



COTTON BELT

Cotton Belt Corridor Regional Rail

Land Use Impact Assessment Technical Memorandum

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1.0 INTRODUCTION

This memo contains the impacts to existing land use conditions as a result of the Cotton Belt Corridor Project. A combination of the 2005 NCTCOG land use GIS shapefile, recent aerial photography, and desktop research formed the inventory of existing land uses on which this impact assessment is based. This assessment is preliminary and will be updated as necessary once the right-of-way requirements for the proposed project have been determined. The methodology for the land use impact assessment is described in Section 2.0.

2.0 IMPACT ASSESSMENT METHODOLOGY

The impact and mitigation assessment methodology consists of a three-step process:

- 1) Identify the characteristics of the study area:
 - Existing land use and zoning of both the proposed project right-of-way and the surrounding area (quarter-mile buffer around the alignment, plus half-mile buffer around stations)
 - Current development plans in the study area, as well as the community-at-large
 - Goals, objectives, policies, and plans for action contained in municipal or neighborhood comprehensive land use, economic development, and community service improvement plans
 - Locations of non-conforming uses
 - Level of high density development allowed under the existing zoning and whether the community desires it
 - The amount of land to be converted for transit use

- 2) Use the data collected for the study area and evaluate impacts in terms of the following:
 - Whether an acceptable degree of support for the transit project exists from the local community and municipal planning agencies;
 - Whether pedestrian, bicycle, and motor vehicle activity generated by the transit facility would be substantially greater than such activity on surrounding land uses under existing conditions and with future development planned for the area;
 - Whether the project would reinforce the objectives of local land use, economic development, and community service improvement plans;
 - Whether development would be encouraged, development patterns changed, or densities increased in a manner that would be inconsistent with the character of the existing community or its future development plans;
 - Whether the project would require zoning changes for implementation;
 - Whether the project would require the conversion of substantial parcels of land, thus resulting in considerable changes to existing or planned land uses;
 - Whether a substantial reduction or increase of the local tax base would occur;
 - Whether the project would induce development and, if so, it should be determined if the secondary impacts on the community would be beneficial or adverse;

- Whether substantial adverse impacts are anticipated during construction. Impacts of the following should be considered: restricted access to businesses and residences; temporary closure of pedestrian or bicycle passageways; temporary disruptions of utility services; and locations of staging sites and haul routes in sensitive areas. Short-term impacts on air quality, traffic flow and circulation patterns, as well as from noise and vibration due to construction activity, should also be considered and are addressed in greater detail in the specific sections of this document.
- 3) Development of alternative mitigation strategies for those cases where mitigation may need to be considered. Coordination with municipal planning agencies and community representatives is key in the identification, comparison, and selection of appropriate mitigation.

3.0 IMPACT ASSESSMENT

3.1 Long-Term Effects

The majority of the proposed Cotton Belt Project would follow the existing Cotton Belt Corridor. Therefore, there would not be a need to permanently impact the land use of most of the project area. Since most development along the corridor occurred after the existing rail alignment within the Cotton Belt Corridor was constructed. Several industrial and warehouse areas were developed along the corridor to have direct access to the rail for the transportation of goods. This history is apparent in the many rail spurs that come off the main line to connect nearby businesses to the rail and in the many existing industrial/warehouse uses adjacent to Cotton Belt Corridor.

There are three elements related to the implementation of the proposed project that could trigger an impact to land use: alignment alternatives, station areas, and profile alternatives.

Three alternative alignment segments that would deviate from the existing Cotton Belt Corridor are proposed: two in Coppell and one in Richardson. These alternatives would require the acquisition of property with commercial, retail, office, and light industrial land uses. Both cities are in support of these alternatives, however, so a conversion of land use for the proposed project would not be viewed as an adverse impact by the cities.

Station areas are proposed throughout the Cotton Belt Corridor. In most cases, there is not adequate acreage of vacant property to construct the proposed stations within the Cotton Belt Corridor using vacant property alone. Acquisition of property currently utilized for other uses would be required to construct the new stations. Although some change in land use could occur, most cities have established transit-supportive zoning and land use policies in proposed station areas of the Cotton Belt Project. Any such changes in land use would not be viewed by the cities as an adverse impact.

Profile options to the Base Alternative are proposed in the North Dallas area, and these are known as the Trench and Tunnel Profile Options. Under the Trench Profile Option, roadway crossings would be reconstructed as overpasses to cross the rail trench. The overpasses would require additional right-of-way, which would impact residential land uses. The Tunnel Profile

Option could require additional right-of-way at the portals on either end of the tunnel, which could impact office, park, and/or transportation land uses.

3.1.1 Base Alternative

Alignment: The Cotton Belt Project would not significantly impact existing land uses along the Base Alternative.

DFW North Station and Alignment: The proposed station would be located on currently vacant property. The TEX Rail Regional Rail Station and alignment is assumed to be in place prior to the Cotton Belt. DART would share the alignment station and access with the TEX Rail project. Therefore the proposed project would not impact the transportation land use that would exist at the time of implementation.

Downtown Carrollton Station: The proposed station would impact approximately six acres of vacant land to construct a new station and two parking facilities. Adding a new station to the existing station could result in the existing residential, commercial, and industrial land uses being rezoned to accommodate increased levels of transit activity.

Addison Station: The proposed station would not impact the existing land use due to the proposed modifications being constructed adjacent to the existing transit center along the alignment.

Knoll Trail Station: The proposed station would impact the existing land uses because the platforms would only be added to the alignment within the Cotton Belt Corridor right-of-way. The existing office and retail land uses could be indirectly impacted by the increased activity, resulting in the land uses becoming more transit-oriented over time.

Preston Road Station: The station project would not impact the existing land uses due to only adding platforms within the Cotton Belt Corridor right-of-way.

