Executive Summary

At the direction of the Fort Worth City Council, and under the guidance of a Mayor-appointed advisory committee made up of a broad range of stakeholders, City staff prepared the following master plan for the Texas Motor Speedway (TMS) area. In accordance with Council direction, the master plan provides the following desired results:

- Assessment of the speedway's economic and environmental impacts on the surrounding area and the broader region.
- Recommendations for compatible land uses within the speedway's noise and traffic impact area.
- Recommendations for appropriate infrastructure improvements to support policies and strategies in the adopted Comprehensive Plan.

Background

The economic impact of the Texas Motor Speedway on the metropolitan region is considerable, with the annual economic benefit generated being comparable to hosting the Super Bowl every year. Due to TMS, the five largest single-day sporting events in the state of Texas are held in Fort Worth each year.

TMS currently hosts three nationally sanctioned race weekends and numerous smaller events throughout the year. The grounds include 660 acres of parking for up to 80,000 vehicles and 6,800 camp sites, providing amenities for up to 40,000 campers on NASCAR Sprint Cup Series race weekends. With up to 200,000 spectators in attendance at one time, no other Metroplex sports or entertainment venue can generate the traffic or noise of a Sprint Cup Series race at TMS. Due to the unique activities at TMS, special attention to compatibility is essential near the racetrack.

When racing began in 1997, most of the land surrounding the facility was rural or undeveloped. In recent years, however, the City of Fort Worth has experienced rapid growth in the Far North Planning Sector and development interest has increased significantly around TMS. This rapid growth around TMS is expected to continue, in part due to its central location between three major Metroplex growth centers: the City of Fort Worth to the south, the City of Denton to the north and Dallas-Fort Worth International Airport to the southeast. As development pressure increases in the TMS area, it will be critical to promote the continued economic success of the racetrack, as well as future development opportunities on nearby properties. The large amount of traffic and noise generated by TMS during race events is expected to result in compatibility issues with new development without effective land use and transportation

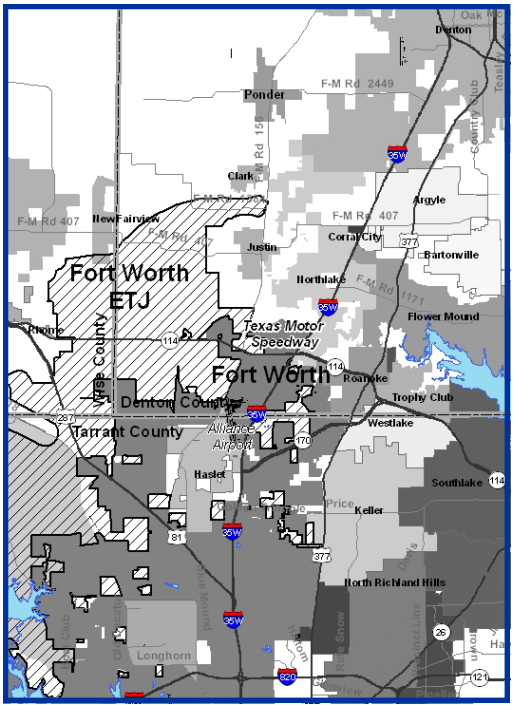

Figure ES-1 The TMS plan study area includes 15 different jurisdictions.

planning.

The Texas Motor Speedway Area Master Plan addresses the complex and potentially competing needs of stakeholders throughout the TMS area. The plan reviews development opportunities and plans, identifies potential compatibility concerns, and describes transportation facility needs and plans to serve the area. The plan acknowledges the multiplicity of planning efforts by the many jurisdictions within the TMS plan study area, and melds elements of these plans into a more understandable long-range view of the TMS study area. Finally, based on stakeholders' desires to more sustainably accommodate the strong growth projected for the area, the plan introduces alternative — and potentially more sustainable — development patterns for the subregion within which TMS is located.

Planning Process

City staff prepared this plan under the direction of the Texas Motor Speedway Advisory Committee. This Mayor-appointed committee, chaired by Mac Churchill of the I-35W Coalition, met four times between May 2007 and March 2009.

