1.0 INTRODUCTION

DART’s *Northeast Corridor Major Investment Study (MIS)* 1995 identified cost-effective solutions to meet the mobility needs in the study area. This study identified the Proposed DART Rail to Rowlett as a Phase II project for the DART LRT Northeast Corridor. The Proposed DART Rail to Rowlett was officially approved with the 1995 DART *Transit System Plan*. This project is depicted as a future Light Rail Blue Line expansion in Figure 1-1, which represents DART’s current and future rail system from the latest *DART 2030 Transit System Plan*, adopted in October 2006.

This chapter defines the need for corridor transportation improvements and describes the Locally Preferred Alternative (LPA) and other alternatives considered for the Proposed DART Rail to Rowlett. The Proposed DART Rail to Rowlett would extend the DART LRT Northeast Line from the DART Downtown Garland LRT Station to the proposed DART Downtown Rowlett LRT Station, which would be located adjacent to the existing DART Rowlett Park & Ride (Figure 1-2).

1.1 Corridor Setting

1.1.1 Corridor Growth Forecasts

The DFW region is growing at a tremendous pace, placing significant demands on the transportation system. NCTCOG is a "voluntary association of, by and for local governments, and was established to assist local governments in planning for common needs, cooperating for mutual benefit, and coordinating for sound regional development". According to the NCTCOG *Mobility 2025—The Metropolitan Transportation Plan, Amended April 2005*, from 1999 to 2025 population for the DFW Metropolitan Planning Area will grow by approximately 75 percent and employment by approximately 84 percent. By 2025, the DFW region is expected to exceed eight million residents supporting approximately five million jobs. The projected growth between 2000 to 2025 results in a growth rate of approximately 140,000 persons per year and an employment rate of approximately 88,000 new jobs per year over the 25-year period.

Specifically, a significant amount of growth is anticipated in northeastern Dallas County. According to NCTCOG, the City of Garland will grow 12 percent to 241,283 by 2025 and the City of Rowlett is expected to grow by 63 percent to 72,350 by 2025(Table 1-1).

<table>
<thead>
<tr>
<th>City of Garland</th>
<th>City of Rowlett</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>2025</td>
</tr>
<tr>
<td>215,165</td>
<td>241,283</td>
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</table>

*Sources*: NCTCOG, 2006; City of Rowlett, 2006

According to the 2000 Census, 70.4 percent of Garland’s population of persons who were 16 years of age or older were employed and the average household income was $49,156, which was slightly higher than Dallas County’s average household income of $43,324. According to the Garland Chamber of Commerce, the City of Garland has several large employers contributing to the economic condition of the City, including the Garland Independent School
CURRENT & FUTURE RAIL SYSTEM

Figure 1-1
Current & Future Rail System
DART Rail to Rowlett LEA

Source: DART, November 2006.
Figure 1-2
Study Area Location Map
DART Rail to Rowlett LEA
Introduction

May 2007

District (GISD), City of Garland, Raytheon, Wal-Mart, Sears Logistic Services, and Baylor Medical Center at Garland. Several recent developments have helped to boost the City’s economy, such as, the addition of the Firewheel Town Center, Bass Pro Shops Harbor Point, other major retail areas, and the continued redevelopment of older shopping centers. In 2000 76.7 percent of the City of Rowlett’s population of persons, who were 16 years of age or older, were employed and the average household income was $70,947, which was considerably higher than Dallas County’s average household income of $43,324.

According to the City of Rowlett, more than 200 new businesses have opened in the City since 2002, including many nationally recognized companies, stores, and restaurants. In addition, the City adopted a comprehensive Economic Development Strategic Plan that was implemented in the 2002–2003 fiscal year to foster more growth, attract new businesses, and retain and support existing Rowlett businesses. Components of the plan included an economic base analysis, target industry analysis, strategic recommendations and action steps, and a five-year implementation plan. In addition, the plan identified and prioritized the City’s economic development challenges and opportunities, such as the Northshore Commercial Development District, Waterfront Entertainment District, Revitalized Downtown District (including the proposed DART Downtown Rowlett LRT Station), State Highway 66 (SH 66)/Lakeview Parkway Corridor, the extension of the President George Bush Turnpike (PGBT) and a technology research zone.

