

# Central Corridor Light Rail Transit

Central Corridor Management  
Committee

February 11, 2009



*Improving  
mobility*

*Easing  
congestion*

*Strengthening  
our communities*

# Agenda



- BAC and CAC reports
- FTA News Starts update
- Budget update
- Streetscape
- Construction packages

## Central Corridor Light Rail Transit



# BAC and CAC Reports

Karri Plowman  
Central Corridor Partnership

Robin Caufman  
Manager of Public Involvement

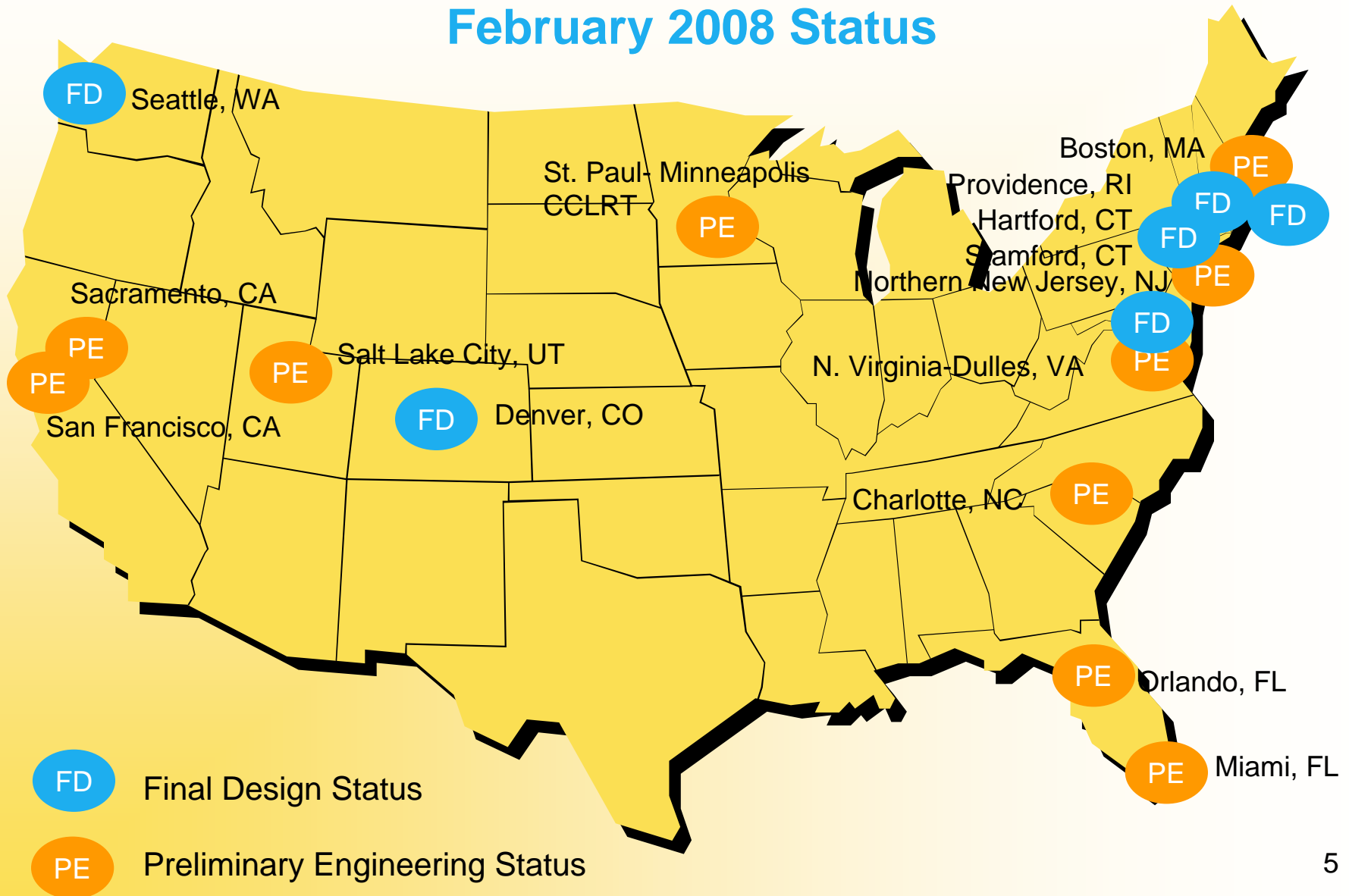
# Central Corridor Light Rail Transit



## “New Starts” Update

# Peer “New Starts” Projects

## February 2008 Status



# Peer “New Starts” Projects

## Preliminary Engineering

2008 Projects in Preliminary Engineering	Capital Cost Est. (millions)
Sacramento, CA S. Sacramento Corridor, Phase 2	\$226.2
San Francisco, CA Central Subway LRT	\$1,289.8
Miami, FL Orange Line Phase 2	\$1,334.1
