7

TRANSPORTATION & MOBILITY

GOALS & RECOMMENDATIONS

Goal 1

Encourage a safe and clean multimodal transportation network that supports community connectivity and walkability.

Recommendations

1. Provide a balanced transportation system that ensures the safe and efficient movement of vehicles, pedestrians, and cyclists.
2. Promote a comprehensive and connected transportation network that improves mobility and accessibility.
3. Make public transportation an integral part of DeSoto's transportation network.
4. Maintain the City's design standards for transportation improvements, such as roadway configuration and intersection design, to better complement and accommodate the surrounding land uses, in addition to improving safety and accessibility for all modes of transportation.
5. Improve access to the City's parks and open spaces.
6. Implement ride-hailing and micro-mobility options.

Goal 2

Support regional access and efficient mobility to and throughout DeSoto.

Recommendations

1. Strengthen partnerships with transportation agencies.
2. Improve access management.
3. Plan roadway improvements to leverage the future Loop 9.
4. Support and study the impact of the Hampton Road Corridor's road reconfiguration.
5. Manage truck, freight, delivery, and e-commerce activity.
6. Prepare for future technologies in mobility

RELEVANT PLANS & PROJECTS

This chapter aims to promote safe and accessible mobility in DeSoto today and the future. The following section highlights relevant plans and projects that support mobility in DeSoto and the region. The aim of this chapter is to highlight existing local and regional efforts and identify strategies to leverage opportunities they create to meet the long range transportation and mobility goals established by the community.

Loop 9

The proposed Loop 9 right-of-way project intends to extend east-west access between U.S. Highway 67 and Interstate 20 and would provide additional regional connections to the southern Dallas region. The road, which would begin at U.S. Highway 67 near Cedar Hill, would run just south of DeSoto, ending at Interstate 20 near Seagoville.

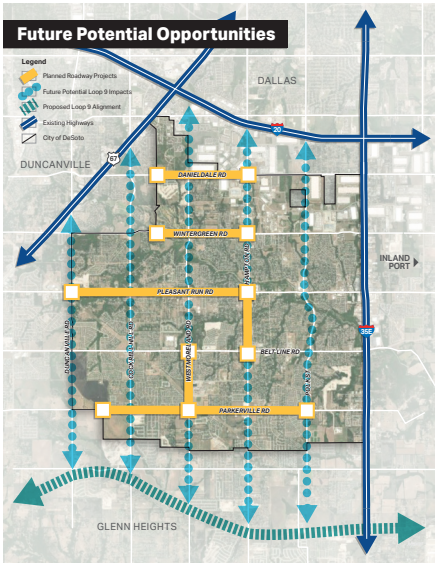
Figure 7.1 TxDOT Map showing Loop 9's Alignment A.

Hampton Road Corridor Plan (2022)

This plan provides insight into proposed updates to the Hampton Road commercial corridor including efforts to make the corridor more walkable and introduce mixed-use village centers into primary intersections. These designs will be further supported through the implementation of a road diet, which allows for increased mobility for all road users.

City of DeSoto Park and Recreation Plan

Public parks and greenspace are crucial to upholding a strong sense of community and wellbeing for all residents. In the 2020 Park and Recreational Plan, goals to create accessible, safe, and cohesive outdoor spaces are laid out, along with steps to help achieve the City's vision. The Plan lays out options for trail system connections, which would make it easier for residents to navigate these updated greenways and uphold a high quality of life.



Roadway Widening Projects

In an effort to curb congestion and increase traffic flow throughout the City, several roadways will take part in street widening efforts, particularly Danieldale Road and Parkerville Road. Duncanville, which is located just outside of DeSoto's jurisdiction, will also experience this widening. When traffic is allowed to flow freely, all road users are safer and commutes are more efficient.

NCTCOG Mobility 2045

The 2022 NCTCOG Mobility 2045 plan illustrates steps for the Southern Dallas region may take to achieve more accessible and equitable transportation options. The plan highlights the need to expand mobility options to fight congestion and provide service for the 11.4 million residents that will call the area home, a three million person increase in 23 years.

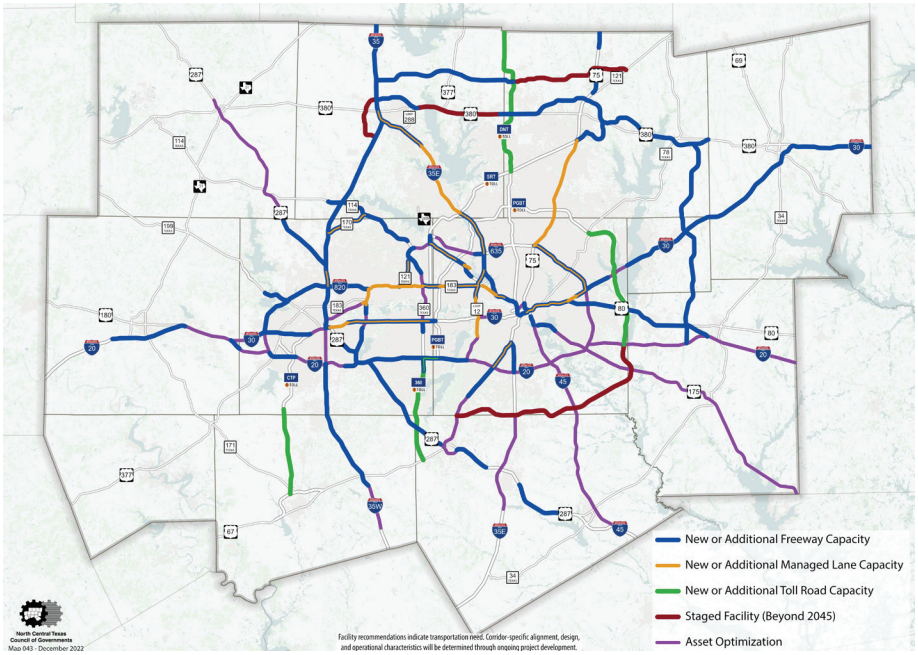


Figure 7.2 TxDOT Map showing Loop 9's Alignment A.

