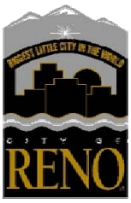


Presentation Highlights

- **Project Review**
 - Overall Concept
 - City Master Plan and Code
 - Implementation Activities
- **Status Report**



Project Review

- 8.22.07** Reno City Council directed staff to work with Regional Transportation Commission (RTC) to analyze improvement alternatives for South Virginia TOD corridor
- 4.22.09** Reno City Council approved multi-phase transit project concept and seven item action plan
- *Eliminated over \$100 million in street projects using existing right-of-way while maintaining similar automobile levels of service*



Project Review

4.22.09 Continued

- *Phase 1: Bus Rapid Transit between California Avenue and Reno-Sparks Convention Center*
- *Phase 2: Streetcar between Lawlor Events Center and California Avenue*
- *Phase 3: Streetcar between California Avenue and Reno-Sparks Convention Center*
- *Phase 4: Light rail between Lawlor Events Center and Reno-Sparks Convention Center*

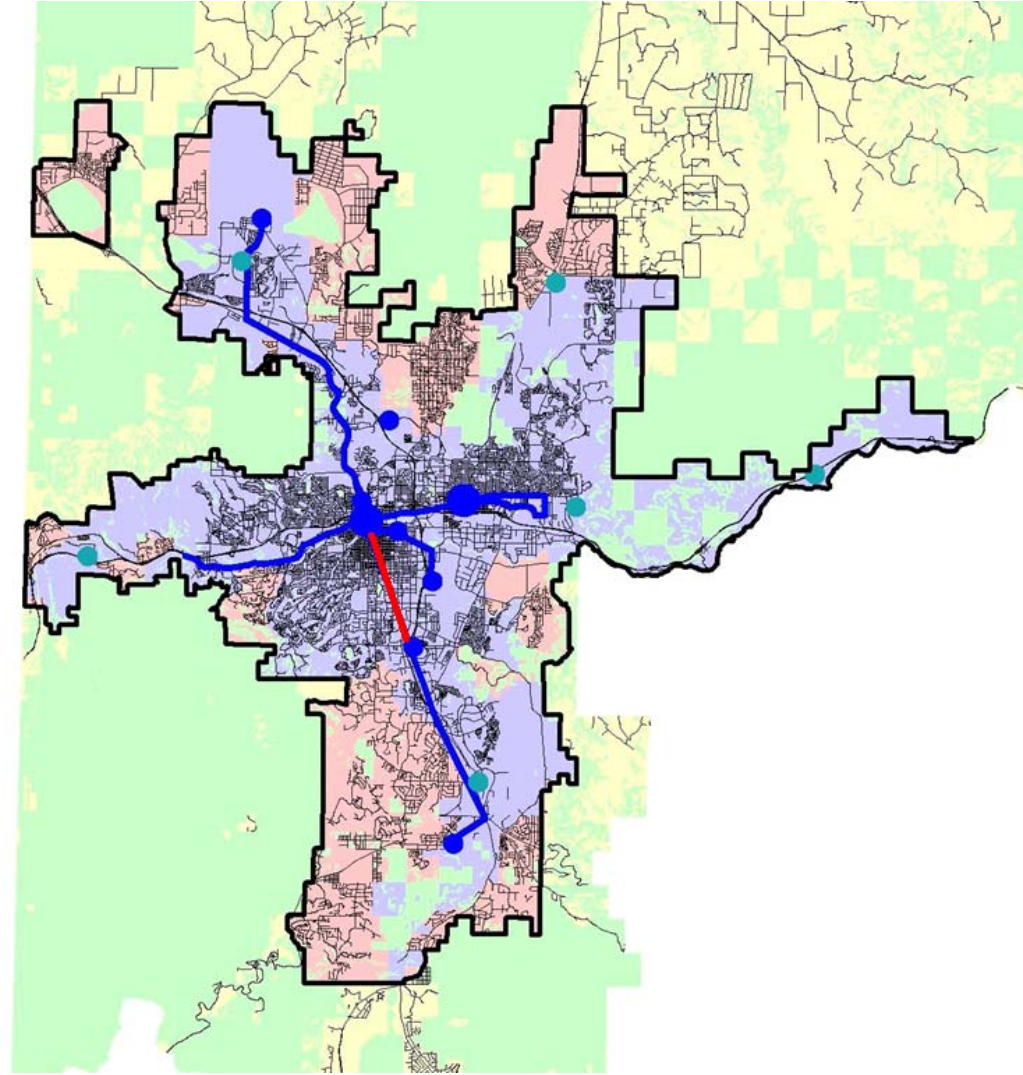


Project Review

- 10.7.09 Reno City Council and approved status and requested RTC to begin process of obtaining Federal funds**
- 11.12.09 RTC approves funding for Virginia Street transit studies for Federal funding application**