Figure ES-2 Map of comparable NASCAR tracks.

The planning process began with City staff identifying the most pertinent goals, policies, and strategies of the 2008 City of Fort Worth Comprehensive Plan. Staff then conducted a study of six comparable NASCAR tracks to provide contextual information on how other communities handle transportation, economic and land use compatibility issues associated with a race facility such as TMS.

With guidance from the Texas Motor Speedway Advisory Committee, City staff analyzed existing conditions, trends, and established plans within a six-mile radius of the speedway, and outlined recommendations concerning economic development, land use, transportation, water and sewer infrastructure, environmental impacts and regional cooperation.

Economic Impact

The continued success of TMS is vital to the local economy. Working with the Fort Worth Housing and Economic Development Department, the Planning and Development Department analyzed existing economic impact reports and reviewed the existing TMS tax increment finance district (TIF District #2).

Selected Recommendations

- Consider a joint planning effort between Fort Worth,

Northlake, and other adjacent communities to capitalize on and promote the TMS area as a sports entertainment district.

- Support an economic analysis of the entire TMS study area, which would assist in future land use, transportation, and economic development decisions.
- Support commercial development in the southwest quadrant of the I-35W and SH 114 interchange.
- Continue to encourage appropriate uses and development forms to locate within the adjacent Alliance Industrial Growth Center.

Figure ES-3 Kansas City, KS has established a sports entertainment district surrounding Kansas Speedway. The Legends at Village West Lifestyle Center (pictured) is one of many destinations adjacent to the race track.

Land Use

City staff identified and analyzed the existing and planned future land uses in the TMS study area. As a starting point, staff analyzed each of the individual communities' comprehensive plans and future land use maps affecting a six-mile radius TMS study area. This information was then aggregated at a sub-regional scale into a standardized, color-coded future land use map for the entire study area (Figure ES-4). Opportunities exist to enhance the compatibility of the existing land uses in the TMS study area by identifying and encouraging appropriate land uses for currently vacant or under-utilized land.

Because of their importance to the economic vitality of the region, the special characteristics and needs of TMS, Alliance Airport and the BNSF Intermodal Facility should be considered in the process of determining appropriate land uses for nearby

