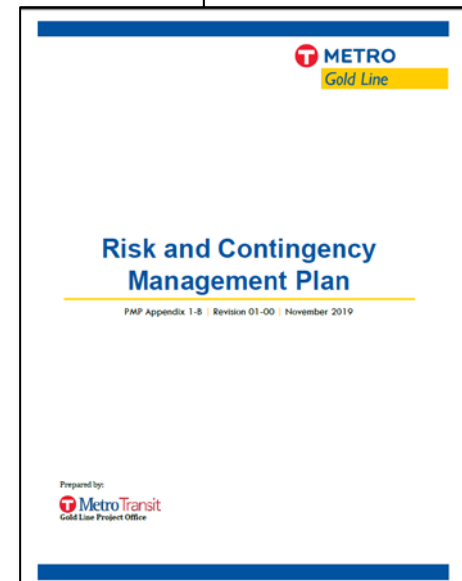
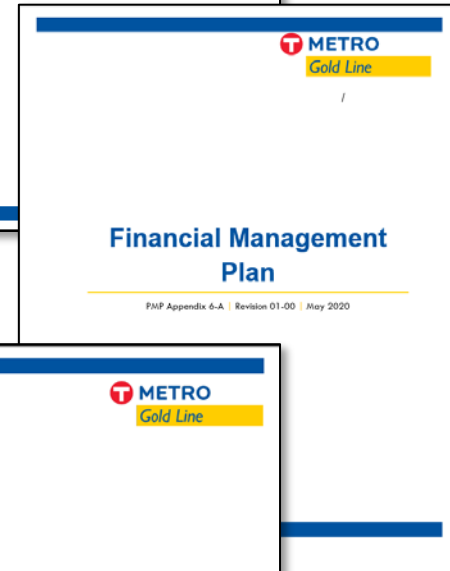
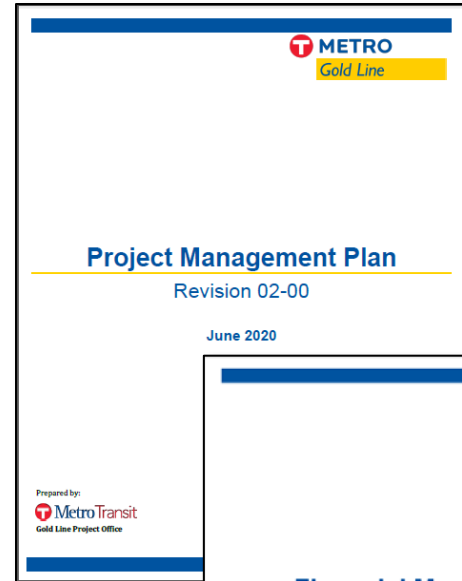
Path to Full Funding Grant Agreement



Anticipated timeline shift –
FFGA application & construction advertisement
to await Congress, FFY22 allocation

Ongoing Readiness for Funding

- FTA coordination and project review continues
 - Project management plans
 - Financial plans and capacity assessments
 - Risk reviews and plans
 - Cost estimate updates
- Completing design in summer 2021 remains a critical strategy to demonstrate project readiness for funding
 - Final issue resolution and agreement development will demonstrate project readiness



Metro Transit 60-foot Electric Bus Pilot (C Line)



www.metrotransit.org/electric-buses



Power:

8 PLUG-IN STYLE AT
HEYWOOD GARAGE

2 RAPID OVERHEAD CHARGERS
FOR QUICK BOOSTS DURING
BREAKS

VEHICLES



Manufacturer:

NEW FLYER OF NORTH AMERICA,
ST. CLOUD



Fleet size:

(8) 60-FOOT "ARTICULATED" BUSES



Cost:

C LINE BATTERY ELECTRIC
BUSES COST \$1,390,000 PER BUS,
NOT INCLUDING CHARGING
EQUIPMENT (FOR COMPARISON
C LINE DIESEL BUSES COST
\$834,000 PER BUS)



Range:

<100 MILES



Top speed:

65 MPH



Includes:

6 BATTERY STRINGS CONSISTING
OF 42 BATTERY MODULES,
PROVIDING A TOTAL BATTERY
CAPACITY OF 466 KWH
DIESEL-FIRED AUXILIARY HEATER
TO PRESERVE RANGE IN COLD
WEATHER