ROADWAY ACCESS & MOBILITY

Roadway Access and Mobility refers to the ability to maneuver though and outside of one's community using a well-connected road network. When DeSoto residents are accessible to each other and the region, including Dallas and the surrounding suburbs, they are presented with better access to jobs and other opportunities. As a largely car-dependent community (95.7% of households having access to a car), DeSoto relies on many types of motorized transportation options to commute to work and daily activities and is well connected to Dallas and other suburbs to the south, through its roads and street networks.

Roadway Functional Classifications

The following section provides roadway function classification definitions for all roadway types within DeSoto.

Highway/Freeway

Highway/Freeway, including U.S. Highway 67 and Interstate 35 East, feature the highest speed limits and widest roadways. Servicing trips in and out of the City, as well as passing-through travelers, highway/freeway see the highest rates of usage each day and act as main routes for longer trips, often between Dallas and other major hubs.

Arterial

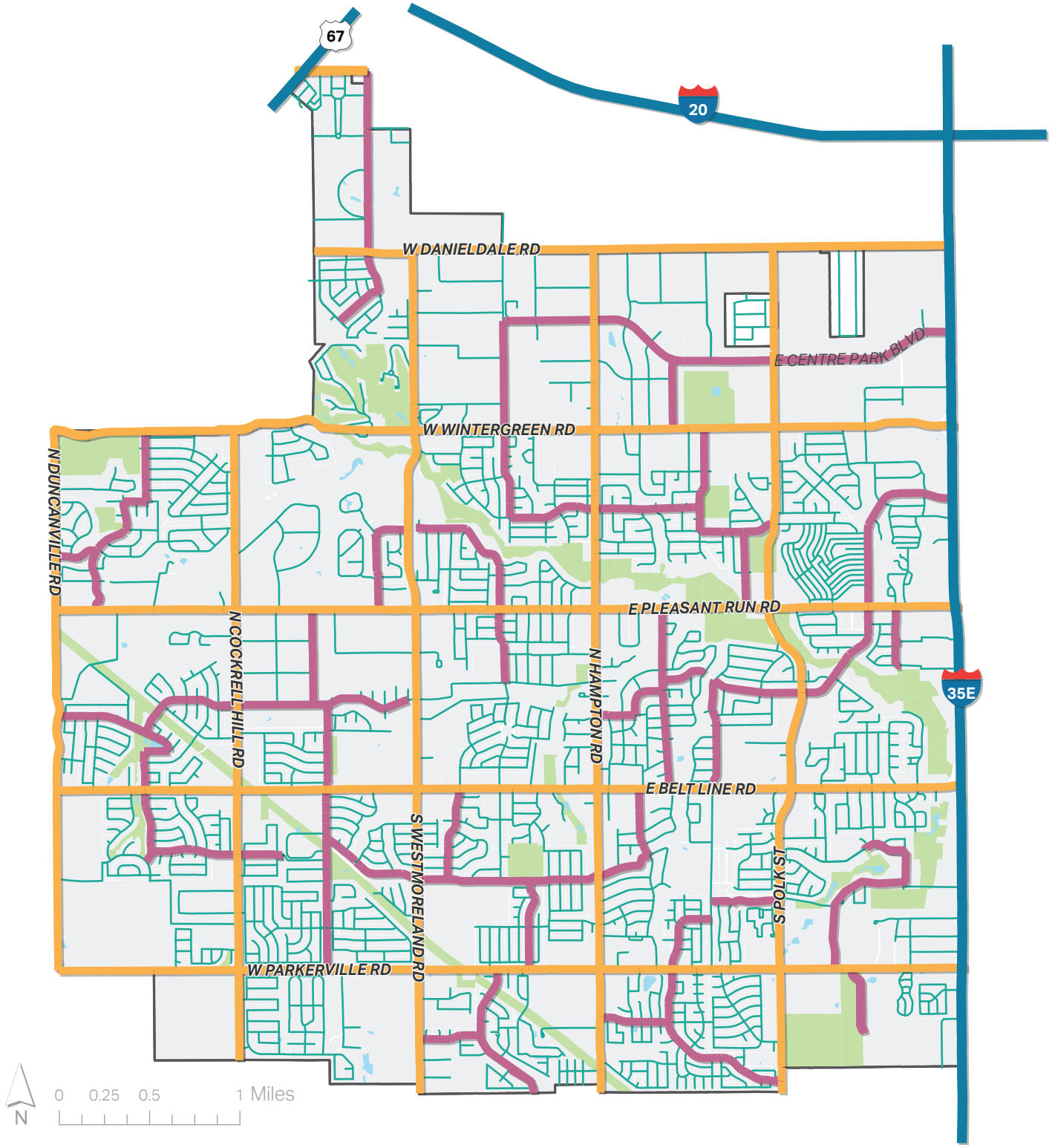
Arterial roads, such as Belt Line Road and Hampton Road, provide some of the highest level of connectivity around the City, and are not only responsible for connecting neighborhoods to each other, but linking each part of the City to a highway or major freeway. These roads connect DeSoto is neighboring communities such as Lancaster and Cedar Hill.

Collector

Collector roads act as essential connections between arterial routes and local city streets. They help to organize traffic flow both from local roads into more central routes, including highways, and vice versa. Due to their versatility of uses, collector roads may be found in diverse land uses and at varying speed limits.

