Indianapolis MPO
Rapid Transit Study Peer Review

May 17, 2006

RTD's General Description

- Eight county service area: 31 municipalities
- Service area: 2,410 miles: 2.5 million population
- 1,071 buses
- 83 light rail vehicles
- 220 paratransit (access-a-Ride)
- 175 routes
- 66 park-n-Rides
- 2,510 employees
- 15 member elected Board of Directors
- Supported by 1% sales tax (0.6% for base system; 0.4% for FasTracks Rapid Transit expansion)

Central Corridor – LRT

- Opened 1994
- 5.3 miles, 14 stations
- $116.5 M (YOE)
- Ridership:
  - *Projected: 14,600*
  - *Actual: 16,100*
- 1,685 Parking Spaces

Lessons Learned

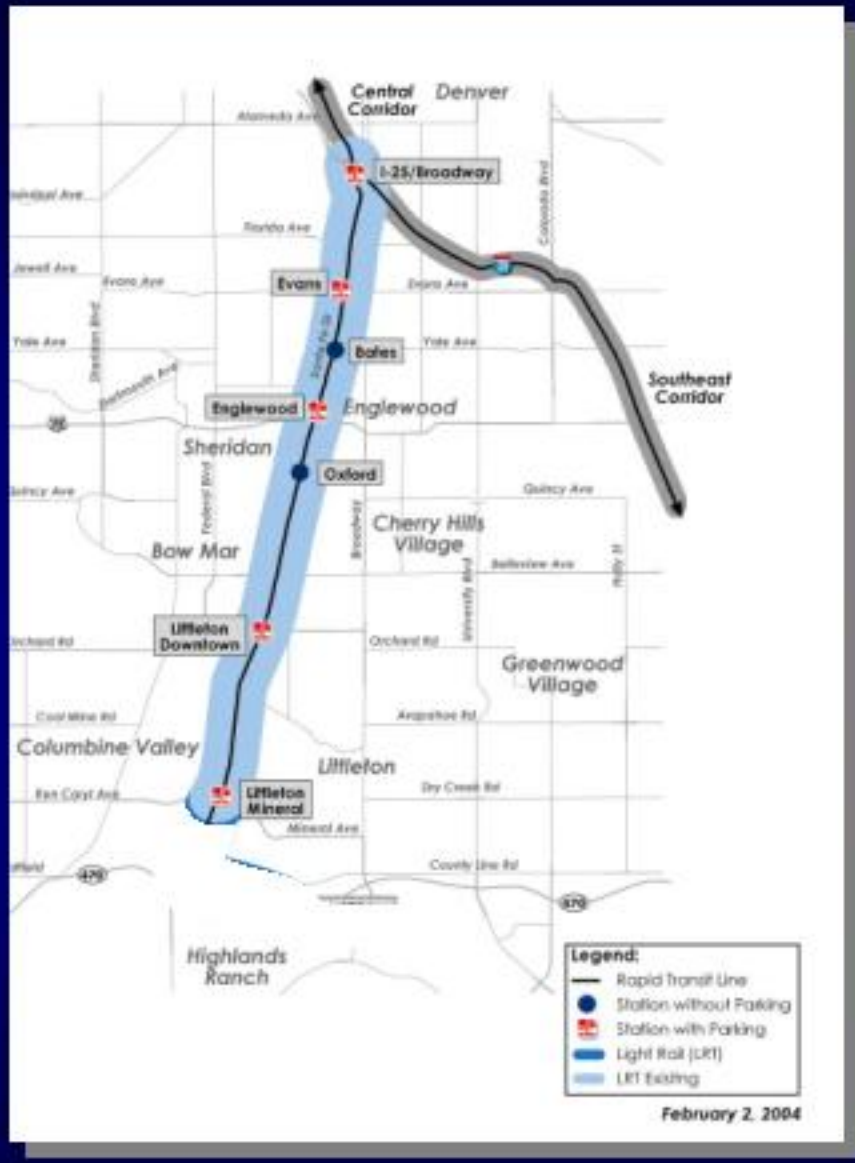
- No Federal Funding – used local funds only
- Did not connect suburbs – starter line to downtown
- Built on time and on budget

