

RTC RAPID

A Brief History of Improving Transit in the Virginia Street Corridor



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Regional Transportation Commission, Washoe County**

Virginia Street

- Resort corridor connecting
 - University of Nevada, Reno
 - Downtown
 - Truckee River
 - Strip Casinos
 - Convention Center
 - Meadowood Mall
- Major transportation corridor
 - 30,000 ADT
- Strong transit patronage
 - 5,000/day (14% Mode Split)



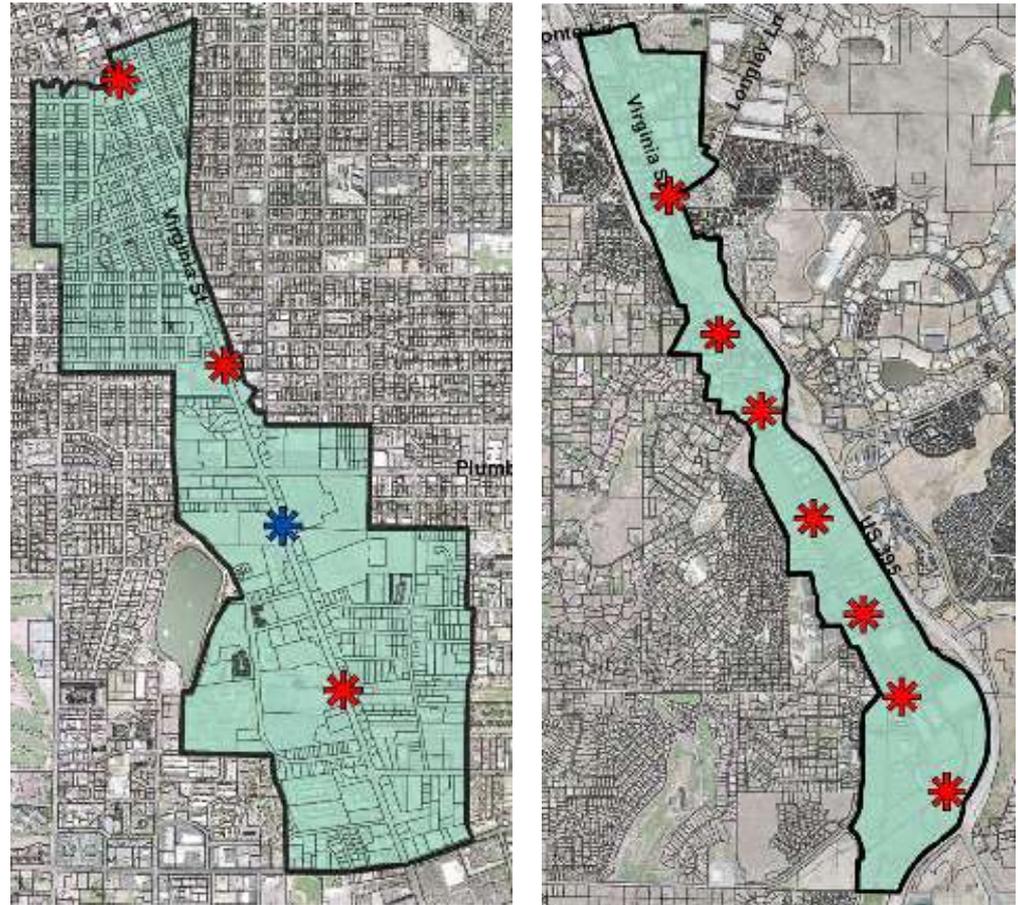
Virginia Street

– Transit Overcrowding and Traffic Congestion



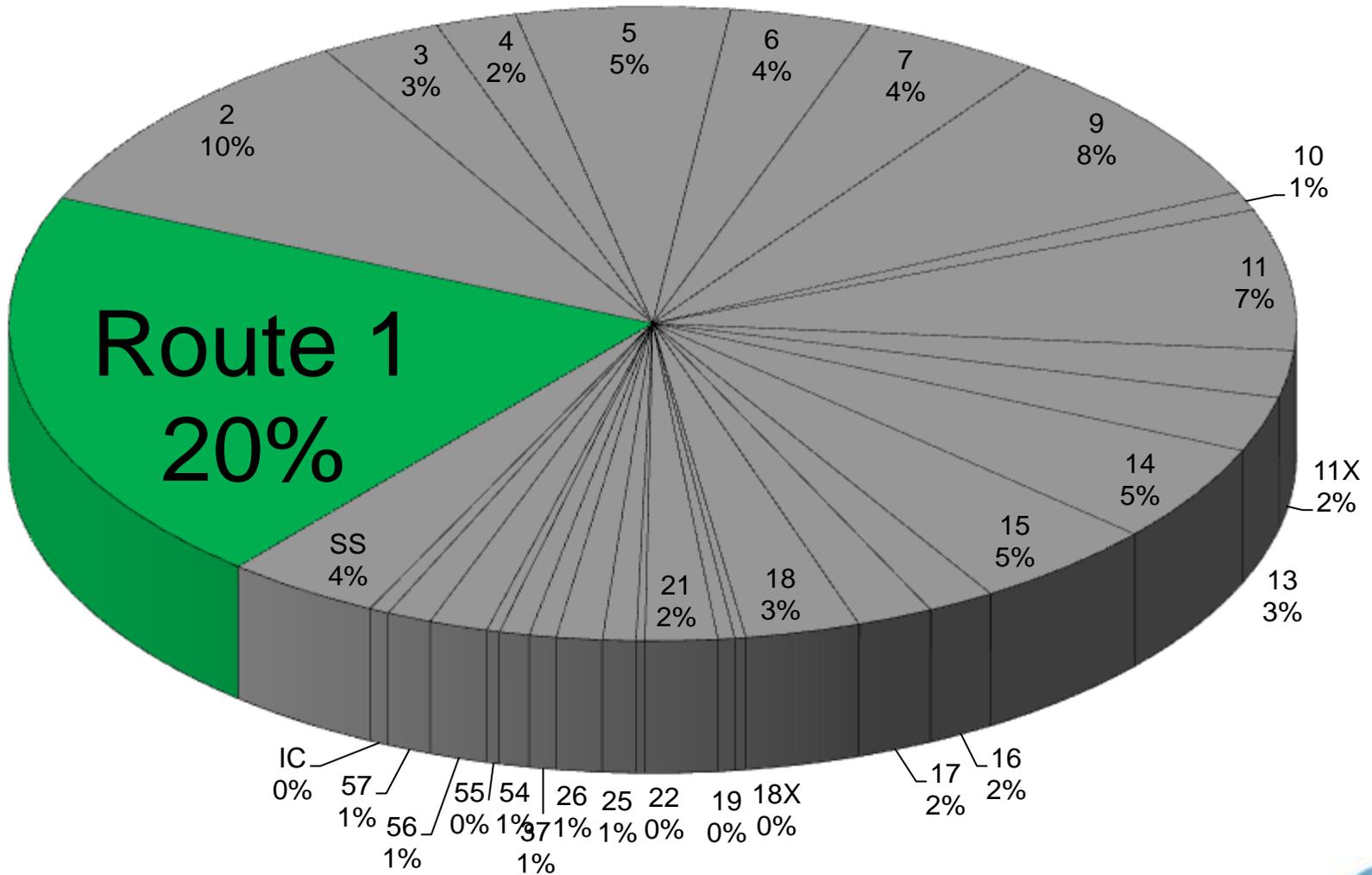
Virginia Street Initiatives

- Truckee Meadows Regional Planning Agency adopted regional TOD initiative.
- RTC proposed Bus Rapid Transit in 2001 as part of the 2030 RTP.
- City of Reno designated first TOD corridor and adopted street design standards.



