

Central Corridor Light Rail Transit

Central Corridor Management
Committee

August 27, 2008



*Improving
mobility*

*Easing
congestion*

*Strengthening
our communities*

Today's Agenda

- SDEIS
- Budget/CEI
- Preferred Alternative & Alignment



Central Corridor Light Rail Transit



SDEIS

SDEIS Commenters



- Approximately 65 comments received in 45-day period
 - 11 Agencies / Units of Gov't
 - 30 Community Groups / Organizations
 - 24 Individuals

Overview of SDEIS Comments Rec'd



- Comments as summarized are those raised most frequently
- Almost all issues have been analyzed and/or addressed
- Information shared with stakeholders
- Continue working on addressing issues in Advanced PE and document in FEIS

Overview of SDEIS Comments Rec'd (cont.)



- Build additions stations at Hamline, Victoria, Western (15)
- Concern about parking loss / impact on businesses (15)

Overview of SDEIS Comments Rec'd (cont.)



- Impact of project on local bus service (11)
- Concerns about gentrification / loss of affordable housing (10)
Ensure Pedestrian / Bicycle safety (9)
- Maintain safe/convenient access across University Ave. (8)

Central Corridor Light Rail Transit



Budget/CEI

Central Corridor Light Rail Transit

FTA Cost Effectiveness Index



$$CEI = \frac{\text{Annualized Capital + Bus and Rail Operating Costs}}{\text{Annual travel time savings}}$$

Central Corridor Light Rail Transit



Revised Capital Cost Estimate

Revised Cost Estimate



- Cost estimates based on more detailed design development
 - PE level engineering now at 30%
- Unit costs updated to \$2008
 - Materials prices
 - Labor rates
 - Equipment operating expenses (e.g. fuel prices)

Revised Cost Estimate Cost Drivers



- Material price increases since 2007 cost estimates
 - Steel for tracks (100%)
 - Asphalt (70%)
 - Concrete (25%)
 - Fuel (50%)
- Contingency remains at about 30% of construction costs
- Annual escalation assumed at 3% after 2008
- Revised 2008 cost estimate \$914.8 million

Central Corridor Light Rail Transit



Value Engineering

Value Engineering Principles



- Meet design criteria
- Ensure public safety
- Operate efficiently
- Reduce project cost increase

Value Engineering Design Elements - Track



- Redesign track slab reinforcing per HLRT
- Redesign thickness of concrete adjacent to track per HLRT
- Modify Washington Ave. alignment between Oak & Huron to eliminate ROW acquisition

Value Engineering Design Elements - Station



- Modify station foundations
- Postpone construction of station canopy and shelters at the third (future) LRV location on lower ridership stations
- Maintain infrastructure for infill stations

Value Engineering Design Elements - Systems



- Postpone installation of second Ticket Vending Machine at each station platform
- Consolidate traction power substations
 - Union Depot & 4th/Cedar into one @ 4th/Cedar
 - Hiawatha connection & West Bank into one in the West Bank area

Value Engineering Budget Modifications



- Reduce escalation to 3% after 2008
 - Account for major unit price increases from 2007-2008
 - Anticipated slowdown in inflation
- Reduce contingency consistent with 30% engineering
 - Professional services
 - Design elements

Cost Summary Table

	May 2008	Aug. 2008	Change
Capital Cost (millions)	\$892.1	\$914.8	+\$22.7
Annualized Capital Cost (millions)	\$65.7	\$66.8	+\$1.1
Incremental change in O&M costs (millions)	\$1.05	\$5.30	+\$4.25

CEI Summary Table

	May 2008	Aug. 2008	Change
Travel time (min:sec)	40:15	39:13	-1:02
Annual travel time savings (hours)	2,589,000	2,718,000	+129,000
CEI	\$23.98	\$24.45	+\$0.47
CEI "Medium" Rating	\$23.99	\$24.49	+\$0.50

Central Corridor Light Rail Transit



Route 16 Analysis

Route 16 Analysis



- Overlay additional service between Downtown St. Paul & Fairview Ave.
- Service frequency
 - Rte 16: 20 min. peak, 30 min. off-peak PLUS
 - Rte 16 Overlay: 20 min. peak, 30 min. off-peak
- Net result in Midway East is combined service frequency, 10 min. peak, 15 min. off-peak

Route 16 Findings



- Compared to current project definition the Rte 16 Overlay produces
 - Bus O&M costs increase by \$947,000/year
 - Annual travel time savings decrease by 127,000 hours
 - CEI increases by \$1.20 to \$25.65

