

# Regional Transportation District - Denver

## FasTracks *Quality of Life Study*



**Rail~Volution: Portland, Oregon**  
**October 21, 2010**

Press Button When  
LX To Open Doors





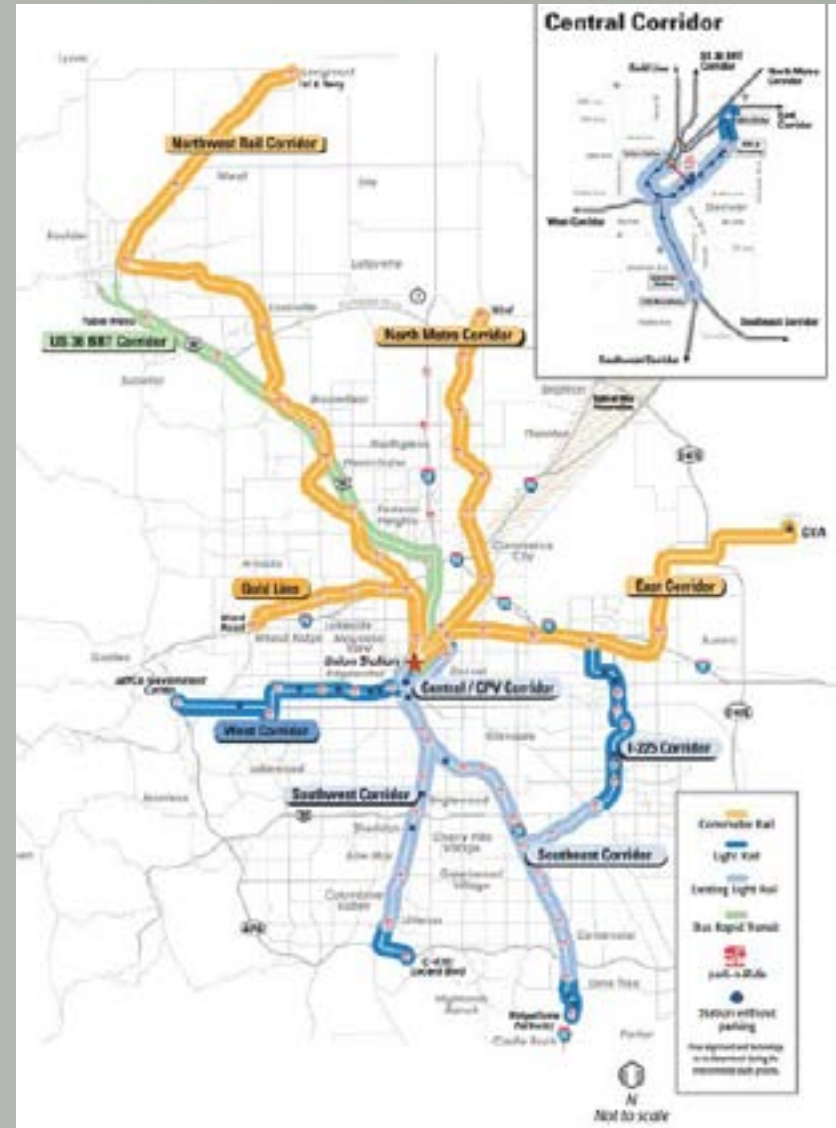
## Quality of Life Study

- Background/Purpose
- Scope
- Reporting
- Example Measures
- Wrap Up

# FASTRACKS PROGRAM



- In 2004, Denver region voters passed a 0.4% tax increase to fund regional transit expansion
- FasTracks Program:
  - 122 miles of new commuter and light rail
  - 18 miles of bus rapid transit (BRT)
  - 21,000 new parking spaces at rail and bus stations
  - Enhanced bus service to facilitate bus/rail transfers across the 8-county district



# STUDY BACKGROUND



- In the 2004 *FasTracks Plan*, the RTD Board adopted three core goals for FasTracks:
  - Balance transit needs with future regional growth
  - Increase transit mode share during peak travel times
  - Provide improved transportation choices and options
- The Plan also outlined anticipated benefits to the region

***How do we know the FasTracks Program is achieving these goals and providing benefits?***



# QoL STUDY: WHAT IS IT?



- Quality of Life (QoL) Study is a multiyear FasTracks monitoring program with the primary goal to:
  - Objectively track and measure how the region changes as FasTracks is planned, constructed and opened for service
- The Study also serves to fulfill the Before and After Study data requirements for corridors receiving Federal New Starts funding

