

SOUTHWEST

Green Line LRT Extension



Executive Change Control Board

March 30, 2016



Today's Topics

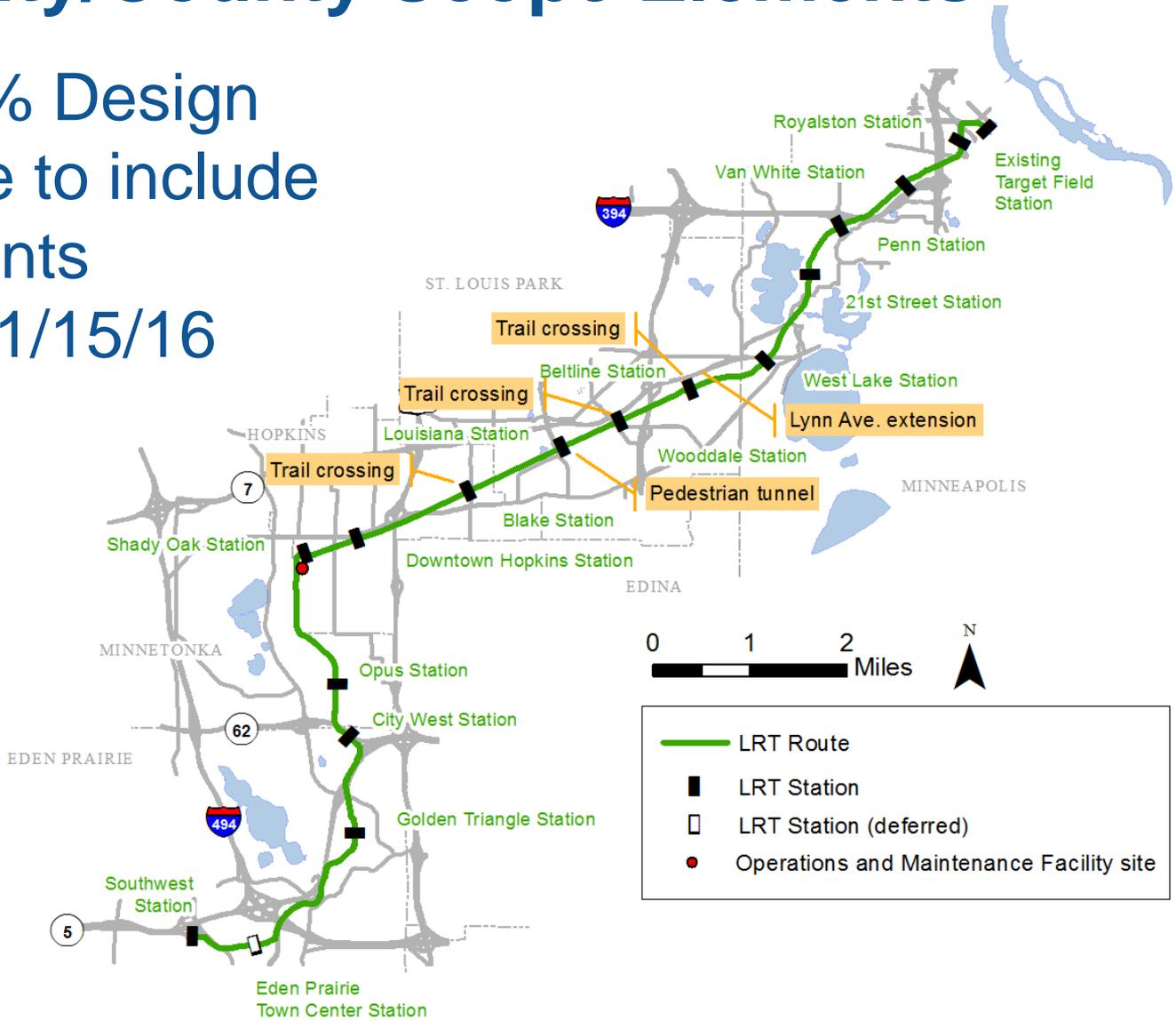
- Review Civil Cost Estimate at 90% Design
- Next Steps