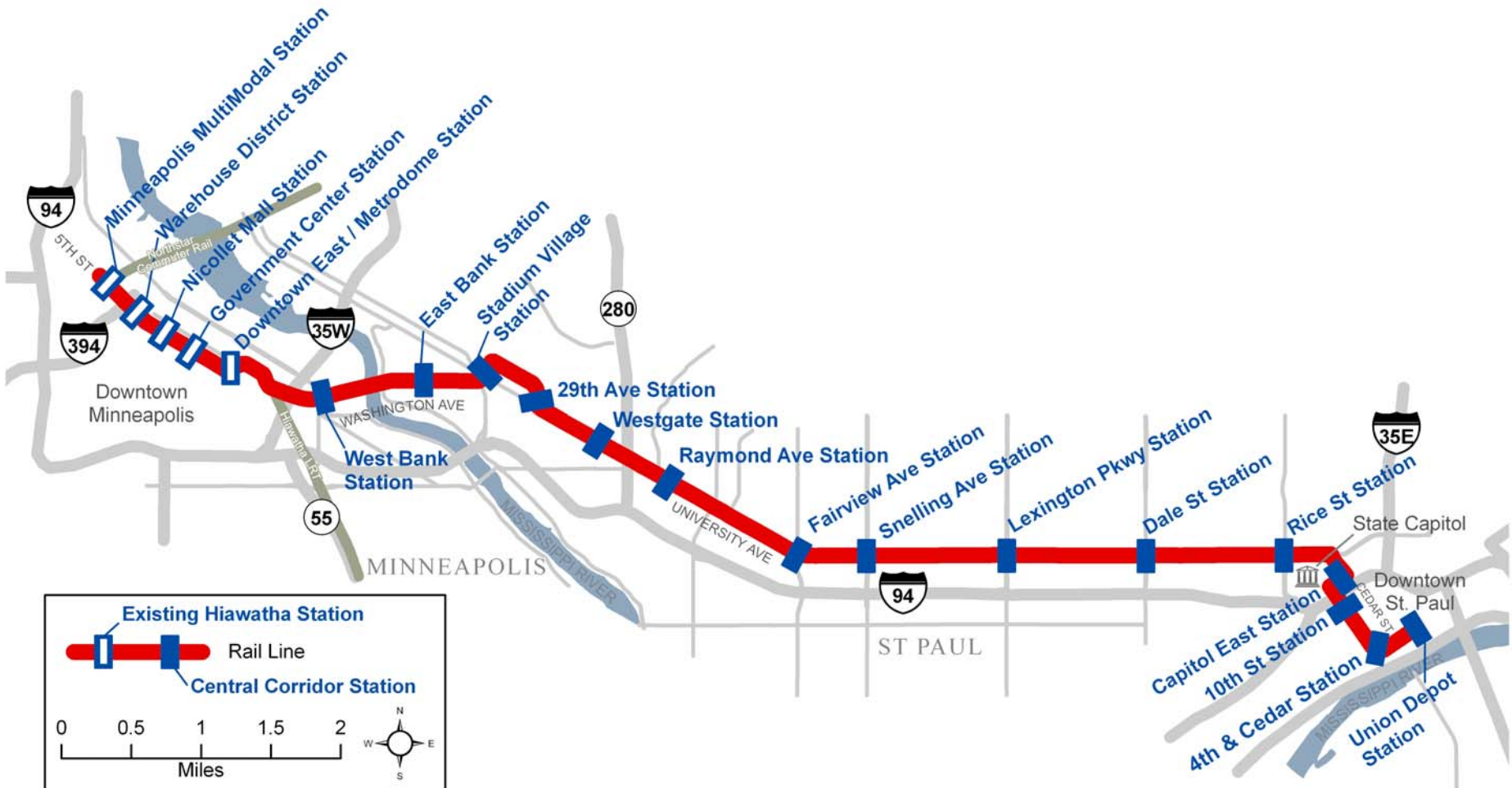
Central Corridor Light Rail Transit



Preferred Alternative & Alignment

Central Corridor Light Rail Transit

Preferred Alternative & Alignment



Preferred Alternative and Alignment

- Washington Ave. at-grade with transit/pedestrian mall
- 15 new stations plus infrastructure for 3 future stations @ Hamline, Victoria, Western
- Station in front of Union Depot
- Improved HLRT connection
- Maintenance facility in St. Paul, east of concourse with two track connection
- Washington Ave. Bridge retrofit
- Diagonal at Cedar and 4th Streets
- 3-car platforms
- Public Art