

SILVER LINE CORRIDOR

Station Areas Plan



PHASE 1 REPORT - EXISTING CONDITIONS

DECEMBER 5, 2022

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01 – Introduction

The 26-mile long Silver Line Corridor is a planned commuter rail line extending between the Dallas Fort Worth International Airport and Shiloh Road in Plano. Dallas Area Rapid Transit (DART), the operator of the commuter rail corridor, anticipates service to begin in 2024. Two stations will be located in Plano to support the Silver Line commuter rail – the 12th Street Station and Shiloh Road Station. Additionally, a new DART Red/Orange Line light rail station will be constructed near the Silver Line’s 12th Street Station to serve as a transfer point between the rail corridors.

In preparation for these new stations, the City of Plano has initiated a **Silver Line Station Area Plan** to develop strategic objectives and policies that guide development and redevelopment opportunities along the corridor. The Comprehensive Plan 2021 supports the development of station area plans through the following policies and actions:

- **Transit-Oriented Development (TOD) Policy:** *Plano will proactively encourage development within walking distance of existing and planned transit stations to create an integrated mix of uses including residential, employment, retail, and civic spaces.*
- **Transit-Oriented Development Policy Action 1 (TOD1):** *Develop Criteria for Review of Transit-Oriented Developments, including existing and projected DART ridership, and update as necessary.*
- **Transit-Oriented Development Policy Action 2 (TOD2):** *Prioritize and prepare area plans within ½ mile of identified light rail stations and future commuter rail corridors, to guide development patterns, address redevelopment of retail and residential sites, and encourage new development. Plans should include an evaluation of market potential resulting from existing and projected transit ridership.”*
- **Transit-Oriented Development Policy Action 3 (TOD3):** *Proactively work with property owners to align zoning with adopted area plans for identified light rail stations and future commuter rail corridors.*
- **Public Transit Policy:** *Plano will provide access to a convenient transit network focused on increasing and improving travel options and direct connections to major local destinations.*
- **Downtown Corridors (DT) Dashboard:** *This future land use category applies to the major vehicle and rail corridors through Downtown Plano, including the K Avenue and 14th Street corridors. The dashboard establishes guidance for new development and redevelopment for the area, including that TOD principles will be used at planned stations, with residential, employment, retail, and civic uses located within 1/4 of a rail transit stop.*



Study Areas

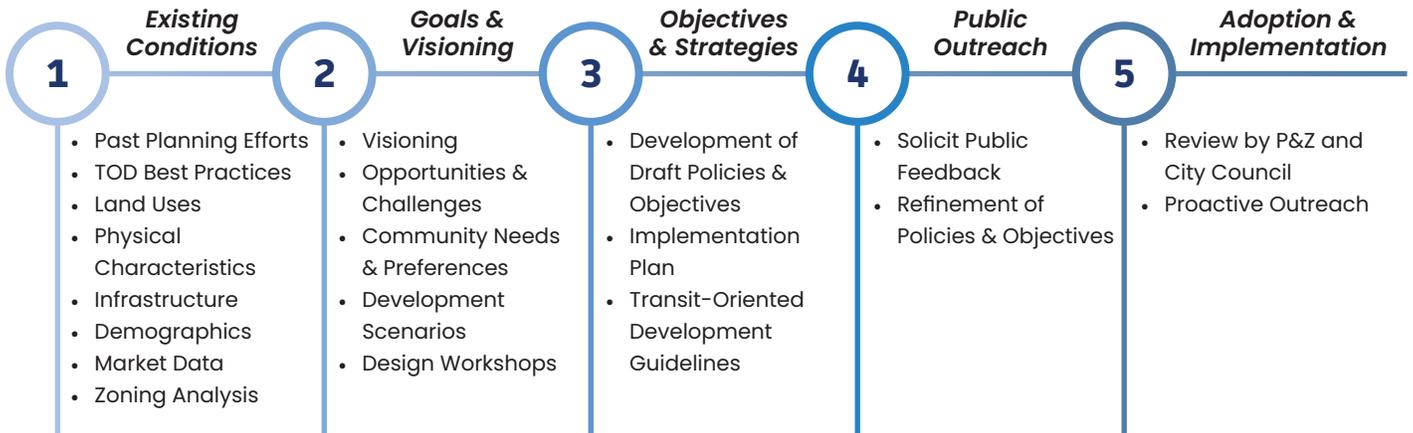


This plan will prepare transit-oriented development (TOD) area plans within $\frac{1}{2}$ mile of the future DART Silver Line Stations at 12th Street and Shiloh Road. This $\frac{1}{2}$ mile radius is consistent with Comprehensive Plan's Transit-Oriented Development Policy and is reflective of DART TOD guidance, which advises that users within a $\frac{1}{2}$ mile radius of a major transit stop are five times more likely to use the service than those outside of that area.

The first $\frac{1}{4}$ mile (approximately a five-minute walk) from a transit station is generally referred to as the transit core, and will be the focus of the station area plan development scenarios. This area should feature a highly walkable, pedestrian-friendly development. The area within a $\frac{1}{2}$ mile of the transit station is considered the full TOD area and is an approximate ten-minute walk for pedestrians. Typically, most funding sources for TOD focus on a $\frac{1}{2}$ mile of a transit station.

Planning Process

The planning process will be conducted in five phases:



Phase 1: Existing Conditions Assessment

This phase will collect background data and information necessary to support stakeholders, the public, and city officials in the planning process. This includes a summary of previous planning initiatives in the area, TOD best practices, an inventory of physical infrastructure and the built environment, and analysis of existing zoning conditions. These are to be used in partnership with the [Silver Line Corridor Market Assessment & Economic Development Strategy](#) completed in February 2022.

Phase 2: Stakeholder Engagement & Visioning

This phase will bring together key stakeholders to establish project goals and guiding principles. Discussions will include opportunities and challenges, feedback on the community's needs and preferences for housing, jobs, and the general character of development, and the vision for future development in these areas. This phase will establish the physical framework for development of the plan areas, addressing land use, mobility, open space, and urban design.

Phase 3: Strategic Objectives and Policy Direction

In this phase, the project team will begin to develop policies, strategies, and objectives that will help achieve the community vision. These policies will address land use diversity, multimodal connectivity, and development character and compatibility. General development guidelines will shape the implementation of the preferred scenario including site planning, building design, parking, and streetscape design.

Phase 4: Public Outreach

In this phase, the project team will solicit feedback from the public through in-person and online engagement opportunities. This input will be critical to identifying priorities and concerns for transit-oriented development in these areas, and to guide final refinement of the plan policies and objectives.

Phase 5: Adoption & Implementation

The final plan will be presented to the Planning & Zoning Commission and City Council for approval. Proactive strategies related to outreach, zoning, and transportation will help advance the opportunities outlined in the plan and stimulate desired development.

History of the Silver Line

The Silver Line Corridor closely follows the former St. Louis Southwestern railroad, nicknamed the “Cotton Belt,” which operated from Texas to Missouri beginning in the 1870s. The Cotton Belt, along with the Houston and Texas Central Railroad, helped establish Plano’s original central business district as an agricultural center in the DFW area. Since that time, the railroad has continued operation as a freight rail line through Plano, which is currently operated by the Kansas City Southern Railway Company. Plans to use the Cotton Belt railroad for commuter rail purposes were first introduced in the 1980s, with various milestones that led to the construction currently underway:

1983 The Cotton Belt is discussed as a potential future commuter rail in DART’s original 1983 Service Plan.

1986 The corridor is incorporated into the North Central Texas Council of Government’s (NCTCOG) Metropolitan Transportation Plan.

1990 DART acquires right-of-way between Wylie and Fort Worth with the provision that transit use could begin as early as 2010.

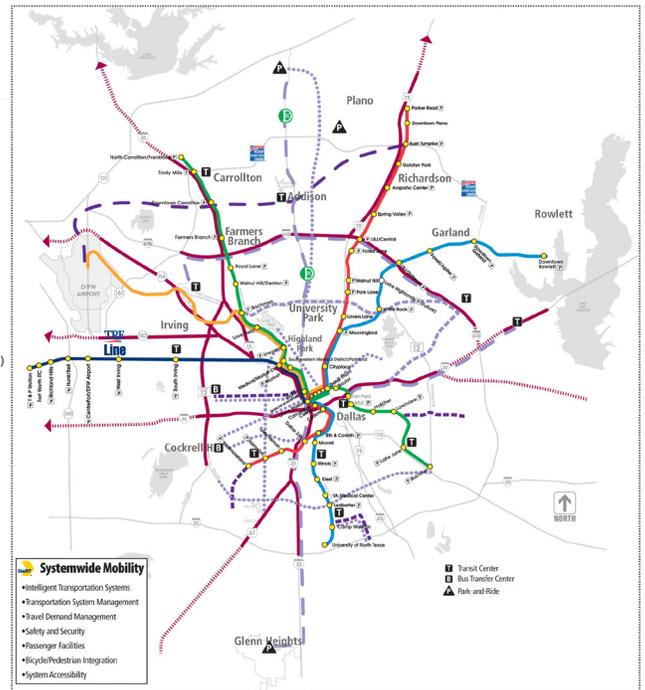
2006 Approval of the DART 2030 Transit System Plan was the first to include the Cotton Belt line as part of the planned DART network.

2010 A Memorandum of Understanding (MOU) between DART and the Regional Transportation Council (RTC) was developed to identify funding sources for the development of the corridor.

2017 A funding plan was approved by DART.

2019 The Cotton Belt line was re-branded as the “Silver Line.”

2020 Construction along the line west of Plano began. Service is anticipated to begin in 2024.



DART 2030 Transit System Plan



Silver Line Train

Past Planning Efforts

Comprehensive Plans

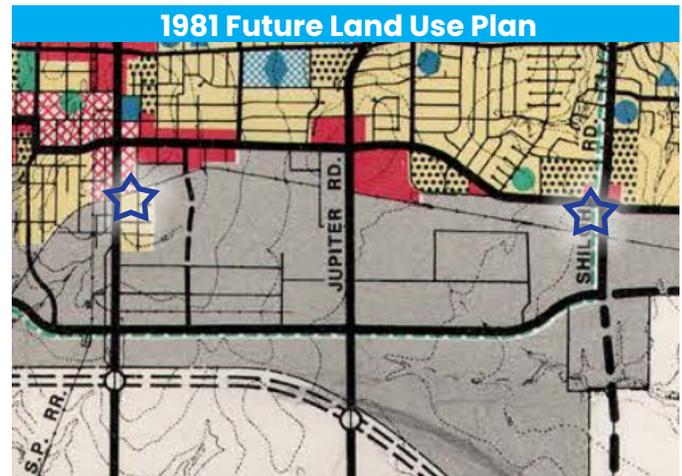
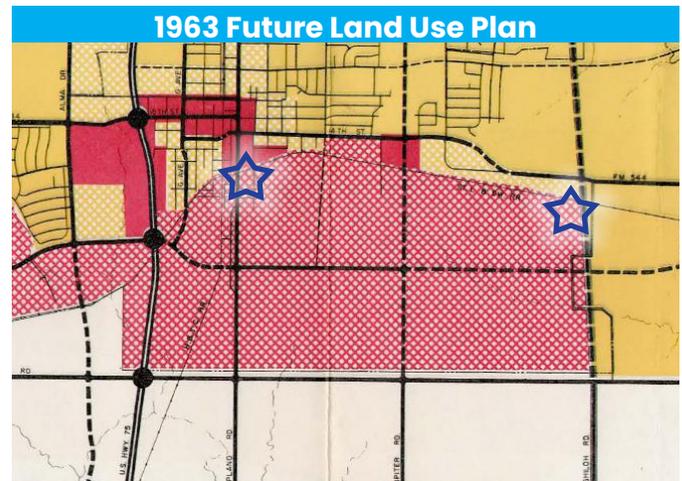
1963 Comprehensive Plan

The city's original 1963 Comprehensive Plan recognized the importance of the Cotton Belt Railroad (future Silver Line) to the industrial and economic base of the city. As shown in the image to the right, the plan recommended industrial uses be located south of the railroad, as far east as present-day Shiloh Road. Zoning in the area was updated to Light Industrial-1 (LI-1) in 1964 to protect industrial land from the encroachment of undesirable uses, and initiating the land use trend towards a commercial and industrial land use pattern still present in parts of the study area.

K Avenue was also recognized as "the most significant north-south major thoroughfare connecting to Richardson and south." North of the Cotton Belt Railroad, the Plan called for a continuation of retail and commercial areas to act as a southern expansion of the city's central business area. Zoning in that area became Light Commercial (LC) in 1964, supporting the land use pattern of commercial business that continues today.

1981 Comprehensive Plan

In 1981, Plano's comprehensive plan was updated to reflect major changes happening in western portions of the city, including the beginnings of the Legacy Business Area and future extension of the Dallas North Tollway. Although this marked Plano's major shift from a bedroom community to a regional economic center, the industrial base in southeastern portion of the city was still seen as an important employment asset of the city. The Plan extended planned industrial areas south of the Cotton Belt Railroad to the city's eastern city limits. By this time, residential growth had also extended east to Shiloh Road. The intersection of Shiloh Road with 14th Street (FM 544) was planned for neighborhood retail with high density residential uses to buffer low-density neighborhoods to the north. This pattern continues today north of 14th Street (FM 544).



 Silver Line Station Locations

1986 Comprehensive Plan

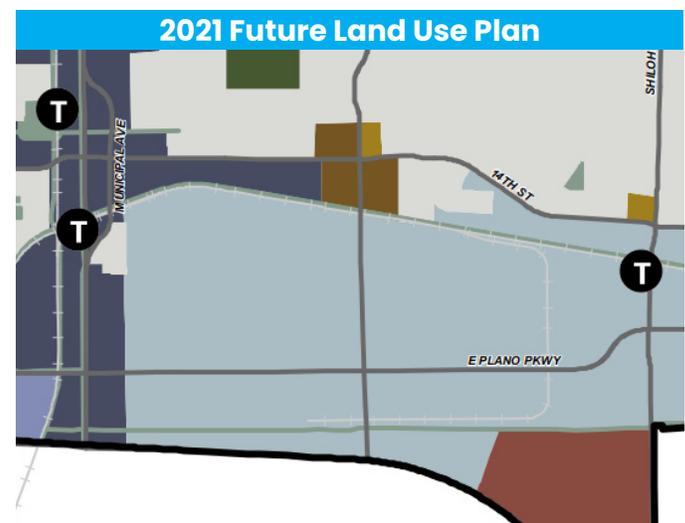
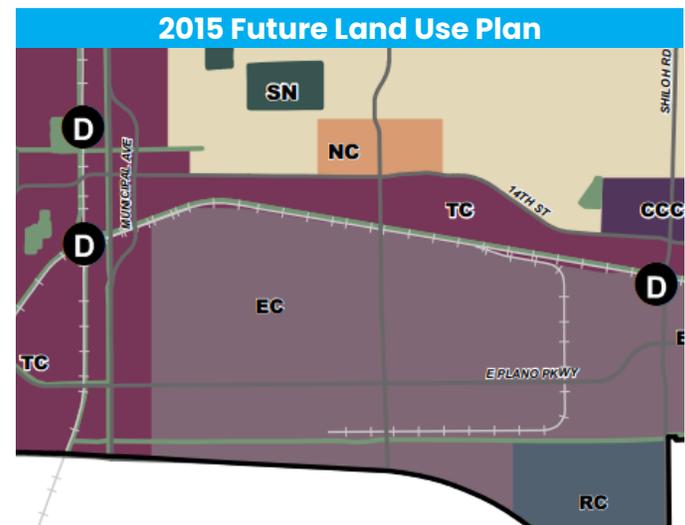
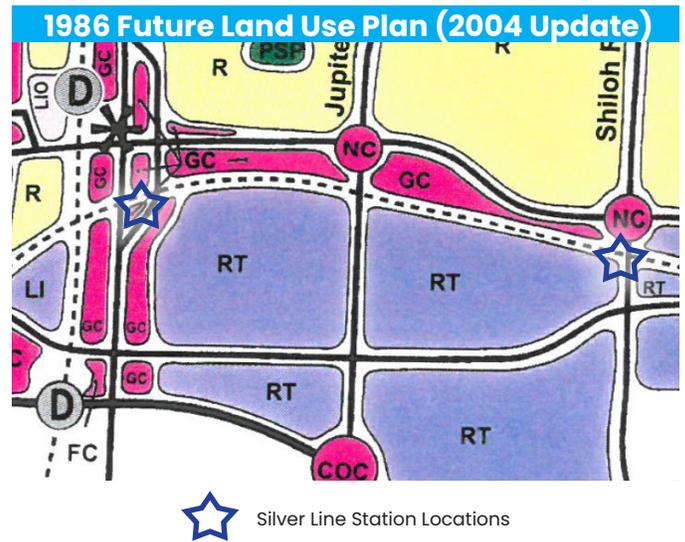
In response to the tech boom of the 1990s, the city re-imagined much of the planned light industrial areas south of the Cotton Belt Railroad and east of Jupiter Road as low-density office, research and development, and light assembly oriented businesses. The Research/Technology (RT) zoning was created in 1998 and applied to much of the area in the southern portion of the Shiloh Road station study area. This pattern of large footprint, low-rise buildings are the prevalent building form in the area today.

Plano Tomorrow Comprehensive Plan (2015)

In 2015, the Plano Tomorrow Comprehensive Plan connected the downtown core with the K Avenue and Cotton Belt corridors through a new future land use designation called "Transit Corridor." This designation was intended to continue the transformation of Downtown Plano into a distinct, authentic urban center and expand the vision for transit-oriented development within the entire corridor. This marked a shift in the approach to land use planning for the area. As passenger rail was re-introduced in traditional freight rail corridors, land uses needed to be re-oriented to treat passenger rail as a "front door" use. The Transit Corridor designation covered both Silver Line station areas, extending eastward from Downtown Plano to Rowlett Creek in the strip of land located between the Silver Line corridor and 14th Street. The industrial and RT areas south of the railroad were also consolidated into a new "Employment Center" designation for office, medical, educational, technology, and research facilities. Plano Tomorrow was the first to include actions to develop station area plans around the future Silver Line stations.

Comprehensive Plan 2021

In 2021, the City's current comprehensive plan was adopted, which narrowed the transit-oriented development focus to within 1/4 mile of planned stations and created a new "Downtown Corridors" future land use designation. This designation emphasized redevelopment of the K Avenue and 14th Street corridors as priorities. The intersection of Shiloh Road and 14th Street was changed to "Neighborhood Corners," representing a shift at the Shiloh Road station area from transit-oriented development towards a less intense form of development.



Highlights from Downtown Plano/Transit-Oriented Development Plans

Downtown Development Plan (1991)

The Downtown Development Plan prioritized the beautification and revitalization of Downtown Plano, recommending a more walkable and compact development form in the city's historic core. The plan included strategies to build on this historic fabric through zoning, transportation, infrastructure improvements, government facilities, gateway signage, streetscape improvements, site design requirements, roadway and sidewalk enhancements, historic preservation, and arts & culture. Major accomplishments of the plan were the establishment of the Downtown Business/Government (BG) and Urban Residential (UR) districts. And although plans for DART light rail extension were not yet established at the time, the plan successfully laid the foundation that allowed Downtown Plano to transition towards a more pedestrian-friendly, transit-oriented development context as rail arrived about a decade later.

Downtown Plano – A Vision & Strategy for Creating a Transit Village (1998)

When plans to construct the Downtown Plano DART station were initiated in the late 1990s, the city updated the vision for Downtown to the concept of a "transit village." A transit village was not intended to be fully self-sufficient, but rather "an independent community where auto-based travel by its residents is more by choice than necessity." The updated vision built on the 1991 Downtown Development Plan, but with new strategies to embrace the opportunities of the light rail station as a catalyst for TOD, including:

- *Integrating residential and commercial uses in a compact, pedestrian-oriented environment served by a transit station;*
- *Clustering development within a five-minute walk (1/4 mile) of the transit stop;*
- *Introducing a complementary mix of retail, entertainment, service, civic, and residential uses;*
- *Encouraging demographic diversity through a variety of housing types and sizes, including rental and for-sale units;*
- *Incorporating design elements such as central activity zone, gridded streets, narrow lots, a mix of uses, common open space, street amenities, pedestrian-oriented storefronts, shared parking, linked neighborhoods, and entry corridors; and*
- *Promoting economic development strategies, such as tax incentives for historic preservation, elimination development fees, creation of Tax Increment Financing (TIF) districts, use of Chapter 380 agreements, assisting with fire sprinkler system upgrades, and other regulatory incentives.*

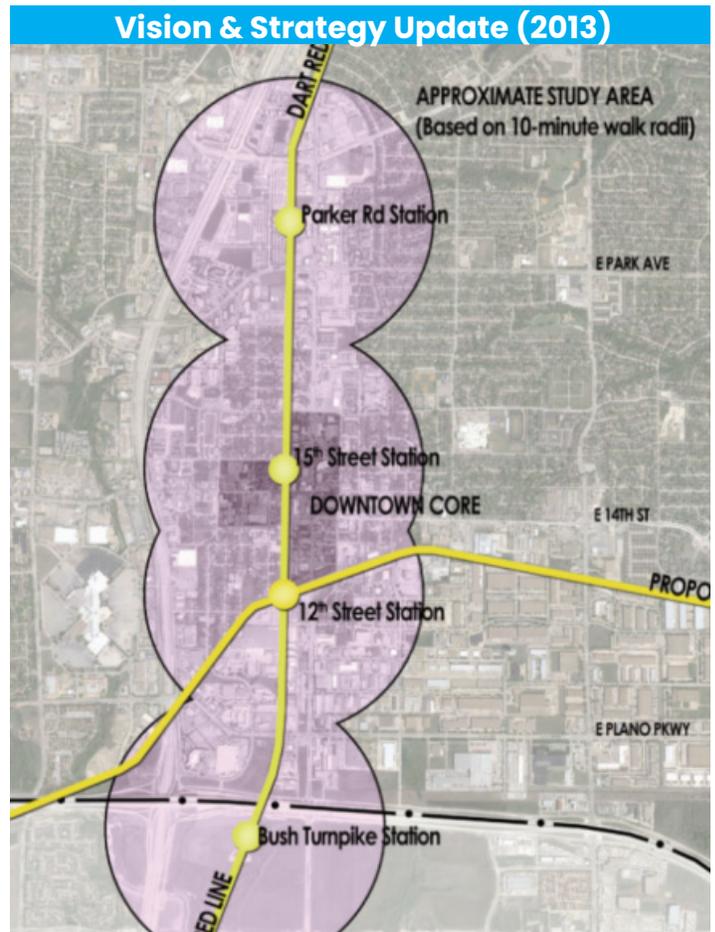
A two-tiered strategy was implemented that recommended the addition of 500-1,000 new residential units within 1/4 mile of the station 3,500 units within 1/2 mile of the station. These were intended to boost transit ridership, diversify business and cultural activities, and generate retail demand. In 1999, the city created a TIF district around Downtown (TIF #2), as well as the Neighborhood Empowerment Zone (NEZ) to help implement the new transit village concept.



Downtown Plano Vision & Strategy Update (2013)

In 2013, with plans for the Cotton Belt/Silver Line firmly in place, the city revisited the transit village concept for Downtown Plano. An updated vision was prepared, expanding the vision for transit-oriented development beyond the 1/2 mile radius of the downtown station to the full 2-1/2 mile corridor between President George Bush Turnpike and the Parker Road Station, with concentration on the Downtown and 12th Street Station area. Major updates included:

- *Developing 1,000 units within 1/2 mile of the Downtown Plano Station and a total of 2,000 units within the DART rail corridor, including a variety of housing types and price points.*
- *Developing or revitalizing or 150,000 square feet of non-residential space within 1/2 mile of the Downtown Plano Station and a total of 500,000 square feet within the DART rail corridor.*
- *Expanding the BG zoning boundary to include the 12th Street Station and southern K Avenue/Municipal Ave couplet.*
- *Continuing the use of economic development strategies, including establishment of a Public Improvement District (PID) for the management, maintenance, and promotion of downtown.*



Silver Line Corridor Market Assessment & Economic Development Strategy (2022)

In 2022, the city completed a market assessment and real estate analysis for the three new Silver Line station sites. The Study outlined likely residential and commercial land use typologies. High-level findings of the study include:

- *Preserve naturally affordable housing for both 12th Street and Shiloh Station areas*
- *Support incremental and adaptive reuse of obsolete property for Shiloh Station area*
- *Encourage TOD real estate development for both 12th Street and Shiloh Station areas*
- *Balance the demand for multifamily housing for both 12th Street and Shiloh Station areas*
- *Complex and fragmented landownership in the 12th Street Station area may present challenges for redevelopment. A proactive planning approach with public input can produce desired redevelopment with the preferred mix and value of uses.*

After presenting the findings of this study at the February 21, 2022 Planning & Zoning Commission meeting, the Commission directed staff to initiate an area plan within half-mile of the future Silver Line stations in order to guide development patterns and address redevelopment opportunities presented in the market study.