Review Civil Cost Estimate at 90% Design

Requested City/County Scope Elements

- Adjusted 60% Design cost estimate to include scope elements approved at 1/15/16 ECCB



Adjusted 60% Design Cost Estimate

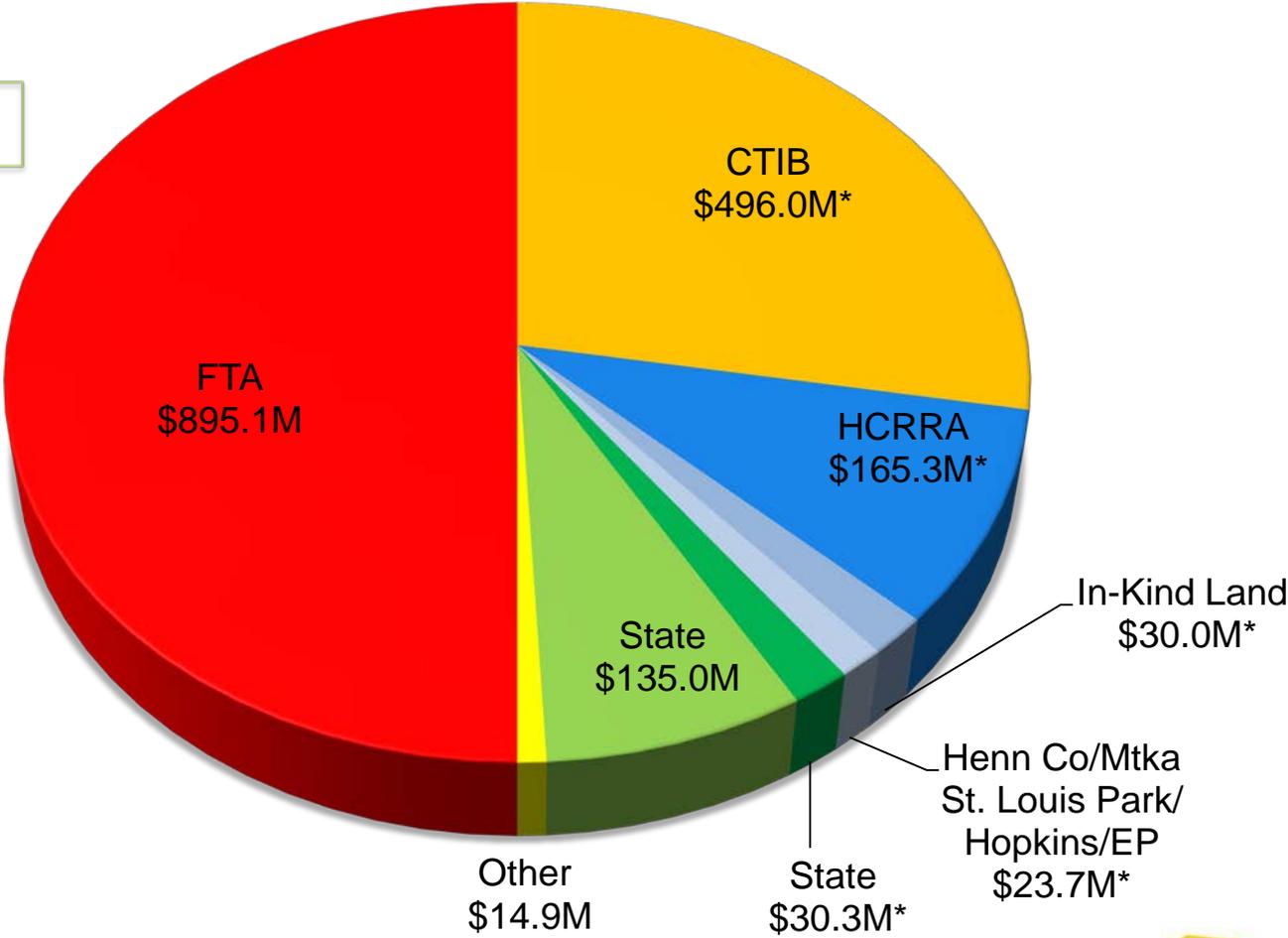
Budget Category (in \$ millions, YOE)	60% Design Reviewed 1/15/16	60% Design Incl. Scope Elements
Guideway and Track	\$384	\$384
Stations, stops, terminals	\$70	\$70
Support facilities/OMF	\$90	\$90
Sitework, special conditions	\$164	\$174
Systems	\$238	\$238
ROW, land, existing improvements	\$210	\$212
Vehicles	\$126	\$126
Soft Costs ¹	\$492	\$497
Total Project Costs	\$1,774	\$1,791