1.2 Purpose and Need for the Proposed DART Rail to Rowlett

During the Northeast Corridor MIS, the DART Board of Directors established a set of goals for the transportation improvements in the DART LRT Northeast Corridor, which included the proposed DART Rail to Rowlett. The goals and objectives respond to the transportation needs defined in this chapter and are based on the goals adopted in the DART Transit System Plan and those stated in the DART Mission Statement:

The mission of DART is to build, establish and operate a safe, efficient and effective transportation system that, within the DART Service Area, provides mobility, improves the quality of life, and stimulates economic development through the implementation of the DART Service Plan as adopted by the voters on August 13, 1983, and as amended from time to time.

The construction of the proposed DART Rail to Rowlett from the DART Downtown Garland LRT Station to proposed DART Downtown Rowlett LRT Station would fulfill the following goals:

1.2.1 Goals for Proposed DART Rail to Rowlett

Increase Regional Connectivity/Transit Effectiveness
The existing DART transit system provides access to job opportunities in the DART LRT Northeast Corridor and elsewhere in the DART Service Area and region, especially for transit-dependent populations. The Proposed DART Rail to Rowlett would expand those opportunities for current and prospective transit riders both in the corridor and the region by providing a connection to DART’s expanding LRT system and bus service. Access to jobs in central Dallas from the northeast would also be improved.
Offer an Alternative to Single-Occupancy-Vehicle (SOV) Travel
According to the 2000 Census, 75.2 percent of Rowlett’s commuters drove to work alone. Traffic congestion in the corridor has increased and will continue to do so. The Proposed DART Rail to Rowlett would offer an alternative to SOV travel in the corridor and within the DART Service Area.

Increase People-Carrying Capacity in the Corridor
Regional demand for radial travel in the corridor will increase and additional capacity is needed. North-south travel patterns include residents from the south traveling to jobs in the DART LRT Northeast Corridor and residents in the northeast traveling to downtown Dallas and further south. The Proposed DART Rail to Rowlett would offer additional travel opportunities to meet this demand.

Improve Accessibility and Increase Economic Development Opportunities
DART’s multi-modal transit network currently includes 44 miles of LRT, 35 miles of commuter rail, 31 miles of high-occupancy vehicle (HOV) lanes, 760 accessible buses, and general mobility programs. The addition of the proposed DART Rail to Rowlett would provide residents from Rowlett and surrounding communities’ access to venues and employment centers throughout the entire transit network. The DART LRT service is planned to expand to approximately 90 miles by 2013. This increased accessibility would strengthen economic conditions for these existing activity centers and provide an opportunity for development of further economic activity at other locations in the region.

1.2.2 Existing Transportation Deficiencies
There are numerous transportation deficiencies within the region, which can be attributed to population increases, economic growth, and growth of suburbs surrounding the region’s largest cities. According to NCTCOG, congestion in the DFW region cost more than $5 billion in lost productivity in 2000. Additionally, the average vehicle-miles traveled (VMT) per person increased from 21 miles per day in 1980 to 28 miles per day in 2000.

Existing mobility constraints within the Proposed DART Rail to Rowlett corridor relates primarily to travel to and from Dallas. This corridor is served by a number of major arterial streets. In addition, existing roadway facilities between the corridor and the Dallas Central Business District (CBD) do not adequately serve trip patterns and travel demand. Residents within the study area utilize State Highway 78 (SH 78), East R.L. Thornton Freeway (IH 30), Miller Road, and SH 66, all of which have congested peak hour traffic conditions.