Orlando, FL Central Florida Commuter Rail Transit	\$415.8
Boston, MA Silver Line Phase III	\$1,060.6
St. Paul-Minneapolis, MN Central Corridor LRT	\$932.3
Charlotte, NC NE Corridor LRT	\$749.0
Northern New Jersey NJ, ARC ⇒ Final Design	\$7,263.5
Salt Lake City, UT Mid-Jordan LRT ⇒ FFGA	\$513.7
No. Virginia VA, Dulles Corridor Metrorail Extension ⇒ FFGA	\$2,548.8
<b>Total</b>	<b>\$16,333.8</b>

# Peer “New Starts” Projects

## Final Design

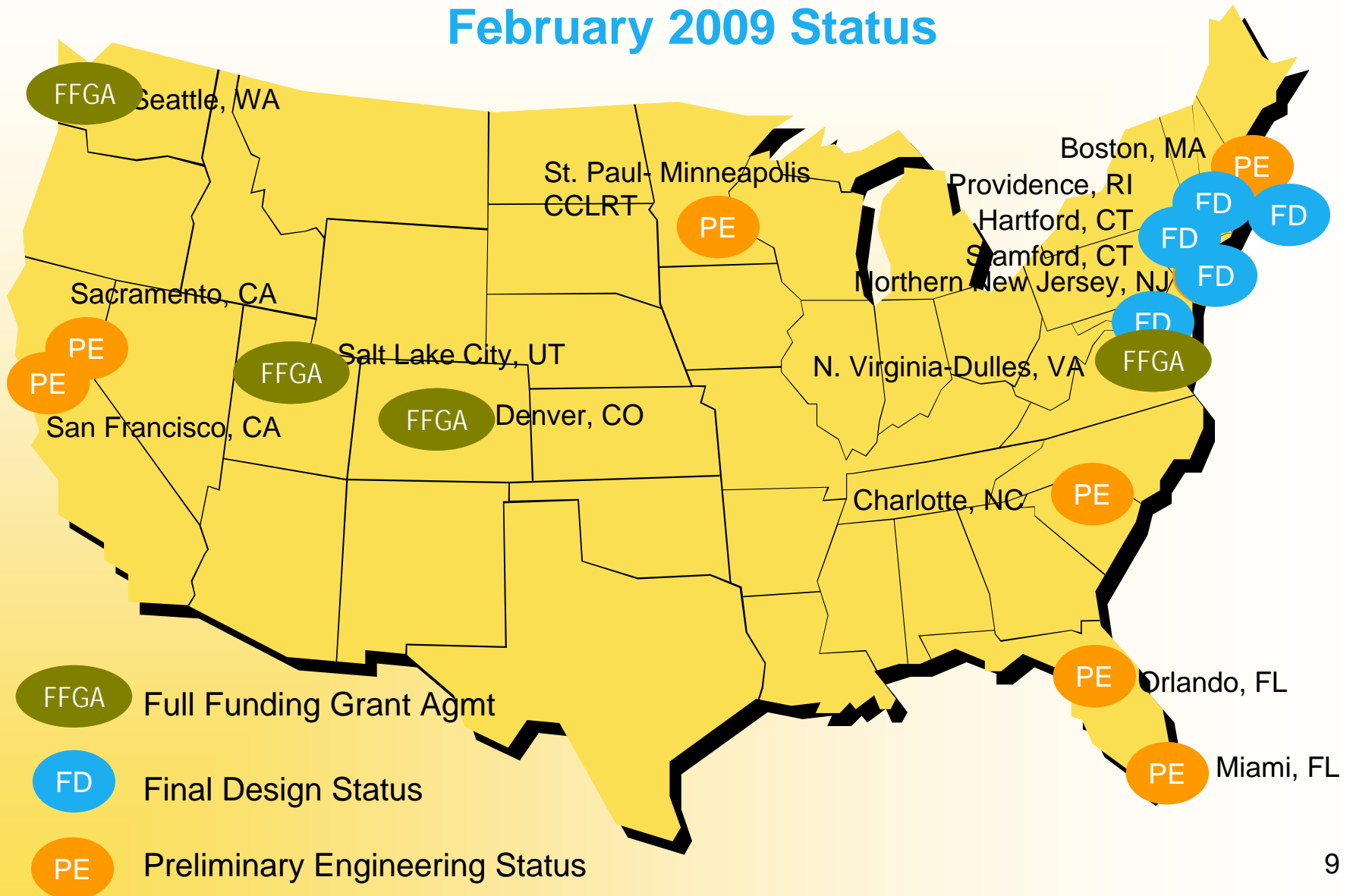
<b>2008 Projects in Final Design</b>	<b>Capital Cost Est. (millions)</b>
Denver, CO West Corridor LRT ⇒FFGA	\$606.5
Hartford, CT New Britain Hartford Busway	\$447.6
Stamford, CT Urban Transitway Phase II	\$48.3
Wilmington, DE Commuter Rail Improvements	\$78.4
Providence, RI S. County Commuter Rail	\$49.2
Seattle, WA University Link LRT ⇒FFGA	\$1,612.0
<b>Total</b>	<b>\$2,842.0</b>

