

SOUTHWEST

Green Line LRT Extension



Executive Change Control Board

August 3, 2016



Today's Topics

- Approval of Meeting Minutes
- 90% Cost Estimate
- Project Schedule
- Project Scope and Budget
 - Action
- Next Steps

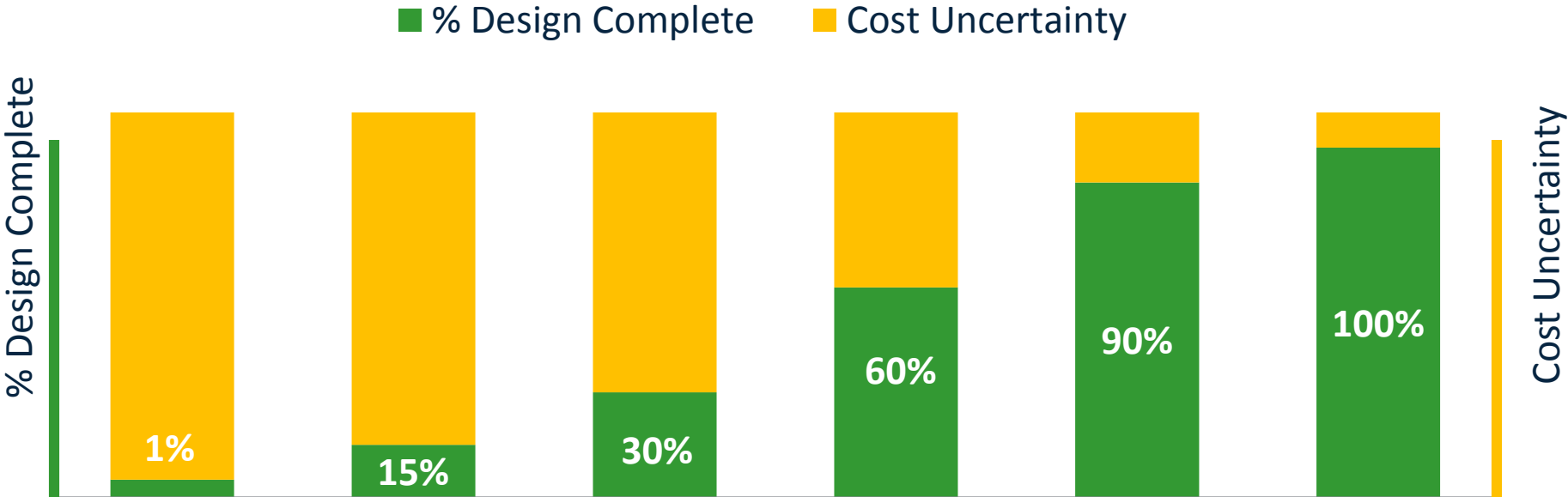


90% Cost Estimate

Project Cost Estimate: 60% Design (Jan. 2016)

FTA SCC Description (in millions)		Jan. 2016 (\$1,791 million) 60% Design
10	Guideway and Track	\$384
20	Stations, stops, terminals	\$70
30	Support facilities	\$90
40	Sitework and special conditions	\$174
50	Systems	\$238
	Construction Subtotal	\$956
60	ROW, Land and existing improve	\$212
70	Vehicles	\$126
80	Professional Services	\$276
90	Unallocated contingency	\$166
100	Finance charges	\$55
	Total Project Costs	\$1,791

