DATE: March 8, 2011

TO: Applicants with Items before the Planning & Zoning Commission

FROM: Chris Caso, Chairman, Planning & Zoning Commission

SUBJECT: Results of Planning & Zoning Commission Meeting of March 7, 2011

AGENDA ITEM NO. 11 - PUBLIC HEARING
COMPREHENSIVE PLAN AMENDMENT
APPLICANT: CITY OF PLANO

Request to amend the Future Land Use Plan map, Thoroughfare Plan map, and Transportation Element of the Comprehensive Plan, and related sections of the plan as it pertains to the designation of future rail stations within the city of Plano.

APPROVED: 5-1 **DENIED:** _____ **TABLED:** _____

STIPULATIONS:

Approved as submitted. The Commissioner voting in opposition did not specify any reasons.

SS/dc

MEMORANDUM

DATE: March 11, 2011

TO: Bruce Glasscock, City Manager
Frank Turner, Deputy City Manager

FROM: Steve Sims, Senior Planner

SUBJECT: Comprehensive Plan Amendment agenda item

On March 7, 2011, the Planning & Zoning Commission recommended approval of the proposed amendments to the Transportation Element supporting future rail stations along the Cotton Belt rail line at 12th Street and Shiloh Road. Subsequent to the Commission's action, staff received comments from DART regarding the proposed amendments.

The alternative language suggested by DART is primarily nomenclature and offers clarification. Staff believes the proposed modifications do not change the intent of the amended text recommended for approval by the Planning & Zoning Commission.

Attached to this memorandum are the two versions of the amended text for the Transportation Element. The first two pages include changes highlighted in yellow which are alternative suggestions and comments from DART. The second set of text highlighted in red font is what the Commission originally approved on March 7, 2011.

Staff recommends that Council approve the alternate language suggested by DART for inclusion into the Transportation Element. If Council believes the alternate language is consistent with the Commission's recommendation, then staff will prepare an ordinance for a future meeting based upon Council's action at their March 28, 2011 meeting.

Attachments: DART suggested changes of amended text
Original text approved by the Planning & Zoning Commission

Cotton Belt Amendment Text and Strategy Statement – DART Suggested Changes in yellow highlight

Plano is part of the Dallas-Fort Worth region where over 6.5 million people live. The North Central Texas Council of Governments (NCTCOG) is in the process of developing its Mobility 2035 Plan, a document which will identify transportation projects needed to accommodate an additional 4 million people expected to live in the region. The plan utilizes a multimodal approach to the region's transportation system through addressing expansion and improvement projects to the roadway system, mass transit and bicycle transportation.

Two modes of mass transportation are commuter rail and light rail provided by DART, Denton County Transit Authority, and the Fort Worth Transit Authority (the "T"). NCTCOG's Regional Rail Corridor Study includes over 250 miles of new rail service for the region within the Central, Northeast, and Southwest corridors (see attached map).

A rail project which will serve Plano is the North-Cross Town Corridor, also known as the Cotton Belt. The railway line passes through southeast Plano near downtown and may eventually extend 52 miles from Wylie to Fort Worth. However, DART's service plan focuses on the eastern section of the Cotton Belt regional rail line which would connect Plano with the Dallas-Fort Worth International Airport and interface with DART's Green, Orange, and Red rail lines. There would be connections with two Northeast Corridor routes including the proposed Burlington Northern Santa Fe (BNSF) commuter rail line with service to Frisco and Irving, and the Denton County Transit Authority's commuter rail line from Denton to Carrollton. Finally, service to downtown Fort Worth would be provided on the western half of the Cotton Belt by the Fort Worth Transit Authority from Dallas-Fort Worth International Airport.

The City of Plano has designated two locations for future stations along the Cotton Belt railway in Plano. The first station would be located at the existing crossing of the Cotton Belt and the DART Red line at 12th Street. This concept would provide an additional Red Line station serving Plano and it offers an economical opportunity to create a station complex serving passenger transfers between the Cotton Belt and the Red Line. The 12th Street station is a good location for connecting bus and shuttle service to surrounding employment centers and residential areas, provides access to affordable housing, and would further stimulate transit-oriented development near downtown Plano. The second station would be located in southeast Plano, at Shiloh Road and would serve an employment center with over 16,000 jobs within a two mile radius.

The Northwest Transit Center, which will be located south of Tennyson Drive at the Dallas North Tollway, is also part of DART's 2030 service plan. Construction on the project will begin in 2011 and will serve the Legacy area and western areas of the city with bus service. Bus Rapid Transit (BRT) could be another

good option for DART to consider using in Plano. BRT operations provide service with limited stops between multiple destination points. It could use a separate lane in its own right-of-way or existing roadways. BRT service in Plano could be operated from Legacy Town Center to the Northwest Transit Station and continue on to the Parker Road Transit Station.

Strategy C.4 Support DART's efforts to improve east-west transit service, including a connection to DFW International Airport, through the development of funding options and designation of the proposed station locations along the Cotton Belt corridor at 12th Street and at Shiloh Road within Plano.

Cotton Belt Amendment Text and Strategy Statement – Recommended for approval by Planning & Zoning Commission

Plano is part of the Dallas-Fort Worth region where over 6.5 million people live. The North Central Texas Council of Governments (NCTCOG) is in the process of developing its Mobility 2035 Plan, a document which will identify transportation projects needed to accommodate an additional 4 million people expected to live in the region. The plan utilizes a multimodal approach to the region's transportation system through addressing expansion and improvement projects to the roadway system, mass transit and bicycle transportation.

One mode of mass transportation is commuter rail and light rail provided by DART, Denton County Transit Authority, and the Fort Worth Transit Authority (the "T"). NCTCOG's Regional Rail Corridor Study includes over 250 miles of new rail service for the region within the Central, Northeast, and Southwest corridors (see attached map).

A rail project which will serve Plano is the North-Cross Town Corridor, also known as the Cotton Belt. The railway line will extend 52 miles from Wylie to Fort Worth and travels through the southeast section of Plano along the 14th Street and Plano Parkway corridors. DART's section of the Cotton Belt commuter rail line would connect Plano with the Dallas-Fort Worth International Airport and interface with DART's Green, Orange, and Red rail lines. There would be connections with two Northeast Corridor routes including the proposed Burlington Northern Santa Fe (BNSF) commuter rail line with service to Frisco and Irving, and the Denton County Transit Authority's commuter rail line from Denton to Carrollton. Finally, service to downtown Fort Worth would be provided on the western half of the Cotton Belt by the Fort Worth Transit Authority from Dallas-Fort Worth International Airport.

The City of Plano has designated two locations for future stations along the Cotton Belt railway in Plano. The first station would be located at the existing crossing of the Cotton Belt and the DART Red line at 12th Street and offers the most economical opportunity to create a joint station serving passenger transfers. The 12th Street station is a good location for connecting bus and shuttle service to surrounding employment centers and residential areas, provides access to affordable housing, and would further stimulate transit-oriented development near downtown Plano. The second station would be located in southeast Plano, at Shiloh Road and would serve an employment center with over 16,000 jobs within a two mile radius. The Shiloh Road station will also be convenient for rail riders from Garland, Murphy, Richardson, and Wylie as well.

The Northwest Transit Center, which will be located south of Tennyson Drive at the Dallas North Tollway, is also part of DART's 2030 service plan. Construction on the project will begin in 2011 and will serve the Legacy area and western

areas of the city with bus service. Bus Rapid Transit (BRT) could be another good option for DART to consider using in Plano. BRT operations provide service with limited stops between multiple destination points. It could use a separate lane in its own right-of-way or existing roadways. BRT service in Plano could be operated from Legacy Town Center to the Northwest Transit Station and continue on to the Parker Road Transit Station.

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CITY OF PLANO

PLANNING & ZONING COMMISSION

March 7, 2011

Agenda Item No. 11

Public Hearing: Comprehensive Plan Amendment

Applicant: City of Plano

DESCRIPTION:

Request to amend the Future Land Use Plan map, Thoroughfare Plan map, and Transportation Element of the Comprehensive Plan, and related sections of the plan as it pertains to the designation of future rail stations within the city of Plano.

REMARKS:

Purpose of the Amendment

The Dallas Area Rapid Transit (DART) board approved the organization's 2030 service plan in 2006. This plan includes the implementation of the North-Cross Town Corridor, designated on the Thoroughfare Plan as the St. Louis and Southwestern railroad (also known as the Cotton Belt), to provide east-west rail transit service in the Dallas-Fort Worth region. Recently, DART has begun work with the North Central Texas Council of Governments (NCTCOG) to identify funding resources for the rail line and perform preliminary studies to determine rail station locations. The Cotton Belt rail line passes through Plano and commuter rail service would benefit residents and businesses in the city. City Council directed staff at the February 14, 2011 meeting, to move forward with amending the Comprehensive Plan and supporting maps to designate future rail stations within Plano along the Cotton Belt rail line.