# Peer “New Starts” Projects Full Funding Grant Agreements

<b>2009 Projects with FFGA’s</b>	<b>FFGA Federal Commitment (millions)</b>
Denver, CO West Corridor LRT	\$309
Salt Lake City, UT Mid-Jordan LRT	\$428
Seattle, WA University Link LRT	\$813
No. Virginia VA, Dulles Corridor Metrorail Extension (pending congressional 60-day review)	\$900
<b>Total</b>	<b>\$2,450</b>

# Peer “New Starts” Projects

## February 2009 Status



# Central Corridor Light Rail Transit



## Baseline Cost Estimate Update

# Baseline Cost Estimate Update

- Materials Pricing Update
- Scope refinements
- Reevaluate contingency
- Summary



# Materials Pricing Update

<u>Item</u>	<u>Unit Measure</u>	<u>Jan. 2009 Price Quote</u>	<u>Sept. '08 to Jan. '09 % Change</u>
Ready Mix Concrete	Cubic yard	\$98.00	+9%
Rail	Ton	\$1,400.00	0%
Underground Piping	Lineal foot	Variable by size	-1%
Asphalt	Ton	\$70.00	-7%
Aggregate	Cubic yard	\$8.49	-8%
Rebar	Pound	\$1.03	-18%

## Central Corridor Light Rail Transit

# Materials Pricing Update

(in millions)

Item	PE Cost Estimate Impact (in \$2008millions)
Ready Mix Concrete	\$ 1.3
Rail	\$ -
Underground Piping	\$ (0.2)
Asphalt	\$ (0.6)
Aggregate	\$ (0.5)
Rebar	\$ (1.9)
<hr/>	
<b>Total Material Variance (2008\$)</b>	<b>\$ (1.9)</b>
<b>Contingency (20%)</b>	<b>\$ (0.4)</b>
<b>Escalation (3 years @ 3%)</b>	<b>\$ (0.2)</b>
<b>Total (2011\$)</b>	<b>\$ (2.5)</b>

# Baseline Cost Estimate Update

- Materials Pricing Update
- **Scope refinements**
- Reevaluate contingency
- Summary