1.2.3 Future Transportation Problems in the Corridor
According to Mobility 2025—Metropolitan Transportation Plan, Amended April 2005, the overall VMT will increase by 86 percent and overall roadway congestion will increase by 53 percent between now and the year 2025 in the DFW Metropolitan Planning Area. According to this study, as of 1999, the project corridor is noted to be within the areas of moderate peak period congestion, but will increase to be within the areas of severe peak-period congestion by 2025. As a result, by the year 2025 congestion could add up to 31 minutes to a trip that currently takes
only 20 minutes. The model used to determine these congestion levels for Mobility 2025—Metropolitan Transportation Plan, Amended April 2005 included proposed DART Rail to Rowlett, as well as, other planned future roadway and transit projects. If this extension is not built, congestion levels would increase further.

DART will increase bus services to correspond to the ridership demands within the corridor. However, anticipated traffic increases and congestion could result in problems for buses that travel the same highways, arterials, and streets as general motorists. Potential delays exist for bus services, which could make timed bus transfers difficult to achieve.

1.2.4 The Need for Transportation Improvements

The proposed DART Rail to Rowlett would become part of a coordinated regional transit system. The entire system would be available to residents within the cities of Garland and Rowlett. The need for transportation improvements is illustrated by the following:

- The DFW region, which includes Rowlett, is currently designated as a non-attainment area for ozone (O₃) by the U.S. Environmental Protection Agency (EPA)
- Existing and planned roadway improvements are insufficient to meet the demands within this corridor
- Travel time delay in the corridor is increasing
- A significant amount of employment and population growth is forecasted for the corridor
- Land use in the corridor is changing from a historically rural community to a suburban community, with a diverse range of housing options to accommodate projected demographic characteristics

According to the City of Rowlett 2001 Comprehensive Plan, reduction in traffic volumes and VMT is a desirable goal, to reduce both traffic congestion and maintain air quality standards. Development of a transportation network that promotes alternative modes of transportation (i.e., transit), trip reduction programs, and the adoption of a land use policy linking trip origins to nearby destinations, are methodologies to be used by the City achieve this goal.

Based on existing and forecasted conditions, the following needs were identified:

- Reduce travel times within the corridor
- Increase transit effectiveness within the corridor and connectivity to the region
- Provide additional people-carrying capacity in the corridor
- Contribute to improvements in unacceptable regional air quality

1.3 Description of Proposed Project

1.3.1 Project Alignment

The proposed DART Rail to Rowlett alignment would begin at the existing DART Downtown Garland LRT Station, following the old MKT Railroad, and continue approximately 4.8 miles eastward to the proposed DART Downtown Rowlett LRT Station site, adjacent to the existing DART Rowlett Park & Ride. The MKT Railroad right-of-way (ROW) is owned by DART and
Introduction May 2007

currently leased and operated by the Dallas Garland and Northeastern Rail Company (DGNO). Existing ROW widths vary between 100 to 150 feet.

The majority of the Proposed DART Rail to Rowlett alignment would be located within the existing DART ROW, which is north of and generally parallel to the existing DGNO freight track. Portions of the LRT alignment would be elevated over rail, street and waterways. In several places along the alignment, additional ROW would be required to enable safe operations of both LRT and freight within the corridor, as well as to facilitate drainage needs. The proposed DART Rail to Rowlett alignment was designed to achieve a 65 miles per hour (mph) operational speed through the majority of the line section, while maintaining a minimum operating speed of 50 mph through several horizontal curves.