North-Cross Town Corridor

The North-Cross Town Corridor would serve as a crucial component of the Dallas-Fort Worth region's east-west mass transit rail service. A map produced by the North Central Texas Council of Governments of the proposed route is attached to the staff report. Rail service may ultimately extend eastward to Murphy and Wylie.

Proposed Stations

The City of Plano has proposed 2 locations for possible station sites along the North-Cross Town Corridor route. The first station would be located at the DART Red line overpass above the Cotton Belt railroad near the 12th Street and K Avenue intersection. The second station would be situated west of Shiloh Road at the intersection with the Cotton Belt railroad. These proposed stations would be designated on the Future Land Use Plan map and the Thoroughfare Plan map with this proposed amendment.

Benefits for Plano

The benefits of stations at 12th Street and at Shiloh Road are numerous as the North-Cross Town Corridor (Cotton Belt line) provides connections to key destinations throughout the Dallas-Fort Worth region. The corridor would intersect 4 major passenger commuter lines including the existing DART Red line with service from Plano to Dallas, the recently completed DART Green line with service from Carrollton to northwest Dallas, and a connection with the proposed Burlington Northern Santa Fe (BNSF) commuter route coming from Frisco. The Cotton Belt will also cross the DART Orange line route which will include terminals at the Dallas-Fort Worth International Airport.

The Cotton Belt would also provide commuter rail service to key destinations within the city. The 12th Street station could serve as a catalyst to expand the Downtown Plano transit village southward. Additionally, the Cotton Belt line would increase opportunities for more new housing and access to jobs around the 12th Street station, and the Shiloh Road station in the Research Technology Crossroads area in southeast Plano. The Cotton Belt commuter line would be an alternative transportation option to major destinations within the Dallas-Fort Worth region for residents of Garland, Murphy, Richardson, and Wylie as well.

12th Street Station Workshop

In September 2010, the City of Plano invited DART officials, planning consultants, and city leaders, as well as local residents, property owners, and business owners near the 12th Street station location to a half-day workshop to gather ideas and feedback for the proposed station. Many attendees expressed interest in the proposal and provided ideas on how the station could be integrated with downtown Plano residences and businesses. Additional informational meetings were held for local neighborhoods, property owners, and business owners in December and February to continue discussions regarding the proposed rail stations. The attendees were supportive of the future opportunities and benefits that a rail station would bring to the area.

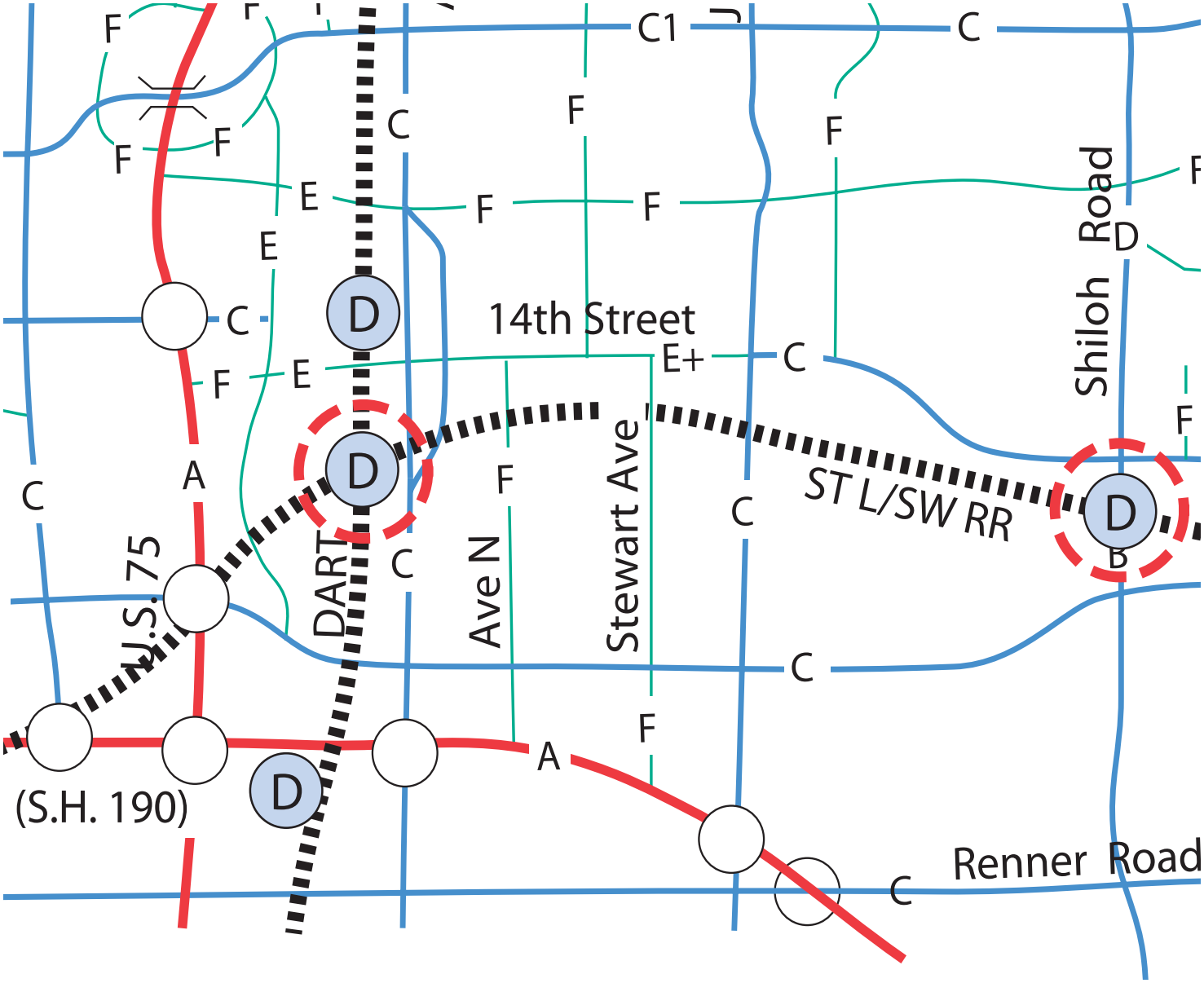
Text Amendments

The proposed amendment to the Transportation Element of the Comprehensive Plan will include text that further supports the additional rail stations in Plano. The amended text is underlined and can be found on pages 17-19 and 22 of the element, and describes the need for east-west rail transit service, the proposed route of the North-Cross Town Corridor, the benefits for Plano and neighboring cities, and proposed map

amendments while current text to be removed from the element will be struck through. The existing Transportation Element is included with this report in order to provide context for the proposed amendment. The inclusion of the station proposals on the Future Land Use Plan map and the Thoroughfare Plan map also support the Transportation Element text of the Comprehensive Plan, and shows Plano's strong interest and commitment to the implementation of the North Cross-Town Corridor commuter rail line.

RECOMMENDATION:

Recommended for approval as submitted.