Southwest Corridor – LRT

- *Initiated Alternatives Analysis 1992*
- *Initiated Construction 1997*
- *Opened 2000*
- *8.7 miles, 5 stations*
- *$177.7 M (YOE)*
- *$120 M Federal FFGA*
- *Ridership (60% over projection)*
  - *Projected: 8,400*
  - *Actual: 13,300 – grew to 18,100 by 2003*
- *2600 Parking spaces*

Lessons Learned

- *Initially controversial, required regional support*
- *1st line to suburbs*
- *Required additional parking and vehicles*
- *Built on time and on budget*



Central Platte Valley LRT

- Opened 2002-$47.8 M (YOE)
- 1.8 miles; 4 stations
- Ridership:
  - Projected: 3,800/Actual: 6,100
- $7.5 million public/private contribution: Denver, Auraria Campus, Rockies, Broncos, Pepsi Center and Six Flags
- $20 million CMAQ – MPO
- DUS $49.7 million purchase: Denver, CDOT, MPO ($20 million CMAQ)

Combined light rail system operating and Maintenance Costs

(Central, Southwest, and Central Platte Valley: $11.738 M/Year (2003$)

Lessons Learned

- Served activity centers, private funds provided
- Solidified Denver Union Station as hub for region
- Provided second means of LRT access into Downtown

