# COMMUTER RAIL IN TEXAS

Yes, it really exists.
And it's growing!!

Texas Transportation Forum July 20, 2007

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# Commuter Rail Projects in North Texas

- Trinity Railway Express (TRE)
- Denton County Transit Authority (DCTA)
- Southwest to Northeast (SW2NE)
- Regional Rail Corridor Study (RRCS)
- Regional Transit Initiative (RTI)

# Trinity Railway Express



Fort Worth
Transportation
Authority





Dallas Area Rapid Transit Phase I Opened December, 1996

Three Stations: South Irving-Dallas Union Station





#### Trinity Railway Express Rail Diesel Cars (RDC)

DART purchased 13 RDCs from VIA Rail Canada in 1993. The Budd Company in Philadelphia, Pennsylvania originally built the RDCs in the 1950's. They were used by VIA Rail throughout Canada in intercity service.

The RDCs were completely stripped down to their stainless steel shell and remanufactured by GEC Alsthom Transport, Inc. at their Montreal facility. All new interiors were provided, including new seats, floors, ceilings, walls, windows, and lighting.

The makeover took 20 months. Upon completion, the RDCs were shipped as part of a freight train to Dallas.

Once the RDCs arrived in Dallas, each car had its interior installation completed including major components mounted, wired and plumbed, and then were tested for 3-5 days prior to being put into service.

Each RDC has 92 passenger seats plus 4 mobility impaired areas. Wheelchair access is through a manually deployed bridgeplate from the side doors to a "high block" on the station platform. Each car is 85 feet long, 10 feet wide, and 14 feet high. Empty, each car weights 135,000 pounds. Its design speed is 85 mph, but travels at a maximum speed of 60 mph while in service. Each car has 2 doors on each side.

The RDCs are powered by 2 diesel engines, each generating 300 horsepower. Each car has dual cabs to allow bi-directional operation just like DART's light rail vehicles (LRV).

#### Rail Diesel Car Technical Specifications

Vehicle Type:Dual-cab, diesel propulsion rail vehicle

Vehicle Height: 14 feet, 8 inches

Vehicle Width: 10 feet Vehicle Length: 85 feet

Vehicle Weight: 135,000 pounds each

Passenger Capacity:96 seated

Travel Speed: Top operating speed: 79 mph. Average speed: 45 mph

Body:Stainless steel

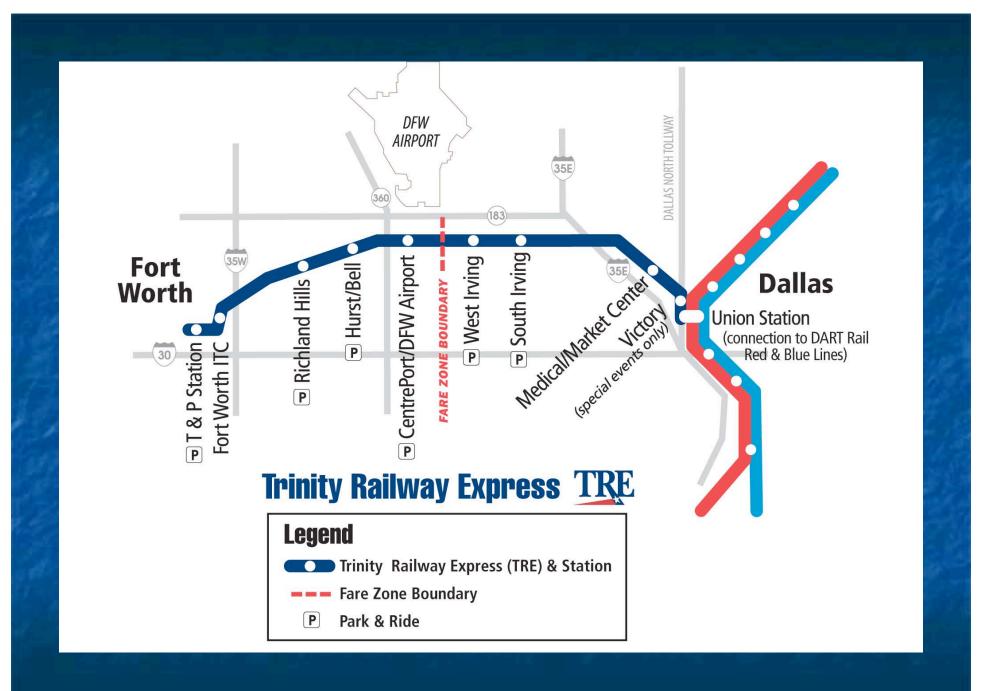
Interior: Redesigned and refurbished to accommodate longer distance commuting.