# SUMMARY OF STUDY MEASURES



FasTracks Goals	Objective	QUALITY OF LIFE STUDY		
		Indicator	Measure	
Establish a Proactive Plan that Balances Transit Needs with Future Regional Growth	1. Meet Future Transportation Needs	Population Growth	Population Urban Land Consumption Urban Residential Density Corridor Population Density	
		Job Growth & Employment	Annual Change in Employment <b>Direct Job Creation</b> Indirect Job Creation Unemployment Rate Station Area Employment	
		Housing Growth	Housing Starts	
	2. Provide Opportunities for Development Near Transit	Economic Activity	RTD Sales Tax Revenue <b>Taxable Retail Sales</b> New Development	
		Property Value	Apartment Rent Housing Affordability Index Commercial Lease Rates Property Values	
		Sustainable Design	<b>Sustainable Project Features &amp; Actions</b>	
	3. Environmental Sustainability	Air Quality	Vehicular Emissions Number of Air Quality Exceedences	
		Energy Consumption	Transportation Energy Consumption per Capita Excess Fuel Consumed Due to Congestion Fuel Saved Due to New Transit Trips	
		Peak Transit Mode Share	Mode Share	
	Increase Transit Mode Share at Peak Times	4. Transit Usage	Ridership	Transit Boardings <b>Annual Transit Boardings per Capita</b> Passenger Demographics New Transit Riders
			Accidents	Safety Benefit
		5. Travel Safety & Security	Crime	<b>Crime Rate on RTD Property</b> Security Resource Inventory
Passenger Perception			Safety Perception	
6. Customer Satisfaction		Passenger Satisfaction	<b>Overall Service Rating</b>	



\* High Level measures are shown in **bold**.

# SUMMARY OF STUDY MEASURES



FasTracks Goals	Objective	QUALITY OF LIFE STUDY	
		Indicator	Measure
Improve Transportation Choices & Options	7. System Mobility	Vehicle Miles Traveled	Vehicle Ownership Transit VMT Impact
		Travel Times	<b>Peak Period Auto &amp; Transit Travel Times</b> <b>Peak Period Auto &amp; Transit Travel Time Variability</b>
Traffic Volumes		Peak Period Freeway Volumes Peak Period Arterial Volumes on Parallel Streets	
Congestion		Extent of Congestion Duration of Congestion	
User Cost Savings		Motorist Congestion Cost Savings Transit Riders Cost Savings	
Transit Access		Access & Egress Mode Population within Walking Distance Employment within Walking Distance	
Auto Access		<b>park-n-Ride Capacity &amp; Utilization</b> park-n-Ride License Plate Survey	
Bike Access		Bicycle Parking Inventory Bike-on-Bus Usage Station Bicycle Access	
Pedestrian Access		Station Pedestrian Access	
Destination Access		<b>Percent of Regional Destinations served by High-Frequency Transit</b>	
Household Access	Population Served by High-Frequency Transit		
Job Access	Employment Served by High-Frequency Transit		
Land Use	<b>Transit Supportive Density Changes</b>		
Transit Service	Miles of Rapid Transit Facilities Revenue Hours of ADA Service Transit Revenue Hours		
	8. Travel Choices & Accessibility		



\* High Level measures are shown in **bold**.

# STUDY SCOPE



- Study measures the effects of the FasTracks Program at three geographic levels:
  - Region
  - Rapid transit corridors
  - Rapid transit station areas
- Only “representative stations” used for station area data collection





# REPORTING



- Detailed Reports
  - 2006: First report established a baseline of data for full set of 70+ measures
  - Detailed reports issued every 3 to 5 years
- High Level Measures reports
  - Issued annually between detailed reports
  - Provides updates on a subset of 11 measures



