Central Corridor
Light Rail Transit

Committee of the Whole
January 30, 2008

Improving mobility

Easing congestion

Strengthening our communities

Metropolitan Council

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Today's Agenda

- Bridges
- 2 or 3-car trains/platforms
- Reconstruction of right-of-way
- Traffic signals and pedestrian crossings
- Design Criteria

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Bridges

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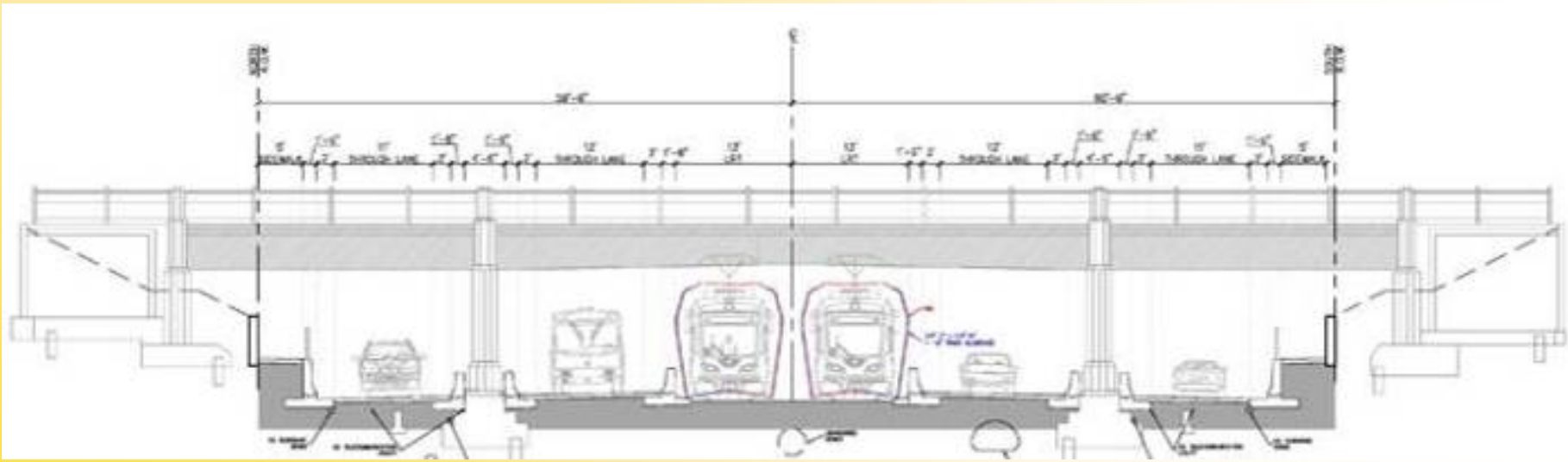
Minnesota Commercial Rail Road Bridge



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Bridges in St. Paul

Cedar St. bridge over I-94

University Ave. bridge over 280

2 or 3-car Trains and Platforms

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2 or 3-Car Trains and Platforms

- 2-car train capacity
- Peak hour passenger demand
- Capacity is adequate in 2014
- 2-car platforms adequate in short-term
- Need 3-car platforms in long-term