Deluxe high-back seating with armrests; luggage racks; non-skid rubber flooring

Cooling/Heating: Heating, ventilation, and air-conditioning system

Special Features: Accessible/accommodations for four wheelchairs per vehicle

Vehicle Cost: \$1.8 million each (cost includes engineering, shipment, etc.)



### Final Expansion to Downtown Ft. Worth-December, 2001



# Trinity Railway Express Locomotives, Bi-Level Coaches, Cab Cars

#### Fleet configuration

6 locomotives

10 bi-level coaches

7 cab cars

#### TRE F-59 PH Locomotive Technical Specifications

Originally Go Transit units purchased by TRE. Amtrak installed Cab HVAC, repainted car bodies, and converted HEP to 480V U.S. style.

First used in service at TRE late 2000.

Road numbers: 565 thru 568

Locomotive manufacturer: EMD

Locomotive type: (B-B) 0440

Locomotive horsepower: 3100

Years built: 1994

Vehicle height: 15'8"

Vehicle width: 10'6"

Vehicle length: 58' 2"

Vehicle weight: 260,000 lbs.

Maximum speed: 83 mph

#### **Trinity Railway Express Push-Pull Equipment**

#### TRE F-59 PHI Locomotive Technical Specifications

Purchased new from EMD, some electrical, and pre-delivery work done by

Alsthom. First used by TRE in 2001.

Road numbers: 569 & 570

Locomotive manufacturer: EMD

Locomotive type: (B-B) 0440

Locomotive horsepower: 3000

Years built: 2001

Vehicle height: 15' 11.5" Vehicle width: 10' 6.5" Vehicle length: 58' 2"

Vehicle weight: 268,000 lbs. Maximum speed: 83 mph

TRE Bi-Level Cab & Coach Equipment

Road numbers: 1000 and 1001 Cab Cars, 1050 thru 1059 Coaches

Car manufacturer: Hawker-Siddeley

Originally built: 1976 thru 1977, rebuilt by Amtrak 2000 thru 2001

Originally owned and operated by: GO Transit, Canada

TRE Bi-Level Cab & Coach Equipment

Road numbers: 1000 and 1001 Cab Cars, 1050 thru 1059 Coaches

Car manufacturer: Hawker-Siddeley

Originally built: 1976 thru 1977, rebuilt by Amtrak 2000 thru 2001

Originally owned and operated by: GO Transit, Canada

Road numbers: 1002 and 1003 Cab Cars

Car manufacturer: Bombardier

Years built: 2000

Purchased new by: TRE

Road numbers: 1004, 1005 and 1006 Cab Cars

Car manufacturer: Bombardier

Years built: 2003

Purchased new by: TRE

Seating capacity for cab and coach cars: 123 to 152 depending on configuration of car

Maximum customer capacity: 399 to 428 depending on exact configuration of car

Height: 15' 11" Width: 9' 10" Length: 85'

Maximum design speed: 95 mph

Empty weight: 122,000 lbs.

Climate control: Full heating, air conditioning and ventilation

Customer amenities: workstation tables, bicycle racks, luggage racks, cup holders