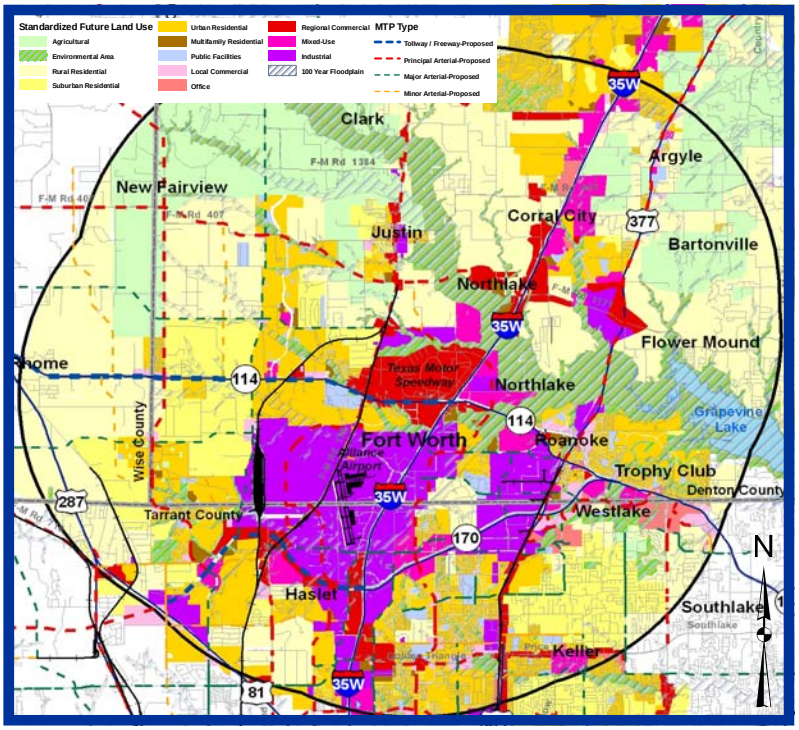

Figure ES-4 TMS Area Standardized Future Land Use

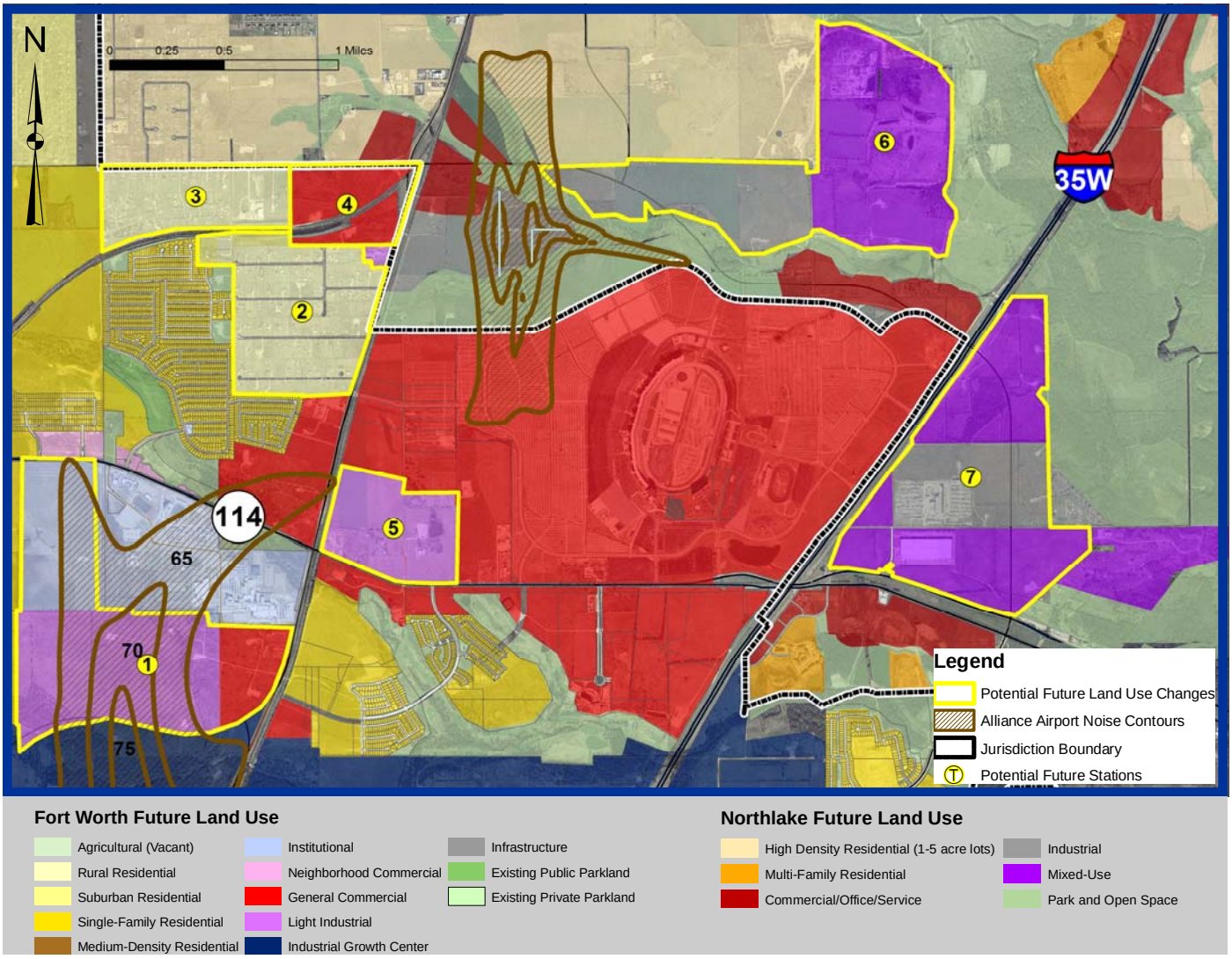

Figure ES-5 Recommended amendments to the City of Fort Worth Future Land Use map.