CITY of PLANO

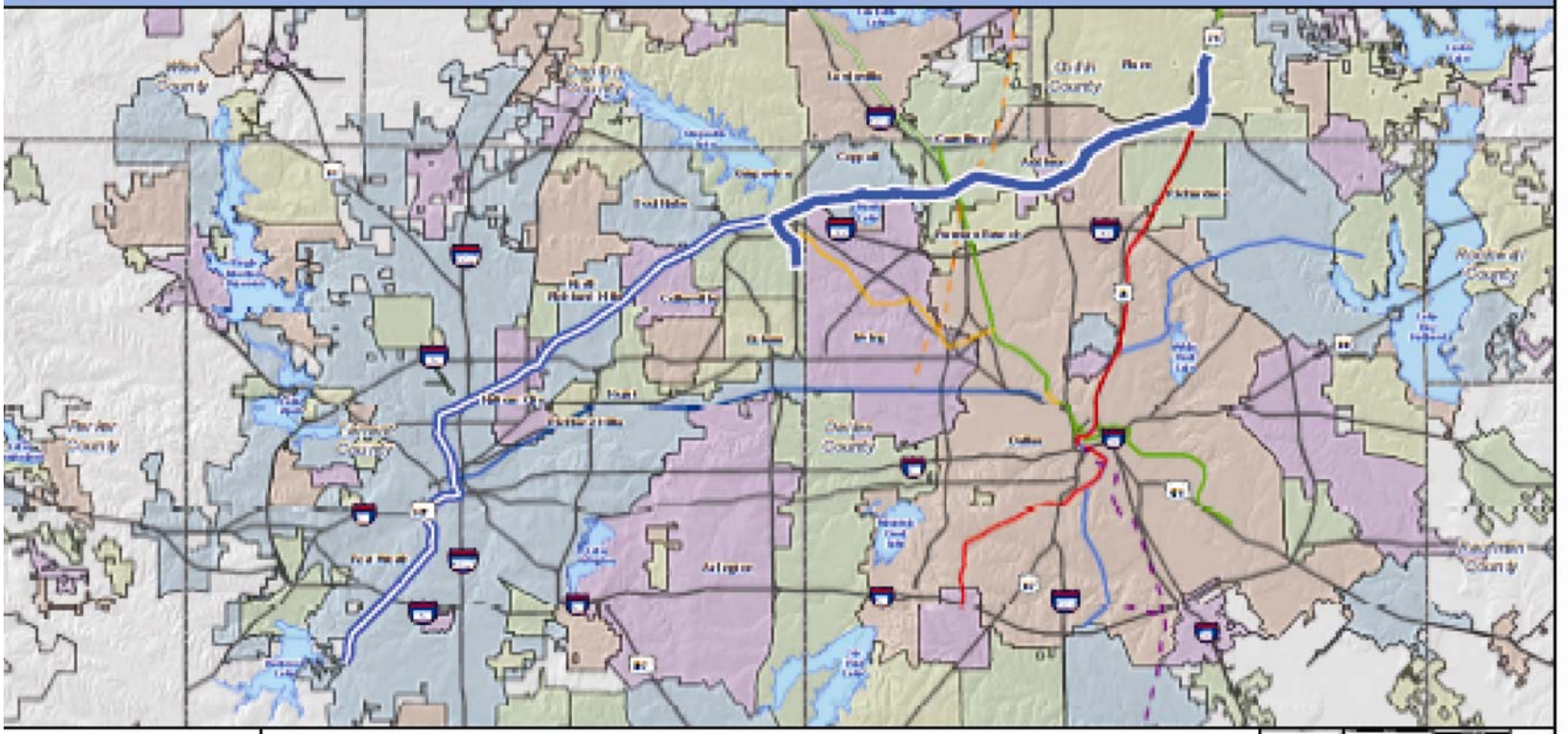
THOROUGHFARE PLAN

COTTON BELT AMENDMENTS

LEGEND

T A	Expressway
B+ B C C1 D	Major or Secondary Divided Thoroughfare
E E+ F	Secondary Undivided Thoroughfare
○	Interchange Grade Separation
△	Rail/Street Grade Separation
⌘	Grade Separation, No Interchange
(D)	DART Facility
(D)	Proposed Cotton Belt DART Facility

Figure 1-1 - Cotton Belt Corridor Sycamore School Road in Fort Worth to US 75 in Plano



Legend

- Potential Cotton Belt Line
- Potential SWGNE Corridor
- DCTA A-train
- DART Blue Line
- DART Green Line
- DART Orange Line
- DART Red Line
- TRE
- Potential Frisco Line
- Potential McKinney Line
- Potential Waxahachie Line
- Highways/Tollways
- County Limits
- City / Town Limits
- Lakes

Miles

North Central Texas Council of Governments

Key Map

Cotton Belt Corridor — Conceptual Engineering and Funding Study

COMPREHENSIVE PLAN
TRANSPORTATION ELEMENT

INTRODUCTION

Purpose

The Transportation Element of the Comprehensive Plan guides the development of an integrated transportation system over time. It defines the existing and proposed transportation system and addresses long range local and regional expectations. The transportation network in Plano is a critical component of the city's development pattern. It influences the placement of land uses such as housing, employment, commercial, industrial and educational facilities. Plano's transportation system impacts quality of life issues such as air quality, accessibility and choice of transportation modes.

Critical Issues

Critical issues facing Plano's transportation system are regional population growth, air quality, increased traffic on expressways, increased through traffic, and roadway capacity implications. The Dallas-Fort Worth Metroplex continues to grow in population and the North Central Texas Council of Governments projects the region will add another 3 million people by 2030. More people in the area contribute to larger numbers of automobiles using the regional roadway system. Increased traffic on regional expressways and local thoroughfares leads to travel delays due to congestion, produces more emissions and decreases the region's air quality.

Plano's internal roadway system is nearly complete and capacity improvements to regional roadways are quickly consumed by growth in outlying communities. Plano is not in a position to reduce congestion and increase roadway capacity by adding more lanes of pavement. Instead, the city must rely on approaches that reduce the level of vehicular travel on its roadways, particularly during peak hours. Mass transit, bicycle transportation, Transportation Demand Management (TDM), and other techniques will need to be promoted and utilized. Different land use concepts, such as mixed-use urban centers which combine employment, residences, and related services in pedestrian friendly environments, will be part of the long term solution for regional and local transportation issues.

MAJOR THEMES

The Transportation Element describes the City of Plano in terms of three major themes: Livable City, City of Organized Development and City in Transition. This element includes a description of factors relating to each of the themes, objectives and strategies defining the city's overall approach to transportation challenges and opportunities along with steps for implementation. The thoroughfare plan map and bicycle transportation plan map reflect existing and proposed street and bicycle trail patterns and are separate documents preceding the Transportation element text.

The “Livable City” theme addresses issues that affect the city’s ability to remain an attractive place to live and work. The “City of Organized Development” theme defines the key components of Plano’s transportation system, their interrelationship, and the process for monitoring and enhancing their effectiveness. The “City in Transition” theme focuses on changing conditions and trends that may require changes in the way Plano addresses the provision of transportation services over time.

Theme I – Livable City

The City of Plano is an excellent place to live, work and enjoy life. Efforts to improve air quality, mass transit, bicycle transportation and access to Plano and other parts of the Dallas-Fort Worth Metroplex contribute to a livable city. This section provides options to address air quality, local and regional accessibility, and the current status and future trends of these factors.

Theme II - City of Organized Development

This section includes key transportation factors that have influenced the development of Plano over the past 40 years. The thoroughfare plan map displays the type, size, and placement of major roadways within the city. The relationship of land uses to various components of the thoroughfare system is defined under this theme. It also addresses efforts that make the thoroughfare system operate more safely and efficiently. This section stresses the significance of a multi-modal transportation system that facilitates mass transit, bicycle, and pedestrian use as well as automobiles.

Theme III - City in Transition

Within 40 years, Plano has transitioned from an agricultural center to a bedroom suburb to an employment center and from a growing community to a city approaching full development. The city has also transitioned from an outer tier suburb on the edge of the metropolitan “commuter shed” to a first tier suburb near the center of daily home-to-work trips. A major portion of Plano’s peak hour traffic results from people commuting to the city for work or passing through Plano to other major employment destinations in the region. Plano’s increased population and employment coupled with growth of neighboring cities reinforces the importance of cooperative planning activities with other communities in the North Dallas region.

Key Factors

Key factors have been identified for each of the major themes. The discussion of these factors in each section will further explain the major themes as well as provide a basis for the objectives and strategies outlined for each theme.

THEME I - LIVABLE CITY

Air Quality

Clean air is critical to one's health and quality of life. Air quality is becoming an increasingly important factor in the planning and development of local transportation systems. However, air quality concerns are typically driven by national efforts through federal legislation such as the Clean Air Act of 1990. This legislation established categories for the evaluation of total emission (pollution) levels for urbanized areas. "Non-attainment areas" are metropolitan regions throughout the United States that exceed those standards. The Dallas-Fort Worth Metroplex region is a non-attainment area - specifically classified as "serious" in 1998 - in regard to ozone by the Environmental Protection Agency (EPA). The Texas Commission on Environmental Quality's State Implementation Plan (SIP) for control of Ozone Air Pollution identified the major source of pollution in this area as emissions from motor vehicles. If this situation does not improve, the EPA could impose sanctions that would result in the loss of federal funding for major transportation projects.

This is a major regional issue that has been gaining more attention in the last few years as the Metroplex nears its air quality compliance deadline. Leaders from Plano and other cities have started to address air quality and transportation planning issues. A recent example of this effort is Plano joining other cities from across the Dallas region to address potential air pollution concerns resulting from proposed coal fueled electric generation plants. Plano should continue to work with other cities in the region to develop initiatives to improve air quality and retain federal funding needed to implement major transportation improvement projects, especially mass transit. Continued monitoring of legislation and enforcement policies will be necessary to understand measurement standards and mitigation actions. Plano should work to develop and maintain a multi-modal transportation system, including mass transit and bicycle transportation, to help improve the air quality of the Metroplex region.

The city has begun the process of replacing conventional gasoline engine vehicles in its fleet with energy-efficient hybrid vehicles. These vehicles have city logos and are visible throughout Plano. They demonstrate the city's efforts to improve air quality and reduce fuel consumption. Hybrid vehicles have proven to be a good investment for the city with high resale values and low maintenance and repair costs.

