



TRANSIT ORIENTED DEVELOPMENT GUIDELINES FOR COLLIN COUNTY



North Central Texas
Council of Governments

PREPARED BY 

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Queensway Transit Exchange ; Kelowna, B.C.

1 INTRODUCTION



Fruitvale Village; Oakland California

1A Introduction

A Resource for TOD in North Texas

Transit-Oriented Development (TOD) is being embraced around the country as a way to leverage improved mobility, attract quality investment, and build more sustainable, livable, and competitive communities. The Dallas and North Texas region—with some of the country’s best known and admired TOD examples—is a leader in providing meaningful growth and change around stations. Successful TOD is a win-win-win proposition providing transit service providers with improved ridership, providing cities and towns with new centers and districts that supply jobs and revenue, and, most importantly, providing the community with homes, services, amenities, and destinations that improve their quality of life and create more equitable and healthy places.

Expanding on the early success of TOD in the region, these Guidelines are designed to build greater understanding of TOD’s benefits to North Texas communities, promote collaborative planning, and provide guidance to elevate the quality and performance of future projects. As a resource for area stakeholders, customers, developers, municipalities, and the general public, the Guidelines will help shape decision making about private development strategy, local land use and development policy, place making, and capital investment programming.

From early visioning and analysis through project design and implementation, the Guidelines serve as a tool to support collaboration among North Central Texas Council of Governments, Collin County, and cities and land use authorities, property owners and developers, and regional advocates for smart growth, equitable economic development, and improved livability.

Related Resources

This document, prepared by HDR, builds off previous work by HDR and others in documenting the various considerations of transit-oriented developments and how to create an environment for such development to succeed. Specifically, the Transit Oriented Development Guidelines prepared by HDR for DART provides a broad basis to support the observations and findings of this report as it seeks to refine those general recommendations for Collin County.

Additionally, organizations around the country provide strong guidance and information for using TOD as a resource for creating stronger and more connected communities. Several examples are included below:

National Resources and Technical Assistance For Transit-Oriented Development

<https://todresources.org/>

FTA Joint Development Brochure

<https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/funding-finance-resources/joint-development/64731/joint-development-brochure.pdf>

NCTCOG Parking Study

www.nctcog.org/nctcg/media/Transportation/DocsMaps/Plan/Landuse/

The Economic and Fiscal Impacts of Development near DART Stations

www.dart.org/about/economicimpact.asp

Ten Principles for Successful Development around Transit

<http://www.reconnectingamerica.org/assets/Uploads/bestpractice086.pdf>

1B Introduction

Guidelines Organization

The Guidelines are organized in three major sections as follows:

- **Understanding Transit Oriented Development.** Defines TOD, describes the qualities of successful TODs, and reports the broad benefits of building transit supportive neighborhoods and districts.
- **Delivering TOD In North Texas.** Describes collaboration with municipalities, and identifies Station Area Contexts & Opportunities.
- **TOD Types & Design.** Defines TOD Typologies and provides guidance for the planning, design, and development of TOD places and projects.



Complete Streets; Phoenix, Arizona

2

UNDERSTANDING TOD



Mockingbird Station; Dallas, Texas

2A Understanding TOD

TOD Defined

TOD, an abbreviation of the phrase Transit Oriented Development, is used to describe a type of community or district designed to capitalize on transit accessibility. Planned as compact, walkable, mixed use places, TODs offer people greater transportation choices, reduce dependence on automobiles, support more sustainable and equitable development, and build demand for enhanced transit services.

Typically, TODs are medium- to high-density mixed use developments centered on a rail station or rapid transit stop. As all transit trips begin and end with a walking trip, pedestrian-friendliness is a key factor in TOD planning and design. Successful TODs are designed with walkable streets and public spaces, buildings with active ground floor uses and pedestrian-oriented entries and facades, and convenient connections to transit.

With robust transit service and the right mix of uses, TODs have proven successful in expanding mobility options; reducing parking demand, auto dependence, and transportation costs; and increasing transit ridership.

TOD is taking root across the country, providing many examples of growth and change that is oriented towards a transit line but reflective of their contexts. Cities and regions like Portland, Denver, and the California Bay area provide many strong examples. However, excellent local TOD examples are available right in your backyard, including Mockingbird Station, Downtown Plano, and CityLine in Richardson. These local examples are nationally recognized as TOD success stories.

Successful TOD projects and places share a number of qualities setting them apart from more conventional forms of development. As highlighted below, successful TODs are walkable and connected, dense and diverse, and context-sensitive:

Walkable & Connected. Access and mobility are key features of successful TODs. First and foremost, TODs are places that encourage walking—a critical factor shaping connectivity to transit. Successful TODs provide pedestrian-friendly streetscapes and public spaces, building frontages oriented to sidewalks, and high-quality urban design contributing to a distinct sense of place and community. TODs are also multi-modal places, providing accommodations for a variety of travel options, from local and regional transit, private cars and delivery vehicles, to last mile mobility options like bike share, car share, and emerging forms of micro-mobility. TODs typically provide less vehicular parking than comparable developments not located near transit. Parking should not be the dominant land use in a TOD area and should be located and priced in a way that discourages unnecessary vehicle trips and promotes walkability, aesthetic cohesion, and reserves valuable real estate for higher uses.

Dense & Diverse. Successful TODs include a dense mix of complementary uses, including housing, retail and services, employment, entertainment, and civic uses. Diverse uses and demographics in a TOD help increase market resiliency, reduce auto dependence, and leverage public investment in transportation and transit infrastructure. Diverse housing choices—including options for lower income residents who rely on public transit—can accommodate households of various sizes, lifestyles, and income levels, help build market demand for a variety of goods and services, and deliver lower combined housing and transportation costs for TOD residents. Residential or employment density in a TOD should be commensurate with the transit infrastructure investment to generate ridership. The “right” density varies by context, but should be denser and more intensive than development not connected to transit. The density will vary widely in different contexts, but as a general rule can range from 12 units per acre in lower scale districts to 30 units or more per acre in more urban districts.

Context Sensitive. Transit oriented projects are not “one size fits all”—the scale, character, intensity, and use mix of projects can vary greatly depending on their location in the region and the needs of surrounding communities. TOD projects and places are designed to fit the scale of surrounding neighborhoods, offer uses to serve community needs, and advance local objectives for place-making, community building, economic development, and neighborhood improvement.



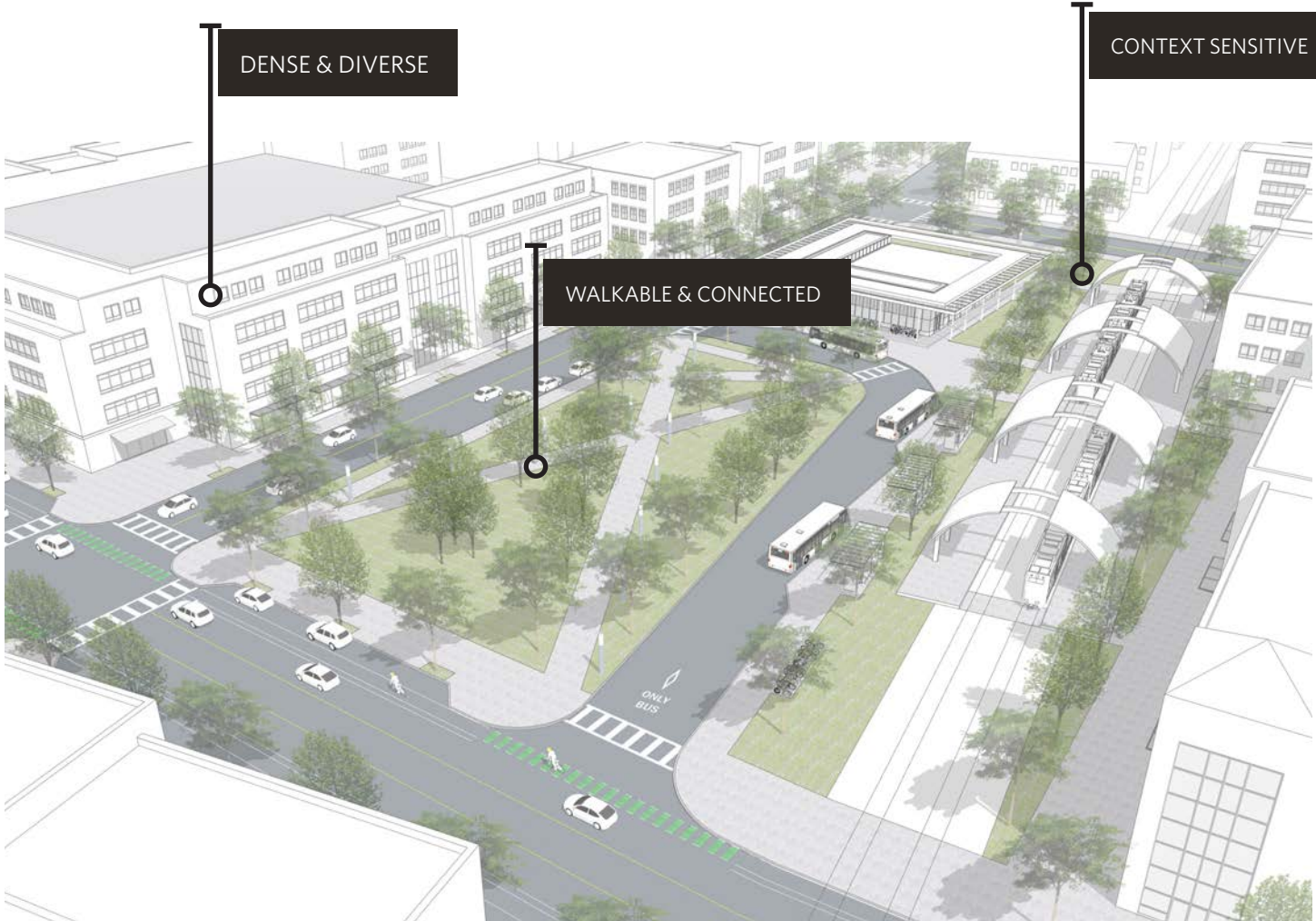
IndyGo Transit; Indianapolis, Indiana



Design Trust for Public Space; New York City, New York

People within a half-mile radius are 5 times as likely to walk to a major transit stop than others.