Local Street

Local streets provide connections between neighborhoods, residential developments, and other, collector and arterial, streets.



MAP 7.1

FUNCTIONAL CLASSIFICATION

- DeSoto Municipal Boundary
- Bodies of Water
- Parks & Open Spaces
- Highway
- Arterial
- Collector
- Local Street

Congestion

When roads networks become hindered by restricted traffic flow, known as congestion, streets become less safe for all users and commutes take longer and are less efficient. According to the NCTCOG Mobility 2045 Plan, DeSoto is likely to continue to experience heaviest traffic flows in the north and east sides of the city into 2045 if no future changes to the roadway network are made.

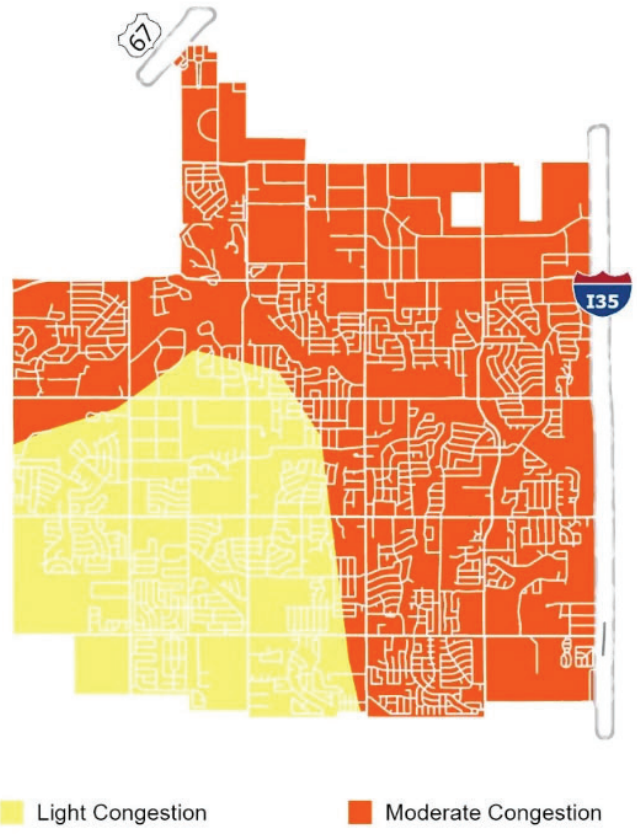
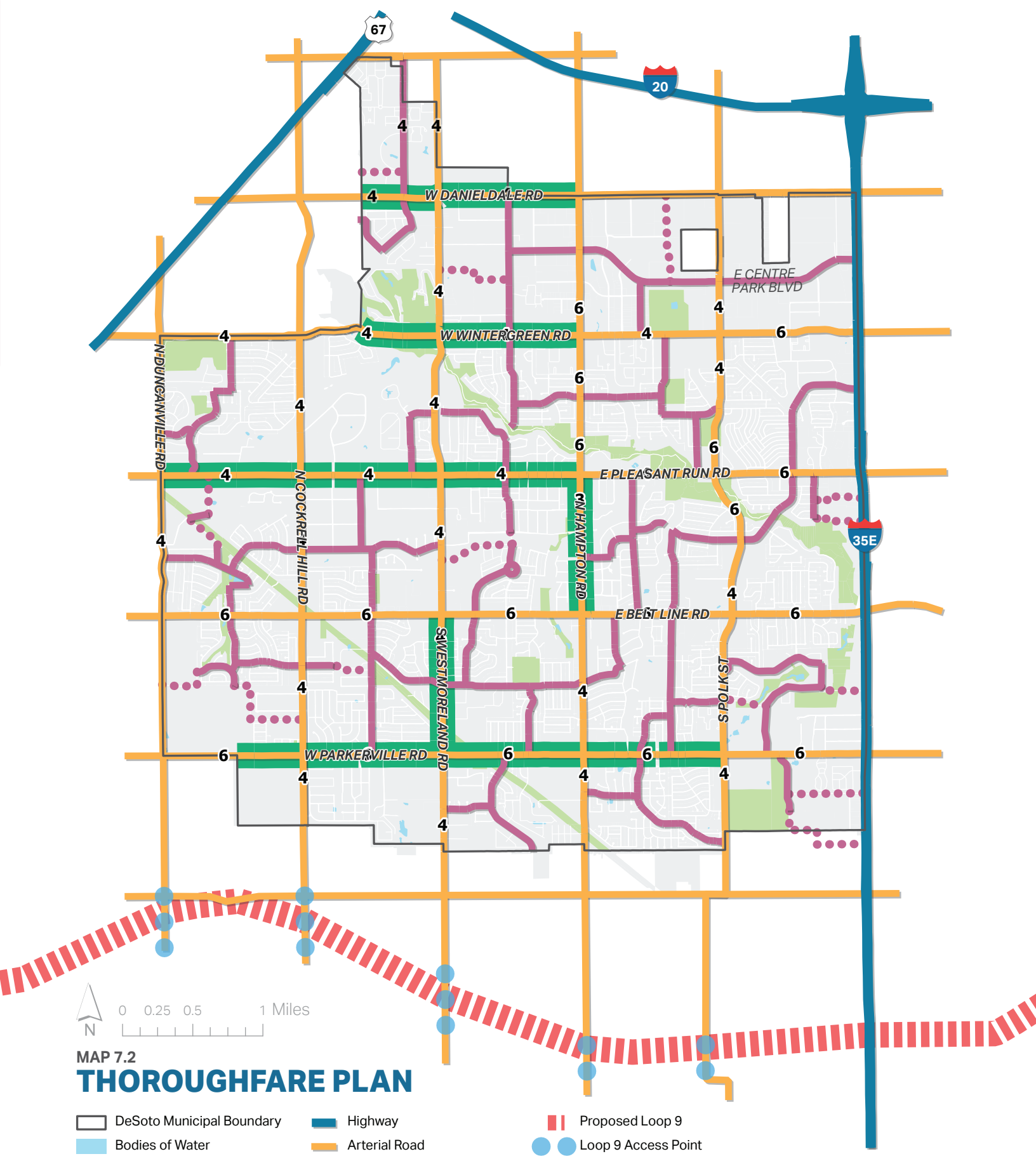


Figure 7.3 NCTCOG Mobility 2045 Plan's Congestion Map.