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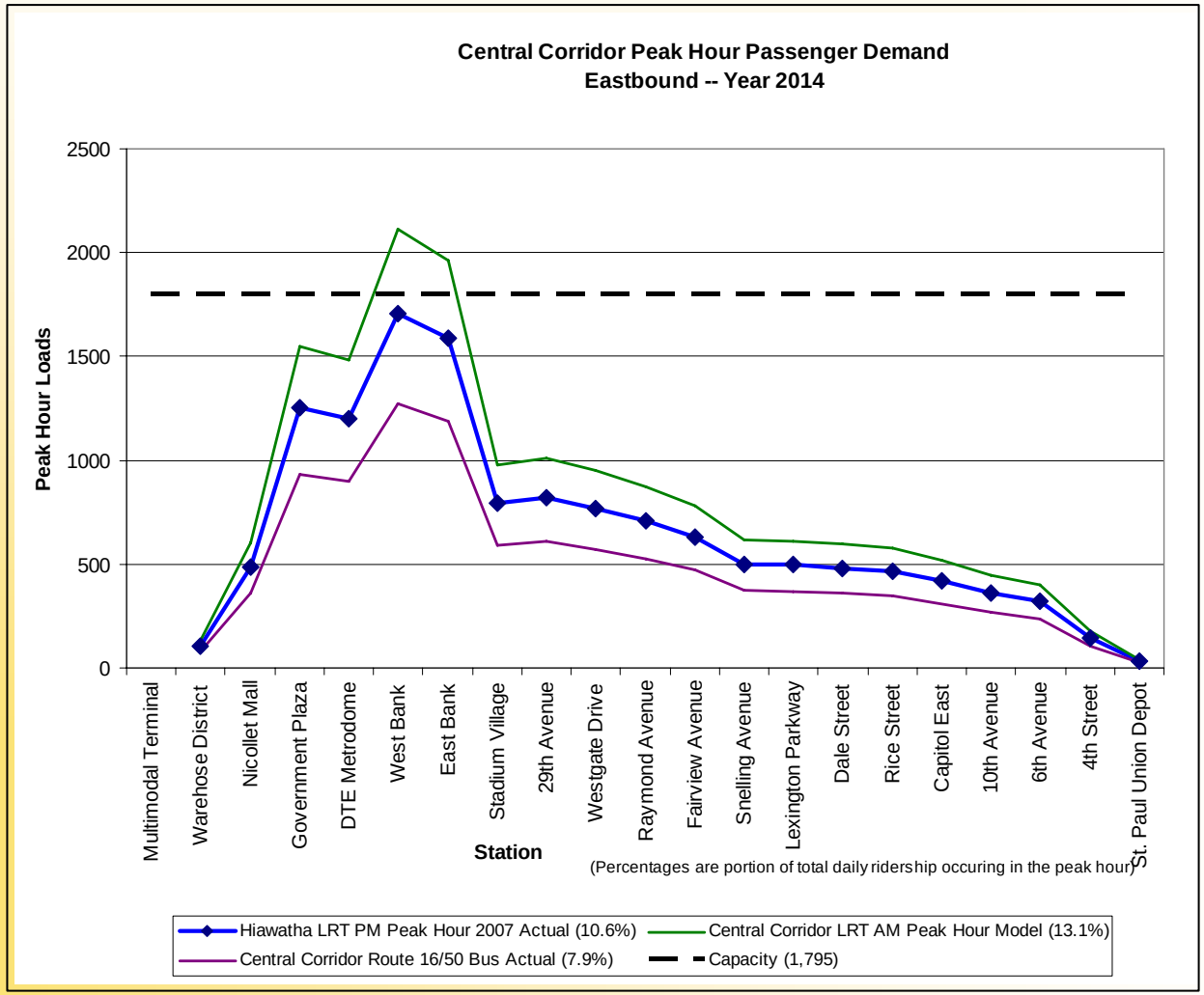
Peak Hour Passenger Demand Eastbound -- Year 2014