Transportation Demand Management

Transportation Demand Management (TDM) was a formal requirement in the original Clean Air Act Amendment of 1990 (CAAA) for non-attainment regions like the Dallas-Fort Worth Metroplex. The enforcement schedule was later amended and TDM measures became voluntary rather than mandatory. TDM includes strategies to effectively manage travel demands in a region to reduce pollution. Such strategies as the use of transit, carpooling, staggered work hours, and telecommuting reduce vehicle emissions, especially during peak hours. TDM also

includes educational efforts to change the culture of single-passenger vehicle trips and inform employers and residents about different modes of transportation available in Plano.

The City of Plano should work with major employers to participate in TDM measures to reduce the number of cars using the roadway system and lead to improvement in air quality. The following are examples of ways to partner with the private sector with TDM initiatives.

- Offer incentives to local major employers to participate in Transportation Demand Management (TDM).
- Identify businesses that can function effectively on non-traditional work hours and encourage them to use flexible scheduling.
- Pursue DART subsidies for the purchase of vehicles for van pooling and establish a program to link prospective riders living and working in common geographic areas together. Provide incentives for persons to volunteer as van pool drivers.
- Provide media exposure and award programs for companies that participate in TDM measures.

Transit Oriented Development

Transit Oriented Development (TOD) is defined as a dense mix of land use activities such as residential, office, retail and entertainment located near a transit facility station. The most common forms of transit serving a TOD are light rail, commuter rail, bus rapid transit or a subway. The transit station may also be a facility where all four forms interface with local bus service and private vehicles. Residential use is often located above office and retail uses in the same building. TOD represents an alternative to the typical suburban, automobile-oriented development pattern in the Metroplex.

The densities of TODs are important because they allow a variety of uses to occur at one location, resulting in more compact development. They also increase transit ridership as a point of origin and destination. Persons residing in TODs can easily walk from homes to board a train or bus. People from outside the area can travel via bus or train to the TOD to shop or work. The Eastside Village in downtown Plano is an excellent example of a TOD.

Parking requirements are lower in TODs because of availability of transit and other services within walking distance. Streets located within TODs or denser residential infill developments can have narrower widths and reduced building setbacks that tend to slow vehicles on the street and promote a pedestrian environment, similar to those standards typically found in the Business/Government zoning district regulations. More information along with objectives and strategies regarding transit-orientated development and urban centers are found in the Land Use Element of the Comprehensive Plan.

Regional Mobility

Mobility is a key component of the transportation system of a community. Plano is located in the heart of the North Dallas region and is accessible to cultural and employment opportunities throughout the area. The City is also a major employment center for the region with significant commercial and office development located at Legacy in northwest Plano, along the Dallas North Tollway, President George Bush Turnpike, State Highway 121 and U.S. Highway 75. During non-peak periods, these roadways, along with mass transit services, provide transportation connections in less than an hour to most destinations around the Dallas-Fort Worth Metroplex. The city also has an extensive system of bicycle and walking trails that connect residential areas with recreational facilities. Work continues to coordinate trail connections from Plano to other cities in the Metroplex. These factors help make Plano a prime location for future business and residential development, contributing to the continued growth and prosperity of the city.

The availability of air transportation has contributed greatly to Plano's and the Metroplex region's growth as a major employment center. The region's location in the center of the country means that air travel times to major cities on the coasts is only two to three hours. Plano is served by two large commercial airports providing long distance domestic service, Dallas-Fort Worth International Airport (DFW) and Love Field. DFW also provides international flights. Corporate and private jet services are found at Addison Airport and Collin County Regional Airport in McKinney.

Objectives for Theme I - Livable City

Objective A.1 Promote regional efforts to improve air quality and address transportation issues in the Metroplex.

Objective A.2 Enhance the ease of access that Plano now enjoys in the region.

Objective A.3 Provide Plano residents with a variety of transportation options.

Objective A.4 Facilitate involvement of major employers in programs to reduce traffic congestion and improve air quality.

Strategies for Theme I – Livable City

Strategy A.1 Monitor federal legislation regarding air quality through regional efforts with the North Central Texas Council of Governments.

Strategy A.2 Work closely with federal, state, and regional agencies to provide for a range of transportation options to meet the changing needs of Plano residents.

Strategy A.3 Continue to facilitate the development of Transit Oriented Developments (TODS) such as those recommended in the Urban Centers Study.

Strategy A.4 Develop a public/private partnership with major employers to encourage participation in TDM programs.

Strategy A.5 Offer incentives to major employers in the city to participate in TDM programs such as positive media exposure for working to mitigate traffic congestion and improve air quality in the region.

THEME II - CITY OF ORGANIZED DEVELOPMENT

Expressway Corridors

Plano is served by four expressways - U. S. Highway 75 (U.S. 75), State Highway 121 (S.H. 121), the Dallas North Tollway and the President George Bush Turnpike. All four expressways provide access from Plano to other cities within the Metroplex and the nation. The issues facing these corridors are future development, continued growth of cities to the north, increased traffic and roadway construction.

Though most of the U.S. 75 corridor has been developed with retail and office uses, the other three corridors still have land available for additional development opportunities. The President George Bush Turnpike comprises most of Plano's southern border and provides access to the Research Technology employment area in southeast Plano.

The Dallas North Tollway travels through the western section of Plano and provides access to the Shops at Willow Bend Mall, numerous office buildings and retail centers along with the corporate campuses found in the Legacy and Granite Park developments near S.H. 121. There has been a shift in development patterns along the Tollway corridor as well. More mixed-use projects such as the one approved at the Parker Road interchange are beginning to appear. The Legacy Town Center at the Legacy Drive interchange has experienced success and is expanding north towards S.H. 121.

S.H. 121 has the most undeveloped land adjacent to it. The highway has been expanded with the completion of three lane service roads in each direction. Interchanges at the Dallas North Tollway, Preston Road and Custer Road have been completed. Main lanes are under construction between the Tollway and Rasor Boulevard. The remainder of the main lanes will be constructed as a toll facility. One of the land use issues facing the S.H. 121 corridor is the demand for residential development. Plano has attempted to provide a 1,200 foot setback from the S. H. 121 centerline for residential development. There have been development pressures to reduce the setback distance in recent years.

Surface Street System

The City of Plano has worked diligently over the past three decades to develop and maintain an extensive modern thoroughfare system. This system is characterized by a grid pattern of divided roadways interconnected with collector and local streets to provide access to commercial and residential properties throughout Plano. The Thoroughfare Plan map shows the general location and design standards of

roadways and serves as a guide to the Community Investment Program (CIP) in regard to street construction (see Plate 1, Thoroughfare Plan map). As a result, Plano has an easily navigable roadway system.

The surface street system has several roadway types such as expressways, major and secondary thoroughfares, commercial and residential streets. Table 1 on the following page contains a general description of each category and the type of thoroughfares represented. The design standards (lane widths, right-of-way requirements, number of lanes and a typical cross-section) are shown on the reverse side of Plate 1.

TABLE 1
ROADWAY CLASSIFICATION AND THOROUGHFARE TYPE

Roadway Classification	Thoroughfare Type
EXPRESSWAYS Intended to carry the highest proportion of traffic through the City at highest speeds and longest distances.	A, T Tollway, Turnpike, Freeway,
MAJOR THOROUGHFARES Intended to provide a balance of high through volume capacity and non-residential property access for the majority of trips with destinations inside the City.	B+, B, C Divided thoroughfares
SECONDARY THOROUGHFARES Intended to provide the opportunity for access and circulation of residential areas for a majority of trips with origins inside the City and to provide connections to major thoroughfares.	D, E+, E, F Includes divided and undivided thoroughfares and collector streets.
RESIDENTIAL STREETS Intended to provide direct access to all abutting residential land areas and connections to collector streets.	G, H Local streets

Most of the roadway system in Plano is complete and has been constructed to the full width and design capacity. Some opportunities exist to add through lanes to meet design standards specified on the Thoroughfare Plan. Continued maintenance of the existing roadway system and keeping increased traffic flowing efficiently and safely through the city are challenges for the future as Plano transitions from building new streets to maximizing the roadway system already in place.

Local Accessibility

Access to Plano from the Metroplex and other areas is provided by expressways, surface street system and mass transit services. Cultural facilities, shopping areas, employment centers and residential neighborhoods are readily accessible via Plano's roadway system.

Accessibility is more than just an issue of efficiency and mobility; it can also affect health and safety. For this reason, all commercial and residential subdivisions in the City are required to have at least two points of access. This allows an additional route into and out of the subdivision for emergency vehicles when an entrance is blocked or unavailable.