National Trends

- Focus on advancements in electric, not hybrid
- Significant ongoing evolution in electric bus technology
 - Interest and support at Federal and State level to continue progress towards zero-emissions
- Future transit industry direction remains unknown:
 - Charging locations - in field (on-route) or at garage?
 - Range of vehicles - today and in the future (5 years, 10+ years)
 - Current reliability/availability of electric vs. diesel buses
- Not comparable to electric automobile ownership:
 - Higher maintenance costs and needs compared to diesel
 - Higher energy costs – especially for peak/on-route charging
 - Likely battery replacement- \$300,000+ per bus at midlife
- Limited resale or redeployment of diesel vehicles in the future

Electric Buses at Metro Transit: Next Steps

2021

Return existing electric buses to service

- All buses/chargers in-service only 10 of 732 service days since June 2019
- All chargers out of service since early 2021
- All chargers planned for replacement

May 2021

Zero emission bus transition master contracts

- Contracts awarded May 2021
- On-demand expertise and support for transition planning to zero emission buses
- Principles and guidance, assessment and evaluation, inputs to capital program

Ongoing

Continue electric bus pilot projects

- 40-foot bus pilots. Low/No funding requested
- Xcel energy, Congressional actions, and other future partnerships
- Project-specific purchases, including additional Gold Line buses

Evaluation of Electric Bus “Fit” for Gold Line

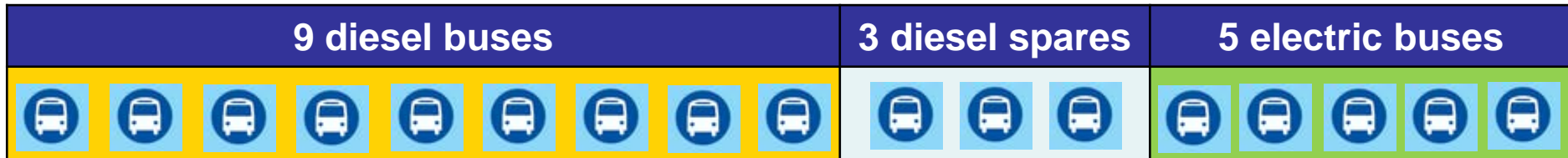
- Six weekday scenarios reviewed
 - Diesel, Hybrid and Electric Fleet Combinations
 - Battery Electric Buses (EVs) – Garage charging only
 - Battery Electric Buses (EVs) – Garage and field charging
- Technical Analysis included:
 - Capital cost (vehicles & infrastructure)
 - Operating cost (hours/miles/power)
 - Operational considerations
 - Fit with operator duty rules
 - Managing pull-ins/pull-outs
 - Reliability and brand promise
 - Environmental sustainability