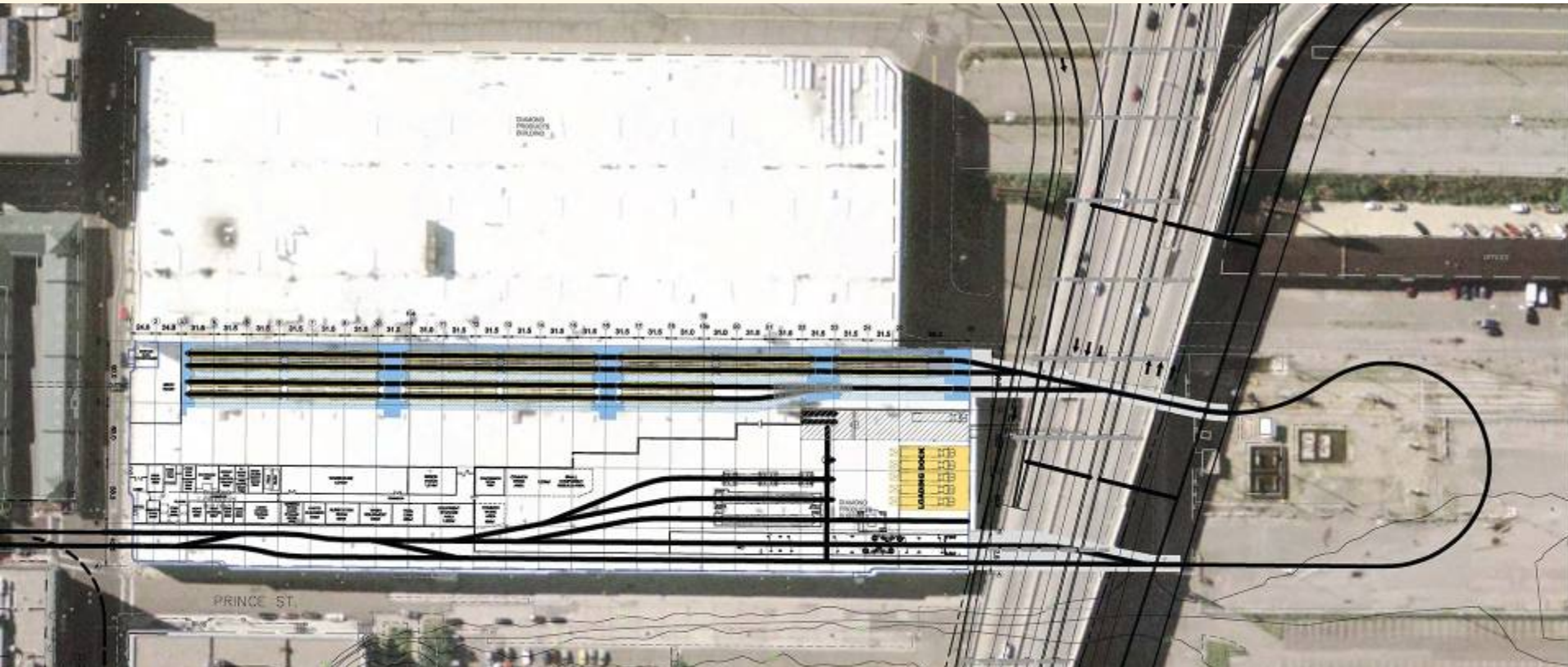
# West Bank Preferred Option

PE Cost impact **-\$6.5 million**



# Operations and Maintenance Facility

PE Cost impact **-\$3.0 million**



# Baseline Cost Estimate Update

- Materials Pricing Update
- Scope refinements
- **Reevaluate contingency**
- Summary



# Reevaluate Contingency

**PE Cost impact +\$13.8 million**



	<b>PE Sept. 2008 Estimate (in millions)</b>	<b>Advanced PE Jan. 2009 Estimate (in millions)</b>
Project Budget	\$ 914.9	\$ 913.9
Project Contingency	\$ 130.9	\$ 144.7
Percent of Program Costs*	17.4 %	20 %

\* Percentage calculated on unexpended funds

# Baseline Cost Estimate Update

- Materials Pricing Update
- Scope refinements
- Reevaluate contingency
- **Summary**



# Baseline Cost Estimate Summary

**SEPTEMBER 2008 PE COST ESTIMATE (midyear 2011\$ millions)      \$914.9**

## **DEDUCTIONS (in millions)**

Evaluate Materials Pricing Impacts	(\$2.5)
Scope Refinements	(\$5.2)
Diamond Products OMF	(\$3.0)
West Bank Configuration Modifications	(\$6.5)
Modified Track Cross Section - Reduce undercut and backfill by 1'-0"	(\$3.2)
Duplicative Scope for Traffic Mitigation	(\$1.3)

## **ADDITIONS (in millions)**

Increase guideway cover from 4" concrete to 6" concrete w/ micro fiber. Required for median cover to carry service trucks	\$0.7
Add train bar signals at all traffic signals	\$1.0
Consolidation of TPSS at 4th and Cedar and West Bank not practical	\$1.5
CCLRT Safety Elements	\$3.6

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**REVISED TOTAL      \$900.1**

Contingency increased to 20% Program Costs (excludes expended funds)      \$13.8

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**REVISED TOTAL      \$913.9**