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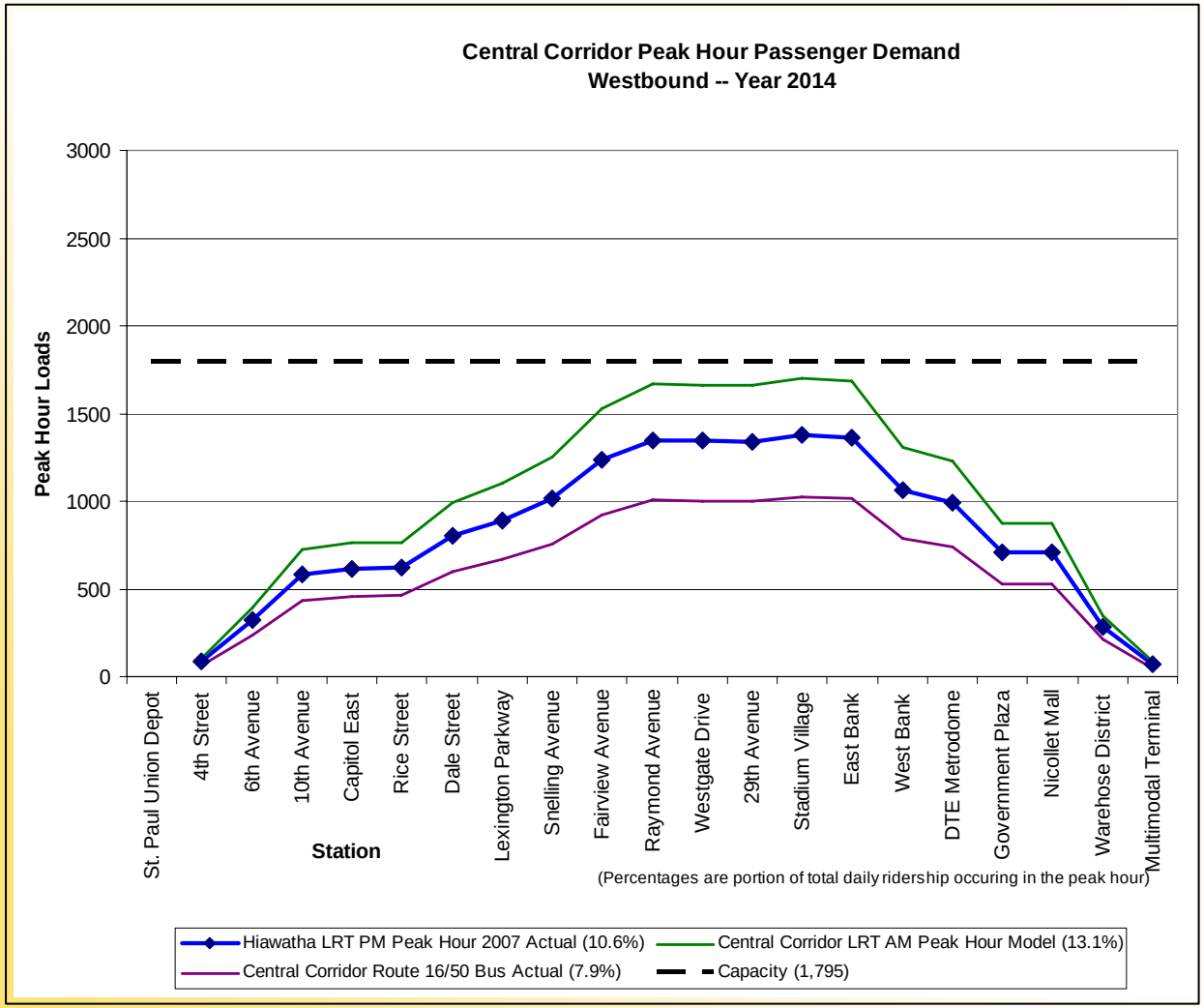
Peak Hour Passenger Demand Westbound -- Year 2014