—Transit-Oriented Development: Factors and Elements of Success, Center for Transit Oriented Development



Everett Transit ; Everett, Washington



Downtown Rowlett; Rowlett, Texas

TOD Benefits Collin County and the Region

TOD projects and places improve the livability, competitiveness, and resilience of North Texas communities. As highlighted below, TODs provide a range of benefits to Collin County and North Texas communities. People living and working in TODs rely less on car travel to meet their daily needs, have access to a wider range of housing and shopping options, and are better connected to jobs, services, and other destinations across the region.

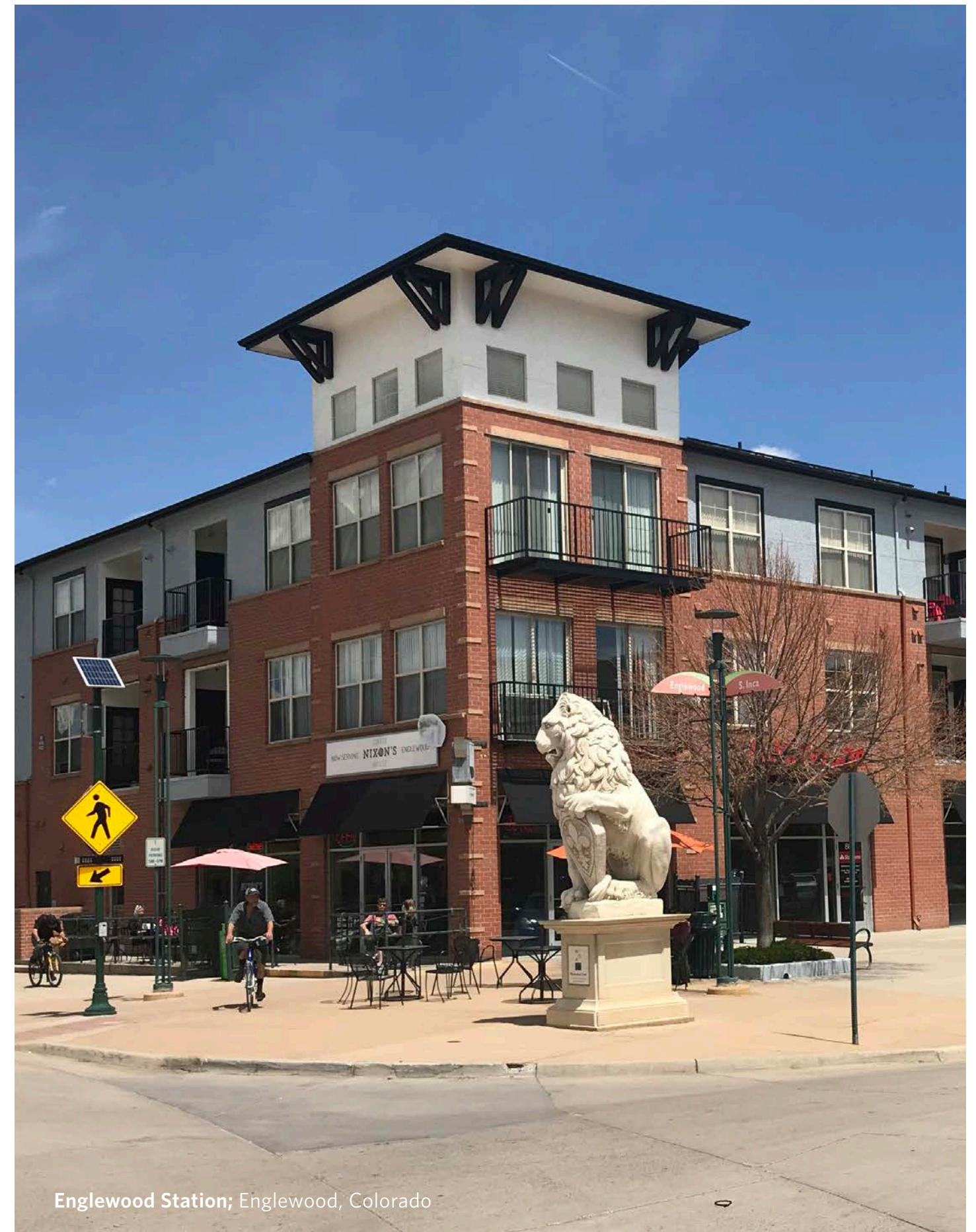
TOD, if approached correctly, can provide benefits to communities, cities and towns, and the transit agencies who serve them. Below are a few ways in which TOD can promote stronger communities that are more competitive, healthy, fiscally strong, and resilient.

Build Ridership. TOD can improve Collin County's ability to provide high quality transit service to North Texas communities. TOD development has an important and positive influence on transit use within a half mile. As TOD concentrates destinations and activity close to stations, ridership levels increase. As reported in a recent publication of the Urban Land Institute and American Planning Association, "...every shred of available evidence points to the significance of density in promoting walking and transit use. Higher densities mean more residents and employers within walking distance of transit stops and stations."

Promote "Location Efficiency". With the right mix and intensity of uses clustered in walkable districts along transit corridors, people can take care of daily needs without having to drive from place to place. Lower auto dependence leads to reductions in automobile travel distances and lower demand for parking at both trip origins and destinations. With a wider range of housing choices and price points, TOD projects can help lower combined housing and transportation costs and expand alternatives for affordable living.

Create Walkable Destinations. Pedestrian friendliness is a key characteristic of successful TODs. TODs with pedestrian-friendly design features—generously-scaled and continuous sidewalks, buffers between sidewalks and traffic, well-marked street crossings, and active storefronts and prominent entries—generate high levels of pedestrian activity, and improve public health.

Serve Emerging Markets. TOD projects and places expand the range of housing and lifestyle options available to meet changing market demands. Both millennials and empty nesters are prime target markets for TOD projects. According to recent research by the Urban Land Institute, 60 percent of millennials want to live and work in areas where they can use their cars less, and empty nesters exhibit similar desires. These demands are well understood by major corporations positioning to compete for talented workers.



Englewood Station; Englewood, Colorado



Star Lake Park & Ride, Seattle, Washington

3

DELIVERING TOD IN NORTH TEXAS



Mixed-Use Development; Arlington, Virginia

3A Delivering TOD in north Texas

A Collaborative Effort

Supporting and encouraging TOD in North Texas takes intensive levels of collaboration and commitment. Local jurisdictions, the development community, transit providers, and regional planning advocates all play important roles in creating opportunities for living and working near transit stations and transfer centers.

3.A.1 Planning & Advocacy Organizations

North Central Texas Council of Governments (NCTCOG), along with other important planning and advocacy groups such as the North Texas Chamber of Commerce, ULI North Texas, American Public Transportation Association, Federal Transit Administration, and others, serve important educational, strategic, and advocacy roles. These organizations provide educational resources, advocacy, and assistance on a wide range of TOD and TOD-related projects, including development feasibility, housing affordability and equity, parking strategy, urban design, and more. Through grants and technical support, they can also bring additional resources to the table to strengthen TOD initiatives and programs.

NCTCOG's recent report *Transportation and Gentrification: A Toolbox for Positive Neighborhood Change*, is an excellent source of information for local planning officials. The report, addressing the causes and concerns related to community change and gentrification, offers strategies focused on housing market affordability and includes suggestions about how equitable public engagement can lead to inclusive revitalization.

3.A.2 Transit Providers

Transit agencies, such as DART, can promote TOD through the provision of high quality, frequent, and reliable transit service. A transit station serving high-frequency and -capacity service generates immediate value to surrounding properties and creates a competitive advantage over places and communities that are not served by transit lines.

In many cases, a transit station will own significant real estate - including prime transit-adjacent locations - that can be leveraged for providing TOD. Joint Development, as defined by the FTA, can be a powerful tool in delivering TOD that is more equitable for the surrounding community, such as affordable housing, community services, and public amenities.

3.A.3 Local Jurisdiction Partnerships

TOD opportunities in North Texas are guided by the efforts of the municipalities served by transit-adjacent and publicly owned stations and transfer centers. For many of these communities, TOD has become a special focus of their planning, economic development, and capital investment programs. These communities have crafted detailed policy and regulatory programs to guide private investment, structured incentive programs, designed and built TOD supportive infrastructure, and worked with community partners to ensure understanding and acceptance of projects.

Planning for TOD at the local level starts with community visioning and long range planning followed by more detailed project and station area planning and design.

Ultimately, communities influence TOD through the application of comprehensive land use plans, land use and development regulations, economic development and redevelopment programs, and capital projects.