Sometimes, accessibility can create problems for a neighborhood. Cut-through traffic and speeding are concerns for some neighborhoods in Plano. The increased traffic becomes a nuisance and the excess speed poses safety concerns. As traffic volumes increase, more drivers will seek alternative routes to avoid busy intersections and neighborhood streets could become more desirable routes for through traffic.

The Transportation Advisory Committee, through the Safe Streets Program, works with neighborhoods to develop solutions to mitigate these problems. The first phase of addressing cut-through traffic and excess speed through residential neighborhoods is education and law enforcement. Most times, this is effective; however, if these solutions do not improve the situation, then physical changes to streets are made to slow down motorists and discourage "cut-through" traffic. Any proposals to modify streets must consider the impact on emergency vehicle access and response times before implementation.

Intersection Improvements

Many years ago, the City of Plano designated certain intersections as candidates for grade-separated interchanges on the Thoroughfare Plan map. The perceived benefit was that these facilities would improve traffic flow at major intersections as Plano and surrounding communities continued to grow. However, recent studies indicated that building grade-separated interchanges is not as cost-effective as at-grade improvements. In 2004, grade-separated overpasses were removed from the Thoroughfare Plan map with the exception of interchanges involved with regional expressways.

The intersection of Legacy Drive and Preston Road should be closely monitored over time as it is in close proximity to the S.H. 121 corridor and the corporate campuses within Legacy. Additional development in these two areas could have a significant impact on the operation of this intersection. Therefore, future traffic conditions may require re-evaluation to determine if a grade-separated interchange would be necessary, but only after all at-grade improvement options have been fully evaluated.

Most of the right-of-way has already been acquired to accommodate previously proposed grade-separated interchanges. Grade-separations are unlikely in the foreseeable future. However, it is difficult to account for various conditions that could change over time. The rights-of-way at these locations should be preserved and additional rights-of-way acquired, when necessary, to accommodate future traffic flow improvements at these locations. Loss of the rights-of-way could preclude the ability of future decision makers to fully address changing conditions. Some at-grade improvements could require extensive rights-of-way to operate safely and efficiently.

Exceptions to retaining rights-of-way should be considered for the intersections of Spring Creek Parkway and Jupiter Road, Spring Creek Parkway and Preston Road and at Plano Parkway and Coit Road. While originally planned and built as a Type A limited access service facility that could accommodate future capacity improvements, such as grade separations, the design standards for Spring Creek Parkway have been revised to provide uniform limited access without grade separations. Enhanced intersection improvements can be provided at the intersection of Spring Creek Parkway and Jupiter Road within the existing 160 foot right-of-way. The proximity of the railroad crossing on Coit Road south of Plano Parkway and the "jug-handle" ramp design will make major improvements at this location infeasible.

The Transportation Engineering Division has completed evaluation of a "Median Left-Turn" design for three intersections. The intersections are located at Spring Creek Parkway and Coit Road, Plano Parkway and Preston Road and Legacy Drive at Preston Road. The "Median Left-Turn" design is an innovative approach to reduce stacking of vehicles making left turns and to improve overall flow at major intersections. The "Median Left-Turn" design will require the additional right-of-way originally reserved for grade separations. Final designs are underway with construction planned for 2008.

High Accident Location/High Accident Road Segment

The High Accident Location/High Accident Road Segment (HAL/HARS) program is used by the City of Plano's Transportation Division to identify and develop solutions for roadway locations with a high number of vehicle collisions. The program also considers citizen complaints, maintenance and staff suggestions. This information is used to compare traffic safety and traffic flow characteristics of high accident locations. High accident locations that can be improved with low cost and quick solutions are addressed immediately. Locations that need more extensive, higher cost improvements are reviewed for consideration of placement on the Community Investment Program (CIP). The HAL/HARS program also produces the annual traffic safety report on the effectiveness of roadway modifications and other traffic safety programs and practices.

Traffic Signal System

The City of Plano operates over 200 traffic signals using a wireless communications system. The system coordinates traffic signals to minimize stopping, which reduces fuel usage, and vehicle exhaust emissions. Timing of traffic signals at intersections has improved and enhanced coordination of traffic movement on Plano's thoroughfare system. This is an example of a local initiative that contributes to improvement in air quality of the Metroplex region.

There are a large number of signalized intersections and a need to balance through traffic movement with access to and from neighborhoods and business centers. Due to these factors, signalization will not overcome traffic congestion. It is a valuable tool that supports the operation of Plano's surface roadway system, but it cannot overcome conditions resulting from traffic volumes that exceed capacities.

Regional Transit System

Mass transit is a key factor in the provision of alternative transportation opportunities for Plano residents. Mass transit service in the form of buses and light rail is provided through the City's membership in the Dallas Area Rapid Transit (DART). Both services connect the City with major destination points and other transit systems in the Metroplex region.

Table 2 provides a description of scheduled DART Capital Improvement Projects from the 2030 Service Plan approved in October of 2006 that could impact Plano in the near future:

TABLE 2
PLANNED DART CAPITAL IMPROVEMENTS
ASSOCIATED WITH PLANO

CAPITAL IMPROVEMENTS	NOTES	STATUS
High-Occupancy Vehicle Lane (HOV) along U.S. 75	LBJ Freeway to Bethany Road	Under Construction
North Cross-Town Corridor (Former Cottonbelt RR ROW)	Would connect Plano with DFW International Airport	Adopted in 2030 DART plan
Patron Parking Structure	Parker Road Station	Under Study

Source: Dallas Area Rapid Transit

The City of Plano has been able to maximize its membership benefits in DART through various efforts, and ridership has grown significantly. The average daily ridership on DART facilities serving Plano has increased by almost 100% from 2,800 in 2000 to 5,565 in 2006 since the arrival of light rail in 2002. Current bus service includes a route from downtown Plano along the K Avenue corridor to the Collin Creek Mall and businesses along U. S. 75. Other bus routes in Plano connect with Collin College's Spring Creek campus and the East Plano area with the Plano Parkway, 15th Street and Parker Road corridors. The bus route then travels up Preston Road and serves the Legacy area. Another route presently serves the Dallas North Tollway corridor up to Parker Road and the Shops at Willow Bend Mall from the Medical Center of Plano at the Coit Road and 15th Street intersection. DART also has an on-call service for people with physical disabilities that make it difficult to use bus or light rail facilities. People can call and schedule appointments for transportation services. Advance arrangements are necessary.

There are gaps in the transit system, particularly with east-west service. More attention should be focused on feeder routes to the light rail stations. The challenge in extending service further west in Plano is ridership. DART has recently determined that there is little demand for bus service west of Coit Road and north of Parker Road. DART periodically evaluates all routes and eliminates those with the low ridership.

The City of Plano also has another on-call transit service through a contract with Collin County Area Regional Transit (CCART). CCART provides curb to curb transportation services for people age 60 years and older. This service is called Senior Trans. There are two vehicles that provide service five days a week and three days a week respectively. People contact CCART and arrange for the transportation they need. This service is funded through the Parks and Recreation Department and is affiliated with the Collin County Committee on Aging. Under a separate grant, CCART also provides transportation for seniors to meals provided by the Collin County Committee on Aging during lunch time at the Plano Senior Center. An interdepartmental study of transportation and other services for Plano's growing senior population is currently underway and may provide other options that can be implemented in the future.

Bicycle Transportation System

The bicycle is considered a component of the multi-modal transportation system found within the City of Plano. As the City matures and neighboring communities continue to develop at a rapid pace, vehicular transportation within Plano will become more difficult. The bicycle could be a limited alternative transportation option for trips to employment centers, transit stations, shopping centers, educational institutions and cultural facilities. Recreational bicycle use is also very important. A quality recreational bicycle trail system is a major contributor to the overall quality of life of a community.

The City of Plano has an extensive bicycle transportation plan in place as indicated in the Bicycle Transportation Plan map (see Plate 2). The Bicycle Transportation

Plan map shows the location and type of system available in Plano through a network of on-street routes and off-street trails. The system is divided into four categories: the Regional Veloweb (a regional network of the bicycle trails in the Metroplex), Major Routes, Secondary Routes, and Recreational Trails.

The Six Cities Trail Plan was adopted in October of 2001, and included the cities of Allen, Frisco, Garland, McKinney, Plano, and Richardson. This plan includes interconnecting bicycle transportation plans for these six cities. The Six Cities Trail Plan would utilize the alignment along the Rowlett Creek corridor, the Bluebonnet Trail, and Preston Ridge Trail to create a multi-city trail plan.

Continuing improvements and expansion of the bicycle trail system will be necessary. Access across barriers such as U.S. 75 and major thoroughfares is a concern for bicyclists in Plano. The City of Plano hired a consultant to study safe crossings of major thoroughfares in 2005. Recommendations from the study for collector street crossings were included in the 2005 bond election. Additional funding for implementation of the study recommendations for major thoroughfare crossing improvements will require a future bond election. The Engineering Department received grants to improve the crossing at 15th Street and U.S. 75 interchange and to build a bicycle/pedestrian bridge over U.S. 75 at Park Boulevard. More details about bicycle transportation in Plano can be found in Policy Statement 1.0 - Bicycle Transportation.

