

# Central Corridor Light Rail Transit

Metropolitan Council  
Committee of the Whole  
August 20, 2008



*Improving  
mobility*

*Easing  
congestion*

*Strengthening  
our communities*

## 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

# FTA New Starts Guidance

- Project documentation due September 5
- Revised CEI “Medium” threshold to \$24.49



## Central Corridor Light Rail Transit



# Bus and Rail Operating Costs

**Central Corridor  
Light Rail Transit**

# Annual Metro Transit Bus Operating Costs (\$2008)



**Baseline**

**\$254.3MM**

**CCLRT Build**

**\$241.7MM**

**Net Change**

**-\$12.6MM**

**Central Corridor  
Light Rail Transit**

# Annual Metro Transit Light Rail Operating Costs (\$2008)



**Baseline**

**\$24.1MM**

**CCLRT Build**

**\$42.0MM**

**Net Change**

**+\$17.9MM**



**Central Corridor  
Light Rail Transit**

# Annual Metro Transit Bus & Rail Operating Costs (\$2008)



**Bus**

**-\$12.6MM**

**Light Rail**

**+\$17.9MM**

**Net Change**

**+\$5.3MM**

# Annual Travel Time Savings

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	Running time (minutes:seconds)	Annual travel time savings (hours)
May 28	40:15	2,589,000
Aug 13	39:13	2,718,000
Difference	-1:02	+129,000



# 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

# CEI Summary Table

	<b>May 2008</b>	<b>Aug. 2008</b>	<b>Change</b>
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
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

# 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



## Parking

**Robin Caufman,**  
Manager of Public Involvement

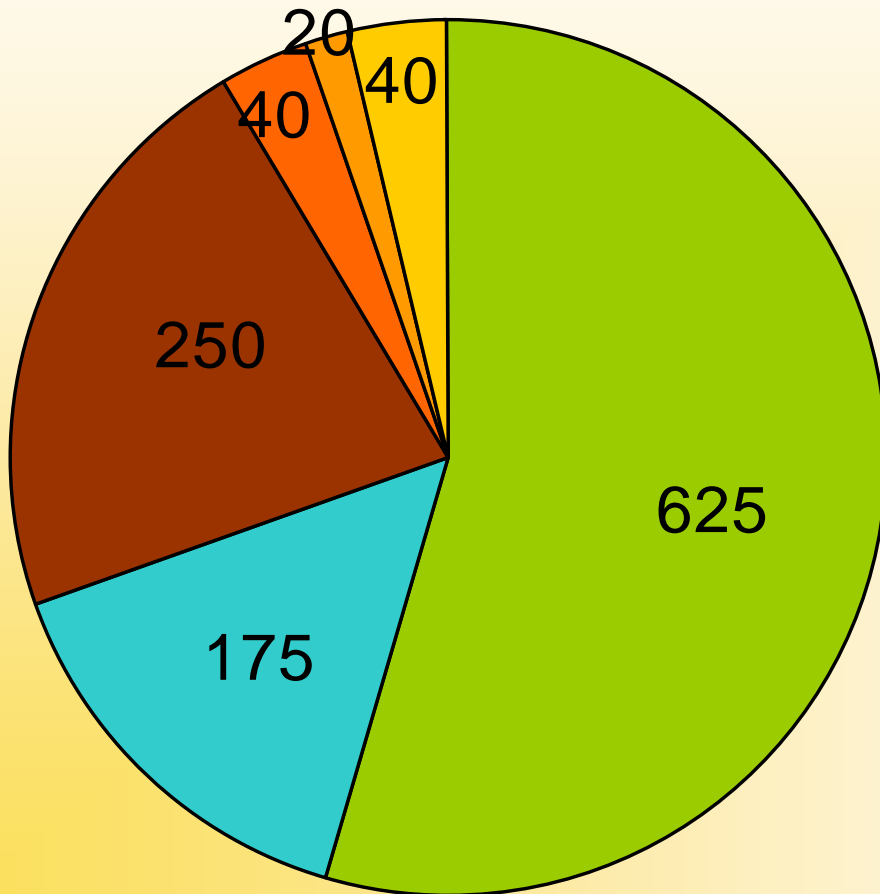


# Central Corridor Light Rail Transit

# Parking Impacts Scope of Study - 29<sup>th</sup> Ave to Rice



# What happens to the 1,150 existing on-street parking spaces?



- Parking lost due to mandatory elements
- Remaining on-street parking
- Parking lost due to non-signalized ped crossings
- Parking lost due to secondary station access
- Parking lost due to 3-car platforms
- Parking lost due to minimize lane transitions