Beyond planning, municipalities can access a number of available tools to influence the feasibility and attractiveness of TOD investment. For example, municipalities may offer incentives such as financing infrastructure through Tax Increment Financing (TIF) revenue, discounting sale of publicly owned properties, or completing or supporting site remediation to create shovel-ready development opportunities. Aligning these local tools to support TOD has proven successful in cities across the region, and provide excellent local models to build upon.

3.A.4 Property Owners & Developers

Station area property owners and developers collaborate with Collin County and municipalities to identify and assess investment opportunities, draft project plans, attract private capital, and deliver individual TOD projects. Collectively, they play a critical role in helping ensure local plans and policies are sensitive to station area market conditions.



Del Mar Station; Pasadena, California



McClintock-Apache Station; Tempe, Arizona



Downtown Garland Station; Dallas, Texas

3B Delivering TOD in north Texas

Station Area Context & Opportunities

3.B.1 Transit Stations & Property

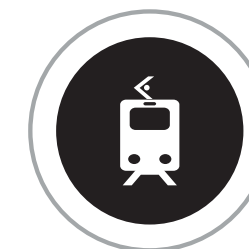
At the heart of any station area is the transit station itself as well as transfer centers, and transit-supportive facilities including bus and shuttle stops, kiss-and-ride locations, and parking areas. In combination, these core facilities are designed to deliver unparalleled access to destinations across the transit network. These elements make up a network of invaluable access and connectivity that make TOD opportunities part of a larger ecosystem and set of destinations including services, amenities, homes, and jobs. In addition to the service provided at these stations, public entities may own the land and infrastructure surrounding the station. These areas are potential opportunities for joint development that can lead to a transit agency or municipality taking a leadership role in delivering TOD. Using joint development as a tool to deliver TOD has the added benefit of removing certain barriers to providing uses that may not be provided through normal market activity such as affordable or attainable housing, community services, or other lower revenue uses that make TOD successful.

Roles in Delivering TOD



PLANNING & ADVOCACY ORGANIZATIONS

- Advocacy for TOD Projects & Investments
- Stakeholder and Community Education
- Technical Assistance for Planning and Projects
- Best Practices and Case Studies for Topics like Housing Affordability & Parking



TRANSIT PROVIDERS

- Transit Service, Transit Infrastructure, & Station/Transfer Center Improvements
- Development Opportunities for DART and other transit providers property, including Underutilized Parking
- Project Selection & Oversight



MUNICIPALITIES

- TOD Visioning & Goal Setting Exercises
- Station Area & TOD Planning
- Transit-Supportive Land Use Policies and Codes
- TOD-Supportive Infrastructure and Mobility Investments



DEVELOPERS & PROPERTY OWNERS

- Collaboration with DART, other transit providers, and municipalities
- Identify and Assess Investment Opportunities
- Private Project Feasibility and Financing
- TOD Project Design and Construction

3.B.2 Station Area Conditions

Several factors influence the potential for TOD investment on transit-adjacent and publicly-owned sites and other properties within a one-half mile walking distance of transit stations and transfer centers. Conditions within these “walk sheds” varies widely.

Understanding how factors like land use, access, parcel configuration, ownership, and the presence of environmental and other constraints impact development potential is a critical early step in planning for TOD.

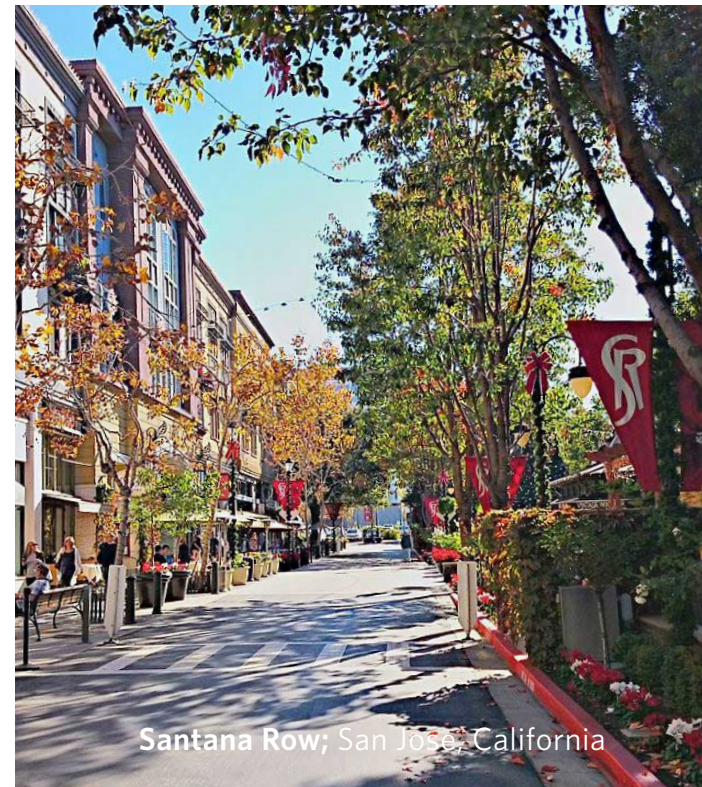
Development context is an important driver of opportunity. Urban locations and traditional downtowns, with street grids, block structures, supportive local transit, and the potential for shared parking or district-level parking management, naturally lend themselves to TOD investment. In locations without these conditions, including auto-oriented commercial areas and older industrial districts, attracting TOD may require municipalities to employ more targeted, location-specific strategies and actions.

Ownership patterns and parcel configurations also impact TOD potential and timing. Prime areas for TOD are often locations with larger parcel sizes, large blocks in common ownership, underutilized sites and buildings, and motivated owners interested in capitalizing on transit accessibility and market opportunities. But not all station areas are equally primed for investment. Many stations are in areas with small lot sizes, disjointed uses, and fragmented patterns of ownership. In these more challenged locations, municipalities may focus on encouraging transit-oriented infill development and incremental change. Identifying catalyst sites and pilot projects, including underused parking, can lay the groundwork for longer term, station area wide changes.

3.B.3 Development Opportunities

Real estate market conditions are among the most powerful drivers of TOD projects. Although access to frequent, high capacity transit is proven to influence a project’s potential, a range of other factors drives investor decision making regional and local market conditions, locational and access advantages, competitive supply, capital availability, and regulatory entitlements certainty all play important roles in moving projects from early vision to implementation.

NCTCOG, local jurisdictions and land use authorities, and other planning entities can study key station areas in order to assess the market potential and market readiness of station sites sets the stage for initiatives designed to leverage competitive advantage of more attractive locations as well as improve the position of more challenged areas. Understanding the barriers to successful, high-quality TOD will help prioritize investments or partnerships that may help create opportunity where it currently does not exist. Planning and advocacy entities can highlight the attributes of a station and the community that surrounds it and work to solve for the challenges that keep it from meeting its potential.



Santana Row; San Jose, California

3.B.4 First Mile/Last Mile Mobility

Planning for first mile/last mile access and connectivity in and around station areas is increasingly important as new technologies place new demands on roadways, streetscapes, and public spaces. New mobility options greatly improve station area mobility and extend the benefits of transit access well beyond a short walking distance. Transportation network companies like Uber and Lyft, bikeshare and e-scooter services, car sharing services like Zip Car, and private shuttles and circulators all extend the range of benefits associated with proximity to transit. To fully utilize these first mile/last mile mobility services curbside access, parking strategy, and public space allocation are critical issues to address in station design and station area planning.

As all of these mobility options begun to connect to transit stations, they can be combined into more purposeful and cohesive “mobility hubs”. The purpose of a mobility hub is to provide a safe, comfortable, and intuitive connection from one mode of transportation to another within close proximity. Station areas make ideal locations for mobility hubs as riders using the high-capacity transit service can quickly connect to one of several other modes to make it to their final destination. These hubs will further promote a more walkable, bikeable, and active station and TOD area.

3.B.5 Expanded Housing Options

Communities across the region are struggling to find ways to meet the housing needs of North Texas families. Affordable housing shortages, a dwindling supply of homes for first-time buyers, and rising prices at all levels have sparked concerns among regional leaders. In a recently completed study, the City of Dallas estimates it has a shortage of 20,000 housing units and six of ten families in the City are paying more for housing each month than they can afford. Research also shows housing affordability challenges are shared across the region, from very low income households to those with limited assets and lower wage jobs. Teachers, first responders, and other essential workers in a range of industries struggle to find affordable places to live and are increasingly impacted by neighborhood change, gentrification, and displacement.

The threat of being priced out of the market is a harsh reality for low-income residents in transitioning neighborhoods.

Workforce housing and low income housing are terms used to describe housing offered for sale or rent at prices affordable to moderate and lower income households. Communities typically define workforce housing as being affordable to households with incomes between 80% and 120% of the Area Median Income (AMI) and low income housing as being affordable to households with incomes less than 80% of AMI. (According to U.S. Department of Housing and Urban Development, the 2018 AMI for a four person household in the Dallas Metro Area was \$77,200.) Households in moderate and lower income categories face significant challenges finding affordable housing, especially options offering high levels of transit service and regional accessibility.

Recent research shows that almost one in two renters in the Dallas region pays 30 percent or more of their income on rent, and one in five pays 50 percent or more. As the region’s economy has expanded, an increasing number of households have fallen into these cost burdened categories, thus increasing the urgency to find solutions to meet the growing demand for affordable options.

