1.0 PURPOSE AND NEED

This chapter describes the need for transit improvements in south Dallas and the purposes that the proposed Dallas Area Rapid Transit (DART) project is intended to serve. The chapter also reviews the planning context and history of local decision-making regarding proposed improvements affecting the study area and presents the mobility, economic and community development, and environmental objectives to be addressed by the project.

1.1 Description of Proposed Action

The proposed action, referred to here as the Build Alternative or South Oak Cliff Corridor Blue Line Extension, is a 2.6-mile light rail transit (LRT) extension of the DART Blue Line. The extension would consist of double-tracked light rail, extending from the existing Ledbetter Station to the campus of the University of North Texas at Dallas (UNT Dallas), and include two new stations as shown in Figure 1-1.

The proposed project would provide high-capacity, efficient and reliable transit service for local area residents and to the developing UNT Dallas campus. The proposed project would respond to regional growth demands, enhance the sustainability and livability of the neighborhoods surrounding UNT Dallas, promote economic development, and support regional transit connectivity. The South Oak Cliff Corridor Blue Line Extension to the UNT Dallas campus is the final planned line segment for the South Oak Cliff (SOC) Corridor. The existing Blue Line, which opened in 1996 as part of DART’s original starter system, consists of 24.2 miles and currently extends from Ledbetter Station in south Dallas to downtown Garland. In December 2012, the Blue Line will be expanded to encompass 28.8 miles with service to Rowlett.

This preliminary design effort and associated environmental assessment are being conducted in accordance with DART’s Design Criteria Manual (2003) and Environmental Impact Assessment and Mitigation Guidelines for Transit Projects (2012). The project is proposed to be funded wholly with local funds.

1.2 Overview of the Project Area

The study area is in the southernmost portion of the contiguous DART Service Area. It is characterized by largely undeveloped land, stretching between the existing Ledbetter Station and the proposed new terminus station located along the southern boundary of the UNT Dallas campus. Recent development includes the initial buildings on the UNT Dallas campus, the Kathryn Joy Gilliam Collegiate Academy, the Magnolia Trace apartments, and the Dallas Police Department South Central Station.

Population and employment in the area are projected to grow faster than the City of Dallas and the Dallas-Fort Worth region, as a whole, creating more employment opportunities in the area. However, at this time the predominant flow of work trips is to the north: downtown Dallas and the employment centers north of downtown.

The project area is currently served by the DART Blue Line, which terminates at Ledbetter Station. Bus service is provided by local and rail feeder routes that serve Ledbetter Station.
These routes provide access to area medical centers, shopping centers, transfer locations, and centers for higher learning. Existing transportation services and facilities are described in Section 3.3.

The proposed South Oak Cliff Corridor Blue Line Extension would potentially serve a large market area. This market catchment area extends approximately half-way to Buckner Station to the east, approximately half-way to Westmoreland Station to the west, and south for several miles as shown in Figure 1-2. This larger catchment area includes rail and interstate transportation choices.

1.3 Relevant Corridor and System Planning Activities

Improvements planned for the study area have been included in several local plans. A summary of these plans is presented below.

The South Oak Cliff Corridor Blue Line Extension (SOC-3) was originally conceptualized during early system planning as part of the broader South Oak Cliff Corridor. The 1989 Transit Plan identified the initial LRT line to Ledbetter with an extension to Camp Wisdom in the future. The concept was refined in the South Oak Cliff Corridor Final Environmental Impact Statement (SOC FEIS) in August 1991. In the SOC FEIS, the corridor segment was envisioned as a light rail transit line extending south toward Interstate Highway (IH) 20 and terminating just south of Camp Wisdom Road. This terminus was planned as the location of a park-and-ride and a vehicle assembly facility (VAF) for light rail vehicles.

The 1995 Transit System Plan reflected an LRT extension from Ledbetter to IH 20, which was the approved Service Plan alignment at the time. The project was identified as a Phase III project to be complete by 2014 based on the financial plan in effect at that time.