Neighborhood Conservation

The Study Areas of this plan include many residential neighborhoods of historical and cultural importance, including the Douglass, Haggard Park, Old Towne, and Vendome neighborhoods. Over the years, the city has adopted multiple plans and policies that help maintain quality of the homes, protect neighborhoods from the encroachment of incompatible uses, and lessen the impacts of gentrification.

Douglass Area Study (1990)

In 1987, the City of Plano began a home and property rehabilitation program funded by Community Development Block Grants to assist very low to moderate income residents in rehabilitating their homes to an acceptable standard. The first neighborhood targeted to receive these funds was the Douglass Community. In order to enhance the quality of life in the Douglass Area, the city and leaders from the community formed a committee to work on a plan to revitalize the Douglass area and ensure its long-term use as a residential area. Recommendations included screening and landscape improvements, reducing cut-through traffic, improving intersections, upgrading parks, facilities, and public infrastructure, increasing housing opportunities for low and moderate income families, and promoting the area's cultural importance.

Old Towne Neighborhood Plan (1999)

Directly northeast of historic Downtown Plan, the Old Towne neighborhood includes many of the old homes in the city. The Old Towne Neighborhood Plan was adopted in 1999 with major recommendations aimed at promoting social harmony and pride, maintaining high quality public facilities and services, improving mobility safety and efficiency, increasing public safety, and preserving the history and character of the neighborhood. Of particular note, the study recommended improving connections from the neighborhood to the Downtown DART transit center.

Douglass Community Neighborhood Action Plan (2002)

In the early 2000s, the city's Neighborhood Planning Program worked with neighborhoods across the city to prepare and adopt neighborhood action plans. The Douglass Community Neighborhood Action Plan was adopted in 2002 and outlined a set of recommendations to best meet the needs of the neighborhood. Major recommendations included reinforcing neighborhood identity and history, improving traffic and bicycle safety, addressing issues of alley abandonment, reducing speeding in the neighborhood, designing a new park, and reducing crime and violence.

Meadows Addition Neighborhood Action Plan (2003)

This neighborhood is located north of 14th Street and west of Shiloh Road, between Jupiter Road and 18th Street, and was primarily built in the 1960s. The Meadows Addition Neighborhood Action Plan was adopted in 2003 and focused on supporting community pride, maintaining high quality public facilities and services, and improving mobility and safety. Specific goals focused on encouraging rehabilitation of homes and enforcing code compliance, infrastructure repair to address streets that flooded, street safety improvements, the preservation of neighborhood trees, and establishing neighborhood identity.

Ridgewood Neighborhood Action Plan (2004)

This neighborhood is located north of 14th Street and west of Shiloh Road, adjacent to the Meadows Addition. Homes primarily date to the 1960s and 1970s, and the area was designed with a common green space and a community clubhouse, which at the time was unique for Plano. The Ridgewood Neighborhood Action Plan was adopted in 2004 and focused on beautification and community cohesion. Specific goals focused on encouraging rehabilitation of homes and enforcing code compliance, improving the overall conditions of public streets, preserving neighborhood trees, maintaining creeks and parks, and establishing neighborhood identity through sign toppers that would signify the neighborhood.

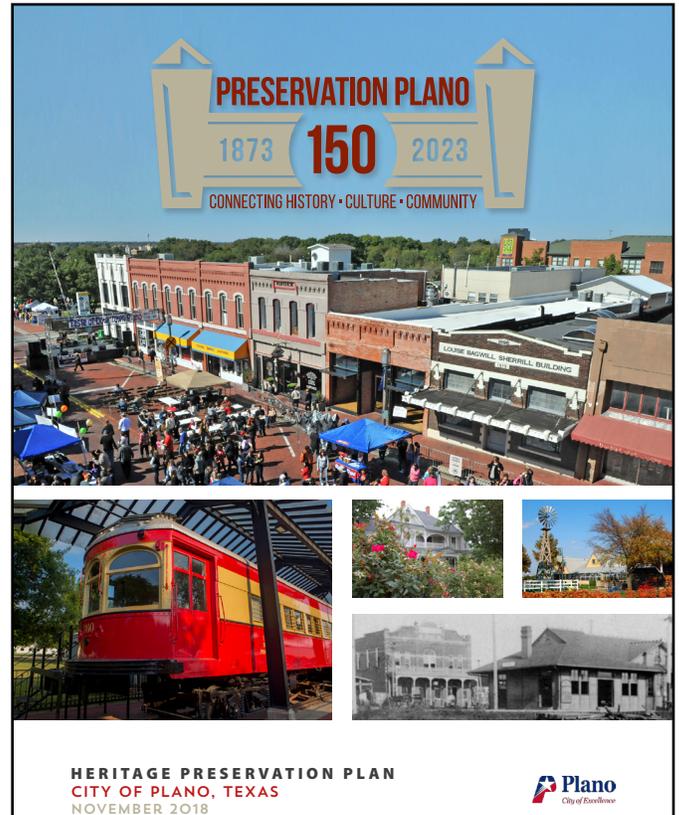
Arts, Culture, & Heritage

Downtown Arts, Culture, and Events Plan (2015)

Since the early 1990s, the city has encouraged the cultivation of an arts and cultural district in the downtown core. Successes include the construction of McCall Plaza, rehabilitation of the Courtyard Theater and Saigling House into visual and performing arts complexes, rehabilitation of the Interurban Railway Museum and Car 360, and the hosting of many events and festivals held throughout the year in Downtown Plano. In 2015, the city adopted a Downtown Arts, Culture, and Events Plan to build on this success by pursuing additional opportunities and strategies to promote Downtown Plano as a destination for arts in the DFW region.

Preservation Plan 150 (2018)

First adopted in 1981, the city's preservation plans have promoted conservation and preservation of Plano's heritage resources. Most recently updated in 2018, Preservation Plano 150 identifies properties of historical, cultural, or architectural significance across the city. A list of potential heritage resources in the study area can be found on Page 29.

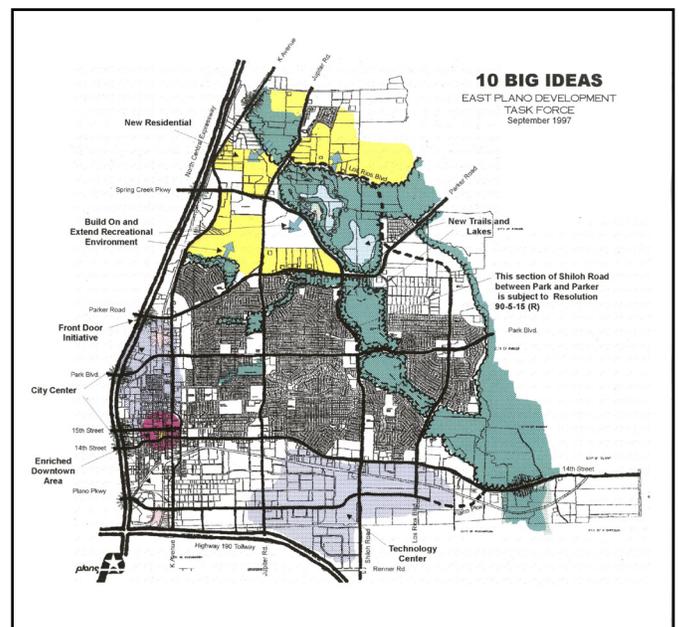


Preservation Plan 150

Other Plans, Policies, & Initiatives

10 Big Ideas for Eastern Plano (1997) – This study, prepared by the East Plano Development Task Force, provided ten big ideas to maintain strong, viable neighborhoods and business centers in east Plano. Of relevance, the Plan recommended creating an inviting gateway to the city from the south at K Avenue and Plano Parkway, creating a technology center between President George Bush Turnpike (State Highway 190) and Plano Parkway, and using economic incentives to encourage development. Many of the ideas have been implemented.

City Center in Eastside Plano (2001) – This plan was created to help implement Big Idea #5 (Create a City Center) from the 10 Big Ideas for Eastern Plano. It included recommendations for the Downtown Station area, Parker Road station area, President George Bush Turnpike station area, residential neighborhoods, retail areas, and other areawide strategies.



10 Big Ideas for Eastern Plano

Research/Technology Crossroads Streetscape Plan (2001) – This streetscape plan outlined guidelines for streetscape features in the Research and Technology Center zoning district. The goal was to create branding and sense of place for the light industrial district.

Downtown Plano Retail Action Plan (2006) – This study, prepared by the Downtown Retail Task Force, presented recommendations to build on Downtown Plano’s retail niche categories of entertainment/restaurants and arts/culture as the basis for attracting new businesses and merchants and marketing downtown to customers. Some of the recommendations included maximizing the presence of the DART rail station and finding effective strategies to manage parking.

Urban Centers Study (2006) – This study was initiated to define the long-term role that urban centers could play in Plano’s future. This study found that urban centers, such as the greater Downtown Plano area, should be a part of the city’s redevelopment strategy.

12th Street Visioning Workshop (2010) – The City of Plano conducted a stakeholder meeting to gather ideas and feedback for the proposed 12th Street Station. Attendees included DART officials, planning consultants, and city leaders, as well as local residents, property owners, and business owners near the 12th Street station. The attendees were supportive of the future opportunities and benefits that a rail station would bring to the area.

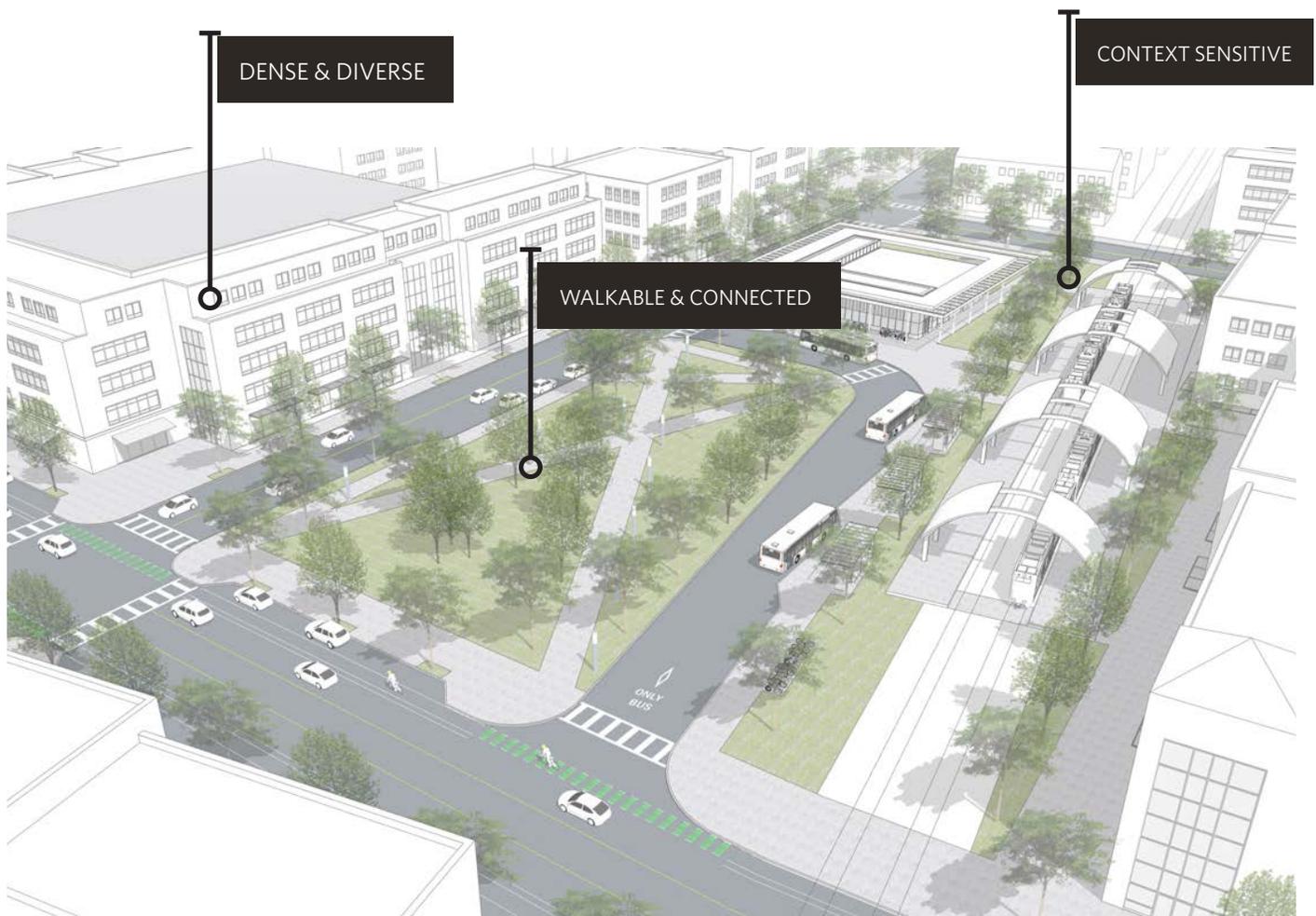
Introduction Chapter – Key Takeaways

- The goal of the Silver Line Station Areas Plan is to fulfill transit-oriented development objectives of the Comprehensive Plan 2021.
- The study area includes the areas within 1/2 mile of the DART 12th Street and Shiloh Road Transit Stations.
- Creation of the plan will include input from citizens and key stakeholders.
- The city has long recognized the importance of the Cotton Belt/Silver Line corridor to meeting the city’s economic development and mobility needs.
- The planning efforts that helped Downtown Plano become a successful transit-oriented development provide a good model for the Silver Line Station Areas Plan.

02 – Transit-Oriented Development

Best Practices

Transit-oriented development (TOD) includes a mix of commercial, residential, office, and entertainment/recreation centered around a transit station (typically served by high frequency transit, such as light rail, streetcar, or bus rapid transit). TODs are typically compact, highly-walkable, and mixed-use in design. As most transit trips begin and end with a walking trip, pedestrian-friendliness and walkability are critical design elements. When implemented successfully, they have been proven to expand mobility options in communities, reduce overall parking demand, reduce auto dependence and overall transportation costs, and increase transit ridership. At their core, TODs share three qualities that set them apart from traditional development. TODs should be:



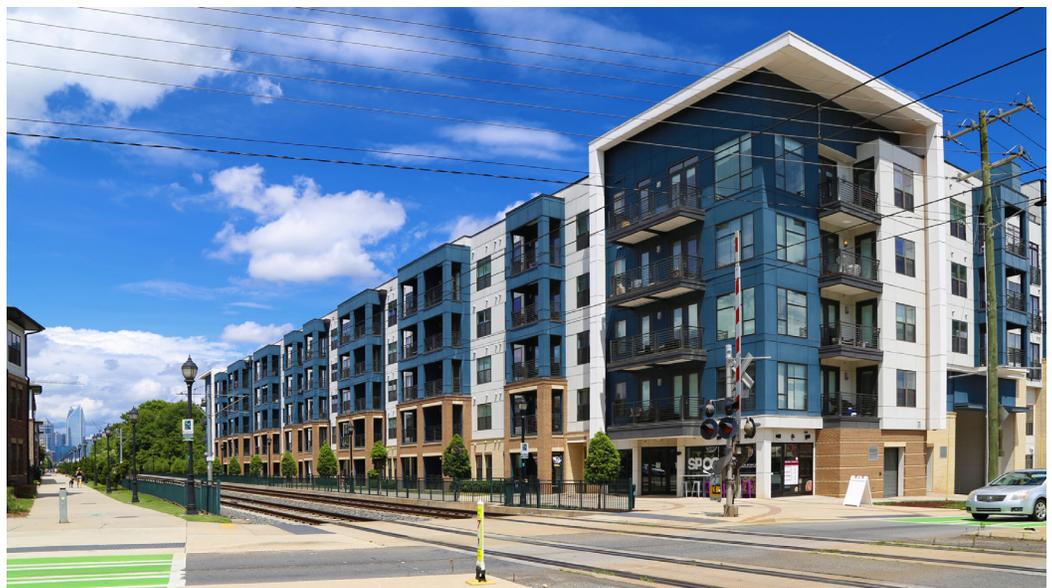
Source: [Transit-Oriented Development Guidelines for Collin County Report \(2021\)](#). NCTCOG and HDR

Walkable and Connected

Mobility and access are primary features of successful TODs. Pedestrian-friendly design requires more than sidewalks. Attractive streetscapes and public spaces, building frontages that are oriented to sidewalks, and high-quality urban design that contribute to a sense of place are all critical to creating a pedestrian-friendly realm.

TODs should be multi-modal places that accommodate multiple forms of transportation such as rail, bus, private cars, delivery vehicles, and first-last mile options like bike share, car share, and other forms of micromobility. Parking should be provided, but should not be the primary land use and should be located in ways that promote walkability, aesthetic cohesion, and reserve the most valuable real estate parcels for higher uses.

*Mixed-use, transit-oriented development
Charlotte, NC*



Dense and Diverse

A dense mix of complementary uses such as residential, retail and services, employment centers, entertainment options, and civic uses are important for TOD sites. A diverse set of land uses increase market resiliency, reduce overall auto dependence, and better support the city's transportation and transit infrastructure investments.

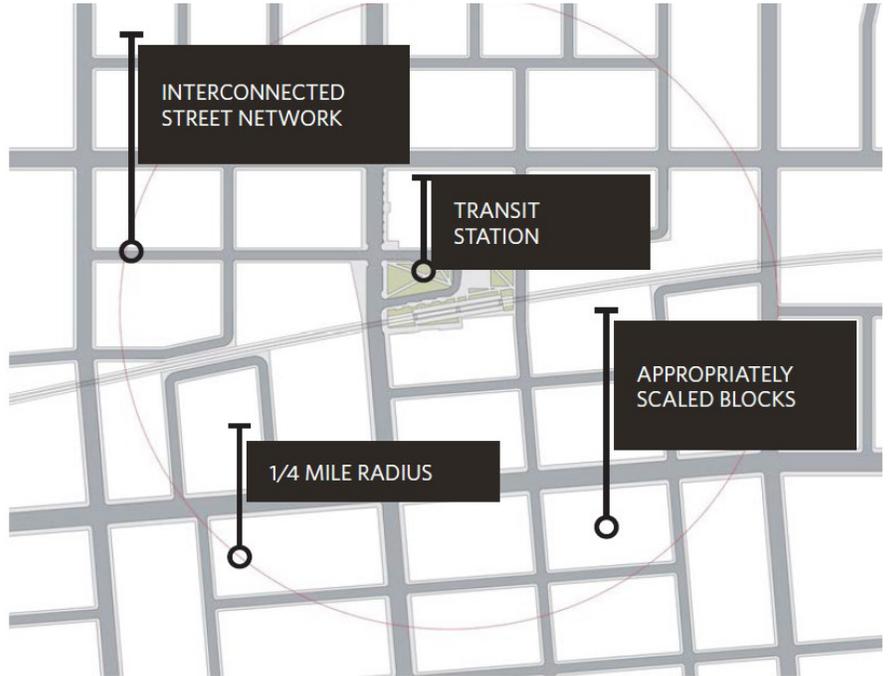
A diverse development also includes a variety of housing options to provide choices for residents at all stages of life and income levels. In general, the "right" density varies by the context of the development, but the density should incrementally decrease the greater the distance from the transit station (i.e., densest in the middle of the development and less dense toward the edges).

DART's Transit Oriented Development Guidelines recommends that in North Texas the minimum residential density for rail-based TOD is generally 30 units per acre to generate ridership. For reference, the 12th Street Study Area currently has approximately 4.1 units per acre and the Shiloh Study Area has approximately 2.9 units per acre.

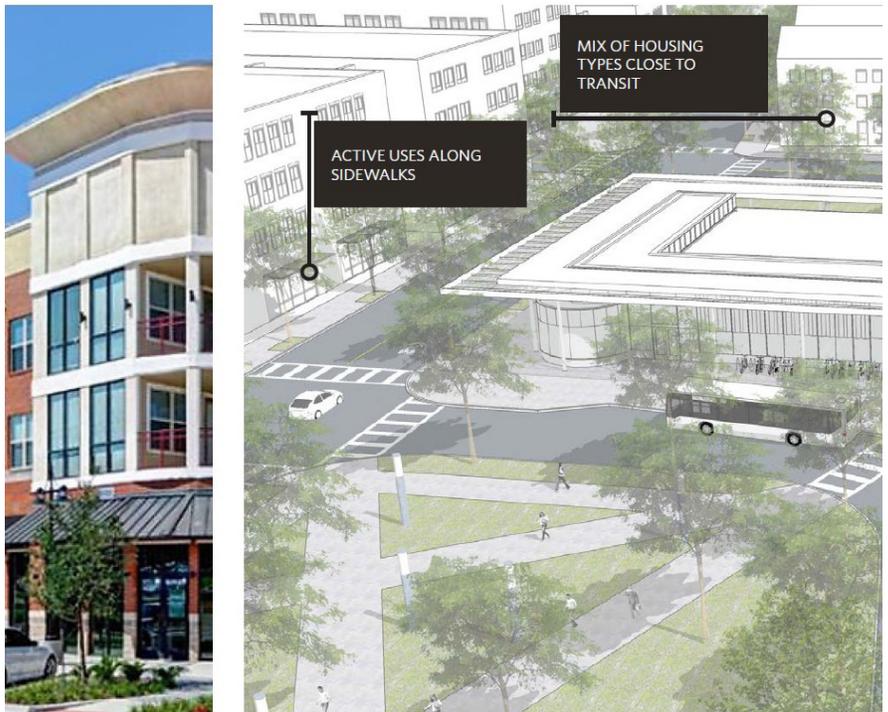
Context Sensitive

Every TOD site is different and serves unique communities. TODs should be developed to meet the needs of the surrounding neighborhoods. Successful TODs should build off of the character of the surrounding neighborhood while improving potential problems (i.e., if a community lacks a park/plaza, the TOD site could provide a park/plaza that supports the overall community and TOD site simultaneously).

Example of interconnected street network that supports appropriately scaled blocks and walkable environments



Primary transit trip-generating uses in the core of the TOD, including higher intensity residential or commercial uses with complementary retail and service uses activating the surrounding streets



Source: *Transit-Oriented Development Guidelines for Collin County Report (2021)*. NCTCOG and HDR

Design Principles

TODs have unique design character, form, and quality of development standards compared to other development contexts. The mix and pattern of uses should create an interactive district where auto-based travel by residents and visitors is a choice rather than a necessity. Most TODs utilize design elements common across traditional mixed-use walkable neighborhoods and transit villages, including the Downtown Plano transit village which was planned around the historic compact street grid and fine-grained development pattern.

Development Pattern

The development pattern should consist of blocks and layouts that accommodate a mix of building types, public spaces, off-street parking, and transit needs. Large blocks are not recommended in order to support walkability. A TOD should have a tight grid pattern of streets to ease circulation and promote interaction. Small blocks make walking easy, and frequent intersections discourage speeding vehicular traffic.

Development should consist of a fine grain of smaller lots and multiple buildings, both attached and detached. Buildings that are grouped together, or clustered, offer convenient access to a variety of destinations on foot. Clustered buildings can frame distinct character areas and create an easily navigable walking environment.

Development should include an interconnected mobility network to support local circulation. Developing a strong link to nearby neighborhoods is critical to creating a larger economic market and generating transit ridership.

Streets and Public Spaces

Streets in a TOD should be designed as more than just a means for travel, but as a shared space where people desire to meet to conduct business or socialize. Streets should be designed to discourage high speed traffic, thereby making the streets safer for walking and biking. Large arterials with high-speeds and multiple lanes are not recommended. Protected bike lanes, multi-use paths, and off-street walkways are recommended, where feasible. Streets within the TOD should also support emerging micromobility modes, such as bike share and scooter programs for first-last mile connections.