Strategic TOD investment within Collin County can help solve for these large challenges by providing affordable housing options connected to job centers and other daily needs. Transit Station Areas and TOD projects are great locations for workforce and affordable housing units. Low-income households are less likely to own a car and more likely to rely entirely on public transit to access a wide range of destinations—from work and shopping to daycare, education, and social services. By providing more affordable housing opportunities near transit, households who would otherwise be priced out of the market can live close to transit and have ready access to opportunities across the region.

Successful TOD is a win-win-win proposition providing stronger and more equitable communities, improved and growing ridership, and economic strength and resiliency for cities and towns.

The inclusion of workforce and low income housing in TODs can help address the region's significant and intensifying housing affordability challenge. TODs that include diverse forms of workforce and low income housing can help accomplish the following:

- Increase economic self-sufficiency by providing accessible and reliable access to employment, education, healthcare, and support service destinations across the North Texas region;
- Increase access to jobs and educational opportunities for transit reliant residents, and lessens travel costs for those with lower and moderate incomes;
- Relieve economic stress on high cost burdened households;
- Build system-wide ridership by improving transit access for those most reliant on public transportation services;
- Provide for a wider range of housing choices and price points then may be found in auto-oriented communities.

3.B.6 Parking

TOD projects require significantly fewer parking spaces than conventional development for a variety of reasons. Transit access reduces reliance on automobile trips and leads to a lower rate of auto ownership by TOD residents. In addition, the overall walkability of TOD projects reduces reliance on automobiles to access destinations such as retail, services, civic institutions, and places of employment, thus reducing parking demand. Micro mobility services provide for alternative modes to access transit and project destinations from beyond the walk shed, and may further reduce the necessity for personal auto trips and parking. Lastly, mixed use TODs are "park-once" destinations and provide opportunities for shared parking, which utilizes parking spaces for multiple uses with complementary peak periods and reduces the overall need for parking.

NCTCOG, in partnership with DART and the cities of Dallas, Richardson, Plano, and Garland studied parking use at TODs along the DART Red & Blue lines. The 2018 study evaluated conditions at 16 privately owned sites with structured and surface parking near 11 stations spread over the four municipalities. The study found that 13 of 16 sites never peaked above 80% utilization, suggesting that required parking ratios resulted in excess spaces. Affordable housing TODs in the study used less parking (peak use 40-50%). Higher end market rate projects had higher peak use (90%+), cost burdening affordable units with excess parking. Furthermore, 10 of 16 sites provided more parking spaces than required by code, suggesting that lenders can have strong influence on amount of parking developers build.



Mobility Hub; Salt Lake City, Utah

Many recent studies have highlighted the link between affordable housing, lower parking utilizations, and increased ridership including a 2020 RTD - Denver's transit agency - report entitled Residential Parking in Station Areas shows substantial data that income-restricted and affordable housing development at a transit station is much less likely to use the parking provided, even as many of these properties have lower parking provision per unit than market rate. In addition, these same income restricted properties are much more likely to house those likely to take transit. This reduced need for parking coupled with an increase of ridership can be a win-win for transit agencies, communities, and cities and towns housing transit stations.

In many ways, providing substantial parking at station area is a self-fulfilling prophecy. If you provide a lot of parking, those who rely on automobile travel are much more likely to live in the TOD area. If those who rely on automobile travel dominate a TOD area, ridership will likely not increase substantially and additional traffic may be created due to the density. Planning for users and development types requiring reduced parking is one of the most important elements of a successful TOD area.

These studies suggest a range of potential strategies to address excess parking at and around transit stations including adopting parking policies supporting the right-sizing of parking and implementation of district-wide parking management programs for TOD projects and station areas.

Transit providers could also explore the potential to reduce the size of or re-purpose underutilized agency-owned parking facilities. Municipalities have a host of possible strategies at their disposal. The study suggests municipalities could: right size parking requirements in TOD areas based on observed local utilization data and development context; unbundle cost of parking from cost of housing; incentivize shared parking, where multiple land uses with complementary peak times utilize the same parking facilities more efficiently, rather than providing individual parking lots that frequently remain underutilized (shared parking is often managed district-wide as a "park once" district, with facilities that are consolidated to maximize efficiency and include on-street parking in the supply calculation to further reduce the need for off-street parking); encourage the use of programs and technologies, e.g. district-wide parking pricing and management initiatives and use of automated space availability monitoring and guidance apps, to maximize the use of available spaces; and consider long term potential of conversion of parking facilities to other land-uses as increased non-automobile mode split and autonomous vehicles reduce demand for individual, on-site parking spaces—best achieved by designing parking lots as city blocks sized for future development and parking structures with minimal ramps, ceiling heights, and building depths that allow for future adaptive remodel as occupied space.



West Village; Dallas Texas



Healthline BRT; Cleveland, Ohio

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TOD TYPES & DESIGN

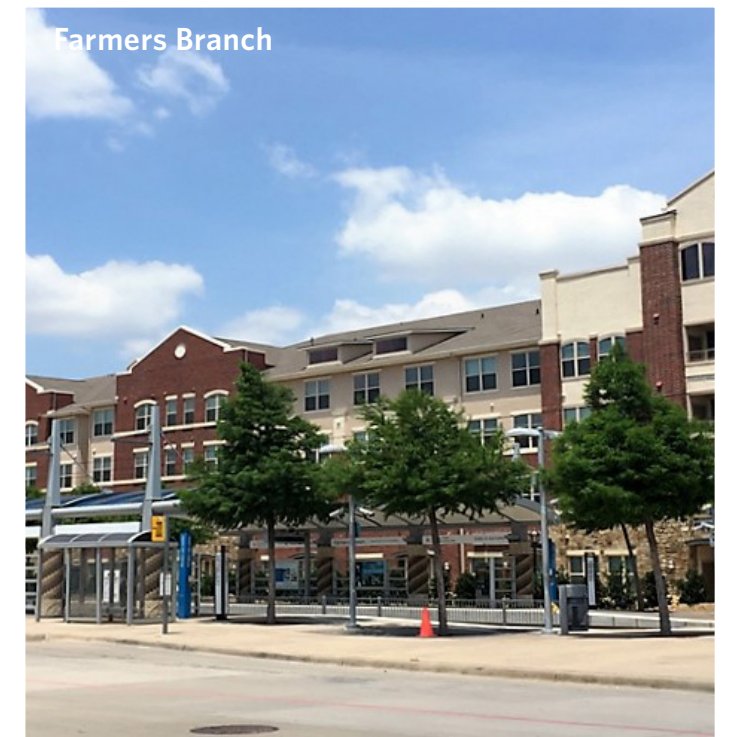


Mixed-Use Development; Denver, Colorado

Typology Characteristics



Eric Fredericks, CC BY-SA 2.0



4A TOD Types & Design

TOD Typologies

A TOD typology is an analytical tool that groups station areas into several “types” based on context and predominant mode of access. The typologies provide broad parameters for the scale and intensity of development, use mix, access, and market potential. As a starting point for collaboration between Collin County, municipalities, and key stakeholders, the typologies serve as a foundation for station area planning, design, and development initiatives.

The TOD typologies described below provide starting points for collaboration between Collin County, municipalities, TOD developers, and other stakeholders. Typologies may change as areas are transformed with improved access, connectivity, and private investment.

While the average family spends roughly 19% of their budget on transportation, households with good access to transit spend just 9%.

—Realizing the Potential: Expanding Housing Opportunities Near Transit, Center for Transit-Oriented Development

● Downtowns & Town Centers

The region’s traditional downtowns and newer town centers are irreplaceable assets that provide a unique character and setting perfectly suited to accommodate improved transit and TOD. With a mix of low and mid-rise buildings lining pedestrian friendly streets and public spaces, these districts serve as retail and entertainment destinations and tend to include a mix of moderate density residential, office, retail, and entertainment uses catering to the daily needs of residents and workers in surrounding suburban communities. The patterns and scale of development tends to support the potential for reduced parking requirements as well as shared parking and district-level parking management. Walking and bicycling are the predominant modes of transit access.

● Community Centers

Community Centers are local activity centers in a suburban context with a mix of commercial and multifamily residential uses near a transit station. Smaller in scale than Downtowns or Town Centers, Community Centers transition quickly to abutting lower density residential or commercial areas. As a result, walkability beyond the core of Community Centers may be limited, and kiss and ride and/or park and ride amenities are often accommodated to facilitate car access to transit in addition to walking and bike access. Walking, bicycling, and personal vehicle are the predominant modes of transit access.