Gold Line Bus Propulsion Recommendation

- Gold Line service requires 9 peak and 3 spare buses

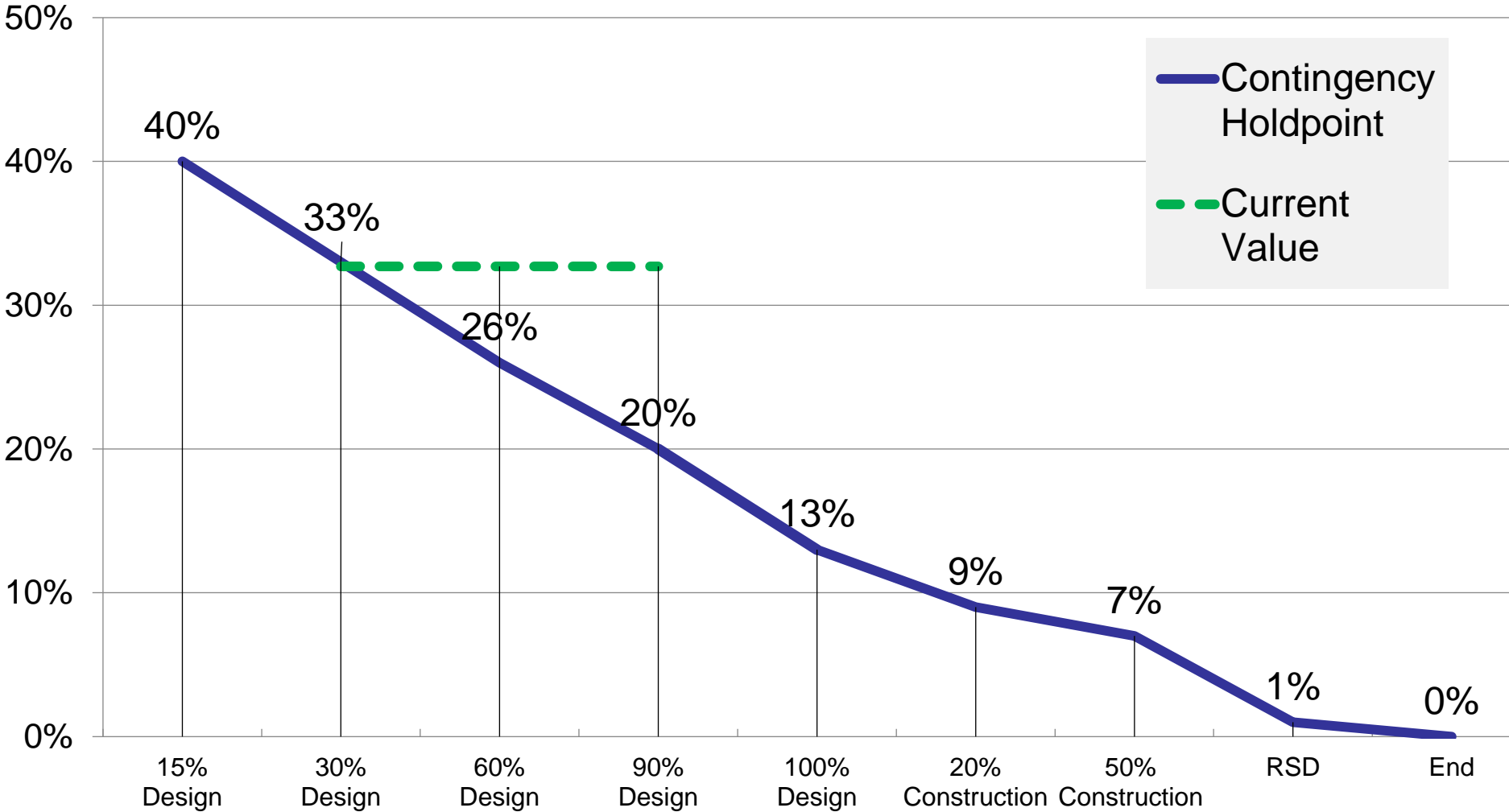


- Proposed approach for 90% scope and cost estimate:
 - Ensure reliability of base fleet need with diesel buses (12)
 - Invest in additional electric buses (5) and garage chargers (5) to continue technology development toward electrification
 - Ensure additional scope does not change FTA project rating





Contingency Draw-down curve (at Entry to Engineering)



Summary of inputs to 90% Cost Estimate

- Remove Joint Development from scope
- Schedule Assumptions
 - Start of construction remains in 2022, partial year of construction
 - Additional inflation costs to account for construction schedule risk
- Bus Propulsion
 - Add 5 electric buses and charging equipment to project scope
 - Maintain 12 diesel buses as project baseline
 - Evaluate both 40-foot and/or 60-foot buses for Gold Line
- Contingency
 - Assumed contingency is 23-28%, dependent on risk assessment
 - Subject to FTA review and determination for final 90% Cost



Engagement Update

Liz Jones, Gold Line Outreach Coordinator

- Activities:
 - Right-of-Way acquisition and property owner engagement
 - Community/neighborhood/business organizations engagement
 - Develop plan for pre-construction engagement



- Pre-Construction Communications and Outreach Goals:
 - Share station and route design to help the public visualize the line
 - Provide information on the construction activities, schedule, and anticipated impacts
 - Communicate where the public can get construction updates
 - Share who to contact with questions and concerns during construction
 - Coordinate with property owners on permanent and temporary easements and work with them to minimize and/or mitigate property and construction impacts
 - Communicate public concerns to construction staff to minimize and/or mitigate construction impacts to public, property owners, businesses.

CMC Next Steps

- Gold Line Project Office (GPO) to finalize design resolution with project partners
- Preparation of 90% cost estimate with FTA and project partners over summer
- Next CMC Quarterly Meeting September 2, 2021