Renner Village Station (Dickerson St. Option): The proposed station would impact the existing office land use at Dickerson Street due to the proposed station infrastructure and parking lot. Land that is now occupied by a large radio tower, a large metal barn, and fenced areas storing trailers, trucks, and scrap would also be impacted. This land, which is immediately east of the office use, is identified in the NCTCOG land use file as vacant.

Renner Village Station (Coit Rd. Option): The proposed station would impact Adventure Landing, the existing commercial land use at Coit Road. The entire theme park would be removed to construct the station infrastructure and parking lot.

UTD/Synergy Park Station: The proposed station would impact vacant land use for the station infrastructure and parking lot. The parking lot would be just east of existing office land use, but would not likely impact the office building or parking lot.

12th Street Station: The proposed station would impact existing retail, industrial, and vacant land uses in order to construct the 12th Street Station.

Shiloh Road Station: The proposed station would impact an existing vacant land use that is surrounded by industrial land uses. The vacant land use would be converted into a parking lot. An industrial land use that contains an Oncor Electric substation separates the station platforms from the parking lot. Over time, the existing industrial land uses could be rezoned to facilitate transit-oriented development.

3.1.2 Cypress Waters Alternatives

Cypress Waters Southwestern Boulevard Alternative

Alignment: The Cotton Belt Project would impact existing land uses. Approximately 150 feet east of Coppell Road, the alignment would run southeast to Southwestern Boulevard cutting through mostly commercial and vacant land uses. A small area of single-family residential land uses may also be impacted from the alignment in this area. The remaining portion of the alignment would cut through utilities land use, similar to the station area.

North Lake Station: The proposed station for either Cypress Waters Alternative would be located on land that is identified in the NCTCOG land use file as Utilities; however, the Cypress Waters mixed-use development is currently under construction. Across Belt Line Road from the future station is a 38-acre vacant land use that has since been developed into a warehouse facility.

Cypress Waters South Alternative

Alignment: The proposed project would impact existing land uses. Approximately 150 feet east of Coppell Road, the alignment would run southeast to Southwestern Boulevard cutting through mostly commercial and vacant land uses. A small area of single-family residential land uses may also be impacted from the alignment in this area. As this alternative runs south of Southwestern Boulevard and south of the Southwestern Boulevard Alternative, a piece of vacant land use would be impacted. The remaining portion of the alignment would impact utilities land use, similar to the station area.

North Lake Station: The proposed North Lake Station area would be the same as described in the Southwestern Boulevard Alternative, therefore, potential impacts would also be the same.

3.1.3 North Dallas Profile Options

At-Grade Profile Option (Section 3-2A)

The At-Grade Profile Option is included in the Base Alternative; therefore, all station areas and alignment impacts would be the same as those described in the Base Alternative.

Trench Profile Option (Section 3-2B)

Alignment: With the Trench Profile Option, roadway crossings would be reconstructed as overpasses to cross the rail trench. The overpasses would require additional right-of-way, which would primarily impact residential land uses but could also impact flood control land uses.

Stations: All station area impacts would be the same as described in the Base Alternative.

Tunnel Profile Option (Section 3-2C)

Alignment: The Tunnel Profile could require additional right-of-way at the portals on either end of the tunnel, which could impact office, parkland, and/or transportation land uses.

Stations: All station area impacts would be the same as described in the Base Alternative.

3.1.4 Red Line Interface Alternatives

North Alternative (Section 3-4A)

The Red Line Interface North Alternative is included in the Base Alternative, therefore, all station area and alignment impacts would be the same as those described in the Base Alternative.

South Alternative with Aerial Station and Depressed Freight (Section 3-4B)

Alignment – The Red Line Interface South Alternative would largely impact vacant land use. However, in order to connect to the existing Bush Turnpike Station, the alignment would deviate from the existing Cotton Belt alignment and impact existing vacant, park/trail, and utilities land uses. Although the multi-family residential land use is shown on **Figure 4-2B** to extend east of the nearby apartment complex, there is no development outside the existing complex.

Bush Turnpike Station – The proposed station with the Red Line Interface South Alternative would impact existing vacant land use by adding two new platforms immediately west of the existing DART Red Line Bush Turnpike Station platforms.

12th Street Station – The proposed station with the Red Line Interface South Alternative would impact existing commercial retail, industrial, and vacant land uses. The impacts would be due to the construction of parking lots for the station. The aerial station option may impact existing infrastructure transportation land use, in order to fit the station platforms.

3.2 Short-Term Construction Effects

Short-term construction effects were not analyzed and would need to be investigated upon further project progression.

4.0 MITIGATION OPTIONS

The specific type of mitigation that could be applied is dependent on the characteristics of the particular neighborhood or community that is affected by the transit project. A wide range of mitigation strategies are available. A few examples are provided as follows:

- Link stations with redevelopment sites
- Route any additional vehicular, pedestrian, and/or bicycle traffic generated by the project away from the local neighborhoods
- Build pedestrian overpasses or underpasses at high-volume pedestrian and vehicular traffic locations
- Provide fencing as needed to keep passengers and others away from potentially dangerous areas such as LRT track
- Place construction staging areas and haul routes away from sensitive land uses such as neighborhoods, schools, or churches to the extent possible. When this is not possible, submit plans for the staging areas as well as construction schedules for review by DART representatives. Store only necessary materials or equipment at the construction site. Restore staging areas to their original condition as soon as possible once the construction is completed
- Notify businesses and residences in advance of short-term utility disruptions in service due to transit construction activity
- Initiate policies at the city level to encourage a mixture of land uses to coexist with one another and complement each other.
- Provide opportunities for stakeholders to discuss concerns about land use and explore potential solutions.



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