

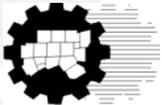
TRANSIT-ORIENTED DEVELOPMENT

City of Colleyville
September 22, 2008

Chad Edwards

Program Manager

**Transit System Planning, Thoroughfare Planning, and
Coordination of Transportation and Environmental Planning**



**North Central Texas Council of Governments
Transportation Department**

Fourth Largest Metropolitan Area in the United States

Ranked 3rd in Population Growth Between 1990-2000 Adding Over 1 Million Persons

- **Current Growth Trend: Added Nearly 850,000 Persons Between 2000 and 2007 (highest growth rate in last 50 years)**

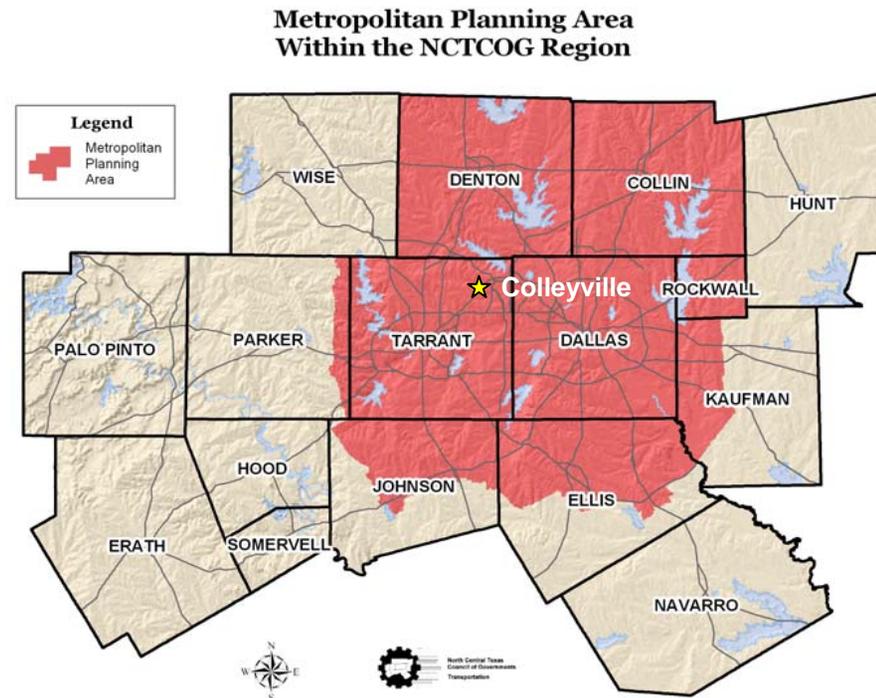
6 Million Persons in Year 2006

- **Growing to Nearly 9 Million Persons by the Year 2030**

Larger than 34 States in Population

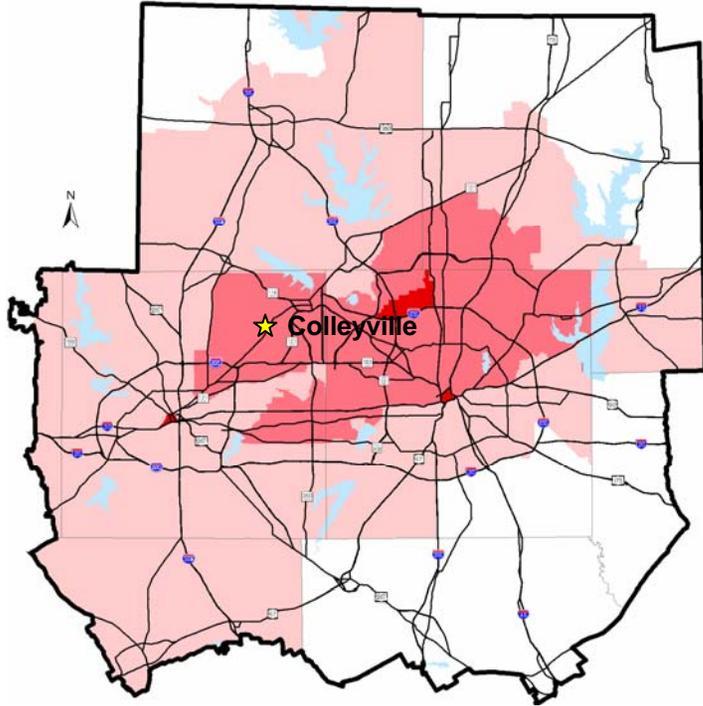
Larger than 9 States in Land Area

Represent Over 34 Percent of the State's Economy



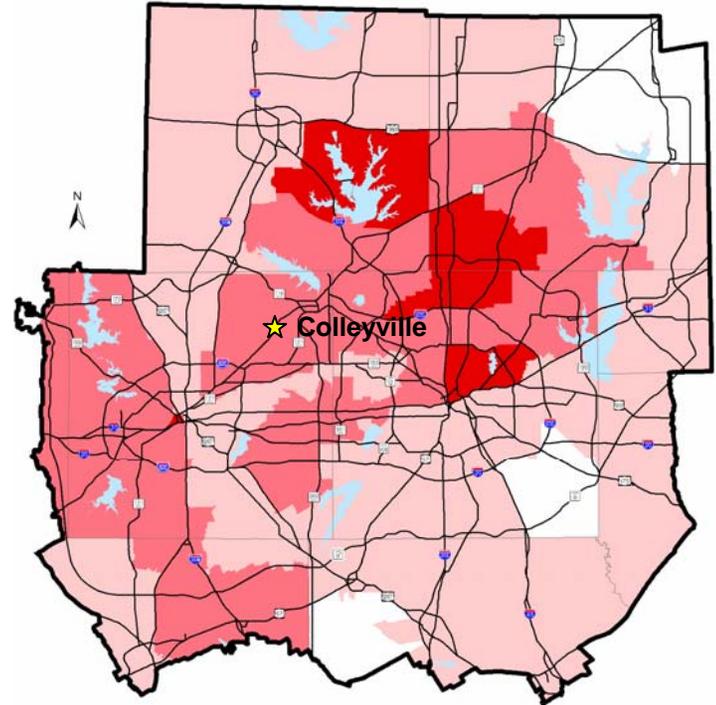
Currently + Add \$71 Billion = Year 2030

For Transportation Improvements:



2007

- Rail
- HOV/Managed Lanes
- Tollways
- Freeways
- Intelligent Transportation Systems



2030

Demographic Changes:

2.6 million additional persons

1.6 million new jobs

Legend

- Areas with No Congestion
- Areas with Light Congestion
- Areas with Moderate Congestion
- Areas with Severe Congestion
- Roadways



The Metropolitan Transportation Plan

System Performance
No Build Levels of Congestion*

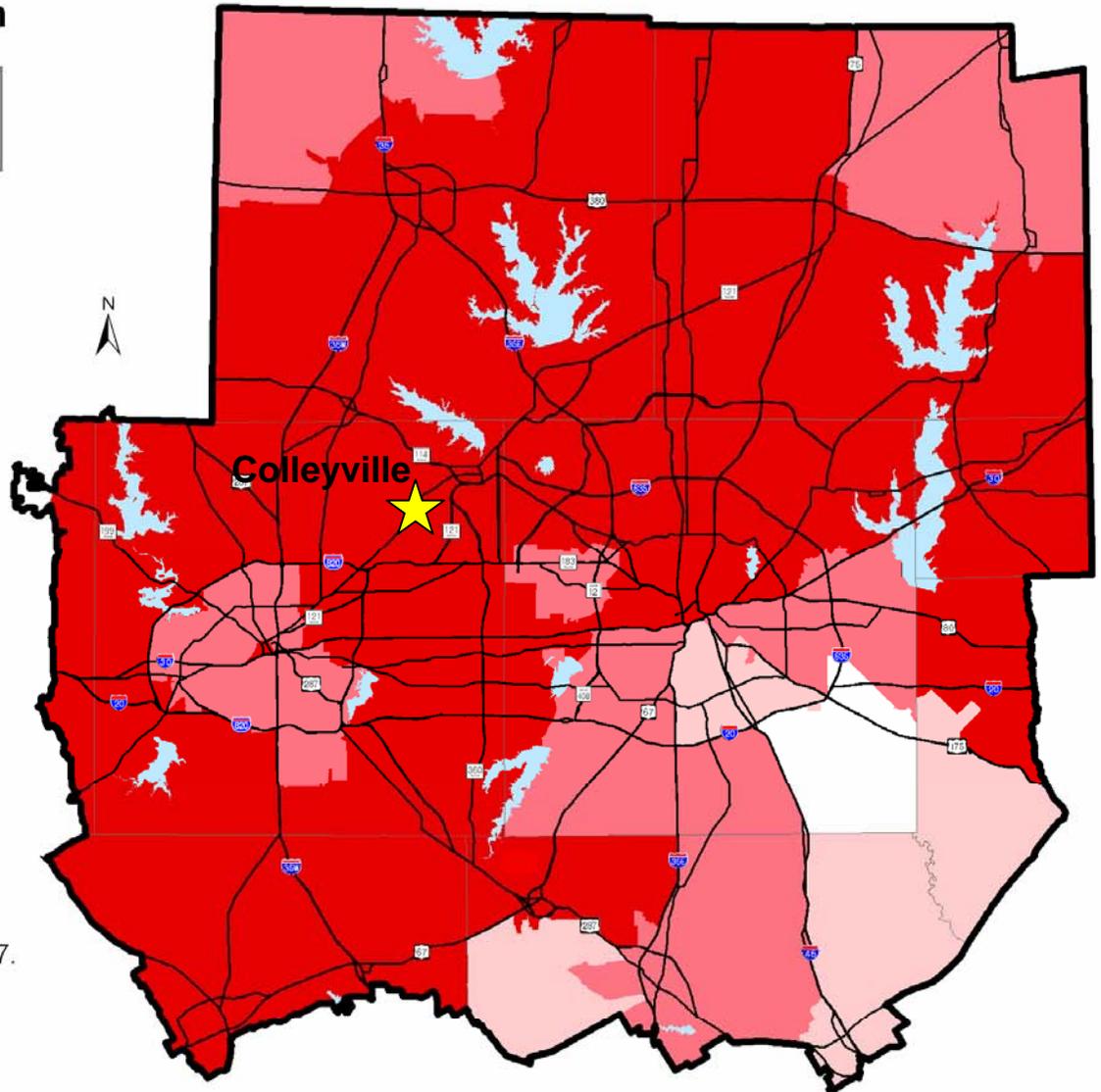
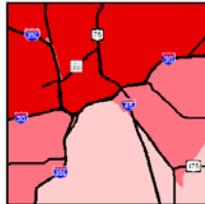
Legend