# Central Corridor Light Rail Transit



## Streetscape

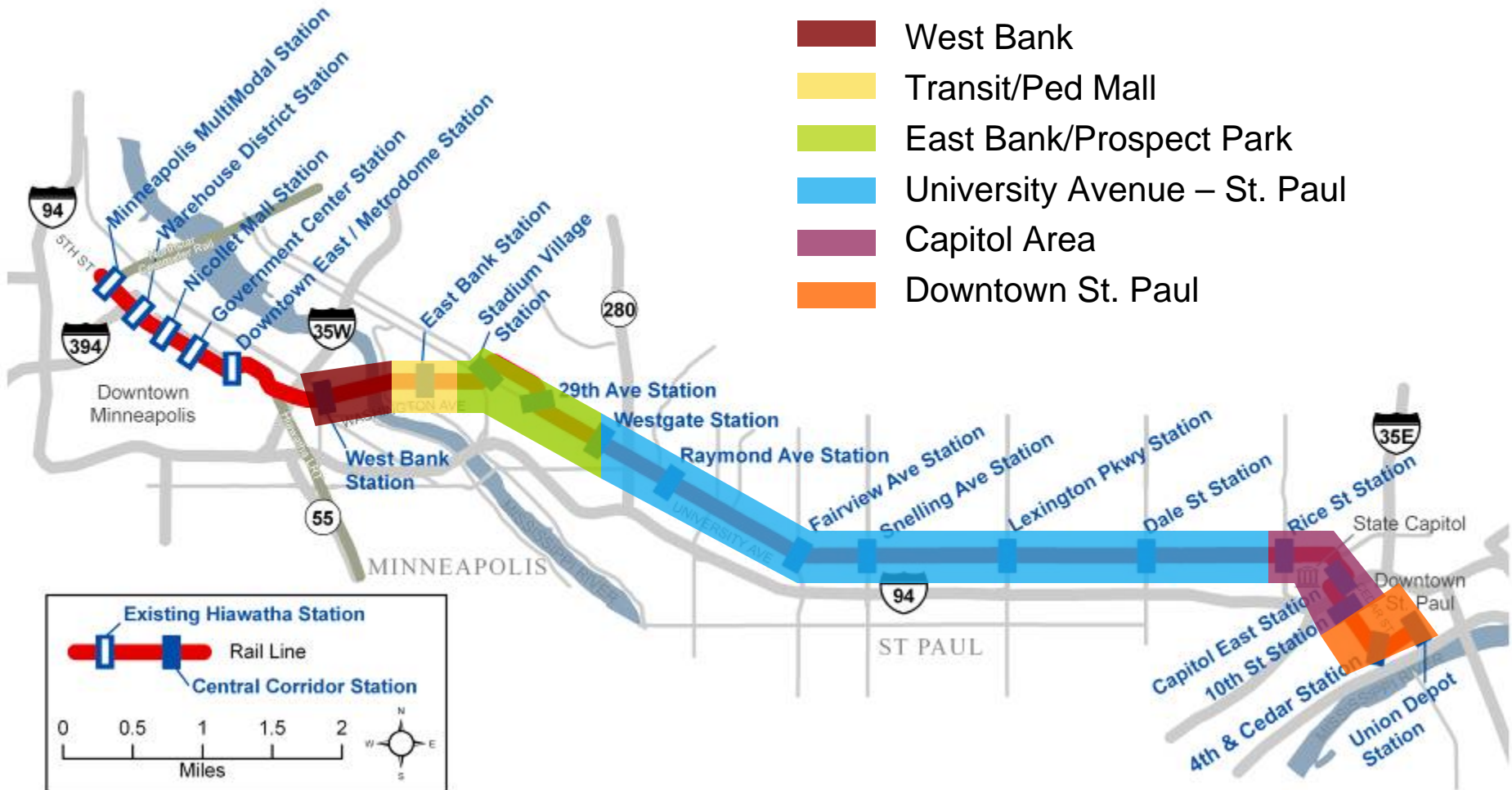
# Streetscape



- Design scope includes
  - Baseline plan
  - Master streetscape plan
- Streetscape elements designated as
  - Baseline design elements
  - Stakeholder desired elements, betterments

# Central Corridor Light Rail Transit

# Streetscape Planning Segments



# Streetscape Design Baseline Plan Elements



- Replace existing elements along University Avenue
- Provide safety elements for LRT operation
- Included in baseline budget

# Streetscape Design Baseline Plan Elements

- Sidewalk replacement
- Concrete median
- Street lighting, remove and re-install existing light fixtures
- Concrete intersections and crosswalks at signalized intersections



# Streetscape Design Baseline Plan Elements



- Bus shelters, remove and re-install existing shelters
- Boulevard trees, in-kind replacement
- Station markers and wayfinding signs

# Streetscape Design Baseline Plan Elements



- Inter-track post and double chain fence
- Curb wall and metal railing along road edge of median walkway
- Metal fence along track edge of median walkway
- Concrete bollards at stations adjacent to intersections

# Streetscape Design Baseline Plan Elements

- Elements at non signalized pedestrian crossing
  - Tactile warning edges
  - Lighting at intersection and along median walkway
  - Bike racks
  - Striped crosswalks



# Project Baseline Plan

## Example of University Ave. Intersection, St. Paul



# Project Baseline Plan

## Example of Non-signalized Pedestrian Crossing, St. Paul



# Project Baseline Plan

## Example of University Ave. Intersection, Minneapolis



Malcolm and University

# Streetscape Design Stakeholder Desired Elements



- Enhancements to existing conditions along University Avenue
- Upgrades to baseline elements, betterments

# Streetscape Master Plan

## Example of Betterments, University Ave., St. Paul



Dale and University

# Streetscape Master Plan

## Example of Betterments, University Ave., St. Paul



# Streetscape Master Plan

## Example of Betterments, University Ave., Minneapolis



Malcolm and University

# Baseline to Betterments Cost Comparison

- Examples
  - Street lights
  - Sidewalk treatment
  - Overhead contact system poles



# Street Lights – St. Paul

## University Avenue (Emerald to Rice)



- **Baseline** project includes replacement and reinstallation of existing street lights
- St. Paul proposes **betterment** of twin lantern street lights
- Costs \$2.5MM more than baseline