## Central Corridor Light Rail Transit

# Step 1: Collect Data

## Identify Parking in the Corridor



- University Ave. on-street
- Off-street
- North-south cross streets





# Step 1: Collect Data

## Community Outreach

(April to July 2008)

### Central Corridor Light Rail Transit



- Business surveys
- Meetings with businesses and organizations
- Advisory committees
- Preliminary engineering maps and aerial photos
- Other public meetings
- City and business leaders' knowledge of businesses

# Step 1: Collect Data

## Summarize Parking

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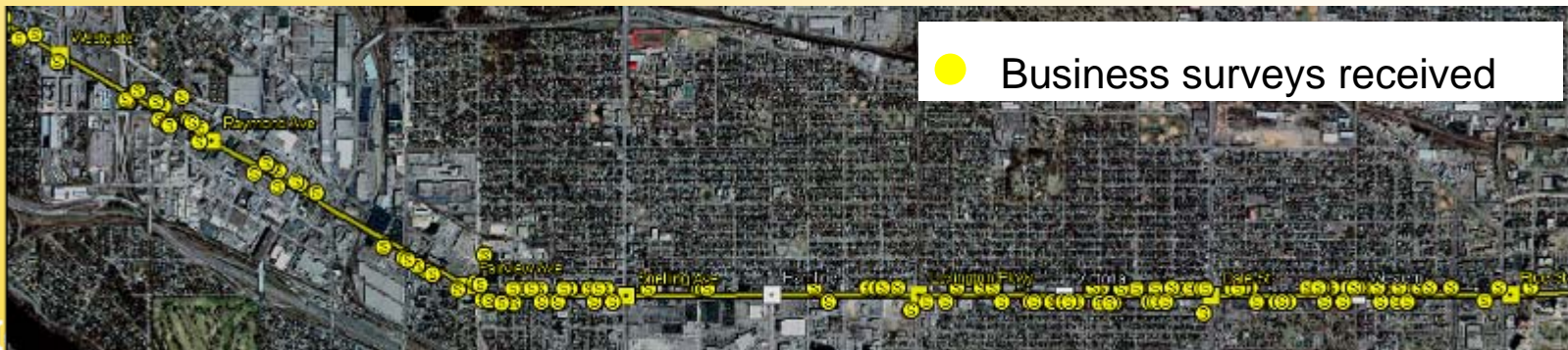
- **Existing University Ave.** on-street parking in St. Paul = 1,150 spaces
  - 175 will remain with LRT
- **Off-street** parking studies
  - 25,000 spaces in private lots within ¼ mile of stations, City 2006 study
  - 15,300 parking spaces within one block of University Avenue, CCPO 2008 study
- **On-street parking** on north-south cross streets = 560 spaces

