



other than those already planned as part of the construction of the station (such as turn lanes along Valley View Lane).

4.2.4 Pedestrian Safety

The LRT Alternative would improve safety in the corridor primarily by enhancing pedestrian access. As described above, pedestrian safety to and from the LRT stations and park-and-ride lots would be enhanced by improving markings at existing signalized crosswalks at major intersections, pedestrian bridges at stations with parking facilities located across major roadways, and sidewalks and other pedestrian facilities connecting park-and-ride lots and bus bays to the station platforms. DART will add or improve pedestrian facilities to meet the requirements stated in the ***DART Build-Out Phase 2 Design Criteria, Volume 1, Revision 3***, 1996. In accordance with DART policy, fencing will be provided along the right-of-way where the operating speed of the LRT would exceed 45 mph or where special safety considerations are present. Locations of fencing and other safety and security elements are discussed in Section 5.13, Safety and Security.

4.2.5 Station Area Mitigation

Roadway impacts due to new traffic generated at LRT stations are anticipated to be minor and localized. These impacts will be mitigated using standard traffic engineering strategies. These mitigation measures, which will be coordinated with the City of Irving, will be refined throughout the final design stage of project development. Specific mitigation for roadway impacts at each station is described below.

University of Dallas Station: Through coordination with TxDOT and the City of Irving, DART will continue to integrate the design of the University of Dallas Station with the design and reconstruction of SH 114.

Lake Carolyn Station: DART will coordinate the safe location of on-street bus bays along Lake Carolyn Parkway with the City of Irving.

North Las Colinas Station: DART will work with the City of Irving, TxDOT and adjacent property owners to integrate the at-grade station within the future development and street network.

Carpenter Ranch Station: DART will work with the City of Irving to ensure a safe design of the rail line as it crosses Green Park Drive near its intersection with Meadow Creek Drive.

North Lake College Station: DART will provide a pedestrian link between the station and the Mandalay Place Community and North Lake College. DART will work with the City of Irving in realigning Brangus Drive and creating the new roadway that feeds the station from both Mac Arthur Boulevard and Walnut Hill Lane.

Belt Line Station: The station design will accommodate a future grade separation over Belt Line Road.

4.3 IMPACTS ON MOVEMENT OF FREIGHT

Freight is transported into, out of, and within the corridor by truck and rail. Contrary to the LRT Line to Farmers Branch and Carrollton, the LRT Line to Irving/DFW would not share the right-of-way of a freight rail line. Therefore, the LRT Alternative will not have a significant impact on the movement of freight by rail.

4.3.1 Freight Railroads

The LRT Alternative does not operate within an existing railroad right-of-way and so will not have an impact on freight railroad operations. Freight service will continue in the same manner as before and the LRT Alternative will be grade separated from the freight tracks where they cross.



4.3.2 Trucking and Deliveries

Trucking and delivery movements through the corridor would experience both positive and negative impacts from the construction of the LRT Alternative. The LRT Alternative is also anticipated to help reduce automobile traffic on several major roadways within the corridor, which should benefit truck and delivery traffic. However, some trucking companies and delivery customers that are based within the corridor would be affected by the closure of some local streets and private driveways when the LRT is implemented. **Table 4-9** summarized those streets that would be closed.

Specifically, some companies would lose some of their direct access to a location through the closure of a local street or a driveway. In most cases this simply means that trucks would have to take an alternate route to reach that location. Overall, the largest impact to trucking and deliveries in the area would be some small added travel time required when certain access points across the tracks are eliminated. All trucking companies (or delivery customers) will continue to have access to all locations with the construction of the LRT Alternative.

4.3.3 Freight Movement Mitigation

The LRT crossing of the BNSF railroad will be grade separated. No other specific mitigation will be required.

4.4 IMPACTS ON NON-MOTORIZED CIRCULATION

Non-motorized circulation includes pedestrian and bicycle facilities. Pedestrian facilities typically include sidewalks adjacent to area streets, pedestrian crossings, pedestrian signals, and off-street pedestrian trails. Bicycle facilities consist of signed and unsigned bicycle routes on certain streets as well as off-street bicycle routes. The implementation of LRT would have both positive and negative impacts on these methods of non-motorized circulation. The bicycle routes and trail system in the project corridor are shown in **Figure 4-5**.

4.4.1 Pedestrian Movements

Pedestrian circulation facilities in the study area are essentially provided as part of the roadway facility cross-section. While this typically includes sidewalks, pedestrian crossings, and pedestrian signals, there are large sections along the alignment of the LRT Alternative where these pedestrian facilities are not currently provided, especially along highways and frontage roads. There are some existing off-road trails in the project corridor, with plans to interconnect them with future trails. None of these trails cross the alignment.

Pedestrian access is a priority in design of DART LRT stations. Stations should be accessible by buses, automobiles and pedestrians alike. Section 4.2.3 describes the access, including pedestrian access, for each proposed station.

4.4.2 Bicycles

As described in Chapter 3, Existing Conditions, the City of Dallas has developed a plan for bicycle circulation facilities which encompasses all three corridor cities. The City of Dallas developed the **Greater Dallas Bike Plan** map in 1992, and updated it most recently in 2004. The plan shows two unsigned on-street bike routes that extend from Dallas into Irving. None of these routes cross the alignment.

The LRT Alternative would have positive impacts for bicycle circulation as stations will provide bicycle racks and long-term bicycle storage lockers. In addition, cyclists may bring their bicycles onto DART trains at any time of the day (as long as there is room) and all DART buses will have bicycle racks installed by mid 2008.