Overall Concept

- Regional Context
 - First segment of regional system

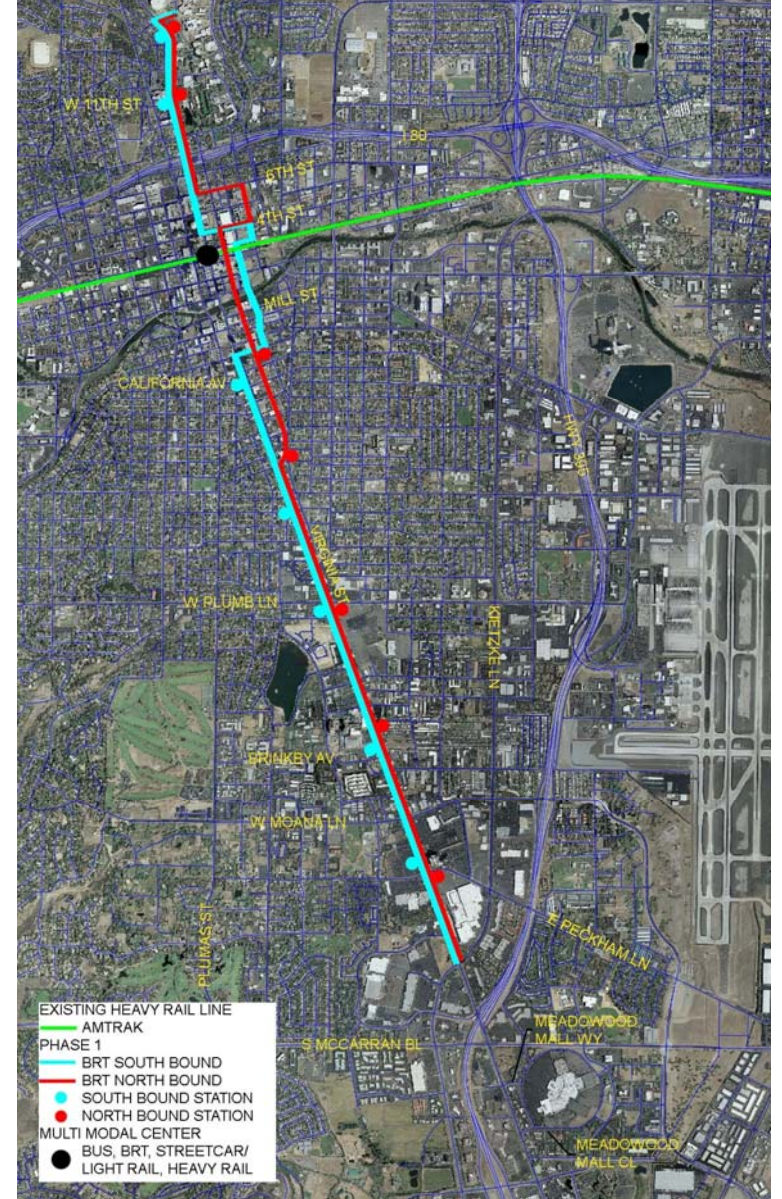


Overall Concept

- Phase 1
- Bus Rapid Transit



Regional Transportation Commission of Washoe County

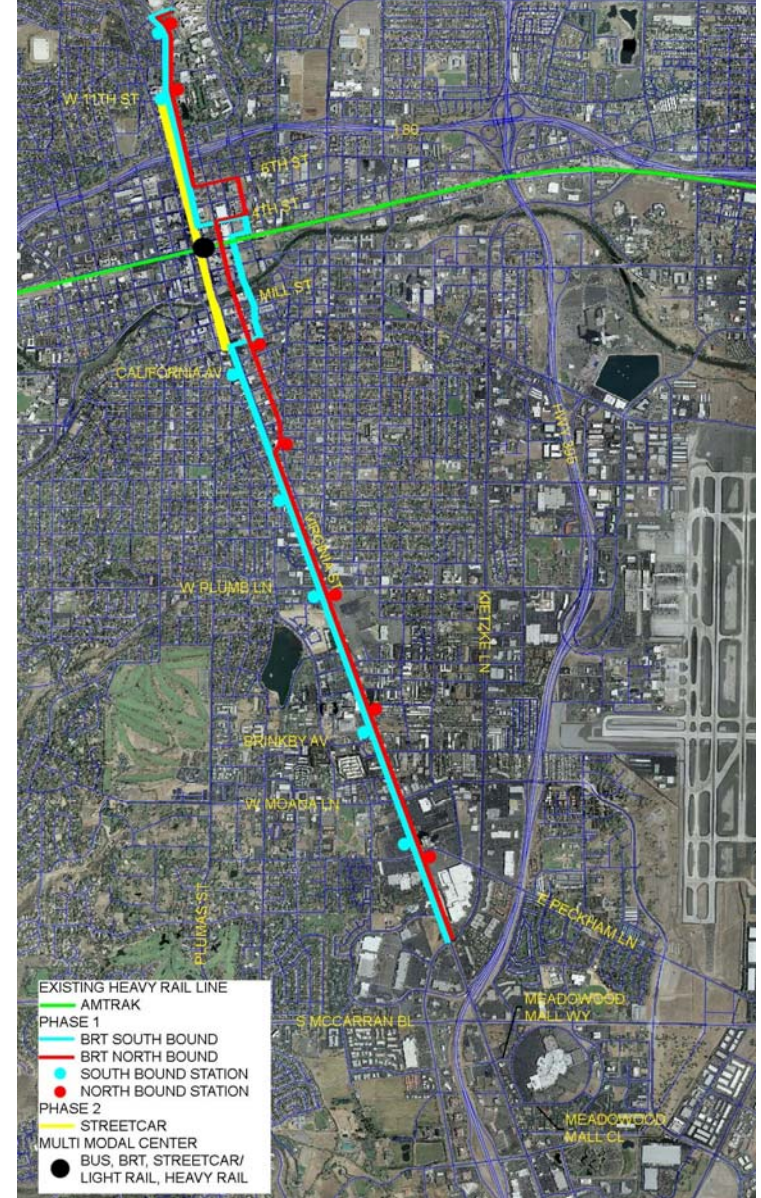


Overall Concept

- Phase 2
 - Bus Rapid Transit
 - Streetcar Downtown



Portland Streetcar, LLC

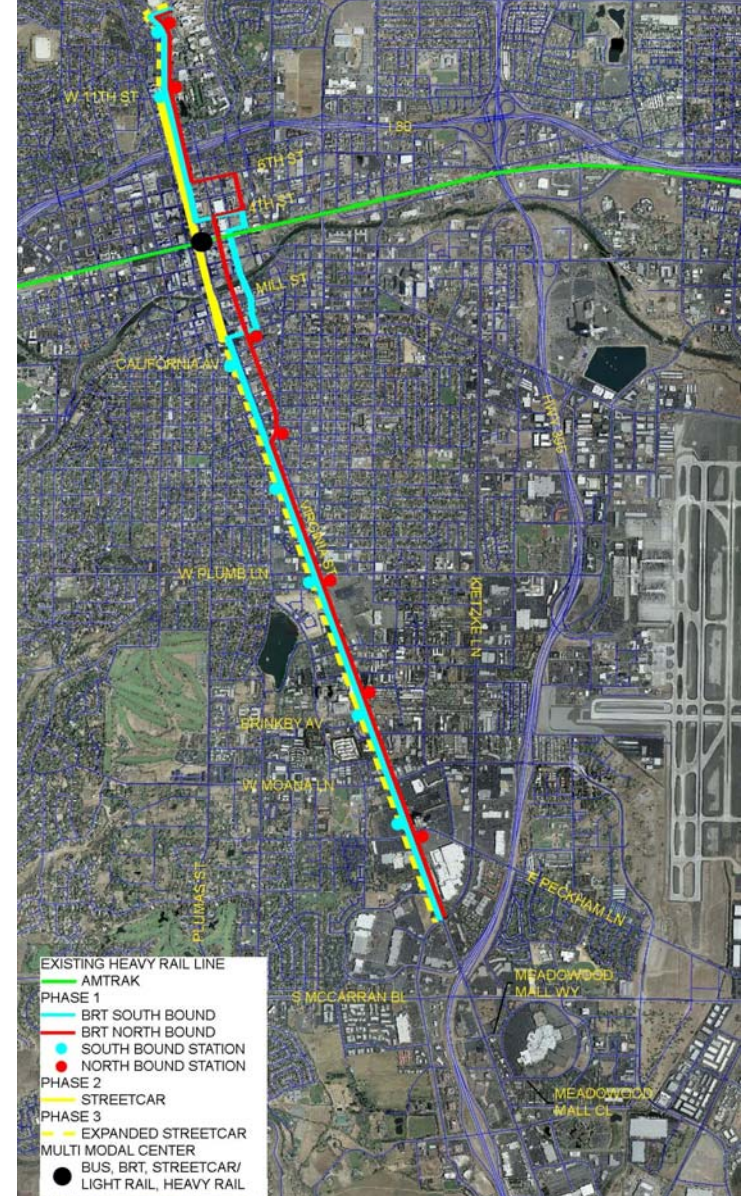


Overall Concept