# Step 1: Collect Data

## Businesses Surveyed

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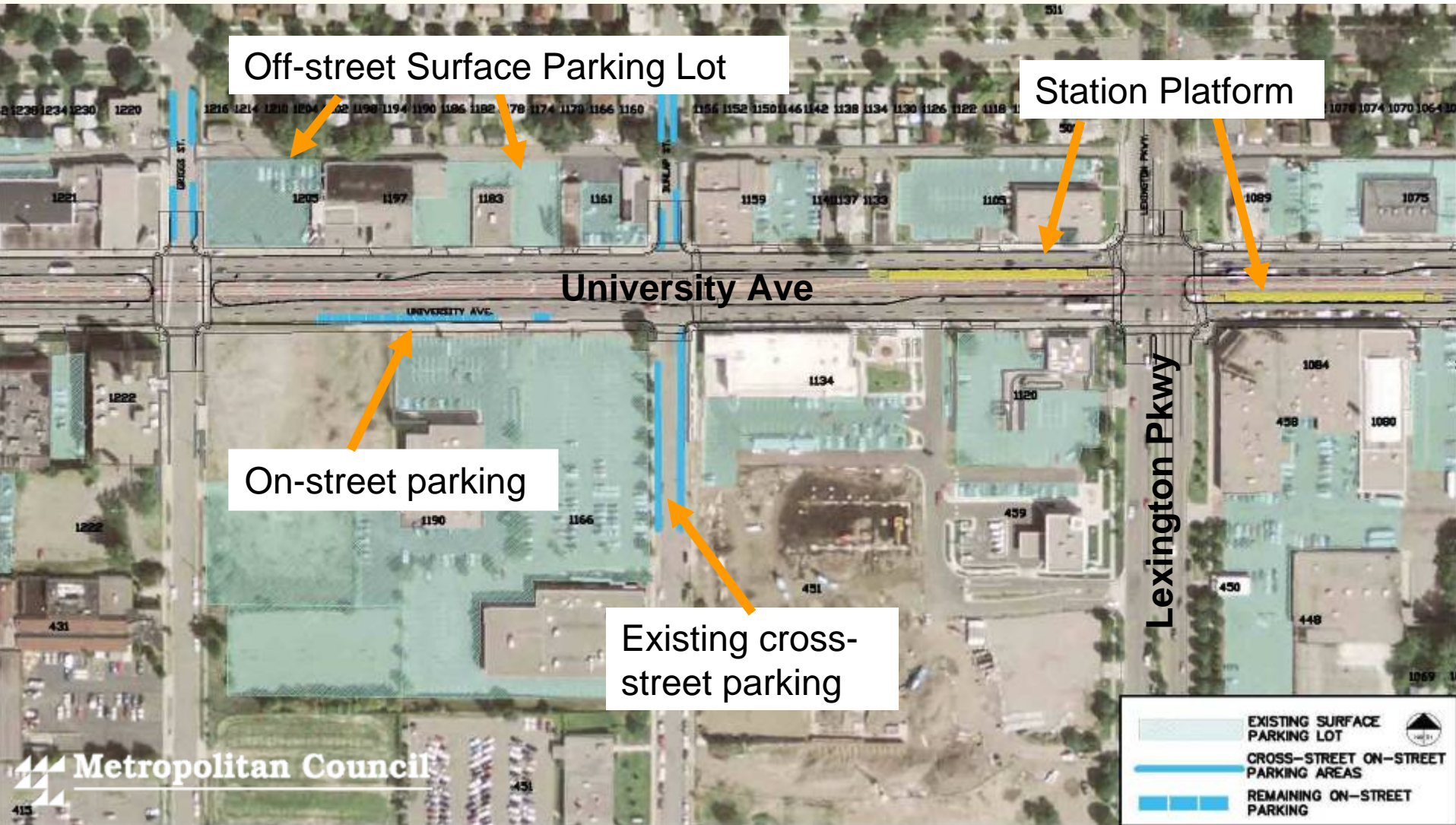
- 1,170 businesses on University Avenue in St. Paul
- 200 business surveys returned
- Office managers for large office complexes returned surveys on behalf of ~300 tenants
  - Adequate parking in ramps, garages & lots
- Surveys collected for 43% of businesses





# Step 2: Summarize Block Summaries

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Off-street Surface Parking Lot

Station Platform

University Ave

Lexington Pkwy

On-street parking

Existing cross-street parking

- EXISTING SURFACE PARKING LOT
- CROSS-STREET ON-STREET PARKING AREAS
- REMAINING ON-STREET PARKING



# Step 2: Summarize Block Summaries

**Block:** Dunlap to Lexington Pkwy

No. of businesses (estimate)	7	No. of surveys returned	4	Percent surveys returned	57%
Distance to LRT Station	0 blocks		Distance to Bus Stop	0 Blocks	

**Summary of parking impacts**

North side of block		South side of block	
Off-street parking	93	Off-street parking spaces	529
Existing on-street parking	13	Existing on-street parking	4
On-street parking with LRT	0	On-street parking with LRT	0
Cross-street parking spaces	6	Cross-street parking spaces	14
Impacts anticipated to 2 businesses midblock because they do not have access to off-street parking and are greater than 160' from limited number of cross-street parking spaces		No impacts anticipated because businesses have access to off-street parking and new parking ramp that was incorporated into the redevelopment of the site by Wilder Foundation.	