In 2001, the City of Dallas acquired land for the future University of North Texas (UNT) campus and the City and UNT requested an amendment to the DART Service Plan to extend rail to the future campus. Several meetings were held with abutting property owners, City of Dallas, and UNT representatives to select a future alignment and station location. The UNT Dallas Campus Master Plan was completed in 2005 and identified a preferred corridor to support right-of-way preservation efforts.

In October 2006, the DART Board approved the 2030 Transit System Plan, which reflected the preferred LRT alignment to the planned UNT Dallas campus. In 2007, a public hearing was held to solicit input for a Service Plan amendment. In February 2008, the DART Board approved a Service Plan Amendment to modify the station locations and alignment to serve the UNT Dallas campus. The alignment was the starting point for the SOC-3 Alternatives Analysis, which resulted in the adoption of a Locally Preferred Alternative which was refined and is the subject of this Local Environmental Assessment (EA). A Service Plan Amendment will be recommended after review and circulation of this Draft Local EA.

Regional planning in the Dallas-Fort Worth (DFW) area is managed by the North Central Texas Council of Governments (NCTCOG). Their metropolitan transportation plan, Mobility 2035: The Metropolitan Transportation Plan for North Central Texas, includes a light rail extension of the Blue Line from Ledbetter Station to UNT Dallas.
Figure 1-2
South Oak Cliff Corridor Blue Line Extension
Extended Market Catchment Area

Source: DART and ATG, 2012

1 inch = 11,500 feet
This project is part of the fiscally-constrained plan. The report indicates that this project would comply with air quality conformity requirements in 2020.

In 2006, the City of Dallas adopted the *forwardDallas! Comprehensive Plan*. This document provides a planning vision and development strategy for Dallas. Core values identified in this document include increased investment in jobs and infrastructure in south Dallas and convenient transportation to afford citizens choices in how to travel throughout the city. The proposed project is included in *forwardDallas!*

Implementation of this plan is designed to be accomplished through the adoption of focused vision and implementation programs. In December 2009, the City of Dallas amended the *forwardDallas! Comprehensive Plan* to incorporate the *UNT-Dallas Vision and Policy Plan* and *Implementation Program*. In July 2011, the City of Dallas, in coordination with NCTCOG and DART, finalized the *Context Sensitive Transportation Study* which makes recommendations on future thoroughfares and trail alignments in the UNT Dallas area.

Envisioning improvements on the large, currently undeveloped properties in the study area, the *UNT-Dallas Area Plan* identifies potential locations for several new thoroughfares designed to connect existing roadways and to serve future development. Exact placement of the planned roads will depend on development plans proposed and adopted by property owners. The plan provides a general outline for the area with samples of various road profiles and intersection designs. The City of Dallas has kept the option of tax increment financing (TIF) as a funding mechanism for implementation of the *UNT-Dallas Area Plan*.

In February 2012, the mayor of Dallas proposed the *Grow South Initiative* to increase quality development in south Dallas. One of the districts identified for improvement is the area around UNT Dallas, categorized as the Education Corridor. Proposed actions for this corridor include initiation of a Complete Streets demonstration project on Camp Wisdom Road/Simpson Stuart Road, infill development in The Villages of Runyon Springs neighborhood, expansion of UNT Dallas, a new recreation center for the Singing Hills neighborhood, and build-out of the Lancaster Corridor. Potential funding mechanisms for the initiative include grants and a private investment fund, which is being set up for this purpose.

The foundations of the *University of North Texas Dallas Campus Master Plan* are community partnerships and environmental stewardship. Using sustainable design principles, the plan aims to reduce transportation impacts. The plan specifically includes a 100-foot wide right-of-way dedication for DART light rail and eight acres for station parking. Since the campus will house only a portion of the student body, regional transportation connectivity is an important element of this plan. Pedestrian and bicycle circulation and open space preservation are also key components of this plan.

