



WHAT IS TRANSIT-ORIENTED DEVELOPMENT (TOD)?

TOD is a strategy available to help manage growth and improve the quality of life in Tysons Corner. TOD provides communities with an alternative to low-density suburban sprawl and automobile-dependent land use patterns.

Fairfax County defines TOD as follows:

“Transit-oriented development (TOD) in Fairfax County is defined as compact, pedestrian-friendly, mixed-use development containing medium to high density residential, office and retail uses within walking distance of certain rail transit stations identified in the Area Plans. Well-planned TOD should incorporate good design principles and an appropriate mix of uses around rail transit stations to promote transit usage and create vibrant neighborhood centers at these locations.”

TOD seeks to align transit investments with a community’s vision for how it wants to grow, creating “livable” mixed-use, denser, walkable “transit villages.” A successful TOD will reinforce both the community and the transit system.

In general, people living and working in TODs walk more, use transit more, and own fewer cars. TOD households are twice as likely to not own a car and own roughly half as many cars as the “average” household. At an individual station, TOD can increase ridership by 20 to 40 percent and up to five percent overall at the regional level. People who live in a TOD are five times more likely to commute by transit than other residents. Locations next to transit can enjoy increases in land values over 50 percent in comparison to locations away from transit stops.

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TOD LAND USE AND DESIGN PRINCIPLES

Transit-oriented development may be described by four basic principles, which define the essential characteristics of all successful TODs:

- Greater density than community average
- A mix of uses
- Quality pedestrian environment
- A defined center

These four principles are expected to directly influence the land use, circulation, and design concepts of Tysons Corner.

Greater Density than the Community Average

A key ingredient for walkable communities and support for transit is having sufficient residential densities to reduce walking distances between residences and other destinations, including commercial services, schools, parks, and transit. The following elements contribute to appropriate density for transit supportive land uses:

- Densities that are higher than the community norm are located within $\frac{1}{4}$ to $\frac{1}{2}$ mile of transit
- Structured parking is used rather than surface lots in higher density areas
- Site design for major projects allows for the intensification of densities over time



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1. Orenco Station. Hillsboro, OR
2. Addison Circle. Dallas, TX
3. Ballston, VA

A Mix of Uses

A transit supportive environment includes a mixture of residential, commercial, service, employment, and public uses making many trips between destinations shorter and more walkable. In addition:

- First floor uses are “active” and oriented to serve pedestrians
- Multiple compatible uses are permitted within buildings near transit
- A mix of uses generating pedestrian traffic is concentrated within walking distance ($\frac{1}{4}$ to $\frac{1}{2}$ mile) of transit
- Auto-oriented uses, such as service stations and drive-through facilities, are limited or prohibited near transit

1. Hollywood and Vine. Los Angeles, CA
2. Darling Harbour. Sydney, Australia
3. Santana Row. San Jose, CA
4. Biscayne Blvd. Miami, FL



McLarand Vasquez Emisek

Quality Pedestrian Environment

Vibrant communities, with or without transit, always are convenient and comfortable places for pedestrians. There are a number of components that contribute to a quality pedestrian environment:

- Buildings and primary entrances are sited and oriented to be easily accessible from the street
- Buildings incorporate architectural features that convey a sense of place and relate to the street and the pedestrian environment
- Amenities, such as storefront windows, awnings, architectural features, lighting, and landscaping, are provided to help create a comfortable pedestrian environment along and between buildings
- The site layout and building design allow direct pedestrian movements between transit, mixed land uses, and surrounding areas
- Most of the parking is located to the side or to the rear of the buildings
- Sidewalks are present along site frontages, which connect to sidewalks and streets on adjacent and nearby properties
- Street patterns are based on an interconnected grid system that simplifies access for all modes
- Pedestrian routes are buffered from fast-moving traffic and expanses of parking
- Trees sheltering streets and sidewalks are provided along with pedestrian-scale lighting
- Buildings and parks are used to provide a focal point or anchor for key areas or intersections
- Secure and convenient bicycle parking is available