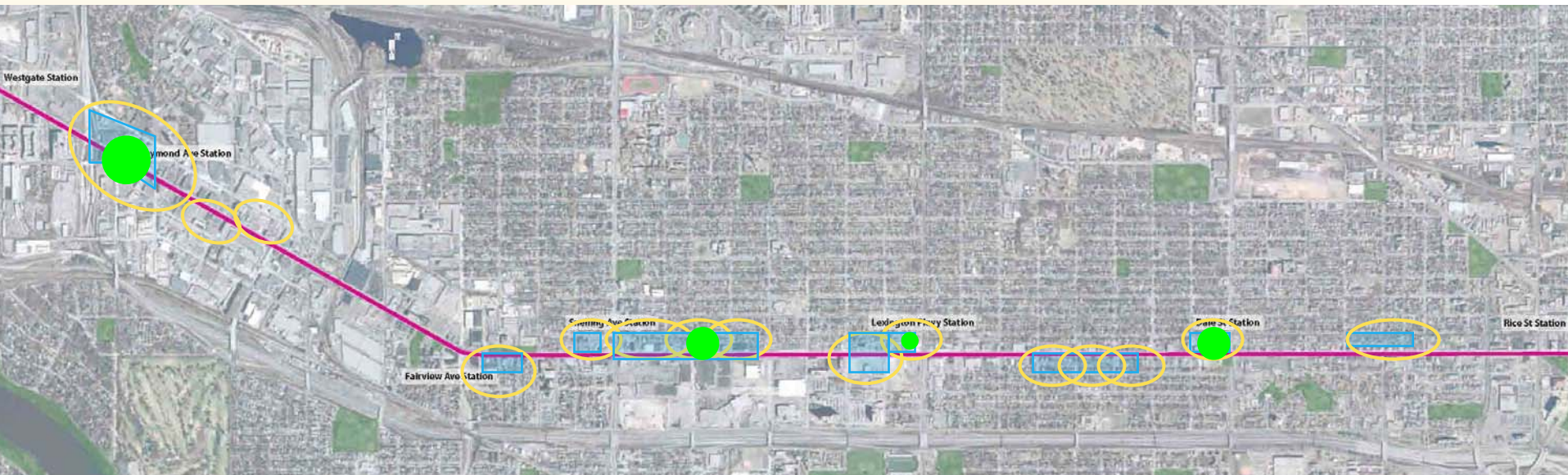
## Step 3: Analyze Impact Assumptions


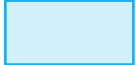



- Not impacted by CCLRT if:
  - Have remaining on-street parking
  - Own off-street parking
  - Have existing arrangements to share or lease parking
  - Are within reasonable distance from north-south on-street parking
    - 160' for retail, convenience uses
    - 600' for service, office uses
- Vetted with business and city staff

# Step 3: Analyze Critical Areas

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-  Initial 15 areas (20 blocks) identified as potential impacts – March 2008
-  Defined 9 critical areas based on surveys – June 2008
-  Refined 4 critical areas based on assumptions – August 2008

## Step 3: Analyze Management Strategies



- St. Paul manage on-street parking by metering or posting time restrictions
- Businesses take steps to address their parking needs
- New surface lots unlikely
  - Corridor has ample parking
  - St. Paul's Development Strategy discourages it
  - Would require acquisition



# Central Corridor Light Rail Transit

## City's Parking Toolbox



### A Parking Management Toolkit For the Central Corridor

The City of Saint Paul is exploring the following strategies to address the loss of parking in the Central Corridor.

#### 1 Shorter-term parking management strategies:

These low-cost actions can be implemented immediately and directly by the City, businesses and property owners.