- Phase 3
 - Expanded Streetcar



Portland Streetcar, LLC

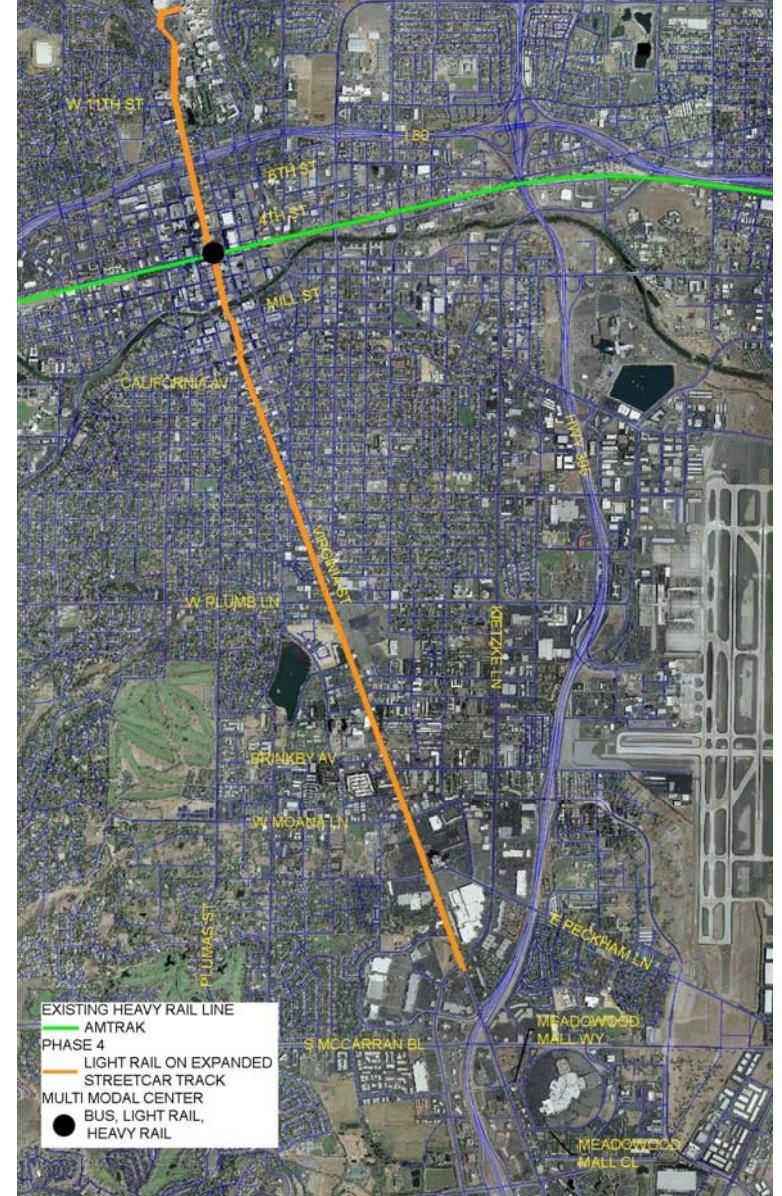


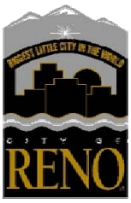
Overall Concept

- Phase 4
- Light Rail Train



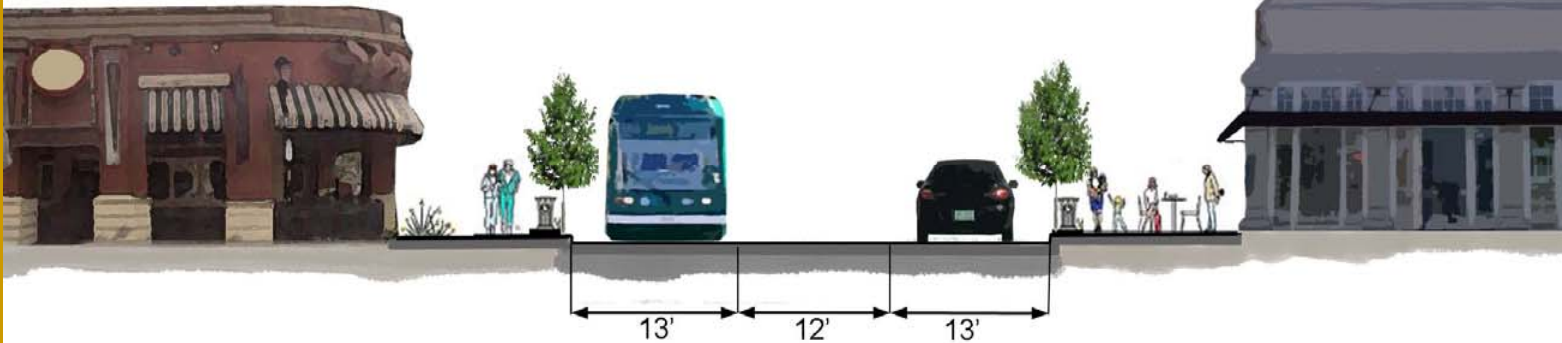
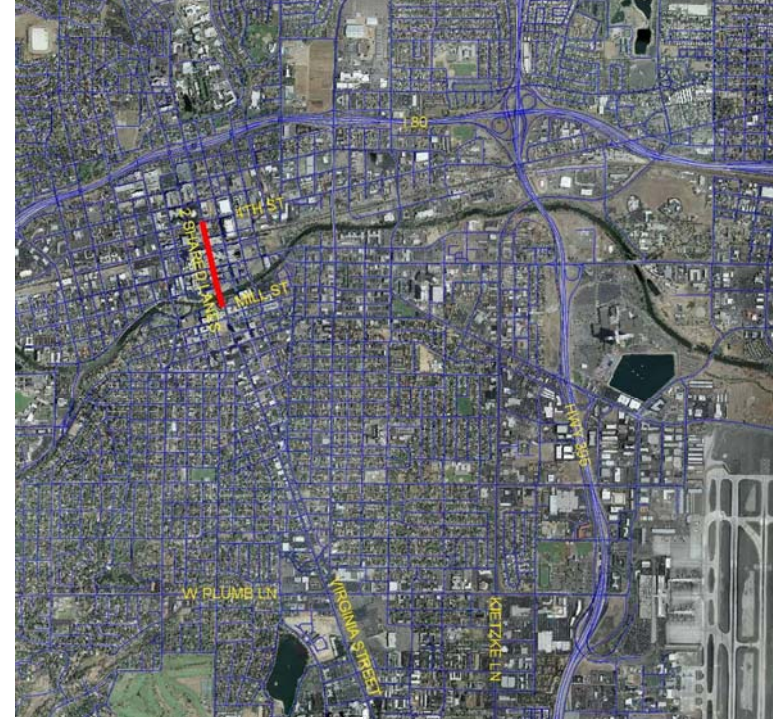
Tri Met





Overall Concept

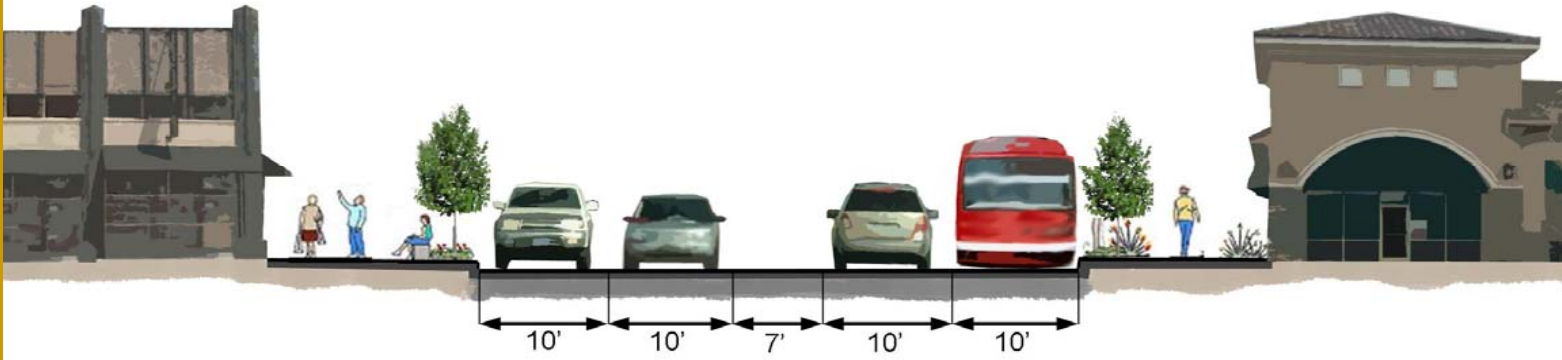
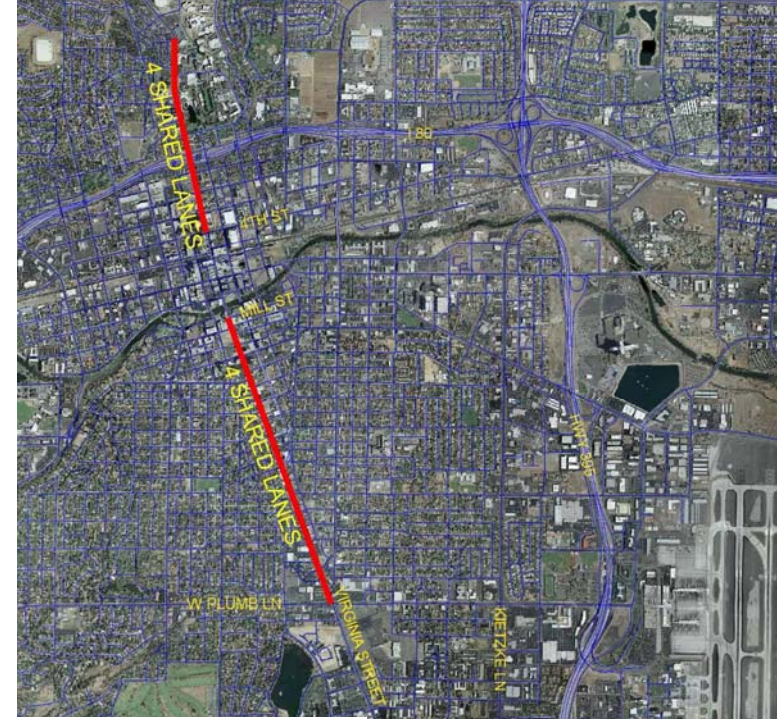
- Street Cross Section
- 2 Shared Lanes