Virginia Street TOD Planning Area

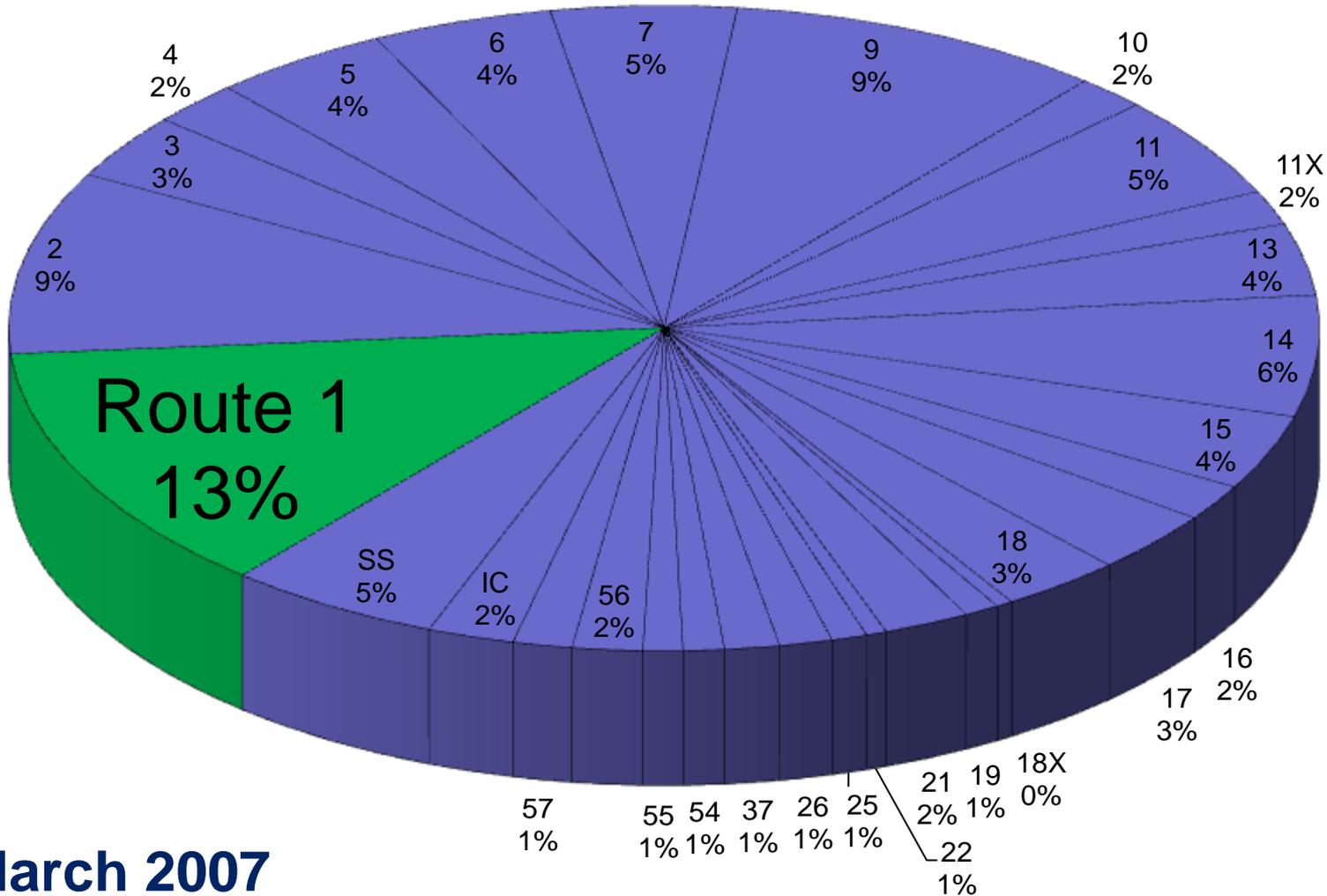
RTC RIDE Route Ridership



March 2007



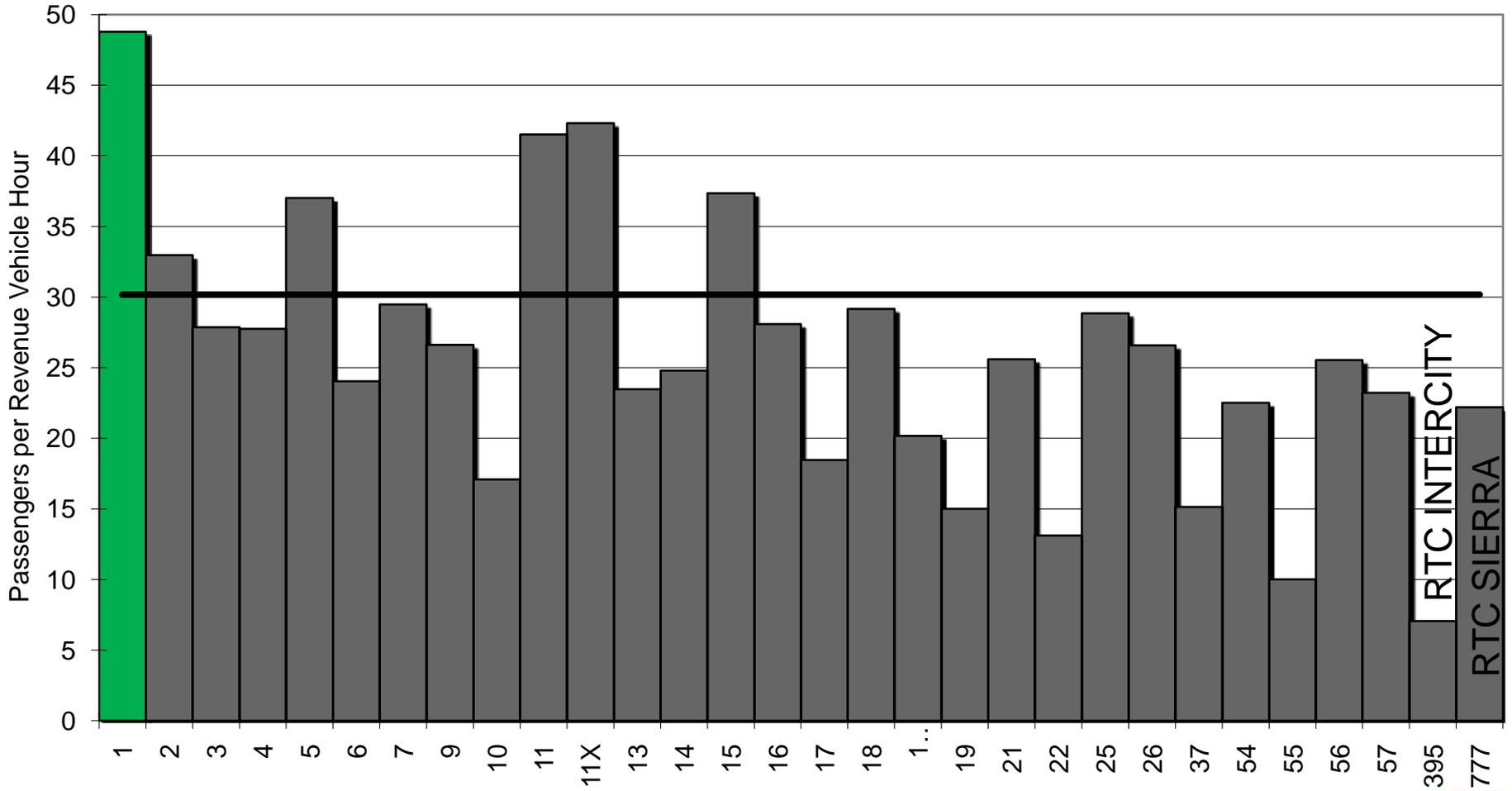
RTC RIDE Service Hours



March 2007



RTC RIDE ROUTE PRODUCTIVITY: MARCH 2007





***Virginia Street
Bus Rapid Transit
Feasibility Study
March 2003***

Early Alternatives Considered



What would you support?