-  Areas with No Congestion
-  Areas with Light Congestion
-  Areas with Moderate Congestion
-  Areas with Severe Congestion
-  Roadways

Fort Worth CBD



Dallas CBD

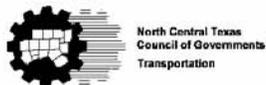


Demographic Activity: 2030

Transportation System: 2007

*Congestion Levels in 2030 if no new transportation projects were built after 2007.

Annual Cost of Congestion \$11.0 Billion



Growth: What Does It Mean?

Growth Projections for 2030

500 New Schools



570,000 New Homes



28 New Hospitals



11 New Malls

315,000 New Multi-Family Units

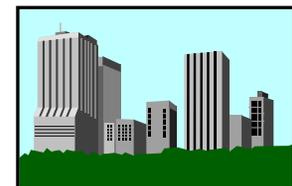


\$70+ Billion of New Transportation Facilities

267 New Neighborhood Retail Centers

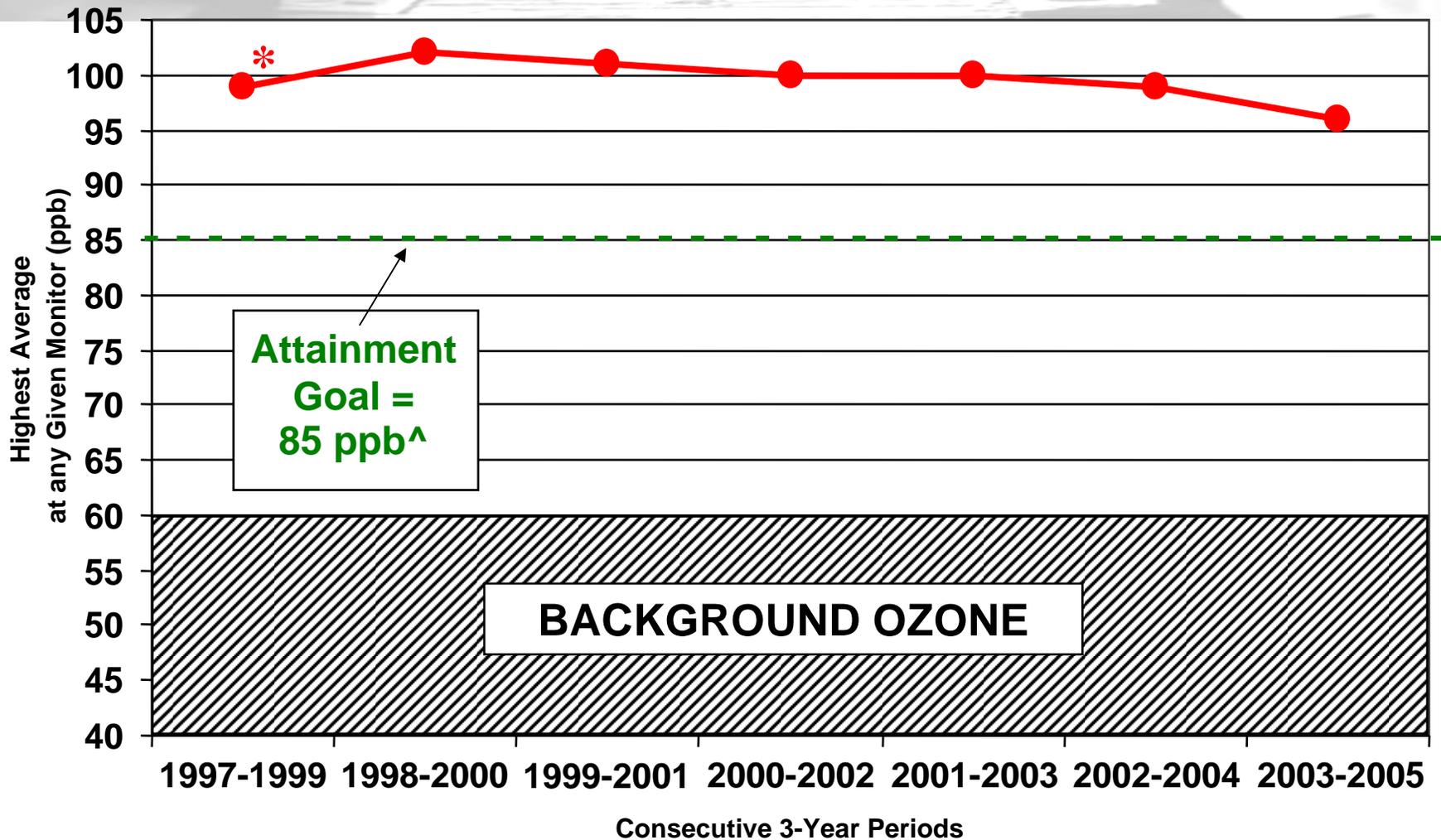


46 Million Square Feet of Class A Office Space



8-Hour Ozone Historical Trend

DFW Non-Attainment Area



FACT: In-vehicle air quality is often worse than that found outdoors.

*NOTE: 1997 data is not for a complete ozone season.

Source: NCTCOG Transportation Dept – October 2005

^Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the three-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than 85 ppb.