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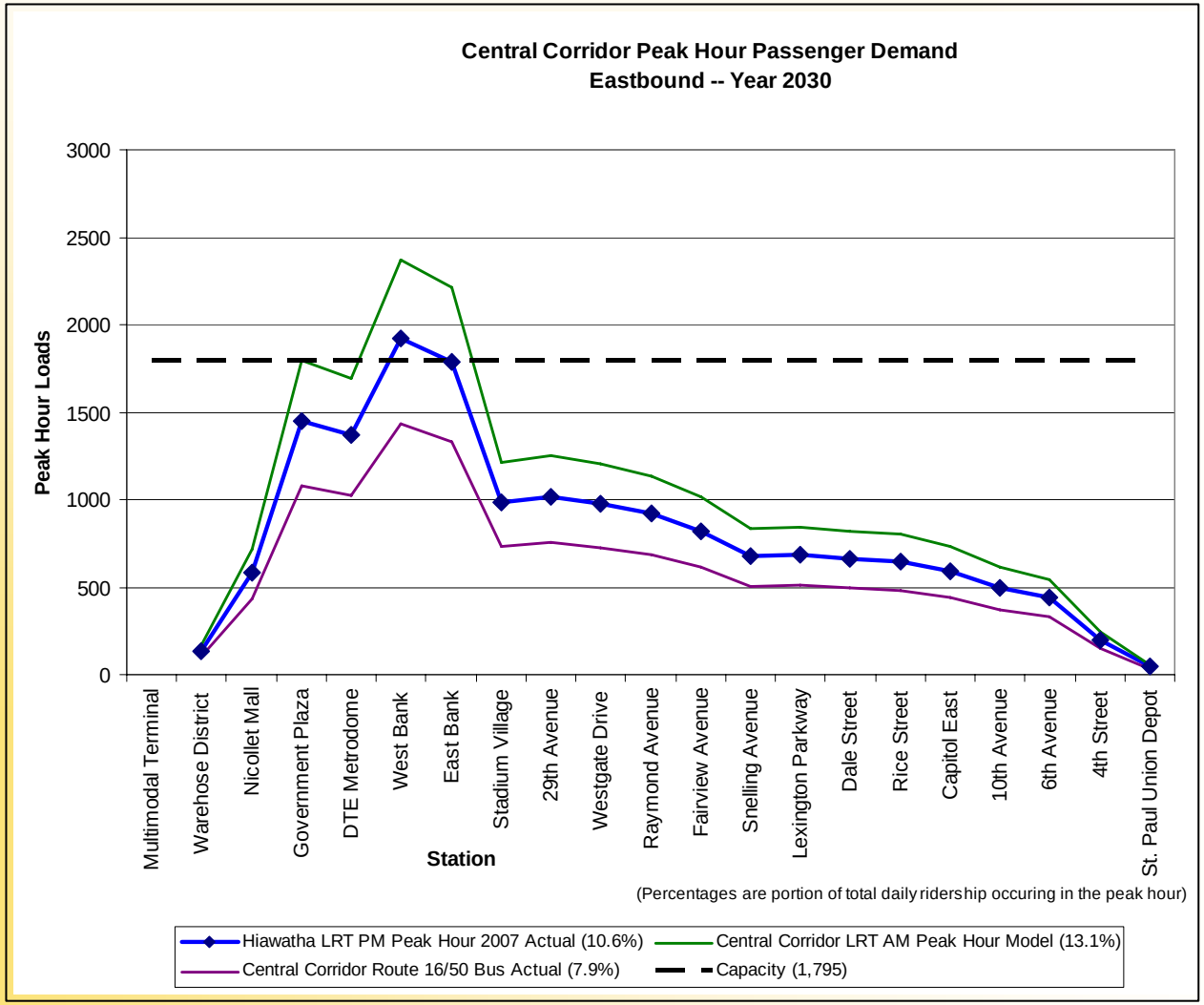
Peak Hour Passenger Demand Eastbound -- Year 2030