Additionally, to foster safe and attractive pedestrian environments, sidewalk-oriented buildings, strong pedestrian linkages, and attractive streetscapes can enhance the area around transit stations and help link the transit station to the surrounding neighborhoods.

Parking

By applying appropriate TOD parking strategies, fewer parking spaces are needed. Using appropriate TOD parking ratios, applying parking maximums, and utilizing shared parking reduce the amount of surface or structured parking that needs to be constructed.

Additionally, on-street parking is encouraged to reduce the need for parking lots and reduce the speed of vehicular traffic. On-street parking also provides a separation between pedestrians and traffic.

Common Open Space

Public gathering spaces are important components of TODs. Public spaces such as parks, green areas, squares, and plazas should be well-defined in the site. These areas should include elements such as seating, shade trees, play equipment, lighting, and other amenities to support active and/or passive uses.

Density/Intensity

TODs should be designed to include primary transit-trip generators, plus supporting uses, with the center designed as the area of greatest density and interaction. Development intensity should decrease from the center to edge. TODs may be primarily a place of employment or residence, with each use supporting and reinforcing other uses. While the amount of residential must be significant enough to support the local TOD area, commercial, recreational, and civic uses should serve a larger market than just the local residents.

North Texas TOD Examples

The Dallas-Fort Worth region has many examples of successful TODs. DART encourages collaborative development between service area cities, developers/property owners, and advocacy organizations to achieve TOD along DART’s light rail routes. DART “seeks to coordinate the development of livable communities at or around DART transit facilities through planning efforts with other governmental entities and communities in the DART service area.”

Collaboration between DART and member cities has led to TOD planning and development in Addison, Coppell, Carrollton, Dallas, and Richardson to develop in recent years. Each new TOD along the DART rail lines respond to development needs in their individual communities, while also aiming to increase transit ridership. For the purposes of this study, staff focused on TODs located in other suburban settings.

CityLine/Bush Station – Richardson, Texas

- Northern-most Richardson station served by light rail and the future Silver Line commuter rail.
- Development mix includes a regional employment center, retail, restaurants, hotel, entertainment options, and recreational/open space amenities.
- Over 2,900 multifamily or single-family attached residential units are complete or under construction within 1/2 mile of the CityLine/Bush Station.
- The physical development pattern is organized as a compact, walkable urban core surrounding the transit station, with a lower-scale retail and residential district further from the station that provides a transition to nearby single-family neighborhoods.

CityLine in Richardson features a large public space in the center of the walkable transit core district



Downtown Carrollton – Carrollton, Texas

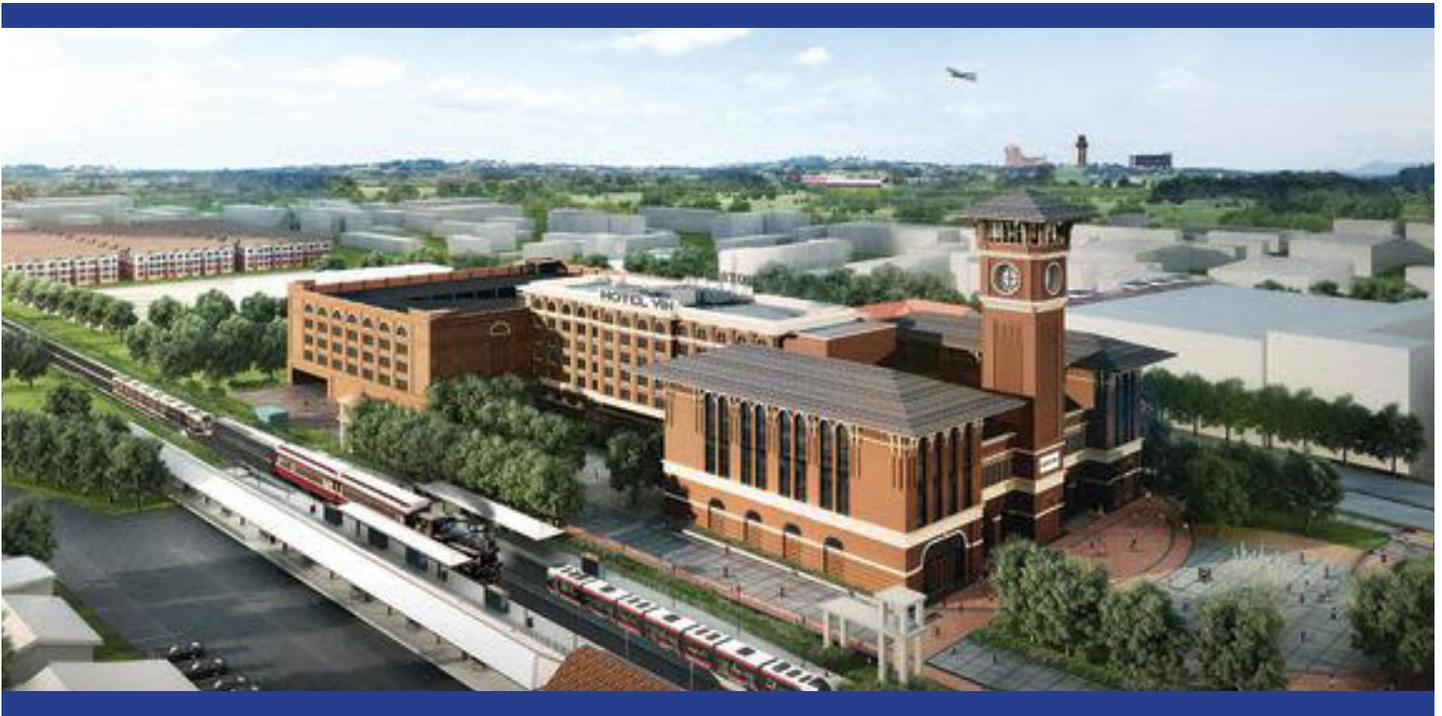
- Directly below the elevated Green Line, Downtown Carrollton offers both visitors and residents a variety of retail, entertainment, and restaurants.
- The Downtown Carrollton Square rehabilitation project created an attractive open space in the center of the historic square where there was once a parking lot. The park offers ample public seating, WiFi, lighting, and a lawn area and is used as a central area for several public events including concerts, movie screenings, and cultural festivals.
- Several multifamily projects have been completed within the past 12 years which has created over 1,200 new units and ground floor office and retail space within half a mile of the station.



Downtown Carrollton connects to the DART Green Line

Downtown Grapevine – Grapevine, Texas

- This site is part of the recently completed TexRail commuter line, a similar line to the proposed Silver Line. TexRail is operated by Trinity Metro and connects DFW Airport to downtown Fort Worth.
- The transit station is located in Grapevine's downtown core. In 2019, Grapevine created a Transit District Overlay, a special zone that promotes walkability and unique developments.
- Grapevine Main Station (pictured below) is a \$114 million dollar public/private sector TOD project that features a food hall, an indoor/outdoor entertainment venue, and part of a boutique luxury hotel.
- A mixed-use residential and retail development with 250 residential units was completed south of Grapevine Main Station.



Grapevine focuses on tourism and entertainment, building off of success of downtown Grapevine

Downtown Garland – Garland, Texas

- The Downtown Garland Station is served by the Northeast segment of the DART Rail Blue Line and provides access to Garland's major civic centers and Performing Arts Center.
- The surrounding multifamily housing has compatible density with the historic downtown character, with ground floor retail, office, and restaurants.
- Various public art installations and wayfinding kiosks promote the businesses within the area, allowing the downtown area to be marketable to visitors.
- Dallas College's Garland Campus is north of the station and is connected by a sidewalk route that is thoughtfully designed and provides a safe route to easily access the campus from the station.

Galatyn Park – Richardson, Texas

- Galatyn Park provides a mix of complementary land uses with a variety of public gathering and open spaces. The Public Plaza – a two acre site that hosts the Wildflower Festival – is directly north of the station.
- The site features 800,000 square feet of office space, hotels, the Blue Cross and Blue Shield corporate office (employing roughly 3,000 people), a performing arts center, and nature areas which are all connected by a comprehensive trail network which can be used for leisure or transportation.
- Over 1,900 multifamily units have been constructed as part of an urban residential district north of the station, with another 360 units currently under construction, and features 6,800 square feet of ground-floor retail and restaurant space.



Galatyn Park offers a mix of public gathering places, residential uses, and office and major employment nodes

Transit-Oriented Development – Key Takeaways

- Transit-oriented development has an important and positive influence on transit use within a half mile of a station.
- TODs should be walkable and connected, offer dense and diverse land uses, and should include context-sensitive streetscape design considerations.
- TODs are typically dense and mixed-use in design.
- As most transit trips begin and end with a walking trip, pedestrian-friendly design and walkability are critical to the design of TODs.
- Public gathering spaces and common open space are important components of TODs provide opportunities for placemaking, as well as cultural, entertainment, and leisure activities.

03 – Existing Conditions

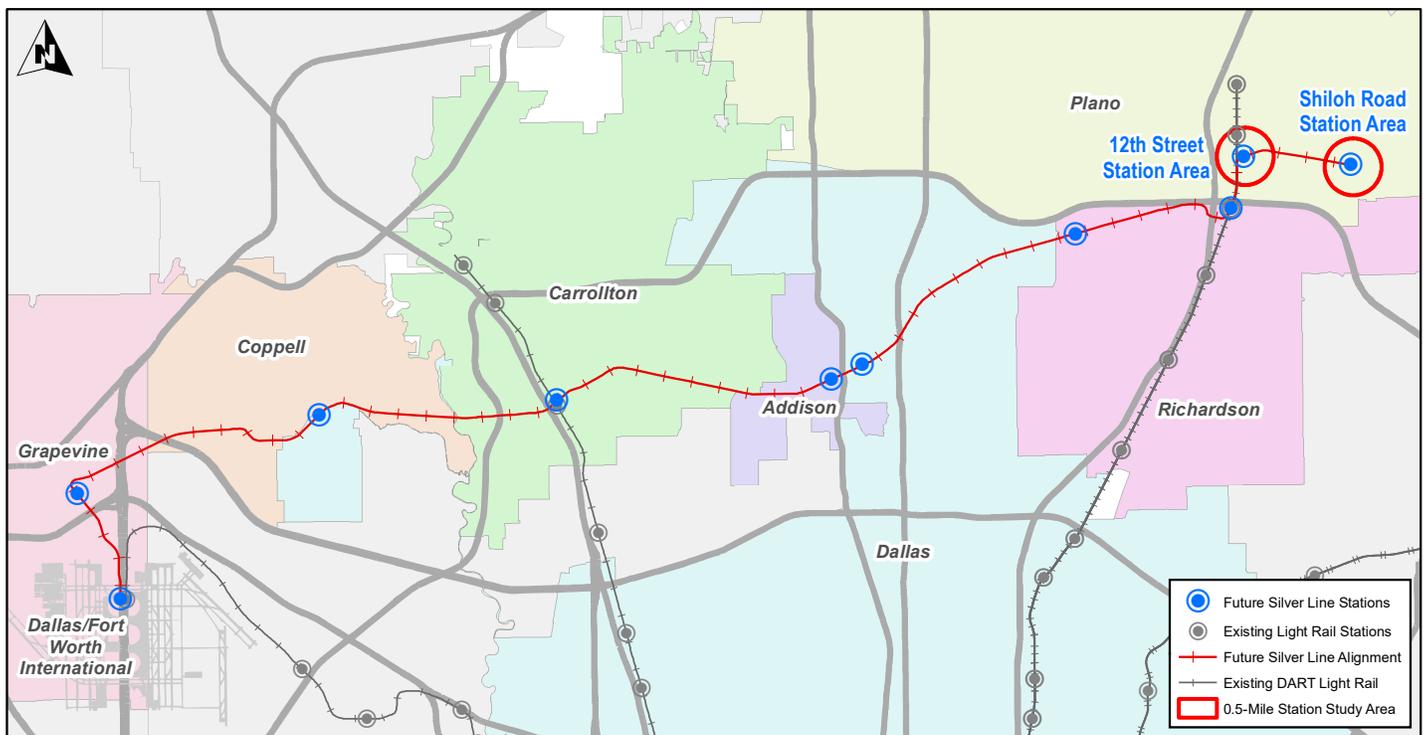
Following review of Plano’s Silver Line Corridor Market Assessment & Economic Development Strategy in February 2022, the Planning & Zoning Commission directed staff to develop Station Area Plans for the planned stations at 12th Street and Shiloh Road and evaluate existing zoning in these areas. The purpose of this Chapter is to provide an overview of the current conditions and context for the station areas, while highlighting the opportunities and constraints for future transit-oriented development.

Area & Regional Context

The study areas are located on the eastern extents of the proposed Silver Line commuter rail, with Shiloh Road serving as the end-of-line station. The Study Areas are located in the northeastern portion of the Dallas-Fort Worth-Arlington Metropolitan Statistical Area (DFW MSA). The areas are in southeast Plano and are entirely within Collin County.

- The DFW MSA is the fourth most populous in the nation with a 2020 population of 7,451,858.
- Collin County is one of the fastest growing counties in the United States. In 2020, the population was over one million residents (1,006,038), which is a 36% increase over the 2010 population.
- The City of Plano is the 72nd largest city in the United States, slightly smaller than Lincoln, Nebraska and larger than Anchorage, Alaska.

The study areas are located in areas of Plano with well-established development patterns, including many properties in the 12th Street Study Area built prior to the 1970s. The City of Plano is surrounded by other incorporated cities and Plano is approaching build out with only small areas of undeveloped green space throughout the City. The Study Areas represent potential to redevelop and re-imagine the east side of Plano and to continue on the growth of transit in the Dallas-Fort Worth area.

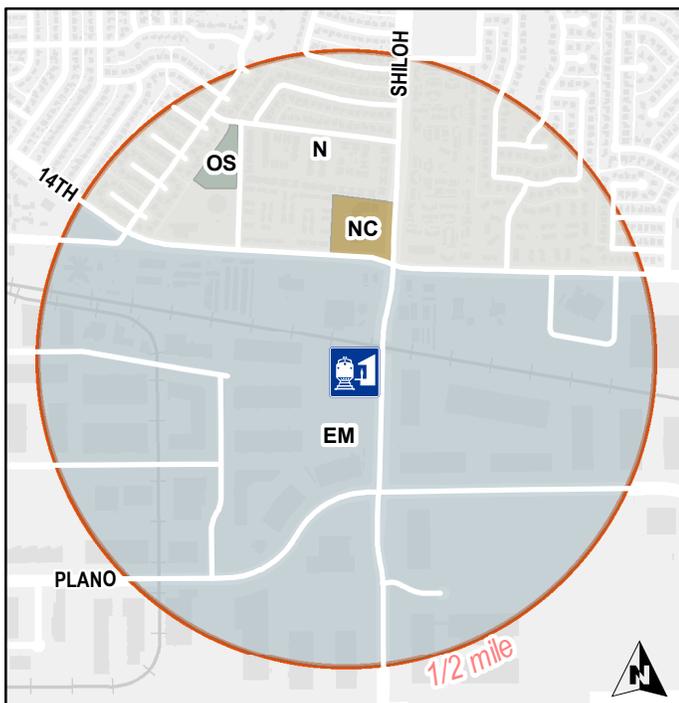


Future Land Use



12th Street Station - This area is mostly located within the *Downtown Corridors (DT)* future land use category of the comprehensive plan. DT is the predominant category of the area, extending north and south along K Avenue. The industrial park to the southeast is primarily located within *Employment Center (EC)* category. Pockets of mostly single-family residential, including the Vendome, Douglass, Haggard Park, and Old Towne neighborhoods are also located within the *Neighborhoods (N)* category. The Future Land Use categories in this area suggests:

- A mix of uses and higher density residential housing types are supported along K Avenue
- The industrial park is not appropriate for residential uses
- Existing neighborhoods should be protected from pressures of redevelopment



Shiloh Road Station - This area has a stark contrast along 14th Street. Properties to the south are exclusively located within the *Employment Center (EC)* category and properties to the north are mostly *Neighborhoods (N)*. The northwest corner at the intersection of 14th Street and Shiloh Road is designated as a *Neighborhood Corner (NC)*. The Future Land Use categories in this area suggests:

- A mix of uses is generally not supported in this area
- Most of the residential units are in established neighborhoods, such as the Meadows and Ridgewood subdivisions
- Housing is not appropriate south of 14th Street

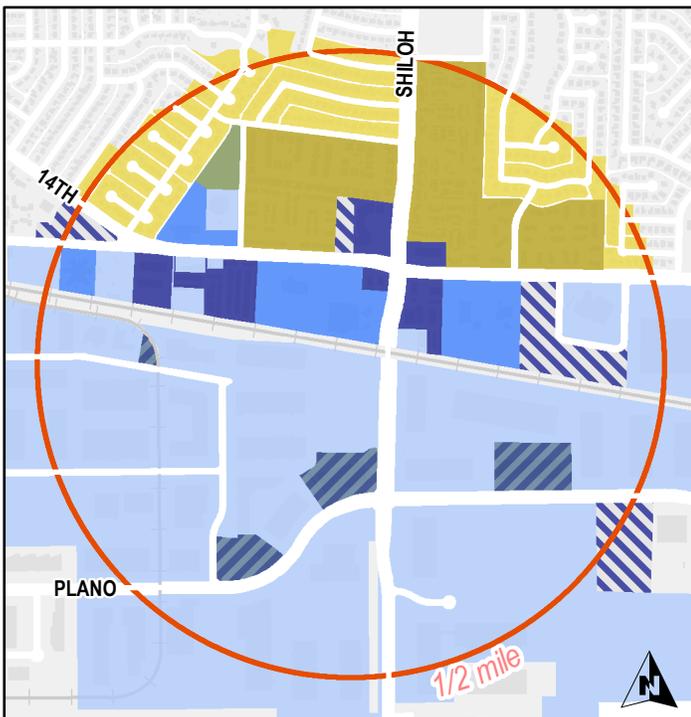
Data Source: City of Plano Comprehensive Plan 2021 (10/01/22)

Existing Land Use



12th Street Station - Approximately 74% (333 acres) of the land within the study area is used for employment and 26% (114 acres) is used for residential.

	Land Use Type	Acres	Percent
1	Industrial Types	153	33%
2	Retail Types	75	17%
3	Single-Family Detached Types	61	13%
4	Institutional Types	48	11%
5	Office Types	44	10%
6	Multifamily Types	40	9%
7	Undeveloped (Employment)	13	3%
8	Parks/Open Space	8	2%
9	Single-Family Attached Types	7	2%
10	Undeveloped (Housing)	5	1%



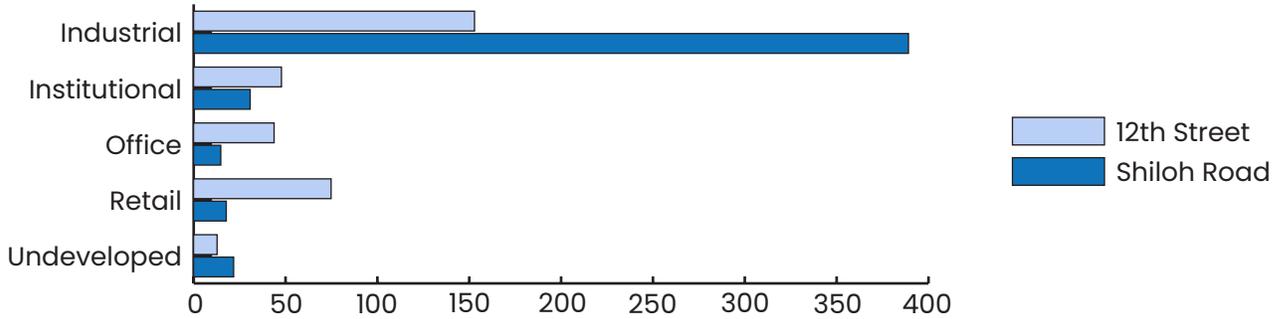
Shiloh Road Station - Approximately 81% (475 acres) of land within the study areas is used for employment and 19% (108 acres) is used for residential.

	Land Use Type	Acres	Percent
1	Industrial Types	388	66%
2	Multifamily Types	58	10%
3	Single-Family Detached Types	51	9%
4	Institutional Types	31	5%
5	Undeveloped (Employment)	22	4%
6	Retail Types	18	3%
7	Office Types	15	3%
8	Parks/Open Space	3	1%
9	Single-Family Attached Types	0	0%
10	Undeveloped (Housing)	0	0%

Data Source: City of Plano Land Use & Housing Inventory (10/01/22)

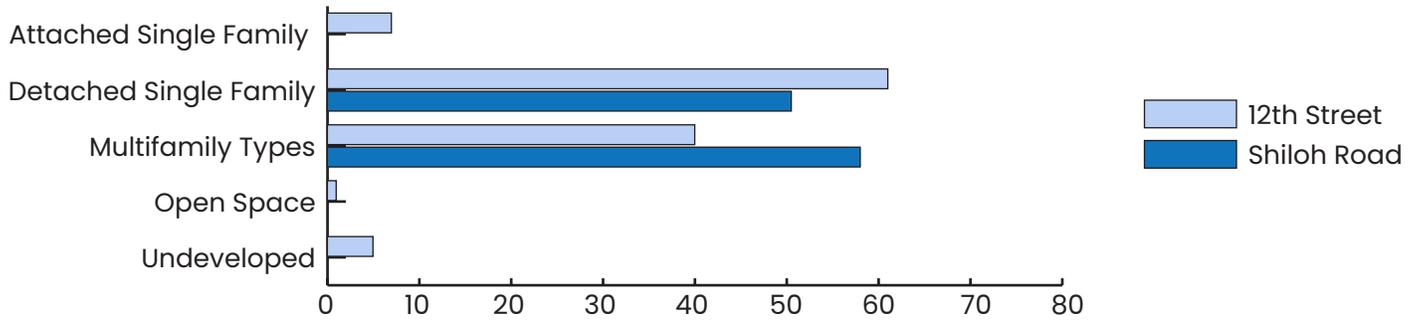
Employment Types

Employment Types include Industrial, Institutional, Office, and Retail uses, as defined by the Comprehensive Plan 2021. In both study areas, the largest employment land use type includes industrial uses.



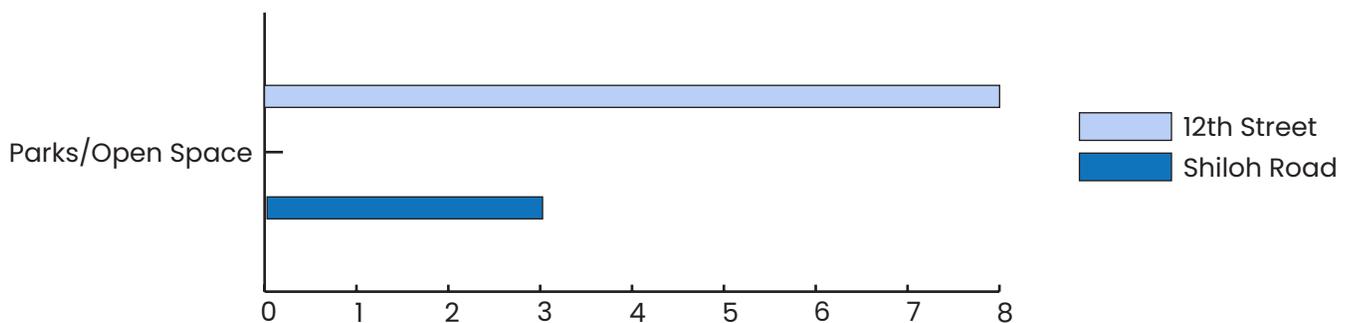
Housing Type Acreage

The housing types are mixed in both study areas. In the 12th Street Study Area, detached single-family make up the largest acreage (includes the Douglass neighborhood). There are no attached single-family homes in the Shiloh Road Study Area.