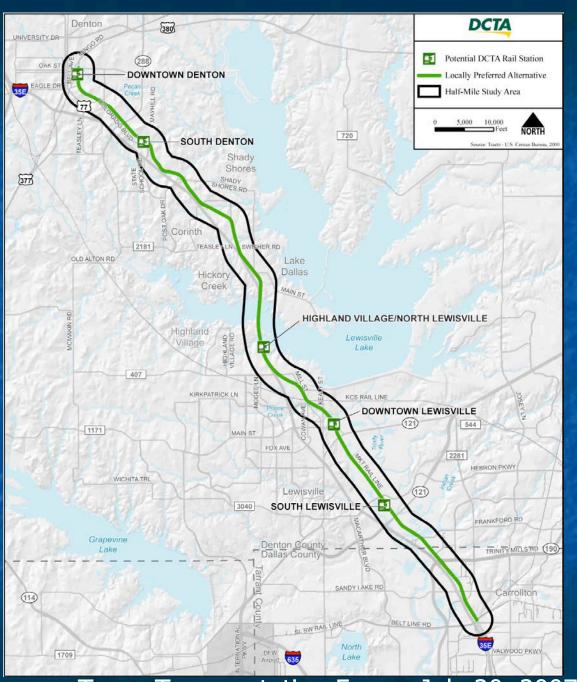
Accessibility: Wheelchair access and interior spaces

Cars equipped with restrooms: 1000, 1001, 1002, 1003, 1004, 1005, 1006, and 1053

# Trinity Railway Express

- Joint Project of Dallas Area Rapid Transit & Fort Worth Transportation Authority
- Contracted Operations, Maintenance, & Dispatch with Herzog Transit Services, Inc.
- Phase I (Dallas County-DART) Budget: \$70m
- Phase II (Tarrant County-FWTA) Budget: \$170m
- Subsequent Projects: Additional Equipment, West Irving Station, Added Parking, New & Rebuilt Elm Fork Trinity Bridge, Sidings, & Quiet Zones. Budget \$50+m.