# Sidewalk Treatment - St. Paul University Avenue (Emerald to Rice)



- **Baseline** project
  - Replacement of existing sidewalk
  - In-kind replacement of trees
- St. Paul proposed **betterments**
  - Boulevard pavers
  - Structural soil
  - Additional trees
- Costs \$8.5MM more than baseline

# Overhead Contact System Pole University Avenue (29<sup>th</sup> to Marion)

**Wide Flange**



**Tapered Tubular**



- **Baseline** project includes wide flange OCS poles
- St. Paul & Minneapolis propose **betterment** of painted tapered tubular OCS poles
- Costs \$1MM more than baseline

# Streetscape Design Next Steps

## Central Corridor Light Rail Transit



- CCPO finalizing costs for betterment elements for University Ave
- CCPO working with stakeholders to define betterment elements for West Bank, Capitol Area, and downtown St. Paul areas
- Stakeholders must secure funding for betterment elements to be added during construction

# Central Corridor Light Rail Transit



## Construction Packages

# Project Schedule Update

	<b>Jan 15, 2009 Updated</b>
Meet with FTA	Feb. 3, 2009
FEIS admin draft to FTA	Feb. 9, 2009
FTA comments to CCPO	Mar. 11, 2009
Publish FEIS	Apr. 20, 2009
FEIS review period	May 20, 2009
FTA issues Record of Decision (ROD)	June 3, 2009
CCPO submits LONP for advanced utilities	June 4, 2009
Advertise advanced utility contract	June 4, 2009
Request entry into Final Design	June 23, 2009
Notice to Proceed for advanced utility	Aug. 24, 2009
FTA approves entry into Final Design	Sept. 21, 2009
Submit FFGA application to FTA	Sept. 22, 2009
FFGA from FTA	Summer 2010
Begin heavy construction	Late Summer 2010

# Central Corridor Light Rail Transit

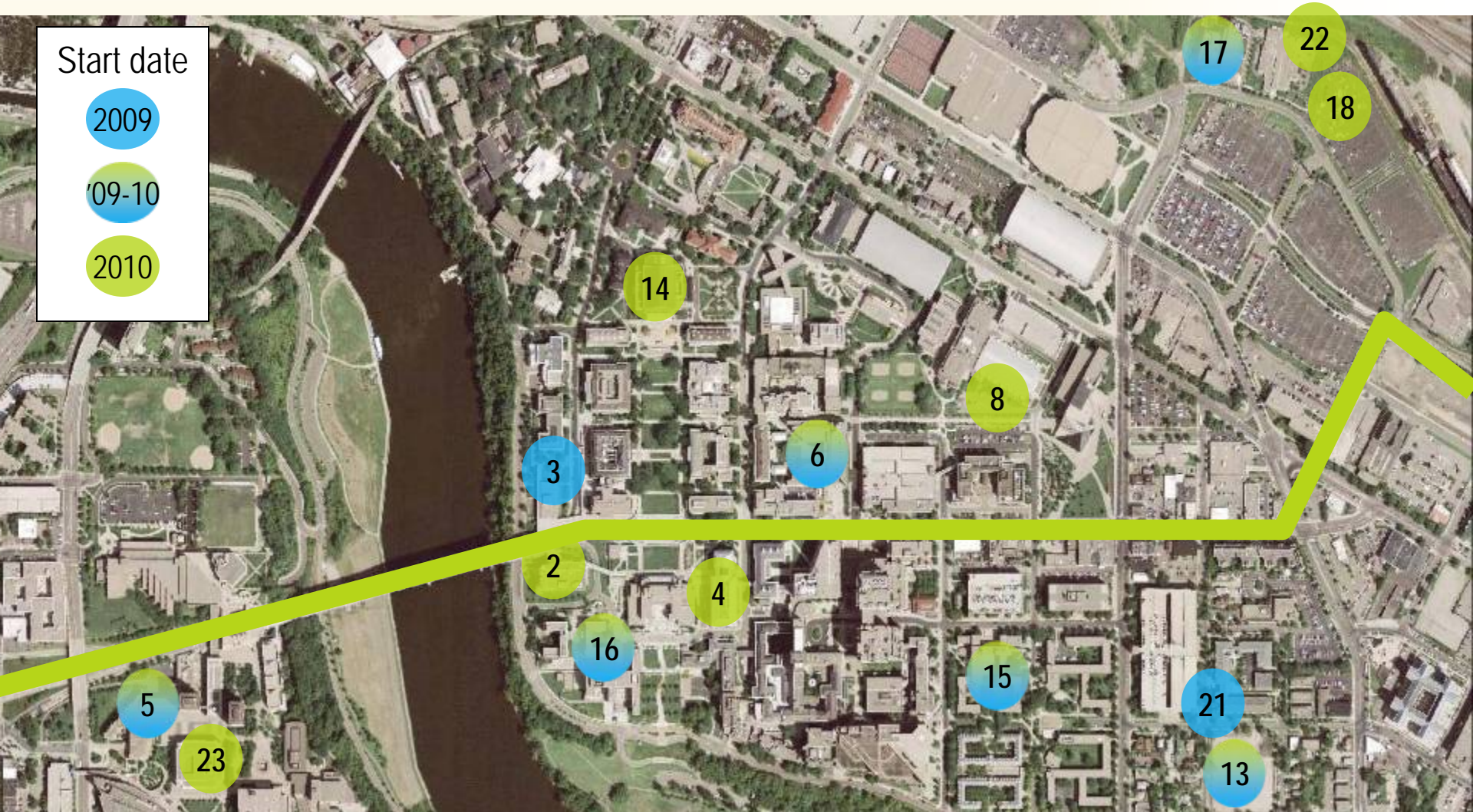
# Upcoming 2009-2010 Construction Projects