¹ Professional Services , Unallocated Contingency and Finance Charges

Updated Funding Sources

**\$745 Million Committed out of \$895 Million Local Funds Needed
Outstanding Local Funds Must be Committed by July 1, 2016**

\$1.79 Billion



*** Committed**

60% Estimate vs 90% Estimate

- 60% Estimate: Complete “bottoms up” approach
 - Used more detailed drawings and quantities
 - Refined labor rates, obtained vendor material quotes
 - Incorporated contractor markup including bonds, insurance, permit fees, and general conditions
 - Projected reduction of allocated contingency with increase in confidence/decrease in design risk

60% Estimate vs 90% Estimate

- 90% Estimate: Updated “bottoms up” approach
 - Updated and used more detailed drawings and quantities
 - Resolved design questions regarding utilities, earthwork, temporary facilities, parking decks
 - Allocated contingency based on updated level of design

Overview of 90% Civil Cost Estimate

- Includes 90% civil design including all bridges (LRT, freight and pedestrian), LRT and freight track, retaining walls, tunnels, stations, parking lots and deck, roads, sidewalks, landscaping, fencing, utilities and vertical circulation
- Assumes contractor bid cost approach that combines
 - Established productivity rates
 - Local labor rates
 - Local, national and international material costs
 - Established contractor mark-up costs
- Incorporates results of project-wide constructability and sequencing reviews

Project Cost Estimate Update Summary

Budget Category (in \$ millions, YOY)	60% Design (24% Contingency)	90% Civil Design (23% Contingency)
Guideway and Track	\$384	\$382
Stations, stops, terminals	\$70	\$73
Support facilities/OMF ¹	\$90	\$90
Sitework, special conditions	\$174	\$176
Systems ²	\$238	\$240
ROW, land, existing improvements	\$212	\$212
Vehicles	\$126	\$126
Soft Costs ³	\$497	\$492
Total Project Costs	\$1,791	\$1,791

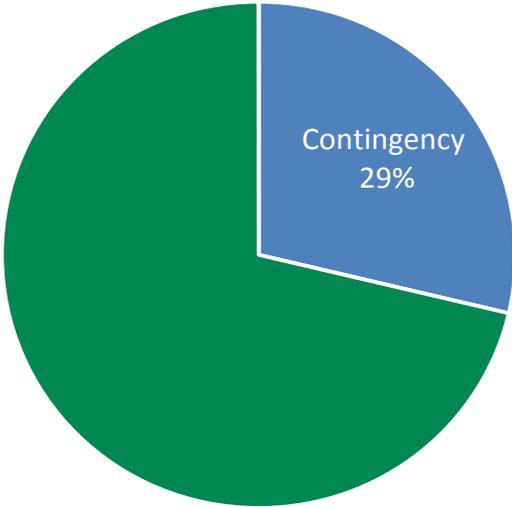
¹ 60% cost estimate only for Support facilities/OMF