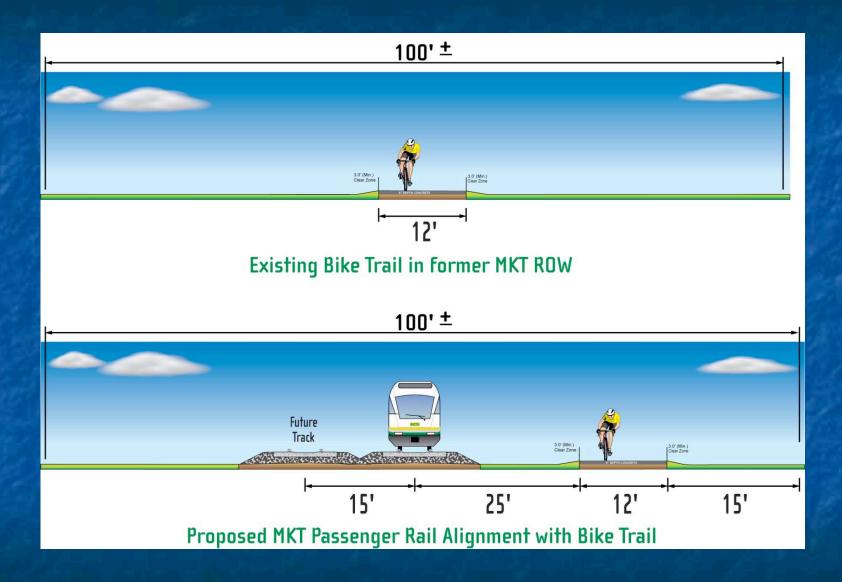


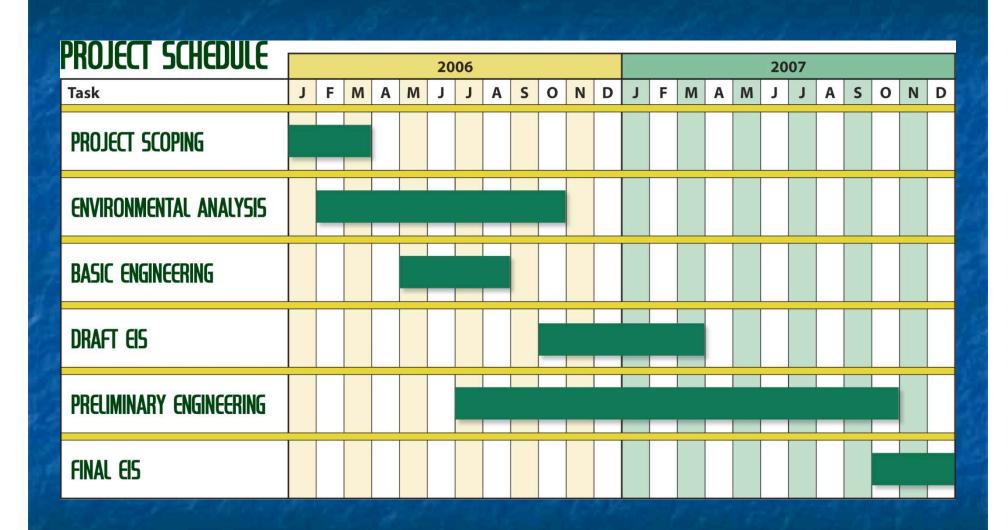
## RAILDCTA

- DCTA ½% Sales Tax
- Service Plan Provides for Rail Connection to DART LRT at Carrollton.
- Six Stations-Approx 21 miles
- AA Completed 2006
- DEIS Available end of July, 2007
- Budget from DEIS: \$316.6m