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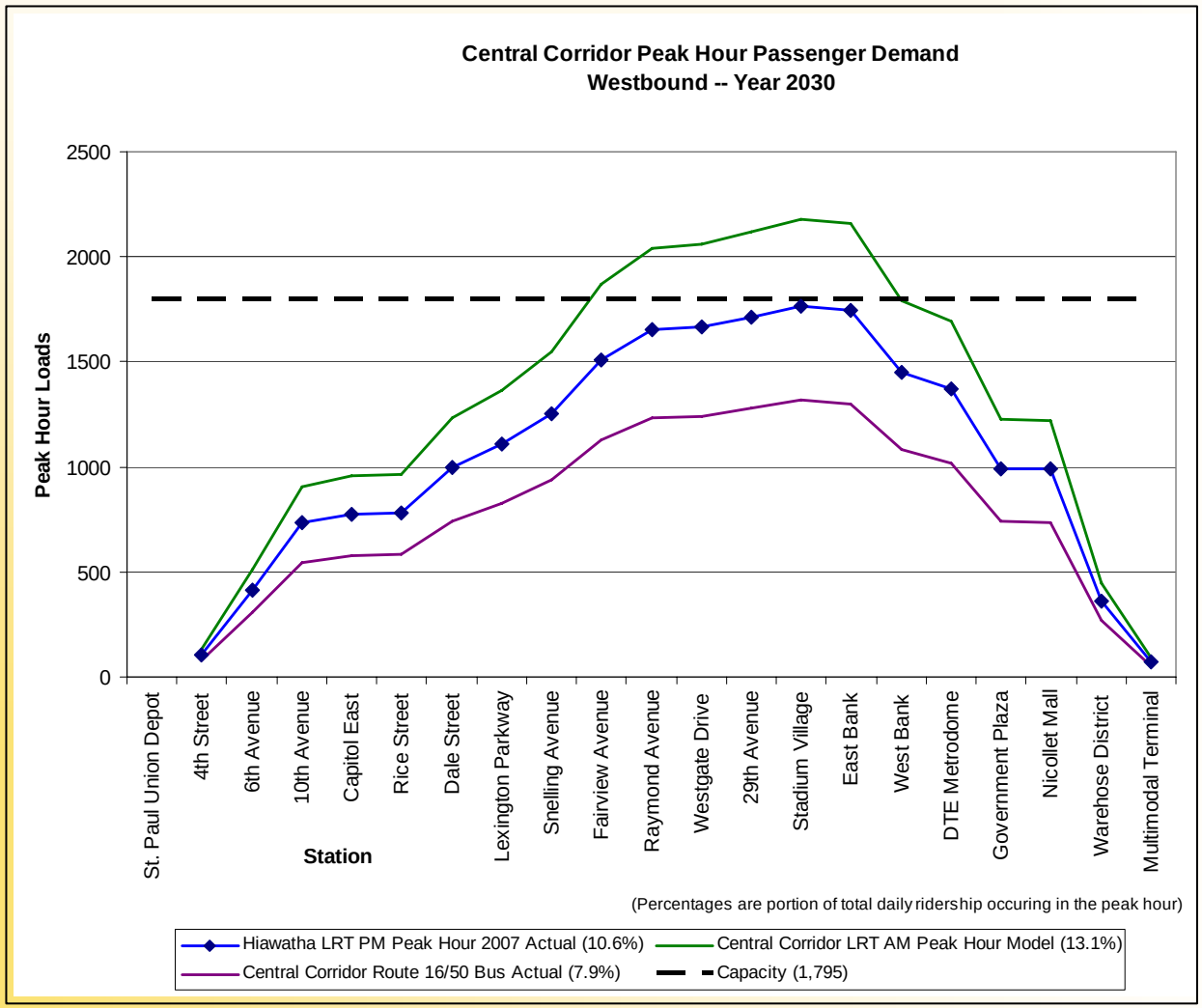
Peak Hour Passenger Demand Westbound -- Year 2030



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University Ave. Reconstruction, Traffic Signals and Pedestrian Crossings

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University Ave. Reconstruction

- DEIS
  - Assumed full reconstruction including street, curb and sidewalk
- Preliminary Engineering findings
  - Roadway condition
  - Amount of impacted curb/sidewalk
  - Utility relocations
  - Storm water issues

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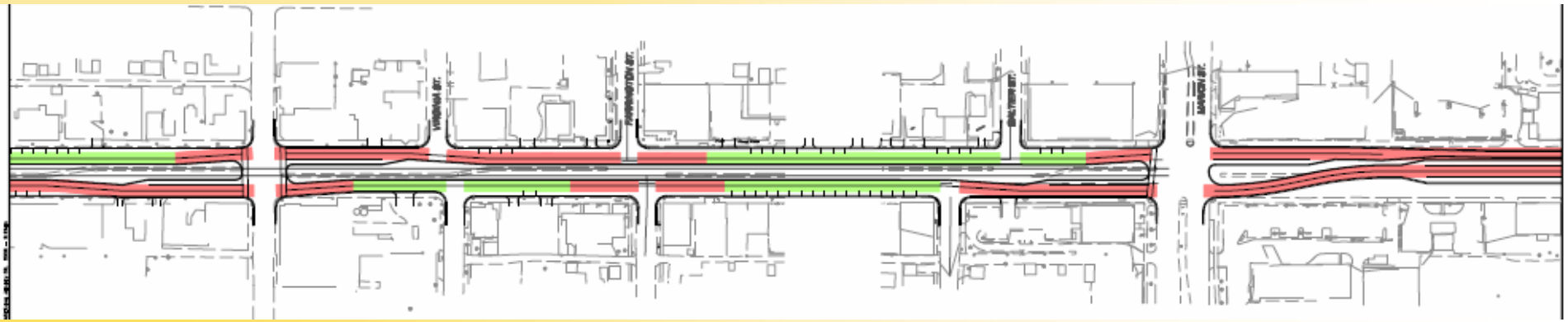
University Ave. Reconstruction