² 90% cost estimate update for Civil elements only

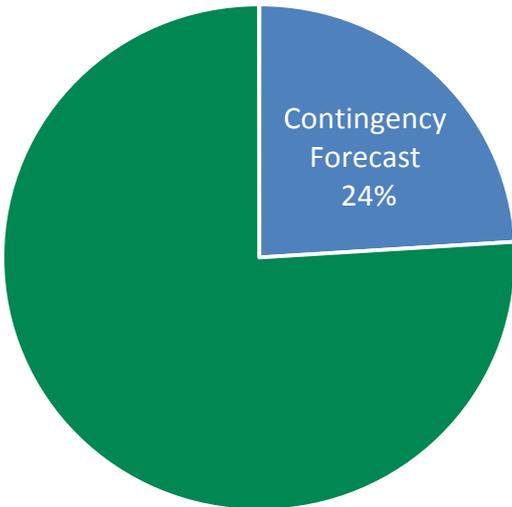
³ Professional Services , Unallocated Contingency and Finance Charges

Updated Contingency Forecast

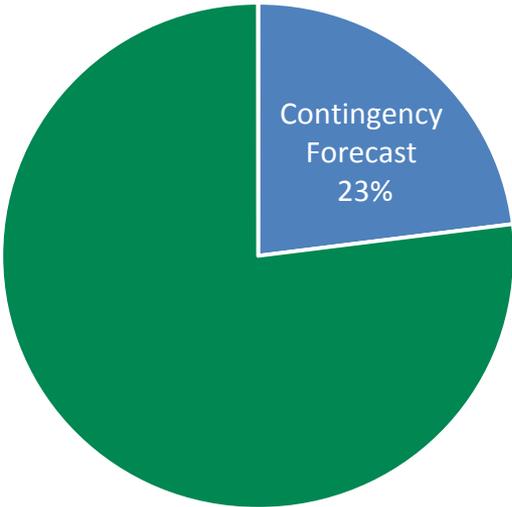
30% Design



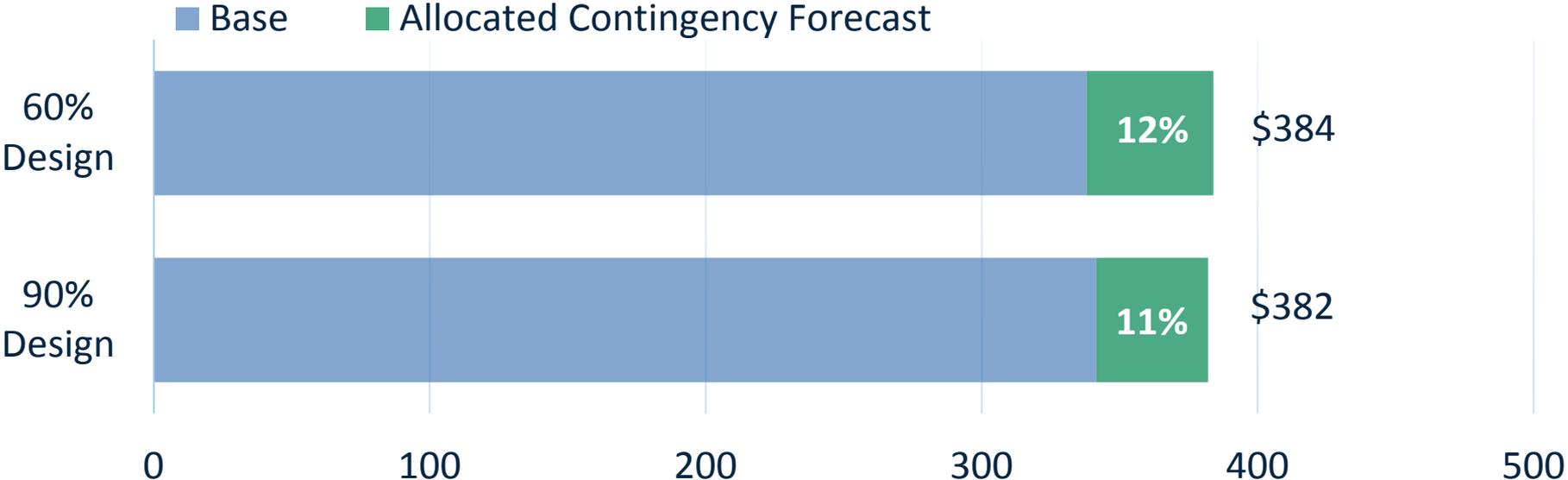
60% Design



90% Design

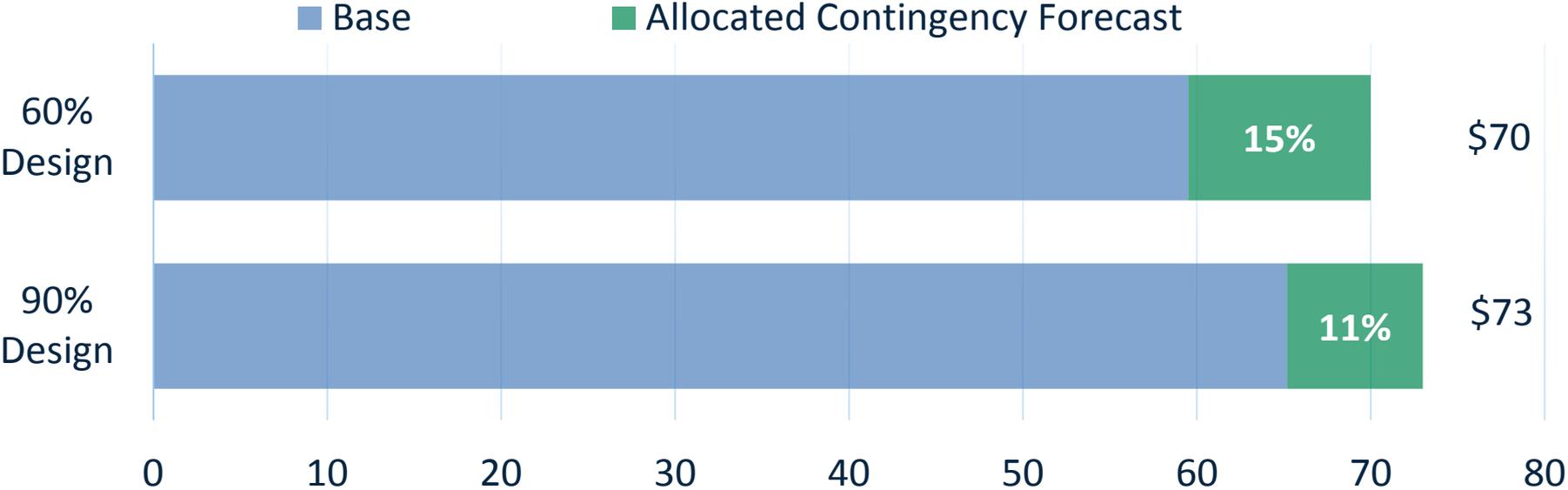


Guideway and Track (YOE, in \$ Millions)