In addition to coordinating transit improvements in south Dallas with the aforementioned regional and local plans, DART also conducted a concurrent design review of Ledbetter Station. This design review was initiated in response to attendees of the initial public meeting for the Alternatives Analysis process expressing their concerns with current conditions at Ledbetter Station. It was mentioned that the horns and bells were noisy and could be heard over a long distance. Members of the public also stated that the station had poor accessibility for the mobility impaired (including a very long ramp from the parking lot to the platform) and transit
patrons were concerned about loitering. As a result of working with members of the public and design professionals, DART was able to develop design solutions to several of the issues raised by the public.

The process for choosing an alternative to serve the transportation needs in this corridor began with the investigation into several factors affecting the area. Technical experts evaluated various transportation technologies, assessed current and projected traffic, and examined the potential noise impacts on sensitive noise receptors in the study area. All of these studies informed the alternatives analysis process for this project. The final screening and selection process is described in Section 2.1.1.

1.4 Need for Action
Projected travel patterns due to anticipated population and employment growth in the region as well as within the study area make this an opportune time to build the project. The need for transit improvements is demonstrated by the following:

- The DFW region is currently (as of May 2012) designated as a moderate non-attainment area for 8-Hour Ozone by the Environmental Protection Agency.
- The study area is part of the NCTCOG’s Mobility 2035 Sustainable Development Area of Interest.
- The rate of population and employment growth in the market catchment area of the South Oak Cliff Corridor Blue Line Extension is expected to exceed the growth rate for the City of Dallas and the DFW region.

1.4.1 Specific Transportation Needs in the Corridor
As described above, the construction of the South Oak Cliff Corridor Blue Line Extension would be a proactive measure to address projected population and employment growth. As the Build Alternative, this project would also increase connections to major employment, commercial, and educational activity centers improving regional mobility. Current north-south access routes become heavily congested approaching downtown Dallas and extension of the light rail line would provide an alternative transportation mode. Since the Dallas-Fort Worth area is a moderate non-attainment area for ozone, and vehicles are a major source of ozone-forming chemicals, transportation alternatives are a tool for reducing emissions.

Lastly, by providing light rail service to UNT Dallas, the South Oak Cliff Corridor Blue Line Extension would allow faculty, staff, and students improved access to this four-year university. With the opening of the Denton County Transportation Authority’s (DCTA) A-train in 2011, the UNT Dallas campus would be connected to the main UNT campus in Denton via rail.

1.4.2 Purposes of the Proposed Action
The purposes of the South Oak Cliff Corridor Blue Line Extension are as follows:

- **Improve Mobility for Local Area Residents and Increase Regional Connectivity**
  Local area residents currently have limited transit options and limited access to the DART service network. An improved transit connection to Ledbetter Station will provide more efficient and reliable transit access to all the employment, educational resources, medical services, and cultural/entertainment venues in the DART Service Area. The Build
Alternative would expand the reach of light rail system increasing connectivity in the region.

- **Increase Transit Effectiveness**
  Currently local area residents must travel by bus to Ledbetter Station and then transfer to the light rail system. By providing light rail transit service into the study area, fewer transfers are required for travel, resulting in reduced travel times.

- **Link the UNT Dallas Campus to the Regional Transit Network**
  The campus is projected to grow to 25,000 students and 3,000 employees over the next 20 years. Improved transit accessibility will provide residents with shorter, more convenient transit trips to the educational and employment opportunities provided by UNT Dallas. With a connection to DART’s light rail network and A-Train service to Denton provided by DCTA, residents will have a high level of transit service between campuses of UNT in downtown Dallas and Denton, as well as other higher education institutions within the DART Service Area.

- **Increase Economic Development Opportunities**
  The City of Dallas has identified the UNT Dallas area as a strategic opportunity for economic development in its *forward Dallas! Comprehensive Plan*. The area is expected to see accelerated growth due to the nearby campus. With UNT Dallas as a regional attractor and in combination with the implementation of high-quality transit connections, the large tracts of undeveloped land are expected to attract new residential, retail, and commercial development. Property and sales tax revenue from this new development can support improvements in municipal services.

As noted above, the proposed project is intended to provide high-capacity, efficient, and reliable transit service to the growing UNT Dallas campus, improve transit mobility for local area residents, respond to regional growth demands, increase transit effectiveness, enhance economic development opportunities, and support regional transit connectivity.