



projected to increase by almost 88 percent. Total jobs will grow to 109,106 by 2030 almost doubling 2000 employment levels.

### **Joint Development Opportunities**

Joint development is an opportunity for enhancing revenue and ridership. It is a public/private venture whereby a private development project is physically related to a transit station through either a direct connection from an adjacent location or air rights over the station. The transit authority's financial benefit from the project can be realized through several means. Often the transit agency receives revenue from the proceeds of the sale or leasing of land or air rights. Revenue can also be generated through connection fees. Sometimes, the private sector makes a contribution of land or offsets a portion or all of the cost of the station.

Joint development potential exists at sites where DART is acquiring property and would have residual land after construction. For all stations on the Irving/DFW line, DART would have to acquire some property. For two of these stations however, the property acquired is needed only for station access, kiss and ride or bus access facilities. There is no property being acquired for parking. These stations include the University of Dallas and Lake Carolyn. The stations where land would be acquired for parking include: Carpenter Ranch, North Lake College and Belt Line Road. At two of these stations, Carpenter Ranch and North Lake College, the station site layout is very tight in accommodating the projected parking demand and no residual land is anticipated for joint development. The North Las Colinas Station is a unique case. Adjacent property owners are working with DART to provide transit parking within future development. Additionally, DART, the City of Irving, Dallas County Utility and Reclamation District (DCURD), and the adjacent property owners are working together on a development concept that would create a public plaza that would serve the LRT station as well as private development. The Belt Line Road station is located on DFW Airport and subject to FAA restrictions. DART use of the property will be likely under some type of joint use arrangement.

#### **5.1.3 Land Use Mitigation**

Temporary construction impacts and mitigation are discussed in Section 5.12 of this document. Traffic mitigation is discussed in Section 4.6. DART with the City of Irving has coordinated the closure of Brangus Drive with the Irving Fire Department. This coordination will continue through final design and construction with the DART Fire/Life Safety Committee.

### **5.2 ACQUISITIONS AND DISPLACEMENTS**

This section describes the potential acquisitions and displacements associated with the No-Build and the LRT Alternative. The LRT assessments are based on preliminary engineering drawings (a 10% level of design) and therefore may not be a complete list of all real estate to be acquired. As design progresses on the alignment and station areas, there will be refinements and additions or deletions to the proposed right-of-way and parcel acquisitions. The Final EIS will incorporate any major changes identified as design and engineering progresses during the preparation of these documents.

#### **5.2.1 No-Build Alternative**

This alternative represents the status quo and there would be no acquisition of property and therefore no displacements.

#### **5.2.2 LRT Alternative**

##### **Station Acquisitions and Displacements**

There are eight stations proposed for the project, with two of the stations being deferred until future development warrants their construction (Loop 12 and South Las Colinas). At this time, real estate estimates are not available for the Loop 12 and South Las Colinas Stations.



**Table 5-1** below summarizes the potential acquisitions for each station based on engineering drawings and station site plans as of April 2007. It also outlines the current land use of the affected parcels.

| <b>TABLE 5-1<br/>STATION AREA ACQUISITIONS AND LAND USE</b>                                                   |                                    |                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------|------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>Station/Location</b>                                                                                       | <b>Area to be Acquired (Acres)</b> | <b>Land Use</b>                                                                                                       |
| <b>Loop 12</b> (Deferred Station)-Northeast corner of Spur 482 State Highway 114                              | 0                                  | Commercial – Central Freight, acquisition would not impact structures but might impact some parking and storage areas |
| <b>University of Dallas</b> -Northeast corner of State Highway 114 and Tom Braniff Drive                      | 4.12                               | Vacant Commercial Land                                                                                                |
| <b>South Las Colinas</b> (Deferred Station)-Northwest corner BNSF Railroad Right-of-Way and State Highway 114 | 0                                  | Vacant Commercial Land                                                                                                |
| <b>Lake Carolyn Station</b> -Southwest corner O'Connor Road and Lake Carolyn Parkway                          | 0.29                               | Vacant Commercial Land                                                                                                |
| <b>North Las Colinas</b>                                                                                      | 5.89                               | Vacant Commercial Land                                                                                                |
| <b>Carpenter Ranch</b> -South of Meadow Creek Drive and west of Greenpark Drive                               | 3.58                               | Meadow Creek Drive, Vacant Commercial Land, and Four Seasons TPC Golf Course                                          |
| <b>North Lake College</b> -North of North Lake College and east of Walnut Hill Lane                           | 5.76                               | North Lake College Parking, Vacant Land and Vacant Transit Corridor                                                   |
| <b>Belt Line Road</b> -Southeast corner of Belt Line Road and Valley View Lane                                | 9.55                               | Vacant Dallas/Fort Worth International Airport Land                                                                   |
| <b>Total Area Acquired for all Stations</b>                                                                   | <b>29.19</b>                       |                                                                                                                       |
| * Use of DFW property will be through a lease or license agreement.                                           |                                    |                                                                                                                       |