The proposed DART Rail to Rowlett alignment would extend the existing LRT double tracks from the eastern edge of the DART Downtown Garland LRT Station with a maximum grade of six percent, rising over the Kansas City Southern (KCS) Railroad and remaining elevated for a grade-separated crossing over North First Street and SH 78. The LRT tracks would then descend to grade east of SH 78, where additional ROW would be required on the north side of the existing DART ROW to minimize relocation of the existing DGNO freight tracks and yard. The LRT tracks would remain at-grade until the tracks would moderately rise to pass over SH 66 and Commerce Street, providing the required 16.5-foot roadway clearance. The LRT tracks would descend back to grade 600 feet east of Commerce Street and remain at-grade and partially in new ROW along the north side of the existing freight tracks, before crossing Centerville Road. Immediately east of Centerville Road, the LRT tracks would be elevated to cross the 2,500-foot wide Rowlett Creek floodplain to 1,600 feet west of Dexham Road in the City of Rowlett. In order to flatten an S-curve and achieve greater operational speed while maintaining minimum horizontal clearance between the LRT tracks and the DGNO track, approximately 2,000 linear feet of existing DGNO track would be relocated to the south of its existing location. Due to the alignment modification, approximately one-half acre of ROW, south of the existing DART ROW, would have to be acquired within three properties in the vicinity of Dexham Road. The LRT tracks would cross Dexham Road at-grade and remain at-grade until the tracks would elevate for grade-separated crossings of Main Street and Rowlett Road. The LRT tracks would descend back to grade after crossing over Rowlett Road and remain at-grade as they enter the proposed DART Downtown Rowlett LRT Station. The tracks would then extend at-grade beyond the station for approximately another 1,000 feet to accommodate end-of-the line train reversal and storage. Additional detailed descriptions of the horizontal and vertical alignments of this line section are located in Section 2.0 of the Proposed DART Rail to Rowlett Preliminary Engineering Design Report.

1.3.2 Station Locations

Station locations for the Proposed DART Rail to Rowlett project would include the existing DART Downtown Garland LRT Station and the proposed DART Downtown Rowlett LRT Station. Technical Work Group (TWG) and Community Work Group (CWG) meetings were held to incorporate public issues and concerns into the planning of the stations. The final proposed station location is a reflection of those work groups and professional evaluation. It was determined that the location of the existing DART Downtown Garland LRT Station would remain unchanged as a result of this extension.
The development of alternatives for the proposed DART Downtown Rowlett LRT Station was conducted in three stages:

Stage 1: Given that DART owns property to the north of the tracks with an existing paved DART Rowlett Park & Ride facility on a portion of the property and the pending redevelopment of downtown Rowlett to the south of the tracks, various alternative station, bus loading and parking lot location options were reviewed to the north and south of the tracks. After examining the size of the parking lot needed, bus routing, and other factors, a station with loading on the north side of the tracks was selected.

Stage 2: Since the City of Rowlett plans to extend Martin Drive across the tracks to connect SH 66 to Main Street, additional detailed alternative station, bus loading and parking lot location options were developed for consideration. Due to the vertical alignment of the LRT tracks coming back to grade east of the grade-separated crossing of Rowlett Road, the station was sited east of the proposed Martin Street extension, with bus loading along the north side of the platform and an over 900-space parking lot north of the bus loading area and east of Martin Street.

Stage 3: Various alternative detailed layouts of the parking and bus loading provisions were developed, examining the amount of space required for surface parking, improvements to pedestrian site circulation, alternative bus loading configurations that would improve convenience of intermodal transfer, optional parking structures and potential concepts for future transit-oriented development (TOD).

As a result of this analysis, the initial proposed DART Downtown Rowlett LRT Station platform was at-grade and 460 feet in length. Weather protection for patrons would be provided by canopies covering the width of the platform for a minimum of one-third of its length. All platforms as well as Light Rail Vehicles (LRVs) would be fully accessible for elderly and handicapped patrons during all hours of operation. Typical patron amenities at the station would include bench seating, leaning rails, windscreens, trash receptacles, newspaper racks, bike racks, safety signage combined with attractive grade crossing walkways that promote safety through visibility and awareness, and artwork. This station would be accessible by various bus routes with pullout bays near the rail platform. Parking, Kiss-and-Ride drop-off spaces, and handicapped parking would also be provided.