Cost Uncertainty By Project Phase



Contingency and Risk

- Contingency is budget set aside to account for project risks

Requirements

- Utilities
- Railroad Negotiations

Design

- Systems elements
- Freight rail requirements

Market

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

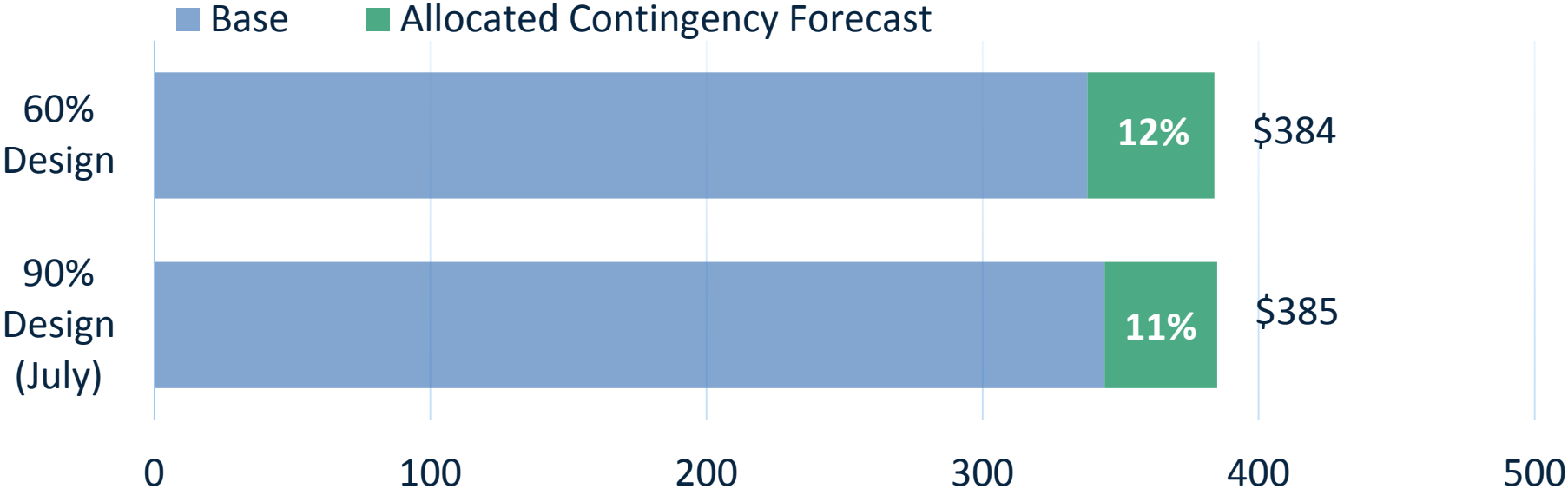
Construction

- Unforeseen Conditions
- Contaminated Soils
- Field Engineering

60% Estimate vs 90% Estimate

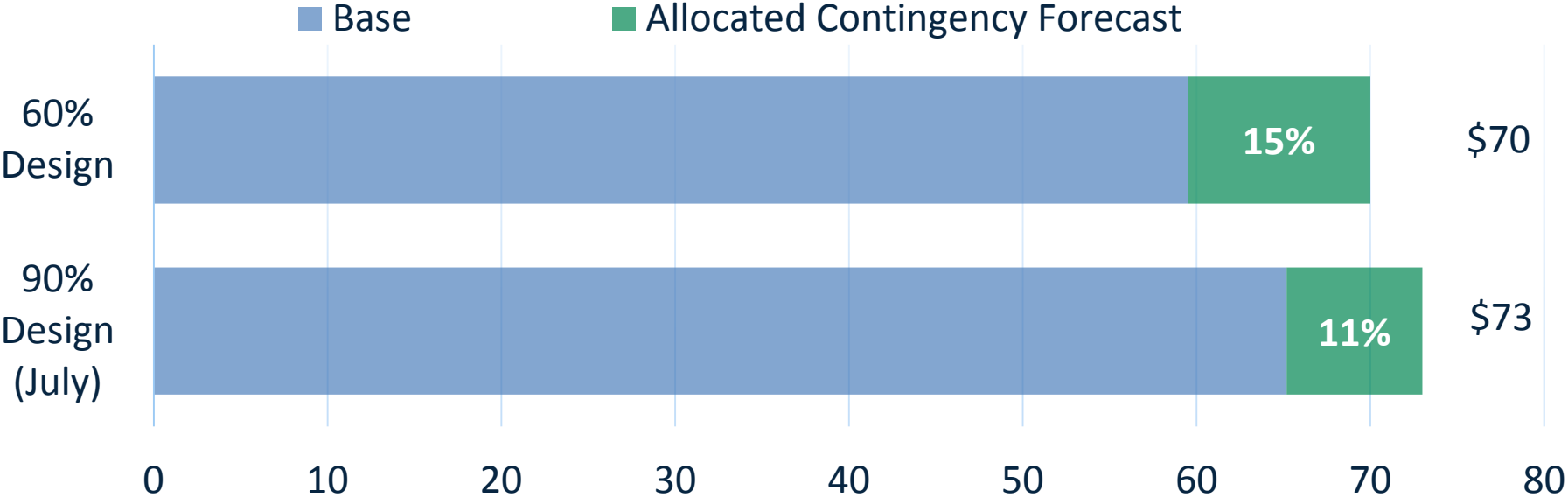
- 60% Estimate: “Bottoms up” approach based on detailed drawings
- 90% Estimate: Refined cost estimate
 - More detailed drawings and quantities
 - More refined labor rates
 - More refined vendor material quotes
 - Increase in confidence/decrease in design risk resulting in reduction in projected allocated contingency