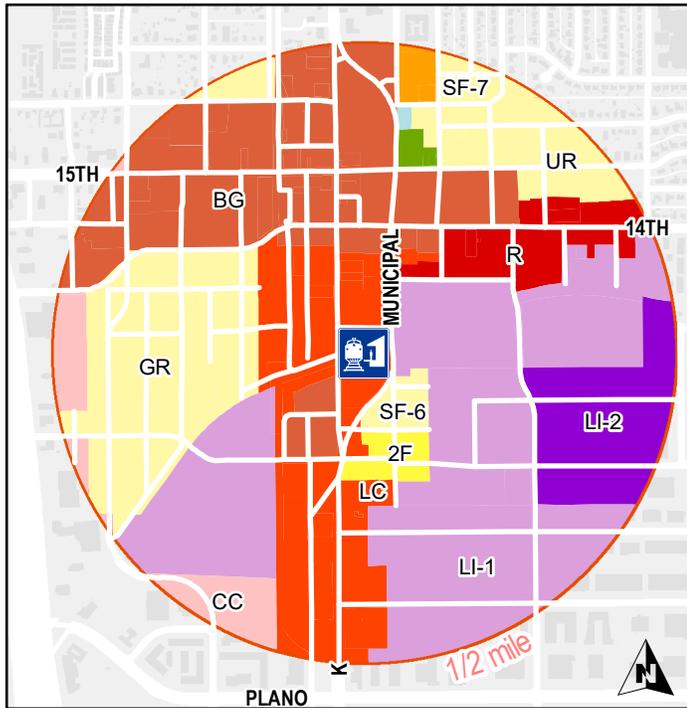


Parks/Open Space

In general, parks and open space constitute a small percentage of land in both study areas.

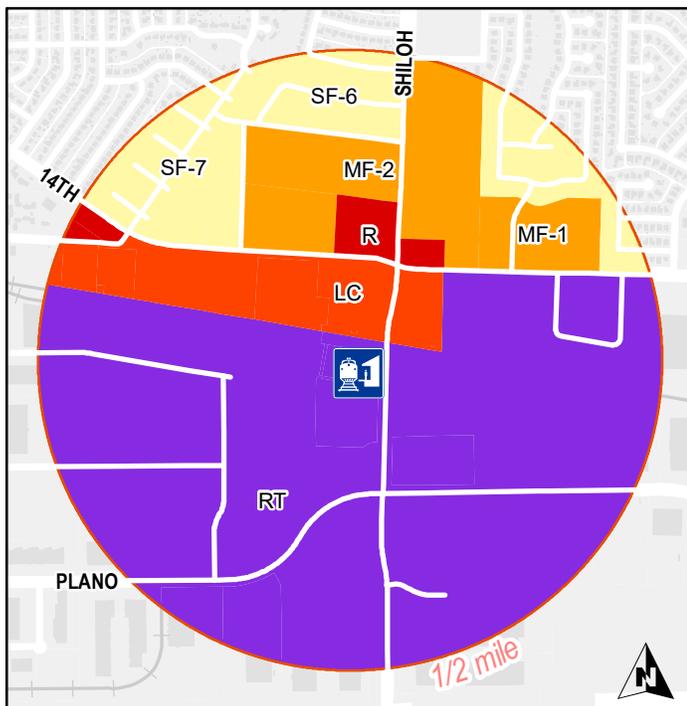


Current Zoning



12th Street Station

	Top Zoning	Acres	%
1	Light Industrial-1 (LI-1)	148	29%
2	Downtown Business/Government (BG)	102.7	20%
3	Light Commercial (LC)	70.1	14%
4	General Residential (GR)	60.9	12%
5	Light Industrial-2 (LI-2)	33.0	7%
6	Urban Residential (UR)	26.9	5%
7	Retail (R)	21.0	4%
8	Corridor Commercial (CC)	17.2	3%
9	Single-Family Residence (SF-6/SF-7)	10	2%
10	Two Family Residence (2F)	5	1%
12	Multifamily Residence (MF-1/MF-3)	4	1%
13	General Office (O-2)	>1	>1%
14	Single-Family Residence Attached (SF-A)	>1	>1%
15	Neighborhood Office (O-1)	>1	>1%



Shiloh Road Station

	Top Zoning	Acres	%
1	Research/Technology Center (RT)	311	62%
2	Single-Family Residence (SF-6/SF-7)	72	15%
3	Multifamily Residence (MF-1/MF-2)	65	13%
4	Light Commercial (LC)	43	9%
5	Retail (R)	11	2%

Data Source: City of Plano Zoning Map (07/01/22)

Age of Structures



12th Street Station

Year Built	Number of Parcels	Percent of Parcels
Prior to 1950	34	32%
1950 - 1959	10	10%
1960 - 1969	10	10%
1970 - 1979	9	9%
1980 - 1989	10	10%
1990 - 1999	10	10%
2000 - 2009	10	10%
2010 - 2019	10	10%
2020 or later	2	2%



Shiloh Road Station

Year Built	Number of Parcels	Percent of Parcels
Prior to 1950	0	0%
1950 - 1959	1	3%
1960 - 1969	2	5%
1970 - 1979	6	16%
1980 - 1989	7	19%
1990 - 1999	7	19%
2000 - 2009	9	24%
2010 - 2019	4	11%
2020 or later	1	3%

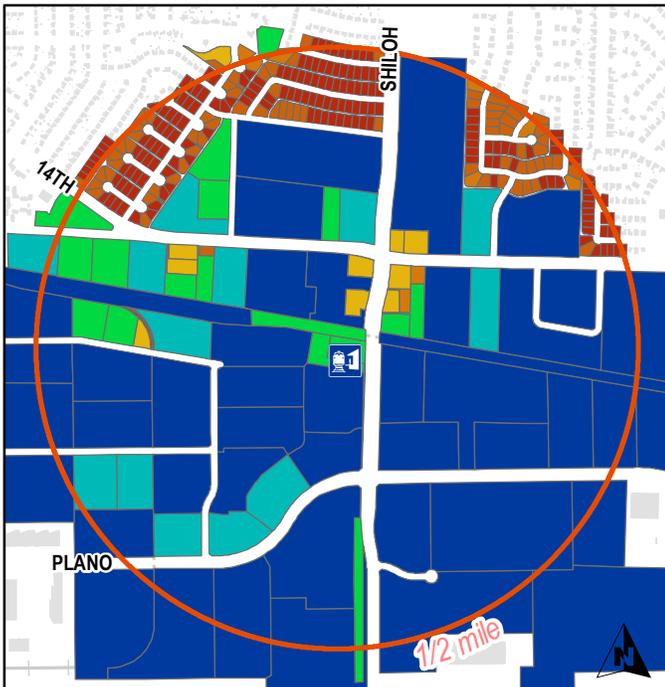
Data Source: City of Plano

Parcel Size



12th Street Station

Parcel Size	Number	Percent
Less than 5,000 sq. ft.	293	31%
5,000 to 9,999 sq. ft.	279	30%
10,000 sq. ft to 0.49 acre	158	17%
0.5 - 0.99 acres	80	9%
1 to 1.99 acres	59	6%
2 to 2.99 acres	35	4%
3 to 4.99 acres	17	2%
5 acres or more	10	1%

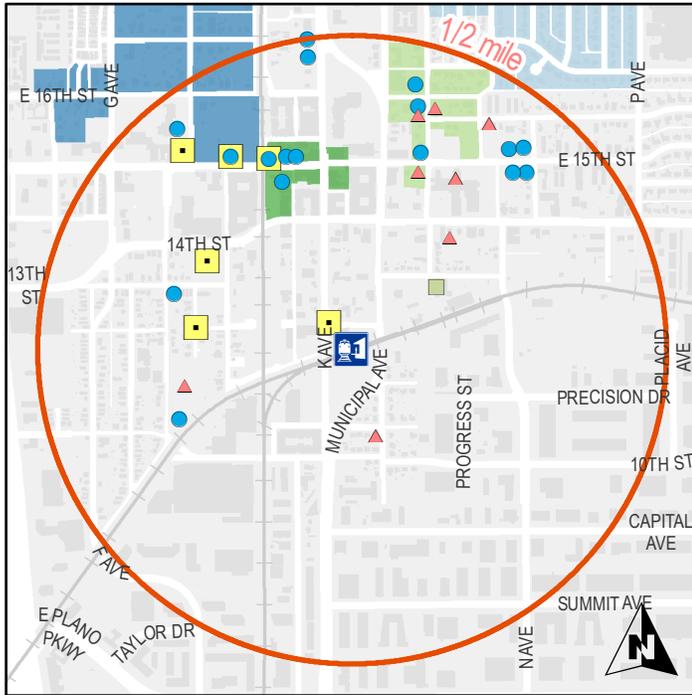


Shiloh Road Station

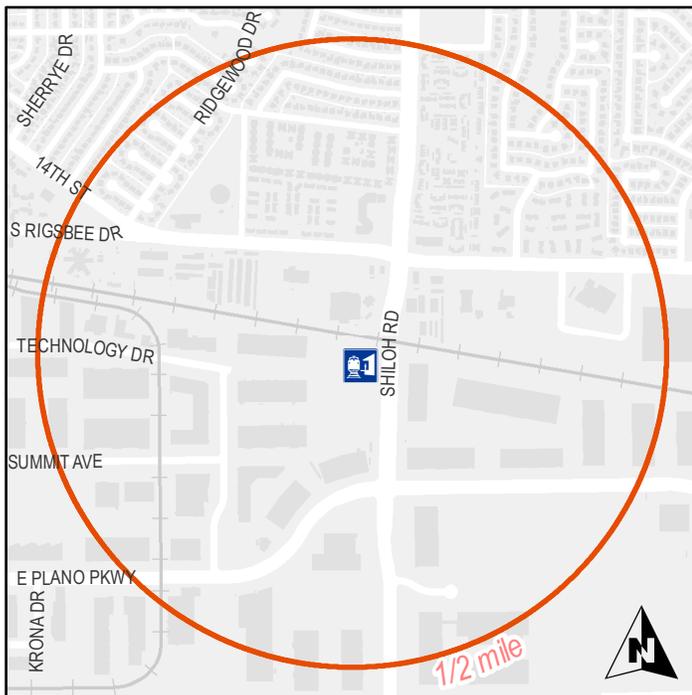
Parcel Size	Number	Percent
Less than 5,000 sq. ft.	1	>0.1%
5,000 to 9,999 sq. ft.	219	64%
10,000 sq. ft to 0.49 acre	37	11%
0.5 - 0.99 acres	10	3%
1 to 1.99 acres	9	3%
2 to 2.99 acres	8	2%
3 to 4.99 acres	13	4%
5 acres or more	44	13%

Data Source: City of Plano

Historic Resources



-  Proposed DART Silver Line Station
-  0.5-Mile Station Buffer
-  Individually Designated Heritage Resource
-  Potential Heritage Resource - Individual
-  More Research Required - Individual
-  Historic Marker
-  Downtown Heritage Resource Overlay District
-  Haggard Park Heritage Resource Overlay District
-  Clint Forman Potential Heritage Resource - District
-  Old Towne More Research Required - District



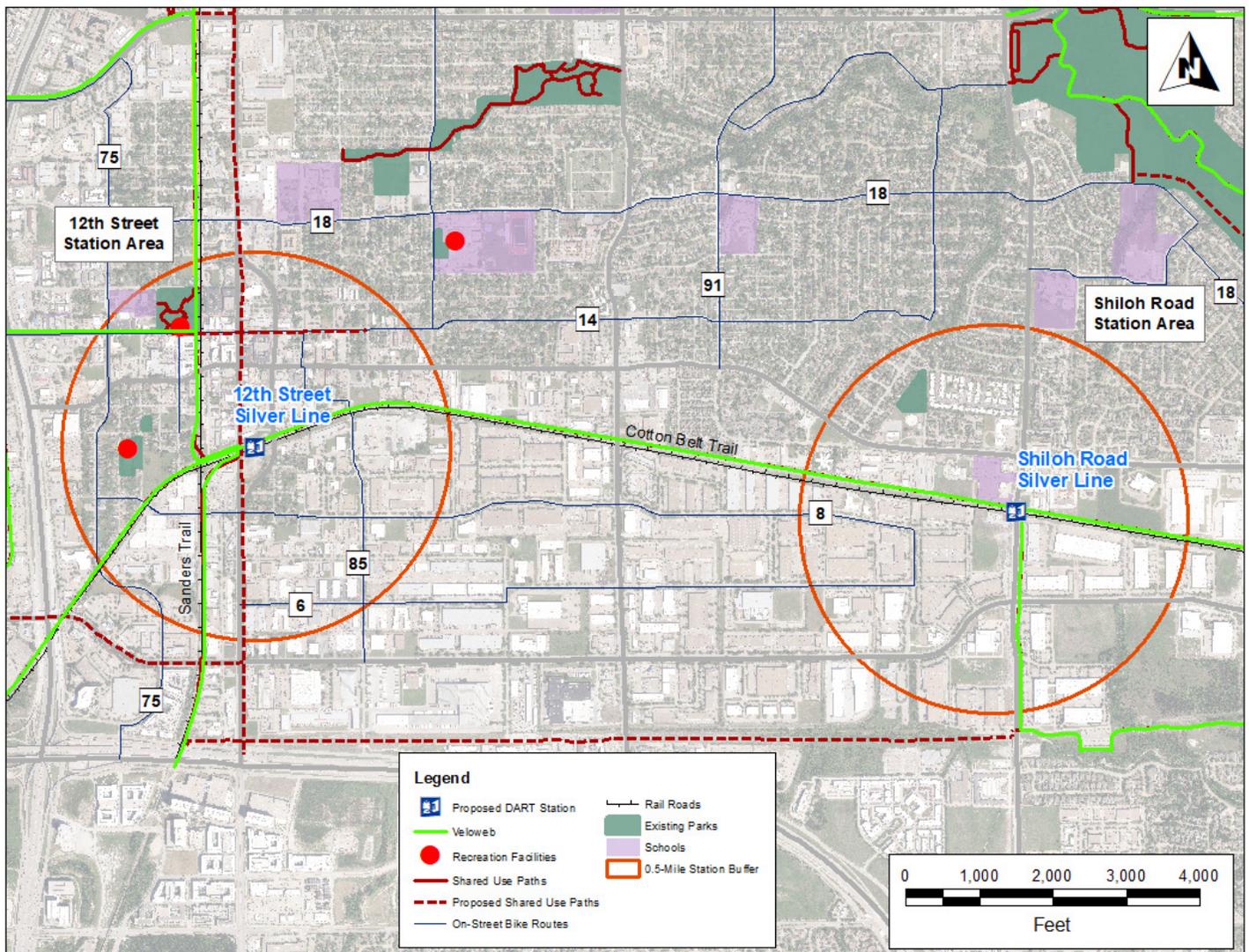
Transportation Network

Bicycle Network

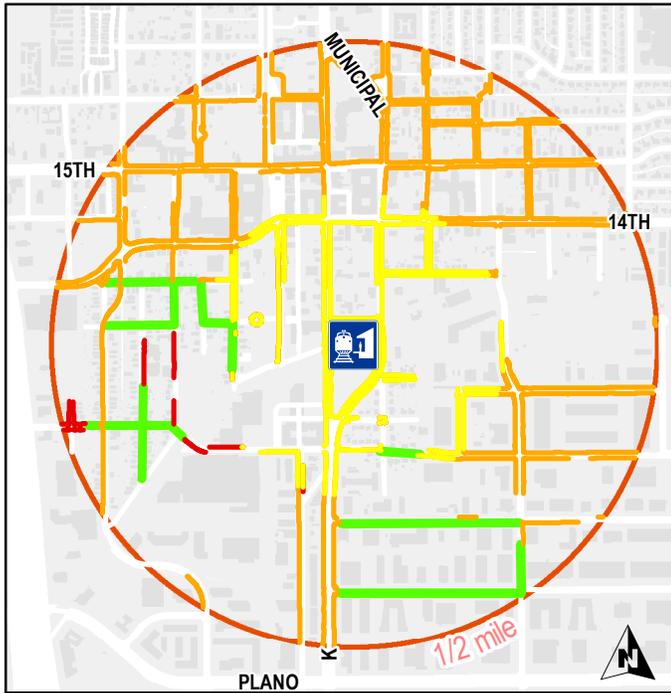
Bicyclist safety and comfort are critical components to a successful transit-oriented development. The figure below illustrates the active transportation network in and around the study areas. A review of existing on-street bicycle routes, the proposed Veloweb bicycle network, and proposed off-street trails found that both station areas will be served by bicycle infrastructure, however, the 12th Street Station Area has a denser and more varied network of planned on and off-street routes.

The planned Cotton Belt Trail, the Sanders Trail, and City of Plano bike routes 6, 8, 14, 75, and 85 would provide bicycle connections to the station study area. The Cotton Belt Trail is a planned regional trail that will follow the Silver Line corridor.

The Shiloh Road study area does not currently have a dense network of bicycle facilities but would be served by the Veloweb active transportation network via the planned Cotton Belt trail.



Existing and Planned Bicycle Facilities (Bicycle Transportation Plan)

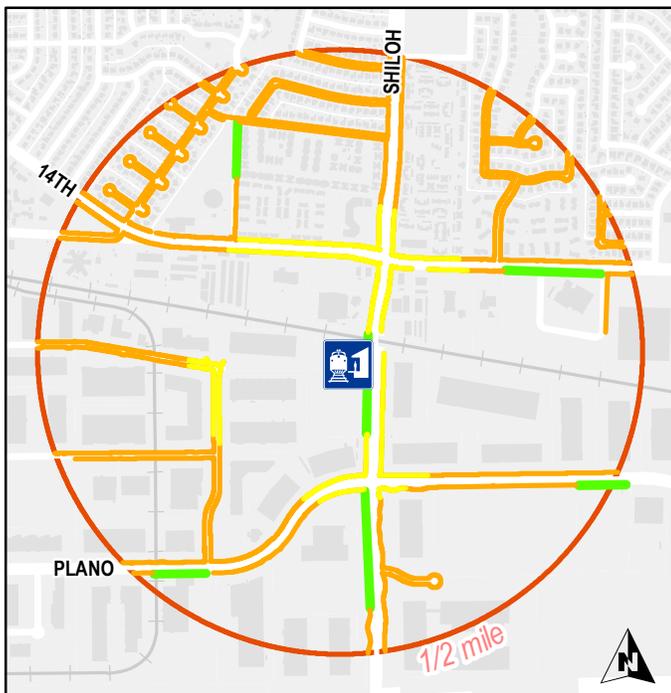


Pedestrian Connectivity

Pedestrian connectivity is a key component to successful transit-oriented developments. Generally, southeast Plano has a well-connected sidewalk network. There are, however, areas of opportunity for new sidewalk connections within the Study Areas.

The 12th Street Study Area has areas without sidewalks mainly in the Douglass neighborhood and in light industrial areas south of the proposed station site. It should be noted that the City of Plano is currently completing plans to complete many sidewalk gaps in the Douglass Community as part of Community Investment Program (CIP) Project #37832. This project will install sidewalks at various locations within the Douglass community to improve pedestrian access and safety throughout the neighborhood and to the future DART station. The 12th Street Study Area also includes many sidewalk segments that were ranked “medium” and “high” priority for repair/replacement in the City of Plano ADA Self Evaluation and Transition Plan (2019). Sidewalks in the area were noted as being in non-compliance for safety and usability (steepness of curb ramps, obstructions, missing portions of sidewalks, etc).

The Shiloh Station Area has areas that lack sidewalks predominately along Shiloh Road and in light industrial areas south of 14th Street.



-  Proposed DART Silver Line Stations
-  Sidewalks within Quartermile
-  Sidewalks within Half-Mile
-  Disconnected Sidewalks
-  Areas Lacking Sidewalks

Street Network

The 12th Street Study Area has nearby regional highway access via US 75 and President George Bush Turnpike. The future Silver Line station site is served by the north-south K Ave/Municipal Ave couplet. The smaller block sizes north of 14th Street allow increased route choice and pedestrian accessibility; however, blocks south of 14th Street are larger, reducing connectivity options. There is more limited street connectivity between 14th Street and Plano Parkway due to the multiple rail lines and larger scale industrial development pattern. 10th Street provides the only other connection to US 75 from the station area. Additional local street connections may need to be considered to create a more walkable block pattern, improve circulation options, and mitigate cut-through traffic in the Douglass Community.

The future Shiloh Road Silver Line station site is connected regionally by the major arterials Shiloh Road, 14th Street, and Plano Parkway. This Study Area has a wide block, auto-oriented street pattern, especially in the Research/Technology light industrial area south of 14th Street. While the arterial network provides effective linkages for motorists, the connectivity in the area is a challenge for pedestrians and bicyclists, with limited local street route options and higher traffic speeds and volumes. As some sites redevelop, there may be opportunities to introduce new local street connections or create more direct pedestrian connectivity between the station and area destinations.

Traffic Counts

The City of Plano released daily traffic volumes for 2019. K Avenue reported approximately 29,240 vehicles per day (vpd) between George Bush Turnpike to Plano Parkway and 23,532 vpd between Plano Parkway and 14th Street. Shiloh Road reported approximately 18,678 vpd between George Bush Parkway and Plano Parkway. Traffic volumes around both proposed station sites are moderate compared to most major streets in Plano.

Transit Access

The Silver Line commuter rail corridor will connect Plano to six other cities across the northern part of the DART Service Area: Richardson, Addison, Carrollton, Dallas, Coppell, and Grapevine. It will travel 26 miles east to west between the Shiloh Road Station and Dallas-Fort Worth International Airport (DFW) Terminal B. Service will be offered seven days per week, with more frequent service during peak weekday periods. Trains will operate in both directions every 30 minutes during peak travel periods (morning and evening) and every 60 minutes during non-peak travel periods. The estimated trip time between Shiloh Road and the DFW Terminal B is 60 minutes.

DART estimates 340 daily riders for 2040 for the 12th Street Silver Line Station. Travel time to DFW Airport Terminal B would be approximately 55 minutes. Riders would be able to transfer to a new 12th Street Red and Orange Line Station. DART estimates 690 daily riders for 2040 at the Shiloh Road Station.

Southeast Plano is currently served by light rail service, fixed route bus service, and on-demand transit service through GoLink. 12th Street Silver Line Station riders would be able to transfer between the Silver Line and Red/Orange Lines. The Shiloh Road Station is located within the East Telecom GoLink zone. This GoLink zone would provide service to the Shiloh Road Station between 5 a.m. and 8 p.m. Monday – Friday. No service is currently offered on weekends.

There are currently no fixed bus routes that connect directly to the proposed 12th Street or Shiloh Road stations. The nearest bus route (Route 247) travels along Jupiter Road and 14th Street to connect to the Downtown Plano Red/Orange Line station.

Economic Development

Market Analysis

The City of Plano completed the [Silver Line Corridor Market Assessment & Economic Development Strategy in February 2022](#). Those findings serve the basis for the station area plans. Major takeaways from the study included:

- Retail within the study area has performed well with some turnover in spaces with higher rents. Market conditions suggest continued demand for affordable, legacy retail space, which would be further supported by additional housing units within area redevelopment (Collin Creek, CityLine, and 12th Street).
- There is a market for additional office in the area; however, the office market is still recovering from the effects of the COVID-19 pandemic and the long range outlook is unknown.
- There is market demand for a variety of housing types in the area, including ownership, condominium, and for-rent products. However, due to small parcel sizes and highly decentralized ownership, existing zoning is unlikely to provide the types of housing products that meet market demand and support transit-oriented development.
- Due to high land costs, redevelopment will likely be slow without public participation or rezoning for additional density.
- Existing cash flows are sufficient to allow property owners to maintain the types of existing structures and commercial tenants that do not support a transit-oriented development.
- Land assembly will be critical to serve as catalysts for redevelopment.
- There is opportunity to adaptively reuse heavy commercial and light industrial buildings. Zoning needs to be flexible to allow these conditions.
- The light industrial, research/technology, office/warehouse sector is doing well and less subject to swings in the economy.

Neighborhood Empowerment Zone

Additionally, a Neighborhood Empowerment Zone (NEZ) was created in 1999 to support affordable housing construction and rehabilitation in the downtown core of Plano. The NEZ would directly affect the 12th Street Station area. The southernmost border of the NEZ is along 10th and 11th Streets, just south of DART right-of-way and the proposed 12th Street Silver Line Station.