Regional Transportation Issues

**Increased travel time
and costs**

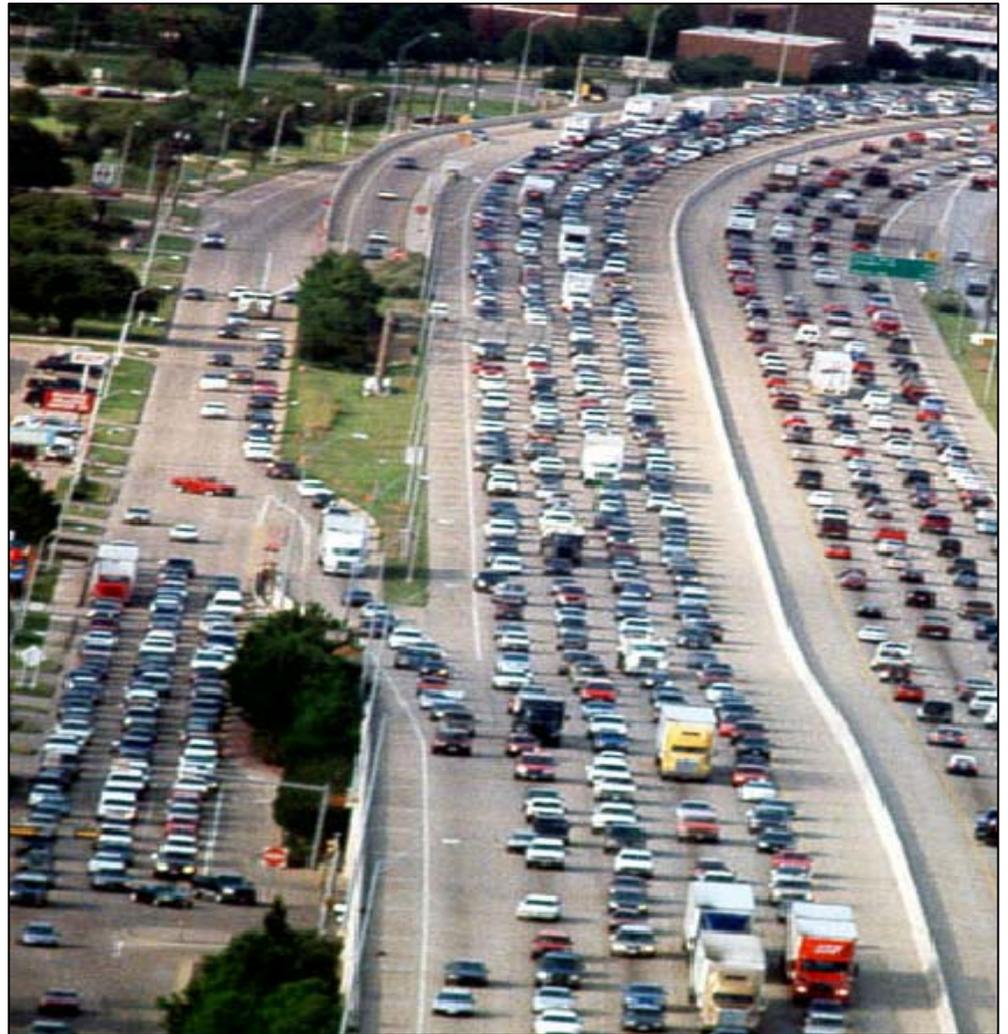
Ground level ozone

Inadequate transit

**Land use/transportation
mismatch**

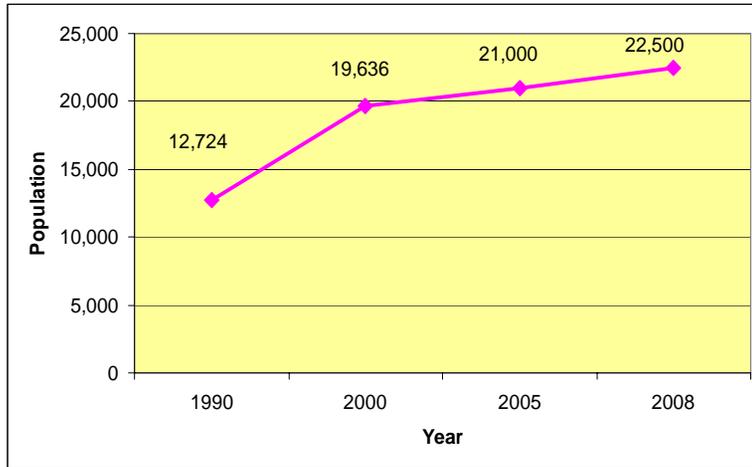
**Decreased freight
access**

**Need for increased
safety and security**

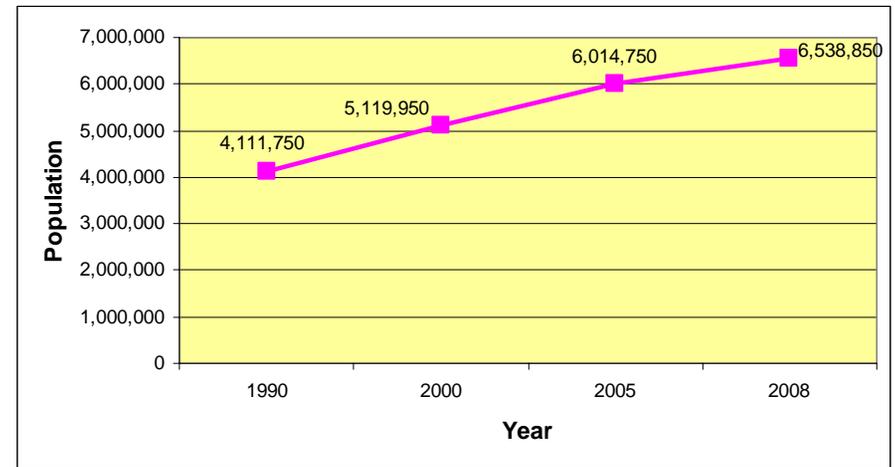


City of Colleyville Population Growth

City of Colleyville



16-County Region



The City of Colleyville's population grew 76% compared to the 59% regional growth between 1990 and 2008.

City of Colleyville Demographics

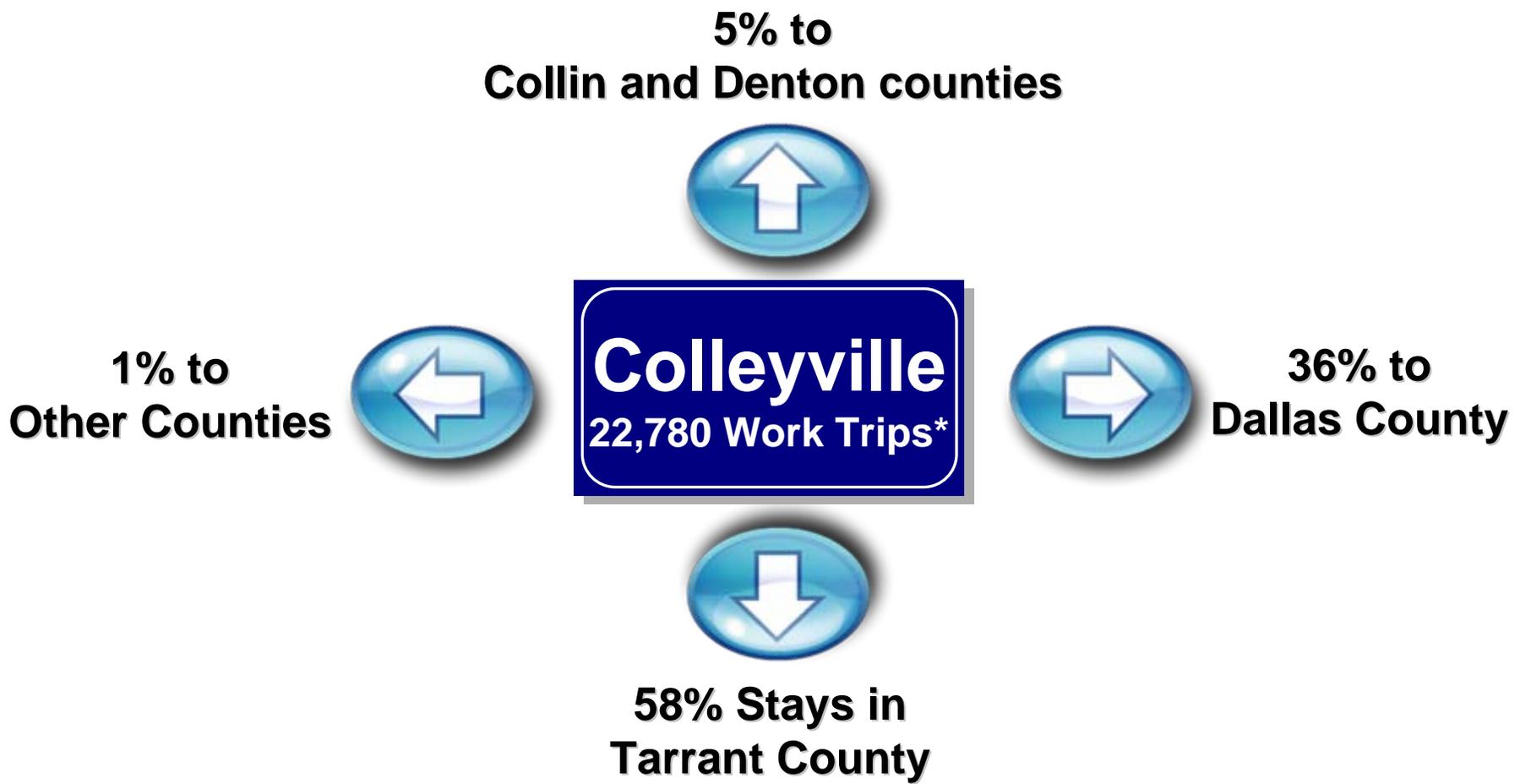
		2005	2030 ^b	2005-2030 Percentage Change
City of Colleyville	Population	21,000 ^a	25,304	20.5%
	Employment	5,930 ^b	11,032	86.0%
10-County Region	Population	5,781,225 ^b	9,107,229	57.5%
	Employment	3,158,202 ^b	5,416,718	71.5%