Area	City	Future Land Use	Current Zoning	Potential Changes
1	Fort Worth	Single Family	ETJ	Light Industrial, General Commercial, Institutional
2	Fort Worth	Suburban Residential	ETJ	Rural Residential
3	Fort Worth	Suburban Residential	ETJ	Rural Residential
4	Fort Worth	Suburban Residential	ETJ	General Commercial
5	Fort Worth	General Commercial	ETJ	Light Industrial
6	Northlake	Mixed Use/Industrial	Rural Residential, ETJ	Restrict Residential
7	Northlake	Mixed Use/Industrial	Commercial, Industrial, ETJ	Restrict Residential

Table ES-1 Recommended amendments to the City of Fort Worth Future Land Use map.

undeveloped properties. Land use plans within the larger TMS study area should be based, at least in part, on the capacity of the transportation infrastructure to support the planned uses. Future development projects located adjacent to major transportation facilities in the area, such as SH-114 and FM 156, will necessarily rely on these facilities for access, but such projects should be designed to minimize their impacts on traffic congestion in the study area.

Selected Recommendations

- Discourage future residential development within one mile of TMS.
- Discourage future residential development within the 65 decibel DNL contour of Alliance Airport, including the Bell Helicopter facility adjacent to TMS.
- Amend the Fort Worth Future Land Use map as indicated in Table ES-1 and depicted in Figure ES-5.
- Support annexation of land within one mile of TMS for the purpose of establishing zoning that protects existing rural residential uses, while restricting new residential subdivisions and facilitating appropriate non-residential uses.
- Support annexation of land within the 65 decibel DNL contours of Alliance Airport and the Bell Helicopter facility for the purpose of establishing zoning that protects existing rural residential uses, while restricting new residential subdivisions and facilitating appropriate non-residential uses.
- Support commercial and industrial development in Northlake at appropriate locations to act as a buffer between TMS and residential uses.
- Developments adjacent to I-35W, SH 114, and FM 156 should include multiple points of access onto an existing or anticipated local street to improve connectivity, emergency vehicle access, and the opportunity to use secondary routes during race weekends.

Transportation

The City of Fort Worth Transportation and Public Works Department retained Kimley-Horn and Associates, Inc., to develop the transportation component of the plan. A primary task included analyzing year 2015 and 2030 transportation demand, based on forecast modeling work completed by the North Central Texas Council of Governments. Because the existing regionally approved population and employment projections were outdated at the time of this analysis, the City of Fort Worth Planning and Development staff provided an alternative set of 2015 and 2030 study area population and employment projections for this modeling. The purpose of the transportation analysis was to

determine if the proposed transportation system would be adequate to serve the area's projected population and employment growth, including the additional growth projected by City staff. The full transportation plan and the alternative population and employment projection methodology can be found as Appendices A and B of this report.

Selected Transportation Findings and Recommendations

- Under existing conditions, multiple roadways within the study area are operating at or above their capacity. SH 114 adjacent to the TMS and US 377 from FM 1171 to SH 114 are both over capacity. FM 156 from FM 407 to SH 114, and FM 1171 east of I-35W also appear to be quickly approaching capacity.
- The daily traffic volumes on SH 114 adjacent to the TMS are projected to almost double between 2007 and 2015 (22,000 in 2007 and a projected 37,200 in 2015).
- FM 156 and US 377 are projected to be deficient in their current two-lane configurations in all 2015 model runs.
- Traffic along the SH 114 frontage roads between I-35W and US 377 begins to experience an unacceptable level of service in 2015.
- The primary means for regional travel and connectivity is and will likely continue to be via the study area's TxDOT facilities. Nearly all of the existing and proposed City arterial facilities will serve local development and will likely only be constructed with adjacent development projects.
- Based on 2030 model runs, build out of the planned roadway network is projected to adequately support the future land use plan within the transportation study area.
- In order to construct the proposed 2030 roadway network, the total cost of these improvements (excluding I-35W and SH 114) is approximately $297 million (in 2008 dollars). Approximately half of these improvements are located along TxDOT facilities.
- Recommended prioritization of roadway improvements in the TMS transportation study area are depicted in Figure ES-6.
- Three special event commuter rail options have been developed to serve TMS in the future. ROW preservation should begin for these alignments, considering the rapid pace of development in the area.
- The three proposed rail alignments for the commuter rail spur should be identified in the comprehensive plans of the respective involved municipalities.
- The special event commuter rail line should be established with the intent of providing a future daily commuter rail line from the TMS.