Below is a summary of attributes for several types of transit. Place a dot beside the one you think would be best for the Virginia Transit Corridor and that you would support.

Vote Below	Type of Transit	Approximate Capital Cost per mile	Approximate Operating Cost / Year*	% Route with Dedicated Transit Lanes	% Intersections Transit has Priority	Estimated Travel Time**	Revenue Requirements
	No changes to current service 	\$0	\$21,000,000	None	0%		No Change
	Transit System Management (TSM) 	\$1 - \$3 million	Minimal Change	None	0-20%		Minimal Change
	Monorail 	\$60 - \$100 million	Significant Increase	100% Removes 1 lane for structures	N/A		Significant increase; may require special bond/tax for operations; needs new maintenance facility; dedicated maintenance operations
	Light Rail 	\$30 - \$60 million	Significant Increase	100% Removes 2 lanes for tracks	Rail Pre-emption		Significant increase; may require special bond/tax for operations; needs new maintenance facility; dedicated maintenance operations
	Bus Rapid Transit Low Level Investment 	\$2 - \$8 million	Minimal Change	0-20%	40%		Some increase is included in the current Short Range Transit Plan
	Bus Rapid Transit Mid Level Investment 	\$8 - \$12 million	Moderate Increase	40-50%	60%		Moderate increase; current Regional Transportation Plan identifies increased funding for BRT
	Bus Rapid Transit High Level Investment 	\$12 - \$20 million	Moderate to Significant Increase	70-80%	80%		Substantial increase; may require special bond/tax for construction/operations

* Operating cost compared to current Citifare Operating Cost

** University of Nevada to Mt. Rose Highway

Why Bus Rapid Transit (BRT)?

- Low-cost, high-capacity alternative to LRT
- Meets the needs of the majority of riders
 - 40% of ridership travels between downtown and Meadowood
 - 60% of riders want only a few stops
- Better service/Better travel time
 - Fewer stops = faster travel time for the majority of riders
 - More consistent travel time leads to better spacing, improving dependability
- Attract more riders
 - As service becomes more convenient, more people will consider transit
- Easy to implement incrementally
 - BRT can progress/adapt from mixed flow to dedicated travel lane operation





Bus Rapid Transit

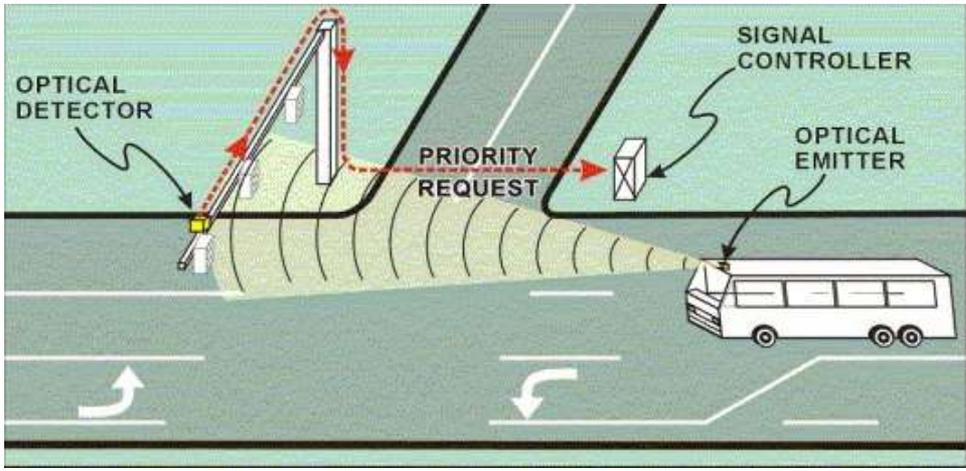
A new way to meet transportation demands



Efficient service results from fewer stops, prepaid fares, quick boarding and alighting, and priority roadway treatments



Exclusive travel lanes



Priority at signals





Modern easily accessible vehicles



On-board display



Clean, comfortable interiors

Bus Rapid Transit

Looks and operates like light rail



Real-time arrival Information



Easy access. Quick boarding and alighting at multiple doors



Comfortable waiting areas



Prepaid fares



Transit Stations and Stops



Conceptual Park Lane Station

***Potential for
retail, day
care, public
space***

***Development
opportunity
for under-
used
properties***

***Attractive Secure
Comfortable***



Potential Park Lane development site





Virginia Street Transit Corridor Alternatives Analysis

RTC Board Meeting

December 21, 2007

Project Cost and Funding

- Project viewed favorably by FTA for Very Small Starts funding
- Local match tied to success of RTC-2 ballot measure on November 4, 2008
- Ballot measure failed
- FTA application withdrawn
- Beginning of the Great Recession

CONCEPTUAL CAPITAL COST ESTIMATE

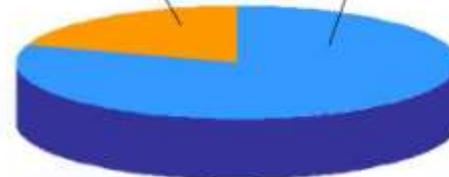
Alternative	Design/Construction	Bus Procurement	Total
4 th St. Station to Meadowood	\$7M	\$9M	\$16M
UNR to Meadowood	\$9M	\$11M	\$20M