THOROUGHFARE PLAN

Thoroughfare Plans are planning tools used to display the roadway network and capacity throughout a community. Typically highlighting major streets and highways, these plans can help forecast long-term future mobility needs based on projected growth and development. When used alongside other supporting documents, Thoroughfare Plans can guide decision-making and evaluate deficiencies in current transportation network and traffic patterns.

In 1990, DeSoto developed its first Thoroughfare Plan, which consisted of a one-mile street grid and all six-lane roads. While this plan appropriately met the City's needs over the coming years, by 2003 new developments required revisions to its vision, ones that largely addressed the number of lanes available on each road. The Thoroughfare Plan in the City's 2015 Comprehensive Plan included upheld previous updates to the City's roadway system and included planning for the future Loop 9 alignment.



MAP 7.2

THOROUGHFARE PLAN

- DeSoto Municipal Boundary
- Bodies of Water
- Parks & Open Spaces
- Planned Roadway Projects
- ## Number of Ultimate Lanes
- Highway
- Arterial Road
- Collector Road
- Proposed Collector
- Proposed Loop 9
- Loop 9 Access Point

ROADWAY ACCESS & MOBILITY STRATEGIES

The Thoroughfare Plan provides guidance for decision-making related to the City's transportation network and traffic patterns. The following sections highlight supporting strategies that the City can undertake to implement the Plan's goals and recommendations. These strategies can be applicable to one or multiple goals and recommendations in the Transportation & Mobility chapter. The goals, recommendations, and strategies will be organized in an Action Matrix in the Implementation chapter (forthcoming).

Designate Truck and Freight Routes

With the city being bordered by two major highways, U.S. Highway 67 and Interstate 35 East, transportation logistics may play a significant role in shaping the feel of the community. The City currently has an ordinance that officially designates truck routes within the City. Two truck routes have been specified in the Ordinance, including Interstate 35 East running between the north and south city limits, as well as Belt Line Road, running between the west and east city limits. The City should continue to collaborate with Texas Department of Transportation (TxDOT) and industry users in monitoring its existing truck routes and revise them when the need arises.

Control Truck and E-Commerce Activity

It is important to preserve safety in residential neighborhoods by controlling the activity of incoming and outgoing delivery trucks. This can be accomplished by creating spaces and schedules for e-commerce related activity that does not disrupt access around neighborhoods, regular traffic patterns. The City should explore regulations that designate specific spaces for truck parking, setting truck speed limits, or times when deliveries may be made in residential neighborhoods.

Support Roadway Improvement Projects

In collaboration with DeSoto's Street Department (DSD) and Development Services (DDS), the City should continue to support roadway improvement projects that enhance access throughout the community such as the Danieldale Road and Parkerville Road widening projects.

Partner with Transportation Agencies

While a significant amount of collector and arterial streets are under the City's jurisdiction, a majority of medium-to-long distance travel in and out of the City takes place on state (U.S. Highway 67) and federal (Interstate 20 and 35 East) highways. The City should continue to work with partner transportation agencies that are responsible for roadways within DeSoto, including TxDOT, DSD, and DDS, to ensure a seamless transportation network within the city.

Promote Equitable Electrical Vehicle Supply Equipment (EVSE) Implementation

Introducing electric vehicles into DeSoto's commuting habits is one of the most direct ways of lowering the City's reliance on fossil fuels and decreasing its carbon footprint. As of early 2023, there is a federal-level initiative to carve out equitable paths for EVSE implementation across the county, making funding available on both federal and state levels. Working with the Streets Department to allocate space for Electric Vehicle Charging Equipment (EVSE) will be a key step in equitably introducing electric vehicles (EVs) into the community. On the neighborhood level, the City should consider design regulations that promote the integration of charging stations into plans for new developments. The City should also consider development regulations that require EVSE in commercial and other destination developments to help attract visitors to local amenities and businesses.

Improve Access Management

Access management is a planning term referring to how users enter and exit a property. Although driveways are considered essential development components, too many of them can result in excessive curb cuts, resulting in greater number of potential traffic conflict points for all modes of transport. The City should work with developers and encourage them to minimize the amount of access points within a development. They should also explore opportunities to create cross-access between adjoining non-residential properties. Cross-access is useful in minimizing traffic spillover into the main roadways.

Example of a good access management, with minimal curb cuts and has cross-access between adjacent developments.