Source: Parsons Transportation Group and Wallace, Roberts & Todd, April 2007

Approximately 29.19 acres of property would be acquired for the stations. These acreages only include property acquisitions; they do not include public right-of-way which would also be used by the LRT Project under some type of use agreement. DART use of public right-of-way owned by the City of Irving, City of Dallas or Texas Department of Transportation would probably be used under some interagency agreement and would not require acquisition by DART.

A significant portion of the property to be acquired for the stations would be land (other than public right-of-way) that is owned by a public agency. The properties are owned by the Dallas/Fort Worth International Airport, the Dallas County Community College District, and the City of Irving. In almost all circumstances, the public land being acquired is vacant; the exception is the North Lake College property which includes some access infrastructure. None of the acquisitions on public land would displace any buildings or facilities on the properties. In a letter to FAA dated July 27, 2007, (See Appendix D) Dallas/Fort Worth International Airport has stated that the use of DFW land for the construction and operation of the DART light rail system will be under a lease or license agreement between DART and DFW.

The majority of the private land being acquired is currently vacant commercial property. The land acquisitions for stations that impact improved properties would not displace any buildings or facilities. They primarily impact either greenspace, access or parking areas. The future Loop 12 Station would probably require property from the site of Central Freight's current operations. Parking and trailer storage areas currently occupy this area. However, this is a deferred station



that will not be implemented until land use change would warrant a station. Property owners are currently studying alternative uses for their site.

**Alignment Acquisitions and Displacements**

Approximately 48.68 acres of land would be acquired for the alignment – 16.38 acres for Section I-1 and 32.3 acres for Section I-2. These estimates do not include public right-of-way owned by TxDOT or the City of Irving since these properties would not be acquired by DART but used under some type of interagency agreement. Use of DFW land will be under a lease or license agreement between DART and DFW. **Table 5-2** below summarizes the potential LRT alignment and construction area acquisitions based on 10% engineering drawings as of April 2007. It also identifies the current land use of the affected parcels.

| <b>TABLE 5-2<br/>ALIGNMENT ACQUISITIONS AND LAND USE</b>                                             |                                        |                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Location</b>                                                                                      | <b>Area (acres)<br/>to be Acquired</b> | <b>Land Use</b>                                                                                                                                                                                                                                        |
| <b>Line Section I-1 from Denton Drive to just east of SH 114</b>                                     |                                        |                                                                                                                                                                                                                                                        |
| NE corner Harry Hines Blvd. and Northwest Hwy.                                                       | .55                                    | Commercial – acquisition would displace retail store and two mini warehouses                                                                                                                                                                           |
| NW corner Harry Hines Blvd. and Northwest Hwy.                                                       | .18                                    | Commercial - acquisition would not impact structure                                                                                                                                                                                                    |
| North of Spur 482 between levees and just west of levees                                             | 9.29                                   | Vacant commercial and vacant floodplain                                                                                                                                                                                                                |
| NE corner of Tom Braniff Drive and SH 114                                                            | .04                                    | Vacant commercial                                                                                                                                                                                                                                      |
| NW corner of BNSF RR & SH 114                                                                        | 5.18                                   | Vacant commercial                                                                                                                                                                                                                                      |
| Along Teleport Ave. & Lake Carolyn Parkway                                                           | .09                                    | Vacant commercial land and some improved commercial properties (no structures are impacted).                                                                                                                                                           |
| North of O'Connor Blvd. and East of N. Las Colinas station                                           | 1.05                                   | Apartments / Vacant commercial                                                                                                                                                                                                                         |
| <b>Sub-total for Line Section I-1</b>                                                                | <b>16.38</b>                           |                                                                                                                                                                                                                                                        |
| <b>Line Section I-2 from just east of SH 114 to Belt Line Road</b>                                   |                                        |                                                                                                                                                                                                                                                        |
| West of N. Las Colinas station & East of SH 114                                                      | .94                                    | Vacant commercial and lake/greenspace                                                                                                                                                                                                                  |
| West of SH 114 to East of McArthur Blvd.                                                             | 8.15                                   | Meadow Creek Drive, Vacant Commercial Land, and Four Seasons TPC Golf Course (approximately 200 square feet)                                                                                                                                           |
| West of McArthur Blvd. to East of Walnut Hill (North Lake Community College Area)                    | 6.94                                   | Archstone at MacArthur Apartments (acquisition would not impact structures) and North Lake Community College (acquisition would not impact structures, would require re-routing some access streets). Alignment ROW includes ROW for new Brangus Drive |
| West of Walnut Hill                                                                                  | 1.92                                   | Vacant property - preserved for transit ROW in Las Colinas Master Plan                                                                                                                                                                                 |
| DFW Airport Property east & west of SH 161                                                           | 14.35                                  | Vacant DFW Airport property *                                                                                                                                                                                                                          |
| <b>Sub-total for Line Section I-2</b>                                                                | <b>32.30</b>                           |                                                                                                                                                                                                                                                        |
| <b>Total for Line Sections I-1 &amp; I-2</b>                                                         | <b>48.68</b>                           |                                                                                                                                                                                                                                                        |
| * Land acquired from DFW is through a lease agreement and does not constitute a release of property. |                                        |                                                                                                                                                                                                                                                        |