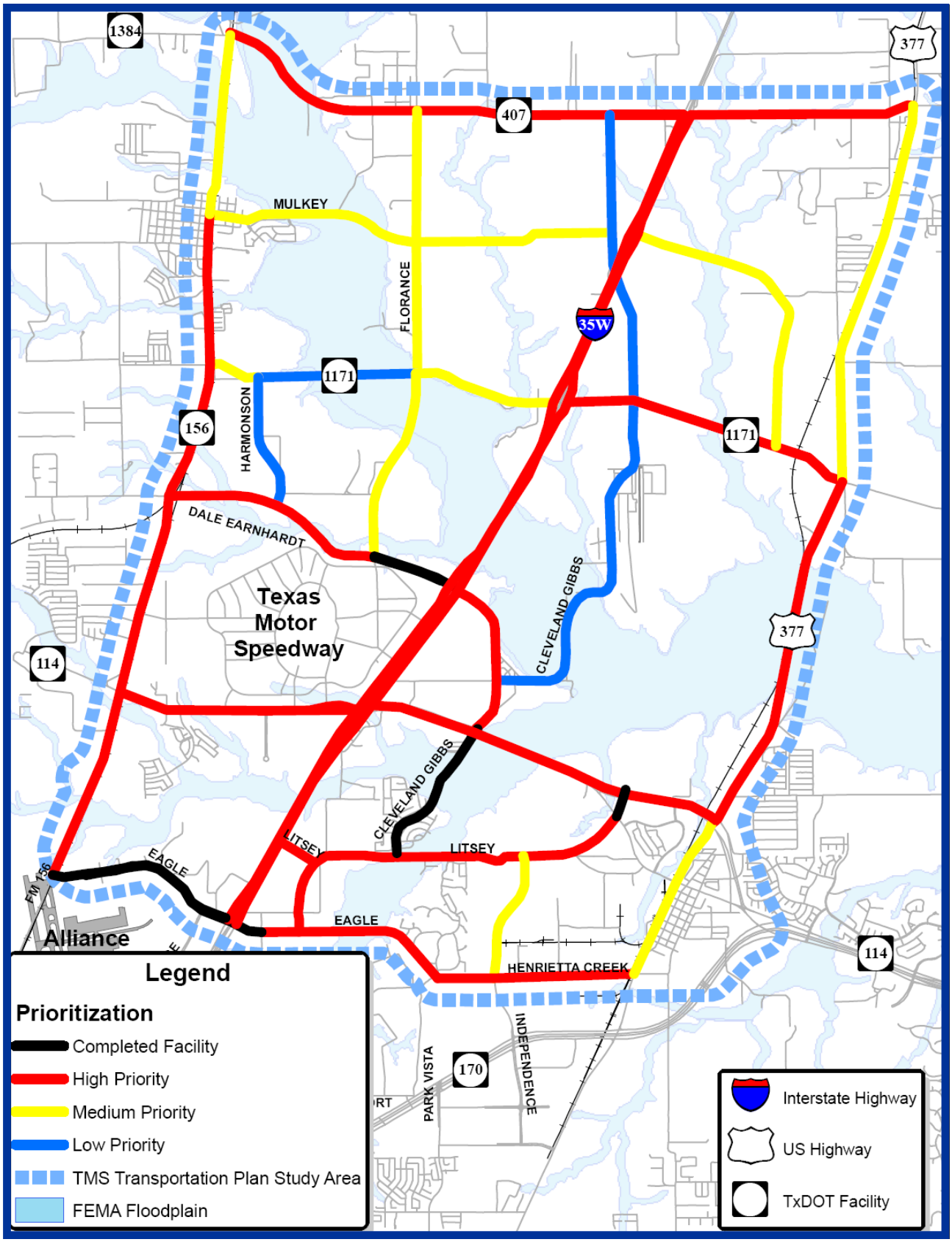

Figure ES-6 Prioritization of Roadway Improvements in the TMS Transportation Study Area