Typology Characteristics



CC by 2.0

Rural Centers

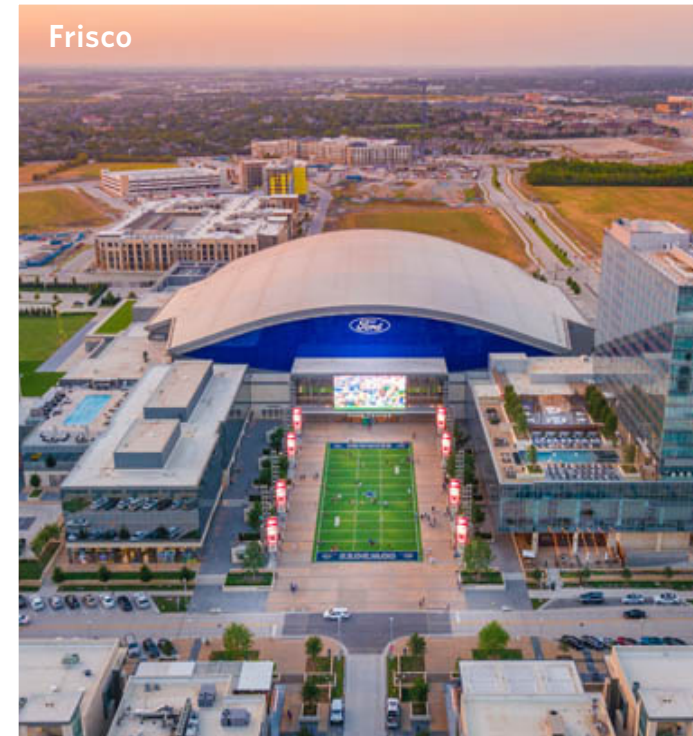
Rural Centers are smaller communities with traditional downtown cores on a smaller scale than the Downtowns or Community Centers. These centers have small retail cores or streets serving the local community primarily surrounded by lower density, single family homes. New development adds needed housing and other uses but preserves the character of the small town. Those within walking or biking distance may be limited by the smaller town size, therefore these stations may serve a larger region and will likely need park and ride facilities. Walking and biking continue to be primary connections for those nearby.



Google Earth

Emerging Districts

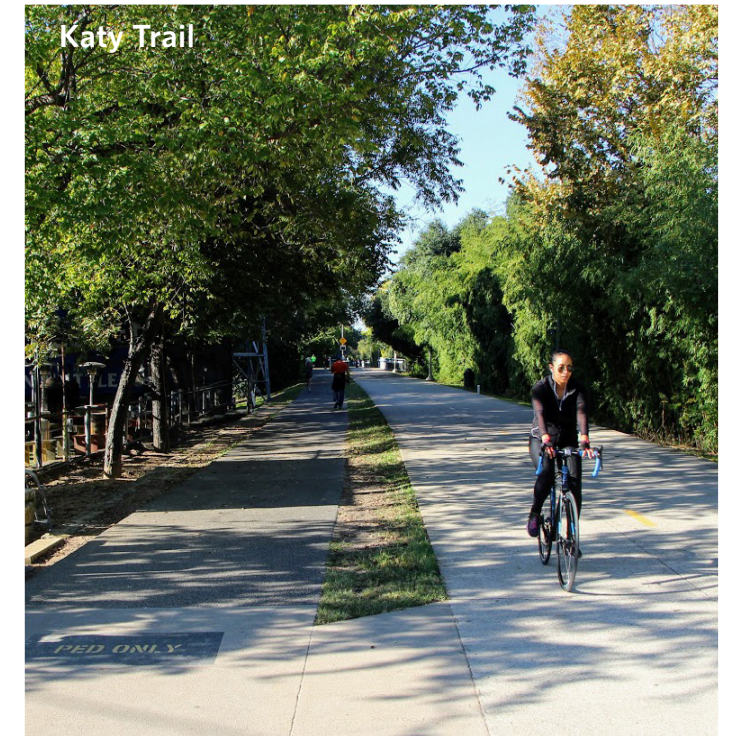
Emerging districts are areas that currently do not exhibit TOD characteristics. These include areas that are industrial or dominated by uses accessible mainly or solely by personal vehicle. These areas may or may not have the infrastructure available to easily accommodate large scale new development. Planning and investment by the local jurisdictions and land use authorities may be necessary to unlock the potential of the areas as more walkable, bikeable, and connected places. Balancing existing jobs and uses with future residential, commercial, and retail uses is important to preserving the strength of the existing districts.



TourTexas.com

Destination Districts

Destination Districts are areas with an exclusive or predominant use, such as medical, employment, cultural, sporting or entertainment. Destination Districts typically include large structures (such as stadiums, hospitals, institutional buildings), often arranged in a campus setting, and require more flexibility on block size. Complementary secondary uses support transit users and may include retail, personal services, restaurants, and lodging, ideally located between the transit station and the primary use to facilitate walking access. Walking is the predominant mode of transit access, though often transit is a secondary mode of access to the district's destinations. Proper district planning that includes direct and interesting walking routes between the transit station and the destinations could make transit access more competitive.



DallasNativeBlog.com

Connected Communities

Connected Communities are defined by established residential areas with strengthened connections to high-quality transit. These places may have fewer opportunities for new TOD development but can gain new transit ridership by providing more, safer, and easy connections to a transit station. Strategic infill development may provide needed services, housing, and amenities for future and existing residents. These locations may have less available land and fewer vehicular connections to provide substantial park and ride facilities. Connected Communities rely heavily on improved multi-modal connections, in many cases, where they currently may not exist.



separated and protected bike lanes or cycle tracks on major thoroughfares.

Block Size & Configuration

- TOD projects should consist of development blocks scaled to accommodate a mix of appropriate building types, public spaces, as well as required off-street parking and service areas.
- Overly large block sizes should be avoided to maintain a walkable scale.

Potential for Long Term Transformation

- Streets and blocks should be configured in a fashion that allows future intensification and transformation with minimal disruption to the network. For instance, parking lots should be laid out to accommodate footprints of anticipated future buildings or parking structures in their place.

- Bike Parking
- Bike Share/ E-Scooter Hub
- Transit Transfer
- Ride Share Drop Off/Pick Up
- Park & Ride
- ↔ Key Walking Route
- ↔ Bike Lane
- ↔ Shared Bike Route (Sharrow)

4B TOD Types & Design

TOD Design

This section of the guidelines defines the preferred design character, form, and quality of development for successful TOD projects and places. The guidance below offers a reference for municipalities as they develop and refine local TOD plans and development regulations, and a reference for use by developers and property owners responding to TOD RFPs and planning for TOD projects.

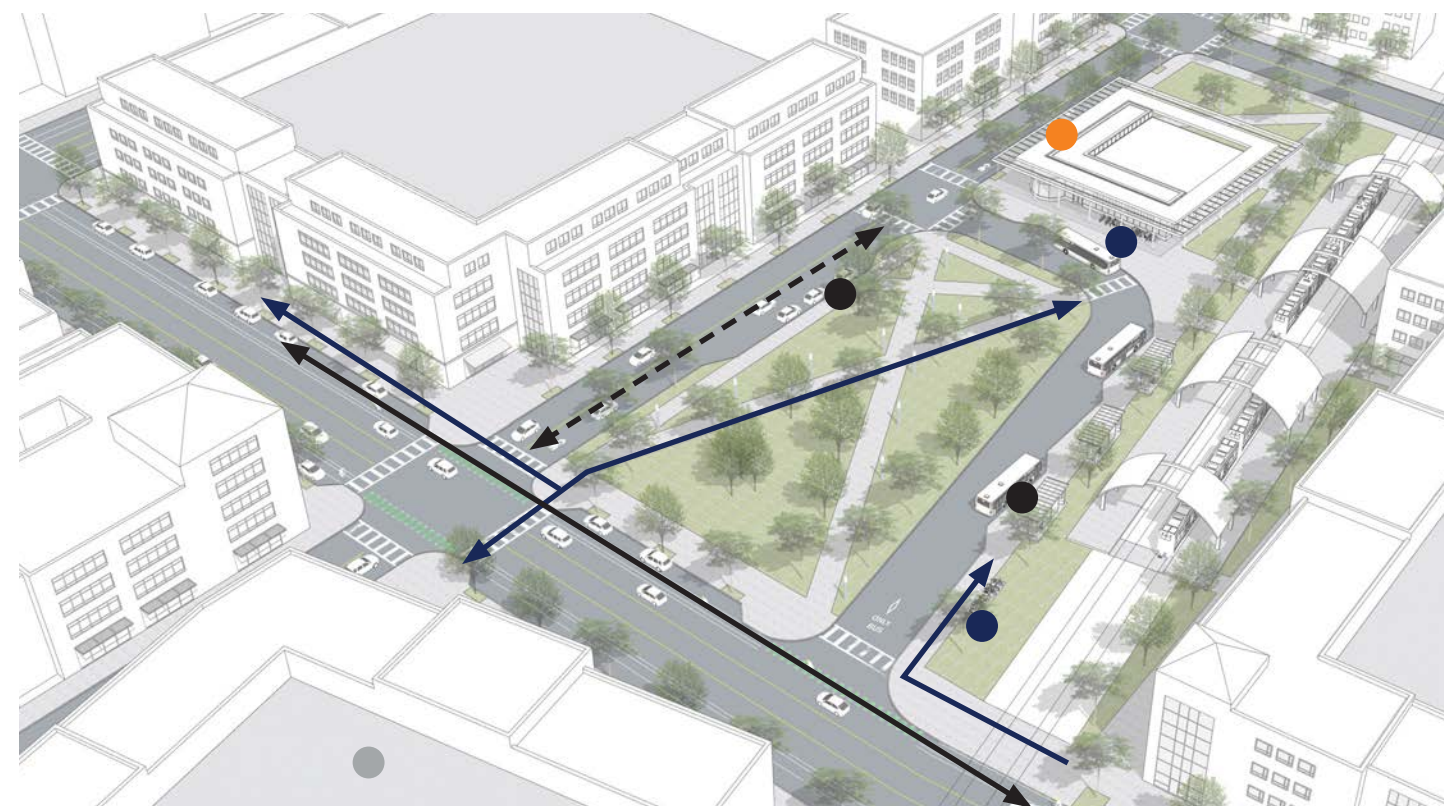
Next-generation projects will orient to infill, urbanizing suburbs, and transit-oriented development... People will seek greater convenience and want to reduce expenses.