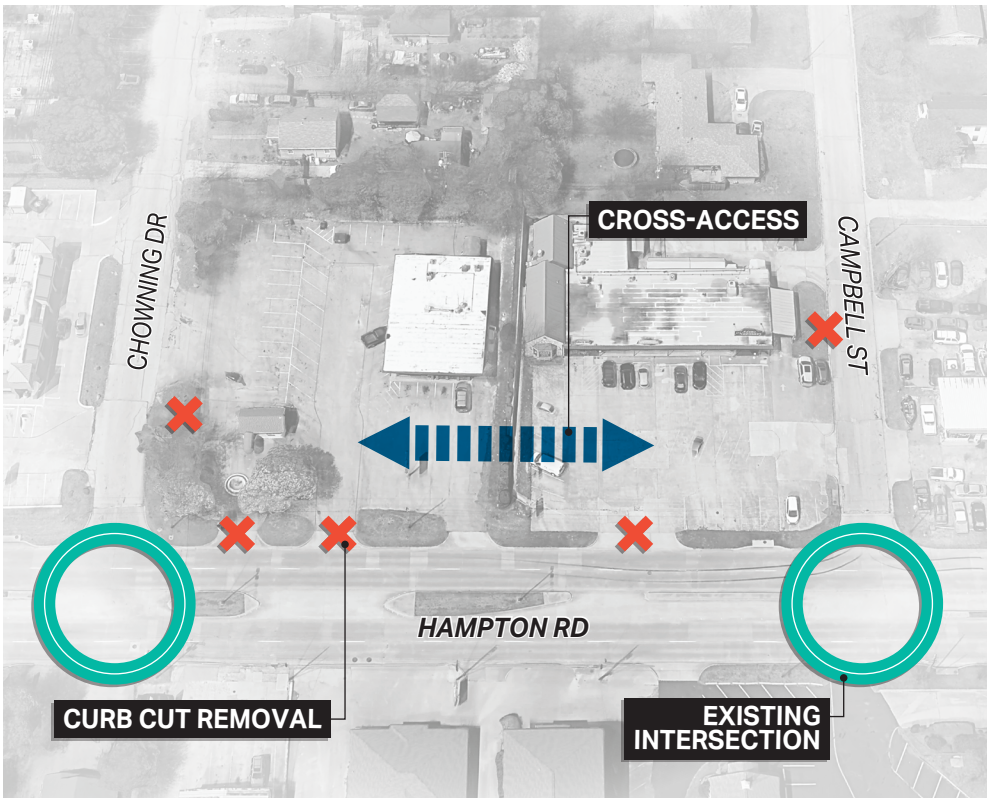
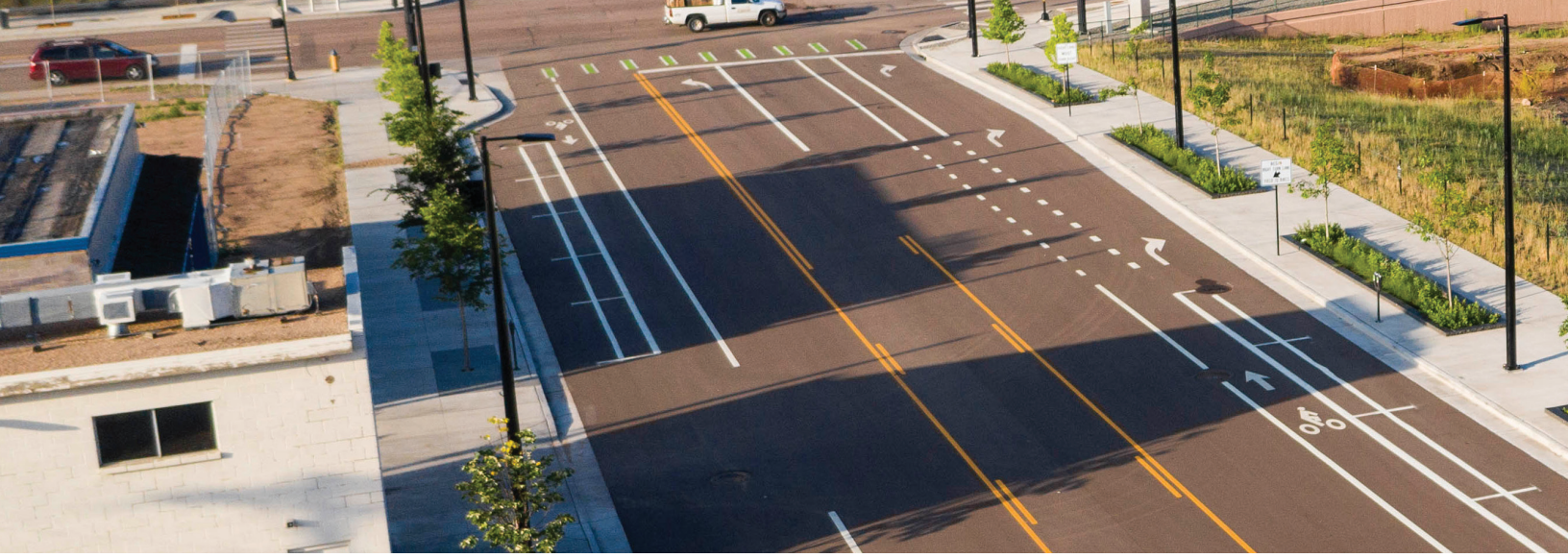


Figure 7.4 Access Management's Example Diagram.



Maintain and Repair Existing Roadways

The City should follow the recommended workplan in TxDOT's Pavement Condition Index Report. The City should also prioritize preventative maintenance efforts on existing roadways to ensure they can effectively carry traffic in the long-term future.

Implement Streetscape Design

Implement the design standards associated with the Streetscape Guidelines on all major roadway corridors in the city through a partnership with DeSoto Sanitation Department (DSan) and Streets Department.

Support and Evaluate Impact of the Hampton Road Corridor Plan

Introduce a road diet, reducing the number of lanes, along Hampton Road. In addition to the diet, the city should implement the landscaping, street furniture, and other elements of the plan to ensure the corridor is a walkable attractive destination. Study the impact of the Hampton Road, road diet on other arterial and connector roadways. Evaluate the outcome to ensure proper distribution of through traffic.

The Hampton Road Streetscape Master Plan provides guidance to the recommended roadway reconfiguration for Hampton Road between Wintergreen Road and Pleasant Run Road.