- **Open parking on side streets to customer parking:** The City can adopt and enforce 2-hour time limits on the side streets one block north and south of University Avenue.
- **Encourage employees to park in more remote locations:** To free up valuable close-in customer parking, business owners and their employees can park in slightly more remote locations.
- **Get the City to enforce existing parking regulations more aggressively:** Become a "squeaky wheel" by organizing area merchants to call the parking enforcement office at 651-268-5585.
- **Subsidize bus passes for employees:** Employers can encourage employees to purchase Metropasses by helping subsidize their monthly cost. Go to [www.metrotransit.org](http://www.metrotransit.org), click on Fares, Transit Pass Options and follow to Metropass.
- **Share private parking resources:** Property owners with parking to spare can lease parking to businesses without enough, and new signage can make it clear to customers that the parking is shared.

#### 2 Middle-term parking management strategies:

These strategies can be implemented in the next 2 years by the City, working with business and property owners.

- **Rationalize and enforce parking regulations along the Corridor:** Make on-street parking time limits uniform, consider extending parking meters onto side streets, and aggressively enforce on-street regulations.
- **Evaluate and update the City's permit parking requirements:** To protect the residential neighborhoods, be ready to establish permit parking zones with 2-hour parking except by permit (for residents and employees).
- **Acquire and apply new parking management technologies:** The City can use new License Plate Recognition technology to dramatically increase on-street parking enforcement.

#### 3 Longer-term parking management strategies:

These strategies can be implemented before LRT becomes operational by business and property owners working with City departments and the Metropolitan Council.

- **Create Parking Improvement Districts at station areas:** The City can lease private parking lots, use grants to improve them into shared parking lots, and assess the property owners for operating costs. This, combined with permit parking zones around the station areas and aggressive enforcement of on-street regulations with License Plate Recognition technology, creates an integrated system of managing on- and off-street parking.
- **Revise the Zoning Code to encourage shared parking:** Amend parking requirements in the Zoning Code to encourage shared parking in the Parking Improvement Districts.
- **Encourage denser transit-oriented development:** Longer term, the best way to provide additional parking is to encourage denser mixed-use development that has sufficient resources to finance the development of structured parking.

#### 4 What the City and Met Council are doing to address the problem:

They are focusing their limited resources on identified hot spots in the Central Corridor where the elimination of on-street parking will be a critical problem.

- **Met Council:** The Central Corridor Project Office has Outreach Coordinators gathering information about parking and engaging the community through the Community Advisory Committee and the Business Advisory Council. Call 651-602-1940, or visit the following web site, [www.centralcorridor.org](http://www.centralcorridor.org). Click on Public Involvement Opportunities.
- **City of Saint Paul:** We are working to mitigate the negative effects of building LRT in the short-term and to spark redevelopment of the station areas in the long-term. More information can be found at, [www.stpaul.gov/centralcorridor](http://www.stpaul.gov/centralcorridor) or by calling Craig Blakely at 651-266-6697.

## Step 4: Review with Stakeholders



- Shared results with stakeholders
- Tested assumptions with business community and city staff
- Conducted traffic study for on-street parking during off-peak times
- Weighed impacts of removing non-signalized ped crossings