University Avenue	Westbound (north curb)		Eastbound (south curb)		Total	
(1) UNAFFECTED	3,850 LF	15%	3,815 LF	15%	7,665	15%
(2) AFFECTED	21,750 LF	85%	21,685 LF	85%	43,435	85%
Total Length	25,600 LF	100%	25,500 LF	100%	51,100	100%

(1) UNAFFECTED – Length of curb and sidewalk unaffected by the LRT construction (shown as GREEN in the graphic – Appendix C)
(2) AFFECTED – Length of curb and sidewalk affected by the LRT construction (shown as RED in the graphic – Appendix C)



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University Ave. Reconstruction

- Mill & overlay vs. full reconstruction
  - Savings $24-27 Million
  - Reduces construction time and impacts
- Curb & sidewalk replacement
  - Local cost share

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University Ave. Reconstruction
Next Steps

- Continued soil borings
- Utility impacts
- Review section from 29th Ave. to city limits (Mpls. Section)

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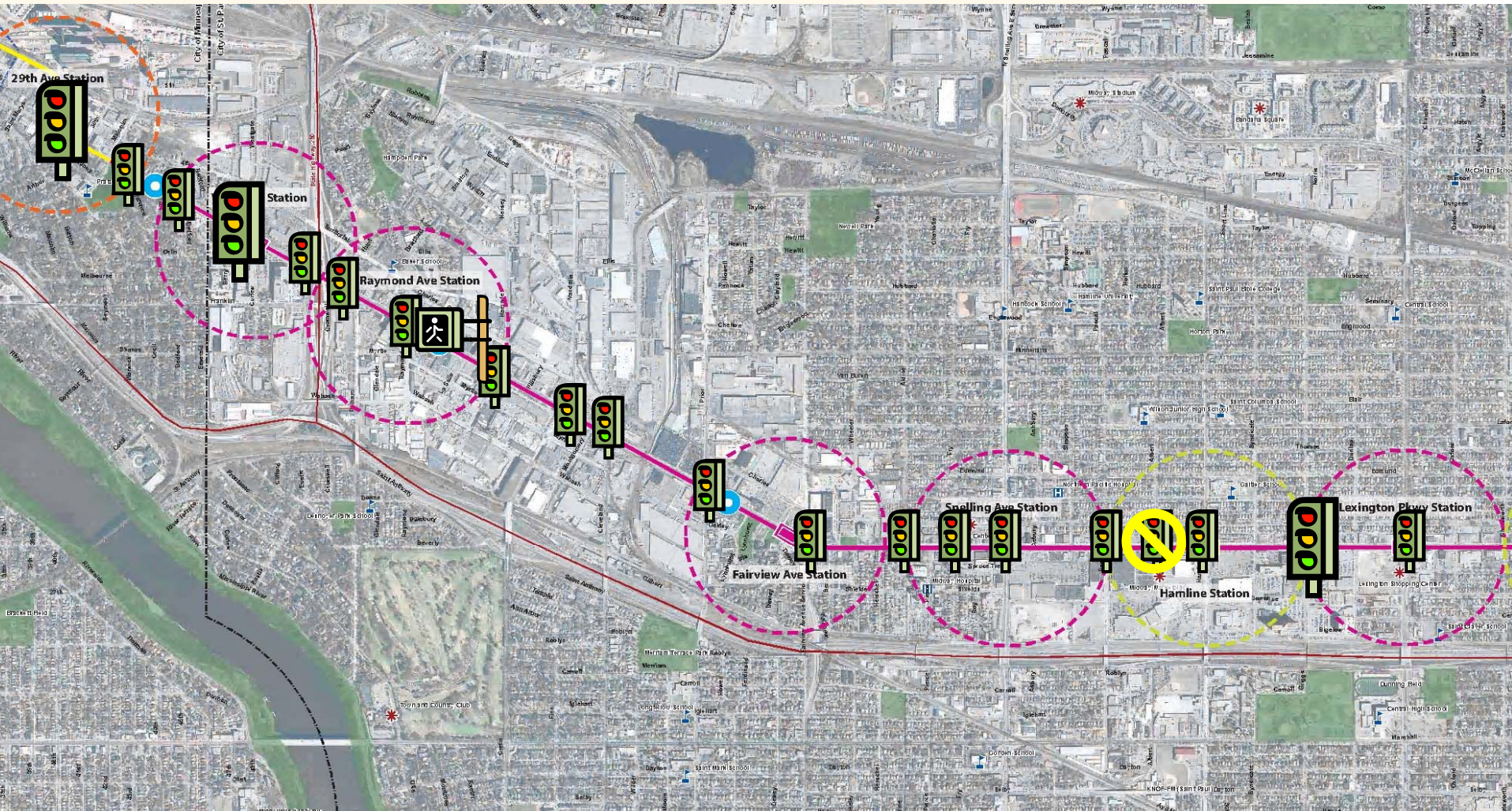
Traffic Signals on University