^aNCTCOG 2005 Population Estimate

^bNCTCOG 2030 Demographic Forecast

City Travel Characteristics

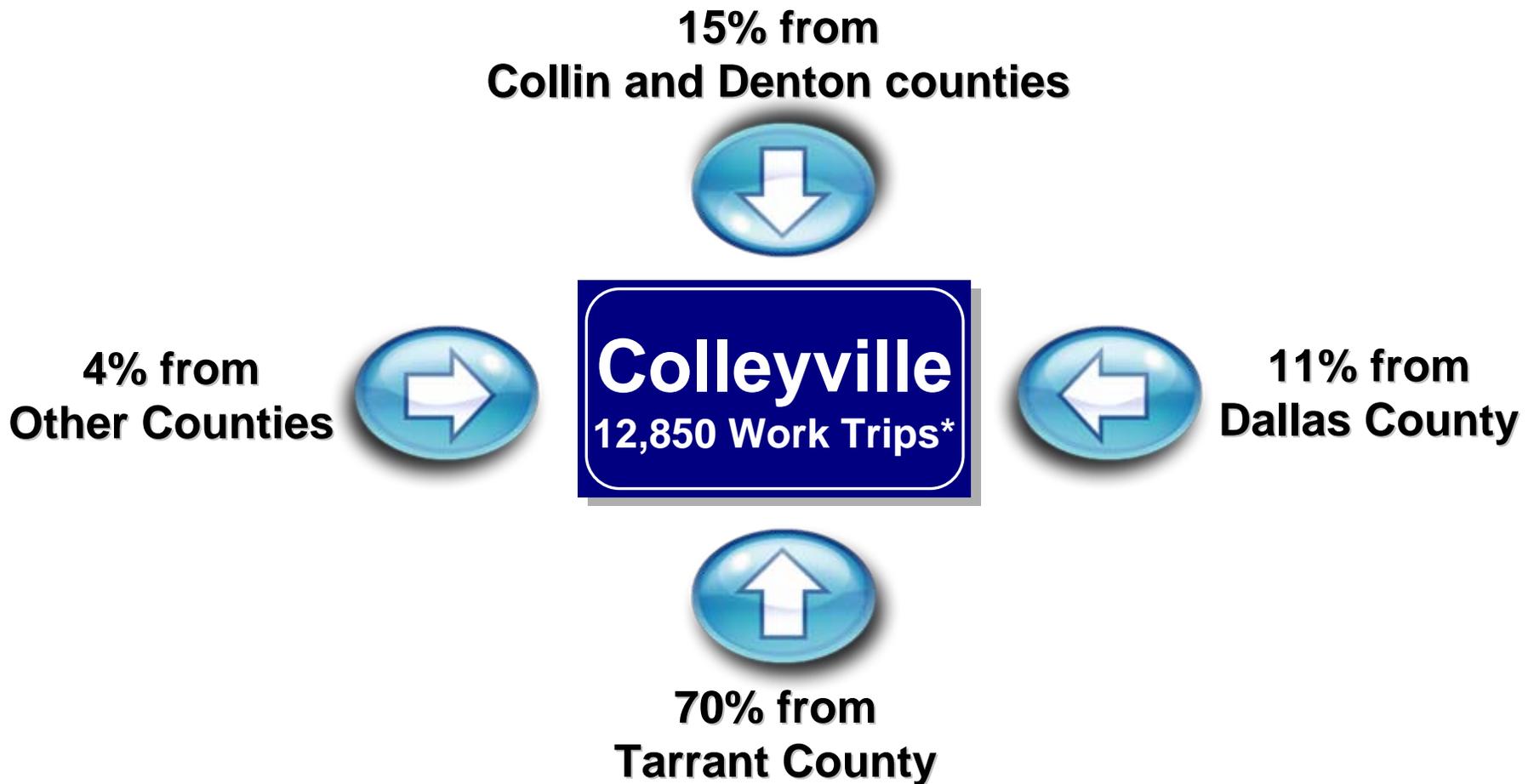
Week Day Work Trips Leaving the City



*Home Based Week Day Work Trips

City Travel Characteristics

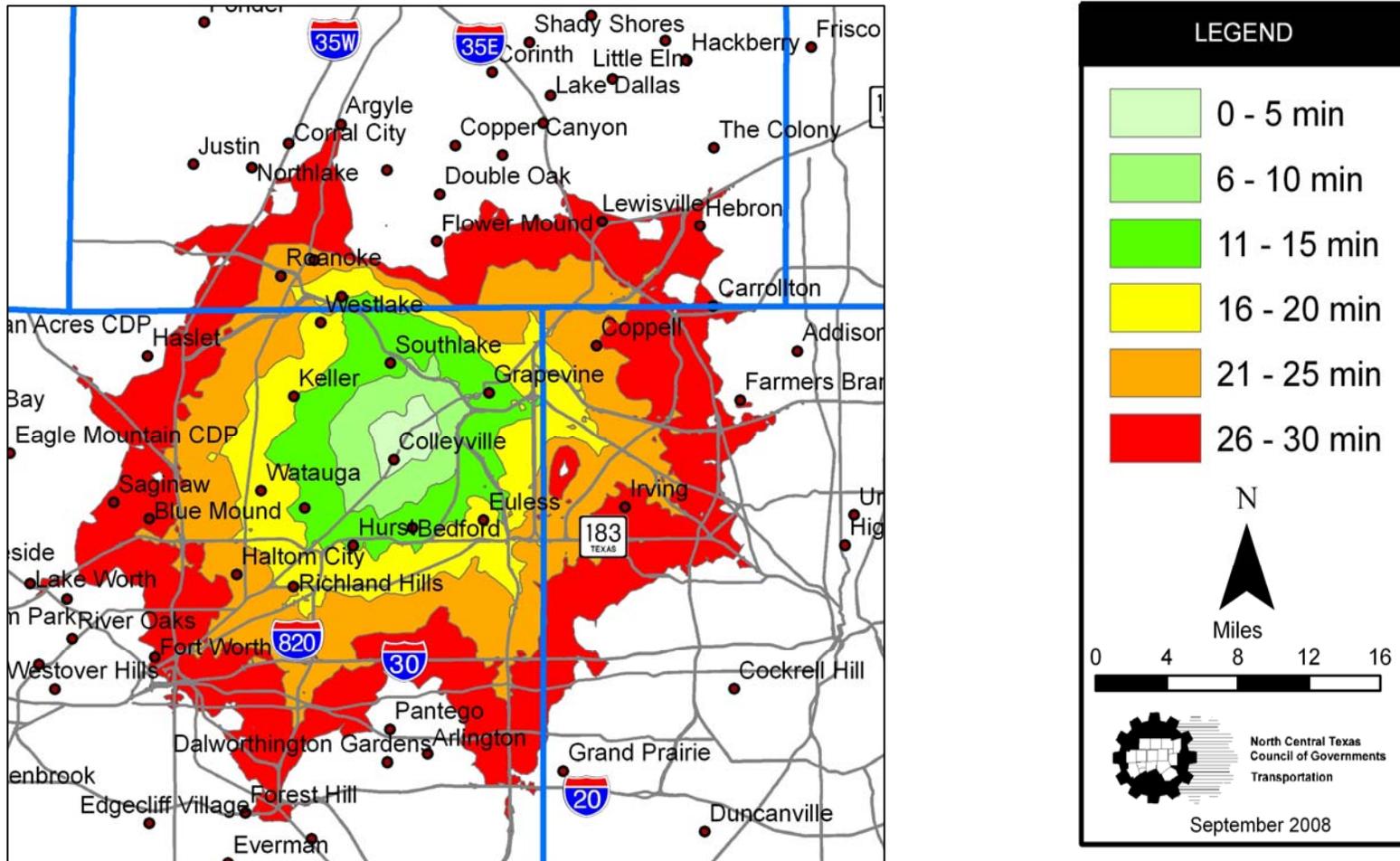
Work Trips Arriving in the City



*Home Based Week Day Work Trips

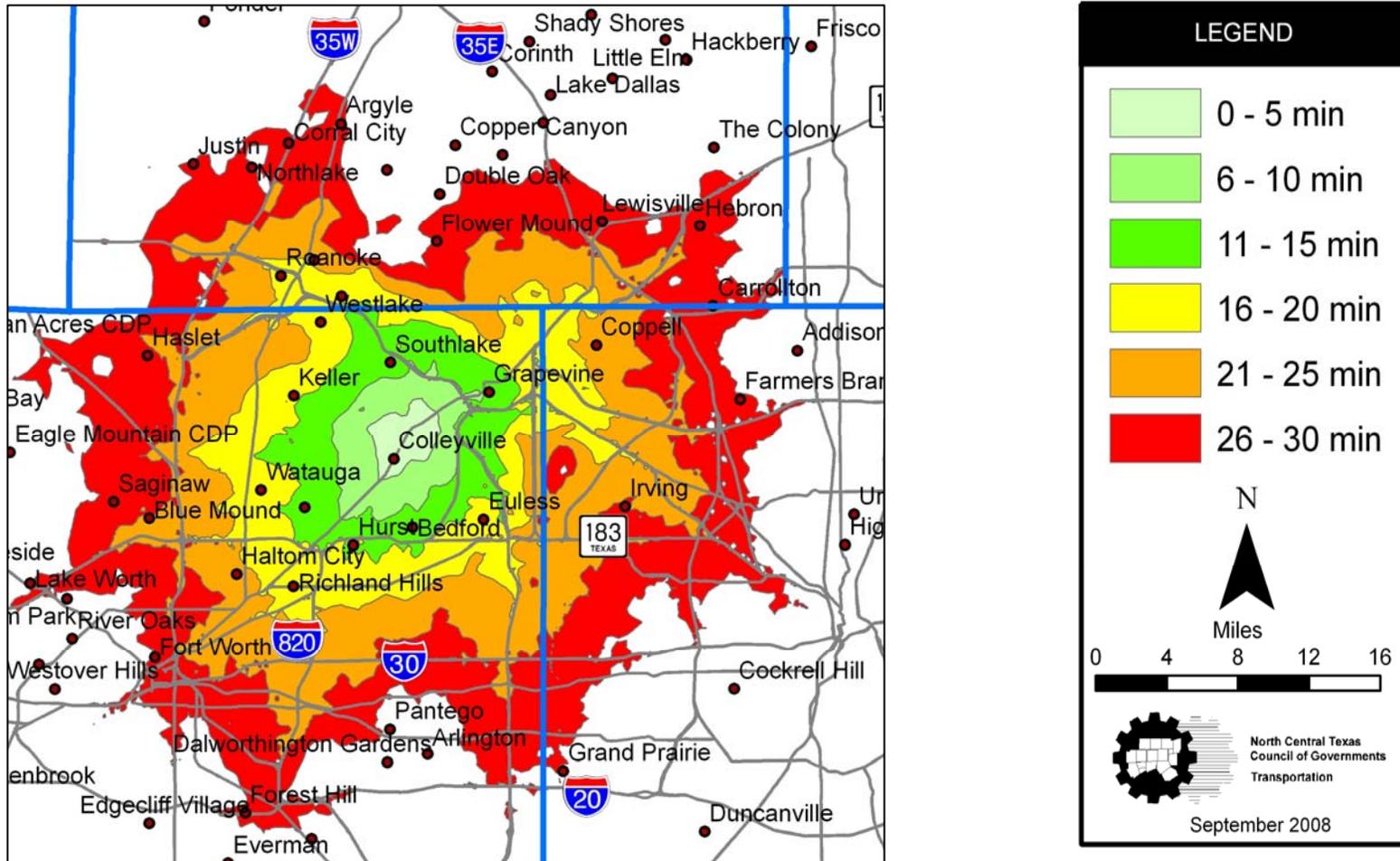
City Travel Characteristics

2007 Morning Travel Times from Colleyville



City Travel Characteristics

2030 Morning Travel Times from Colleyville



The DFW Connector

Affected Roadways: SH 360, SH 114, SH 121, FM 2499
and IH 635

Construction Completed: Between 2015 and 2020

North Tarrant Express

Affected Roadways: IH 35W, SH 121 and SH 183

Construction Completed: Between 2015 and 2020

SH 26 (Colleyville Blvd)