## Quality of Life Study Baseline Report - 2006



February 2008



# Example Measures

# PROVIDE OPPORTUNITIES FOR DEVELOPMENT NEAR TRANSIT

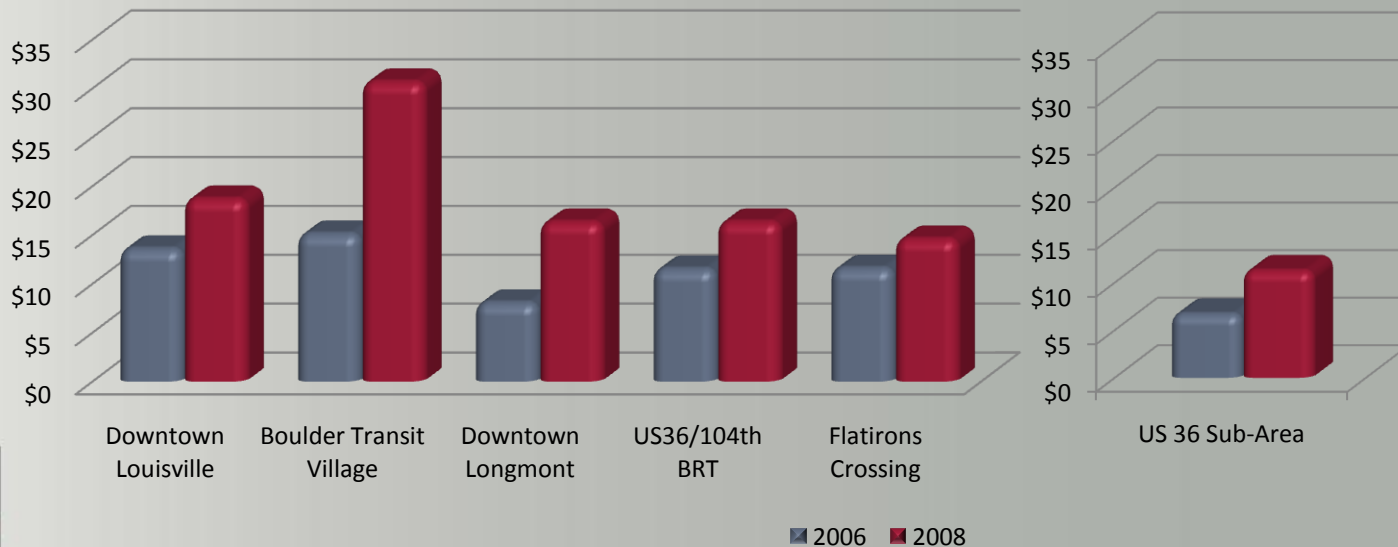
*Property Value*



## Property Values

- The total property value for ½ mile station areas as a price per square foot
- US 36/Northwest Rail Corridor shows higher property values at stations as compared to the surrounding area