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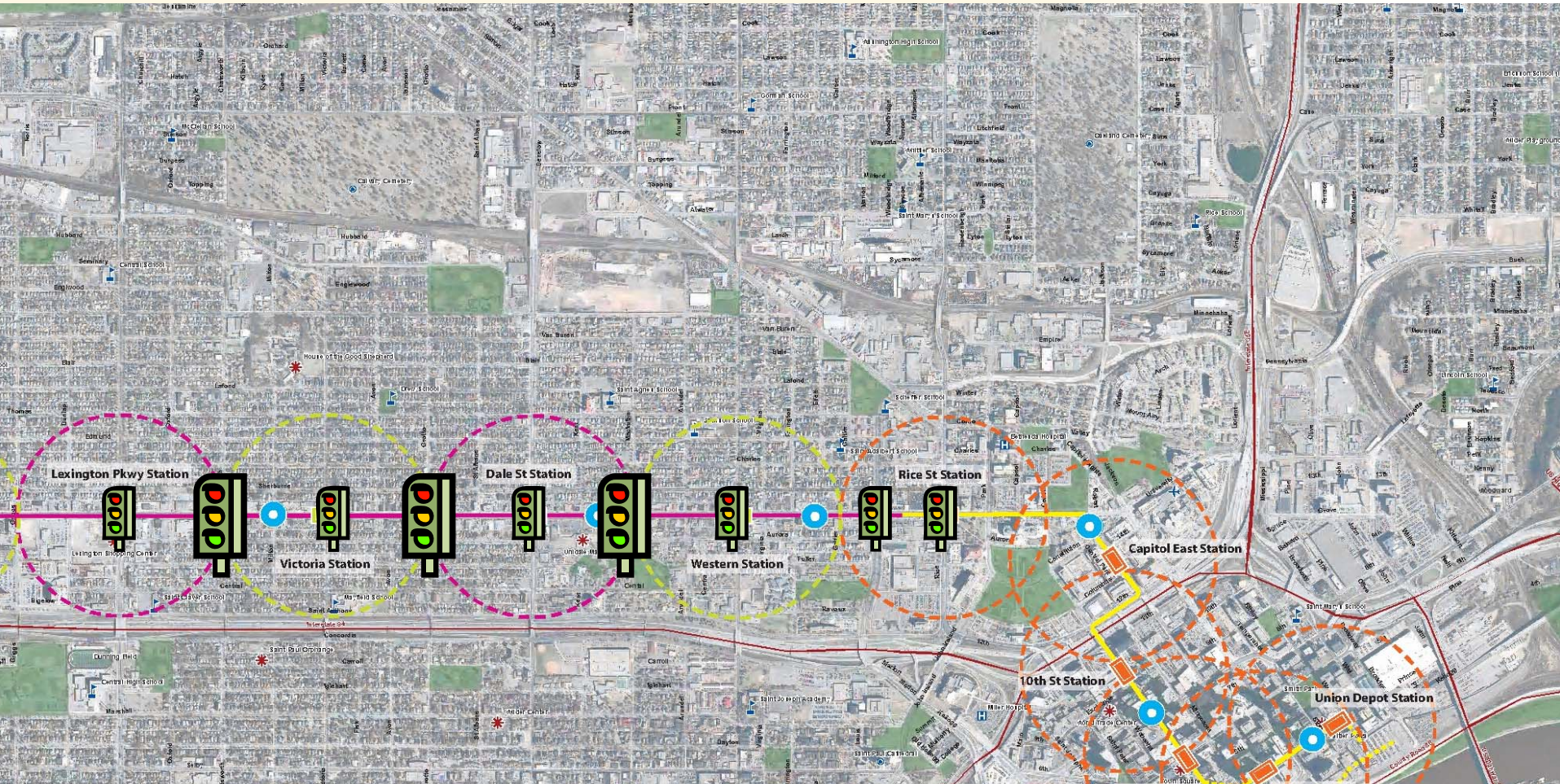
Traffic Signals on University