\$30 Million Allocated \$11 Million of Additional Funds Are
Needed to Proceed

Construction Completed: Between 2009 and 2012

Dallas Area Rapid Transit (DART)

Provides bus, light rail, paratransit, HOV lanes and vanpool services



Fort Worth Transportation Authority (the T)

Provides bus, mobility impaired, and vanpool services



Trinity Railway Express (TRE)

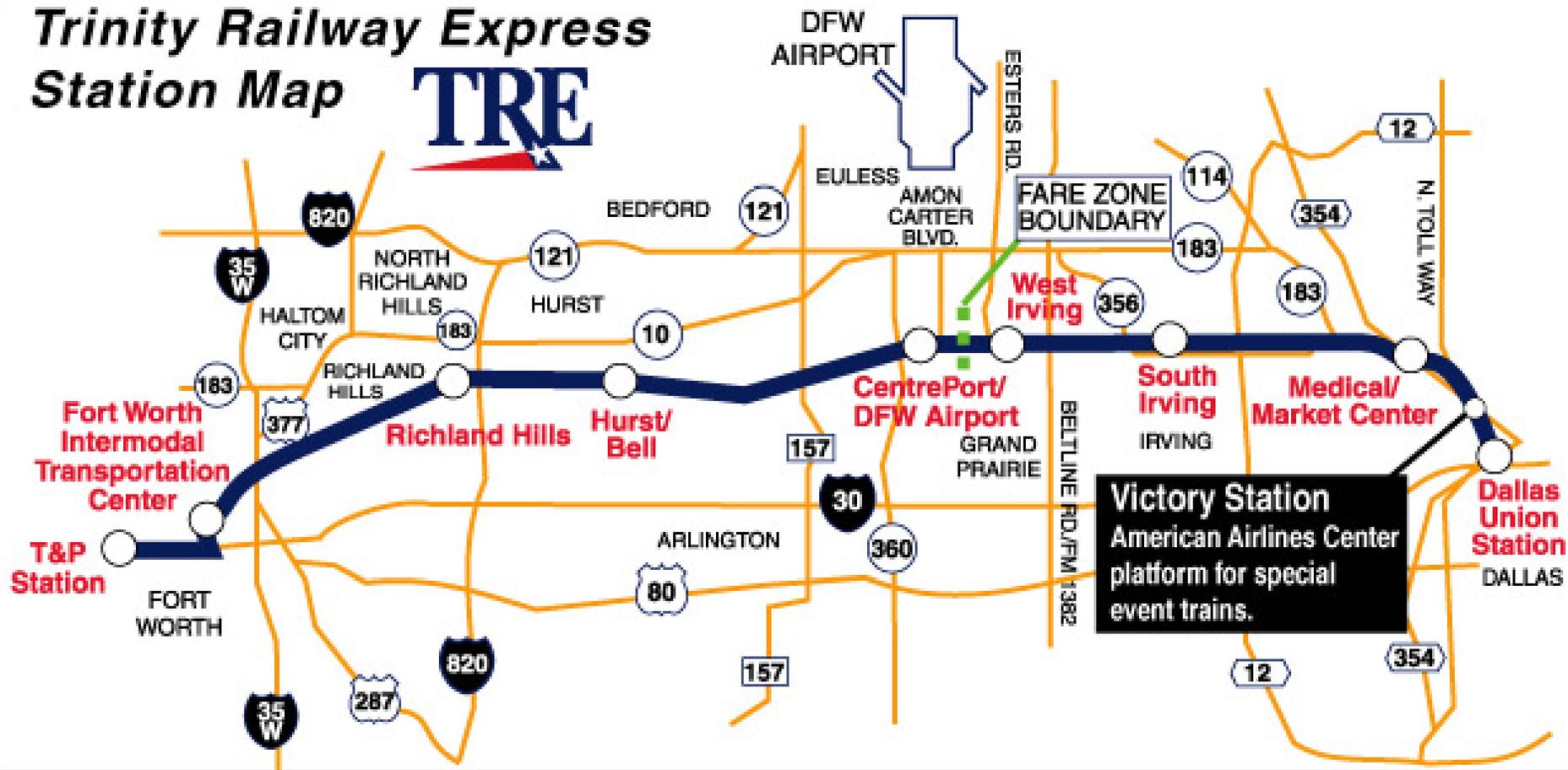
Commuter rail service operated cooperatively by DART and the T between downtown Dallas and downtown Fort Worth



Other Transit Agency:

Denton County Transportation Authority (DCTA)

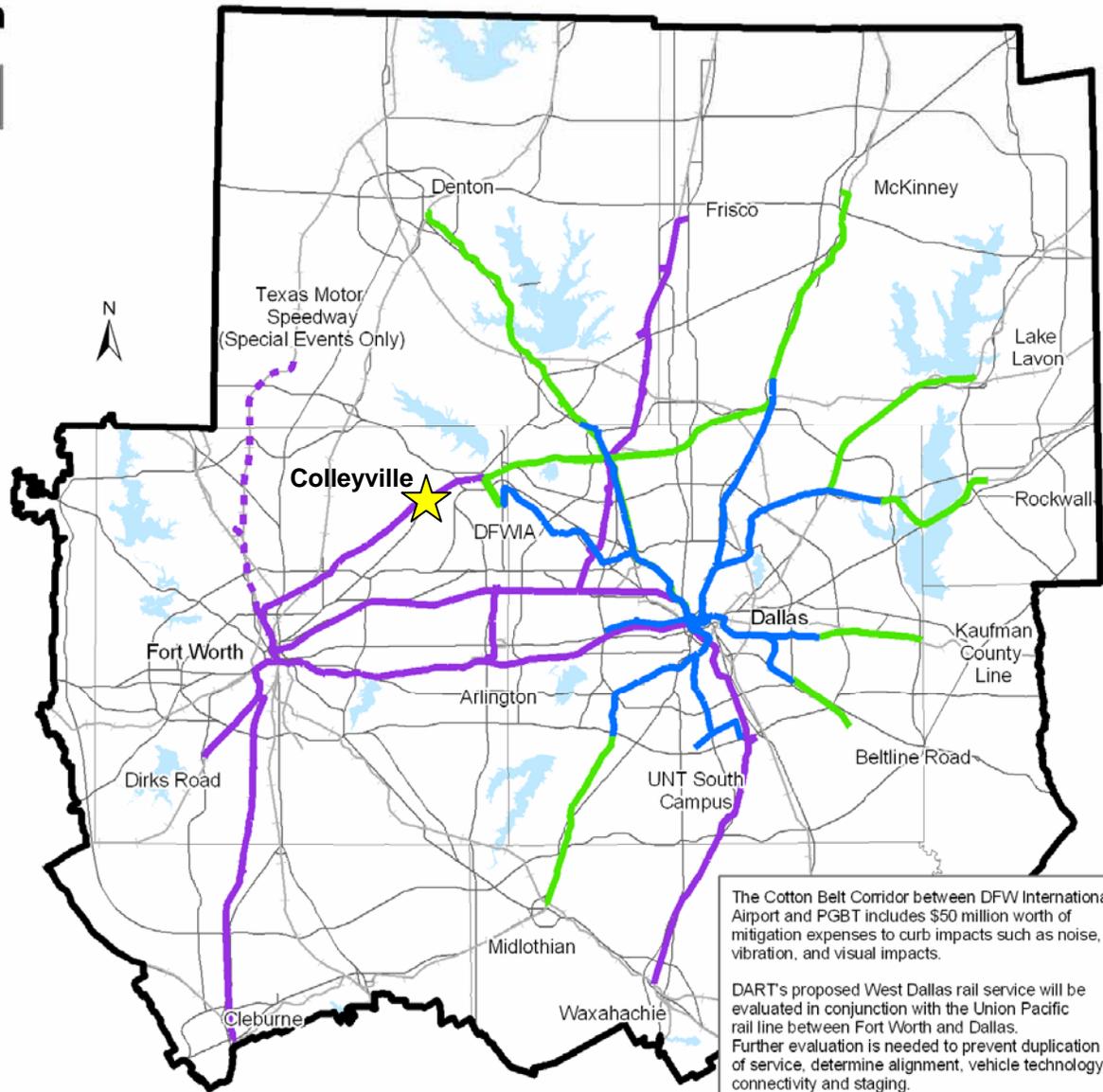
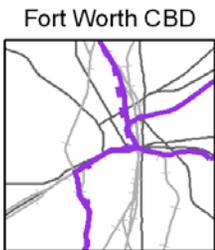
Trinity Railway Express Station Map



Passenger Rail Recommendations

Legend

- Light Rail
- Light Rail - New Technology
- Regional Rail
- - - Regional Rail - Special Events Only
- + + + Existing Rail Corridors
- Highways



Corridor specific design and operation characteristics for the Intercity Passenger, Regional Passenger and Freight Rail Systems will be determined through capacity evaluation and ongoing project development. Refined rail forecasts are necessary to determine technology and alignment in Future Rail corridors.

All existing railroad rights-of-way should be monitored for potential future transportation corridors. New facility locations represent transportation needs and do not reflect specific alignments.

Institutional structure being reviewed for the region.

The need for additional rail capacity in the Dallas CBD, Fort Worth CBD, DFW International Airport, and other inter-modal centers will be monitored. A grade separation is needed for the Dallas CBD second alignment.