After the initial station location and layout were established, additional public and agency input were utilized to develop three alternatives:

1. DART Downtown Rowlett LRT Station Area Base Option
2. DART Downtown Rowlett LRT Station Area Alternative A
3. DART Downtown Rowlett LRT Station Area Alternative B

The alternatives modified the original conceptual layout to minimize the acquisition of private property and refine the design. The three alternatives for the station site configuration of bus loading, parking, and pedestrian site circulation were presented to City of Rowlett staff for approval and are described below. Each of the alternatives included the following refinements:
• A 130-space parking area extension east of the current DART Rowlett Park & Ride lot, adjacent to and north of the rail alignment
• Elimination of the bus loading drive along the east edge of the DART Rowlett Park & Ride lot, allowing for a new, efficient parking layout
• Adjustments in the curvature of the proposed Martin Drive alignment to promote access to the DART Rowlett Park & Ride and ease traffic flow

The DART Downtown Rowlett LRT Station Area Base Option included the following distinguishing characteristics:

• A bus loading “loop” adjacent to Martin Drive with five loading bays, four within the off-street “loop” and one in a pull-off configuration along Martin Drive. The “loop” would include two driveways with in-and-out bus movements within approximately 150 feet of the Melcer Street/Martin Drive intersection. The “loop” would utilize a segment of Martin Drive to change bus direction. Two bus loading platforms within the center island of the “loop” would require bus passengers to cross vehicle driveways to access the rail platforms, creating opportunities for vehicle/pedestrian conflicts.
• A small parking area for short-term users with a driveway between the rail alignment and the bus “loop”. This small, short-term area would be connected to the larger parking area.
• A second parking access drive from Martin Drive, north of the bus loop and south of Industrial Street at an approximate midpoint. Two additional points of access would remain on Industrial Street. On Martin Drive between Industrial Street and the rail alignment would be a total of four driveways and one pull-in/pull-out bus loading area.
• The area remaining on-site would yield 803 parking spaces for bus, rail and car sharing travelers.

The DART Downtown Rowlett LRT Station Area Alternative A included the following distinguishing characteristics:

• Relocation and reconfiguration of bus loading bays as an arrangement parallel and adjacent to Martin Drive. This configuration would allow buses to enter and leave the site from one driveway on Martin Drive, having turned 180-degrees on-site. This configuration would also allow bus passengers to access the rail platforms without crossing a vehicular driveway, reducing potential for vehicle/pedestrian conflicts and increasing safety. Six loading bays are included in this alternative.
• The area remaining on-site would yield 743 parking spaces for bus, rail and car sharing travelers. Parking access would be provided via Industrial Street only. No parking access would be provided from Martin Drive.

The DART Downtown Rowlett LRT Station Area Alternative B was similar to the base option, with the following distinguishing characteristics:

• Relocation and reconfiguration of bus loading bays as an arrangement roughly parallel to Martin Drive but further east than the base option. This location for the bus
bays would allow for a small, short-term parking area to be located between Martin Drive and the bus bays, with a driveway opposite the Melcer Street intersection with Martin Drive. This small parking area would not have a driveway connection to the larger parking area to the east of the bus bays; it would be separate with its own access point. This bus loading configuration would allow buses to enter and leave the site from one driveway on Martin Drive, having turned 180-degrees on-site. This configuration would also allow bus passengers to access the rail platforms without crossing a vehicular driveway, reducing potential for vehicle/pedestrian conflicts and increasing safety. Five loading bays are included in this alternative.

- Alternative B includes a second parking access drive from Martin Drive, north of the bus bays and south of Industrial Drive at an approximate midpoint. A third point of access would remain on Industrial Road.
- The area remaining on-site would yield 737 parking spaces for bus, rail and car sharing travelers.

The preceding alternatives were presented to City of Rowlett staff that chose their preferred alternative, DART Downtown Rowlett LRT Station Area Alternative B. One of the major factors important to City staff was to limit the access points on Martin Drive. This option was further refined to become the LPA for the DART Downtown Rowlett LRT Station, which is depicted in Figure 1-3.