POTENTIAL PROJECT FUNDING

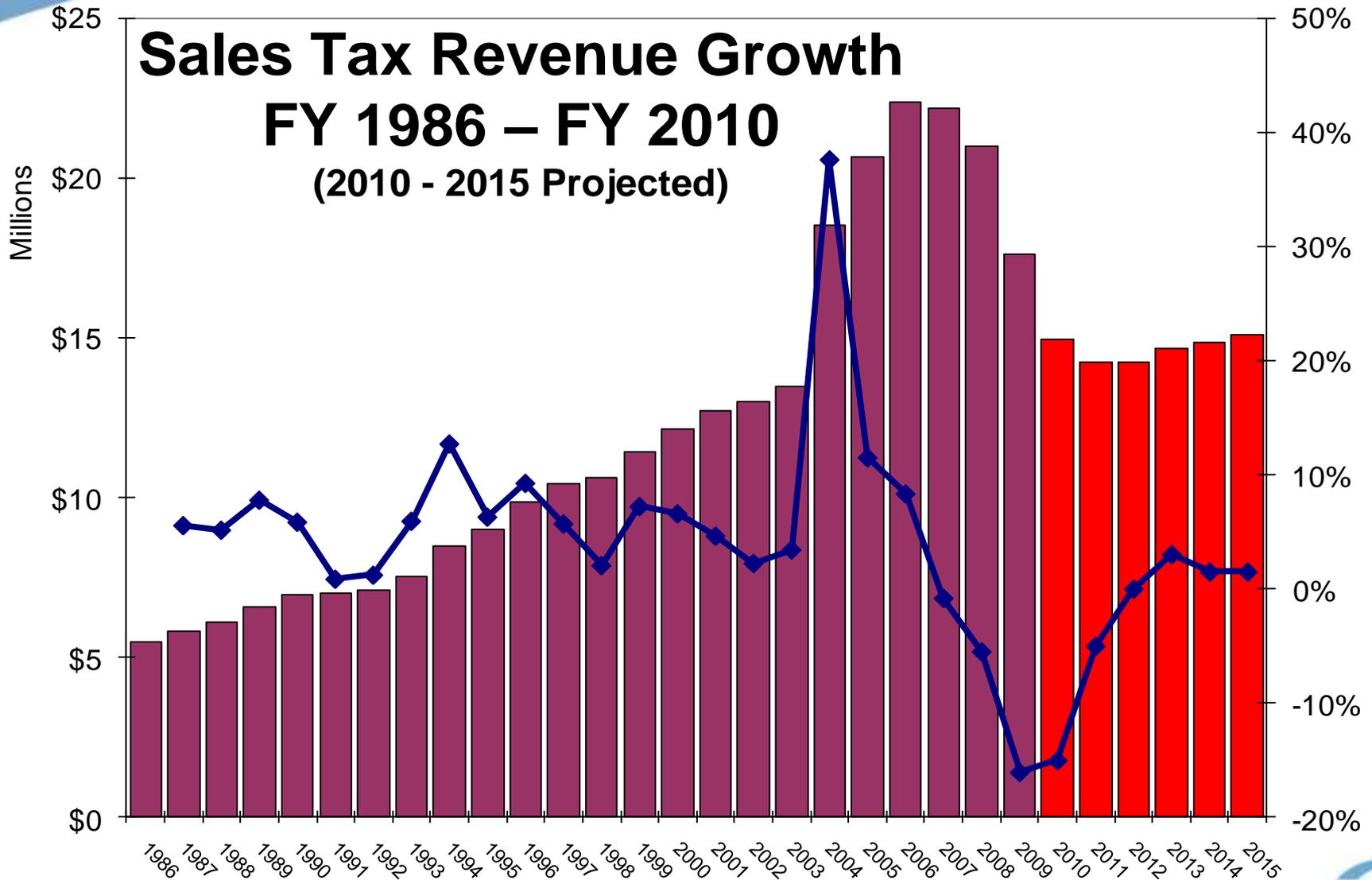
Balance

Local Transportation Funds, Public/Private Partnership

Up to 80%
Federal Transit Administration
Very Small Starts Program



Sales Tax Revenue Growth FY 1986 – FY 2010 (2010 - 2015 Projected)



TAX REVENUE (Y1)
 PERCENT CHANGE (Y2)

NOTE: Sales tax increased from 1/4% to 5/16% effective FY 2004



RTC faced with 30% service cuts

- Propose replacing Route 1 with new mode, RTC RAPID
- Use CMAQ funds to operate for three years
 - This would free nearly \$5.0M annually in local funds to offset remaining service cuts
 - Operate a higher level of service
 - 10-minute headways between 5:30 AM and 8:00 PM.
 - New 30-minute local service, RAPID CONNECT,
 - Augment RTC RAPID
 - Provide 24-hour service



Year 1: Implementation Schedule

- **Apr. 17, 2009: Board Approves CMAQ Demonstration Project**
- **Oct. 11, 2009: Service Begins**
 - Operating cost: \$4,787,000
 - RTC RAPID – \$3,307,000
 - (34,244 service hours)
 - RAPID LOCAL – \$1,480,000
 - (15,330 service hours)
 - Capital Costs: \$305,000
 - Vehicle Branding – \$55,000
 - Rapid Station Shelter and CONNECT Bus Stops – \$250,000
 - **Total Costs: \$5,092,000**



Year 1: Vehicles



RTC RAPID: Branded to look different from RTC RIDE. Includes blue and white from the RIDE brand, but introduces the color **green** to promote clean, environmental message.