Tax Increment Financing Zones

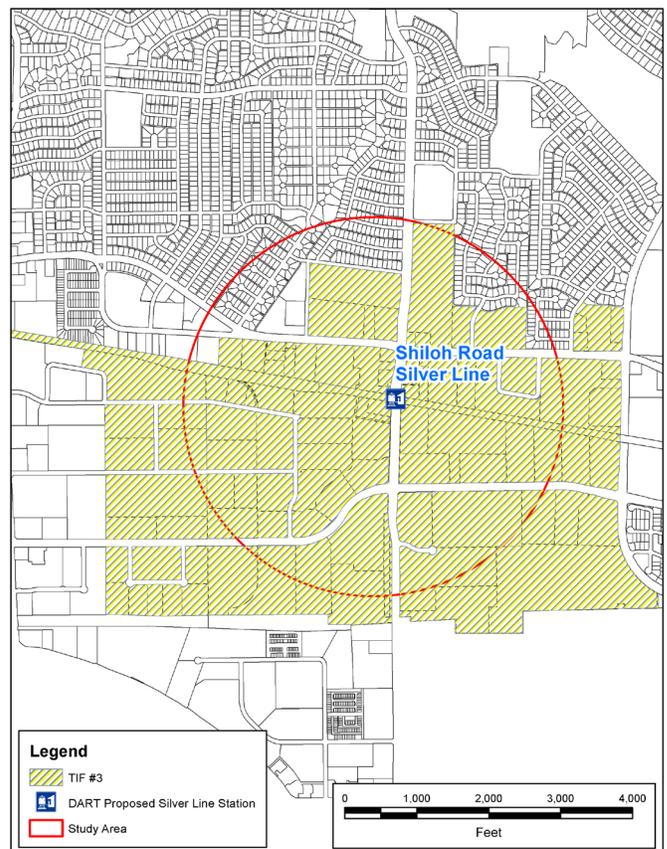
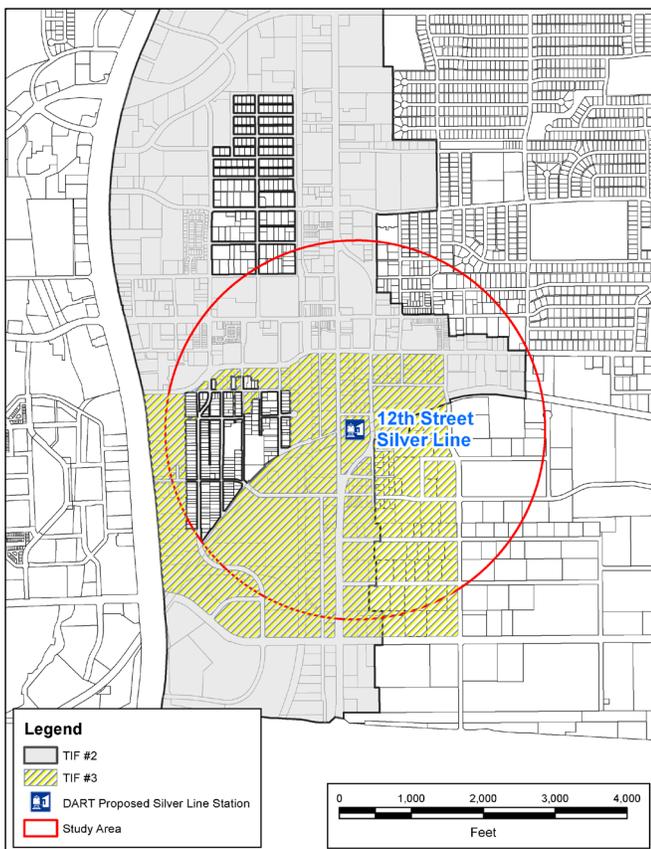
Tax increment financing (TIF) is an economic development tool used to promote investment in a defined area. The TIF has historically been used to finance public improvements in blighted or underdeveloped areas identified as reinvestment zones. Once the zone is created, revenue from the TIF district is divided into two categories: property tax value prior to the formation of the TIF (tax base), and property tax value from new development or redevelopment and investment in the district (tax increment). The tax increment fund is maintained by the city for investment in projects such as property acquisition, public right-of-way construction and repair, infrastructure development, demolition, site preparation, implementing and/or enhancing public utilities, streetscape improvements and beautification. These investments serve as a catalyst for private investment and development within the TIF zones.

Tax Increment Reinvestment Zone 2

In 1999, the City of Plano created a tax increment finance (TIF) district to encourage reinvestment along the DART light rail line in downtown Plano. The zone is referred to as TIF Reinvestment Zone 2. The zone was designed to maximize potential transit-oriented development and to support arts and cultural heritage expansion in the downtown area. In May 2014, the zone was extended for another 15 years. Planned improvements in the zone include additional public infrastructure, streetscaping, and the continuation of various development projects.

Tax Increment Reinvestment Zone 3

In 2018, the City approved a new zone to support the construction and development of the Silver Line. TIF Reinvestment Zone 3 includes areas around the Shiloh Road Station and areas south and east of the existing TIF Reinvestment Zone 2 (near the proposed 12th Street Station).



Downtown Public Improvement District

Public Improvement Districts (PID) serve as economic stimulators that help revitalize an area, and continue the momentum gained through economic investment. The Downtown Plano Public Improvement District (PID) is made possible by an assessment levy on property owners in the District. Property owners are assessed \$0.15 per \$100 of appraised value on taxable real property. The assessment levy supports additional services and events executed within the PID.

The Plano City Council established the Downtown Plano PID in 2014. It was created to help increase public improvements and expand opportunities attracting people to Downtown. The Downtown Plano PID consists of an Advisory Board made up of all property owners in the PID. An eight-member Executive Committee is formed that includes the three highest valued property owners, and five other property owners that the Board elects. The Board also establishes a Management Committee for managing programs and services, and overseeing expenditures.

The City Council established the District to help increase public improvements and expand opportunities to attract people to the District. The Authorized Improvements of the District include:

- **Marketing/Advertising** - Improvements include commercial media advertising, printed material, social media, web-based information, messaging, signs, billboards, banners, and souvenirs. The marketing/advertising improvements will provide benefit to all Lots within the District.
- **Events** - Improvements include entertainment, celebrations, support services, equipment/venue charges, and fees. The events improvements will provide benefit to all Lots within the District.
- **Beautification** - Improvements include landscaping, streetscaping, lighting, and other decorative improvements. The beautification improvements will provide benefit to all Lots within the District.
- **PID Management** - Improvements include services and costs related to coordinating and administering the PID program and budget by persons and organizations other than the city.
- **City Administration** - Improvements include contract services related to assessment administration and collection.
- **Security** - Improvements include security matters related to events and lighting projects. The security improvements will provide benefit to all Lots within the District.

Completed projects and PID expenditures include beautification projects on 15th Street; special events occurring throughout the year such as SteinFest, Plano ArtFest, Plano Art & Wine Walk, Night Out on 15th and the Movies in the Park series; and advertising and marketing that promote Downtown.

Downtown PID goals are consistent with downtown revitalization efforts:

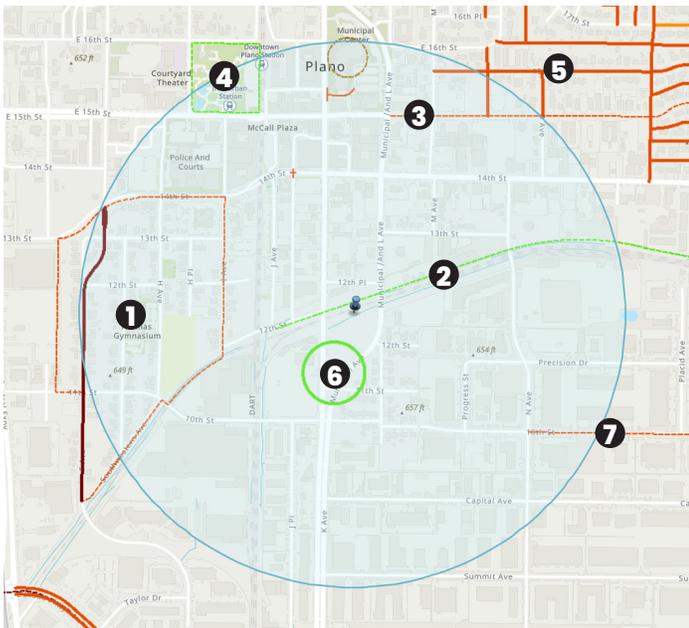
- Facilitate opportunities for thoughtful engagement among property and business owners;
- Draw attention to the Downtown Plano Arts District;
- Increase revenue for Downtown businesses; and,
- Support the arts with programming and financial assistance.

In November 2017, City Council voted to renew the Downtown Plano PID for an additional five years. Continued PID support provides the additional resources needed to stimulate greater business and residential activity, and encourage a thriving downtown.

Community Investment Program (CIP)

The Community Investment Program (CIP) is a five-year guide to planning, building, operating, and maintaining capital projects. The program includes a schedule of proposed municipal expenditures for new facilities and/or the renovation, reconstruction, or expansion of existing facilities and infrastructure. Projects budgeted in the CIP are major capital investments to municipal buildings, streets, parks, drainage ways, and utilities.

12th Street Station



1. **Douglass Neighborhood Sidewalks:** This project includes the installation of sidewalks throughout the Douglass Community. Design plans and easement acquisition for new sidewalks are in progress. Repair of existing sidewalks are currently underway on F Avenue.

2. **Silver Line Rail Trail:** Plans include a 12 ft. hike-and-bike trail located along the Silver Line including a bridge over Jupiter Road. The bike trail connects to the existing hike-and-bike trail along the DART Red Line.

3. **15th Street Reconstruction:** Plans include reconstruction of E 15th Street from Municipal Avenue to Jupiter Road. The western segment will include wider sidewalks and on-street parking spaces.

4. **Haggard Park Master Plan:** The Parks & Recreation Department is currently preparing a master plan for future park updates and improvements.

5. **Residential Pavement Repair:** This project includes repair of residential streets in neighborhoods throughout Plano.

6. **Downtown Signage:** Signage into downtown is being repaired and upgraded.

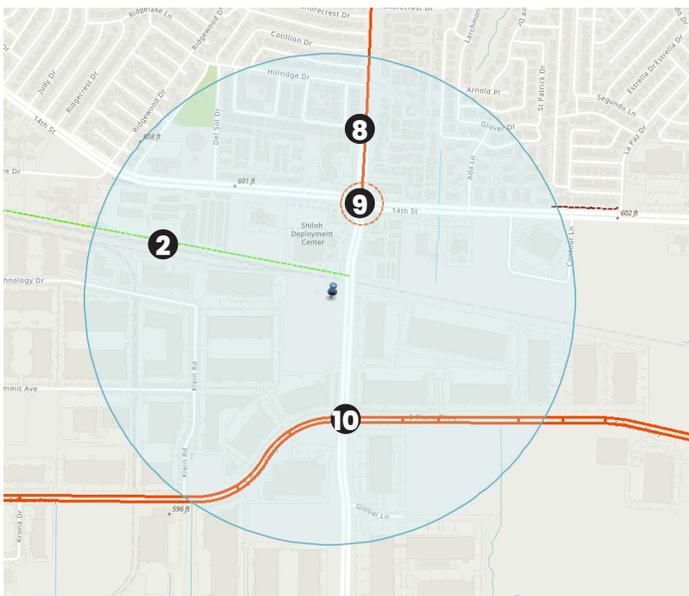
7. **10th Street:** Project includes paving and water line reconstruction on 10th Street, from N Avenue to Jupiter Road.

8. **Shiloh Road Widening:** Shiloh Road will be widened to a 4-lane, divided roadway from 14th Street to Park Road.

9. **Intersection Improvements:** The intersection of 14th and Jupiter will be improved to include turn lanes.

10. **Plano Parkway Concrete Repair:** Work is underway for concrete repairs to Plano Parkway from US 75 to the city's eastern limits.

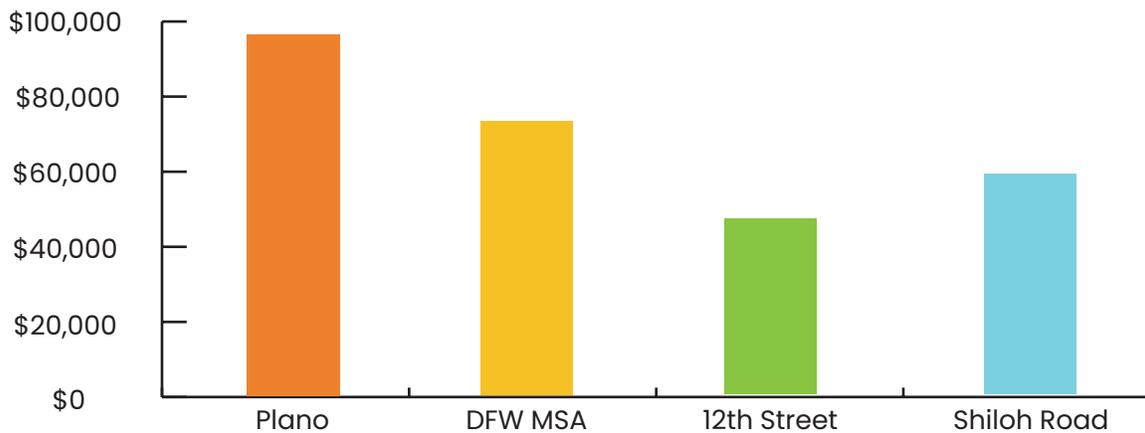
Shiloh Road Station



Demographics

Household Income

The median household income in the 12th Street Study Area (\$45,150) is approximately half the median household income of the City of Plano (\$96,348). The Shiloh Road Study Area has a higher median household income (\$57,406) than the 12th Street Study Area but a lower median household income than the City of Plano. Both study areas have lower median household incomes than the DFW MSA, which is \$72,882.



In general, the study areas have a higher percentage of households earning between \$25,000 and \$50,000 than the City of Plano and the greater DFW MSA region. Both study areas have 9% of households earning more than \$150,000 per year.

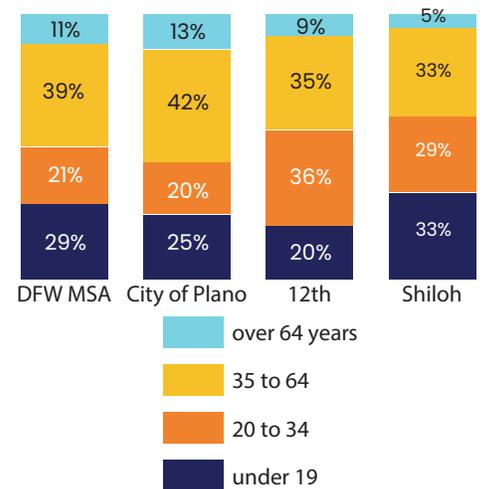


Source: 2020 5-year American Community Survey

Population and Age Composition

The 12th Street Study Area had a 2020 population of 5,210 while the Shiloh Road Study Area had more than twice the population at 13,530. Both study areas had a higher percentage of residents aged 20 to 34 years than the City of Plano and the Dallas-Fort Worth-Arlington Metropolitan Statistical Area (DFW MSA).

Geography	Total Population 2020	Total Households 2020	Persons per Household
Dallas-Fort Worth-Arlington MSA	7,451,858	2,615,579	2.9
City of Plano	288,870	107,320	2.7
12th Street Study Area*	5,210	2,523	2.0
Shiloh Road Study Area *	13,530	4,189	3.2



Source: 2020 American Community Survey

*Study Area data is from 2020 Census Block Groups whose boundaries extend outside of the 1/2 mile Study Areas presented elsewhere in this report. The 0.5-mile study areas are both 502.7 acres, whereas the 12th Street block groups cover 1,645.5 acres, and Shiloh Road block groups cover 1,805.4 acres

Race/Ethnicity



Source: 2020 American Community Survey

04 – Zoning Alignment

In anticipation of significant public investment in new rail transit infrastructure and new commuter rail stations, the City completed the *Silver Line Market Assessment & Economic Development Strategy* in February 2022. The study identified several residential and commercial redevelopment TOD typologies (see below) that are likely to be in market demand as a result of the Silver Line stations. Findings of the study were broken down into 12 subdistricts.

TOD Typologies

The Silver Line Market Assessment & Economic Development Strategy report outlined a variety of expected residential and commercial typologies:

Residential TOD Typologies

- Single-Family Detached
- Townhome
- Slot Home/Turned Townhome
- Live-Work
- 3- to 5-Story Multifamily
- 4- or 5-Over 1 Multifamily
- High Rise Residential

Commercial TOD Typologies

- Class A Office
- Rehabilitated Industrial
- 4- or 5-Over 1 Commercial
- Stand Alone Retail
- Strip or Retail Center
- Full-Service Hotel

Subdistricts

The Silver Line Market Assessment & Economic Development Strategy analyzed the TOD Typologies by 12 subdistricts:

12th Street Station Study Area Subdistricts

- Downtown North
- Downtown South Fragmented Industrial
- Douglass Neighborhood
- Large Format Industrial Southwest
- K Avenue Extension South
- Vendome Neighborhood
- Industrial District

Shiloh Road Study Area Subdistricts

- Shiloh Single-Family
- Shiloh Multifamily
- 14th Street East
- RT North
- Research & Technology

Objectives

The goal of the Zoning Alignment Chapter is to build on these findings by exploring if the current zoning in the subdistricts are supportive of the market conditions. It provides answers the following questions:

1. Which zoning districts are generally supportive of the TOD typologies overall?
2. Are the subdistricts currently zoned to allow the expected redevelopment typologies?
3. Are there barriers in existing zoning to meeting market demand or facilitating redevelopment?

Analysis

This chapter is intended to inform future phases of the Silver Line Station Areas Plan. Findings of the zoning analysis are not recommendations, but simply analysis of the existing zoning and what changes would likely be needed to allow the redevelopment typologies identified in the market study. Future phases will identify community needs and preferences in the study areas. Understanding market demand and community preferences will be used together to develop the vision and implementation strategies for the study areas.

Residential TOD Typologies

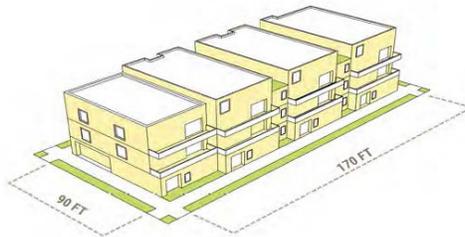


Single-Family Detached

Typical: Up to 10 units per acre
 Urban: 10 or more units per acre
 1 to 3 stories

Use Type in Zoning Ordinance:

Single-Family Residence (Detached)
 or Patio Home



Townhomes

15 to 40 units per acre
 ~1,800-2,500 sq. ft. lot sizes
 1 to 3 stories

Use Type in Zoning Ordinance:

Single-Family Residence (Attached)
 Units are most often on individually
 platted lots, but may be on a single lot
 in some circumstances.



Slot Homes

25 to 55 units per acre
 600 sq. ft. footprint per unit
 1 to 4 stories

Use Type in Zoning Ordinance:

Plano does not currently have a
 use type or zoning district designed
 specifically for higher density single-
 family, such as Slot Homes. The
 analysis that follows evaluates
 these types as condominium-
 type ownership products would be
 reviewed under the Zoning Ordinance.

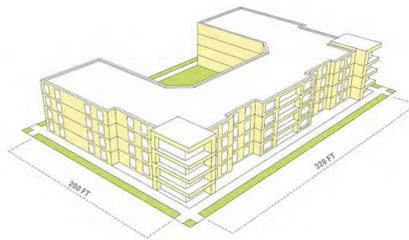


Live-Work

Live above/behind/within commercial
 18 to 25 units per acre
 1 to 3 stories
 Lot sizes vary

Use Type in Zoning Ordinance:

Live-Work (Business Loft)

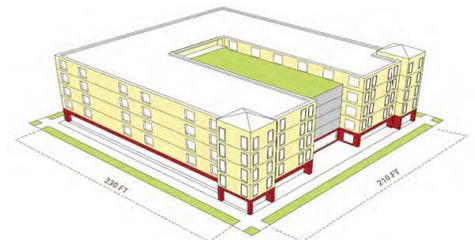


3 to 5 Story Multifamily

30 to 80 units per acre
 3 to 5 stories
 Structured Parking
 4 to 7 acre lot sizes

Use Type in Zoning Ordinance:

Multifamily Residence (1 to 4 stories)
 Mid-Rise Residential (5+ stories)



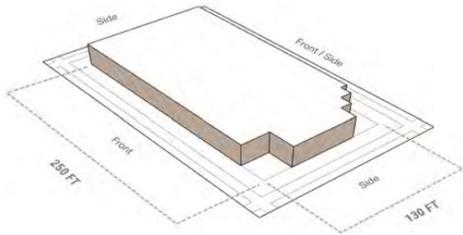
4/5 over 1 Multifamily

80 to 110 units per acre
 4 to 5 stories
 Ground Floor Commercial
 1.5 to 5 acre lot sizes

Use Type in Zoning Ordinance:

Multifamily Residence (1 to 4 stories)
 Mid-Rise Residential (5+ stories)

Commercial TOD Typologies

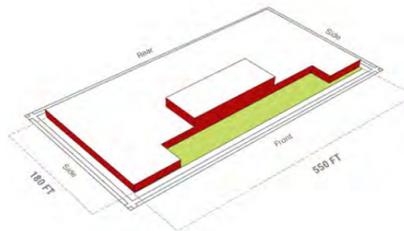


Repurposed Industrial

Conversion of older industrial buildings into bars/restaurants, art or event venues, showrooms, boutique offices, microbreweries, etc.

Use Type in Zoning Ordinance:

The Repurposed Industrial typology is not associated with a specific type of land use. The site would be evaluated on a case-by-case basis depending upon the proposed use.



Stand-Alone Retail

Retail, Service, or Restaurants
Surface Parking in Front
1 to 2 stories
Lot sizes vary

Use Type in Zoning Ordinance:

Retail Store (retail/service uses) or
Restaurant/Cafeteria (restaurants)

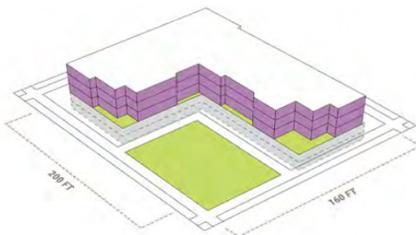


4/5 over 1 Commercial

Ground floor retail with residential units above. Same as the 4/5 over 1 Multifamily residential typology.

Use Type in Zoning Ordinance:

Multifamily Residence (1 to 4 stories)
Mid-Rise Residential (5+ stories)



Boutique Hotel

Unique amenity packages
Typically less than 200 rooms
Cultural or historical experience

Use Type in Zoning Ordinance:

Hotel/Motel

Unlikely Redevelopment Types:

The Silver Line Market Study found that the following typologies were unlikely in both study areas:

High-Rise Residential

80 to 200 units per acre
10 to 30 stories

Class A Office

3 to 12 acres
1:1 Floor Area Ratios

Strip Retail

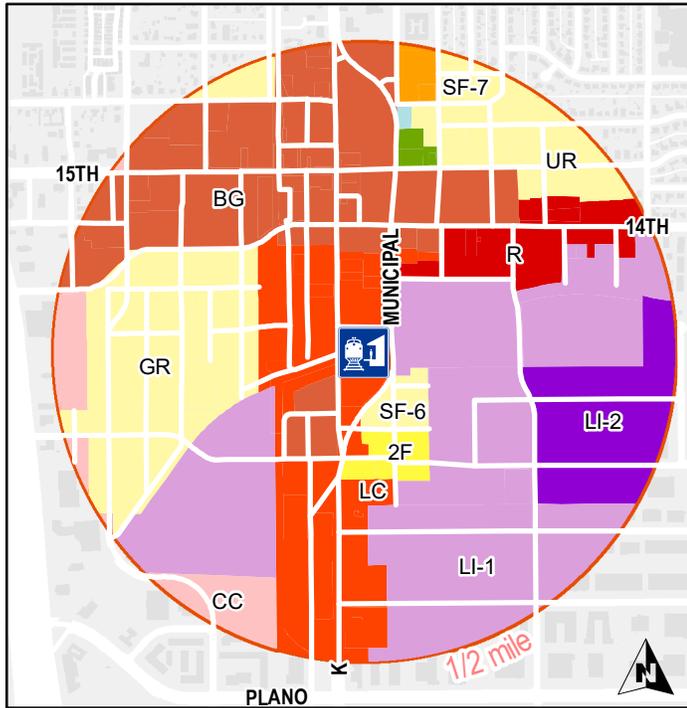
Multi-tenant retail and service
1 to 2 stories

Full Service Hotel

Amenities such as restaurants,
meeting rooms, gyms, and
pools

Current Zoning in Study Areas

The analysis in the Section analyzes the findings of the TOD Typologies from the Silver Line Market Study with existing zoning in the study areas. Other zoning districts not located in the study areas were not considered.