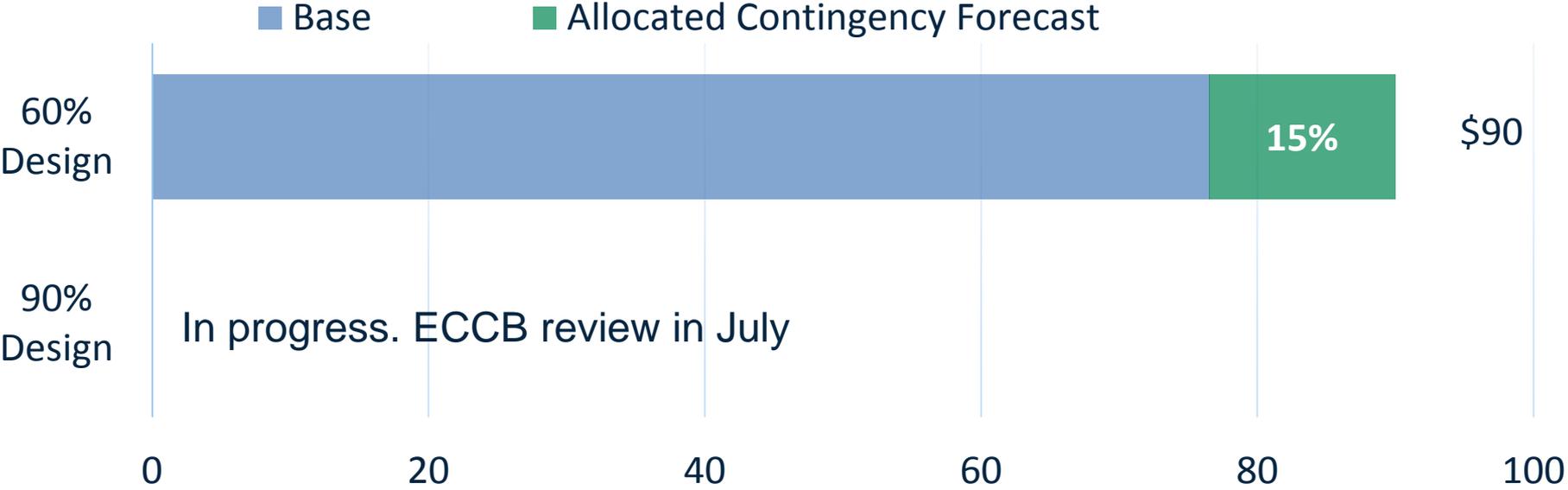
Factors	Examples
Updated Quantities	Refined retaining wall sizing, layout and type.
Reduced Unknowns	Refined trackway drainage, bridge materials.
Refined Cost Inputs	Updated piling unit costs for retaining walls and bridges. Rail quotes updated.

Stations (YOE, in \$ Millions)



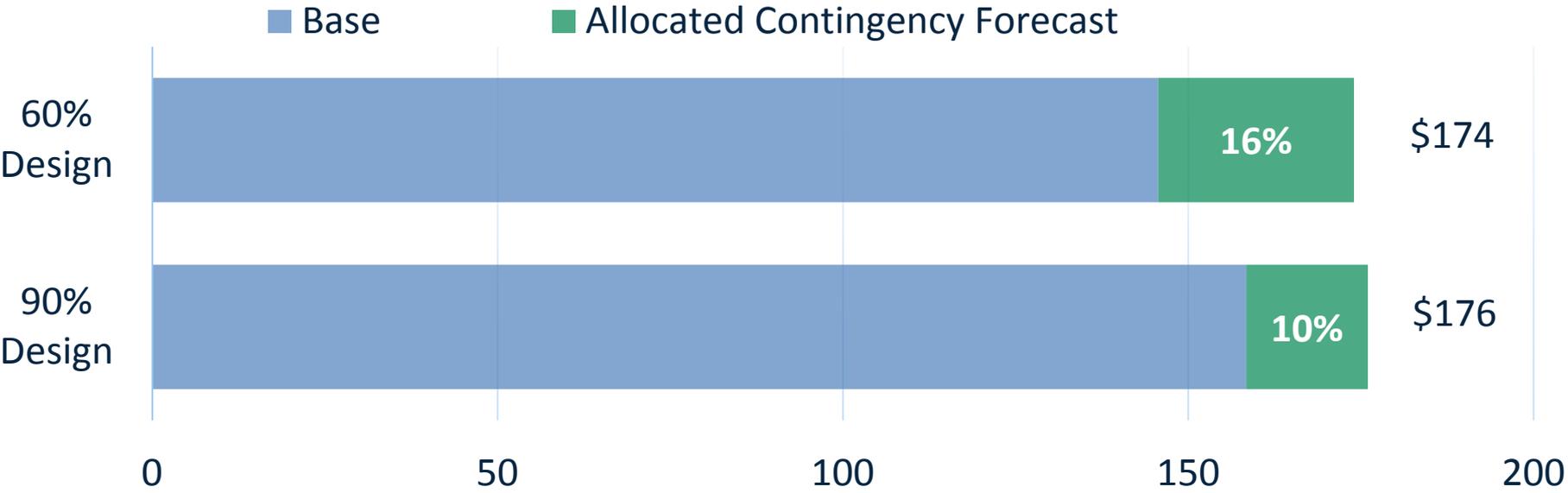
Factors	Examples
Updated Quantities	Confirmed SouthWest Station parking deck foundation design and station materials.
Reduced Unknowns	Refined SouthWest Station bus waiting area design and canopy.
Refined Cost Inputs	Updated concrete unit costs, foundation piling.