Guideway and Track (YOE, in \$ Millions)



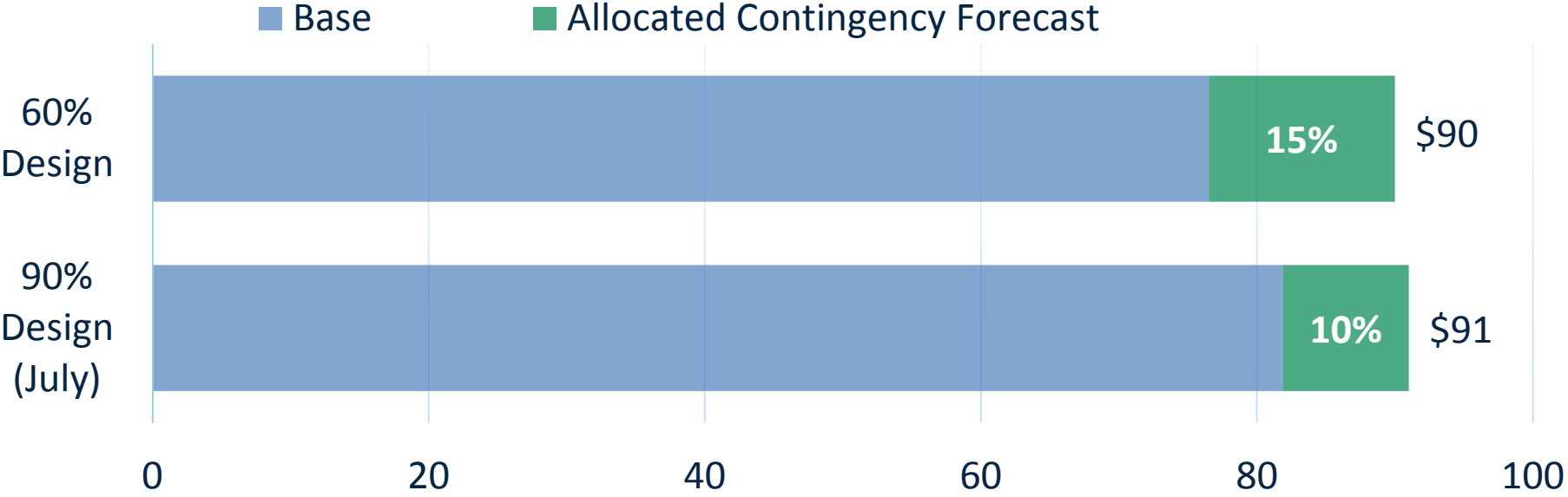
Factors	Examples
Updated Quantities	Refined retaining wall sizing, layout and type.
Reduced Unknowns	Refined trackway drainage, bridge materials, schedule.
Refined Cost Inputs	Updated piling unit costs for retaining walls and bridges. Rail quotes updated.

Stations (YOE, in \$ Millions)