## Traffic Study # 5.1

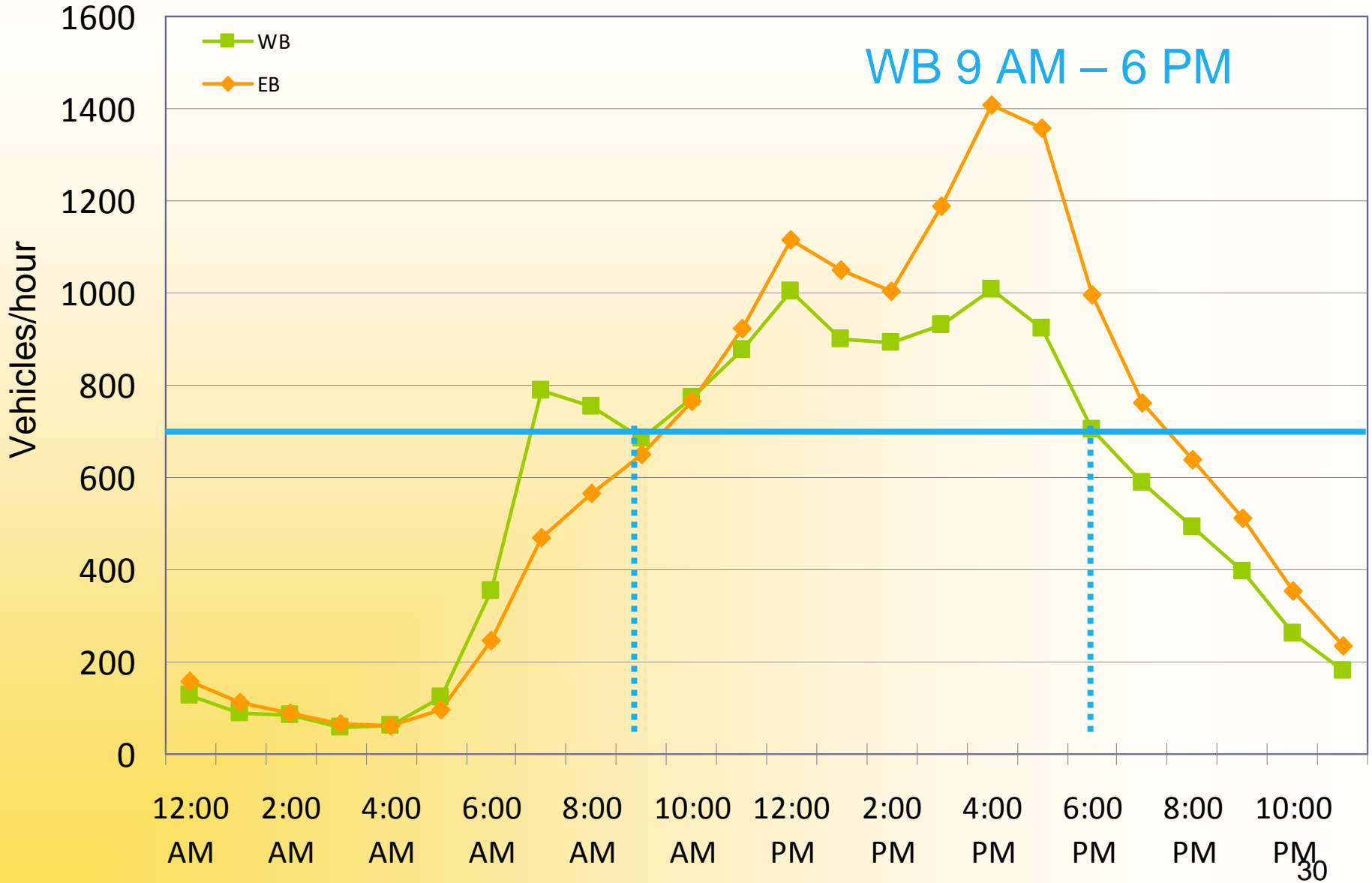


- Plot hourly traffic volume for 5 points between 280 and Rice
- Determine hours of the day when two lanes in each direction are necessary
  - Threshold for one lane of traffic is 700 vehicles/hour
  - Traffic volumes greater than 700 vehicles/hour requires two lanes in each direction
  - Converting outside lanes to parking would result in failing intersections