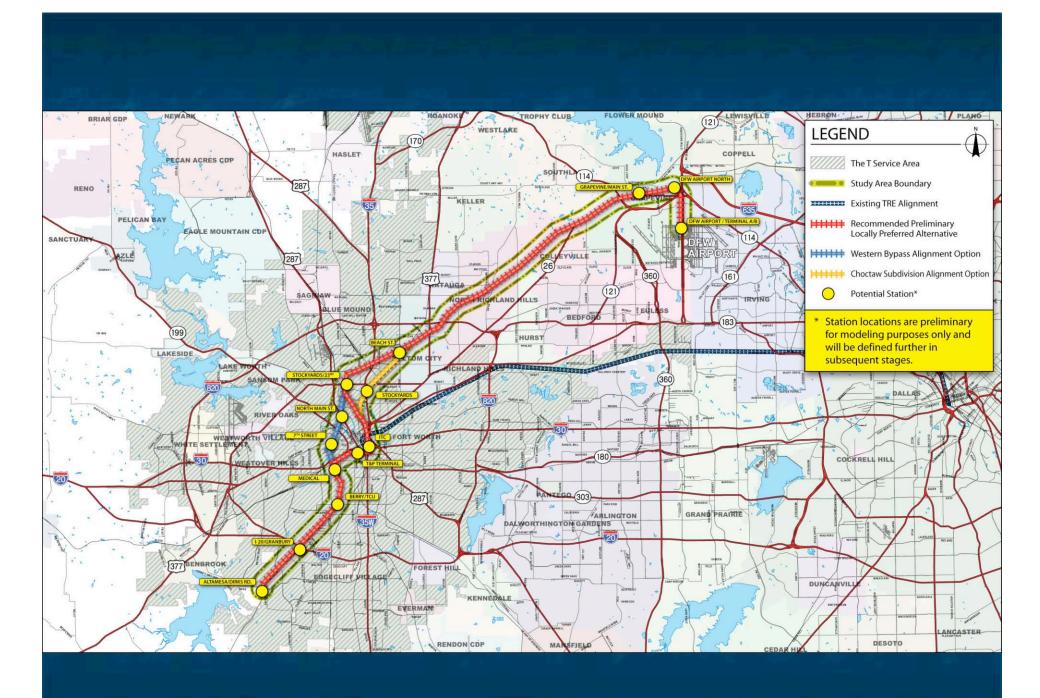
### Rails with Trails







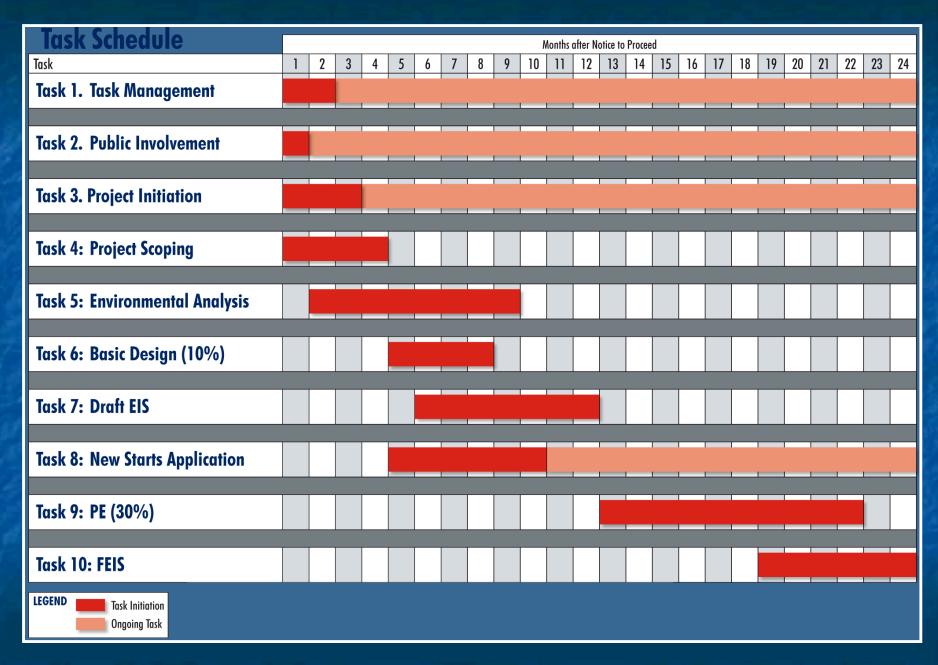




# SW-to-NE Project

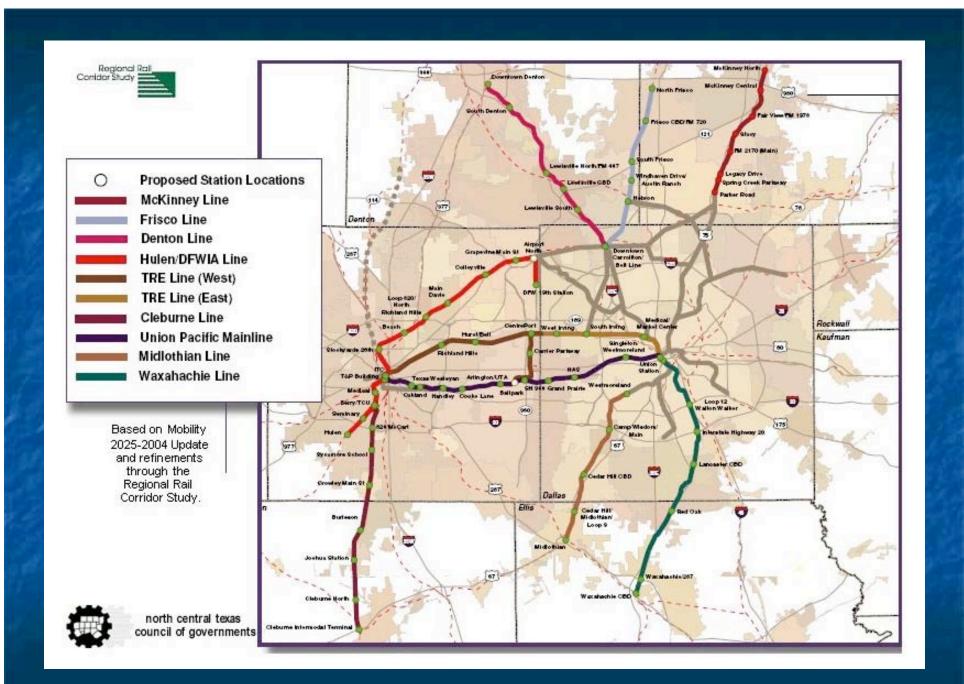
- On Former Cotton Belt (Ft. Worth-DFW) & Ft. Worth & Western Railroad (Ft. Worth-Southwest)
- Eleven Stations (Share 2 Downtown TRE Stations). Approx 34 miles
- EIS has just started
- \$392.0 Total (from Alternatives Analysis)