Plan for Smart Mobility/ City Integration

The City should consider completing a Smart Mobility/City Plan that explores ways DeSoto can integrate smart infrastructure and transportation systems into roadways, systems, and services. The Plan should consider other similar communities in size, population, and demographics as case studies to evaluate how smart systems can be utilized to improve quality of life for all residents. Examples of smart infrastructure and transportation systems include but are not limited to: online utility bill payment services, 311 reporting dashboards and apps, broadband infrastructure, smart signalized traffic lights, etc.

MULTIMODAL ACCESS & MOBILITY

One of the main issues impacting DeSoto's congestion and lack of efficient travel is the City's dependency on cars as its main mode of transportation. Introducing other viable and accessible ways to travel within and outside of DeSoto would not only alleviate unsafe and inefficient traffic patterns but provide residents of all ages greater choices of transportation. Multi-modal transportation refers to the availability of multiple transportation options around a community that are practical and viable, often including cars, buses, trains, bikes, and walking.

Aligning with the community-identified goal of connecting DeSoto's neighborhoods and commercial corridors, improving multi modal access within DeSoto opens new opportunities for stronger connections with communities and the Greater Dallas Metropolitan Area. A well-connected transportation network in this region, with multiple choices for transportation, helps improve transportation equity for all families and residents in the region.

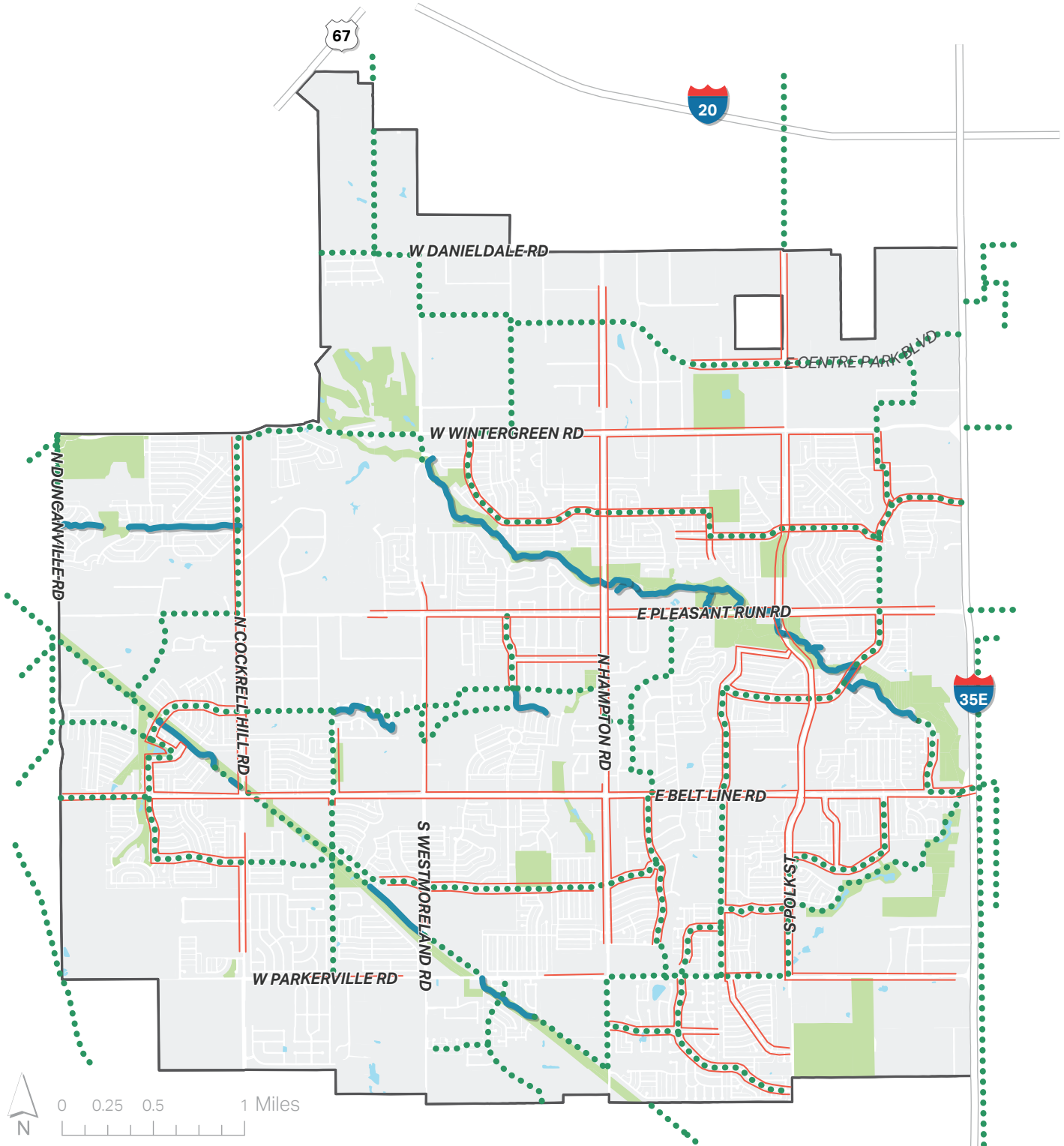
Active Transportation

Active Transportation refers to the integration of non-motorized transportation, such as bicycling and walking, across a community. To encourage people to bike and walk in the DeSoto, the City should ensure future roadways feature sidewalks on both sides of the roadways and proactively plan for a connected network of on- and off-street trails. Including these forms of mobility around DeSoto would help to decrease the City's dependency on cars as well as increase overall health, sense of community, and well-being.

Implementing active transportation includes more than just mobility on sidewalks and pathways - it can also involve the coordination of parks and recreational spaces to provide more greenspace to pedestrians. Goals to uphold greenspace among walking and biking paths have been outlined in DeSoto's 2020 Parks Master Plan and should act as a guiding vision towards implementing active transportation options across the City.