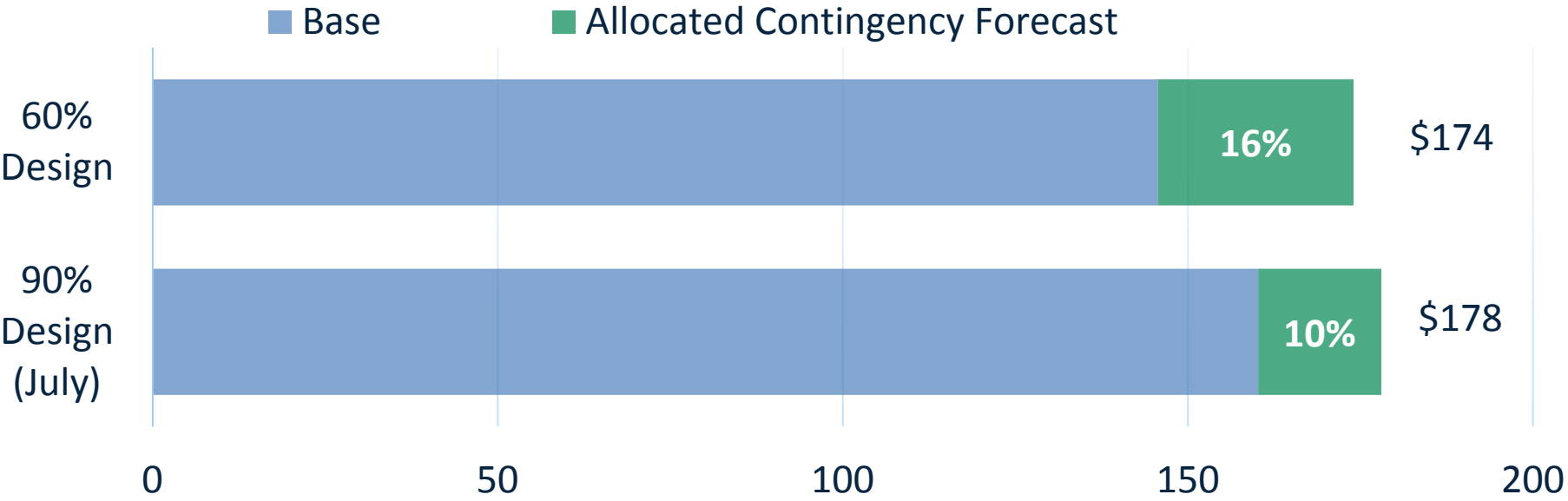
Factors	Examples
Updated Quantities	Confirmed SouthWest Station parking deck foundation design and station materials.
Reduced Unknowns	Refined SouthWest Station bus waiting area design and canopy, schedule.
Refined Cost Inputs	Updated concrete unit costs, foundation piling.

Operations & Maintenance Facility (YOE, in \$ Millions)



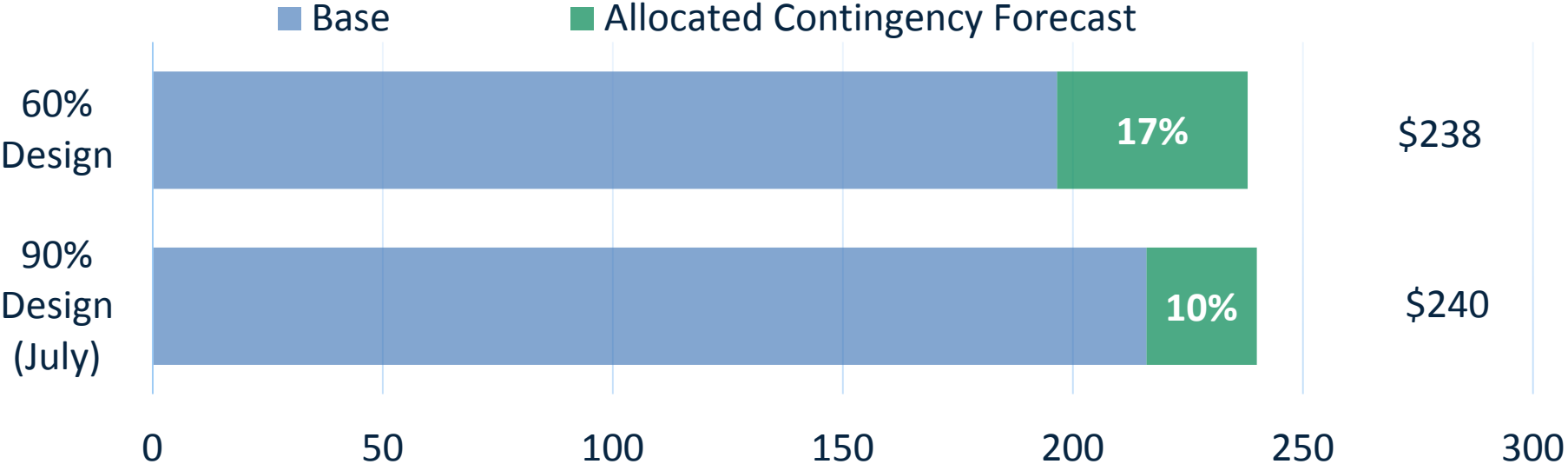
Factors	Examples
Updated Quantities	Mechanical/electrical/plumbing, wall types and systems.
Reduced Unknowns	Foundation design, vapor mitigation approach, contaminated soil mitigation.
Refined Cost Inputs	Interior finishes, main equipment, track design.