Objectives for Theme II - City of Organized Development

Objective B.1 Provide a local roadway system with safe and efficient cross-town and neighborhood circulation and access, in accordance with the Thoroughfare Plan.

Objective B.2 Enhance the efficiency of intersections to cope with increased traffic demand on the roadway system.

Objective B.3 Provide for the full operation of Plano's thoroughfare system through the completion of remaining capacity improvements.

Objective B.4 Promote the provision of a fiscally responsible, diversified transit system which addresses local and regional needs, and maximizes the benefits derived by Plano.

Objective B.5 Promote safe and accessible recreational and destination-oriented bicycle use.

Strategies for Theme II - City of Organized Development

Strategy B.1 Review and update the Transportation Element, including the Thoroughfare Plan map every three years.

Strategy B.2 Allow for amendments to the Thoroughfare Plan map between updates only when essential to the development of land and when supported by a study of local and system wide impacts of the proposed change.

Strategy B.3 Conduct an annual review of existing transportation facilities, particularly major intersections, and their performance and safety records to improve traffic capacity and safety.

Strategies B.4 Where possible, acquire rights-of-way for additional turn lanes at major intersections.

Strategy B.5 Through the development review process and Community Investment Program (CIP), provide safe, reliable street access for daily use, and for emergencies to all developed properties.

Strategy B.6 Complete missing links of the thoroughfare system and develop roadways in accordance with design standards as indicated on the Thoroughfare Plan map and Thoroughfare Plan standards ordinance.

Strategy B.7 Maintain a close working relationship with DART and monitor its development of plans and programs to ensure Plano's transportation needs are properly understood and addressed.

Strategy B.8 Develop and maintain a system of bicycle routes and recreational trails for destination and recreational use that lead to cultural attractions and employment areas, mass transit facilities and residential neighborhoods.

THEME III - CITY IN TRANSITION

Increased Traffic Volumes

As is the case in most cities, Plano's biggest travel demand is by automobile. This demand has grown with the city as it has matured. A measurement of the growth of automobile travel in Plano is the average traffic count of selected major thoroughfares. Roadways were selected that traveled through the most populated areas of the city. Table 3 on the following page provides average traffic counts from all sections of the selected roadways from 2000 and 2006.

TABLE 3
AVERAGE WEEKDAY TRAFFIC COUNT OF SELECTED MAJOR THOROUGHFARES

Roadway	2000 Average	2006 Average	Change
Coit Road	34,312	37,967	10.7%
Custer Road	21,685	25,171	16.1%
K Avenue	21,541	20,365	-5.5%
Legacy Drive	32,094	32,774	2.1%
Park Boulevard	21,754	24,827	14.1%
Parker Road	28,325	26,863	-5.2%
Preston Road	42,605	44,445	4.3%
Spring Creek Parkway	24,177	25,783	6.6%

Source: City of Plano Transportation Division

The data in Table 3 indicate that six of the eight roadways increased the average weekday traffic counts from 2000 to 2006. The greatest increases were for Coit Road, Custer Road, and Park Boulevard. The Cities of Allen, Frisco, and McKinney have experienced tremendous growth since the 2000 Census. The North Central Texas Council of Governments estimates that Allen's population has increased by 76 percent as compared with 173 percent for Frisco and 106 percent for McKinney. The highest growth areas of the three cities are located along the Coit Road and Custer Road corridors. Park Boulevard provides east-west access into Plano. The roadway begins near Murphy and Wylie. These cities have grown by 302 and 134 percent respectively. Continued population growth in Plano's neighboring cities will contribute to increased traffic on Plano's thoroughfares as more people travel through the city for employment opportunities

K Avenue and Parker Road have experienced decreases in average weekday traffic counts. The loss of traffic may be attributed to reduced capacity along K Avenue and the construction for additional lanes for Parker Road. Drivers are seeking alternative routes to avoid traffic congestion and construction delays. Traffic congestion is a problem on K Avenue at the Legacy Drive, Parker Road, and Park Boulevard intersections. Most of the intersections will receive major lane modifications to mitigate congestion.

Improvements to Parker Road east of Plano have been completed; however, work is still underway on adding lanes from K Avenue to east of P Avenue. Reconfiguration of the interchange at Parker Road and U. S. 75 will begin during spring or summer of 2008 and will last about two years. When these projects are completed, traffic volume should return and probably exceed counts from previous years.

High Congestion Areas

Several areas of the City are experiencing relatively high levels of traffic congestion. The five highest congestion locations are the Legacy area; the S. H. 121 corridor, the Dallas North Tollway corridor, and the U. S. 75 interchange locations at Parker Road and Spring Creek Parkway.

Heavy traffic concentration in the Legacy area results from the corporate employment centers situated along Legacy Drive. Both Legacy Drive and Spring Creek Parkway serve regional traffic needs by providing connections between Preston Road and S. H. 121. At the present time, Frito-Lay, Inc., Cadbury Schweppes, Electronic Data Systems Corporation, the J. C. Penney Co., Inc., Countrywide Financial Corporation, Ericsson, Inc., and other companies employ approximately 37,000 persons in Legacy. Traffic congestion in the area occurs primarily during weekday morning and evening peak hour periods. However, the entertainment and retail businesses in the Legacy Town Center attract quite a few people on the weekend as well. Much more development of land is possible in Legacy, yet the vast majority of the thoroughfare system serving it is in place. Therefore, continued monitoring of traffic volumes in the area and the introduction of TDM measures and mass transit services will be essential to maintaining its significance as a major destination and employment center.

S.H. 121 passes through one of the highest growth areas in the Metroplex. Development still continues in northern Plano and the Legacy area as well as in Allen, Frisco, and McKinney. Traffic count data shows a 7.2 percent increase in automobiles using the highway between 2000 and 2004, the last year data was available from the Texas Department of Transportation (TxDOT). The construction of the service roads and interchanges at the Dallas North Tollway, Preston Road, and Custer Road has improved traffic flow along the S.H. 121 corridor. The Regional Transportation Council has awarded the North Texas Tollway Authority (NTTA) the bid to construct and operate the main lanes of S.H. 121 as a tolled facility.

Continued office and retail development along with residential growth in cities such as Celina, Frisco, and Prosper along the Dallas North Tollway corridor has increased congestion during peak weekday travel periods. Backups are now beginning to occur at the Parker Road Toll Plaza. This situation may worsen with the recent extension of the Tollway from S.H. 121 to U.S. 380.

In response to the congestion trends along U.S. 75, the city sponsored a corridor improvement study for all ramps except Legacy Drive within Plano and the Parker Road interchange. TxDOT is using the study recommendations to improve the ramp placement along the U.S. 75 corridor and reconfigure the interchange at Parker Road. Both TxDOT and DART are building High Occupancy Vehicle lanes from Interstate 635 in Dallas to Bethany Road in Allen. The purpose of the lanes is to provide optimum travel conditions for vehicles with two or more persons, hybrid vehicles, and motorcycles and to encourage more people to ride share instead of traveling alone in their cars.

Use of the President George Bush Turnpike has grown immensely since the roadway opened in 1998. The North Central Texas Council of Governments (NCTCOG) reported traffic count volumes at over 120,000 vehicles per day in 2004 at the Coit Road Toll Plaza. This figure is almost twice than the 63,000 vehicles per day projected by the North Texas Tollway Authority (NTTA) for the same year before the turnpike opened. Much development has occurred along the expressway corridor at Coit Road and in the Research/Technology Crossroads (RT) near Jupiter, Renner and Shiloh Roads. There is still a considerable amount of land available for development along the corridor and its utilization will increase traffic to even higher levels on the turnpike.

Commuting Patterns

In 2006, the U.S. Census Bureau released detailed information regarding commuting patterns between cities. Tables 4 and 5 list the top ten cities where Plano workers commute for employment and where people live who travel into Plano for their jobs. Plano's commute pattern has mostly been north to south for the past several decades. Table 4 shows this trend continues with Dallas and Richardson as the leading destination cities for Plano workers. While the southbound commuting pattern remains significant, other trends have emerged. Plano workers are also traveling east and west to employment opportunities in Irving, Farmers Branch, Addison, Carrollton, and Garland. For the second consecutive census, data indicates that more Plano residents are commuting to jobs within the city than traveling south to Dallas.

The growth of the Legacy area and development along the Dallas North Tollway, President George Bush Turnpike, and U. S. 75 corridors during the 1990s and early 2000s have created employment centers in Plano that attract people who live within the city and in neighboring communities. Statistics from U.S. Census Bureau indicate over 62,000 people are coming into Plano to work each day while almost 71,000 residents leave daily for jobs located outside the City.