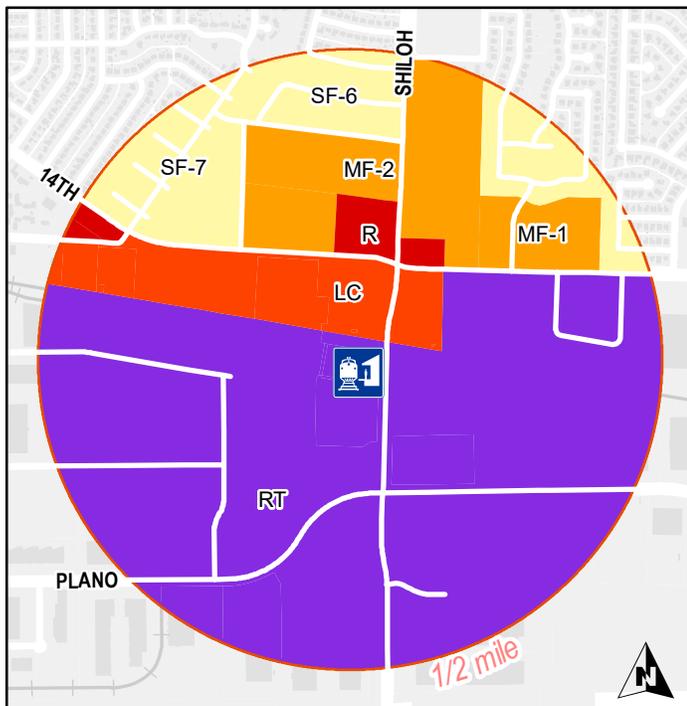


Residential Zoning Districts:

- Single-Family Residence-6 (SF-6)
- Single-Family Residence-7 (SF-7)
- Urban Residential (UR)
- Single-Family Residence Attached (SF-A)
- Two-Family Residence (2F)
- General Residential (GR)
- Multifamily Residence-1 (MF-1)
- Multifamily Residence-2 (MF-2)
- Multifamily Residence-3 (MF-3)

Nonresidential Zoning Districts:

- Corridor Commercial (CC)
- Downtown Business/Government (BG)
- Neighborhood Office (O-1)
- General Office (O-2)
- Light Commercial (LC)
- Light Industrial-1 (LI-1)
- Light Industrial-2 (LI-2)
- Retail (R)
- Research/Technology Center (RT)



Data Source: City of Plano Zoning Map (07/01/22)

Where are Residential TOD Typologies permitted?

The table below shows where the Residential TOD Typologies described in the Silver Line Market Study are permitted in the various zoning districts located within the study area.

P - Permitted | N - Not Permitted | S - Specific Use Permit | # - See Notes Below

Zoning Districts in the Study Areas		Residential TOD Typologies					
		Single-Family Detached	Townhome	Slot Home	Live-Work	3 to 5 story MF	4 or 5 over 1 MF
Residential Zoning Districts	Single-Family Residence-6 (SF-6)	P	N	N	N	N	N
	Single-Family Residence-7 (SF-7)	P	N	N	N	N	N
	Urban Residential (UR)	P	N	N	N	N	N
	Single-Family Residence Attached (SF-A)	P	N ²	N ^{2,3}	N	N	N
	Two-Family Residence (2F)	P	N	N	N	N	N
	General Residential (GR)	P	N	N	N/A	N	N
	Multifamily Residence-1 (MF-1)	P	N ²	N ^{2,3}	N	N ²	N ²
	Multifamily Residence-2 (MF-2)	P	P	N ^{2,3}	N	N ²	N ²
	Multifamily Residence-3 (MF-3)	P	P	N ^{2,3}	N	N ²	N ²
Nonresidential Zoning Districts	Corridor Commercial (CC)	N	N	N	N	N	N
	Downtown Business/Government (BG)	N	P	P ³	P	P ¹	P ¹
	Neighborhood Office (O-1)	N	N	N	N	N	N
	General Office (O-2)	N	N	N	N	N	N
	Light Commercial (LC)	N	N	N	N	N	N
	Light Industrial-1 (LI-1)	N	N	N	N	N	N
	Light Industrial-2 (LI-2)	N	N	N	N	N	N
	Retail (R)	S	S	N	N	N	N
	Research/Technology Center (RT)	N	N	N	N	N	N

- Permitted By Right
- May be Permitted
- Not Permitted

NOTES:

¹ Permitted up to 4 stories, or 5 stories if the ground floor is podium parking, commercial uses, or commercial/residential flex space

² The use is permitted, however maximum density and/or building heights of the zoning district(s) would not allow this typology as described in the Silver Line Market Study (2022)

³ Would be classified as Single-Family Residence (Attached) or Multifamily Residence in the Zoning Ordinance depending upon site design

Where are Commercial TOD Typologies permitted?

Permitted By Right
 Conditionally Permitted
 Not Permitted

The table below shows where the Commercial TOD Typologies described in the Silver Line Market Study are permitted in the various zoning districts located within the study area.

P - Permitted | N - Not Permitted | S - Specific Use Permit | # - See Notes Below

Zoning Districts in the Study Areas		Commercial TOD Typologies				
		Rehabilitated Industrial	4/5 over 1 Commercial	Stand Alone Retail/Service	Stand Alone Restaurant	Boutique Hotel
Residential Zoning Districts	Single-Family Residence-6 (SF-6)	N	N	N	N	N
	Single-Family Residence-7 (SF-7)	N	N	N	N	N
	Urban Residential (UR)	N	N	N	N	N
	Single-Family Residence Attached (SF-A)	N	N	N	N	N
	Two-Family Residence (2F)	N	N	N	N	N
	General Residential (GR)	N	N	N	N	N
	Multifamily Residence-1 (MF-1)	N	N	N	N	N
	Multifamily Residence-2 (MF-2)	N	N	N	N	N
	Multifamily Residence-3 (MF-3)	N	N	N	N	N
Nonresidential Zoning Districts	Corridor Commercial (CC)	P ¹	N	P	P	P
	Downtown Business/Government (BG)	P ¹	P ²	P	P	P
	Neighborhood Office (O-1)	P ¹	N	N	N	N
	General Office (O-2)	P ¹	N	N	S	P
	Light Commercial (LC)	P ¹	N	P	P	P
	Light Industrial-1 (LI-1)	P ¹	N	P	P	P
	Light Industrial-2 (LI-2)	P ¹	N	P	P	P
	Retail (R)	P ¹	N	P	P	P
	Research/Technology Center (RT)	P ¹	N	N	N	P ³

Permitted By Right
 May be Permitted
 Not Permitted

NOTES:

¹ This typology does not specify a future use; may be permitted depending upon the proposed use (Retail Store, Restaurant/Cafeteria, Office, etc.)

² Permitted up to 4 stories, or 5 stories if the ground floor is podium parking, commercial uses, or commercial/residential flex space

³ Permitted when at least 200 feet from a residential zoning district

Zoning Districts Allowing Single-Family Detached (SF-7/SF-6/UR/GR)

Residential TOD Typologies	SF-7	SF-6	UR	GR
Single-Family Detached	P	P	P	P
Townhome	N	N	N	N
Slot Home	N	N	N	N
Live-Work	N	N	N	N
3 to 5 Story Multifamily	N	N	N	N
4 or 5 over 1 Multifamily	N	N	N	N
Zoning Standards (Typical ^A)				
Minimum Lot Area (square feet)	7,000	6,000	5,000	3,000
Minimum Lot Width (feet)	65'	55'	50'	30'
Minimum Lot Depth (feet)	100'	100'	90'	90'
Maximum Lot Coverage	45%	45%	60%	50%
Maximum Building Height	2 story	2 story	2 story	1-1.5 story
Minimum Floor Areas (square feet)	800	800	800	800
Parking Requirements (spaces/unit)	2	2	2	1

NOTES:

P - Permitted
 N - Not Permitted
 S - Specific Use Permit

^ADISCLAIMER:

The standards in the table are intended to reflect the typical requirements for the district. Refer to the City of Plano Zoning Ordinance for detailed regulations for the applicable zoning district.

 Permitted By Right
 May be Permitted
 Not Permitted

Analysis:

- The **Single-Family Residence-6** and **Single-Family Residence-7 (SF-6, SF-7)** districts are designed for the Typical Neighborhood Design, as described in the Comprehensive Plan. The larger lot sizes and setbacks do not support the compact development form necessary for transit-oriented development, but may be appropriate in locations where subdivision of large lots into smaller lots is not desirable. Backyard Cottages are also a potential way to provide additional housing opportunities in these areas, specifically for seniors and those with special housing needs.
- The **Urban Residential District (UR)** district is currently applied to Haggard Park and Old Towne neighborhoods. This zoning was created in 1998 with the purpose of providing single-family detached housing, particular infill developments that are urban and pedestrian-oriented in nature. However, rising land prices in the downtown area are driving demand for even smaller lot sizes. If more options for single-family detached are desired, the city should consider zoning adjustments to allow smaller lot sizes.
- The **General Residential (GR)** district is designed specifically for the Douglass Community and is not intended for use elsewhere in the city. It includes requirements to construct a front porch to maintain the character of the area.

Zoning Districts Allowing Single-Family Attached (2F/GR/SF-A/BG)

Residential TOD Typologies	2F	GR	SF-A	BG	
Single-Family Detached	P	P	P	N	NOTES: None P - Permitted N - Not Permitted S - Specific Use Permit 1 - Permitted up to 4 stories, or 5 stories if the ground floor is podium parking, commercial uses, or commercial/residential flex space 2 - The use is permitted, however maximum density and/or building heights of the zoning district(s) would not allow this typology as described in the Silver Line Market Study (2022) 3 - Would be classified as Single-Family Residence (Attached) or Multifamily Residence in the Zoning Ordinance depending upon site design
Townhome	N	N	N ²	P	
Slot Home	N ³	N ³	N ^{2,3}	P ³	
Live-Work	N	N	N	P	
3 to 5 Story Multifamily	N	N	N	P ¹	
4 or 5 over 1 Multifamily	N	N	N	P ¹	
Zoning Standards (Typical ^A)					
Minimum Lot Area (square feet)	8,000	6,000	2,250	700	^ADISCLAIMER: The standards in the table are intended to reflect the typical requirements for the district. Refer to the City of Plano Zoning Ordinance for detailed regulations for the applicable zoning district. <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="width: 15px; height: 15px; background-color: #669933; border: 1px solid black;"></div> Permitted By Right <div style="width: 15px; height: 15px; background-color: #ffff99; border: 1px solid black;"></div> May be Permitted <div style="width: 15px; height: 15px; background-color: #ffffff; border: 1px solid black;"></div> Not Permitted </div>
Minimum Lot Width (feet)	70'	30'	25'	20'	
Minimum Lot Depth (feet)	100'	90'	85'	35'	
Maximum Lot Coverage	45%	50%	65%	100%	
Maximum Building Height	2 story	1-1.5 story	2 story	3 story	
Minimum Floor Areas (square feet)	800	800	800	800	
Maximum Density	N/A	N/A	10-12	40	
Parking Requirements (spaces/unit)	2	1	2-2.5	2	

Analysis:

- The **Two-Family Residence (2F)** and **General Residential (GR)** districts allow both single-family detached and duplexes. Though not a residential typology considered by the Silver Line Market Study, smaller lot duplexes are not uncommon in mixed-use and transit-oriented developments. The Collin Creek Mall redevelopment site, located approximately 3/4 mile west of the 12th Street Station, includes duplex-type housing. However, the required lot sizes in the 2F and GR districts are likely larger than those necessary for transit-oriented development. These districts may be appropriate in locations where subdivision of large lots into smaller lots is not desirable. Backyard Cottages are not permitted as accessory dwellings to duplexes.
- The **Single-Family Residence Attached (SF-A)** district allows both single-family detached and townhome typologies. Minimum lot sizes for SF-A units may be reduced to as low as 2,025 square feet with stormwater incentives. SF-A has long been used for moderate density transitions from commercial to single-family detached neighborhoods and may be a good redevelopment option where the greater intensity of BG zoning is a concern.
- The **Downtown/Business Government (BG)** district is designed specifically for the Downtown area and allows the density necessary to support TOD. A potential drawback of the BG district is that it does not permit urban-style, single-family detached units, such as Rice Field and Elmwood Park, without approval of a Planned Development. If more options for single-family detached are desired, the city should consider zoning adjustments to allow smaller lot sizes.

Zoning Districts Allowing Multifamily (MF-1/MF-2/MF-3/BG)

Residential TOD Typologies	MF-1	MF-2	MF-3	BG
Single-Family Detached	P	P	P	N
Townhome	N ²	P	P	P
Slot Home	N ^{2,3}	N ^{2,3}	N ^{2,3}	P ³
Live-Work	N	N	N	P
3 to 5 Story Multifamily	N ²	N ²	N ²	P ¹
4 or 5 over 1 Multifamily	N ²	N ²	N ²	P ¹
Zoning Standards (Typical ^A)				
Minimum Lot Area	8,400	8,400	2,250	None
Minimum Lot Width (feet)	70'	70'	25'	None
Minimum Lot Depth (feet)	120'	120'	85'	None
Maximum Lot Coverage	35%	35%	65%	4:1 FAR
Maximum Building Height	3 story	2 story	3 story	4-5 story ¹
Minimum Floor Areas (square feet)	500-800	500-800	500-800	400
Maximum Density (units per acre)	12	18	21.5	None
Parking Requirements (spaces/unit)	2	2	2	1-2

NOTES: None
P - Permitted
N - Not Permitted
S - Specific Use Permit

¹ - Permitted up to 4 stories, or 5 stories if the ground floor is podium parking, commercial uses, or commercial/residential flex space

² - The use is permitted, however maximum density and/or building heights of the zoning district(s) would not allow this typology as described in the Silver Line Market Study (2022)

³ - Would be classified as Single-Family Residence (Attached) or Multifamily Residence in the Zoning Ordinance depending upon site design

^ADISCLAIMER:
The standards in the table are intended to reflect the typical requirements for the district. Refer to the City of Plano Zoning Ordinance for detailed regulations for the applicable zoning district.

Permitted By Right
 May be Permitted
 Not Permitted

Analysis:

- The **Multifamily Residence-1 (MF-1)**, **Multifamily Residence-2 (MF-2)** and **Multifamily Residence-3 (MF-3)** districts are the city's standard zoning for garden-style apartments and condominiums. The "3 to 5 story Multifamily" and "4 to 5 over 1 Multifamily" typologies are not supported in these districts, as they do not permit the 30+ units per acre density customary of these housing types. Slot Homes, if built as a multi-unit building on a single lot, could possibly be developed using the MF-1, MF-2, or MF-3 districts; however, the maximum densities are probably a limiting factor for these to develop under current market conditions.
- The **Downtown/Business Government (BG)** district is designed specifically for the Downtown area and allows the density necessary to support TOD. It allows multifamily uses by-right, but limits height to four floors of residential. Buildings may be as tall as five stories if the ground floor is used for parking, commercial, or residential/commercial flex space. The BG district also limits multifamily to no more than 300 units per block.

A potential drawback of the BG district is that because multifamily is permitted by-right, Planned Development districts have been used to prohibit multifamily uses for development projects seeking BG zoning for townhomes or non-residential uses. BG may be an appropriate district for areas within 1/4 mile of the transit stations where the highest intensity of TOD is supported by the Comprehensive Plan.

Zoning Districts Allowing Commercial Uses (R/LC/CC/BG)

Commercial TOD Typologies	R	LC	CC	BG
Repurposed Industrial	P ¹	P ¹	P ¹	P ¹
4 or 5 Over 1 Commercial	N	N	N	P ²
Stand Alone Retail/Service	P	P	P	P
Stand Alone Restaurant	P	P	P	P
Boutique Hotel	P	P	P	P
Zoning Standards (Typical ^A)				
Minimum Lot Area	None	None	None	None
Minimum Lot Width (feet)	None	None	None	None
Minimum Lot Depth (feet)	None	None	None	None
Maximum Lot Coverage	30%	40%	50%	None
Maximum Building Height	2 story	2 story	20 story	4-5 story ²
Maximum Floor Area Ratio	0.6:1	0.8:1	1:1	4:1

NOTES: None
P - Permitted
N - Not Permitted
S - Specific Use Permit

¹ - This typology does not specify a future use; may be permitted depending upon the proposed use (Retail Store, Restaurant/Cafeteria, Office, etc.)

² - Permitted up to 4 stories, or 5 stories if the ground floor is podium parking, commercial uses, or commercial/residential flex space

^ADISCLAIMER:
The standards in the table are intended to reflect the typical requirements for the district. Refer to the City of Plano Zoning Ordinance for detailed regulations for the applicable zoning district.

 Permitted By Right
 May be Permitted
 Not Permitted

Analysis:

- The **Retail (R)** and **Light Commercial (LC)** districts are the city's traditional commercial zoning districts. The districts are very similar, with the LC district allowing slightly larger buildings and more uses oriented towards light assembly, manufacturing, furniture stores, wholesalers, repair shops, and other similar businesses. The Retail district also allows some residential uses, such as single-family detached, townhomes, patio homes, and independent living facilities, with a Specific Use Permit. Although these districts allow the retail and service uses typical of TOD, zoning standards like front yard setbacks and lot coverage are supportive customary for compact, pedestrian-oriented environment.
- The **Corridor Commercial (CC)** district is located within the study area, but only in a small portion along US 75 on the western edge of the 12th Street Station study area. The district is intended for use along major expressways and is not appropriate for transit-oriented development.
- The **Downtown/Business Government (BG)** district is designed specifically for the Downtown area and allows a range of non-residential uses customary of TOD, such as retail stores, restaurants, bars, offices, and boutique hotels. BG is also the only district in the study areas that permits Live-Work units, where a residential unit is permitted to be attached to (above or beside) a ground-floor business. Allowing many of the same types of commercial uses but with different zoning standards, the BG district may be a good option for properties currently zoned Retail or Light Commercial in close proximity to the transit stations where a transition to a more mixed-use, pedestrian-friendly form is desirable.

Zoning Districts Allowing Office/Tech Uses (O-1/O-2/RT/BG)

Commercial TOD Typologies	O-1	O-2	RT	BG
Repurposed Industrial	P ¹	P ¹	P ¹	P ¹
4-5 Over 1 Commercial	N	N	N	P ²
Stand Alone Retail/Service	N	N	N	P
Stand Alone Restaurant	N	S	N	P
Boutique Hotel	N	P	P ³	P
Zoning Standards (Typical ^A)				
Minimum Lot Area	None	None	None	None
Minimum Lot Width (feet)	None	None	None	None
Minimum Lot Depth (feet)	None	None	None	None
Maximum Lot Coverage	30%	50%	45-60%	None
Maximum Building Height	2 story	None	20 story	4-5 story ²
Maximum Floor Area Ratio	0.6:1	1:1	1:1	4:1

NOTES: None
P - Permitted
N - Not Permitted
S - Specific Use Permit

¹ - This typology does not specify a future use; may be permitted depending upon the proposed use (Retail Store, Restaurant/Cafeteria, Office, etc.)

² - Permitted up to 4 stories, or 5 stories if the ground floor is podium parking, commercial uses, or commercial/residential flex space

³ - Permitted when at least 200 feet from a residential zoning district

^ADISCLAIMER:
The standards in the table are intended to reflect the typical requirements for the district. Refer to the City of Plano Zoning Ordinance for detailed regulations for the applicable zoning district.

■ Permitted By Right
■ May be Permitted
□ Not Permitted

Analysis:

- The **Neighborhood Office (O-1)** district allows office uses at a lower-intensity, neighborhood scale. It used commonly throughout the city on the edges of four-corner retail shopping areas as complementary transitions to single-family neighborhoods. Of the likely redevelopment typologies, only *Re-purposed Industrial* is possible in this district; however, just one property is zoned O-1 in either study area and it is not an industrial site.
- The **General Office (O-2)** district allows office uses with unlimited height and a 1:1 FAR. This district is intended for a variety of low-, mid-, and high-rise corporations. Of the likely commercial redevelopment typologies, *Boutique Hotels* is the only one permitted outright. A specific use permit is needed for restaurants. *Re-purposed Industrial* may be possible; however, the single O-2 property in the study area does not have industrial buildings on site.
- The **Research/Technology Center (RT)** district is intended to allow a low density employment center consisting of office, research and development facilities, and limited assembly operations. The minimum district size is 25 acres.
- The **Downtown/Business Government (BG)** district is designed specifically for the Downtown area and, similar to the other office districts, allows professional, administrative, and medical offices. It is a good zoning option for TOD, where these employment generating uses are wanted in walkable proximity to housing, shopping, dining, and entertainment.

Zoning Districts Allowing Industrial Uses (LI-1/LI-2)

Commercial TOD Typologies	LI-1	LI-2
Repurposed Industrial	P ¹	P ¹
4-5 Over 1 Commercial	N	N
Stand Alone Retail/Service	P	P
Stand Alone Restaurant	P	P
Boutique Hotel	P	P
Zoning Standards (Typical ^A)		
Minimum Lot Area	None	None
Minimum Lot Width (feet)	None	None
Minimum Lot Depth (feet)	None	None
Maximum Lot Coverage	50%	50%
Maximum Building Height	None	None
Maximum Floor Area Ratio	1:1	2:1

NOTES: None
P - Permitted
N - Not Permitted
S - Specific Use Permit

¹ - This typology does not specify a future use; may be permitted depending upon the proposed use (Retail Store, Restaurant/Cafeteria, Office, etc.)

^ADISCLAIMER:
The standards in the table are intended to reflect the typical requirements for the district. Refer to the City of Plano Zoning Ordinance for detailed regulations for the applicable zoning district.

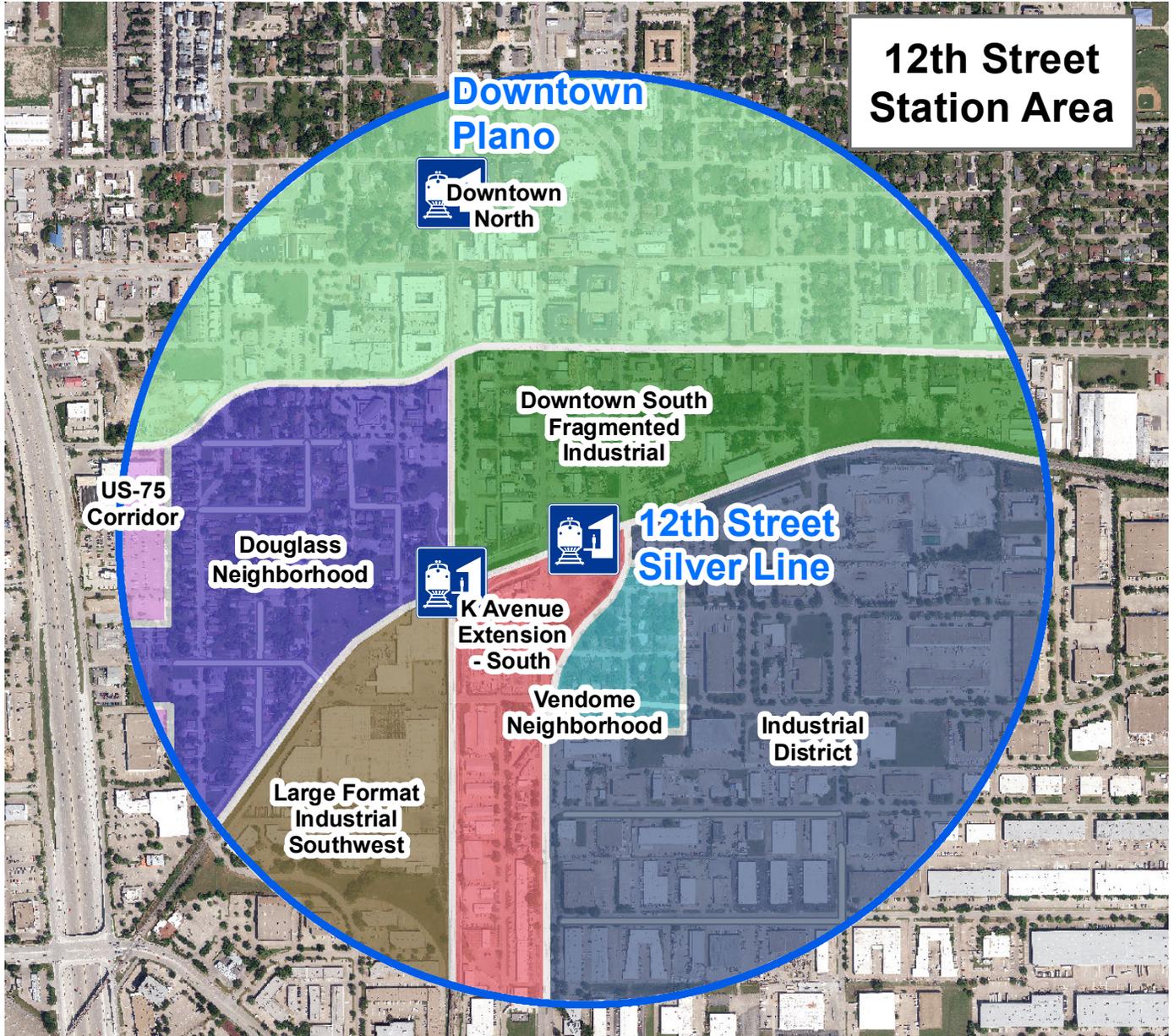
 Permitted By Right
 May be Permitted
 Not Permitted

Analysis:

- The **Light Industrial-1 (LI-1)** and **Light Industrial-2 (LI-2)** districts are the city's only districts designed specifically for heavy commercial and manufacturing, heavy equipment sales and repair, assembly plants, distribution centers, warehouses, and other similar uses. The LI-2 district allows larger buildings and wider variety of industrial uses than the LI-1 district.