RAPID CONNECT: Color choice connected to RTC RAPID to promote a new “system” in the corridor. Blue bumper distinguishes CONNECT from RAPID as it approaches the station.



Year 1: Shelters

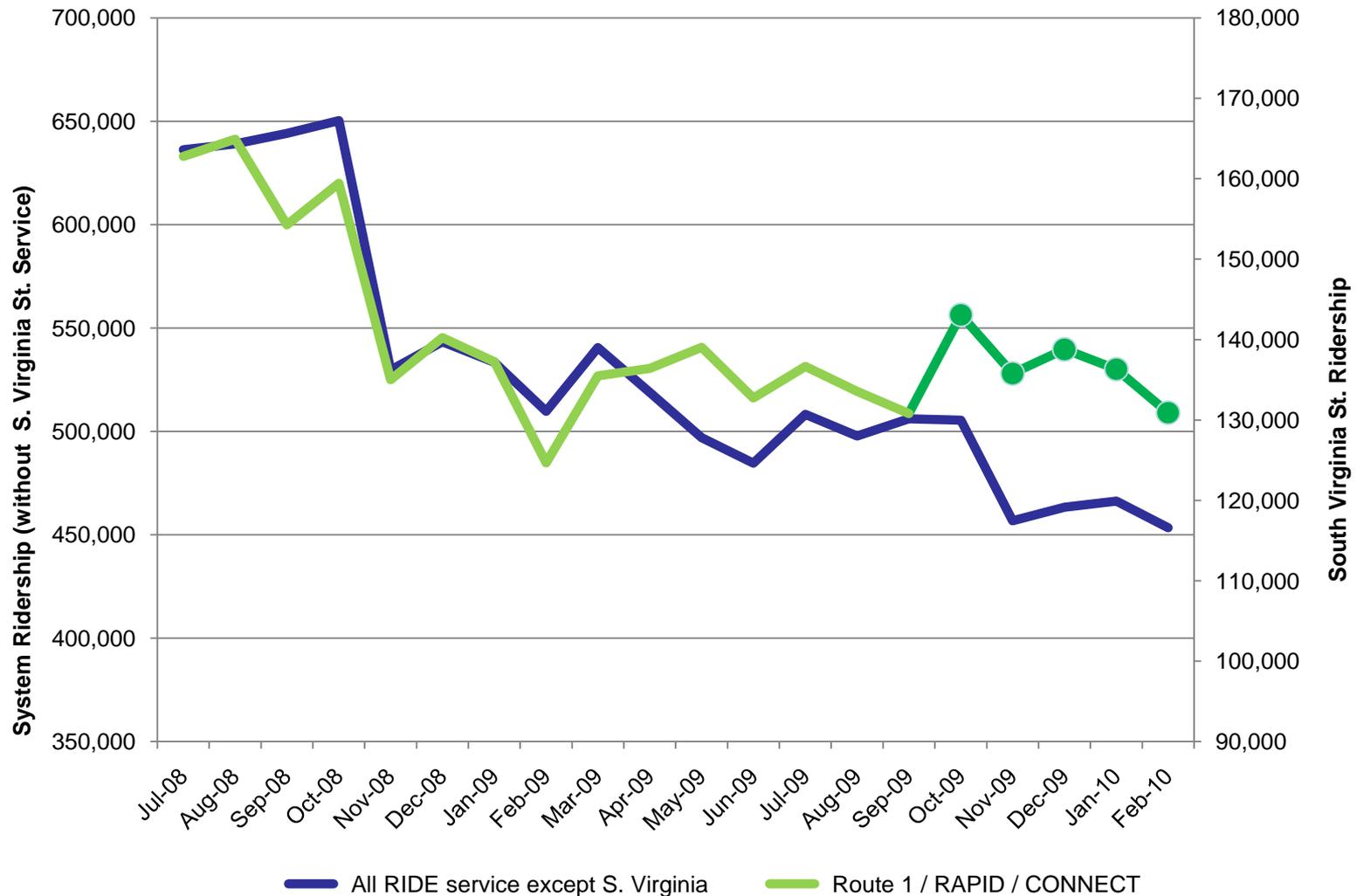
Shelters and signs branded to match the green RAPID color scheme.



Exterior bike racks on rebranded buses. New buses will have interior racks.