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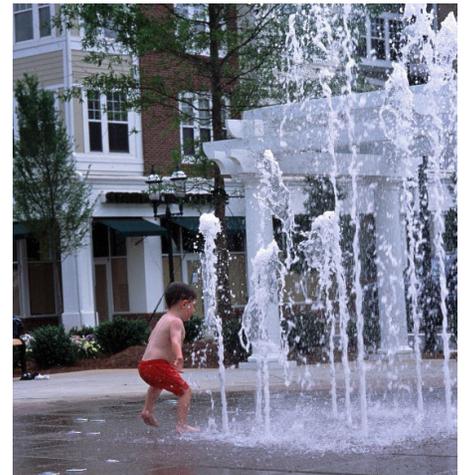
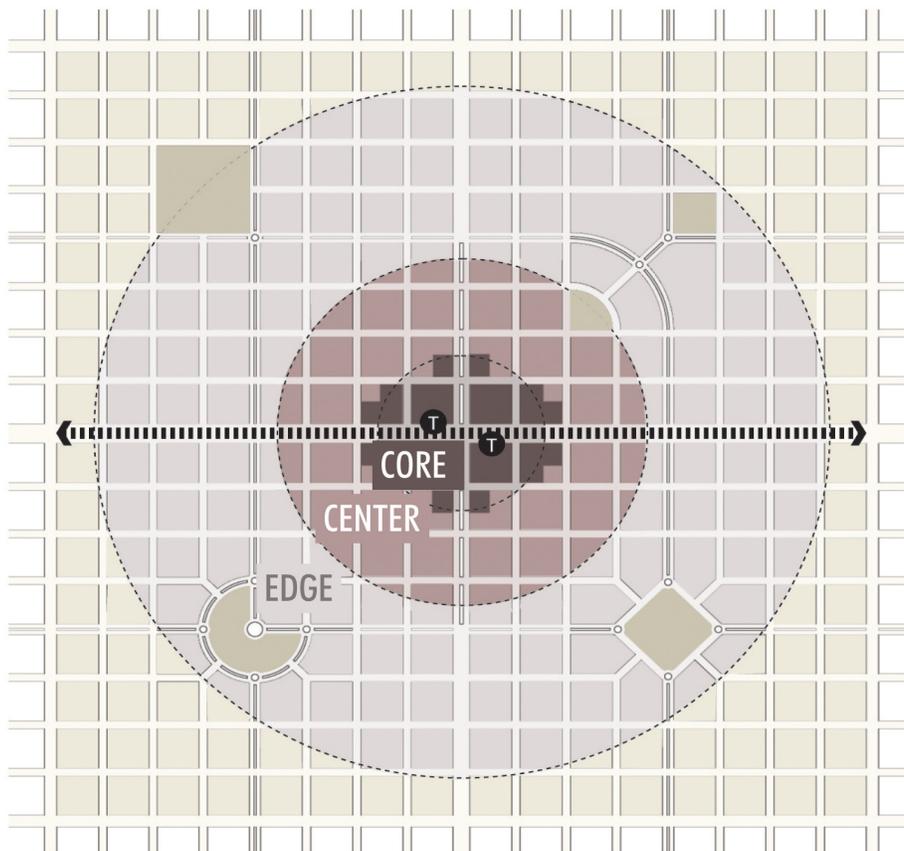
1. City Place. West Palm, FL
2. Rodeo Drive. Beverly Hills, CA
3. Orenco Station. Hillsboro, OR

A Defined Center

Transit is particularly successful in communities and neighborhoods that have defined centers, offering multiple attractions and reasons for pedestrians to frequent the area. These areas project a sense of place by including at least several of the following attributes:

- The density and buildings are highest in the core near the transit station, moderating somewhat in the center that is within ¼ mile of the transit station, and ultimately transitioning in the edge to match the character of surrounding development approximately ½ mile from the station
- Buildings are located closer to the street and are typically taller than the surrounding area
- Buildings are primarily oriented to the street with windows and main entrances
- Parking is less predominant, being located to the rear and in parking structures. Parking requirements are reduced in close proximity to transit, compared to the norm
- Sidewalks are wider than in lower density areas, and offer pedestrian amenities, such as street trees, benches, kiosks, and plazas

1. Core Center Edge Diagram - Illustrates development patterns in a TOD
2. Birkdale Village, Charolette, NC
3. Metro Center. Bethesda, MD
4. Clarendon. Arlington, VA



BENEFITS OF TOD

By implementing TOD and coordinating investment in transportation and land use projects, communities can make significant progress toward improving their quality of life. The extent to which this progress is made depends largely on the type and quality of transit service available as well as the primary characteristics of the TOD. Ten major benefits from TOD are:

- 1. Providing mobility choices.** By creating “activity nodes” linked by transit, TOD provides much needed mobility options, including options for young people, the elderly and people who do not own cars or prefer not to drive.
- 2. Increasing public safety.** By creating active places that are busy through the day and evening and providing “eyes on the street”, TOD helps increase safety for pedestrians, transit users, and many others.
- 3. Increasing transit ridership.** TOD improves the efficiency and effectiveness of transit service investments by increasing the use of transit near stations by 20 to 40 percent, and up to five percent overall at the regional level.
- 4. Reducing rates of vehicle miles traveled (VMT).** Vehicle travel has been increasing faster than population growth. TOD can lower annual household rates of driving by 20 to 40 percent for those living, working, and/or shopping within transit station areas. Recent research shows that automobile ownership in TOD is approximately one half the national average.
- 5. Increasing disposable household income.** Housing and transportation are the first and second largest household expenses, respectively. TOD can effectively increase disposable income by reducing the need for more than one car and reducing driving costs, saving households \$3,000-4,000 per year.
- 6. Reducing air pollution and energy consumption rates.** By providing safe and easy pedestrian access to transit, TOD can lower rates of air pollution and energy consumption. TOD can also reduce rates of greenhouse gas emissions by 2.5 to 3.7 tons per year per household.
- 7. Helping protect existing single-family neighborhoods.** TOD directs higher density development to appropriate areas near transit, thereby reducing pressure to build higher density development adjacent to existing single-family neighborhoods.
- 8. Playing a role in economic development.** TOD is increasingly used as a tool to help revitalize aging downtowns and declining urban neighborhoods, and to enhance tax revenues for local jurisdictions.
- 9. Contributing to more affordable housing.** TOD can add to the supply of affordable housing by providing lower-cost and accessible housing, and by reducing household transportation expenditures. It was recently estimated that housing costs for land and structures can be significantly reduced through more compact growth patterns.
- 10. Decreasing local infrastructure costs.** Depending on local circumstances, TOD can help reduce infrastructure costs (such as for water, sewage, and roads) to local governments and property owners by up to 25 percent through more compact and infill development.