Although many of the commercial redevelopment types anticipated by the market study are allowed in these districts, industrial parks often benefit from wider streets and larger driveways to accommodate truck traffic and turning movements that are generally not supportive of TOD. However, the repurposing of older stand-alone industrial properties for restaurants, microbreweries, outdoor recreation, and other entertainment uses could be beneficial in walking or biking distance to TOD, or where adequate parking

12th Street Station Subdistricts



NOTE: The US 75 Corridor subdistrict was not included in TOD Typology analysis of the Silver Line Market Study. This area has been combined with Douglass Neighborhood subdistrict for purposes of this section.

- Not Supported
- ◐ Not Fully Supported
- Supported

12th Street Subdistricts: Downtown North

TOD Typologies		1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology? ¹				
			BG (67%)	UR (20%)	MF-1 (3%)	O-2 (2%)	R (4%)
Residential	Single-Family Detached	→ No	○	●	●	○	◐
	Townhome	→ Yes	●	○	◐	○	◐
	Slot Home	→ Yes	●	○	◐	○	○
	Live-Work	→ Yes	●	○	○	○	○
	3 to 5 Story Multifamily	→ Yes	●	○	○	○	○
	4 or 5 over 1 Multifamily	→ Yes	●	○	○	○	○
Commercial	Repurposed Industrial	→ No	◐	○	○	◐	◐
	4 or 5 Over 1 Commercial	→ Yes	●	○	○	○	○
	Stand Alone Retail/Service	→ Yes	●	○	○	○	●
	Stand Alone Restaurant	→ Yes	●	○	○	●	●
	Boutique Hotel	→ Yes	●	○	○	●	●

¹Districts less than 1% not included.

Downtown/Business Government (BG)

- Generally allows the full variety of redevelopment typologies anticipated in this area.
- 5-story multifamily is not permitted unless the ground floor is parking, nonresidential, or flexspace.
- No minimum lot size or setbacks for non-residential is conducive for redevelopment of small infill lots.
- The Downtown Heritage District provides height and architectural protections along a portion of 15th Street and K Avenue.
- Recent developments include the Morada Apartments, Patriot Park, @15th Apartments, 1897 Addition, and Elmwood Park.

General Office (O-2)

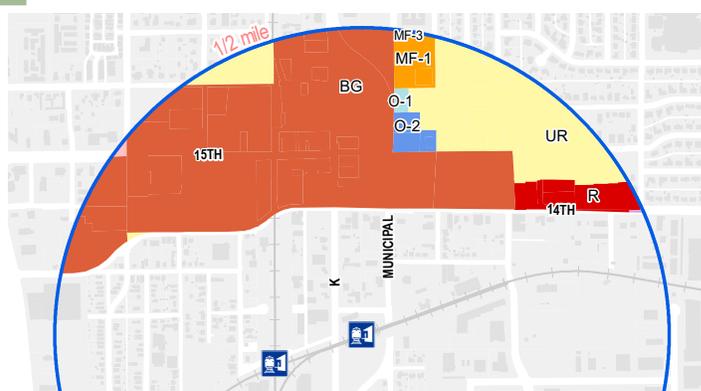
- Current zoning for 6 small properties in the subdistrict.

Multifamily Residence-1 (MF-1)

- The maximum heights and densities are not supportive of 4 or 5 Over 1 Multifamily/Commercial.
- May be utilized for small-scale, multiplex apartments or townhomes.

Urban Residential (UR)

- Current zoning for Haggard Park and Old Towne neighborhoods, as well as several older 2-story apartments located along E 15th Street.
- Permits the *Single-Family Detached* typology only, which is appropriate for neighborhood conservation.



However, multifamily in these areas built before 1998 may be reconstructed.

- The Haggard Park Heritage District provides additional architectural protections. A neighborhood conservation overlay district may be beneficial for Old Towne as the areas sees rising redevelopment pressure.
- The minimum lot size (5,000 sq. ft.) and height limitations (2-story) are more restrictive than recent PDs for urban-style, single-family detached have allowed, such as Rice Field (700 sq. ft./3-story), the Commodore (1,500 sq. ft./3-story), the Icon at Legacy West (700 sq. ft./3-story), and Elmwood Park (3,000 sq. ft./2-3 stories).

Retail (R)

- Generally allows the commercial typologies, with the exception of 4/5 over 1 MF. Single-family uses are permitted with an Specific Use Permit (SUP).

- Not Supported
- ◐ Not Fully Supported
- Supported

12th Street Subdistricts: Downtown South Fragmented Industrial

TOD Typologies	1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology?¹			
		BG (11%)	LC (37%)	R (25%)	LI-1 (27%)
Residential	Single-Family Detached → No	○	○	◐	○
	Townhome → Yes	●	○	◐	○
	Slot Home → Yes	●	○	○	○
	Live-Work → Yes	●	○	○	○
	3 to 5 Story Multifamily → Yes	●	○	○	○
	4 or 5 over 1 Multifamily → Yes	●	○	○	○
Commercial	Repurposed Industrial → Yes	◐	◐	◐	◐
	4 or 5 Over 1 Commercial → No	●	○	○	○
	Stand Alone Retail/Service → Yes	●	●	●	●
	Stand Alone Restaurant → Yes	●	●	●	●
	Boutique Hotel → No	●	●	●	●

¹Districts less than 1% not included.

Downtown/Business Government (BG)

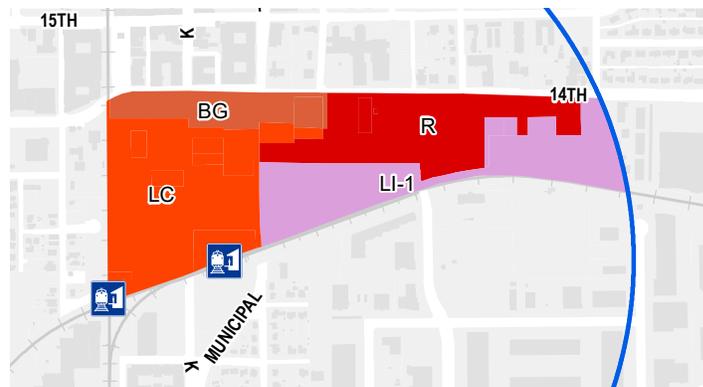
- Generally allows the full variety of redevelopment typologies anticipated in this area.
- 5-story multifamily is not permitted unless the ground floor is parking, nonresidential, or flexspace.
- No minimum lot size or setbacks for non-residential is conducive for redevelopment of small infill lots.

Light Commercial (LC)

- The properties with LC zoning along K Avenue were part of a larger rezoning from LI-1 to K Avenue in 2003. This was intended to better align zoning of the corridor with the Comprehensive Plan, City Center Plan, Downtown Development Plan, and the Douglass Community Neighborhood Plan.
- LC and BG permit many of the same commercial typologies anticipated in this area; however BG allows the residential typologies and greater development intensity. If residential uses are desired to support TOD in this subdistrict, a change to BG may be appropriate.

Retail (R)

- The Retail area includes a mix of office, commercial, and retail uses along 14th Street. Some single-family homes also remain along the north side of 13th Street. The study should consider how to protect residents in the near-term as it transitions to nonresidential uses.
- Single-family uses are permitted with a Specific Use Permit (SUP).



Light Industrial-1 (LI-1)

- The LI-1 portion of the subdistrict includes several lots along 14th Street where the frontage of the property is zoned Retail and the back is used for outdoor storage. The study should consider the aesthetic impacts of this from the Silver Line corridor.
- Two properties are zoned LI-1 that are separated from other parts of the industrial park by the rail corridor. These properties have frontage on Municipal Avenue and are located directly across from the new station. Identified as a potential catalyst site in the market study, the Silver Line Plan should consider ways to capitalize on the transition of this property to more TOD-related uses.

- Not Supported
- ◐ Not Fully Supported
- Supported

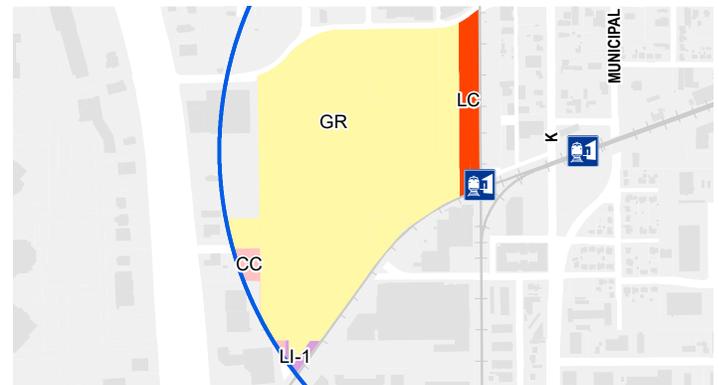
12th Street Subdistricts: Douglass Neighborhood

TOD Typologies	1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology? ¹			
		GR (91%)	LC (6%)	CC (2%)	
Residential	Single-Family Detached	Yes	●	○	○
	Townhome	No	○	○	○
	Slot Home	No	○	○	○
	Live-Work	No	○	○	○
	3 to 5 Story Multifamily	No	○	○	○
	4 or 5 over 1 Multifamily	No	○	○	○
Commercial	Repurposed Industrial	No	◐	◐	
	4 or 5 Over 1 Commercial	No	○	○	○
	Stand Alone Retail/Service	No	○	●	●
	Stand Alone Restaurant	No	○	●	●
	Boutique Hotel	No	○	●	●

¹Districts less than 1% not included.

General Residential (GR)

- The majority of the subdistrict is zoned GR, which was designed specifically for the Douglass Neighborhood. It permits single-family and duplex uses with requirements to construct front porches in character with historic homes in the neighborhood. The GR zoning is appropriate where necessary to protect the neighborhood from encroachment of nonresidential uses.
- Homes in the neighborhood are mostly one-story. The BG zoning of properties directly to the north permits 4-5 stories. This extreme contrast in building height allowances could result in a stark transition in height and scale on either side of 14th Street.



Light Commercial (LC)

- A narrow portion of the area running parallel to the DART Red Line is zoned LC, which is not consistent with the rest of the neighborhood. A portion of this area is owned by Dallas Area Rapid Transit (DART).

Corridor Commercial (CC)

- There are two 1/2-acre properties zoned CC in the subdistrict located on the west end of 11th Street near US 75. The sites are not ideally situated for commercial uses and two similar properties were rezoned for single-family homes in 2011. Formerly used as several residences, both properties are now undeveloped with frontage on E Avenue. The lot depths are approximately 105 feet, making them potentially suitable for subdivision into several residential lots.

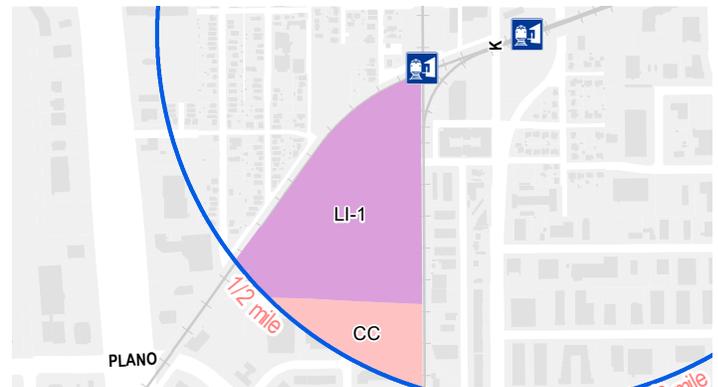
- Not Supported
- ◐ Not Fully Supported
- Supported

12th Street Subdistricts: Large Format Industrial Southwest

TOD Typologies		1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology?	
			LI-1 (77%)	CC (22%)
Residential	Single-Family Detached	→ No	→ ○	→ ○
	Townhome	→ No	→ ○	→ ○
	Slot Home	→ No	→ ○	→ ○
	Live-Work	→ No	→ ○	→ ○
	3 to 5 Story Multifamily	→ Yes	→ ○	→ ○
	4 or 5 over 1 Multifamily	→ No	→ ○	→ ○
Commercial	Repurposed Industrial	→ Yes	→ ◐	→ ◐
	4 or 5 Over 1 Commercial	→ No	→ ○	→ ○
	Stand Alone Retail/Service	→ No	→ ●	→ ●
	Stand Alone Restaurant	→ No	→ ●	→ ●
	Boutique Hotel	→ No	→ ●	→ ●

Light Industrial-1 (LI-1)

- The majority of the subdistrict is zoned LI-1, which allows many commercial uses that could be associated with repurposing industrial buildings. Lots size in this area are large, making them more suitable for large-scale redevelopment.
- The LI-1 zoning does not currently permit multifamily uses, which would be necessary to permit the 3-5 story multifamily typology. Any redevelopment into residential uses would likely need to study the environmental impacts of the industrial uses that have been located in the area since the 1950s.
- 10th Street bisects the area, providing good access to the 12th Street Station and nearby trail system. Future development should consider the potential impacts of cut-through traffic to the west towards the Douglass Neighborhood and US 75.



Corridor Commercial (CC)

- The CC property is located along the southwestern perimeter of the 12th Street Station area and is developed with retail and light commercial uses in 1-story buildings.
- Connectivity to the 12th Street Station is not ideal. Future workers or residents may find it quicker and more convenient to travel south to Richardson's City Line station for their transit needs.

12th Street: K Avenue Extension South

- Not Supported
- ◐ Not Fully Supported
- Supported

12th Street Subdistricts: K Avenue Extension South

TOD Typologies	1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology? ¹	
		BG (18%)	LC (82%)
Residential	Single-Family Detached → No →	○	○
	Townhome → Yes →	●	○
	Slot Home → Yes →	●	○
	Live-Work → Yes →	●	○
	3 to 5 Story Multifamily → Yes →	●	○
	4 or 5 over 1 Multifamily → Yes →	●	○
Commercial	Repurposed Industrial → Yes →	◐	◐
	4 or 5 Over 1 Commercial → Yes →	●	○
	Stand Alone Retail/Service → Yes →	●	●
	Stand Alone Restaurant → Yes →	●	●
	Boutique Hotel → Yes →	●	●

¹Districts less than 1% not included.

Light Commercial (LC)

- The majority of the subdistrict is zoned LC, located between the rail line and K Avenue. This includes the main parking area for the DART Silver Line Station, located on the north side of the souther K Avenue/ Municipal Avenue couplet.
- The properties with LC zoning along K Avenue were part of a larger rezoning from LI-1 to K Avenue in 2003. This was intended to better align zoning of the corridor with the Comprehensive Plan, City Center Plan, Downtown Development Plan, and the Douglass Community Neighborhood Plan.
- LC and BG permit many of the same commercial typologies anticipated in this area; however, BG allows the residential typologies and greater development intensity. If residential uses are desired to support TOD in this subdistrict, a change to BG may be appropriate.
- Sites in this subdistrict will benefit from having access to the Hike-and-Bike trail on the west and 10 ft. sidewalks along K Avenue. These provide great pedestrian and bicycle connections to the 12th Street Station.



Downtown Business/Government (BG)

- The BG portion of this district includes the recently constructed Ferro Apartments. Rezoned in 2016, this property is the only area zoned BG south of the rail line and non-contiguous to other BG areas.

- Not Supported
- ◐ Not Fully Supported
- Supported

12th Street Subdistricts: Vendome Neighborhood

TOD Typologies	1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology?				
		SF-6 (40%)	2F (40%)	SF-A (9%)	LC (9%)	LI-1 (3%)
Residential	Single-Family Detached → Yes	●	●	●	○	○
	Townhome → Yes	○	◐	◐	○	○
	Slot Home → Yes	○	◐	◐	○	○
	Live-Work → Yes	○	○	○	○	○
	3 to 5 Story Multifamily → No	○	○	○	○	○
	4 or 5 over 1 Multifamily → No	○	○	○	○	○
Commercial	Repurposed Industrial → No	○	○	○	◐	◐
	4 or 5 Over 1 Commercial → No	○	○	○	○	○
	Stand Alone Retail/Service → No	○	○	○	●	●
	Stand Alone Restaurant → No	○	○	○	●	●
	Boutique Hotel → No	○	○	○	●	●

Single-Family Residence-6 (SF-6)

- The SF-6 portion of this district is what remains of the Vendome neighborhood that existed prior to the construction of the southern K Avenue/Municipal Avenue couplet. This realignment resulted in removal of homes and the remaining neighborhood being sandwiched between commercial properties to the west and light industrial uses to the east.
- The area contains several homes of potentially historic value to the city. Options to maintain long-term viability of the neighborhood should be considered as part of this Study.

Two-Family Residence-6 (2F)

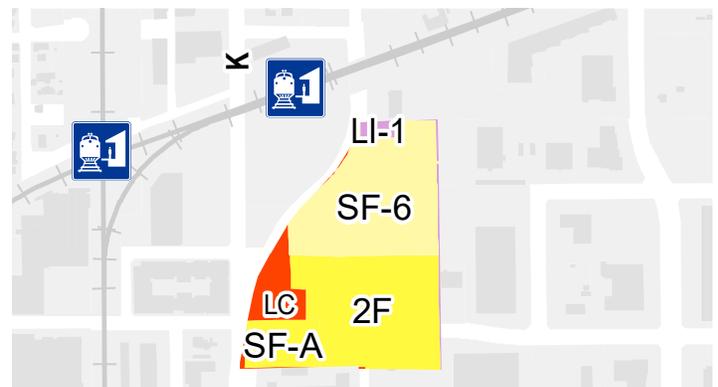
- Similar to the SF-6 portion to the north, the area zoned 2F is also what remains of the Vendome Neighborhood.
- Options to maintain the long-term viability of the neighborhood should be considered as part of the Study.

Single-Family Residence Attached (SF-A)

- The portion zoned SF-A was rezoned from Light Commercial in 2021.

Light Commercial (LC)

- The LC portion of the subdistrict was part of a larger rezoning of the K Avenue Corridor south of the rail line from LI-1 to LC in 2003.



- The five properties zoned LI-1 are currently platted for single-family lots. These would likely need to be replatted together to make a viable commercial property, which may be detrimental to the adjacent Vendome residents. The long-term viability of these properties for commercial uses should be considered as part of this study.

Light Industrial-1 (LI-1)

- See the Industrial District on the following page for more information on this site.

- Not Supported
- ◐ Not Fully Supported
- Supported

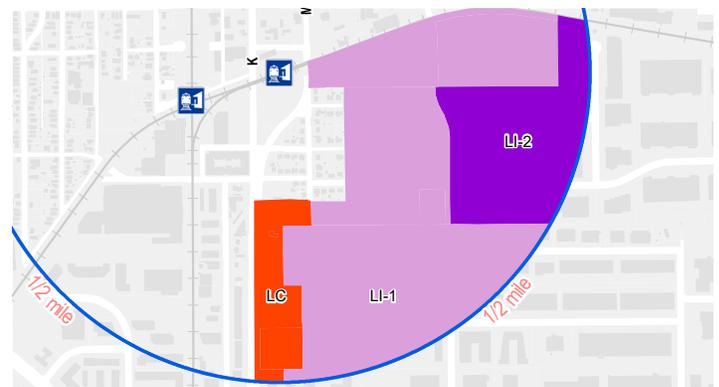
12th Street Subdistricts: Industrial District

TOD Typologies	1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology? ¹			
		LI-1 (68%)	LI-2 (23%)	LC (9%)	
Residential	Single-Family Detached	→ No	→ ○	→ ○	→ ○
	Townhome	→ No	→ ○	→ ○	→ ○
	Slot Home	→ No	→ ○	→ ○	→ ○
	Live-Work	→ No	→ ○	→ ○	→ ○
	3 to 5 Story Multifamily	→ No	→ ○	→ ○	→ ○
	4 or 5 over 1 Multifamily	→ No	→ ○	→ ○	→ ○
Commercial	Repurposed Industrial	→ Yes	→ ◐	→ ◐	→ ◐
	4 or 5 Over 1 Commercial	→ No	→ ○	→ ○	→ ○
	Stand Alone Retail/Service	→ No	→ ●	→ ●	→ ●
	Stand Alone Restaurant	→ No	→ ●	→ ●	→ ●
	Boutique Hotel	→ No	→ ●	→ ●	→ ●

¹Districts less than 1% not shown.

Light Commercial (LC)

- The properties with LC zoning along K Avenue were part of a larger rezoning from LI-1 to K Avenue in 2003. This was intended to better align zoning of the corridor with the Comprehensive Plan, City Center Plan, Downtown Development Plan, and the Douglass Community Neighborhood Plan.
- The existing buildings are heavy commercial/light industrial in nature, which could be repurposed as anticipated by the market study.



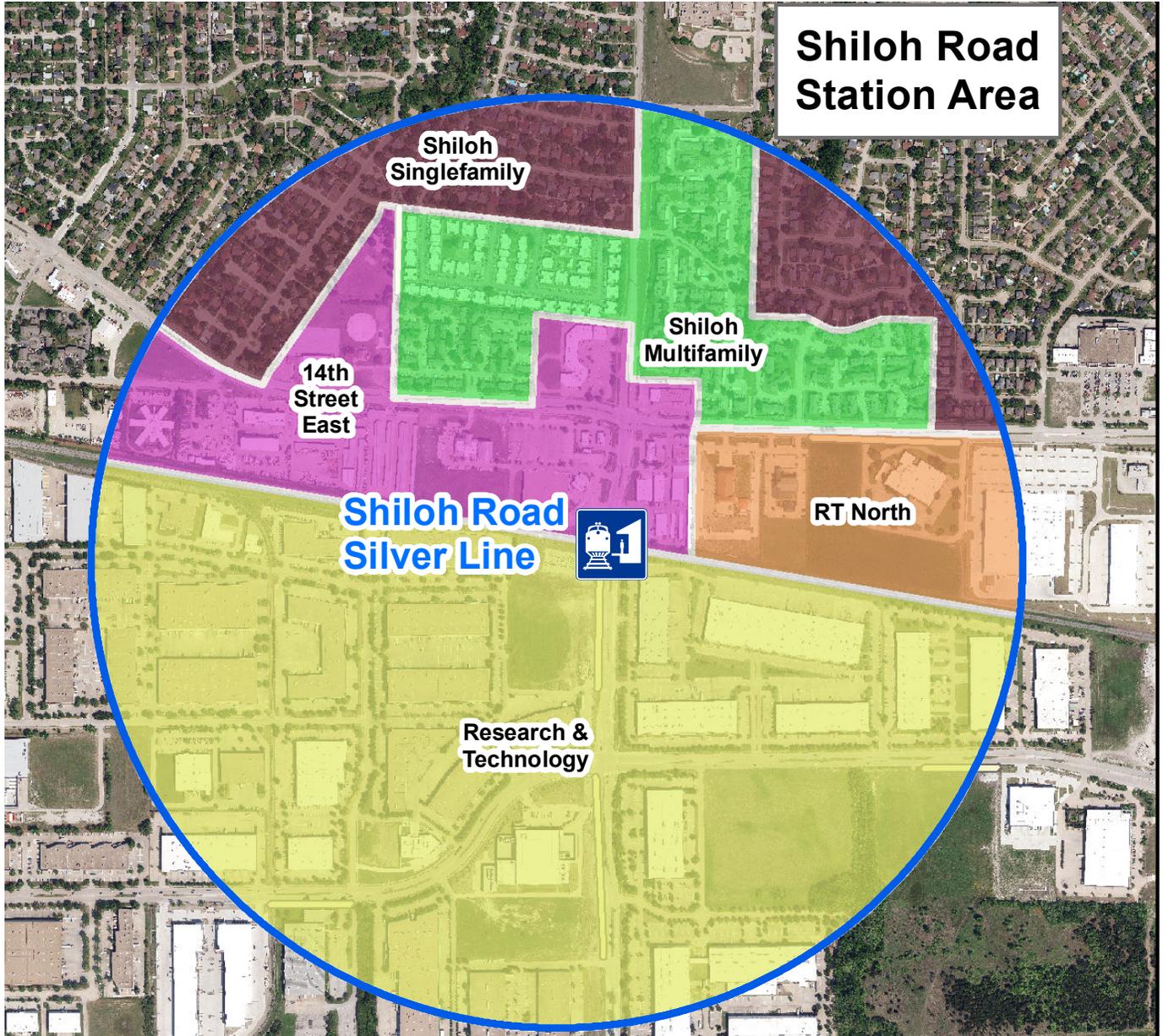
Light Industrial-1 (LI-1)

- The LI-1 portions of this district have been in place for decades, when the Cotton Belt/Silver Line provided good freight access. As noted in the Silver Line market study, many of the buildings are becoming obsolete due to their lower ceilings and lack of amenities.