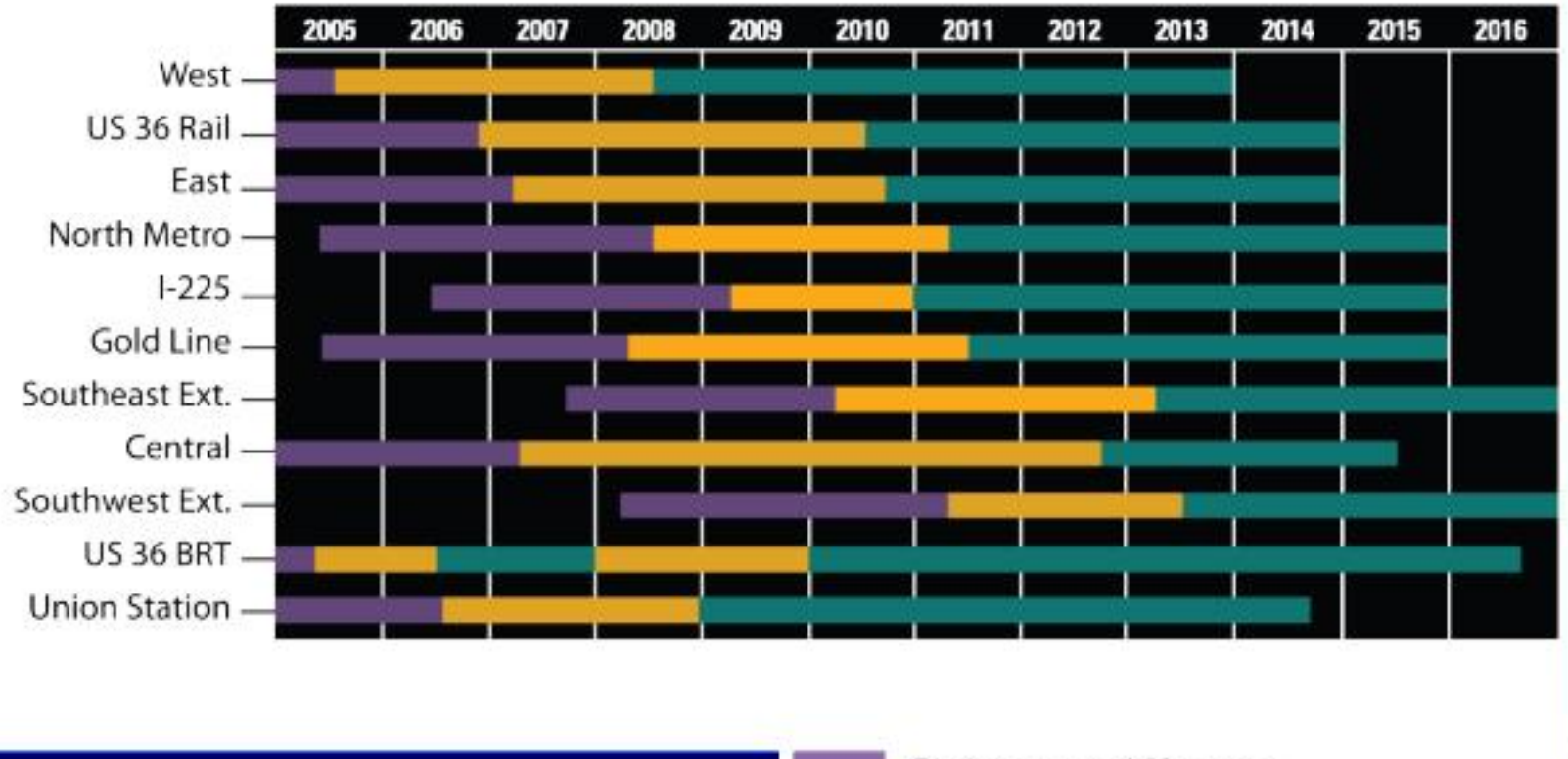
Southeast Corridor (T-REX) LRT

- Scheduled to open December 2006
- Part of $1.6 billion transit/highway design/build contract partnership between RTD and CDOT
- 19 miles, 13 stations
- $879 M for light rail
- Federal FFGA $525 M
- Ridership:
  - Projected: 38,100
- 6,000 parking spaces

The RTD FasTracks Plan

- 119 miles of rapid transit
- 18 miles of Bus Rapid Transit (BRT)
- 31 new park-n-Rides with over 21,000 new spaces
- Enhanced Bus Network & Transit Hubs (FastConnects)
- Development of Denver Union Station

Implementation Schedule



FasTracks Elements of System Financial Plan

(In millions)

	Amount	***% of Total Cost***
Sales Tax Bonds	$2,365.9	50.16%
COPs	$203.1	4.31%
TIFIA Loan	$142.7	3.03%
"Pay as You Go" Cash	$985.0	20.88%
Federal New Start	$815.4	17.29%
Federal Other	$110.0	2.33%
Local Contribution	$95.0	2.01%
Total	***$4,717.1***	***100.00%***

FasTracks Market Share

	Existing Mode Split*	2025 *FasTracks* Mode Split*
I-225	9%	19%
Southeast	13%	26%
East	11%	30%
West	7%	23%
Gold Line	6%	17%
US 36**	16%	22%
North Metro/I-25**	12%	17%
Southwest**	19%***	23%
Average All Corridors	***11%***	***21%***

** In peak direction at most congested point.*

*** Does not include car pools.*

**** Reflects the mode split from after the opening of the SW Corridor Light Rail.*

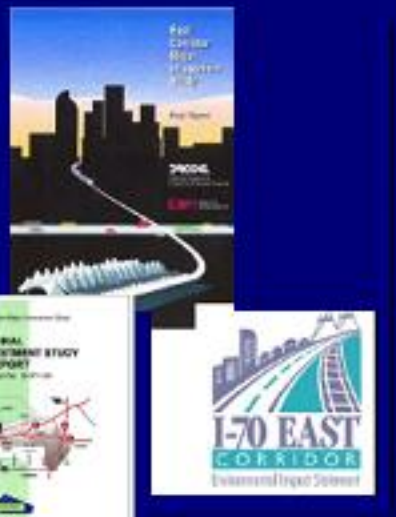
Major Investment Studies for 7 Corridors

- All corridors generally defined within the DRCOG Metro Vision Plan
- RTD did not create new corridors for analysis, instead conducted MISs cooperatively with Colorado Department of Transportation and MPO (DRCOG) to provide preliminary selection of alignments, technologies and station sites
- Used jointly developed technical Guidance Manual to consistently analyze transit technology and alignment alternatives in each corridor
- MISs then provided clear description of corridor improvements for public and agency understanding

FasTracks Lessons Learned

Utilize "bottom-up" planning and engineering work

- Major Investment Studies – 7 Corridors
  - Provided preliminary selection of alignments, technologies and station sites
  - Provided clear corridor description of corridors for public understanding
  - Gained acceptance and consensus at local community level for each corridor.