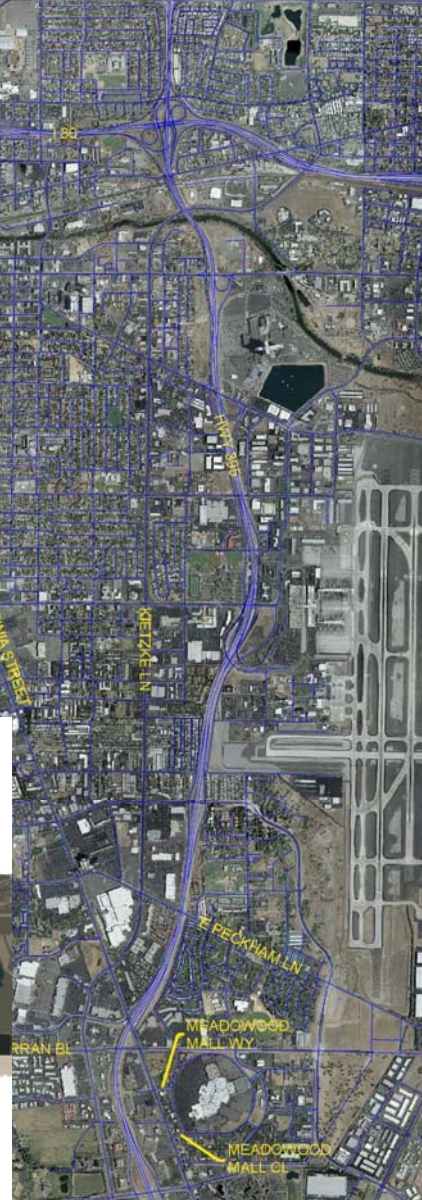
KLS Planning and Design

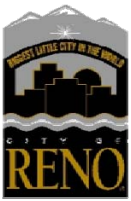
Overall Concept

- Street Cross Section
- 4 Shared Lanes



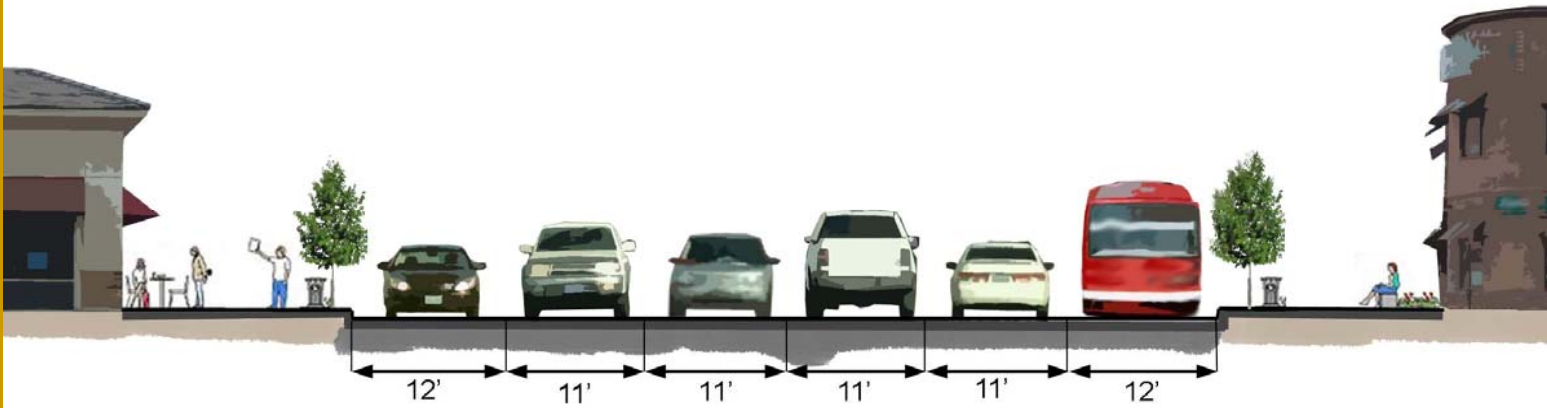
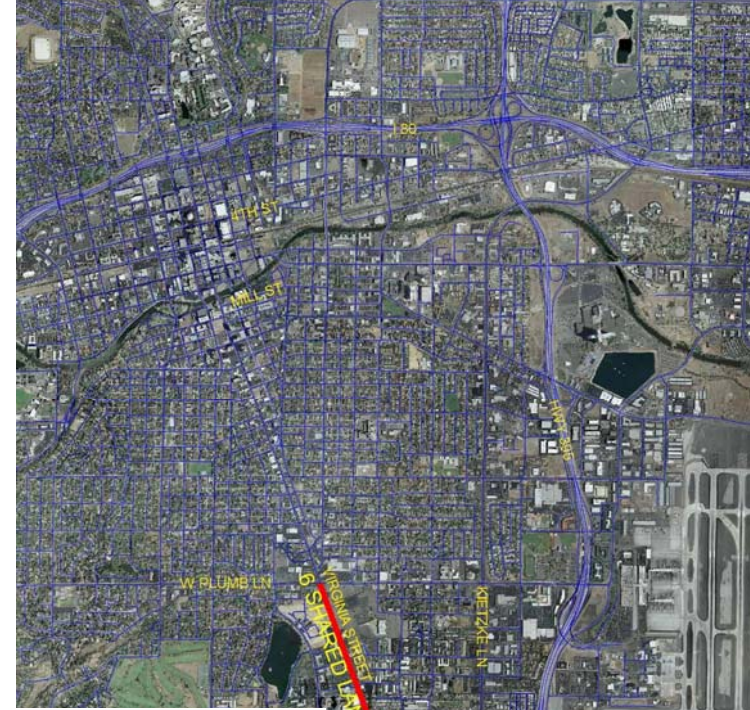
KLS Planning and Design