—Emerging Trends in Real Estate, Urban Land Institute

4.B.1 Development Pattern

Street & Pathway Network

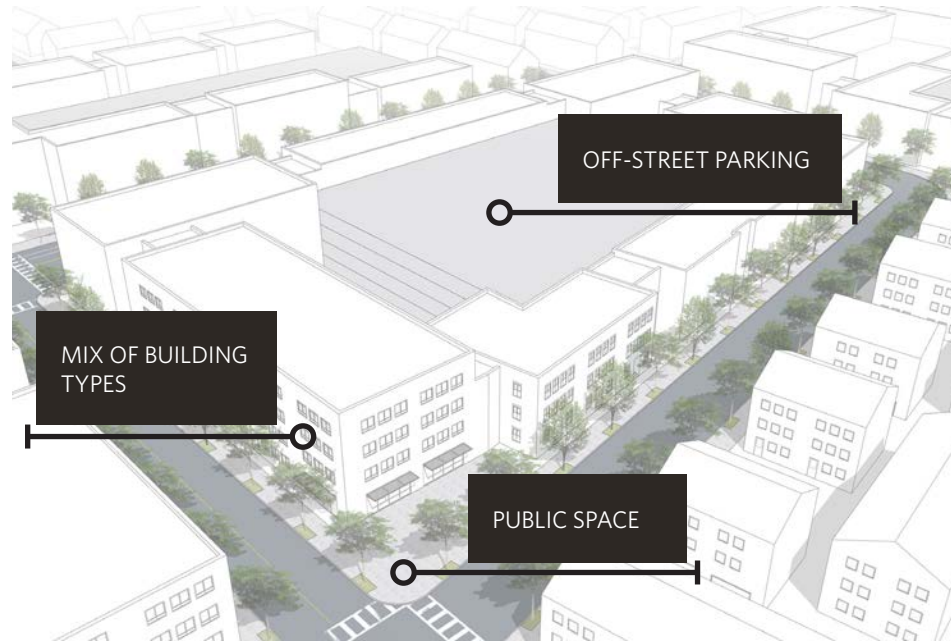
- TOD projects should include an interconnected, fine-grained grid of pedestrian- and bicycle-friendly streets and pathways that form development blocks and accommodate local circulation. Walking and bicycling should get preferential treatment over vehicular traffic.
- Street networks should serve as an extension of the existing street network in the surrounding area. TOD projects should provide street and pathway connections to the surrounding context wherever feasible. Street or pathway stub outs or set aside rights-of-way should be located strategically to accommodate future connections to undeveloped neighboring sites or developments that currently do not allow connections.
- Cul-de-sacs should be avoided except where topography or existing natural features prevent a feasible roadway connection, or as a temporary facility to provide future connections to an abutting site.
- TOD projects should contribute to a hierarchical bike network that provides uninterrupted access to the transit station with context-sensitive bike facilities. These may range from shared roadways on low traffic neighborhood streets to physically



4.B.2 Streets & Public Spaces

Street Types

- Streets in TOD projects should be designed to encourage low speed vehicular traffic and the safe movement of pedestrians and bicyclists. Street widths should be minimal, with narrow travel lanes, to reduce crossing distances for pedestrians. Multi-lane roadways within TOD projects should be discouraged.
- Primary walking and cycling routes should accommodate those modes through adequate facilities, which may include protected bike lanes, cycle tracks, multi-use paths, and off-street walkways.
- Streets in TOD projects should be designed to accommodate emerging micro-mobility modes, including bike share programs and e-scooters.

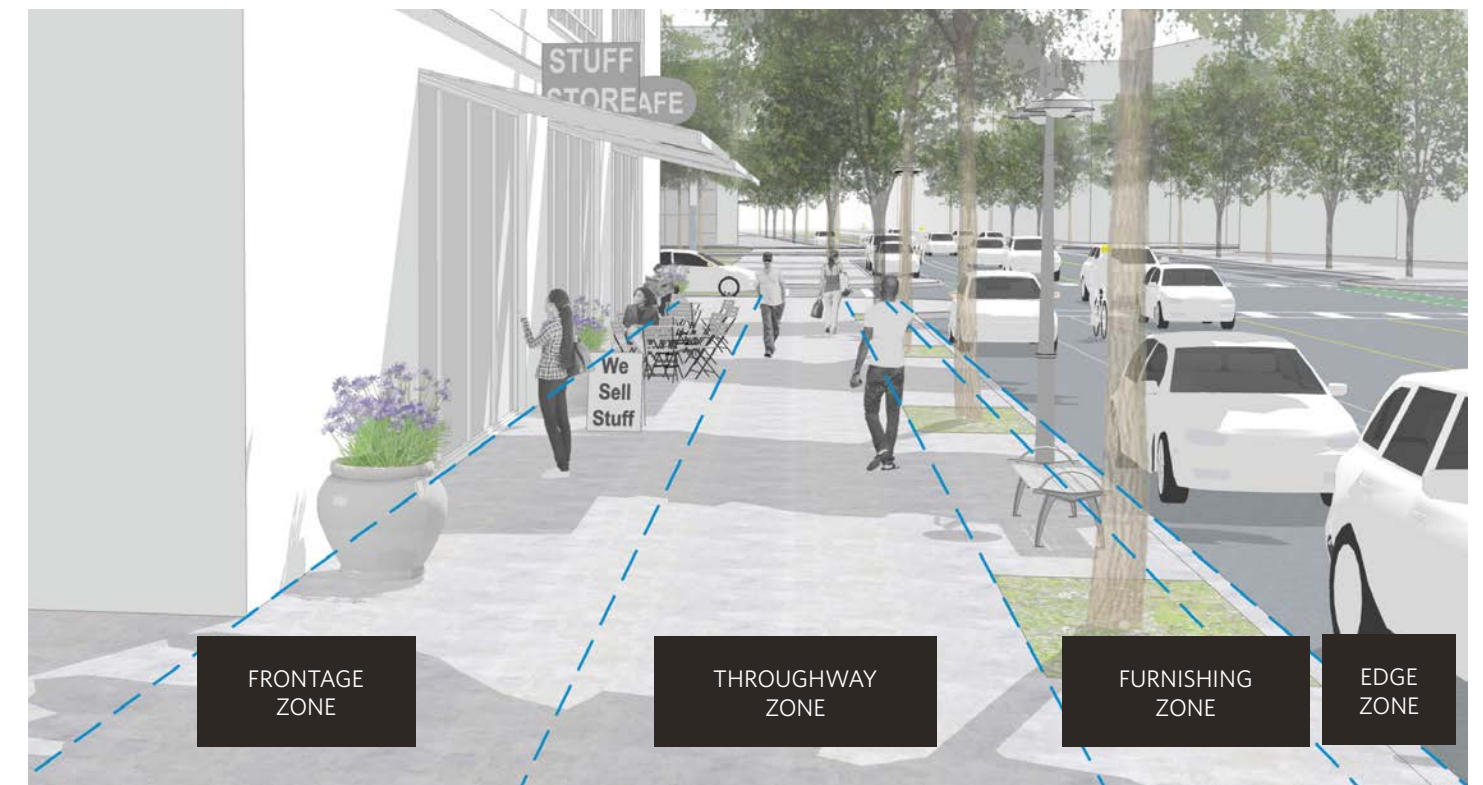
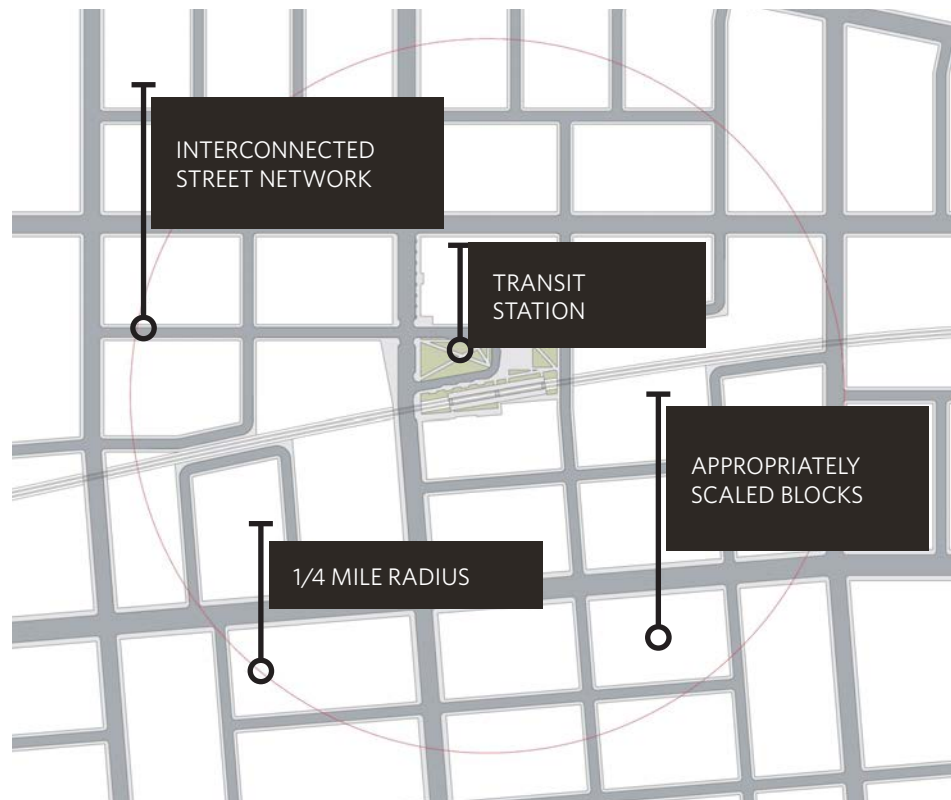


Streetscape Design

- To create safe and attractive pedestrian environments, buildings should be placed along and oriented to public streets.
- Streets providing pedestrian connections between transit stations and major walking destinations should be lined with buildings designed to allow active ground floor uses.
- Streets in TOD projects should be reflective of their context and include a roadside design that invites walking. The roadside – the portion of the street between the curb and the right-of-way or building facade – consists of four zones:
 - » Edge Zone: Includes the curb and required clearances.
 - » Furnishing Zone: Provides a buffer between pedestrians and vehicles and may range in width to include a variety of elements, depending on context, such as street trees and other landscape features, pedestrian-scaled lighting, street furnishings, street signage, and utility elements.
 - » Throughway Zone: The walking zone free of obstacles, which may range in width subject to the context.
 - » Frontage Zone: The area between the building façade and the throughway zone, typical in urban context without private front yards. The frontage zone provides room for building entrances and allows for the placement of café seating and other private street furnishings, business signage, and merchandise display. The width of the frontage zone may vary depending on context and use and may be minimal in purely residential contexts.