US 36 BRT/Northwest Rail Property Values



# SYSTEM MOBILITY

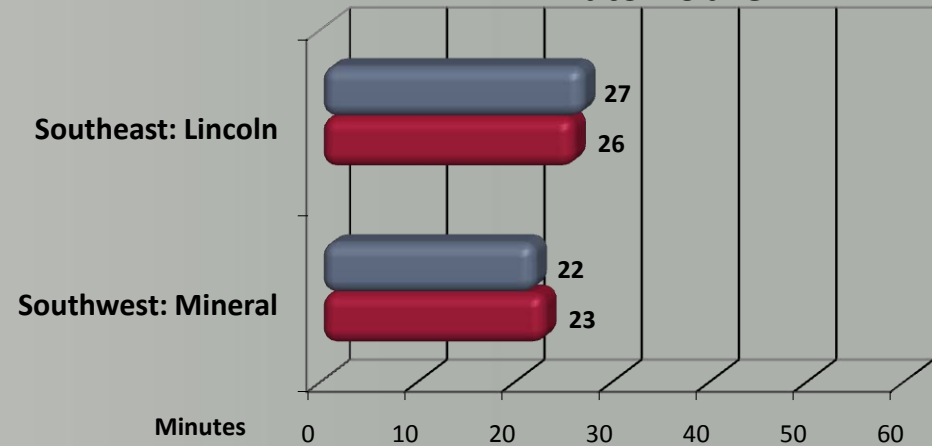


## Travel Times

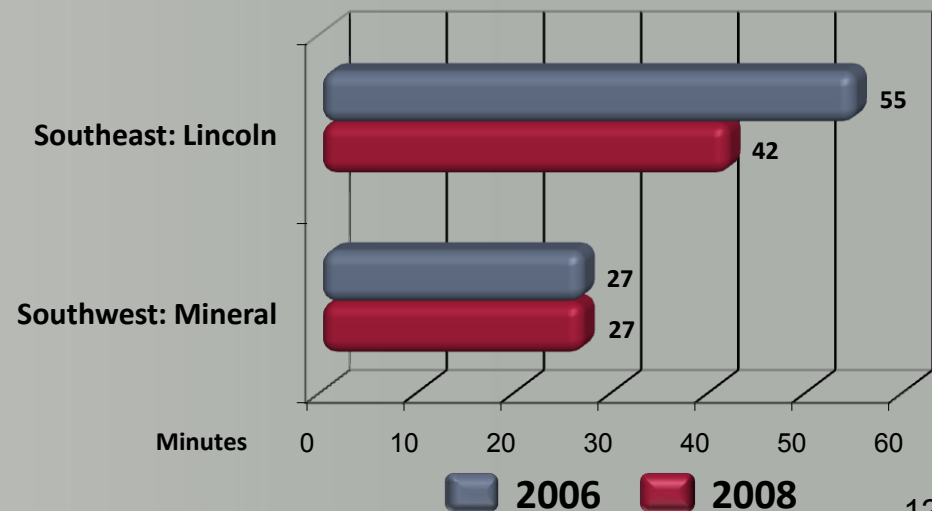
### Corridor Travel Times

- Travel time to reach Downtown Denver during the AM peak period
- Automobile travel time decreased by 1 minute from Lincoln to downtown Denver
- Transit travel time decreased by 13 minutes from Lincoln to Downtown Denver