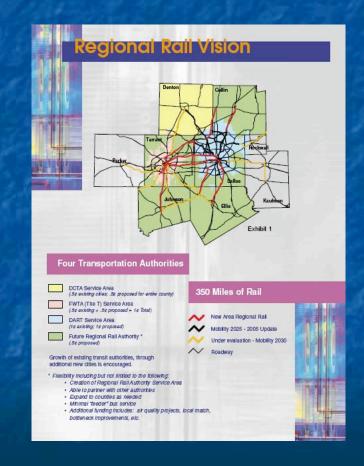
# Regional Rail Corridor Study North Central Texas Council of Governments

- Two Year Study of Eight Additional Rail
   Corridors in North central Texas
- Basic Feasibility Study-Ridership, Cost, Mode/Technology, etc.
- Public Involvement/Political Support



# NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS REGIONAL TRANSIT INITIATIVE

#### Regional Rail Momentum The Vision: Safe, Reliable Rail Transportation for North Central Texas Dallas-Fort Worth Area Consensus for a Seamless Rail System With a population that is expected to exceed 6.5 million by 2030, the need for a reliable transportation system in North Central Texas is particularly important. The proven ability of rail service to improve mobility will play a crucial role in meeting those future transportation needs. The current regional transportation plan for North Central Texas contains a number of future rall investments where service will be needed. but that fall in areas outside current service boundaries. The successes of Datas Area Rapid Transit (DART), Denton County Transportation Authority (DCTA), and the Fort Worth Transportation Authority (The T) have moved this region to a point where interest and need is outstripping service delivery areas. The Regional Transportation Council of the North Central Texas Council of Governments and the transportation authorities are working to develop innovative solutions to these challenges. After studying needs, financing and organizational options through the Regional Rail Corridor Study and the Regional Transit Initiative, committees established to develop The committee chalmersons embraced a alement of Principles, which calls for a new solutions reached consensus to move ahead Regional Rail Authority, funded through with a new Regional Rail Authority. additional sales tax capacity and allowing for a region-wide local option election. The proposed structure would include the The next steps to continuing this continued growth of DART, DCTA and The T. along with a new Regional Rail Authority. This would provide over 350 miles of rail momentum include gathering support for necessary legislative change and service, reaching residents in communities outside current transportation authority developing the organizational structure to plan and implement the Regional Rall Authority system.



#### **REGIONAL RAIL SYSTEM**

**Regional Transit Initiative** 

(.5¢ existing cities; .5¢ proposed for entire county)

(.5¢ existing + .5¢ proposed = 1¢ Total)

(1¢ existing ; 1¢ proposed)

(.5¢ proposed)