- The municipalities should continue to work together and coordinate their transportation planning efforts to develop consistent comprehensive and thoroughfare plans.
- The TMS Advisory Committee should continue to meet and work together to identify funding opportunities for regional roadway and transit facilities.
- The findings of this study should be presented to various city and town councils within the study area to solicit their support.
- Due to the visual impact that the SH 114 corridor will have on thousands of visitors per year as well as the economic impact to the area, all reasonable efforts should be made by utility providers to reduce the visual blight of overhead utilities by constructing underground lines when possible and when underground construction is not possible consolidating lines on shared overhead structures.

Water and Sewer Infrastructure

Much of the TMS area currently lacks the necessary water and sewer infrastructure needed for appropriate development to occur at suburban or urban densities. The Planning and Development Department, in coordination with the Water Department and the Town of Northlake, reviewed existing and planned future water and sewer infrastructure in the TMS area.

While long range plans are in place for water and sewer line extensions within the study area, the installation of these facilities (and any treatment or storage capacity improvements to support them) is typically tied to the pace and specific requirements of individual development projects. For this reason, property owners and developers should consult with the appropriate service provider (s) prior to purchasing property or making development plans within the TMS study area.

Selected Recommendations

- Communities should continue to work cooperatively to establish an adequate regional water and sanitary sewer system.
- Seek authority to enact an Adequate Public Facilities Ordinance (APFO): APFOs require that public facilities–such as water and sewer lines, roadways, fire stations, schools, and parks–be available concurrently with new development to more efficiently and cost-effectively accommodate growth.

Environmental Impact

A primary task of the plan was to address compatibility concerns between TMS and new residential development. The Planning

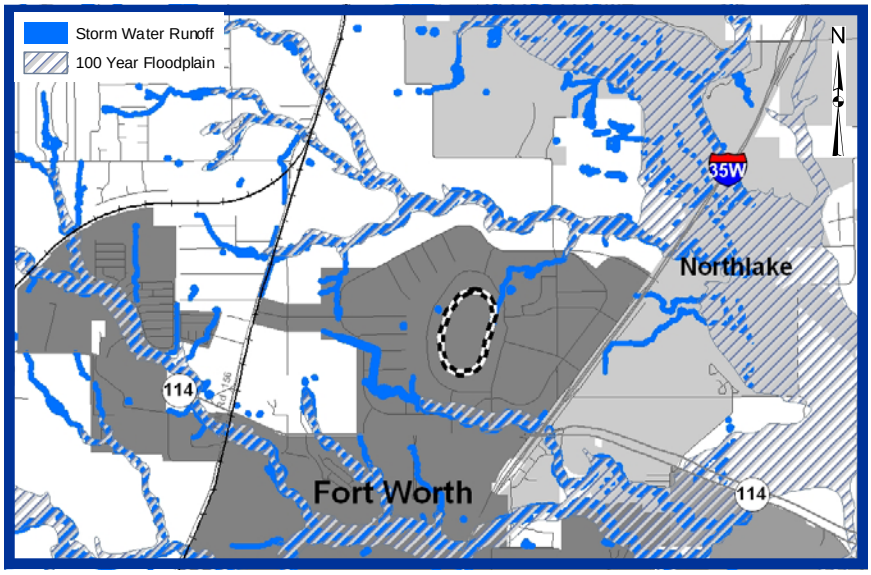

Figure ES-7 100-year floodplain in the TMS study area.

and Development Department used information provided by the Transportation and Public Works Department, the Town of Northlake, and TMS consultants, to assess the known environmental impacts of TMS on the surrounding area.

Selected Recommendations

- Use environmentally sensitive areas as undeveloped buffers between TMS and residential areas.
- All study area jurisdictions should establish floodplains as natural green corridors. This could be achieved either through zoning or subdivision ordinances that prohibit development within the 100-year floodplain. These green corridors would provide valuable open space for residents, be available for hiking and biking trails, and provide habitat and act as a migration routes for wildlife.
- Consider an additional noise study during race events to establish a more broadly focused noise level contour map of the study area. This map could then be used to establish any city ordinances necessary to minimize residential development within areas impacted by high noise levels.