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



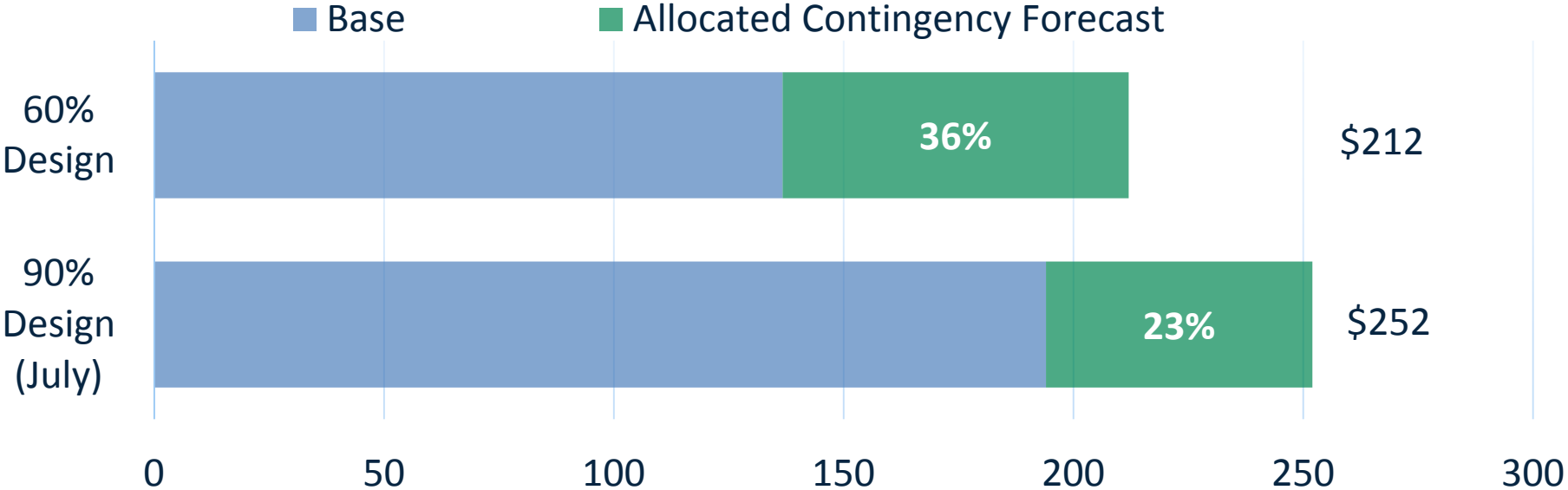
Factors	Examples
Updated Quantities	Refined roadway, sidewalk, and landscape design and erosion control plans. Refined wall sizing, layout and type.
Reduced Unknowns	Refined cathodic protection to stormwater structures, earthwork approach, schedule.
Refined Cost Inputs	Refined SouthWest Station bus loop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

Systems (YOE, in \$ Millions)



Factors	Examples (Civil Elements Only)
Updated Quantities	Refined guideway ductbank; OCS pole foundations, type and number; added 3 medium voltage transformers, camera types and locations; spare parts and training
Reduced Unknowns	Refined traffic signal layout and interconnects design, length of wire/section insulators, wayside radio equipment.
Refined Cost Inputs	Refined freight intrusion protection design, communication equipment and devices, specific vendor quotes.