TABLE 4
TOP 10 COMMUTING DESTINATIONS FOR PLANO RESIDENTS
TRIP ORIGIN – PLANO

Work Trip Destination	Number	Percent
Plano	45,390	39.1%
Dallas	31,650	27.3%
Richardson	12,205	10.5%
Irving	3,570	3.1%
Farmers Branch	3,405	2.9%
Addison	3,035	2.6%
Carrollton	3,025	2.6%
McKinney	2,425	2.1%
Garland	2,110	1.8%
Allen	1,715	1.5%

Source: 2000 U. S. Census

Table 5 reveals some interesting trends. Almost 24,000 people are reversing the commuting patterns and traveling north from Dallas and Richardson to jobs in Plano. These reverse travel movements help mitigate peak hour patterns that typically result in greater southbound congestion in the morning and increased northbound traffic in the evening. Over 13,000 people commute to Plano from cities to the north such as Allen, Frisco and McKinney. The data from the U.S. Census Bureau indicates that many people make east-west commutes from neighboring cities as well. Over 12,000 people were coming to jobs in Plano from Carrollton, Garland, Lewisville, and Wylie. These emerging commuting patterns are expected to continue and must be considered in transportation planning efforts.

TABLE 5
TOP 10 PLACES OF ORIGIN FOR PLANO WORKERS
TRIP ORIGIN – OTHER CITIES

Place of Origin	Number	Percent
Plano	45,390	42.2%
Dallas	17,890	16.6%
Garland	6,100	5.7%
Allen	4,825	4.5%
Richardson	4,750	4.4%
McKinney	4,570	4.2%
Frisco	3,980	3.7%
Carrollton	3,075	2.9%
Wylie	1,545	1.4%
Lewisville	1,365	1.3%

Source: 2000 U. S. Census

Future Outlook for Transportation

It is no surprise that statistics on traffic volumes, commuting patterns and employment trends continue to document increased automobile traffic on Plano streets. With most of the thoroughfare system in place and no land available for expansion of the existing street system, the roadway service levels will continue to deteriorate and congestion at major intersections will increase. In response, other modes of transportation will need to be utilized more effectively. In particular, ridership on the mass transit system (particularly buses) must increase. Limited bus ridership has led to service changes and cutbacks in Plano. Light rail has proven to be a popular option for mass transit among Plano residents, but it is more expensive to construct due to acquisition of rights-of-way and the provision of new infrastructure. Buses use existing roadways and can be more easily allocated to meet the needs of the service area. Plano should work with DART and other regional transit agencies to ensure coordination between bus routes, light rail transit origins and destinations, and major employment centers. The system should be easy to use, timely, and routed to desired destinations.

Plano is part of the Dallas-Fort Worth region where over 6.5 million people live. The North Central Texas Council of Governments (NCTCOG) is in the process of developing its Mobility 2035 Plan, a document which will identify transportation projects needed to accommodate an additional 4 million people expected to live in the region. The plan utilizes a multimodal approach to the region's transportation system through addressing expansion and improvement projects to the roadway system, mass transit and bicycle transportation.

One mode of mass transportation is commuter rail and light rail provided by DART, Denton County Transit Authority, and the Fort Worth Transit Authority (the "T"). NCTCOG's Regional Rail Corridor Study includes over 250 miles of new rail service for the region within the Central, Northeast, and Southwest corridors (see attached map).

A rail project which will serve Plano is the North-Cross Town Corridor, also known as the Cotton Belt. The railway line will extend 52 miles from Wylie to Fort Worth and travels through the southeast section of Plano along the 14th Street and Plano Parkway corridors. DART's section of the Cotton Belt commuter rail line would connect Plano with the Dallas-Fort Worth International Airport and interface with DART's Green, Orange, and Red rail lines. There would be connections with two Northeast Corridor routes including the proposed Burlington Northern Santa Fe (BNSF) commuter rail line with service to Frisco and Irving, and the Denton County Transit Authority's commuter rail line from Denton to Carrollton. Finally, service to downtown Fort Worth would be provided on the western half of the Cotton Belt by the Fort Worth Transit Authority from Dallas-Fort Worth International Airport.

The City of Plano has designated two locations for future stations along the Cotton Belt railway in Plano. The first station would be located at the existing crossing of the Cotton Belt and the DART Red line at 12th Street and offers the most economical opportunity to create a joint station serving passenger transfers. The 12th Street station is a good location for connecting bus and shuttle service to surrounding employment centers and residential areas, provides access to affordable housing, and would further stimulate transit-oriented development near downtown Plano. The second station would be located in southeast Plano, at Shiloh Road and would serve an employment center with over 16,000 jobs within a two mile radius. The Shiloh Road station will also be convenient for rail riders from Garland, Murphy, Richardson, and Wylie as well.

The Northwest Transit Center, which will be located south of Tennyson Drive at the Dallas North Tollway, is also part of DART's 2030 service plan. Construction on the project will begin in 2011 and will serve the Legacy area and western areas of the city with bus service. Bus Rapid Transit (BRT) could be another good option for DART to consider using in Plano. BRT operations provide service with limited stops between multiple destination points. It could use a separate lane in its own right-of-way or existing roadways. BRT service in Plano could be operated from Legacy Town Center to the Northwest Transit Station and continue on to the Parker Road Transit Station.

~~Another issue with DART is the extension of services into other cities such as Allen, Frisco and McKinney. These three cities are not currently members of DART. The BNSF Railroad right-of-way along the west side of Plano is under consideration by the NCTCOG in its Regional Rail Corridor Study and Mobility 2025 update for commuter rail service. The study is considering the technical aspects of eight rail corridors around the Metroplex as well as the legislative and financial solutions required for potential regional rail service in the future.~~

~~If Allen and McKinney were to join DART, light rail or commuter rail could be extended from its present terminus at Parker Road up the Union Pacific railroad right-of-way owned by DART. If this happens, the City of Plano should work with DART to determine the feasibility of a station at Spring Creek Parkway. The land area required for a station should be preserved. The possibility of a grade separation of the light rail line with Parker Road should also be considered.~~

~~DART's 2030 service plan eliminates the Northwest Transit Center from the DART 2030 plan. This station would have been located near the Legacy area at Tennyson Parkway and the Dallas North Tollway on property already owned by DART. Because of the continued employment, retail, and residential growth in Legacy and the increased use of traffic arteries serving Legacy, mass transit is needed in this area. This change comes at a time when more attention needs to be focused on bus service. The City will need to work closely with DART and major employers in Legacy to ensure that the station becomes part of the service plan again.~~

Transportation Improvement Projects

Many issues face Plano in regards to the provision of a variety transportation service options. In light of limited financial resources and availability of land required for capacity improvements, it will be important that the City get the most from its investment on projects to improve transportation. An option to consider would be the development of criteria to prioritize transportation improvement projects. Here are some examples to consider:

- Ability to mitigate traffic impacts for the least amount of cost.
- Ability to improve the utilization of existing transportation facilities.
- Relationship to other City issues such as changing demographics, growing reverse commute, and new employment centers.
- Regional as well as local significance such as potential to improve air quality.
- Fostering public/private partnerships to solve common problems including those using private investment in long term transportation solutions. Examples include encouraging large employers to participate in TDM programs and private development of major transportation infrastructure improvements.
- Fostering coordination between efficient land use and transportation system investments.

The criteria listed above could help guide decisions for funding and implementing transportation improvement projects.

Traffic Impact Analysis

Plano has used Traffic Impact Analysis (TIAs) studies for many years to determine the impact of new development on the local roadway system. TIA studies typically show that new development generates more traffic and decreases level of service at intersections of major thoroughfares. Since there are very few options to improve capacity to accommodate increased traffic, the value of TIAs is questionable. A negative TIA finding does not provide the legal means to deny or delay development that conforms to zoning and subdivision regulations unless there are capacity enhancement options available. Using it as a development review tool tends to complicate rather than improve the review process, because the results often cannot be translated into specific actions. A consultant study on the use of TIAs for the City of Plano recommends that the City abandon TIAs in favor of a circulation plan for large development projects.

Regional Mobility

Plano's transportation system is strongly tied to the regional network of roadways, rail, and transit services within the Metroplex. The expenditure of federal, state and local funds for regional transportation improvements is guided by the "Regional Transportation Plan for North Central Texas" (currently called Mobility 2030) sponsored by NCTCOG. The current plan is required to justify federal funding for various roadways.