Regional Context, Cooperation and Future Planning Opportunities

Planning and Development staff recognized the need to begin to address development pressure in the TMS area from a sub-regional perspective. The alternative population and employment projections developed for the TMS transportation plan provided the data needed to produce an alternative development pattern map (See Figure ES-9). City staff met with communities in the study area where growth centers could be located to present this alternative development pattern and to begin a sub-regional

Comparison of Projections

	Population	Employment
Base 2007	143,119	45,896
NCTCOG 2015	207,488	123,627
CFW Alternative 2015	245,022	130,846
NCTCOG 2030	303,994	183,930
CFW Alternative 2030	364,658	192,770

Table ES-2 Comparison between 2003 NCTCOG regionally-approved and TMS study alternative projections.

dialogue on growth and development.

Selected Recommendations

- Engage the North Central Texas Council of Governments to assist communities in the study area to adopt ordinances that emulate the regional "best practices" in land use, zoning, and subdivision regulations.
- Consider future land use map and other Comprehensive Plan amendments intended to attain a more sustainable development pattern across the subregion.
- Support planning to bring commuter rail to northern Tarrant and southern Denton counties, and to link Fort Worth, Denton, Dallas, and adjacent communities by passenger rail.
- Identify appropriate locations for new mixed-use growth centers in Fort Worth and other communities and adopt supporting future land use designations and implementation tools. Direct higher density development into these growth centers across the subregion.
- Seek greater municipal control over special infrastructure districts in the Extraterritorial Jurisdiction (ETJ): These districts (municipal utility districts, water control and improvement districts, and fresh water supply districts) can be used to promote high quality development, but they may also facilitate development that bypasses undeveloped areas more economically served by public facilities and services.
- Seek greater municipal land use authority in the ETJ: Successful long-range land use and infrastructure planning relies heavily on a municipality's ability to control the location, type, and ultimate density of development in the ETJ.

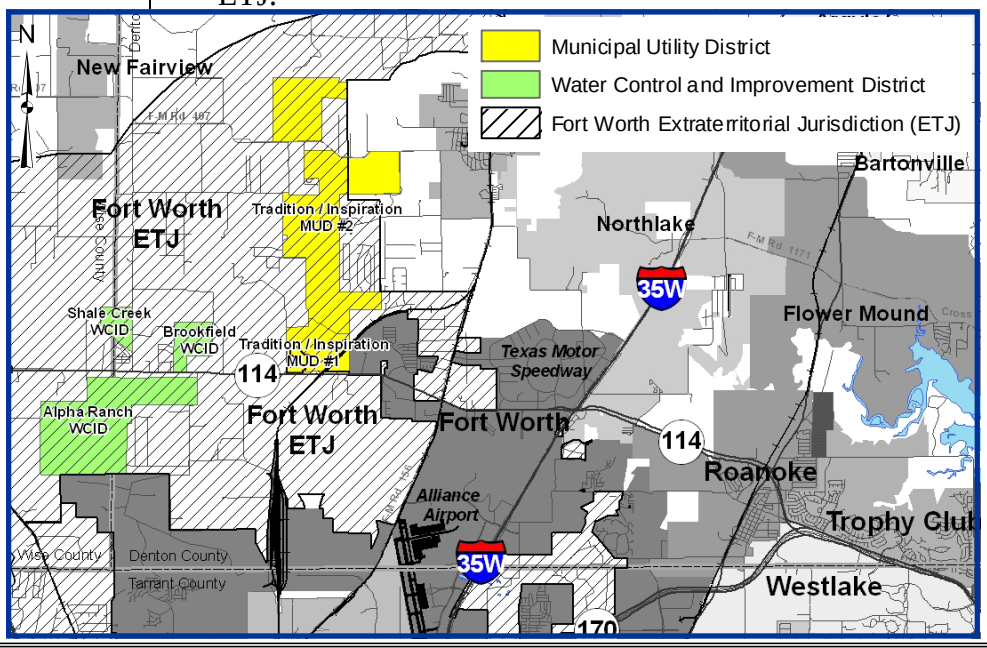

Figure ES-8 Special Infrastructure Districts within Fort Worth's ETJ near TMS.