FasTracks Lessons Learned

1. **Successful starter line**
   - Central Corridor, 1994
   - Southwest Corridor, 2000
   - Central Platte Valley Spur, 2002
   - All three lines were built on-time and within budget.
   - All three lines exceeded ridership projections

2. **Major Investment Studies**
   - Provided preliminary selection of alignments, technologies and station sites.
   - Provided clear corridor description for public understanding.

FasTracks Lessons Learned

3. **Sound Financial Plan**
   - Specified revenue, cost and debt assumptions.
   - Financial plan reviewed and approved by MPO and outside reviewer
4. **Implementation Schedule**
   - Developed implementation schedule supported by the financing plan.
   - Provided clear timeline of individual capital investments

FasTracks Lessons Learned

5. Support from all of the region's mayors and most of the region's elected officials.

6. Strong support from the business and development communities.
   - Considered initiative as means to channel and sustain economic development growth in the region.
   - Denver Metro Chamber of Commerce was the single largest contributor to the campaign.

FasTracks Lessons Learned

7. **Private campaign team.**
   - Campaign spent over $3 million.
   - Invested primarily in TV and radio ads
   - Engaged professional pollsters to determine public's priorities and direct messages to address these priorities.

8. **Board and Agency earned respect of public for professionalism.**

FasTracks Lessons Learned

9. Public Involvement
   - Agency held hundreds of meetings throughout the region to explain the program and answer question the pubic raised.

10. Rapid responses to opponents attacks
    - Quickly corrected statistical distortions
    - Avoided highway v. transit debate.

Key Partners in Making TOD Happen

- Transit Agency
- Local Governments
- Communities
- Developers

TOD Success – Southwest Corridor

Before

- Cinderella City Shopping Mall – 1.3 million square foot regional mall constructed in 1968.
- By early 1990's all mall tenants were gone
- Annual revenue loss for the City of Englewood $2.5 million

Englewood City Center

TOD Success – Southwest Corridor

After

- 438 residential units
- 350,000 square feet retail
- Total square footage residential office civic 900,000 square feet on 55 acres
- 66 percent big box

Outcomes/Lessons Learned

- $5.2 million RTD contribution for long term transit easement
- $18 million from City ($9 million general fund and $9 million COPs)
- $14.8 million from land sales
- Leveraged $155 million in private investment
- Over 700 new jobs on the site

Englewood City Center

TOD – Southeast Corridor

Before

- Vacant, undeveloped parcel
- Located at key interchange in Denver Tech Center
- Under Construction
- 3.7 acres, RTD land
- 5-level, 820-stall parking garage
- CDOT facility on ground floor.
- Pedestrian bridge over I-25 to platform.
- City of Greenwood Village Town Center to be developed on 5.3 adjacent acres
- Conceptual plan includes civic, residential, retail, office and hotel rooms.