Support Facilities/OMF (YOE, in \$ Millions)



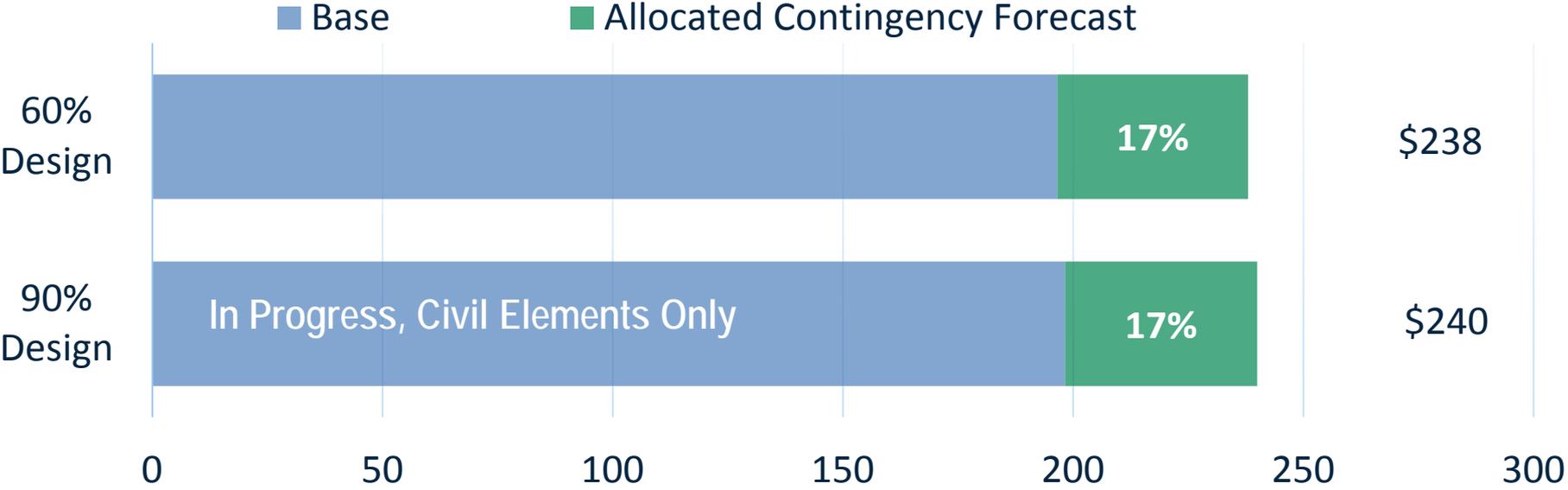
Factors	Examples
Updated Quantities	In progress
Reduced Unknowns	In progress
Refined Cost Inputs	In progress

Site Work, Special Conditions (YOE, in \$ Millions)



