



Envision Midway – A Collaborative Planning Project Overview of High-Capacity Transit Station Location Criteria Stakeholders Committee

This is a primer on transit-oriented development (TOD) and the criteria that should be considered for locating transit station communities. Additional materials will be provided in future Stakeholder Committee meetings.

TOD is defined as an intensive mix of residential and commercial land use that is located close to a high-capacity transit stations. TOD is usually focused on land within one-quarter mile to one-half mile radius of the station facility, which represents a 5-10 minute walking distance. What develops within the TOD is commonly known as a transit station community, which is a compact mixed-use activity area that by design, encourages residents, workers, and shoppers to ride mass transit more and drive their cars less.

At the center of a transit community is the transit station. It connects the residents and workers to the rest of the region and can an anchor for civic activities and public open space that surround it. The design and configuration of a transit station community mixes building types and the uses within them, emphasizing pedestrian-oriented activities and environments that encourage use of public transportation. The land uses are linked with convenient pedestrian walkways and parking is managed to diminish dependence on the automobile and its impact on the physical environment. A variety of housing types are provided to support diverse populations that in turn support the commercial, retail, and employment land use, as well as, the cultural and recreational attractions located in a transit station community.

Puget Sound Regional Council is a leader in promoting transit station communities within the Central Puget Sound Region. They have examined existing TODs worldwide and distilled what makes a successful transit station community, which we have drawn on here (all italics text is drawn from the footnoted reference).¹

Among the many other benefits of transit-oriented development include:

- *Builds strong, cohesive, and sustainable communities by providing a focal point for concentrating growth*
- *Increases the quantity of affordable housing and creates opportunities for more diverse housing options.*
- *Increases a local community's economic activity, property values and tax base*

¹ 1999 Creating Transit Station Communities in the Central Puget Sound Region – A Transit-Oriented Development Workbook, Puget Sound Regional Council.

- *Provides more travel options and better living environments for the transit dependent*
- *Increases the transit trips to a station area and decreases the number of auto trips within the station vicinity*
- *Improves air and water quality, and other environmental concerns due to reduced auto use*
- *Increase safety for pedestrians and bicycles, and creates a convenient and attractive setting for non-auto trips*
- *Provides workers and residents with commercial, public, and recreational services close to where they live or work*

The use of transit-oriented development as a strategy for increasing transit ridership has been employed in many different regions throughout the county. The concerns are all the same – reducing sprawl by managing growth – concentrating a mix of uses near a high-capacity transit station. Communities where you can learn more about their strategies and accomplishments are San Diego, Washington D.C., San Francisco Bay Area, Portland, and Los Angeles. All utilize a combination of transit options that support a system of moving people to job centers and between transit station community centers.

Guiding Principles for Creating Transit Station Communities

The Guiding Principles are grouped into three major categories:

- ***Compact, Mixed-Use Development***
A sufficient variety and intensity of land uses should be provided within walking distance of the station facility.
- ***Pedestrian-Friendly Design***
Building siting and orientation should be designed to create an environment that is conducive to walking in the vicinity of the station facility.
- ***Parking and Access Management***
Automobile and bicycle parking should be planned in a way that balances the needs of motorized travel and bicycling and walking.

Guiding Principles to Achieve Compact, Mixed Use Development

A key to successful transit station communities is to ensure development supports a variety of uses that can be easily reached by foot. A compact community encourages activity without the need for an automobile. Everyday needs are within easy reach and the norm of travel is walking. The following italicized texts are from PSRC's "Creating Transit Station Communities in the Central Puget Sound Region".

- ***Site and design transit station facilities to maximize development opportunities.***
The intent here is to create a community that maximizes pedestrian access. This is accomplished by shortening the walking distance between attractions from 700 to 500 feet and by creating shortcuts, intensifying activity, and improving distance alternatives with bus and bicycle use. Research on transit riders generally cites that on average individuals are willing to walk between 1,000 to 2,000 feet (¼ to ½ mile) or an equivalent to a 5 to 10 minute walk.

The following needs to be kept in mind when considering distances:

- *The most important influences on how far people will walk are whether the walkway system is direct and complete and the walk environment is enjoyable and safe.*
- *People will walk farther to transit stations that provide a very high level of transit service, such as to a light rail facility.*
- *People will tend to walk farther between a station and residential or employment than they will to retail establishments.*
- *People will walk only very short distances (less than 500 feet) to transfer between travel modes (e.g., between car and bus, or bus and rail).*
- ***Establish a compact mix of land uses within a defined station area.***
A station area should contain a mix and density of land uses that support the pedestrian. The highest density development should be located closest to the station. Barriers, such as busy broad streets or steep slopes should be avoided when considering the placement of a station.
- ***Establish a range of complementary land uses within the station area.***
Allowing a mix of different land uses that serve different needs helps to support a transit station community and generates different kinds of transit trips. The area generates activities throughout the day by providing a place to work, shop, and enjoy entertainment and relaxation. A residential component is critical to this mix.
- ***Concentrate commercial retail close to the station facility.***
Errands can be accomplished on the way home, with commercial establishments located near stations.
- ***Establish an employment base close to the station facility.***
- ***Promote residential development opportunities new transit facilities.***
Research indicates that 15 dwelling units per gross acre will support a high level of bus or rail service. To maintain a balance of activity, the number of jobs in the station area should not exceed the number of households by more than 3 to 1.
- ***Encourage infill and/or redevelopment of underdeveloped land***
- ***Encourage the mix of uses both within buildings and on adjacent sites.***
- ***Discourage automobile-oriented land uses in the station area.***
- ***Locate public buildings within the station area.***
- ***Establish adequate park space in a station area.***
- ***Consider the importance of land uses outside of the defined station area.***
- ***Protect and preserve important natural features.***
- ***Protect and preserve historic character.***

Guiding Principles to Achieve Pedestrian-Friendly Design

People walk more if the landscape, whether built or natural, is safe, interesting, and at a scale that feels comfortable. The following points are extracted from PSRC's manual on "Creating Transit Station Communities".