Source: Parsons Transportation Group, April 2007

**5.2.3 Acquisition and Displacement Mitigation**

All acquisition of property must adhere to the DART Board of Directors' Real Estate Policy and Procedures, adopted August 25, 1987 and modified in October 2000. These policies and





procedures adhere to all Federal guidelines regarding acquisition and relocation assistance including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (42USC 4601). For all real property acquired, DART compensates the property owner for the fair market value of their property and for damages to any remaining parcel(s).

Relocation benefits are provided for all businesses and residents (owner occupants and tenants) that are displaced by acquisition. The project will not displace any residents. Prior to the relocation of businesses, DART staff will prepare a relocation analysis that determines the availability of suitable locations or facilities for displaced businesses. The relocation benefits and services provided to those displaced are determined by eligibility guidelines based on Federal policies. For businesses, these generally include reimbursement of moving expenses and advisory assistance in locating a replacement site.

### **5.3 AIR QUALITY**

The purpose of this analysis is to determine potential air quality impacts of the proposed Northwest Corridor LRT Line to Irving and DFW International Airport project. The impact assessment was performed by comparing the predicted ambient air pollutants concentrations, for the proposed project alternatives, to the National Ambient Air Quality Standards (NAAQS). Section 3.4 of this DEIS includes information on current status of air quality in the project area, the applicable air quality standards, and the impact criteria.

#### **5.3.1 Impact Assessment**

##### **5.3.1.1 Methodology**

To assess the proposed project's air quality impacts, a mesoscale as well as a microscale analysis was performed based on the procedures established in the Texas Department of Transportation ***Air Quality Guidelines*** (Texas DOT, 1999). A mesoscale pollutant burden analysis was performed to assess air quality impacts of the proposed project, on a regional level. The 2025 pollutant emissions associated with the various alternatives were calculated for carbon monoxide (CO), volatile organic compounds (VOC), and oxides of nitrogen (NO<sub>x</sub>). The latter two pollutants are precursors of ozone (O<sub>3</sub>) and serve as an indicator of the ozone impact in the area. Because O<sub>3</sub> formation reactions take place over a period of several hours, maximum concentrations of O<sub>3</sub> are often found far downwind of the precursor sources. Thus, ozone is a regional problem and not a localized condition.

The analysis and evaluation of long-term air quality impacts of the proposed project are based on the traffic analysis completed for the project (*Parsons, 2006*). The analysis evaluated the change in traffic operations and transportation circulation, as well as the passenger rail vehicle operations in the year 2025. Emissions analyses were evaluated for the proposed project corridor for the horizon year 2025 and for No-Build and Build scenarios.

#### **Regional Emissions**

Regional operational emissions evaluated for the project Build scenario include the following:

- direct emissions from operation of trains within the new LRT corridor;
- indirect emissions from passenger vehicles traveling to the park-and-ride stations, as compared to the decrease in emissions resulting from commuters using trains rather than driving to their destinations.

Impact to the regional air quality is analyzed by comparing the future (2025) air quality conditions with and without the project. The 2025 No-Build conditions reflect development, growth and infrastructure improvements that have already been accounted for in regional planning documents. Project-related impacts were identified based on the net difference in future Build and No-Build Alternatives (i.e., how the proposed project would affect future traffic patterns that already consider