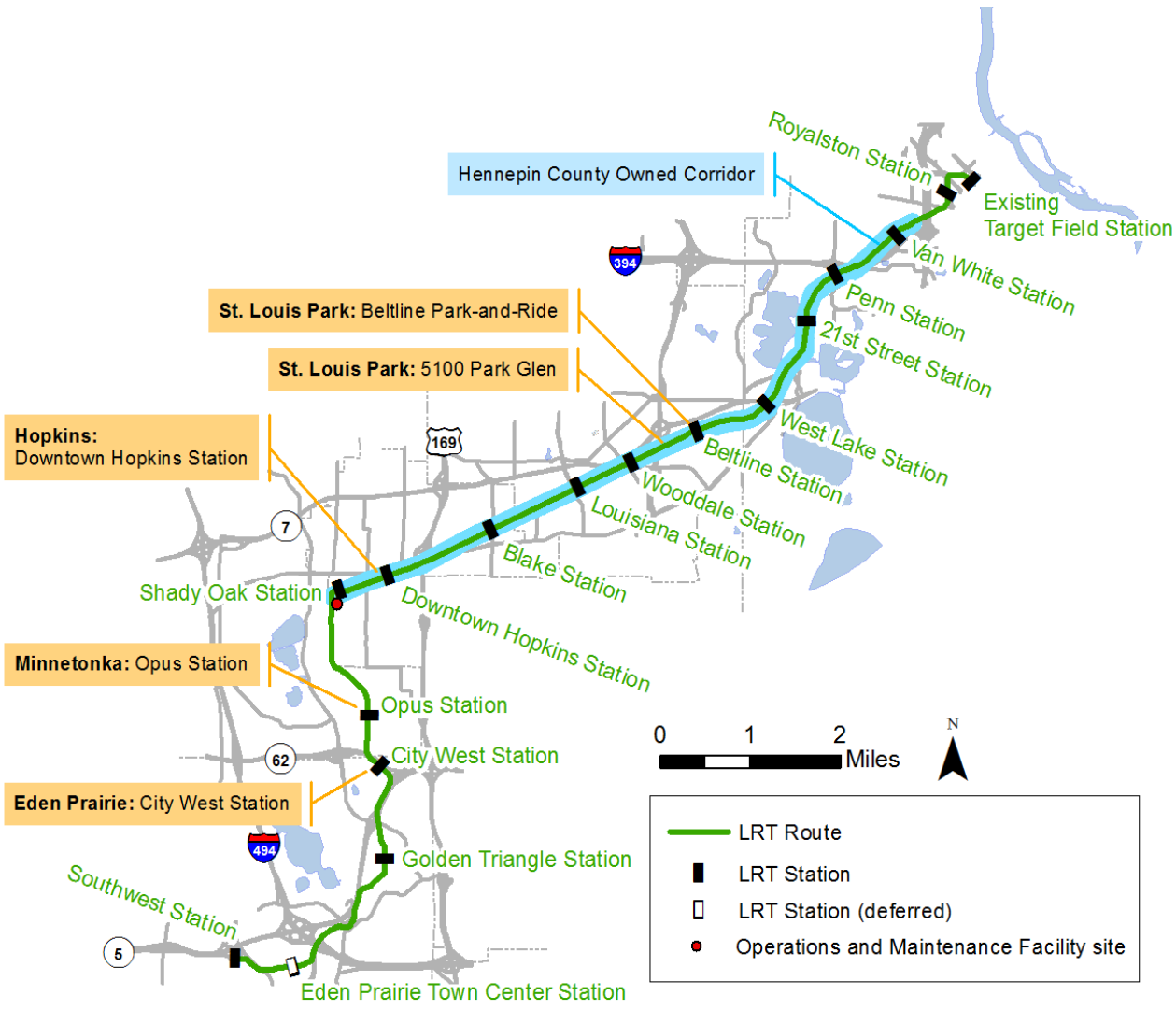
Right of Way (YOE, in \$ Millions)



Factors	Examples
In-Kind Land Transfers	Added appraised Hennepin County, Eden Prairie, Hopkins, St. Louis Park in-kind land.

In-Kind Land Transfers

- Increases project cost estimate with value confirmed by FTA
- Applies in-kind land transfers to local match
- Leverages Federal match