Arapahoe at Village Center Station

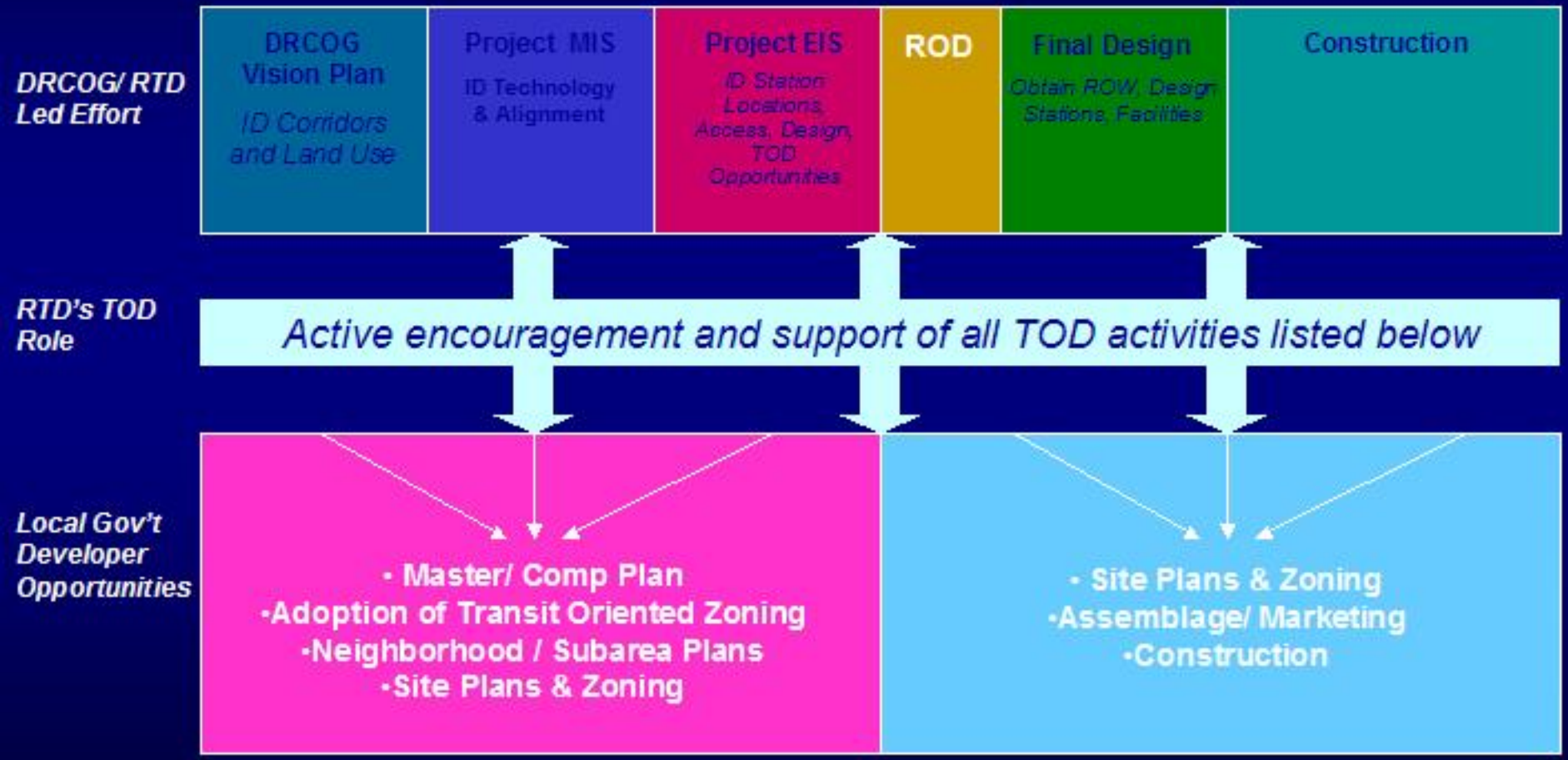
TOD – Southeast Corridor

Arapahoe at Village Center Station

Lessons Learned

- Change order necessary after project awarded to accommodate TOD
- City of Greenwood Village contributed $6.9 million for Town Center, received ownership of vacant site
- RTD contributed $800,000 for aesthetic upgrades to facilities through sales/use tax rebates
- Village also committed $700,000 to construct regional drainage facility to maximize development.
- Need coordinated TOD plans prior to construction

Build a Successful Relationship Between Transportation & Land Use Planning in TOD



TOD Lessons Learned

- Early interface
- Understand resources and commitments of other partners
- Focus on the achievable
- Clearly identify roles
- Put it in writing; development agreements

Build a Successful Relationship Between Transit and Development in TOD

- Work with local jurisdictions through Stages of the transportation planning processes to build TOD
  - Coordinate with local jurisdictions (all phases)
  - Identify appropriate station locations and TOD opportunities (EIS/PE phase)
  - Assist local jurisdictions and developers in developing land use plans and zoning to accommodate/encourage TOD (MIS and EIS phases)
  - Assemble and design stations with TOD focus (Final Design)