Overall Concept

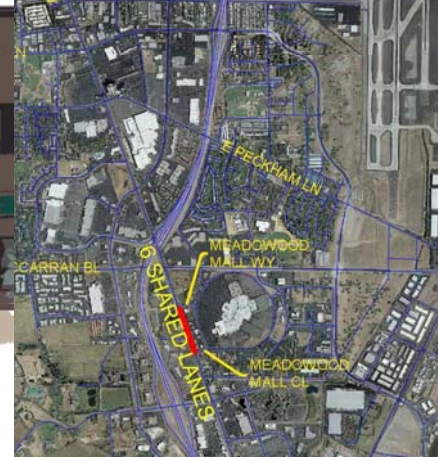
- Street Cross Section
- 6 Shared Lanes



KLS Planning and Design

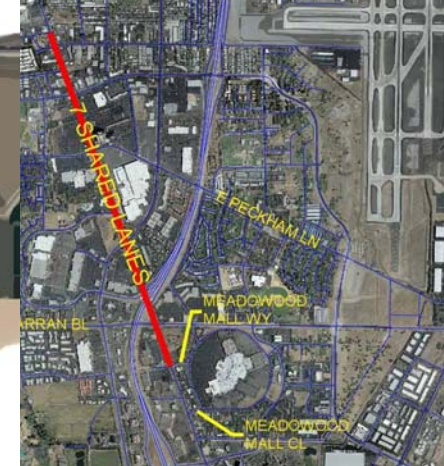
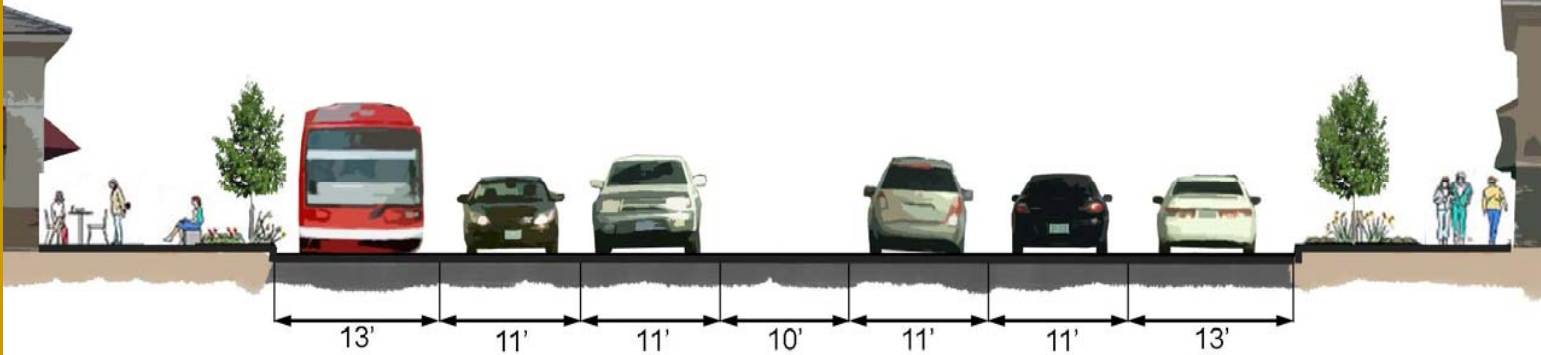
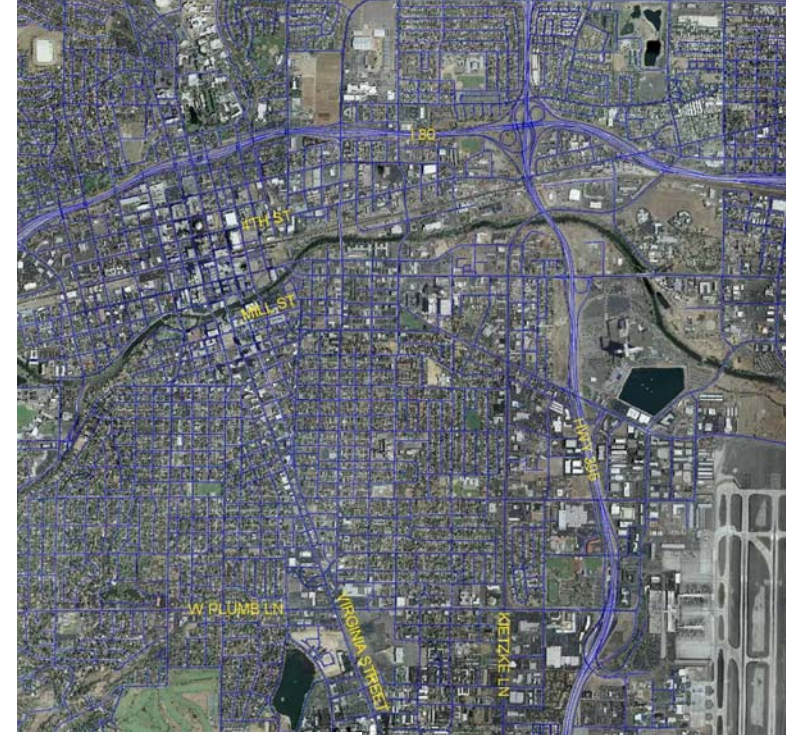
Virginia Street Transit Project

November 13, 2009



Overall Concept

- Street Cross Section
- 7 Shared Lanes



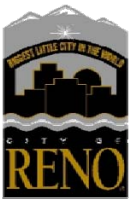
KLS Planning and Design

Overall Concept



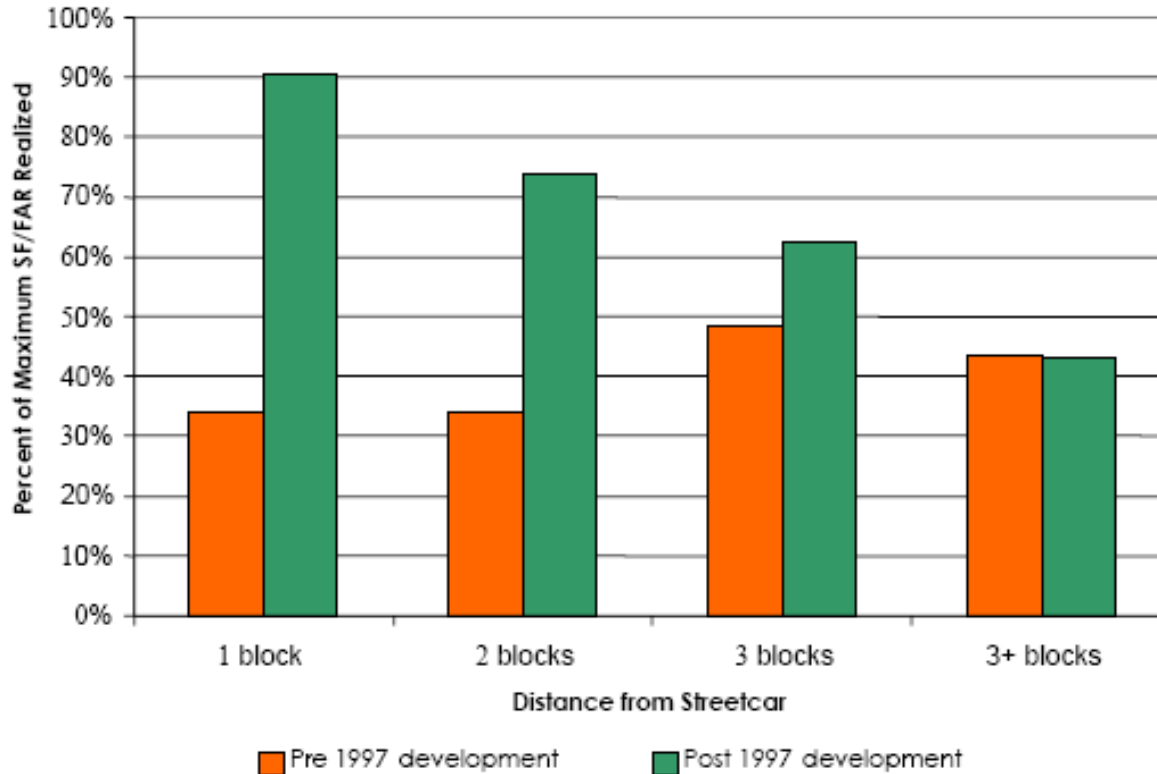
Portland Streetcar, LLC

- **Portland Streetcar**
 - **2001 2.4 mile line**
 - **In street operation**
 - **Modern low floor cars**
 - **Ridership 12,000/day**
 - **Development:**
 - **10,000 dwelling units**
 - **5.4 million square feet**
 - **\$3.5 billion invested within 2 blocks**



Overall Concept

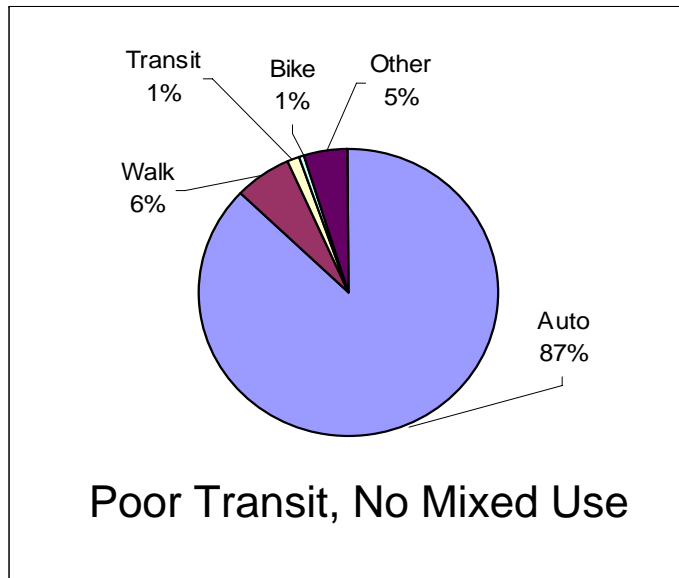
- Portland Streetcar Development Density