Light Industrial-1 (LI-2)

- The buildings in the LI-2 district are newer and contain more of the features desired by light industrial users. The current zoning is appropriate as long-term redevelopment or repurposing is unlikely.

Shiloh Road Station Subdistricts



- Not Supported
- ◐ Not Fully Supported
- Supported

Shiloh Road Subdistricts: 14th Street East

TOD Typologies	1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology?¹		
		SF-7 (15%)	R (16%)	LC (62%)
Residential	Single-Family Detached → No →	●	○	○
	Townhome → No →	○	○	○
	Slot Home → No →	○	○	○
	Live-Work → No →	○	○	○
	3 to 5 Story Multifamily → No →	○	○	○
	4 or 5 over 1 Multifamily → No →	○	○	○
Commercial	Repurposed Industrial → Yes →	○	◐	◐
	4 or 5 Over 1 Commercial → No →	○	○	○
	Stand Alone Retail/Service → Yes →	○	●	●
	Stand Alone Restaurant → Yes →	○	●	●
	Boutique Hotel → No →	○	●	●

¹Districts less than 1% not shown. Portions of the subdistrict zoned RT are fully within DART Silver Line right-of-way.

Light Commercial (LC)

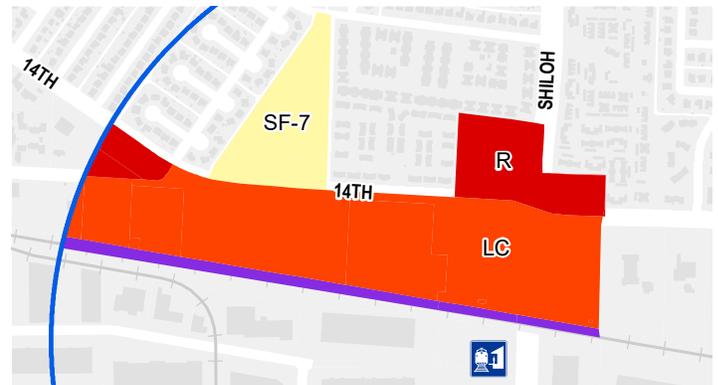
- The majority of the subdistrict is zoned LC. Like the LC properties along K Avenue, these sites were rezoned from LI-1 to LC in 2003 to better align with the comprehensive plan. Today, the area includes a mix of retail, self-storage, religious, non-profit, and heavy commercial uses. Current zoning is adequate to permit the likely redevelopment typologies anticipated in this area.

Single-Family Residence-7 (SF-7)

- The SF-7 portion of the subdistrict includes Shoshoni Park, a City of Plano pump station, and a church.

Retail (R)

- Retail zoning is located on the northern corners of the Shiloh Road and 14th Street intersection, including a small section of undeveloped land. Another undeveloped property is located at the intersection of Rigsbee Drive and 14th Street. Current zoning is adequate to permit the likely redevelopment typologies anticipated in this area.



Shiloh Road: Single-Family

- Not Supported
- ◐ Not Fully Supported
- Supported

Shiloh Road Subdistricts: Single-Family

TOD Typologies	1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology?¹	
		SF-6 (38%)	SF-7 (61%)
Residential	Single-Family Detached → Yes	●	●
	Townhome → No	○	○
	Slot Home → No	○	○
	Live-Work → No	○	○
	3 to 5 Story Multifamily → No	○	○
	4 or 5 over 1 Multifamily → No	○	○
Commercial	Repurposed Industrial → No	○	○
	4 or 5 Over 1 Commercial → No	○	○
	Stand Alone Retail/Service → No	○	○
	Stand Alone Restaurant → No	○	○
	Boutique Hotel → No	○	○

¹Districts less than 1% not shown.

Single-Family Residence-6 and -7 (SF-6, SF-7)

- The SF-6 and SF-7 portions of the subdistrict are existing single-family neighborhoods built between the late 1960s and 1990s. The existing zoning is sufficient to support rehabilitation or reconstruction of homes in the area.



- Not Supported
- ◐ Not Fully Supported
- Supported

Shiloh Road Subdistricts: Multifamily

TOD Typologies		1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology?¹	
			MF-1 (23%)	MF-2 (77%)
Residential	Single-Family Detached	→ No	→ ●	→ ●
	Townhome	→ No	→ ◐	→ ◐
	Slot Home	→ No	→ ◐	→ ◐
	Live-Work	→ No	→ ○	→ ○
	3 to 5 Story Multifamily	→ Yes	→ ○	→ ○
	4 or 5 over 1 Multifamily	→ No	→ ○	→ ○
Commercial	Repurposed Industrial	→ No	→ ○	→ ○
	4 or 5 Over 1 Commercial	→ No	→ ○	→ ○
	Stand Alone Retail/Service	→ No	→ ○	→ ○
	Stand Alone Restaurant	→ No	→ ○	→ ○
	Boutique Hotel	→ No	→ ○	→ ○

¹Districts less than 1% not included.

Multifamily Residence-1 and -2 (MF-1, MF-2)

- As noted in the Silver Line Market Study, redevelopment is not expected in the near-term as these properties appear to be performing well.
- Rising land costs may motivate property owners to seek additional density. The study should consider whether additional density, if any, is appropriate for the long-term viability of these properties.



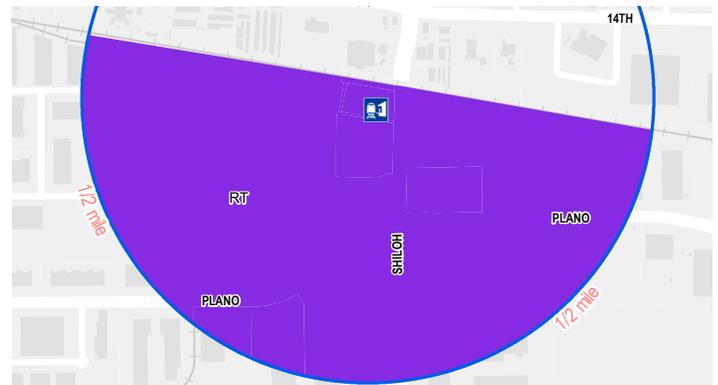
- Not Supported
- ◐ Not Fully Supported
- Supported

Shiloh Road Subdistricts: Research & Technology

TOD Typologies		1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology?
			RT (100%)
Residential	Single-Family Detached	→ No	○
	Townhome	→ No	○
	Slot Home	→ No	○
	Live-Work	→ No	○
	3 to 5 Story Multifamily	→ No	○
	4 or 5 over 1 Multifamily	→ No	○
Commercial	Repurposed Industrial	→ No	◐
	4 or 5 Over 1 Commercial	→ No	○
	Stand Alone Retail/Service	→ No	○
	Stand Alone Restaurant	→ No	○
	Boutique Hotel	→ No	●

Research & Technology Center (RT)

- The majority of the area was zoned RT in 1998, following the 10 Big Ideas for Eastern Plano that called for creation of a RT hub in southeast Plano. As noted in the Silver Line Market Study, businesses in the area are productive and provide an abundance of jobs.
- None of the TOD typologies are expected in this area.



- Not Supported
- ◐ Not Fully Supported
- Supported

Shiloh Road Subdistricts: RT North

TOD Typologies		1. Is TOD Typology Expected in Subdistrict?	2. Does the existing zoning support the TOD Typology? RT (100%)
Residential	Single-Family Detached	→ No	→ ○
	Townhome	→ No	→ ○
	Slot Home	→ No	→ ○
	Live-Work	→ No	→ ○
	3 to 5 Story Multifamily	→ No	→ ○
	4 or 5 over 1 Multifamily	→ No	→ ○
Commercial	Repurposed Industrial	→ No	→ ◐
	4 or 5 Over 1 Commercial	→ No	→ ○
	Stand Alone Retail/Service	→ No	→ ○
	Stand Alone Restaurant	→ No	→ ○
	Boutique Hotel	→ No	→ ●

Research & Technology Center (RT)

- The entire subdistrict is zoned RT and includes religious facilities, a mapping company, the new Shutterfly distribution center, and a large undeveloped parcel.
- None of the TOD typologies are anticipated by the Silver Line Study.



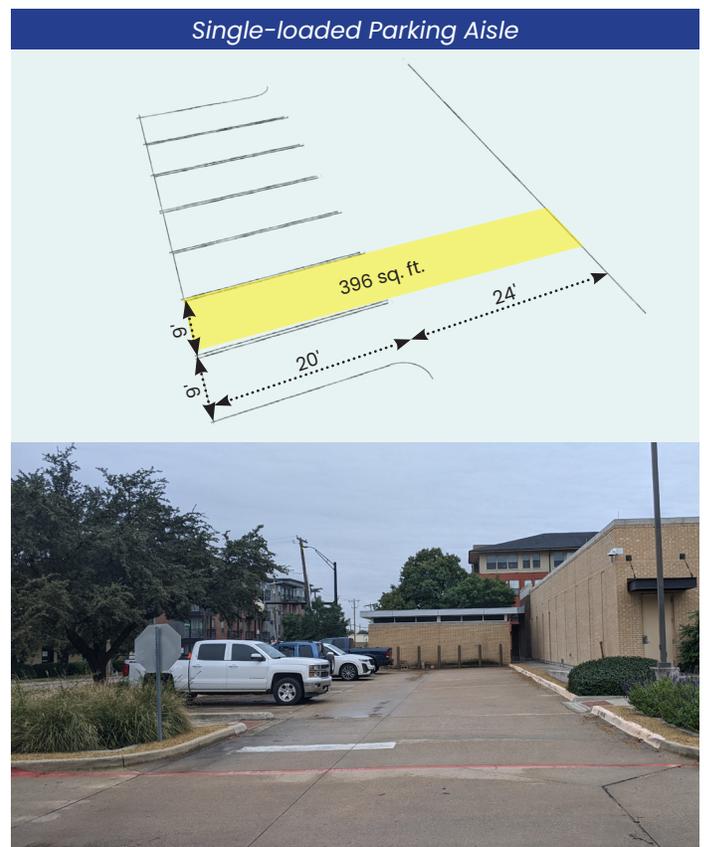
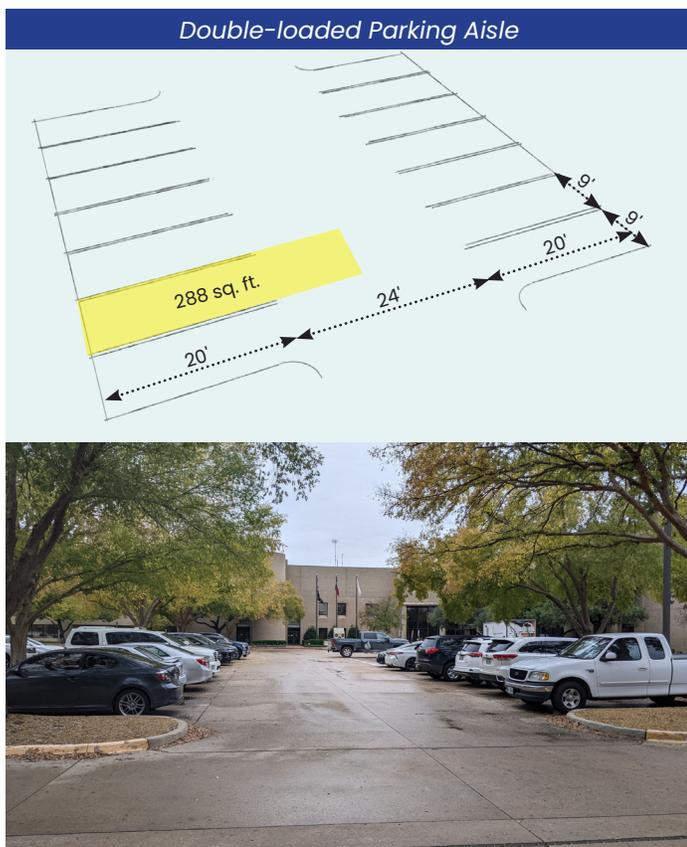
Parking

Off-Street Parking

Parking requirements for non-residential uses are fairly uniform across the zoning districts, with the number of parking spaces required based on use of the property. For example, parking for retail buildings under 50,000 square feet in size is calculated at 1 space per 200 square feet of floor area in most districts including the Retail (R), Light Commercial (LC), Corridor Commercial (CC), and Regional Commercial (RC) zoning districts. However, there are some zoning districts with exceptions to the standard parking schedule. This includes the Downtown Business/Government District (BG), which generally requires less parking for all uses due to the proximity of transit, greater availability of public parking, and vision for more efficient and productive use of the land.

Parking Size and Pavement

For non-residential and multifamily uses, the Zoning Ordinance requires a typical parking space to be 9 feet by 20 feet. When including the 24-ft. drive-aisle required for vehicle maneuvering, this equates to approximately **288 to 396 square feet (SF) for every parking space required**, depending on whether the drive aisle is single-loaded or double-loaded (see image below).



For the purposes of this report, the standard perpendicular (or 90-degree) parking space is used for comparison purposes. Other parking space configurations, such as compact car spaces, angled or parallel parking, one-way drive aisles, and/or on-street parking, would reduce the amount of pavement surface per parking space. A 9 x 18 ft. parking space is also optional where there is sufficient clear space in front of the parking stall for vehicle overhang. Parking requirements may also be reduced under certain circumstances.

Impacts of Parking Requirements on TOD

Parking ratios (e.g., spaces per SF of floor area, or spaces per dwelling unit) are often overlooked in the development potential of a property. Although zoning districts may allow for certain setbacks, building heights, lot coverage, etc., many properties often cannot fully maximize these aspects due to the associated amount of parking required. Structured or podium parking, which comes at much greater construction costs than surface parking lots, are often needed to maximize development potential of a property. The ability to collect higher rents are then needed to recoup construction costs. In TOD areas, use of the standard parking ratios can be a significant limiting factor is driving the greater development intensity that is necessary.

With the assumption that a typical parking space in Plano requires 288–396 square feet (SF) in developable area, the table below shows the ratio of parking area required per square foot of leasable floor area for various non-residential and multifamily uses. The BG district, as previously noted, includes reduced parking ratios for these uses.

Ratio of Parking Space Pavement Area to Leasable Floor Area Ratio by Use/Zoning

Zoning District	Uses	Parking Required	Ratio of Parking Area to Floor Area
R/LC/O-1/O-2	General Office	1 space/300 SF	0.96-1.32 SF : 1 SF
	Retail (less than 50k SF)	1 space/200 SF	1.44-1.98 SF : 1 SF
	Retail (greater than 50k SF)	1 space/250 SF	1.15-1.58 SF : 1 SF
	Restaurants	1 space/100 SF	2.88-3.96 SF : 1 SF
LI-1, LI-2	Manufacturing/Warehousing	1 space/1,000 SF	0.28-0.399 SF : 1 SF
BG	All Non-Residential Uses	1 space/300 SF ¹	0.96-1.32 SF : 1 SF

Zoning District	Uses	Parking Required	Parking SF/Unit
MF-1/MF-2/MF-3	Multifamily Residence	1.5-2.25 spaces/unit	432-891 SF/unit
BG	Multifamily Residence	1-2 spaces/unit ¹	288-792 SF/unit

¹Credit may also be granted for on-street parking

For areas with smaller parcel sizes, such as in the 12th Street Station area, getting the 64 feet of space (*exclusive of any required landscape buffers, sidewalks, and other design criteria*) necessary to provide the more efficient double-loaded parking aisles can be a challenge. That means, (1) with more spaces required per square feet of floor area and (2) more total area required per parking space, developments in non-BG zoning districts must often dedicate much more land for parking than leaseable floor area. Future phases should review parking requirements and determine the appropriate parking ratios that would be necessary to support TOD in the study areas. Outside studies from land use and transportation agencies, such as the Institute of Transportation Engineers (ITE) and Urban Land Institute (ULI), may be helpful in this analysis.

Other Zoning Considerations



Block Pattern and Streetscape

Block sizes and street amenities are critical aspects of creating places that are enjoyable to walk or bike. The 12th Street study contains many long blocks that could be divided, providing additional street frontage and a human-scale form. The study should consider if maximum block lengths are appropriate in the area.

Access to Parks

There are small amounts of open space within the Study Area – approximately 5.4 acres in the 12th Street Station Area and 2.79 in the Shiloh Road Station Area. There is an opportunity to expand park/open space areas in this study area. Where not possible, private open space will be needed in residential developments.

Zoning Analysis Chapter – Key Takeaways

- *The Shiloh Road Station Area anticipates significantly less TOD redevelopment than the 12th Street Station Area. Considering the vision for this area in the Comprehensive Plan, the next phase of the Silver Line Station Areas Plan should consider whether additional pursuit of TOD is appropriate. If not, the study could still continue to study other ways to provide greater connectivity to existing residents and businesses in the area.*
- *The Plano Zoning Ordinance does not have a district that allows single-family detached homes with the minimum lot size and building heights currently being driven by the market. The study should consider whether a new zoning category (Urban Residential-2, for example) that allows for urban-style, detached homes and townhomes without the need to create a Planned Development. Allowing detached homes in the BG district is another possibility, but could be problematic for some properties where 4 to 5-story height and 40+ units/acre density are not appropriate.*
- *The Light Commercial (LC), Retail (R), and Downtown Business/Government (BG) districts allow similar commercial uses, but with BG allowing larger buildings as well as residential uses. Where residential typologies are desirable to encourage TOD, the study should consider changing zoning from LC or R to BG.*
- *The Vendome subdistrict of the 12th Street Study Area should be reviewed to determine a strategy for long-term viability of the neighborhood.*
- *There are four LI-1 properties with frontage along Municipal Avenue that are separate from the rest of the industrial park to the southeast. The close proximity to the 12th Street Station and large size of the parcels warrant further consideration for TOD catalyst projects.*
- *Plano does not currently have a land use classification or zoning type designed specifically for Slot Homes. If developed on individual lots, these would be classified as Single-Family Residence (Attached). If on a single lot, they would be classified as Multifamily Residence.*
- *A new district may be needed to allow small-scale multifamily, such as slot homes, multiplexes, and courtyard apartments. MF-1, MF-2, and MF-3 could be used, but would potentially require the use of Planned Developments to allow the form necessary. The Neighborhood Business Design (NBD) and Residential Community Design (RCD) districts could also be considered as an infill option to provide the housing density necessary for TOD.*
- *The study should consider strategies to encourage parking structures and shared parking agreements.*
- *Live-Work units are only currently permitted in the BG and NBD districts of the Zoning Ordinance.*
- *Parking ratios should be reviewed as part the study.*

05 – Summary

In preparation for the new DART Silver Line stations, the City of Plano has initiated a **Silver Line Station Areas Plan** to develop strategic objectives and policies that guide development and redevelopment opportunities along the corridor. This plan will prepare transit-oriented development (TOD) area plans within ½ mile of the future DART Silver Line Stations at 12th Street and Shiloh Road, consistent with the Comprehensive Plan's Transit-Oriented Development Policy.

The existing conditions analysis presented in the Phase I Report represents the first phase of the station area planning process. Key findings of this report include:

- *Successful TODs include a dense and diverse set of land uses that allow for a compact and highly-walkable development pattern. These areas should also be context-sensitive to allow for unique character and design consideration that are complementary to adjacent land uses.*
- *The City of Plano has a successful track record of effectively planning for TOD in the downtown area and implementing that vision through updates to zoning, improvements to streets and infrastructure, creation of economic development tools, and proactive community engagement.*
- *The Downtown Business/Government (BG) and Urban Residential (UR) districts were created in the late 1990s to help transition downtown into a successful transit village. These districts are currently the best options to support TOD in the station areas; however, they may not fully meet anticipated market needs. There is not a zoning option that specifically allows for slot homes, small-scale multifamily, or small-lot, single-family detached.*
- *The Light Commercial (LC), Retail (R), and Light Industrial (LI-1) districts allow many commercial uses that are anticipated in the area, but not residential uses. Additionally, zoning standards on height, lot coverage, setbacks, and parking may not allow the type of compact and pedestrian-oriented building form that is needed to support TOD. Areas with these zoning designations should be carefully reviewed in future phases to determine if changes to zoning would be beneficial.*
- *The 12th Street Station area is anticipated to see more redevelopment interest as a result of the new stations. However, apart from BG areas, zoning in the area is not in place to allow the full potential of TOD.*
- *The Shiloh Station is not anticipated to drive much redevelopment in a TOD context. The area includes established residential neighborhoods north of 14th Street and well-performing business park to south of the railroad. Existing zoning appears largely appropriate to meet market demands in the area.*

In summary, the 12th Street Station Area has higher potential for transit-oriented development than the Shiloh Station. This is evident through the market data, existing built environment and land use pattern, and multimodal transportation network. If a change to transit-oriented development is ultimately the community's vision for these areas, updates to zoning will be needed. This can be handled on a site-by-site basis through rezoning requests or through a mix of proactive city-initiated map and text changes.

For the next phase, an extensive stakeholder outreach campaign will be necessary to determine the extent and scale of change desired by the community. Policies will then be derived to direct change in the area that supports this vision.

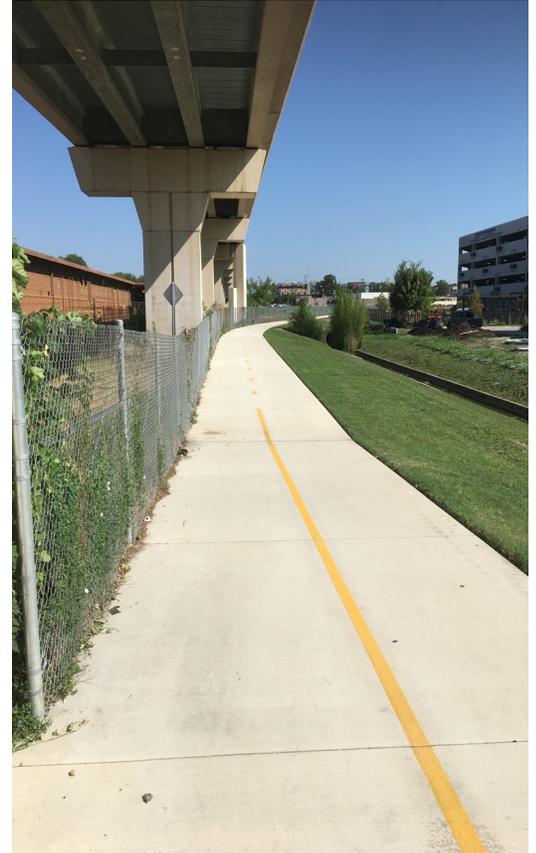
XX – Existing Conditions Photos

12th Street

.....



New multifamily developments



Existing shared-use paths along portions of DART Red Line



Light industrial uses



Light industrial buildings clustered south of the DART rail line

Shiloh Road

.....



Electric substation and ancillary power lines



Low-density commercial/retail



Attached single-family residential uses



Shiloh Road (east of station area site) includes divided roadway/median



Sidewalks within 1/2 mile of proposed station



Construction activity at proposed station area site