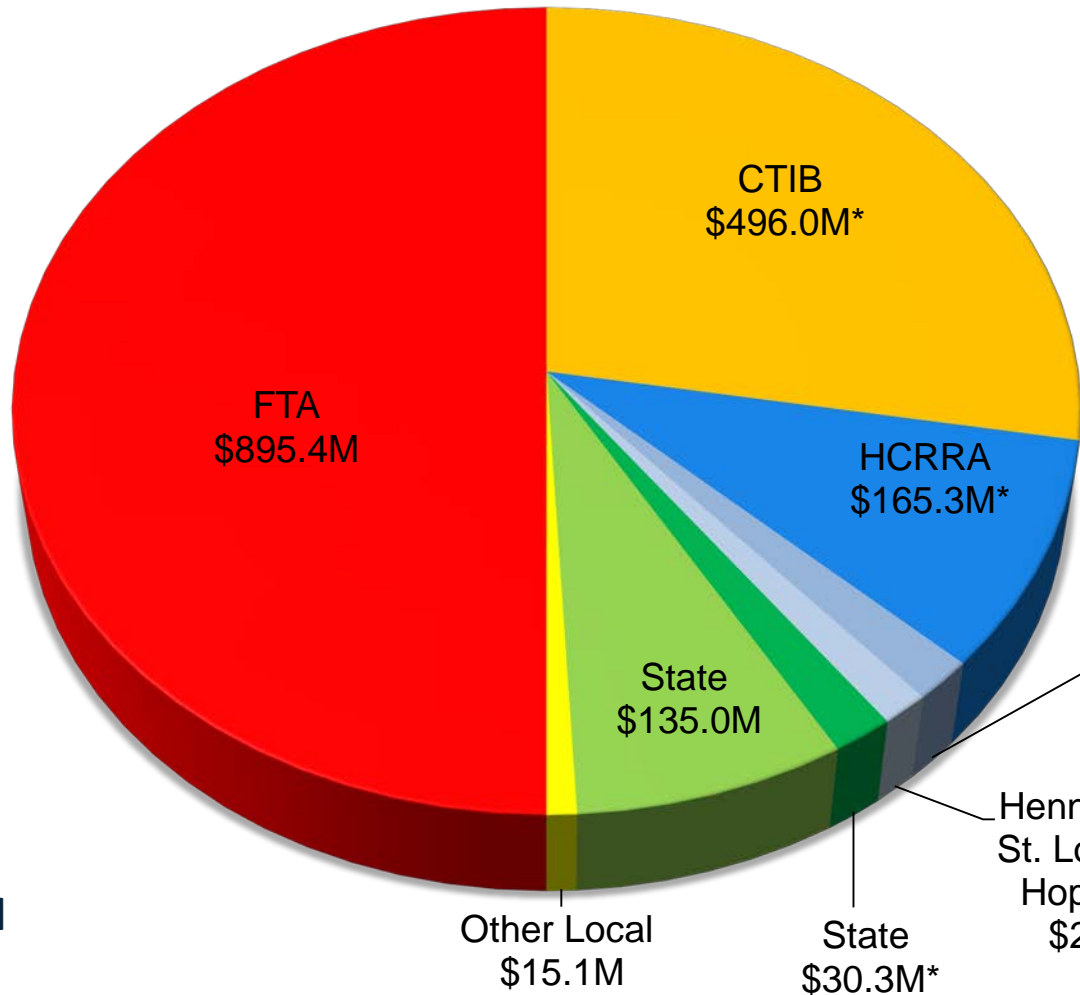
Recognizing In-kind Land Value

- July 2015: added \$30M in-kind value to cost estimate and recognized as local funding commitment
- July 2016: added additional \$39M of in-kind value to cost estimate and recognize as local funding commitment
- Total \$69M of in-kind value included in cost estimate and recognized as local funding commitment