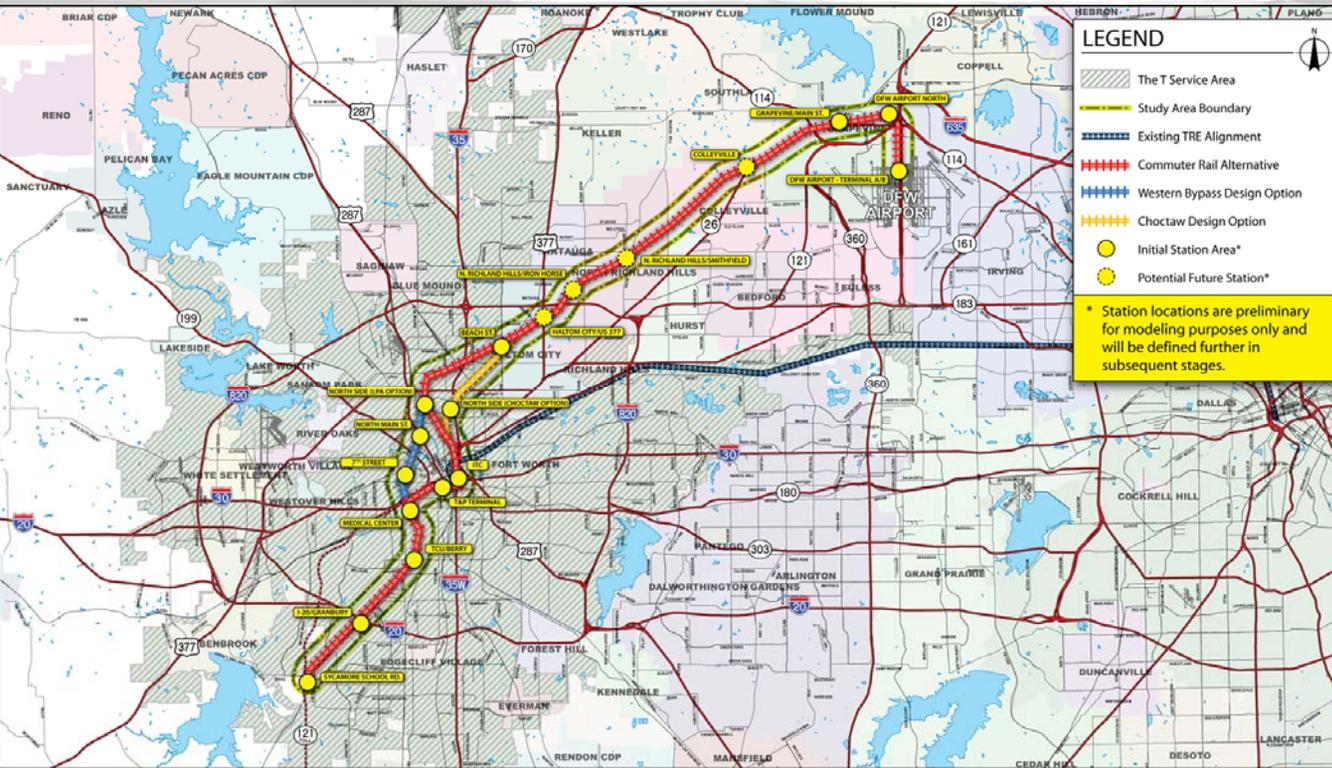
The Cotton Belt Corridor between DFW International Airport and PGBT includes \$50 million worth of mitigation expenses to curb impacts such as noise, vibration, and visual impacts.

DART's proposed West Dallas rail service will be evaluated in conjunction with the Union Pacific rail line between Fort Worth and Dallas. Further evaluation is needed to prevent duplication of service, determine alignment, vehicle technology, connectivity and staging.

DART's proposed SouthPort rail line extension will be evaluated in conjunction with the Dallas to Waxahachie rail service. Further evaluation is needed to prevent duplication of service, determine alignment, vehicle technology, connectivity and staging.

397 Additional Rail Miles
\$9.6 Billion

Southwest-to-Northeast Rail Corridor



LEGEND

- The T Service Area
- Study Area Boundary
- Existing TRE Alignment
- Commuter Rail Alternative
- Western Bypass Design Option
- Choctaw Design Option
- Initial Station Area*
- Potential Future Station*

* Station locations are preliminary for modeling purposes only and will be defined further in subsequent stages.

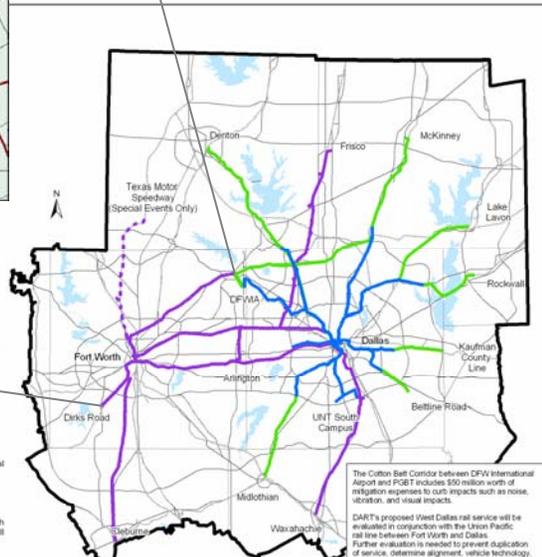
- Regional Rail - Special Events Only
- Existing Rail Corridors
- Highways
- Fort Worth CBD
- Dallas CBD

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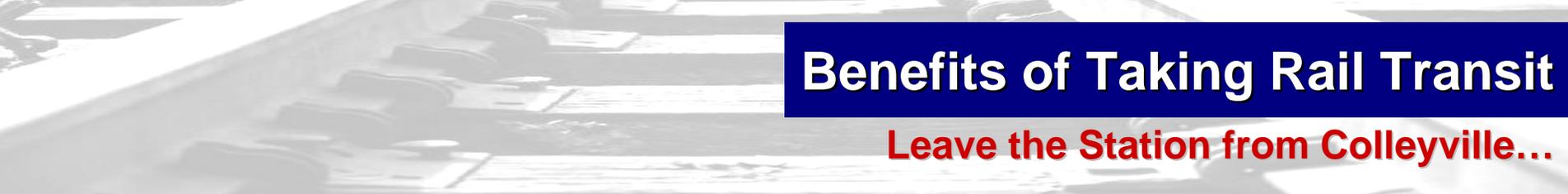


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DART's proposed SouthPort rail line extension will be evaluated in conjunction with the Dallas to Vashoe rail service. Further evaluation is needed to prevent duplication of service, determine alignment, vehicle technology, connectivity and staging.



Benefits of Taking Rail Transit

Leave the Station from Colleyville...

Reduces time idling in traffic (congestion)

Improves air quality

Improves safety (reduced accidents)

Avoids high fuel costs, car maintenance and insurance

Avoids destination parking fees

Safe returns home after nightlife activities

Promotes independence for seniors

Promotes healthier lifestyle with more walking, less driving and less stress

Benefits of Taking Rail Transit

Leave the Station from Colleyville...

Use of your time more efficiently by participating in sedentary activities while riding on rail:



Read

Work



Work on line (Wi-Fi)