Public Transportation

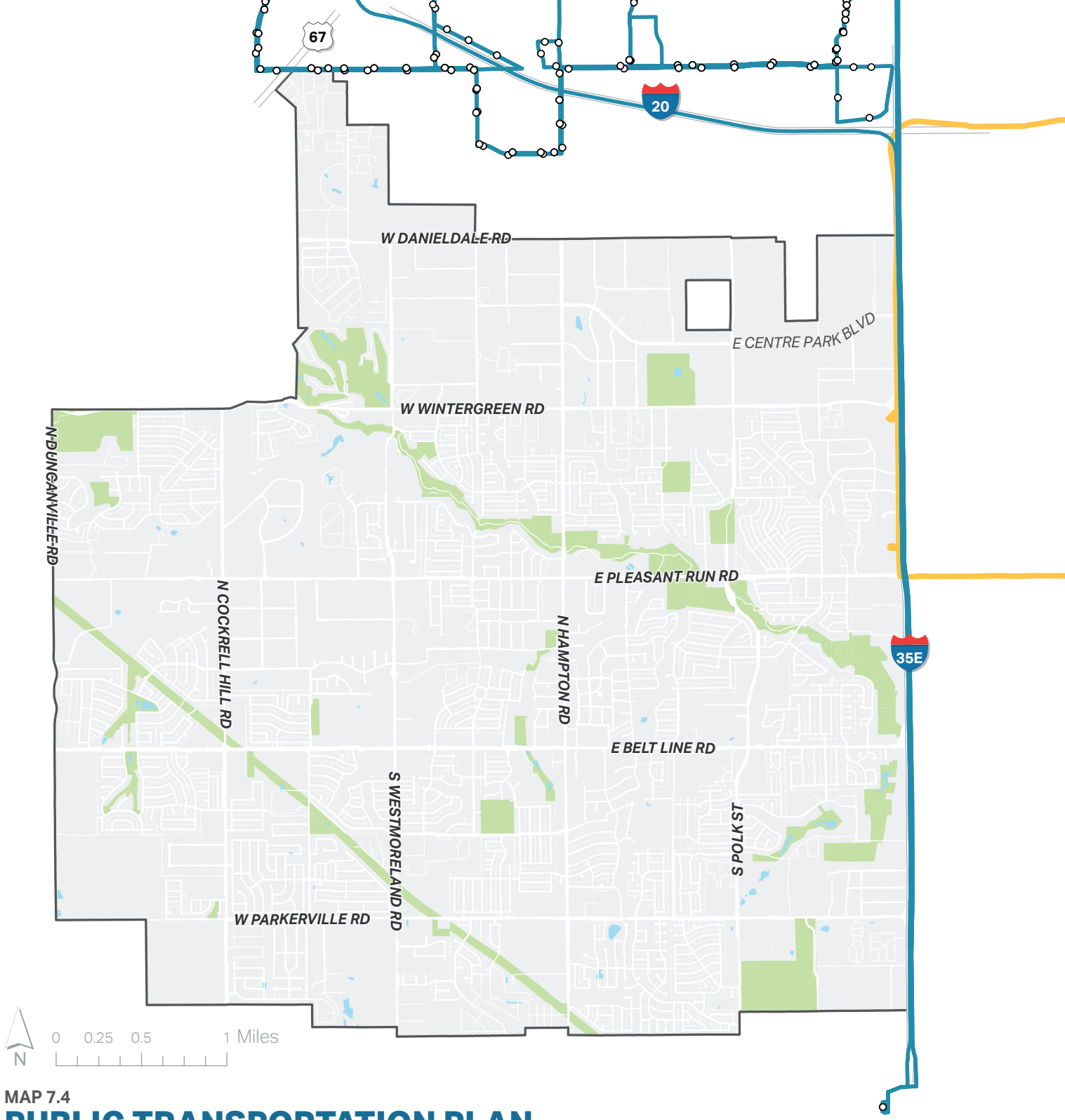
Despite its proximity to the Greater Dallas Metropolitan region, DeSoto is not currently being served by any of DART's public transit lines. The only form of public transportation within City limits is provided by STAR Transit's shuttle service, which provides rides for qualifying residents. In order to provide equitable mobility options across the City, DeSoto should consider implementing transit options that are safe and accessible to all residents. To help implement these goals, the City may partner with Texas Department of Transportation, as well as DeSoto's Economic Development office and Streets Department.