Public Spaces

- TOD projects should include public gathering spaces connected by pedestrian-friendly streets and pathways. Public spaces—such as parks, greens, squares and plazas—should be well defined and programmed appropriate to their location and context. Public spaces should include elements such as seating, shade trees, shade structures, play equipment, lighting, and other amenities to support their intended active and/or passive uses.
- Transit stations should be integrated into a well-designed and well-connected public space that serves both transit riders and the general population of the TOD.
- Public space design should consider accommodations for private bicycle parking, bicycle-share stations, e-scooter hubs, and other emerging micro mobility technologies.
- Bicycle parking should be provided near transit stations with easy access to and from bicycle routes. Bicycle parking should provide adequate amenities for secure storage of bicycles and may include open shelters, individual lockers, or fully enclosed and locked shelters.
- Micromobility stations and hubs, including bike share and e-scooters, should be accommodated near station locations to provide easy access. Facilities should be designed to minimize conflicts with pedestrian routes and provide for the orderly parking of bikes and scooters.



On-Street Parking & Curb-Side Uses

- On-street parking should be provided on all streets in TOD projects to provide a buffer between pedestrians and moving traffic, deliver high-turnover spots to support storefront retail uses, and to reduce the need for off-street parking.
- To avoid the use of street parking as informal park and ride parking, non-resident street parking should be short-term only through the use of parking time limits or pricing.
- Pick-up/drop-off zones for ride share services and kiss & ride should be provided in a manner that avoids conflicts with transit vehicles, pedestrians or bicyclists. Pick-up/drop-off zones should be located to reduce out of direction travel for vehicles and discourage risky maneuvers. To give priority to non-motorized modes pick-up/drop-off zones should be located at some distance from the transit station.
- Paratransit access should be provided near station locations to adequately serve transit riders with limited mobility.

4.B.3 Density/Intensity

Use Mix

- TOD projects should be designed to include primary transit-trip generators plus supportive uses to serve for daily needs to reduce car dependency for non-commute trips. Primary trip generators may be high-density residential uses with complementary retail and service uses, or may be employment uses with supporting residential, retail and service uses.
- A mix of uses is critical at the core of a TOD project, surrounding the transit station, and should include high activity uses such as retail. Beyond the core area the use mix is less critical and predominantly residential or employment uses may be acceptable.
- Single-use developments are generally incompatible with TOD. The exception may be destination districts such as large sports or entertainment venues, or educational or medical campuses.



Development Intensity

- TOD projects should provide an average development density and intensity sufficient to generate the ridership that supports the existing or desired transit service.
- The allocation of density/intensity in a TOD project may vary, depending on the location or context. A larger area with consistent density/intensity may be appropriate in urban locations, whereas a more confined core of high density/intensity development that transitions to lower density/intensity away from the station may be appropriate in a lower density context.

Equitable Housing

- TOD projects should provide a range of housing types for households of varying ages, demographics, and income levels. Housing options for people relying on transit should be provided near stations.
- Inclusion of affordable housing is preferred, and should be incorporated in projects. North Central Texas Council of Governments encourages service areas cities to adopt targeted policy, regulatory, and incentive programs to promote workforce and affordable housing options. Localities should explore the following as methods to promote equity and affordability in TOD projects:



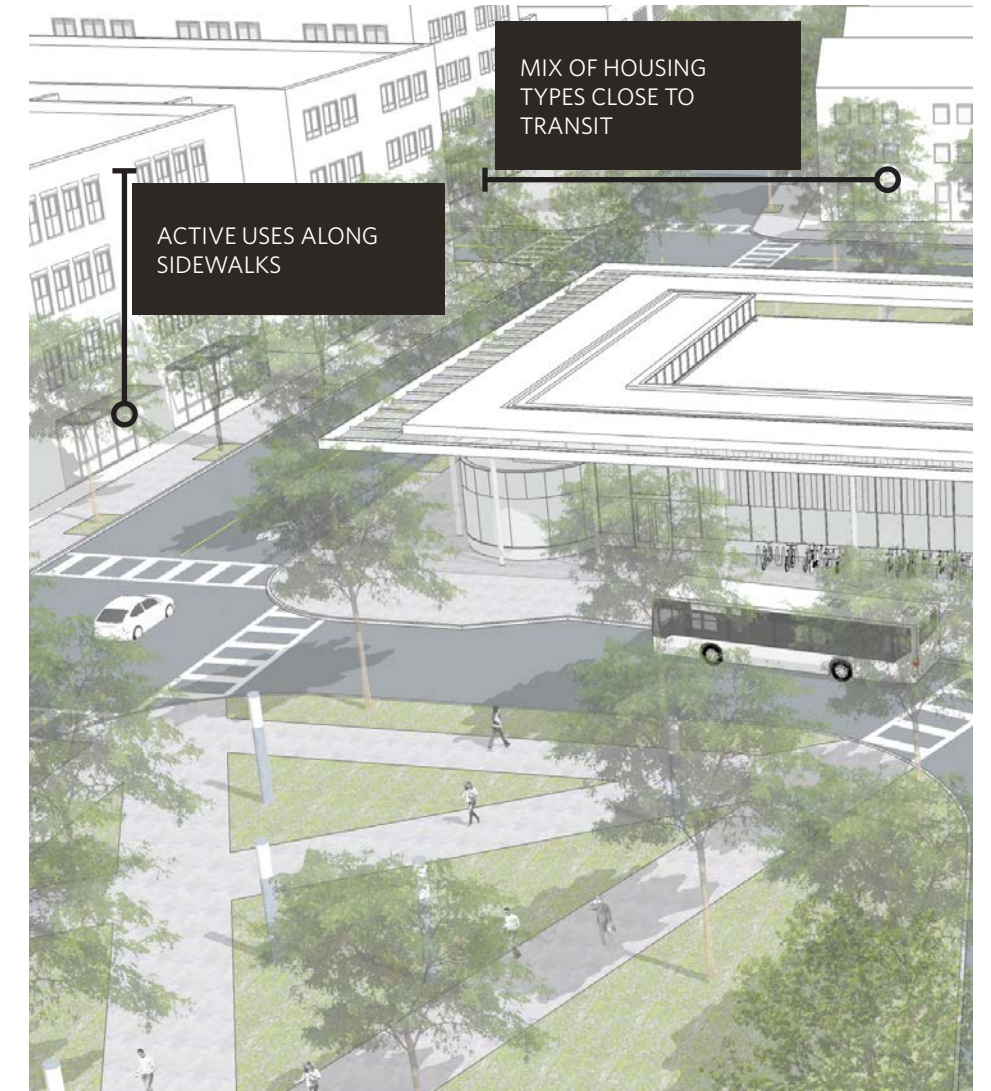
With compact development, people drive 20-40 percent less, at minimal or reduced costs, while reaping other fiscal and health benefits.

—Growing Cooler, Urban Land Institute

- » Adoption of equitable TOD policies by municipalities to support the creation and promotion of mixed-income and mixed-use communities around transit;
- » Development of policy, regulatory, and financial incentives to include workforce and affordable housing in projects on Transit-adjacent and publicly-owned sites.
- » Reduction or removal of project requirements with the potential to increase the cost of individual housing units, including parking minimums, impact fees, permit fees, etc.
- » Implementation of programs and initiatives at the local level designed to create or maintain affordability, limit project and per unit costs, and provide long term maintenance of cost restrictions, including low interest loans and grants for rehabilitation, reconstructed, and long term rent restrictions; incremental or wholesale densification of station areas through regulatory change or bonus provisions; inclusionary policies or requirements; regulatory, project review, and fee relief; and parking reductions and parking cost unbundling.

Limits on Incompatible Uses

- Primarily auto-oriented uses (such as strip commercial or office park uses) or uses generating little to no pedestrian activity (such as warehousing or mini storage) are not compatible with TOD projects.
- Drive-thru restaurants or banks should not be permitted in TOD projects. If they are present, such uses should be located in the rear of buildings and designed to minimize their visibility from public streets and spaces.