The following characteristics describe the station layout as it moves forward to final design. This station is designed to accommodate an at-grade center platform that is approximately 460 feet in length. A Crew Room and Traction and Power Substation (TPSS) are included to accommodate the operational needs of a terminal station. The bus transfer facility includes six bus bays. Buses would enter and leave the circular exclusive bus area from one entrance on Martin Drive to minimize traffic impacts to Martin Drive and make this new road more pedestrian friendly. This configuration would also allow bus passengers to access the rail platform without crossing a vehicular driveway, reducing the potential for vehicle/pedestrian conflicts and increasing safety. The DART Downtown Rowlett LRT Station would accommodate approximately 850 parking spaces, 18 of which would be handicapped accessible. Additionally, Kiss-and-Ride spaces would be located adjacent to the handicapped spaces.

1.3.3 Operations and Technology

Operations

The proposed DART Rail to Rowlett project would extend 4.8 miles from the existing DART Downtown Garland LRT Station on the DART LRT Northeast Corridor to the proposed DART Downtown Rowlett LRT Station. The proposed DART Rail to Rowlett would follow the operating characteristics of the existing DART Blue Line LRT with 10-minute headways during peak periods and 15 to 20-minute headways during the off-peak periods on weekdays. Weekday service would operate from 5:00 a.m. to midnight. Weekend service would operate from 6:00 a.m. to midnight at 20 to 30-minute headways.
Figure 1-3
DART Downtown Rowlett LRT Station Layout
DART Rail to Rowlett LEA
The trains within the proposed DART Rail to Rowlett corridor would operate at speeds that meet DART safety standards. Two-car LRT trains would have a maximum operating speed of 65 mph. The proposed DART Rail to Rowlett is designed to operate at a minimum of 50 mph. Station dwell times would generally be 20 seconds for each station stop. As an extension of the DART LRT Northeast Corridor, proposed DART Rail to Rowlett operations would work in conjunction with the existing LRT system. Trains would operate on double track, continuously-welded steel rails and primarily operate with two vehicles to meet DART passenger load standards. DART is implementing a Fleet Management Plan that would move the standard LRV cars to Super Light Rail Vehicles (SLRVs). In conjunction with this plan, it is anticipated that the proposed DART Rail to Rowlett project would require two additional trains, consisting of two SLRVs, to maintain the existing DART Blue Line LRT schedule.

Maintenance and Inspection (NWROF Facility)

According to the DART Fleet Management Plan, the new Northwest Rail Operations Facility (NWROF) will be constructed. The cost of the maintenance of the additional cars needed for the proposed DART Rail to Rowlett is included in the overall cost of this project.

Technology

The transit technology for the proposed project would be the same as that for the existing DART LRT System. LRT lines would be electrically powered from overhead wires using steel wheels on steel rails and LRVs would be identical to the models used on the DART LRT System. The vehicles would be electrically powered using a Direct Current power source of 750 volts. The vehicles would collect primary electrical power via a pantograph from an overhead contact system that distributes the power from wayside traction power substations. Overhead power lines would run along the south side of Melcer Drive to the site and power supply would run underground. Power would be supplied by the Texas Utilities Electric Company and coordinated with Garland Power & Light (GP&L). Transformers would be screened or placed in an underground vault. The vehicles would be primarily controlled by the LRV operator with guidance from a wayside signal system, grade crossing protection, and operating rules. The track layout would incorporate special trackwork (switches) to permit service under track outage conditions and facilitate LRT operating movements to reverse train direction. Special trackwork would be located where trains would most conveniently switch from one track to the other based on LRT operating requirements.

1.3.4 Service Improvements

The proposed DART Rail to Rowlett would interline with the existing DART LRT Northeast Line that was extended to Garland in 2002. This would allow passengers to have a direct connection to the Ledbetter Station in South Oak Cliff. Also, there would be the potential to transfer to other LRT lines between the Mockingbird and 8th & Corinth Stations.