RTC RAPID Ridership

Compared to Route 1 & all other RIDE service



Year 2 & 3: Implementation

- **Annual Operating cost: \$4,787,000**
- **Capital Costs: \$11,640,000**
 - 8 New Flyer Buses – \$7,400,000
 - 14 Stations – \$4,200,000
 - RIDE rebranding – \$40,000
- **Open 4th Street Station**
 - Downtown Reno transit center
- **Complete construction of 14 RAPID Stations**
- **Implement Transit Signal Priority & Queue Jump/Queue Bypass**



Year 2: Vehicles

New Flyer DE60LFA
60-foot hybrid
articulated bus



Piggy-back
procurement
through
Albuquerque,
NM, Sun Tran



Lane Transit EmX

Community Transit Swift

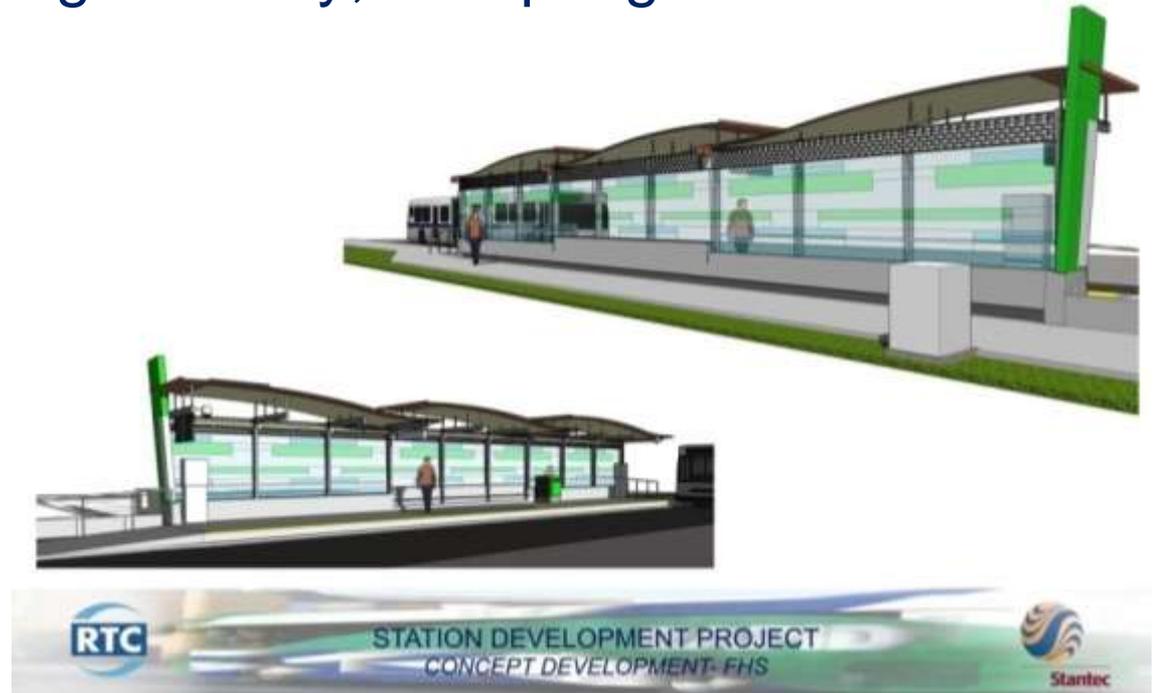


Year 2: Stations

Build in existing public right of way; accepting easements

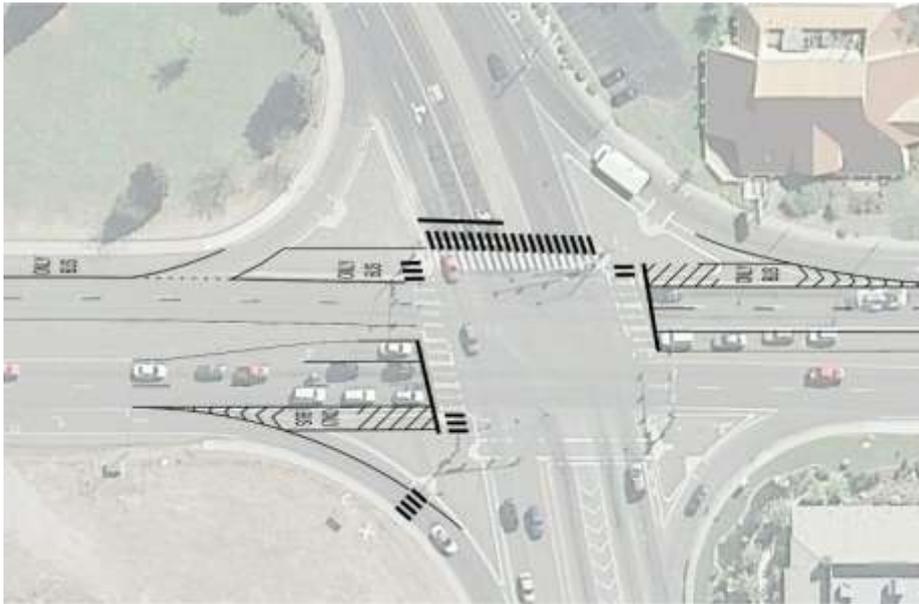
- Full Stations

- Raised platforms
- Pre-board fare purchase machines
- Next bus display
- Security cameras
- Sidewalk by-pass desirable