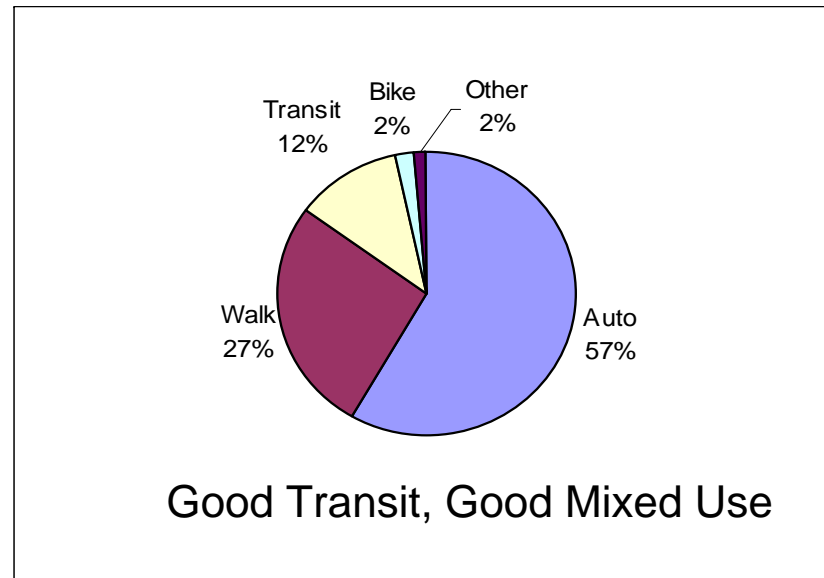
Portland Streetcar, LLC

Overall Concept

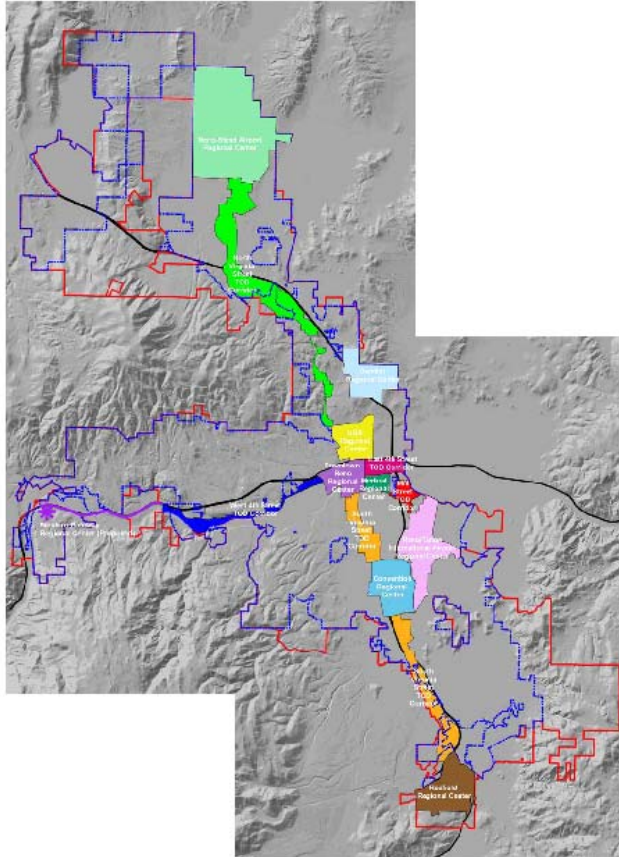
- Portland Travel Mode by Area



Portland Streetcar, LLC



City Master Plan and Code



- City Master Plan
 - 9 Regional Centers
 - 5 Transit Oriented Development Corridors
 - Special Planning Area in Land Use Plan
 - Individual Plan and Code Adopted for Each Center and Corridor

City Master Plan and Code

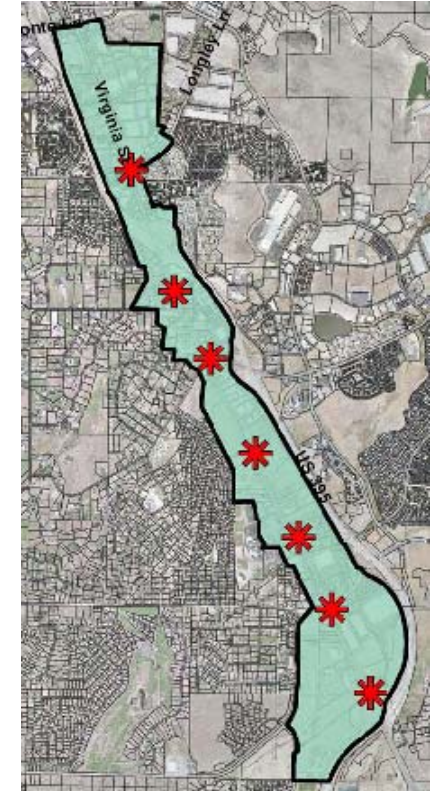
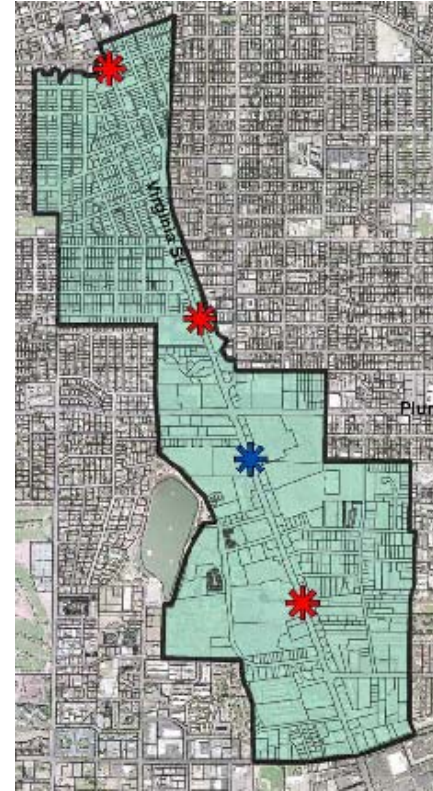


Clarion Associates

- **TOD Plan Concept**
 - Transit at highest density nodes (station areas)
 - Pedestrian circulation and density between nodes

City Master Plan and Code

- South Virginia TOD Corridor Plan
 - 2 Sections Between Downtown Regional Center, Convention Regional Center and Redfield Regional Center
 - 11 Station Areas



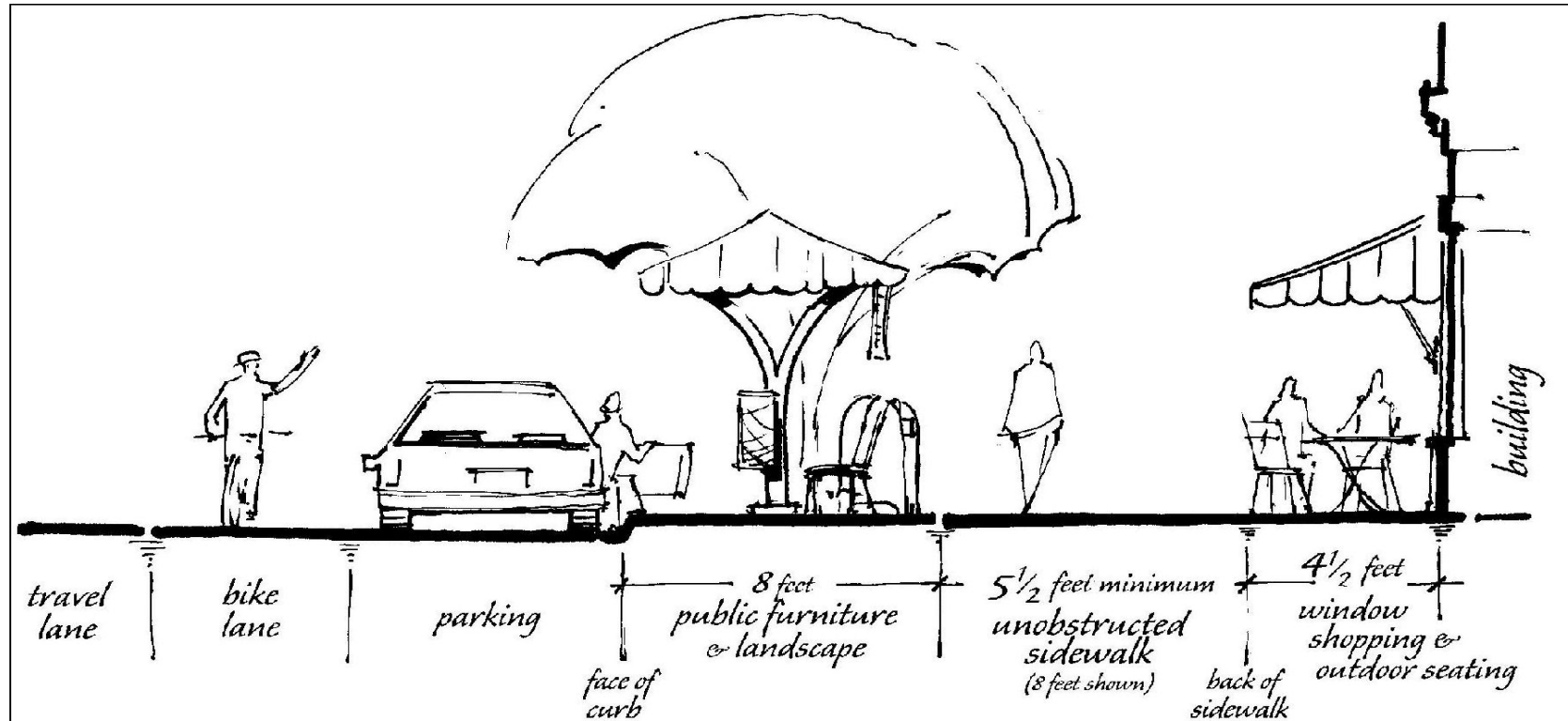


City Master Plan and Code

- **Reno Municipal Code TOD Corridor Regulations**
 - **Mixed use zoning with overlays**
 - **Minimum number of dwellings 14 - 45 du/acre**
 - **Minimum floor area ratio 0.25 - 4.0**
 - **Pedestrian oriented sidewalk standard**
 - **Building forward and parking to rear/side**
 - **Reduced parking**
 - **Pedestrian amenities 1% - 1.5%**
 - **Complementary land uses allowed without special use permit**
 - **Construction allowed without special use permit if meets standards**