- ***Identify and enhance pedestrian streets within the station area.***
- ***Design street right-of-way for pedestrian travel.***
- ***Establish continuous and uninterrupted walking routes.***
- ***Ensure safe, convenient, and frequent street crossings.***
- ***Design intersections that balance pedestrian and auto movements.***
- ***Locate building entrances close to public walkways.***
- ***Orient commercial establishments based on their different needs.***
- ***Design parking areas for pedestrian movement.***
- ***Establish a coordinated system of bikeways.***
- ***Provide attractive, safe, and convenient transit stops.***
- ***Provide pedestrian amenities within the station area.***

Guiding Principles for Effective Parking Management

Station Communities balance the need for automobile access with the desire to create compact, mixed-use, pedestrian-friendly area that emphasizes transit, walking, and biking. Typical suburban development projects devote 50 to 75 percent of their sites to surface parking, resulting in low density development patterns that do not support TOD. Below are PSRC's guiding principles for effective parking management.

- ***Carefully control the total supply of parking.***
- ***Use parking charges to control demand for parking.***
- ***Keep the size of surface lots small.***
- ***Design and plan surface lots to convert to other uses over time.***
- ***Encourage the development of parking structures.***
- ***Encourage development on street-side edges for parking structures.***
- ***Carefully plan and design park & ride lots.***
- ***Locate parking lots behind buildings or in the interior of a block.***

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TRANSIT ORIENTED DEVELOPMENT

<http://www.transitorienteddevelopment.org/>



Portland, Oregon

TRANSIT ORIENTED DEVELOPMENT is the exciting new fast growing trend in creating vibrant, livable communities. Also known as Transit Oriented Design, or TOD, it is the creation of compact, walkable communities centered around high quality train systems. This makes it possible to live a higher quality life without complete dependence on a car for mobility and survival.

Transit oriented development is a major solution to the serious and growing problems of *peak oil* and *global warming* by creating dense, walkable communities connected to a train line that greatly reduce the need for driving and the burning of fossil fuels.



FACTORS DRIVING THE TREND TOWARD TOD

- Rapidly growing, mind-numbing traffic congestion nation-wide
- Growing distaste for suburbia and fry-pit strip development
- Growing desire for quality urban lifestyle
- Growing desire for more walkable lifestyles away from traffic
- Changes in family structures: more singles, empty-nesters, etc
- Growing national support for Smart Growth
- New focus of Federal policy

"Traffic congestion has increased so much in virtually every metropolitan area that two-hour commutes now are routine. Attempts to alleviate the problem by constructing more highways almost always have led to more sprawl and, eventually, more congestion." - Jim Miara

"Transit Oriented Development as an approach to combat traffic congestion and protect the environment has caught on all across the country. The trick for real estate developers has always been identifying the hot transportation system. Today, highways are out; urban transit systems are in." -The Urban Land Institute (ULI)



COMPONENTS OF TRANSIT ORIENTED DESIGN

- Walkable design with pedestrian as the highest priority
- Train station as prominent feature of town center
- A regional node containing a mixture of uses in close proximity including office, residential, retail, and civic uses
- High density, high-quality development within 10-minute walk circle surrounding train station
- Collector support transit systems including trolleys, streetcars, light rail, and buses, etc
- Designed to include the easy use of bicycles, scooters, and rollerblades as daily support transportation systems
- Reduced and managed parking inside 10-minute walk circle around town center / train station



“A New Train network is the most effective way to curb sprawl, and goes hand in hand with smart growth, creating livable communities, economic sustainability, environmental protection, human rights, and sustainable community design. When planned together with compact, walkable forms of development, trains solve many serious problems facing society.” -NewUrbanism.org

BENEFITS

- Higher quality of life
- Better places to live, work, and play
- Greater mobility with ease of moving around
- Increased transit ridership
- Reduced traffic congestion and driving
- Reduced car accidents and injuries
- Reduced household spending on transportation, resulting in more affordable housing
- Healthier lifestyle with more walking, and less stress
- Higher, more stable property values
- Increased foot traffic and customers for area businesses
- Greatly reduced dependence on foreign oil
- Greatly reduced pollution and environmental destruction
- Reduced incentive to sprawl, increased incentive for compact development
- Less expensive than building roads and sprawl
- Enhanced ability to maintain economic competitiveness

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- Transit investment has double the economic benefit to a city than does highway investment.**
 - Transit can enable a city to use market forces to increase densities near stations, where most services are located, thus creating more efficient subcenters and minimizing sprawl.**
 - Transit enables a city to be more corridor-oriented, making it easier to provide infrastructure.**
 - Transit enhances the overall economic efficiency of a city; denser cities with less car use and more transit use spend a lower proportion of their gross regional product or wealth on passenger transportation.**
- Taken from [*Sustainability and Cities*](#), by Newman & Kenworthy
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