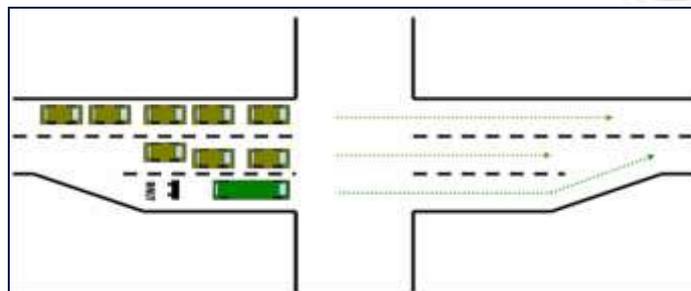
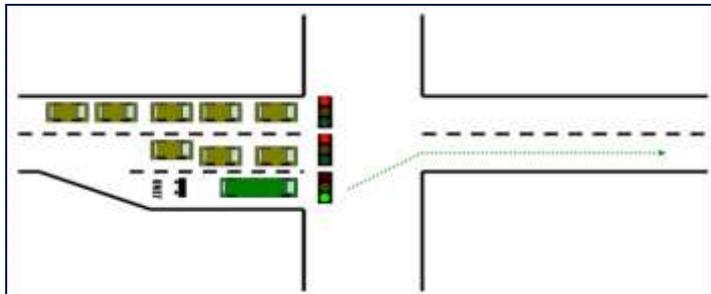
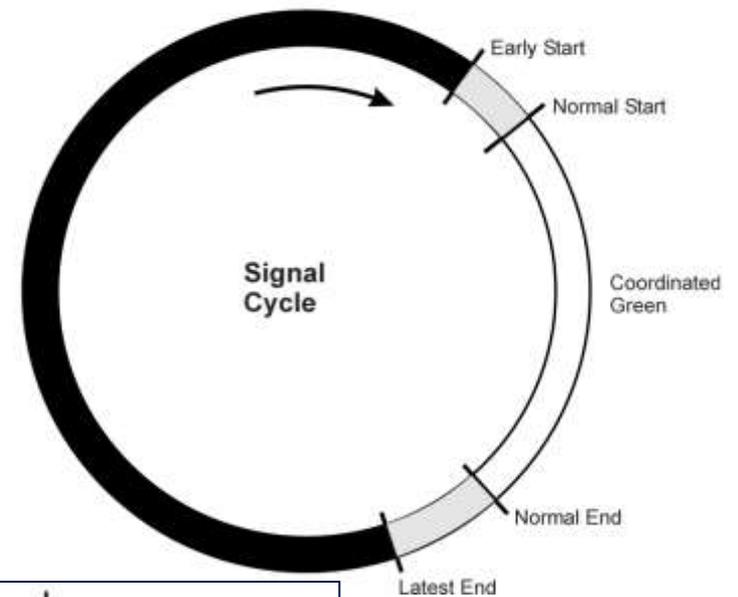
Year 2: Fall 2010

Transit Signal Priority & Queue Jump



Queue-jump and queue-bypass at key intersections

Transit Signal Priority at key intersections



**Opening
October
2010:**

***RTC 4th
Street
Station***



What's next?

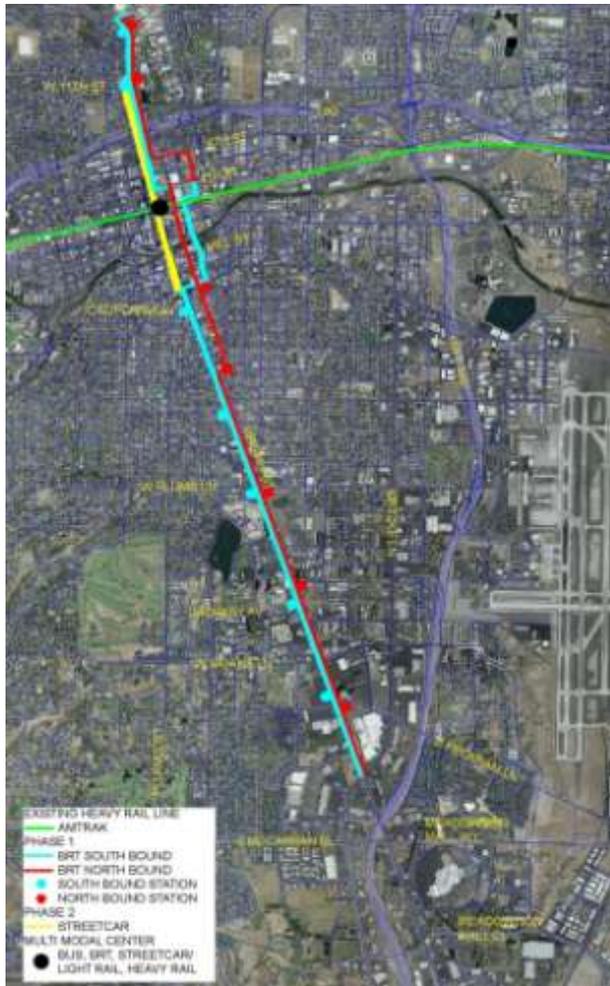
- Streetcar Project in partnership with City of Reno
- Planning/Engineering contract to be awarded



- Evaluate feasibility for fixed-guideway
- Prepare for federal funding
- Build local support

Street Car Concept

- Result of BRT and land use policies
- Promote walkability
- Transit supportive land uses
- Encourage redevelopment
- Promote economic vitality



Phase I



Phase II

Questions or Comments?

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Thank You!



RTC 4TH STREET STATION

PARSONS BRINCKERHOFF