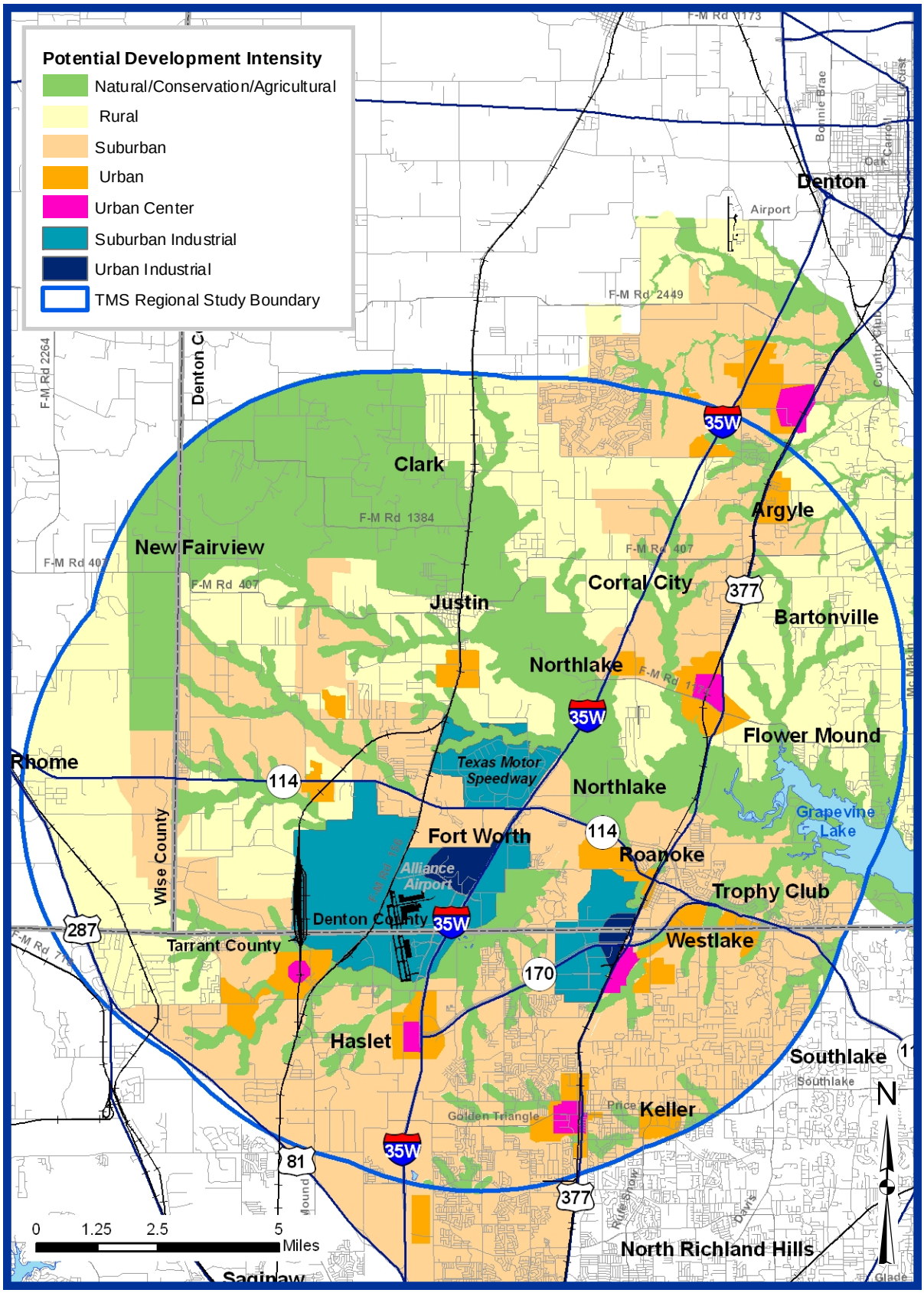

Figure ES-9 Potential development pattern with changes to future land use plans.