The DART 2030 Transit System Plan, adopted in October 2006, provides guidelines for future expansion of rail corridors within the DART Service Area. The document details DART’s current status, provides guidance for the future, and methods to achieve their objectives. As a part of this plan, the proposed DART Rail to Rowlett is scheduled to be implemented in December.
2012. Also included in this plan are other improvements to the DART LRT System. By 2010, the DART LRT Northwest Corridor to Carrollton and the DART LRT Southeast Corridor to Pleasant Grove are programmed to be constructed, which would add an additional 27.7 miles of LRT service. The DART LRT Northwest Corridor, an additional 9.2 miles to Irving, is planned to be constructed by 2012 and extended to DFW Airport by the end of 2013, which would add 4.8 miles to the DART LRT System. In summary, by the time the proposed DART Rail to Rowlett would be open to revenue service, the DART LRT system would encompass approximately 90 miles.

According to the North Texas Tollway Authority (NTTA), there are plans to extend the PGBT/SH 190 from SH 78 to IH 30. This extension would bring toll road access to the corridor. This tollway extension project received environmental clearance in 2005 and final design and ROW acquisition are underway. Construction is expected to begin in 2008 and open to traffic in 2011, approximately one year prior to the implementation of the proposed project.

Feeder Bus Service Concept

The proposed bus route network for the proposed DART Rail to Rowlett would be based on the 2010 No-Build/Congestion Management System (CMS) Alternative service plan, with appropriate modifications to reflect the addition of LRT service. These modifications are based on the guidelines from the DART Bus/Rail Interface Plan. Based on the guidelines presented, the existing service would be evaluated and competing routes would be proposed for elimination or reduction.

1.3.5 Construction Scenario

Construction of the proposed DART Rail to Rowlett would be conducted within a general, eleven-phase process (Table 1-2). The construction would last two years with a proposed opening date of December 2012. Construction activities would be kept within DART-owned ROW to the greatest extent possible. Temporary construction easements, as well as, permanent drainage easements would be acquired as a part of this process. However, exact acreage would be determined during final design. Reducing potential impacts to sensitive land uses would be a priority during construction of this extension.

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<th>Description</th>
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<td>Temporary Construction Easement Acquisition</td>
<td>Temporary construction easements would be identified and acquired based on DART’s real estate acquisition policies</td>
</tr>
<tr>
<td>2</td>
<td>Traffic Preparation</td>
<td>Traffic detour plans would be developed with appropriate agencies, including provisions for traffic, bus service, pedestrian and bicycle activity while delineating a construction area</td>
</tr>
<tr>
<td>3</td>
<td>Clearing and Grubbing</td>
<td>Site preparation and vegetation removal for construction would be sensitive to existing vegetation by leaving as much in place as possible</td>
</tr>
</tbody>
</table>
1.4 Other Alternatives Considered

Only the Build and No-Build Alternatives were analyzed for the proposed project. The No-Build Alternative includes no new major transportation facility or service improvements between the cities of Garland and Rowlett, other than those required to ensure that transit services maintain pace with expected population and employment growth. Only improvements contained in the Mobility 2025—Metropolitan Transportation Plan, Amended April 2005, prepared and adopted by NCTCOG, and the DART 2030 Transit System Plan, adopted in October 2006, would be implemented.

1.5 Historical Use of MKT Railroad Corridor

The existing railroad was constructed through the cities of Garland and Rowlett in 1886 as part of an approximate 52-mile route by the Dallas & Greenville Railway Company (D&G). The D&G was chartered on February 15, 1886 to build the railroad and a telegraph line from Greenville to Dallas, Texas. The 52 miles of track connecting Dallas and Greenville were completed by December 2, 1886. On that date the line was sold to the MKT Railway Company of Texas; however, the deed was not transferred to the MKT Railway Company of Texas until November 18, 1891. The MKT Railway Company did not become officially incorporated in Texas until...
1891; until then, it operated in the state under its own name or through various subsidiary companies.