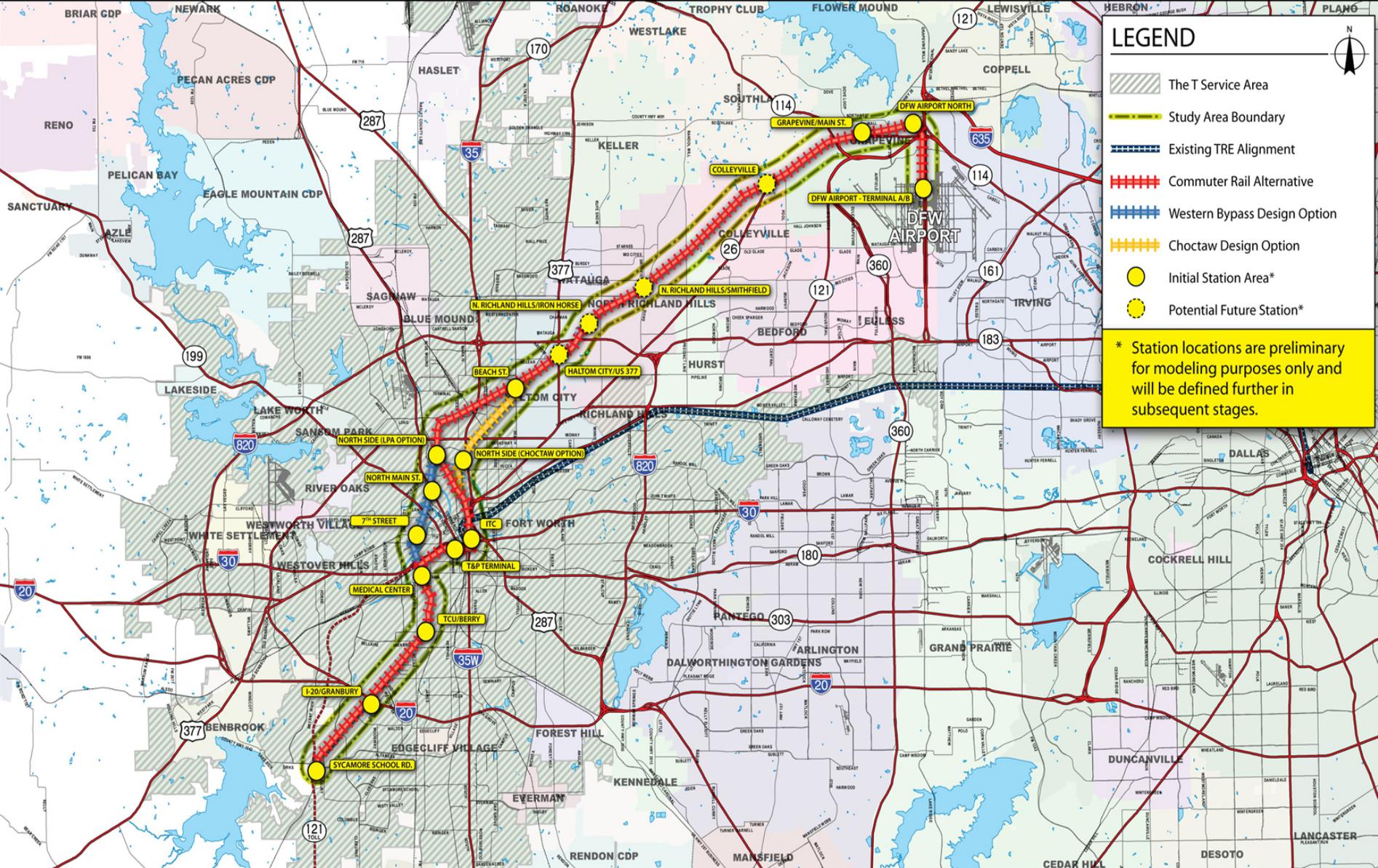


Meet

Relax



Southwest-to-Northeast Rail Corridor



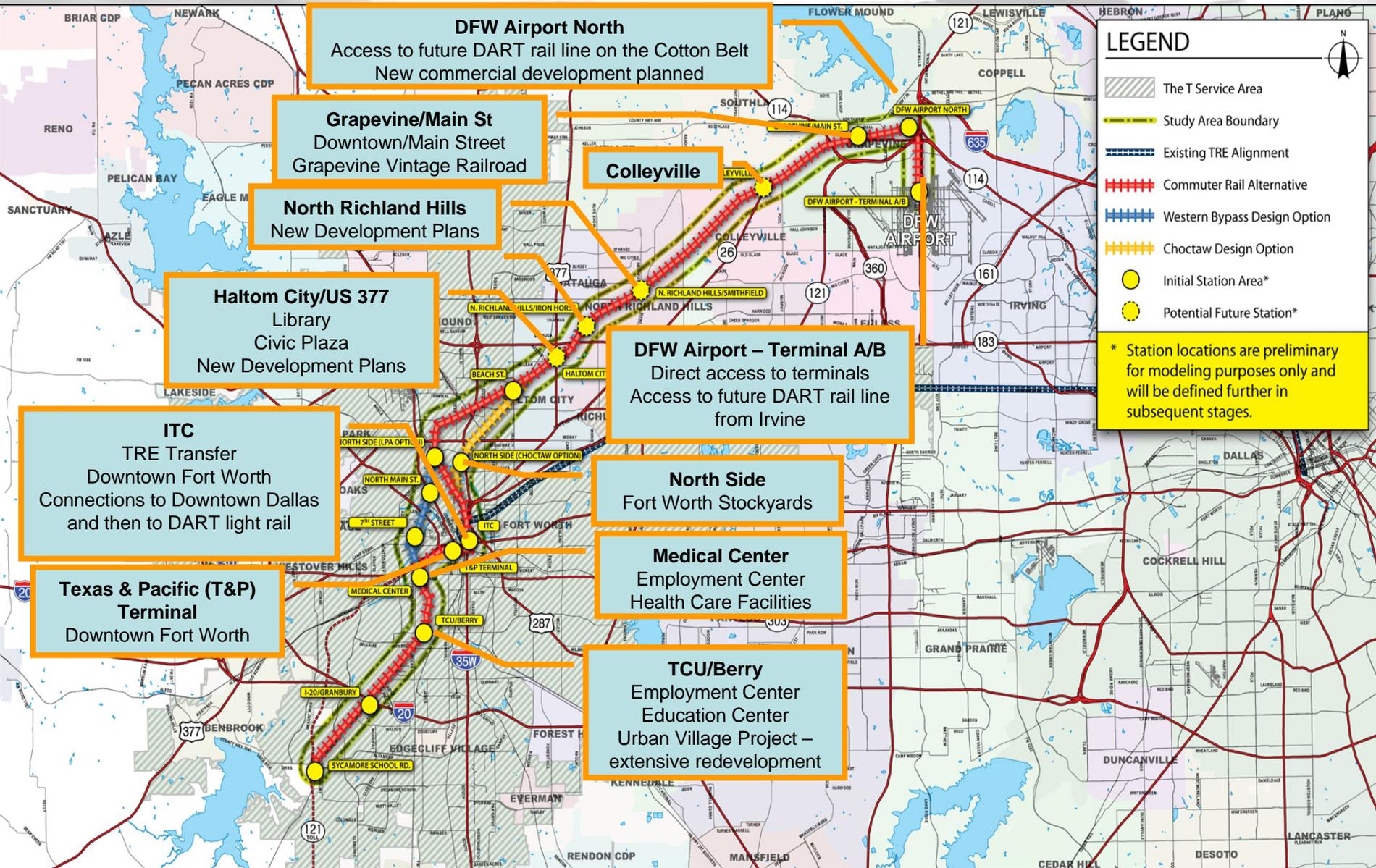
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- Potential Future Station*

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Southwest-to-Northeast Rail Corridor

Destinations Along the Corridor



Where Do You Want To Go?

Leave the Station from Colleyville...

Destinations of Interest:

**Downtown Fort Worth (ITC transfer)
bus/walk/taxi to Sundance Square.**

**ITC transfer station to TRE line: connections
to American Airlines Center (Mavs/Stars,
concerts).**

Ride the Rail to DFW International Airport

**Connect with DCTA to travel to downtown
Denton – with connections to the University
of North Texas (UNT)**

Downtown Grapevine (Grapefest!)

Stockyards

Medical Centers for aging populations



Where Do You Want To Go?

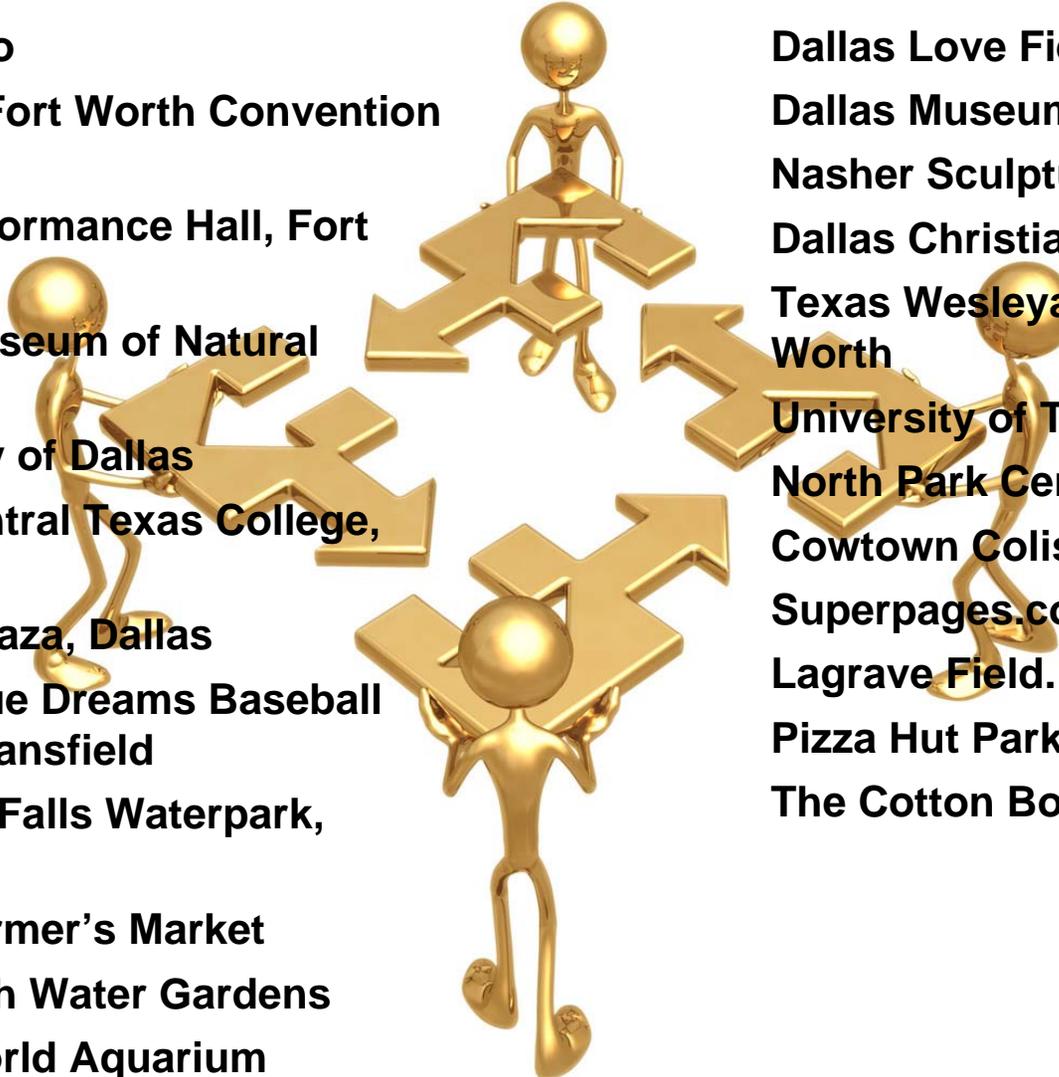
Additional Noteworthy Connections

Within ¼ Mile of Rail Line...