City Master Plan and Code

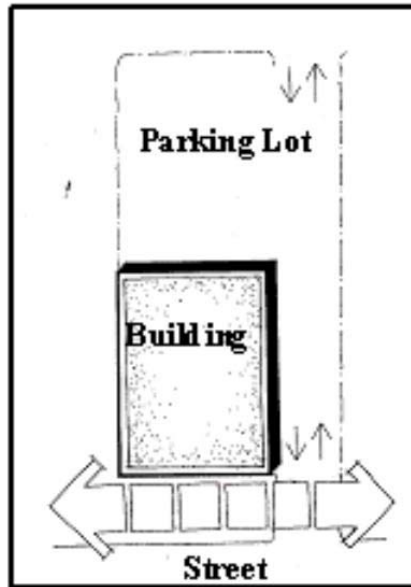
- Reno Municipal Code TOD Corridor Street and Sidewalk Standard



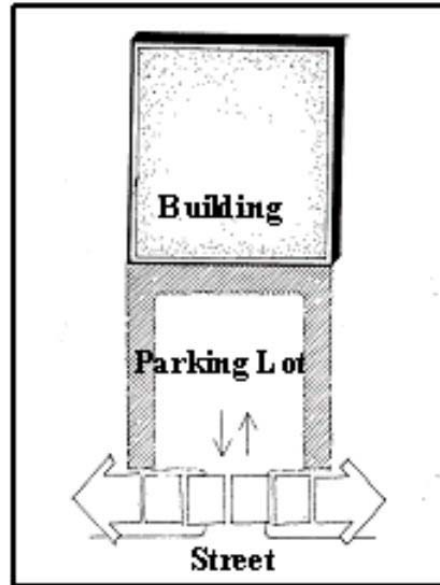
City Master Plan and Code

- Reno Municipal Code TOD Corridor Narrow Lot Parking Options

A. PARKING LOT IN REAR OF BUILDING



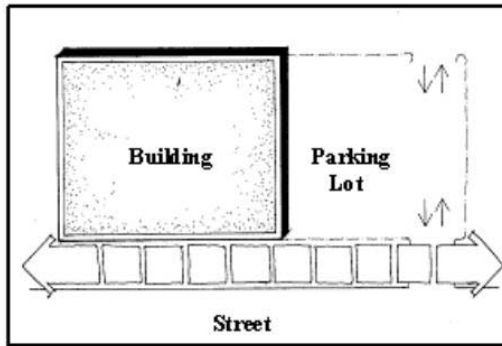
B. PARKING LOT IN FRONT OF BUILDING



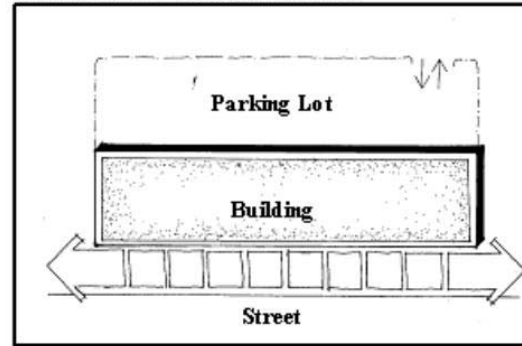
City Master Plan and Code

• Reno Municipal Code TOD Corridor Shallow Lot Options

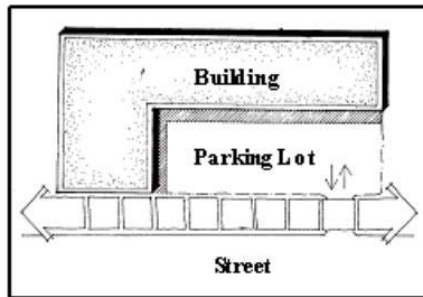
A. PARKING LOT ON SIDE OF BUILDING



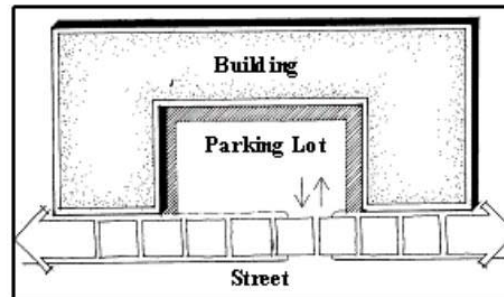
B. PARKING LOT REAR OF BUILDING

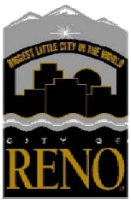


C. L-SHAPE BUILDING: PARKING LOT IN FRONT OF BUILDING



D. DOUBLE L-SHAPE BUILDING: PARKING LOT IN FRONT OF BUILDING



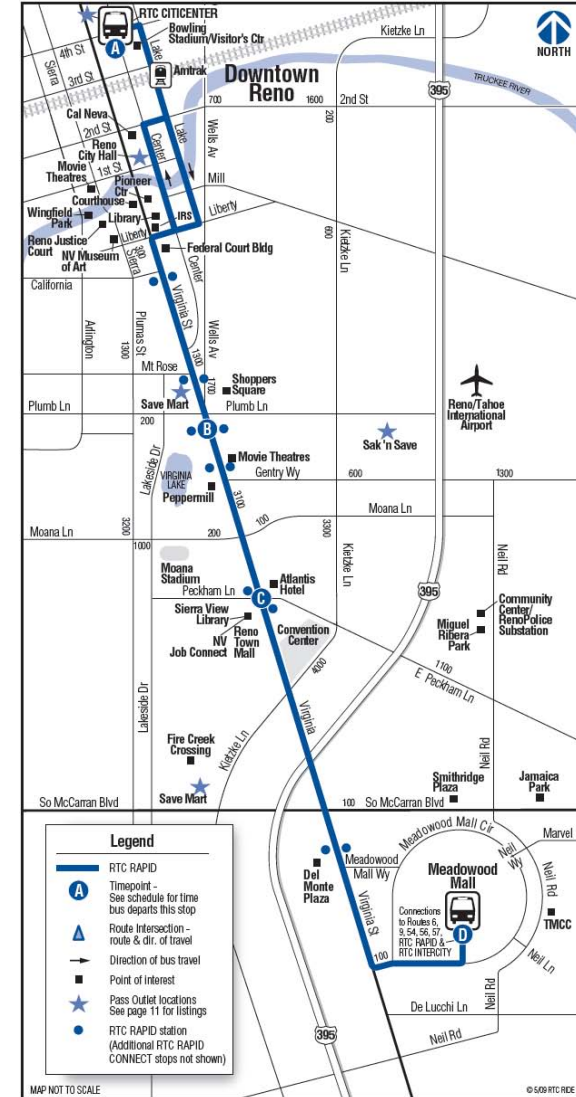


Implementation Activities

Item 1: RTC implement Bus Rapid Transit (BRT)