Start date

2009

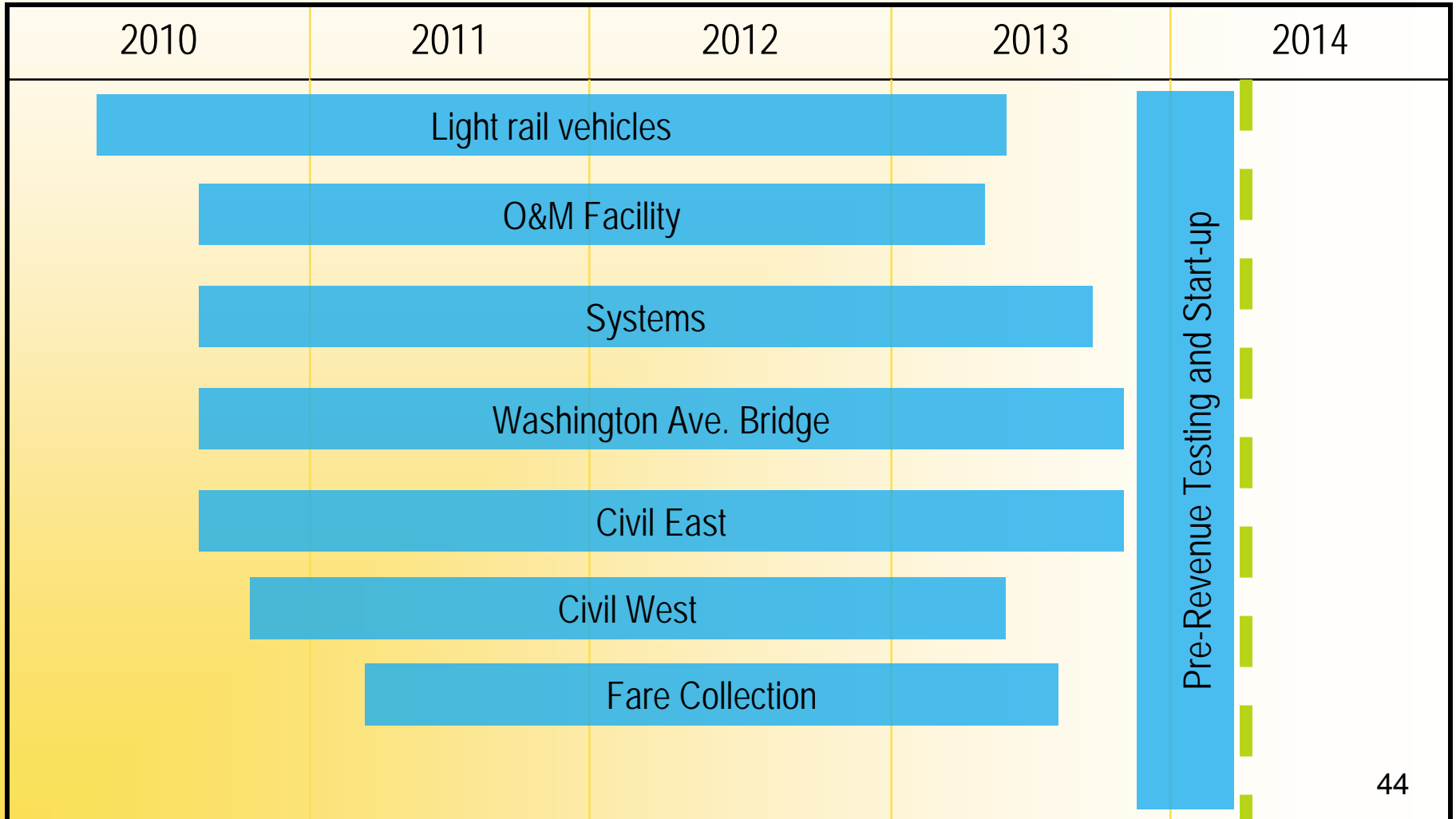
'09-10

2010



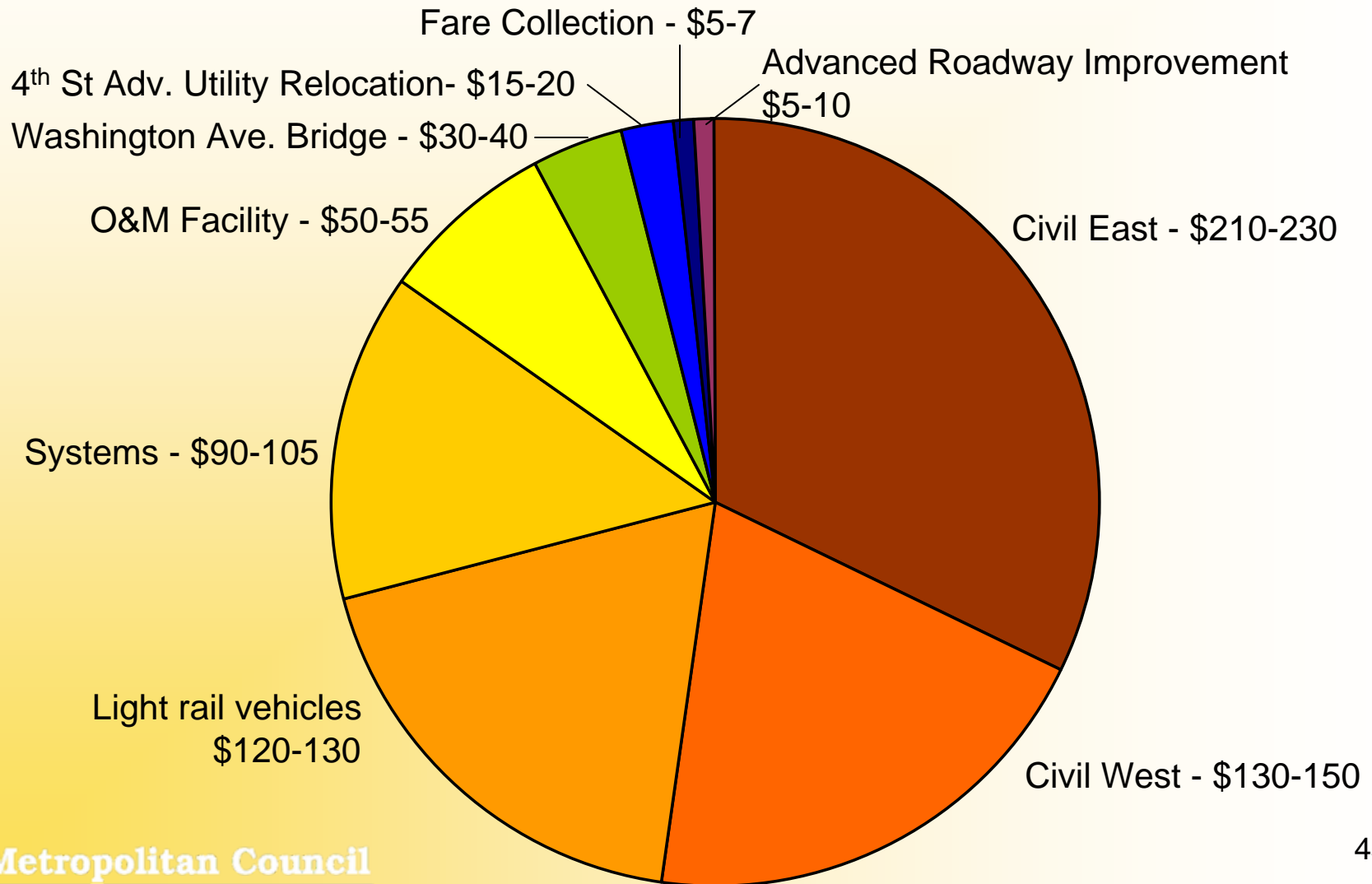
# Estimated Heavy Construction Schedule

## Central Corridor Light Rail Transit



# Anticipated Contracts

(Cost Est. Ranges in \$ Millions)



## More Information

Check out our website:

- [www.centralcorridor.org](http://www.centralcorridor.org)

Contact Central Corridor Project Office:

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- Email: [centralcorridor@metc.state.mn.us](mailto:centralcorridor@metc.state.mn.us)