Funding Sources with Original \$30M In-kind Land Value

January 2016

\$1.791 Billion



\$895.4 M
in Local Value =
\$850.5M Cash
+
\$30M In-kind
+
\$15M
Unidentified

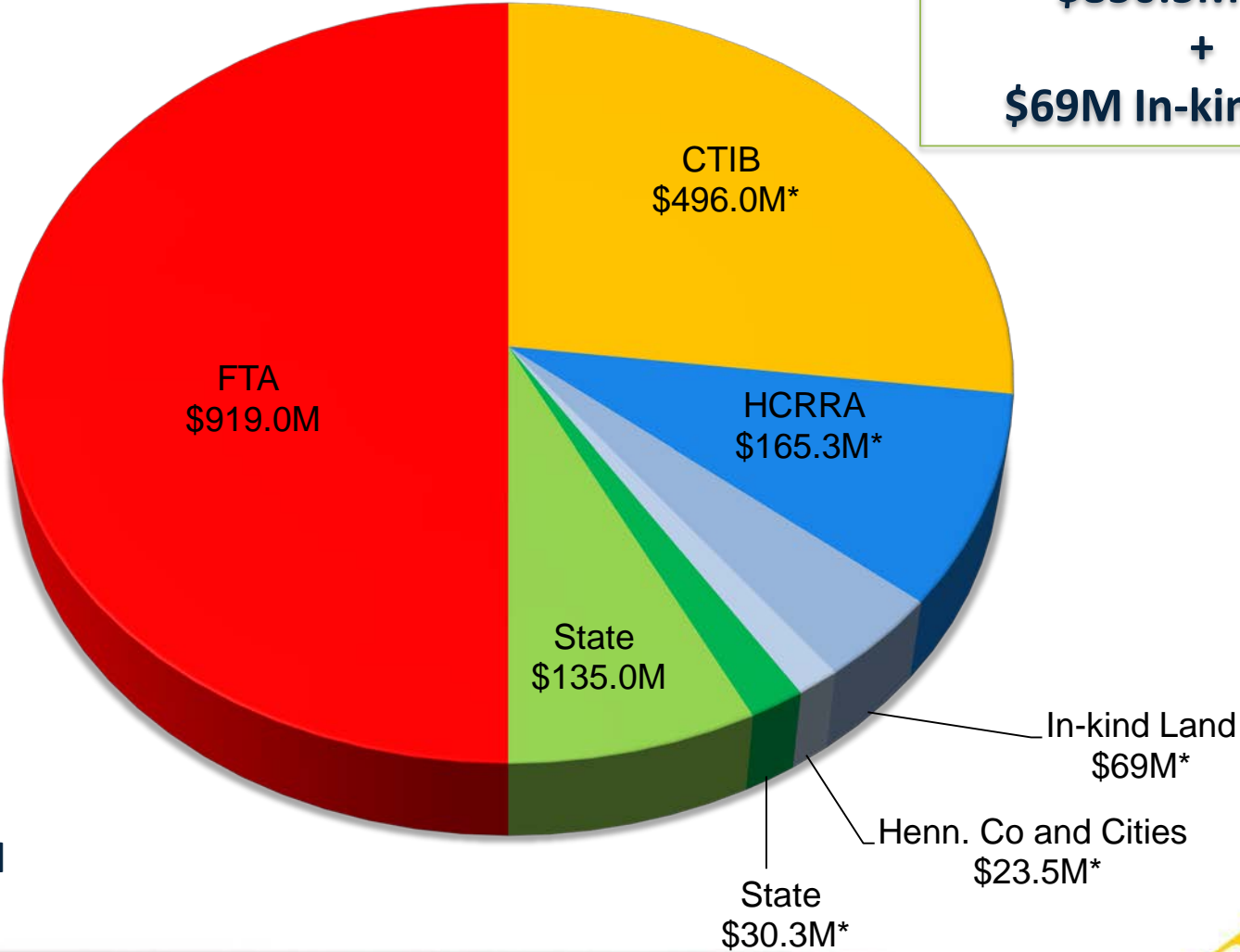
*** Committed**

Recognizing Total In-kind Land Value

August 2016

\$1.839 Billion

\$919 M
In Local Value =
\$850.5M Cash
+
\$69M In-kind value



*** Committed**

Project Cost Estimate: 90% Design (Aug. 2016)

FTA SCC Description (in millions)		Jan. 2016 60% Design 24% Contingency	Aug. 2016 90% Design 21% Contingency
10	Guideway and Track	\$384	\$385
20	Stations, stops, terminals	\$70	\$73
30	Support facilities	\$90	\$91
40	Sitework and special conditions	\$174	\$178
50	Systems	\$238	\$240
	Construction Subtotal	\$956	\$967
60	ROW, Land and existing improve	\$212	\$252
70	Vehicles	\$126	\$126
80	Professional Services	\$276	\$276
90	Unallocated contingency	\$166	\$164
100	Finance charges	\$55	\$55
	Total Project Costs	\$1,791	\$1,839

Summary

- Recognizing total in-kind land value:
 - Eliminates \$15.1M local funding shortfall
 - Local cash remains constant at \$850.5M
 - Raises project cost estimate to \$1.839B
 - Does not increase CTIB, HCRRA or State contribution amounts

Project Schedule

Project Schedule

- Schedule anticipated late 2020 revenue operations date
- Updated schedule anticipates 2021 revenue operations date:
 - Construction complete in 2020
 - System-wide integration testing, pre-revenue testing and training operation activities in 2021
 - Durations based on lessons learned from the Green Line

ECCB Resolution Discussion/Approval

Next Steps

Next Steps

Milestone	Date
Met Council Takes Action <ul style="list-style-type: none">• MEPA Determination of Adequacy• Scope and Budget Authority• Submit Entry into Engineering Application	Aug 2016
SPO Submits Entry Into Engineering Application	Aug 2016
FTA Approves Entry into Engineering	Nov 2016

More Information

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