The Regional Transportation Plan is a long-term, comprehensive program that stresses participation of local governments, transit authorities and TxDOT. The plan addresses mitigation of transportation problems along freeways and regional arterial roadways. In addition to roadway improvements, the plan addresses bus and rail transit service as well as high occupancy vehicle (HOV) systems for carpools and buses. Plano's transportation system must be consistent with that provided throughout the Metroplex in order to move traffic as efficiently as possible. Inconsistencies in the transportation system could result in untimely delays and worsening of air quality due to increased exhaust emissions from idling vehicles. The City of Plano participates fully in reviews and updates of the Regional Transportation Plan to ensure the document's consistency with the City's Thoroughfare Plan.

Plano is nearing full development, but neighboring cities continue to grow rapidly. To ensure regional mobility, it is important that the transportation system within Plano interconnects with those in neighboring cities. This is accomplished through coordination with officials from surrounding cities and comparing land use and transportation plans. Plans for roadway improvements and development projects that could impact traffic on streets should be shared and evaluated.

Emerging Technologies - Intelligent Transportation Systems (ITS)

Intelligent Transportation Systems (ITS) is a nationwide effort to link new communication, information, and mapping technologies to improve transportation mobility and efficiency. The U. S. Department of Transportation (USDOT) and the Intelligent Transportation Society of America (ITS AMERICA) are working with many organizations and companies at national and international levels to make ITS a reality. The City of Plano is currently participating with DART on an Integrated Corridor Management Project on U.S. 75. This project calls for coordination of transportation groups to keep traffic moving along the U.S. 75 corridor by sharing information with local governments, transportation service agencies, major employers, roadway and transit users.

The city and the region should continue to identify and incorporate ITS elements into transportation operations. ITS represents another way to better utilize the transportation capacity that is already in place.

Objectives for Theme III - City in Transition

Objective C.1 Coordinate with neighboring cities and regional transportation agencies on critical land use and transportation issues.

Objective C.2 Ensure that Plano's transportation system is consistent with that of the Metroplex region through review of regional and local plans.

Objective C.3 Employ innovative programs to reduce traffic congestion on regional expressways and the City's street system.

Objective C.4 Ensure quality mass transit services and interconnectivity with both local and regional destinations.

Objective C.5 Minimize the impact of new development and redevelopment on the operation of Plano's thoroughfare system.

Strategies Theme III – City in Transition

Strategy C.1 Coordinate with neighboring communities to explore regional transportation approaches that would improve traffic flow within and between jurisdictions.

Strategy C.2 Participate in the development and implementation of NCTCOG's Regional Transportation Plan and other regional coordination programs.

Strategy C.3 Work with DART to identify and implement new bus transit alternatives in Plano. In particular, explore the provision of bus rapid transit between Legacy and the Parker Road station.

Strategy C.4 Support DART's efforts to improve east-west transit service, including a connection to DFW International Airport, through the development of funding options and designation of the proposed station locations along the Cotton Belt corridor at 12th Street and at Shiloh Road within Plano.

Strategy C.5 Work with DART and other transportation service agencies to develop plans and programs to provide transportation services for the disabled and seniors.

Strategy C.6 Encourage expansion of DART services to new member cities using equitable funding policies.

Strategy C.7 Develop criteria to prioritize transportation improvement projects and programs that will receive funding from Plano's Community Investment Program (CIP).

Strategy C.8 Require developers to submit site circulation plans for major development projects to improve on-site circulation and vehicle access to and from the property.

2011 THOROUGHFARE PLAN MAP AMENDMENTS

The Thoroughfare Plan map displays the future plans for Plano's transportation system. Several changes are proposed for the 2011 update.

1. 12th Street DART Station

Place a DART facility symbol at the junction of the DART Red rail line and the St. Louis and Southwestern Railroad (Cotton Belt) identifying the 12th Street station.

2. Shiloh Road DART Station

Place a DART facility symbol just west of Shiloh Road at the intersection with the St. Louis and Southwestern Railroad (Cotton Belt).

EXHIBIT II-1

CORRIDOR LOCATION MAP

Northeast:
E-3: Dallas Area Rapid Transit: Plano/Allen/Fairview/McKinney
E-4: Burlington Northern Santa Fe: Carrollton/The Colony/Frisco

Southeast:
E-5: Burlington Northern Santa Fe: Duncanville/Cedar Hill/Midlothian
E-6: Burlington Northern Santa Fe: Dallas/Lancaster/Red Oak/Waxahachie

Central:
E-1: Trinity Railway Express: Dallas County line/Downtown Dallas
W-3: Trinity Railway Express: Fort Worth/Tarrant County Line
W-1: Union Pacific Mainline: Fort Worth/Dallas
(includes Dorothy Spur)

W-4: Burlington Northern Santa Fe:
Fort Worth/Burleson/Joshua/Cleburne

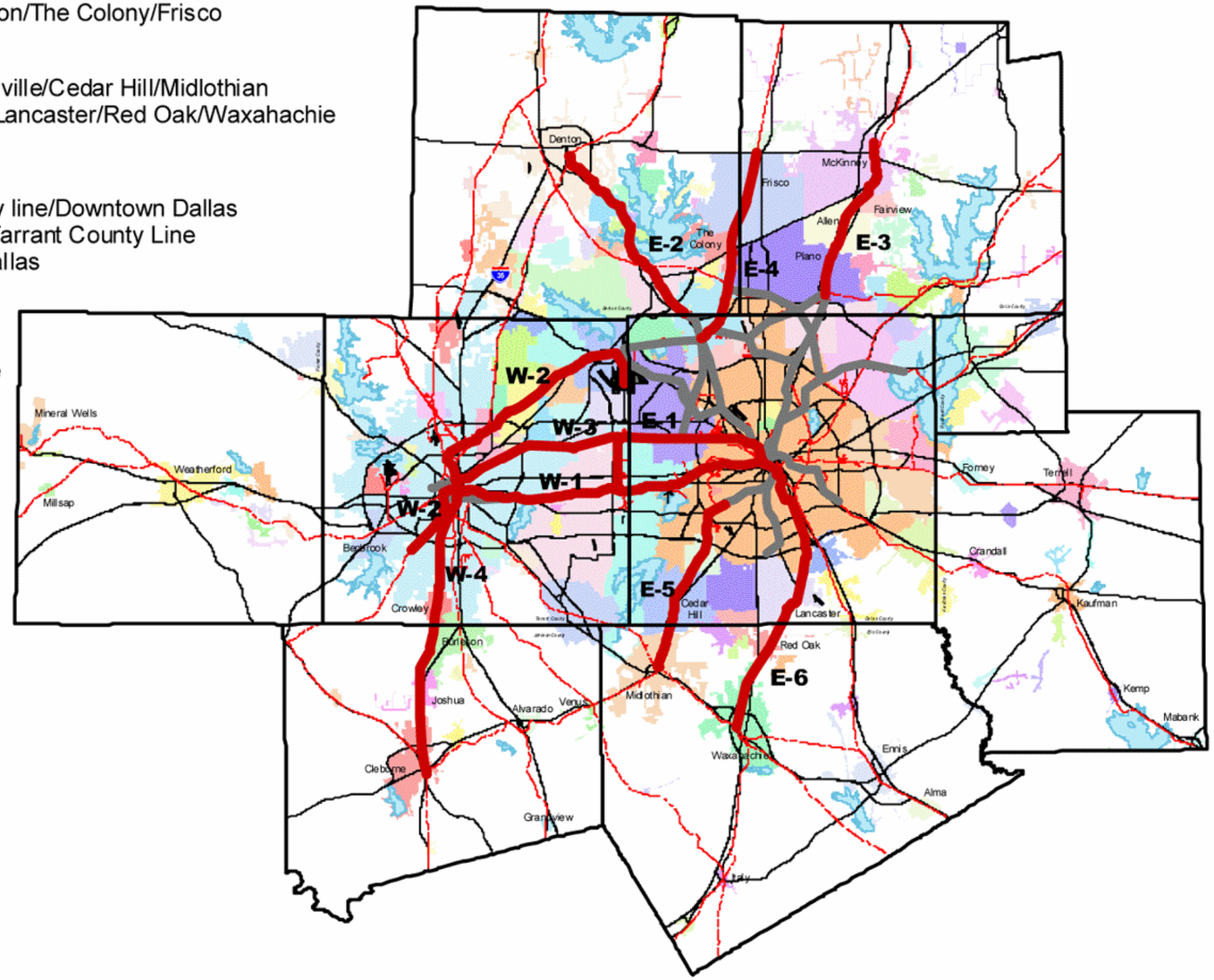
W-2: Fort Worth & Western/Cotton Belt:
Southwest Fort Worth/Tarrant
County Line

E-2: Union Pacific: Carrollton/Denton

Legend

Rail Corridors Under Study
Existing Rail Corridors
Roadway

E = East/URS Corporation
W = West/Carter-Burgess, Inc.



North Central Texas Council
of Governments (NCTCOG)
Transportation

N