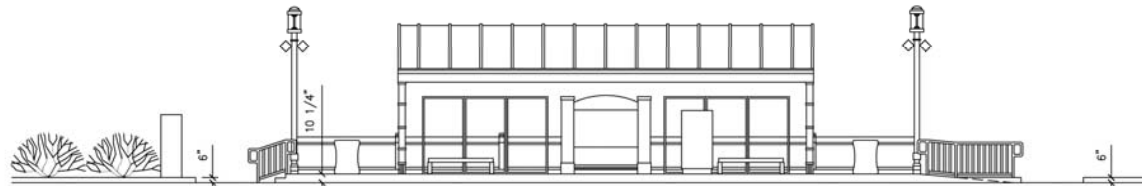
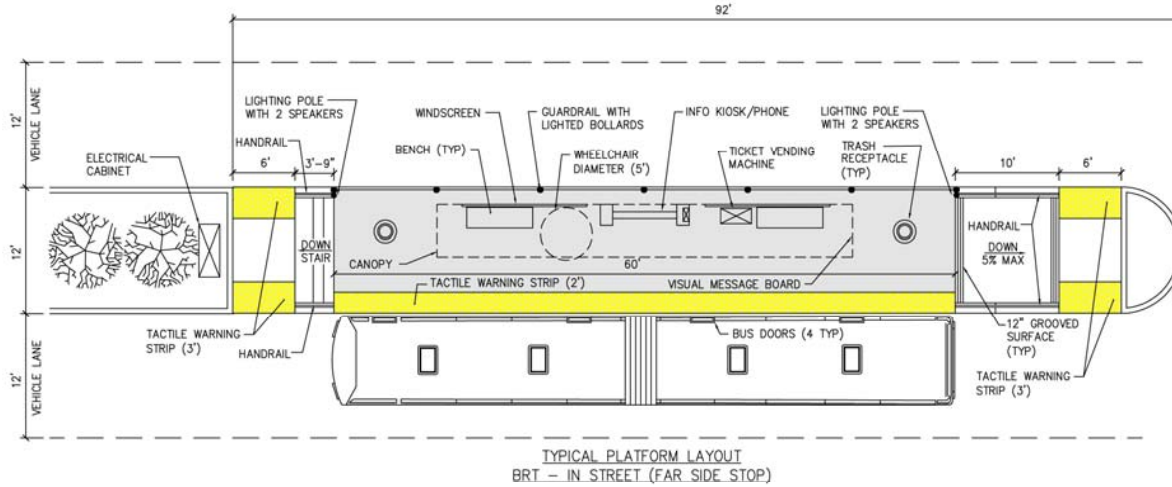


Regional Transportation Commission of Washoe County



Implementation Activities

Item 2: Add station requirements/design standards to RMC



Regional Transportation Commission of Washoe County

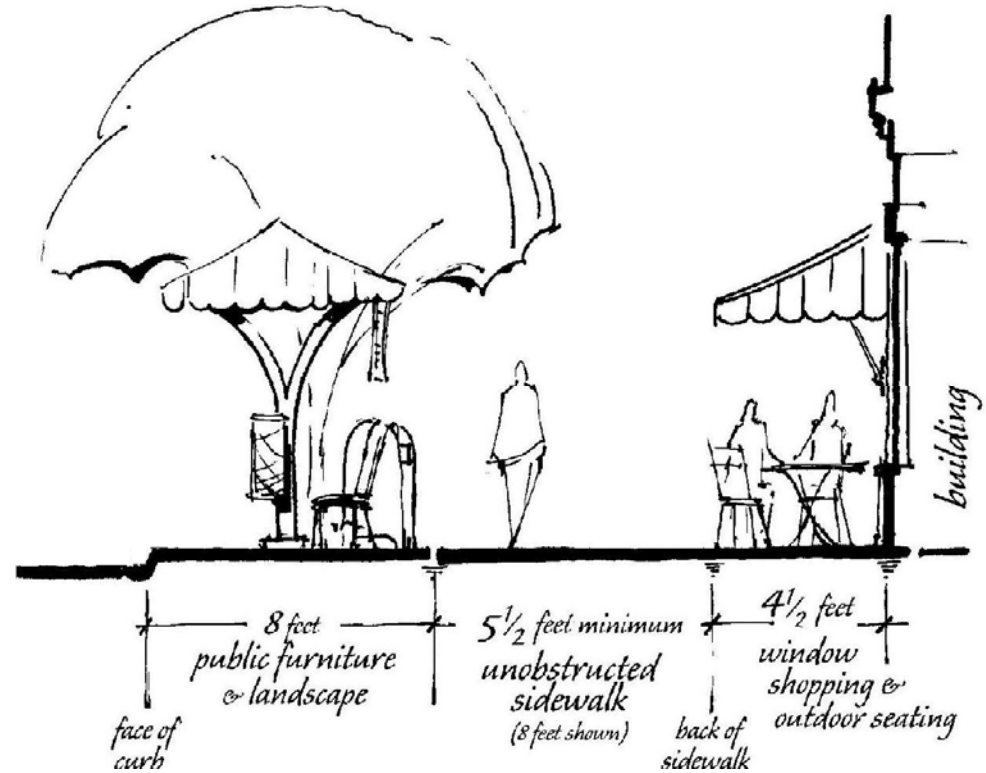
Implementation Activities

Item 3: Amend NRS, RMC and/or Regional Road Impact Fee to allow credits if capacity created by construction of parking lot outside right of way



Implementation Activities

Item 4: Complete Street standards for corridor



Implementation Activities

Item 5: Include streetcar/light rail capacity on new Virginia Street Bridge



Implementation Activities

Item 6: Multimodal Downtown Transportation Center Plan

- Virginia Street: Sierra Spirit then Streetcar
- Parking Garage: Auto Park & Ride
- Amtrak Station: Heavy Rail
- 4th Street Station: Bus and BRT



Regional Transportation Commission of Washoe County



Implementation Activities

Item 7: Staff working group and stakeholders groups for research on other systems, funding options, operational issues, lane reconfiguration, streetscape, parking, etc.

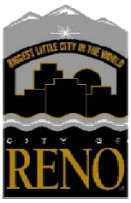


Status Report

On-going research

- *Design, operations and maintenance, and funding of existing systems in other cities*

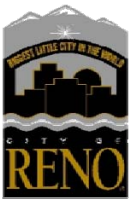




Status Report

Preliminary Capital Cost Estimate

- *Phase 2: \$67 million for initial phase (4 track-miles rails, power, vehicles, stations, maintenance facility)*
 - *\$4.8 million annual cost for 30 years @ 6%*
- *Phase 3: \$84 million for remaining portion of project (7 track-miles rails, power, and additional vehicles)*
 - *\$6.1 million annual cost for 30 years @ 6%*
- *Phases 2 & 3: \$10.9 million annual cost for 30 years @ 6%*



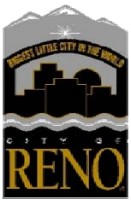
Status Report

Phases 2 & 3 Operations and Maintenance Costs

- *\$3 million/year depending on # streetcars, operating hours, etc.*

30-Year Replacement Cost Estimate

- *\$1.7 million/year*



Status Report

	Phase 2 (Lawlor Event Center - California Ave)		Phase 2 and 3 (Lawlor Event Center – Convention Center)	
	50%	100%	50%	100%
Annual Capital Costs	\$2.4 M	\$4.8 M	\$5.45 M	\$10.9 M
Annual O & M Costs	\$65.0 K	\$1.3 M	\$1.5 M	\$3.0 M
Annual Sinking Fund	\$375.0 K	\$750.0 K	\$850.0 K	\$1.7 M
Total Annual Costs	\$2.84 M	\$6.85 M	\$7.8 M	\$15.6 M
Total Annual Property Tax Rate Increase (@ \$850,000 per each cent)	\$.033	\$.081	\$.092	\$.184
Total Funding Required from Other Source(s)	\$33.5 M	\$0	\$75.5 M	\$0



Status Report

Potential Funding Sources

- *Comprehensive funding package to be proposed by Finance Sub-Group*
 - *Sales Tax*
 - *Tax Increment Funds*
 - *Federal Funding*
 - *Property Tax*
 - *Tourism Tax*
- *If property tax, Reno City Council must decide to place on ballot by July 2010*



Status Report

Potential Funding Sources (continued)

- *Regional Transportation Commission preparing studies and analyses for Federal funding application*
 - *Corridor study/alternatives analysis*
 - *Develop Locally Preferred Alternative*
 - *Initiate preliminary engineering and NEPA documentation*