The MKT Railroad was used for intermodal traffic and carried general freight including food and farm products, rock aggregate, and hazardous waste material. In 1895 the MKT Railroad reported passenger earnings of $1,200,000, freight earnings of $3,000,000, and owned 133 locomotives and 163 cars. In 1931 it reported passenger earnings of $1,722,000, freight earnings of $8,085,000, other earnings of $1,542,000, and owned 82 locomotives and 1,000 cars. Though the rail intermittently experienced financial difficulties, it contributed to the general well-being of its service area by supplying economical and reliable freight and passenger service. Wheat was transported regularly on MKT lines from Oklahoma to Fort Worth, Houston, and Galveston, and oil rolled out of on-line patches in train-load lots.

At least eight daily passenger trains operated on the MKT Railroad until additional passenger trains were added for military use during World War II. Up to 12 freight trains operated daily on the MKT Railroad with typical speed limits of 45 mph for freight trains and up to 75 mph for passenger trains. In 1964, four passenger trains remained in operation between Dallas and Kansas City. This service was discontinued in August 1965, leaving two to three freight trains per day in operation after 1964.

The MKT Railroad holdings merged with Union Pacific (UP) in 1987 and UP continued leasing rights to the DGNO Railroad. Between 1996 and 1999 DART purchased the MKT Railroad ROW from downtown Garland to downtown Rowlett. DART agreed to continue leasing freight operating rights to the DGNO Railroad for this 4.8-mile segment of the ROW.

The use of this railroad for freight traffic is important to consider in this LEA, particularly in conjunction with the corridor’s proposed use of LRT operations. LRT vehicles would be more frequent than freight trains, and the project would introduce new physical elements to the existing corridor. These include a new double LRT track adjacent to the existing freight track, as well as new bridges over railroads, public roadways, and wetlands. However, the proposed LRT use of the ROW is consistent with the historical use of the corridor for transportation purposes.

1.6 Planning History and Process

1.6.1 Rowlett LRT Planning Efforts

The DART LRT Northeast Corridor was initially identified in the 1983 DART Final Service Plan as a potential candidate for a rail investment. In 1995, the Northeast Corridor MIS analyzed the transportation issues within the corridor and evaluated a No-Build Alternative, a Transportation System Management Alternative, a Light Rail Alternative, and a Commuter Rail Alternative. As a result, Intermediate Capacity LRT that provides a capacity of up to 30,000 passengers per hour per direction to Garland, with future service to Rowlett, was chosen as the LPA. An extension of the DART LRT Northeast Corridor to Rowlett was identified as a Phase II project. In addition, the proposed DART Rail to Rowlett was included as a project in the 1995 update of the DART Transit System Plan, and future rail system from the latest DART 2030 Transit System Plan, adopted in October 2006 (Figure 1-1) The 1998 Northeast Corridor LEA addressed the concerns of the fully developed LRT alternative. However, while the LPA
1.6.2 Public and Agency Involvement

DART conducted a public and agency involvement program throughout the planning process for the DART Rail to Rowlett LEA. This program included public and agency involvement for the evaluation of alternatives associated with the two DART stations associated with this project: the DART Downtown Garland LRT Station and proposed DART Downtown Rowlett LRT Station.

Throughout the planning process, numerous opportunities were provided to the general public, residents of the corridor and affected agencies to become active in the process. A series of four public meetings were held over the course of the study to involve the community in project design, EA alternatives, and station area planning. Two CWG meetings were held to receive input from community and business leaders. Three TWG meetings were held to inform and collect data from affected agencies, city staff and utility company representatives. In addition to these meetings, three newsletters were distributed to the surrounding community and landowners to keep the public apprised of the study progress.

DART has documented comments and suggestions from the general public, CWG, and TWG (Appendix A). This information was used as the basis for the definition of project alternatives, station location planning, and the DART Rail to Rowlett LEA.

A detailed summary and list of agency and public coordination efforts included in the planning process are presented in Chapter 4.0, Coordination and Consultation.