#### Automobile



#### Transit



# TRAVEL CHOICES AND ACCESSIBILITY



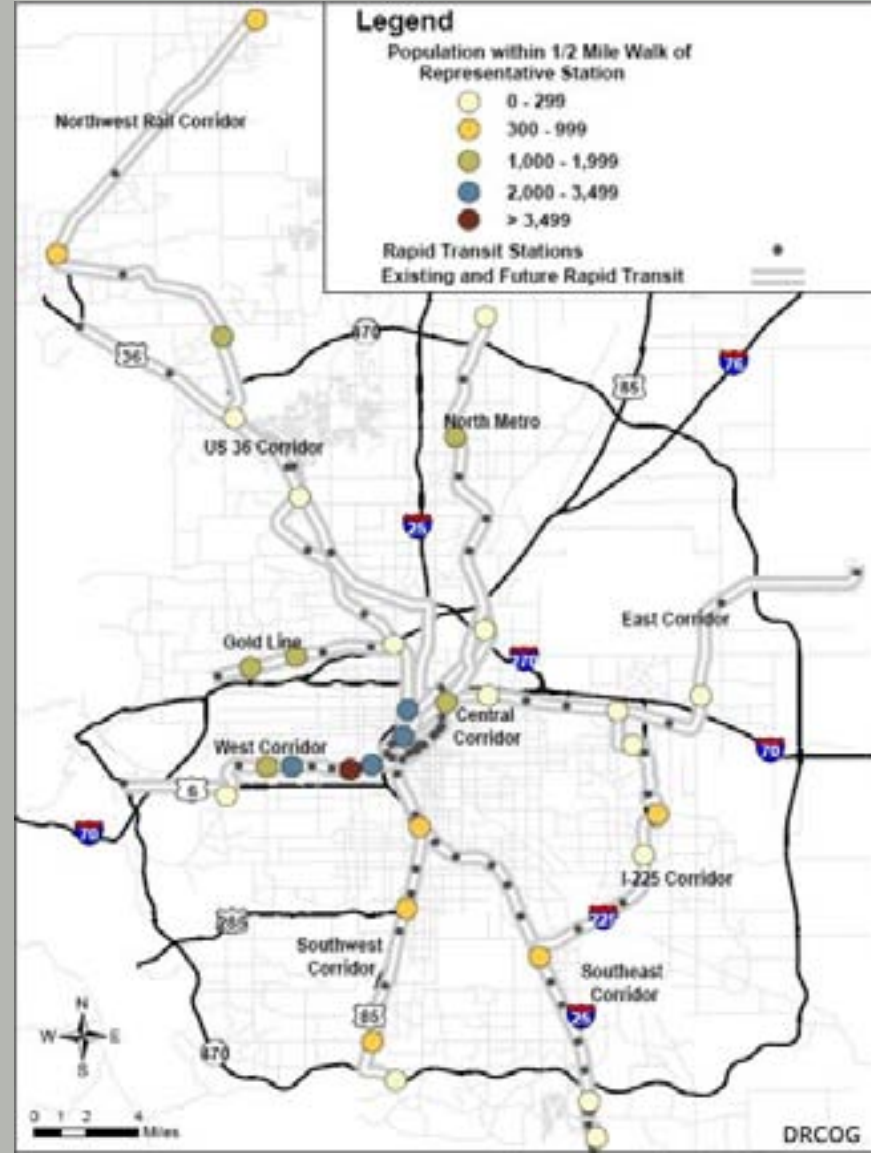
## Transit Access

### Population within Walking Distance of Representative Stations

- Half mile walkshed used versus half mile radius
- Walkable streets include all roadways except limited access freeways



½ mile walkshed at Belleview Station



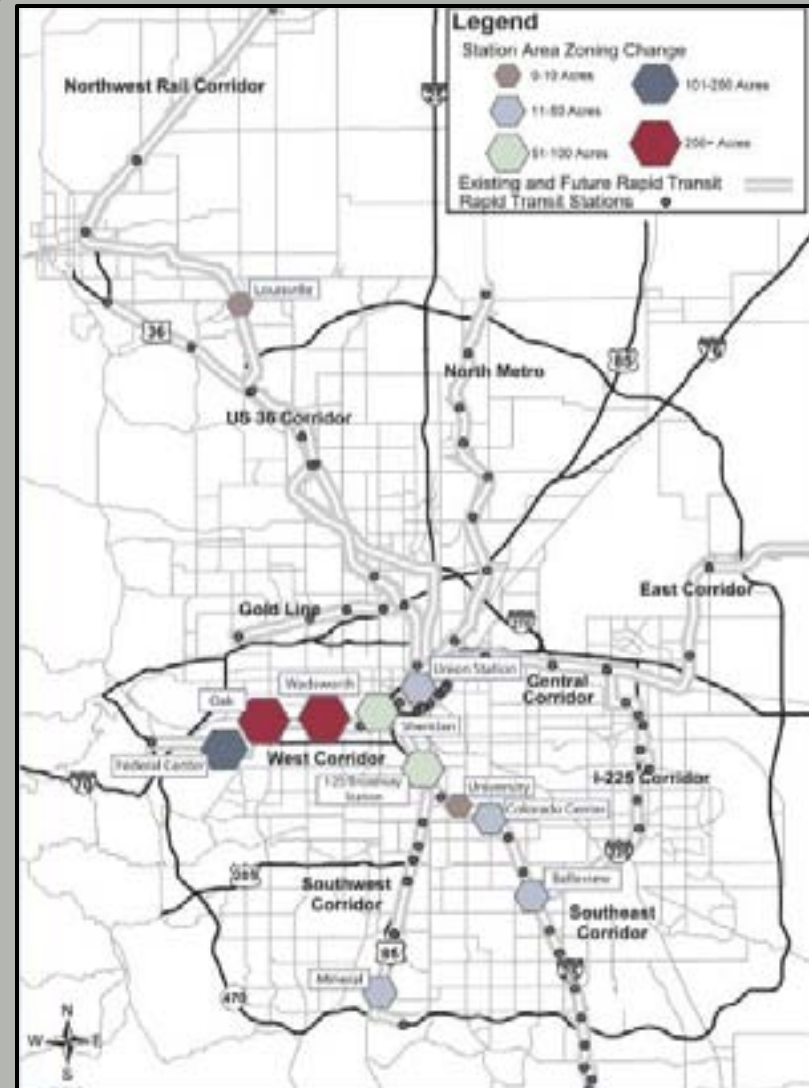
# TRAVEL CHOICES AND ACCESSIBILITY



*Land Use*

## Transit Supportive Zoning Changes

- Tracks zoning changes in existing and future station areas that increase densities & encourage mixed use development
- Between 2006 and 2008, eleven station areas changed zoning





# Wrap Up

# QoL STUDY: WHY DO IT?



- Track how well the *FasTracks Plan* core goals are being met
- Provide RTD Board, stakeholders, and the public information about early and ongoing benefits and impacts
- Attempt to answer long-asked questions about the value of transit improvements to communities
- *Emphasize the need for partnership between RTD and local governments*