MAP 7.3

ACTIVE TRANSPORTATION PLAN

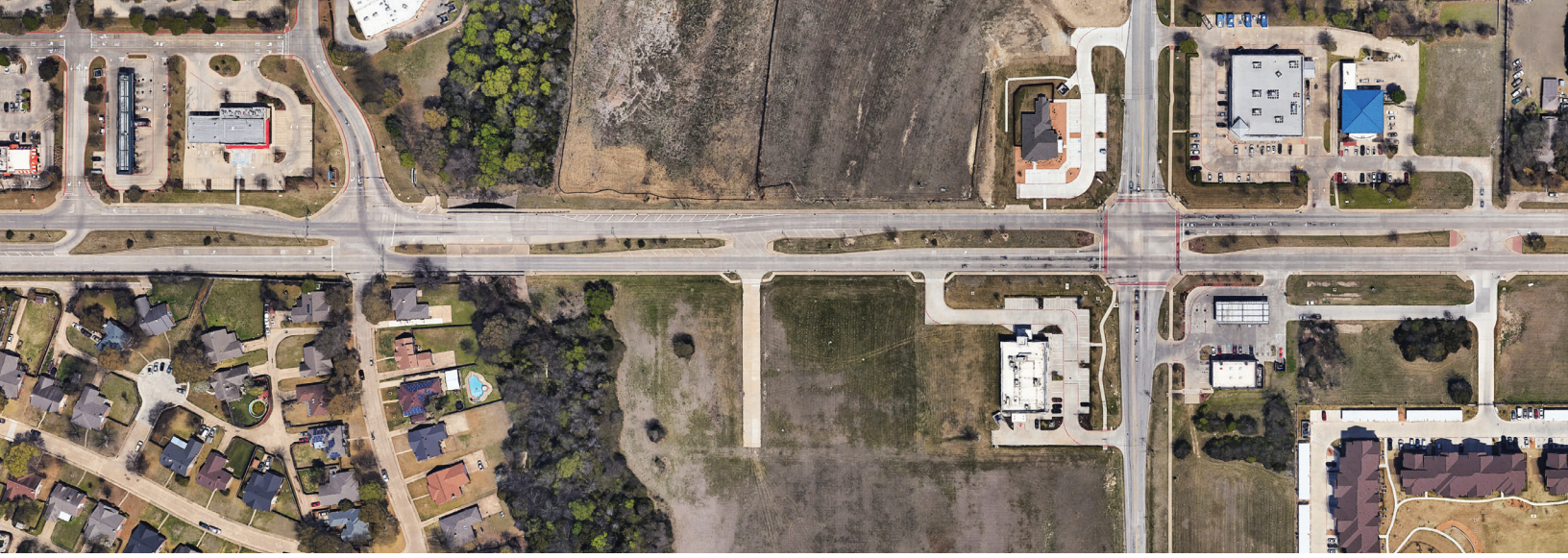
- DeSoto Municipal Boundary
- Parks & Open Spaces
- Bodies of Water
- Existing Trail
- Future Trail
- Existing Sidewalk



MAP 7.4

PUBLIC TRANSPORTATION PLAN

- DeSoto Municipal Boundary
- Bodies of Water
- Parks & Open Spaces
- Existing DART Bus Stop
- Existing DART Bus Route
- STAR Transit Hutchins Shuttle



MULTI-MODAL ACCESS & MOBILITY STRATEGIES

The Active Transportation and Public Transportation Plan provides guidance for decision-making related to the City's infrastructure related to multimodal access and mobility. The following sections highlight supporting strategies that the City can undertake to implement the Plan's goals and recommendations. These strategies can be applicable to one or multiple goals and recommendations in the Transportation & Mobility chapter. The goals, recommendations, and strategies will be organized in an Action Matrix in the Implementation chapter (forthcoming).

Promote Complete Streets Where Appropriate

Promoting non-motorized modes of transportation in the City will require the City's roadways to be strategically accommodating to all modes of transportation. The City should work with TxDOT to identify and promote Complete Streets on important roadways that have strong potential in promoting mobility and access for all modes of transportation. Complete Streets is a set street design standards that balances right-of-way dedication to pedestrian, bicyclists, public transit, and vehicles to promote accessibility and mobility for all. Incorporating Complete Streets on roadways with higher traffic speeds and conflict between different modes of transportation would be considered most appropriate.

The City has already approved works on reconstructing Hampton Road between Pleasant Run Road and Belt Line Road from an auto-centric four-lane roadway into a complete street with on-street bicycle lanes, widened sidewalks, three drivelanes, which includes a center-turn lane. Streetscaping elements, such as planters, street trees, and dual-scale lighting fixture will also be installed to make this section of Hampton Road a visually appealing, safe, and accessible roadway for all modes of transportation.

Promote Walkable Neighborhoods

In collaboration with the Streets Department, implement accessible and safe sidewalks and multi-use paths within and around residential areas that provide connections to key destinations in the city. These paths may be created in open and green spaces, aligning with the goals set out in the 2020 Parks and Recreation Plan. Pedestrian accessibility may be upheld in residential areas by requiring connection points in all new developments.

Support Mobility for Residents Without Car Access

The City may consider micro mobility options, such as bike-share and dial-a-ride, at key destinations and neighborhood gateways to support mobility for recreational use and for residents without access to a car.

Improve Access to Parks and Open Spaces

Implement the 2020 Parks Masterplan proposed trail routes and explore opportunities to connect to the regional Veloweb network. Resources and funding is available on the state level through the Texas Parks and Wildlife Department (TPWD) and Texas Department of Forestry (TDF), as well as through public/private partnerships and private donors.

Support Active Lifestyle Districts

Especially in larger-sized developments, the City should work with developers to foster site design that incorporates park-once-and-walk design solutions. Where possible, these places should be connected with adjacent trails and sidewalks. Doing so help creates new and walkable destinations in the City. This initiative may include a collaboration with the Streets Department, Economic Development Department, and Health Department.

Create Safe Commute Patterns for All Ages

Partner with TxDOT and DeSoto School District's Transportation Department to create safe commute patterns that are accessible for all ages between residential and educational areas by leveraging federal and state funds for Safe Routes to School and other resources.

Designate Areas for Ride-Hail Zones

Designate in the city's commercial and mixed-use design standards appropriate areas for ride-hail pick-up and drop off locations so these ride-hail zones are integrated into the design of new development and do not disrupt circulation and traffic along major thoroughfares.

Explore Connections to DART Bus Lines

Work with DART and TxDOT to explore potential transit connections to the 57 and 102 DART bus lines north of the city to support resident's ability to access public transit options beyond DeSoto that help them get to jobs and key destinations in Downtown Dallas and the South Dallas area.

Uphold and Extend STAR Transit Shuttle Service

Continue to partner with STAR Transit to support residents access to COMPASS on-demand ride service for getting around the city without a car. Consider partnering with STAR Transit to provide shuttle services between Active-lifestyle Districts and Downtown DeSoto.