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Traffic Signals on University

- Left turns
  - Protected phasing (green arrow)
  - U turns
- Cross street signal phasing
- Pedestrian accommodations
  - Accessible pedestrian signals

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Traffic Signals on University
Priority vs. Pre-Emption

- Hiawatha operation
- Signal priority for LRT
- Cross street impacts

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Traffic Signals on University
Next Steps

- VISSIM traffic modeling
  - Cross streets
  - LRT travel time
- Hardware and software specifications
- Continue evaluation in downtown Mpls. and downtown St. Paul

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University Avenue Pedestrian Crossings

- Signalized Crossings
  - ¼ Mile Spacing
  - “Walk/Don’t Walk”
  - Pedestrian Activation

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University Avenue Pedestrian Crossings

- Unsignalized Crossings
  - 1/8 mile spacing
  - Street crossing vs. track crossing
  - Active warning devices
  - Impacts to on-street parking

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University Avenue Pedestrian Crossings

Possible Spacing

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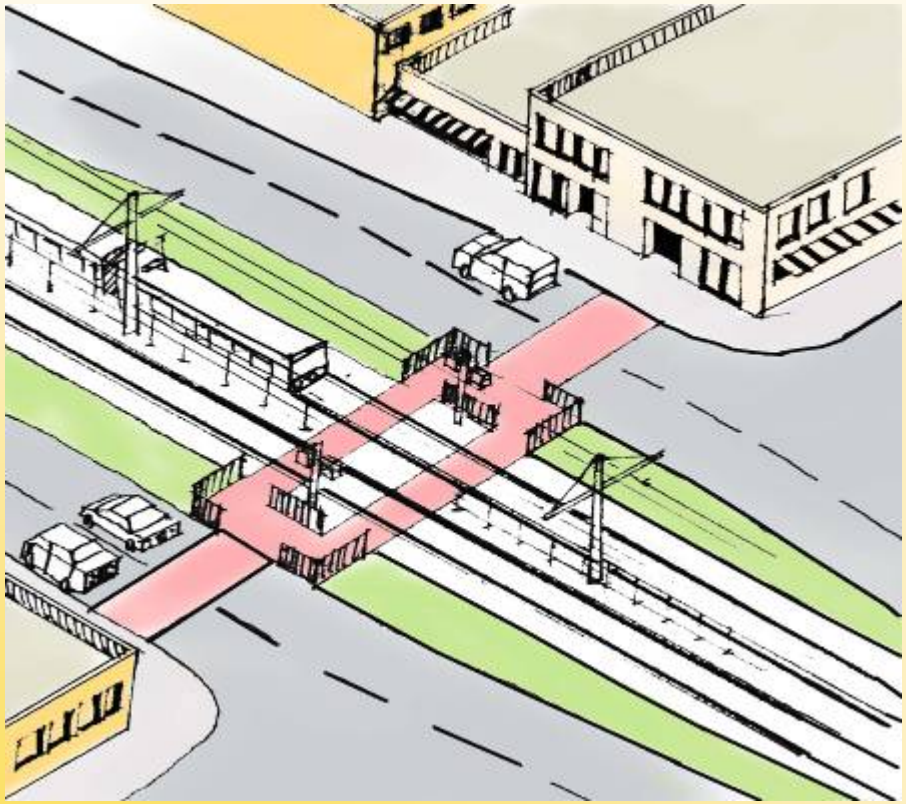
University Avenue Pedestrian Crossings
Possible Designs



Design Criteria

Design Criteria

- Update to current codes, laws and regulations
- Increase emphasis on local standards
- Standardize stations

Design Criteria

- Increase emphasis on providing safe and consistent access and crossing opportunities
- Comply with Homeland Security guidelines
- Add inter-operability features for safety at Hiawatha and Central Corridor connection

More Information

Check out our website:

- **www.centralcorridor.org**

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