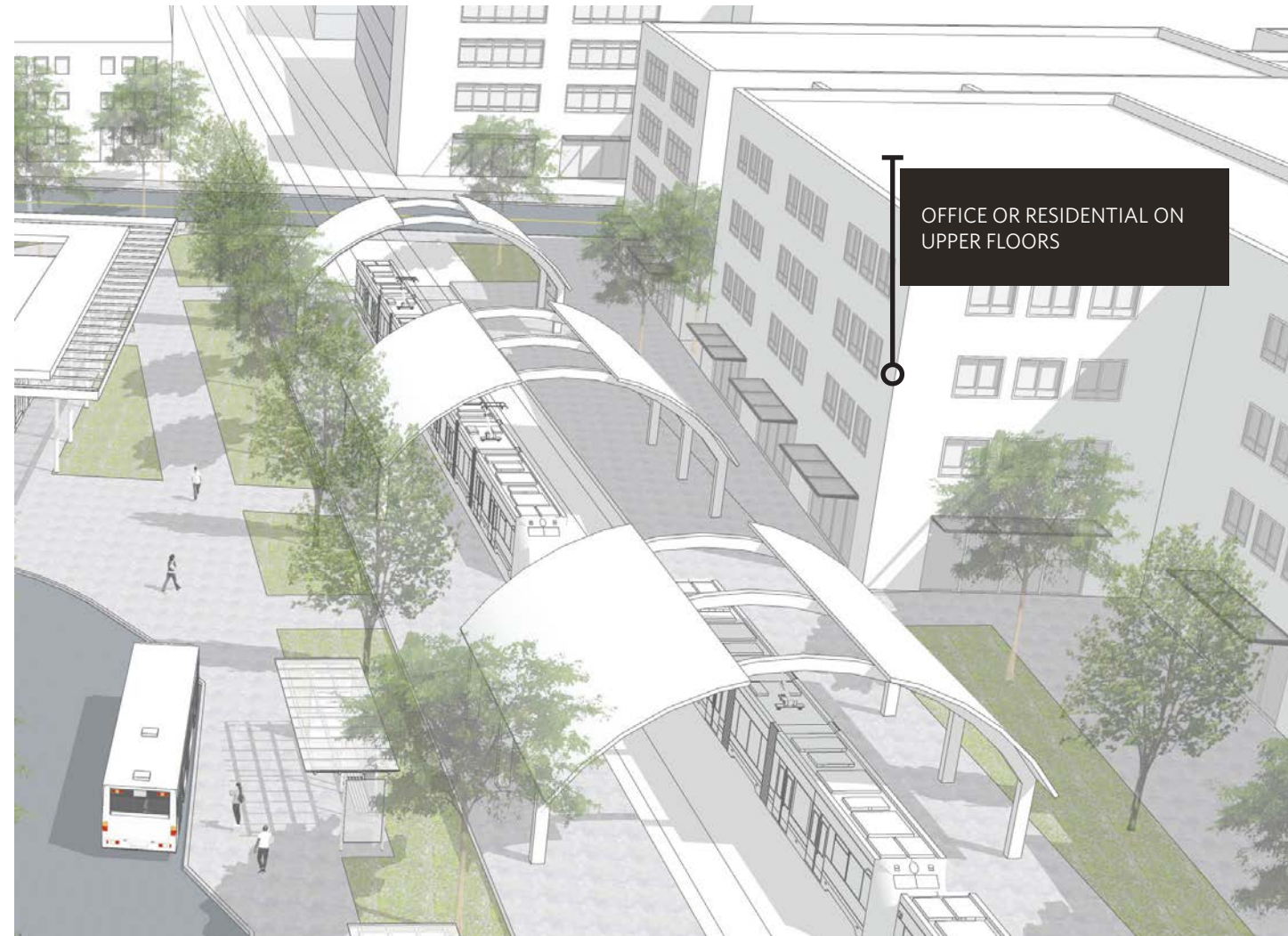
4.B.4 Site & Building Design

Building Scale

- Building heights within TOD projects should be the tallest near transit stations. A transition of building heights may be appropriate where a TOD project abuts a lower density/intensity development.

Building Frontages

- Buildings should be placed along and oriented to public streets and public spaces. To maintain building continuity a significant percentage of the lot width should be occupied by a building located at the setback or build-to line.
- Primary building entries should be located along the street frontage with direct access from a public street or public space.
- Active ground floor uses such as retail and service establishments are encouraged, particularly on primary walking and cycling routes. To allow flexibility, ground floor ceiling heights that allow for commercial use should be encouraged irrespective of initial use.



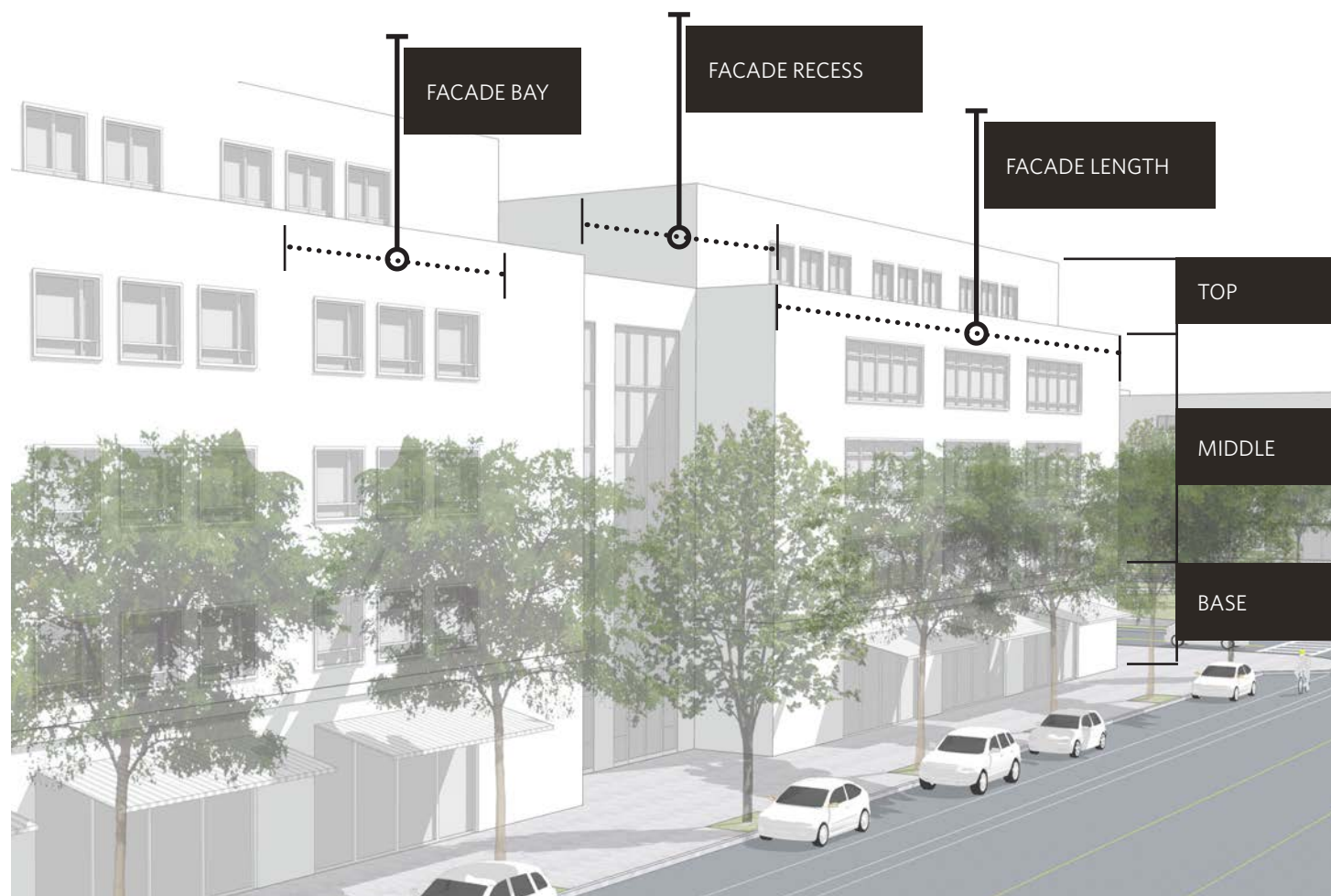
Facades

- Building facades should generally be designed with a distinct base, middle, and top. Long building facades should be composed of façade bays and intermittent recesses.
- Building facades along streets and public spaces should be designed with attractive ground floor facades, well-defined building entries, and quality building materials.
- Ground floor facades of buildings with ground floor retail, restaurant, office, professional service, and personal service uses should be designed with a high percentage on transparent windows and doors.
- Ground floor facades of buildings with residential uses should provide vertical separation and enhance privacy by slightly elevating the finished floor elevation of ground floor residential space along pedestrian walkways.
- Blank façade walls should be discouraged and limited in size to maintain an interesting streetscape.

Off-Street Parking

- Off-street parking should be placed behind buildings and out of sight from public spaces.
- Transit park and ride lots or structures should be located with sufficient distance from transit stations to encourage pedestrian flow along streets lined with businesses.
- TOD projects should provide a limited supply of parking to encourage the use of transit, walking and bicycling. A reduction of required parking should be considered. Shared parking strategies should be considered to reduce the overall parking supply and increase the efficiency of use of available land.
- Long-term parking intended for park-and-ride service and kiss-and-rides (drop-off locations) and rideshare pickup areas are located some distance from the stop (approximately 1/8 of a mile) to encourage transit users to frequent local businesses and services along the way.







**North Central Texas
Council of Governments**

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