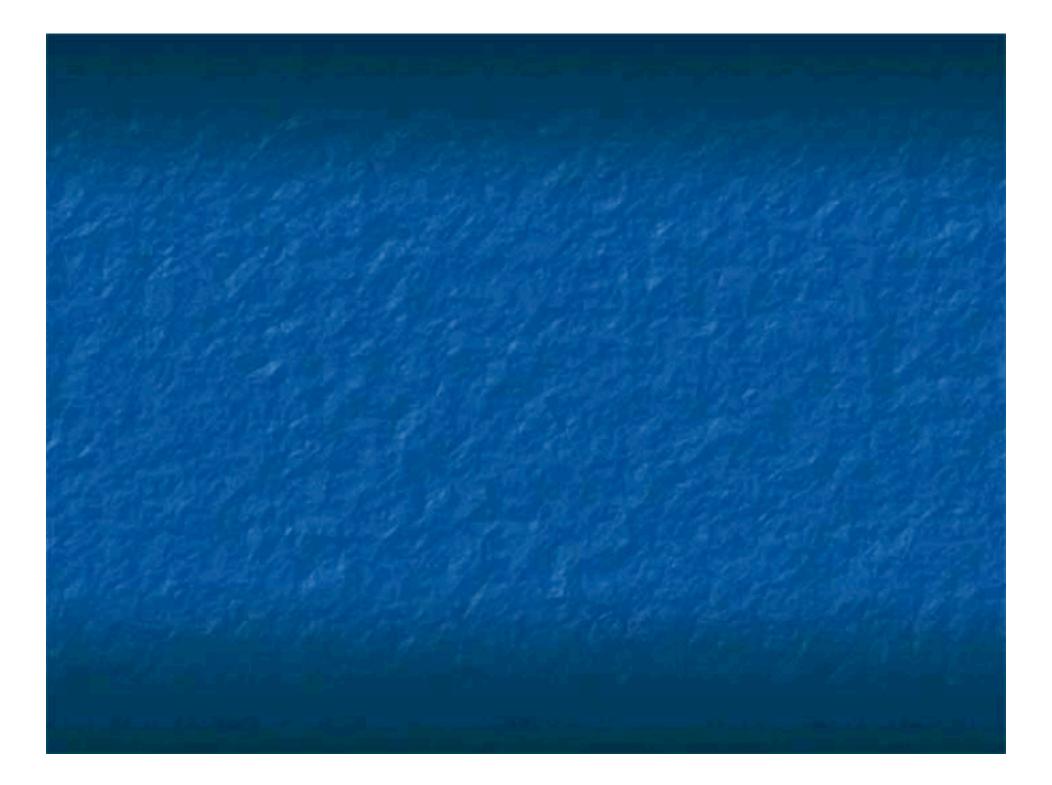
## **Houston Commuter Rail?**

- Many Studies Over Past Years: H-GAC, Harris County, Galveston, Houston Metro
- Very Complicated Freight Rail System in Houston with real capacity constraints
- Wavering Commitment to Commuter Rail
   Over the Years



## Commuter Rail Contact Information

- TRE: trinityrailwayexpress.org
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- DCTA: RailDCTA.net Patrick Diviney: pdiviney@dcta.net
- FWTA: sw2nerail.com Curvie Hawkins: chawkins@the-t.com
- Houston Metro: John Haley: JH26@ridemetro.org



#### Trinity Railway Express Ridership by Fiscal Year

199610-mile system opens December 30, 1996

**1997**175,969

1998455,515

**1999**587,519

2000688,486 (service extended to Tarrant County,

September 2000)

20011.32 million (service extended to Fort Worth,

completing TRE system, December 2001)

20022.13 million

20032.29 million

20042.16 million

#### **Trinity Railway Express Commuter Rail Stations**

**Union Station** (DART Rail and commuter rail service)

400 S. Houston St.

Medical/Market Center Station

1419 Motor St. (between Stemmons Freeway & Harry Hines Blvd.)

South Irving Transit Center

115 Rock Island Rd., east of O'Connor Rd., Irving

West Irving Station

4200 Jackson St.

CentrePort/DFW Airport Station

14470 Statler Blvd. (southeast of Trinity Blvd. and SH 360, Fort Worth)

Hurst/Bell Station

3232 Bell Spur Dr. (at Trinity Boulevard, Fort Worth)

Richland Hills Station

7225 Burns St., Richland Hills (Handley-Ederville Rd. at SH 121)

Intermodal Transportation Center

1001 Jones, Fort Worth (9th and Jones)

Texas & Pacific Station

1600 Throckmorton, Fort Worth

#### Significant Dates in Trinity Railway Express History

*December 30, 1996* – DART opened the first commuter rail line in the southwestern United States. The first segment of the Trinity Railway Express follows along a 10-mile commuter rail line linking downtown's Union Station, the Medical/Market Center Station, and the South Irving Transit Center. More than 4,000 people rode the train during its first day of operation.

December 15, 1997 – The Trinity Railway Express commuter rail line debuts an expanded schedule featuring midday and evening service. The new schedule allows DART to offer 50 trips each weekday on the Trinity Railway Express, up from the 30 currently provided.

December 5, 1998 – The Trinity Railway Express commuter rail line adds Saturday service to its schedule.

*March 12, 1999* – The Trinity Railway Express carries its one-millionth customer. *September 16, 2000* – Trinity Railway Express service extends west to four new stations at West Irving, CentrePort, Hurst/Bell and Richland Hills. Revenue service begins September 18. More than 5700 people ride the first day.

*December 3, 2001* – Service extends to the Intermodal Transit Center and T & P Stations in downtown Fort Worth. This completes the rail connection between Dallas and Fort Worth. *January 14, 2002* – Trinity Railway Express Dedicates Intermodal Transportation Center accommodating TRE, the T, Amtrak Passenger Service, and retail opportunities.