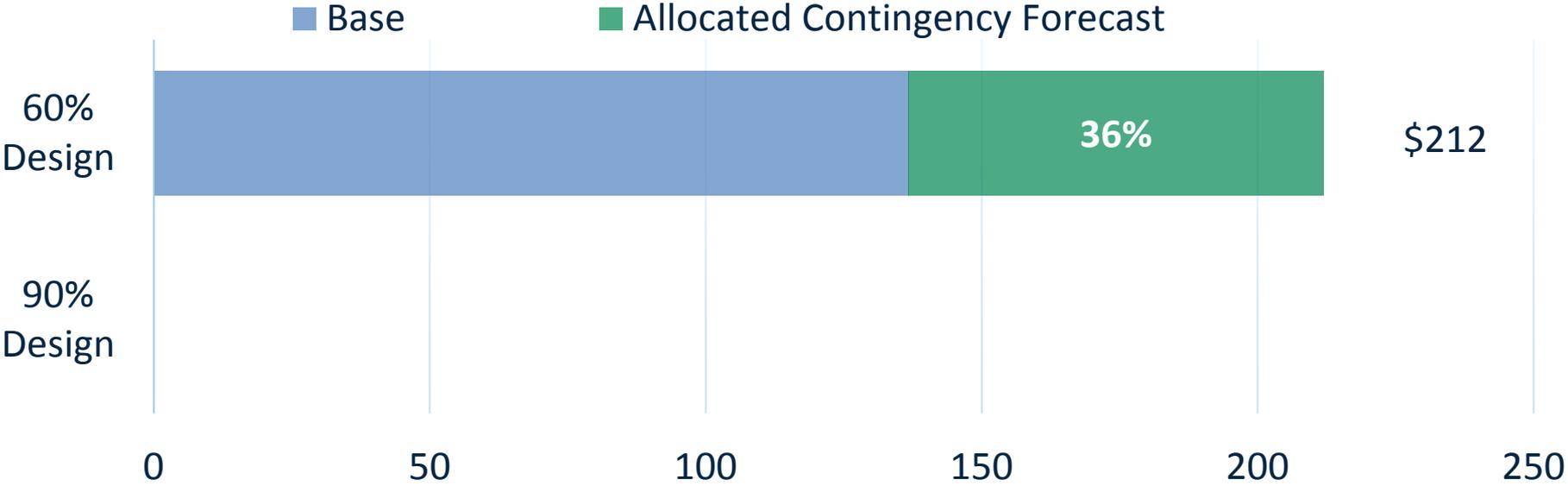
Factors	Examples
Updated Quantities	Refined roadway, sidewalk, and landscape design and erosion control plans. Refined wall sizing, layout and type.
Reduced Unknowns	Refined cathodic protection to stormwater structures, earthwork approach.
Refined Cost Inputs	Refined SouthWest Station bus loop bridge, overall utility design requirements.

Systems (YOE, in \$ Millions)



Factors	Examples (Civil Elements Only)
Updated Quantities	Refined guideway ductbank, OCS pole foundations.
Reduced Unknowns	Refined traffic signal layout and interconnects design.
Refined Cost Inputs	Refined freight intrusion protection design.

Right of Way (YOE, in \$ Millions)



Factors	Examples
Updated Appraisals	In Progress. ROW will be updated when in-kind land appraisals are complete. ECCB review in July.

Next Steps

Major Milestones	Date
ECCB Reviews* 60% Project Cost Estimate	Completed
90% Design Packages for Civil Completed	Completed
LRV Proposals Due	Completed
ECCB Reviews* 90% Civil Cost Estimate	Mar 2016
FEIS Publication	May 2016
90% Design Packages for Systems & OMF Completed	May 2016
ECCB Reviews and Approves* Project Budget (includes 90% cost estimate)	July 2016
Environmental Record of Decision	Aug 2016
Approval to Enter Engineering	Fall 2016
Letters of No Prejudice (LONP) from FTA	Pre FFGA
Full Funding Grant Agreement	Mid 2017
Heavy Construction	2017-2019
Revenue Service	2020

***per CTIB Funding Commitment Resolution**

Next Steps Summer 2016

- Review and approve project scope and cost estimate as project budget prior to applying for entry into Engineering
 - CMC
 - ECCB
 - HCRRA
 - CTIB
- Approve project scope and budget, authorize SPO to submit application to enter Engineering
 - Transportation Committee
 - Metropolitan Council

More Information

Online:

www.SWLRT.org

Email:

SWLRT@metrotransit.org

Twitter:

www.twitter.com/southwestlrt