Dallas Zoo
Dallas & Fort Worth Convention Centers
Bass Performance Hall, Fort Worth
Dallas Museum of Natural History
University of Dallas
North Central Texas College, Corinth
Victory Plaza, Dallas
Big League Dreams Baseball Center, Mansfield
Hawaiian Falls Waterpark, Mansfield
Dallas Farmer's Market
Fort Worth Water Gardens
Dallas World Aquarium

Within ½ Mile of Rail Line...

Dallas Love Field
Dallas Museum of Art
Nasher Sculpture Center, Dallas
Dallas Christian College
Texas Wesleyan College, Fort Worth
University of Texas at Arlington
North Park Center Mall, Dallas
Cowtown Coliseum, Fort Worth
Superpages.com Center, Dallas
Lagrange Field, Fort Worth
Pizza Hut Park, Frisco
The Cotton Bowl, Dallas



Where Do You Want To Go?

Additional Noteworthy Connections

Within ¾ Mile of Rail Line...

Dallas-Fort Worth International
Airport (South Access)

Addison Airport

Meacham Airport, Fort Worth

Grapevine Convention Center

Fort Worth Zoo

Texas Women's University, Denton

University of Texas at Dallas

Southern Methodist University

Texas Star Golf Course, Euless

Rangers Ballpark In Arlington

Within 1 Mile of Rail Line...

Six Flags Over Texas

Malibu Speed Zone

Arlington Convention Center

Texas Christian University

University of North Texas

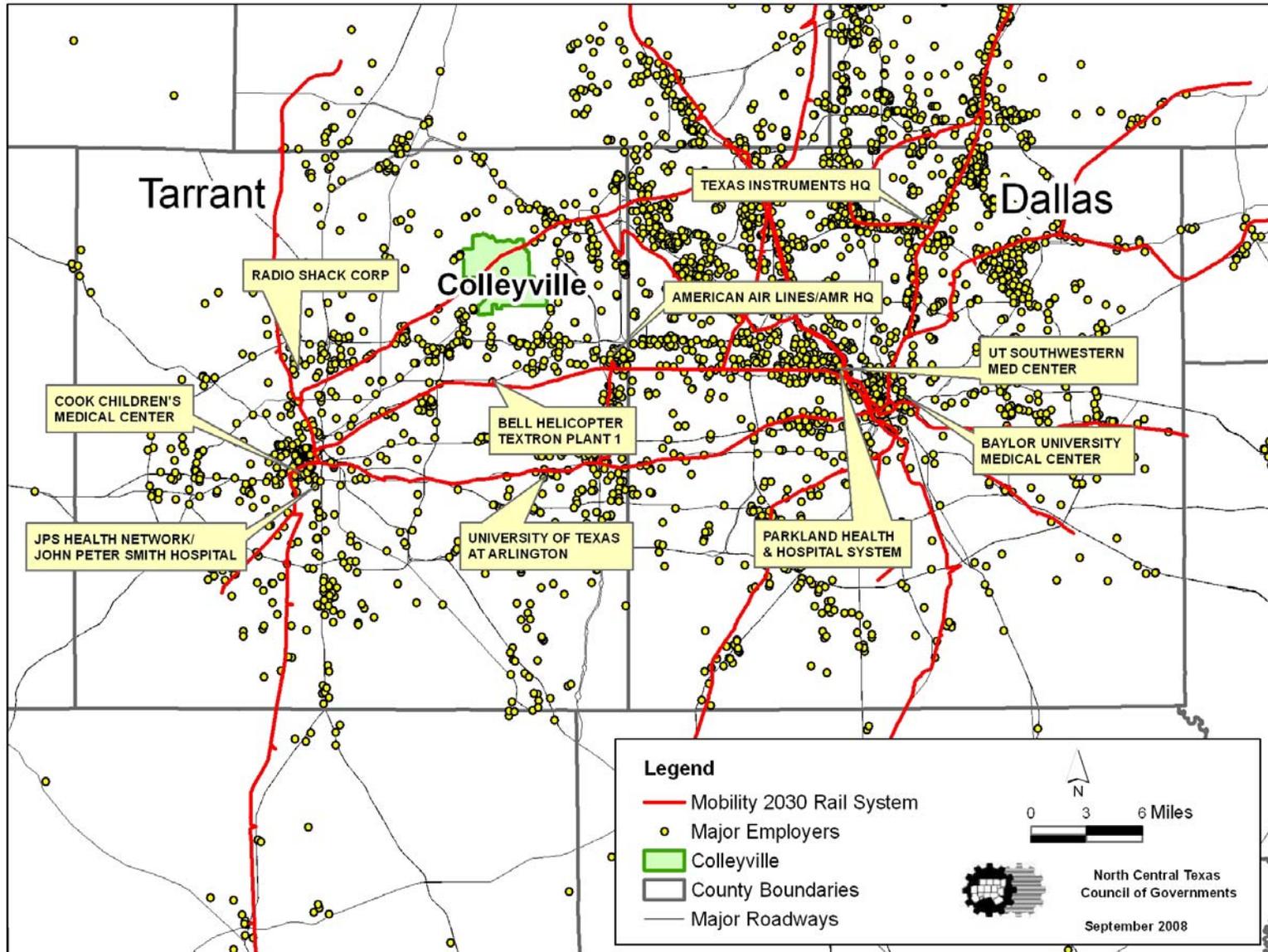
Dallas Cowboys Football Club

Fort Worth Botanical Gardens



Where Do You Work?

Connections to Major Employers in the Region



Proposed Station Plan Alternative 1

John McCain Road and Colleyville Blvd.

Conceptual Illustration – Parking Option



**Parking:
304 Spaces**

Proposed Station Plan Alternative 2

John McCain Road and Colleyville Blvd.

Conceptual Illustration – Parking Option



**Parking:
468 Spaces**



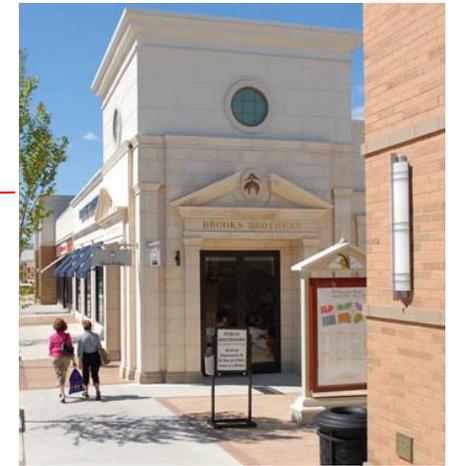
Proposed Station Plan Alternative 3

John McCain Road and Colleyville Blvd.

Conceptual Illustration – Transit Oriented Development Option



Development Examples



Proposed Station Plan

John McCain Road and Colleyville Blvd.

Conceptual Illustrations

Transit Oriented Development Option



Conceptual Illustrations



Sound Buffer – Sound Wall

Conceptual Illustrations



Sound Buffer – Decorative Sound Wall

Conceptual Illustrations



City's Committee looking into satellite parking options.

Satellite parking or remote parking is not directly connected to the main destination and is usually used at airports.

Other parking options could include: resident permits, charging for parking (Toll Tags), limiting the time for parking and providing kiss-and-ride lots.



What is Successful Transit-Oriented Development (TOD)?

Development is centered around a transit station.

Compact, mixed-use, walkable community.

Improves quality of life.

Offers a multi-modal experience with vehicular, bicycle, pedestrian, and rail modes of travel.

An average radius of approximately one-half mile, which is intended to represent a 'comfortable walking distance' for most people.¹



2008 Population:
1,825 people
within ½ mile radius of station²

¹Center for Transit-Oriented Development

²City of Colleyville

Transit-Oriented Development

Market for TOD

AARP reports that 71% of older households want to live within walking distance of transit.

Real estate forecasters and investment experts are advising their clients to invest in mixed use communities.

A recent market assessment shows that at least a quarter of all new households (14.6 million) could be looking for housing in transit zones over the next 25 years.



Transit-Oriented Development

TOD and Property Value

Between 1997 and 2001, increase of median values of properties

Residential Property	Near DART Station	32.1%
	In non-rail station areas	19.5%
Office Buildings	DART Properties	24.7%
	In non-DART properties	11.5%

Based on a recent study, the average DART Station produces \$3 million in revenue for local governments annually.



Transit-Oriented Development

What Could the Area Around the Station Look Like?



Before with a
parking lot and
very few buildings

After with
retail/restaurant
options

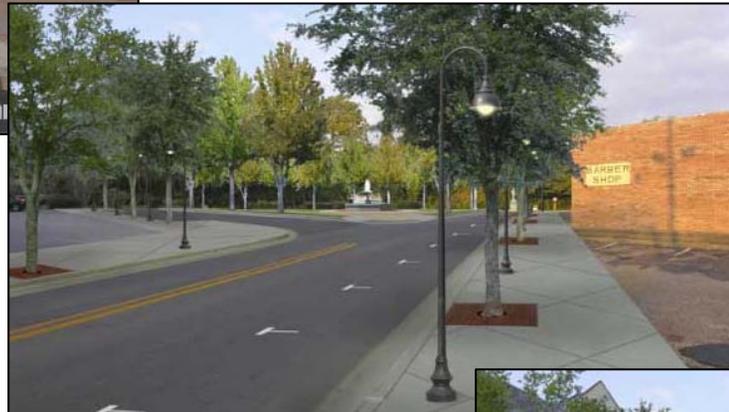


Transit-Oriented Development

What Could the Area Around the Station Look Like?



Before with no amenities



After with amenities



QUESTIONS

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