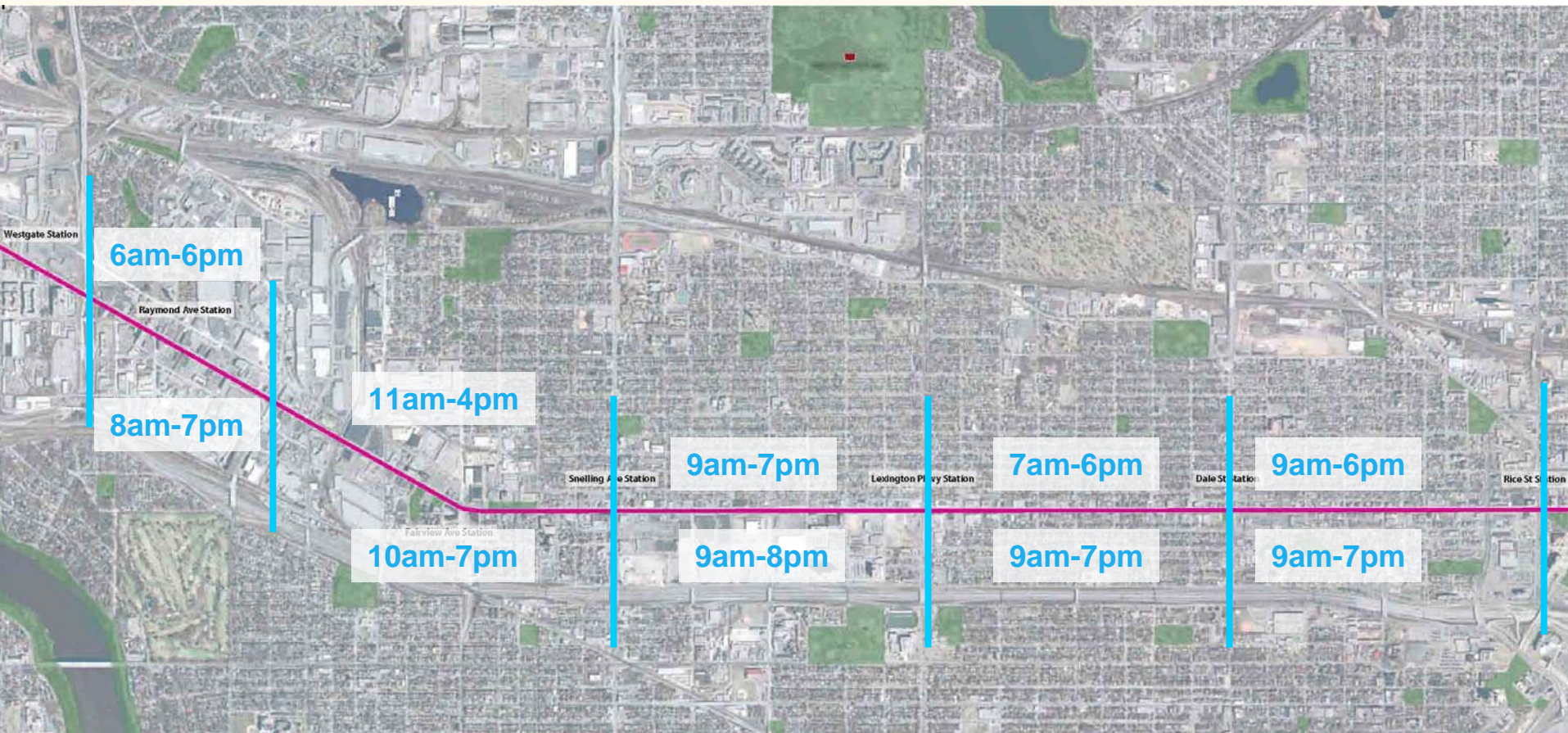


# University Avenue Daily Traffic Flow

## Dale Street to Rice Street



# Two Lanes of Traffic Required in Each Direction



Times when traffic volumes exceed 700 vehicles/hour

# Traffic Study # 5.1 Findings

## Central Corridor Light Rail Transit



- Converting outside lane to parking between standard business hours would result in congestion and failing intersections
- Work with City and County to determine if on-street parking should be allowed after 7 pm

## Central Corridor Light Rail Transit



# Recap SDEIS Public Hearings

**Kathryn O'Brien,**  
Environmental Services Project  
Manager



# SDEIS Hearings



- Three hearings held
  - Monday, August 4 (Wilder)
  - Thursday, August 7 (Brian Coyle)
  - Saturday, August 9 (Goodwill)
- 23 persons testified

# SDEIS Hearings Comments



- Address parking impacts
- Ensure equitable benefits of project, need for infill stations
- Maintain local bus service
- Mitigate gentrification effects
- Provide safe crossings of University Ave.

# SDEIS Comments Rec'd

- Comment period ends Aug. 25
- 38 comments received as of Aug. 18





## Central Corridor Light Rail Transit

## More Information

Check out our website:

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

Contact Central Corridor Project Office:

- 540 Fairview Avenue North, Ste 200  
St. Paul, MN 55104
- Comment Line: 651-602-1645
- Email: [centralcorridor@metc.state.mn.us](mailto:centralcorridor@metc.state.mn.us)

