

# Transit-Oriented

## DEVELOPMENT



TOD OVERLAY



# PARKING STUDY

## Stakeholder Meeting Handouts

Prepared by



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# The Case **FOR** Parking Minimum Requirements

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- Reduce street congestion around the development site
- Avoid parking spillover
- Create orderly development patterns
- Anticipate possible intensification or changes in the use of a development
- Create a level playing field among developers
- Encourage growth of core areas by increasing parking supply in those areas
- Reduce parking management by making the adjudication of conflicts between property owners unnecessary
- Reduce the demand for public provision of parking



# The Case **AGAINST** Parking Minimum Requirements

- Encourages private vehicle usage and lengthens trips
- Adversely impacts transit and alternative modes
- Reduces development density
- Creates inhospitable project design
- Thwarts development and economic activity (little or no direct revenue)
- Makes construction of affordable housing more challenging
- Hampers investment in infill development and adaptive reuse in core areas
- Directly and indirectly harms the environment
- Lowers physical activity with consequences for public health
- Imprecisely represents actual parking utilization levels (parking utilization ratios typically are not based on local empirical evidence)



# Transit-Oriented Development



## PARKING STUDY

### Potential Strategies for Different Types of Areas

STRATEGIES	Regional Center	City Center	Urban Neighborhoods	Suburban Center	Town Center	Transit Neighborhood	Small Town
<b>1 Transit/TOD Supportive Policies</b>							
Transit Incentive Programs	■	■	■	■	■	■	■
Transit Friendly Parking Design	■	■	■	■	■	■	■
Transit Supportive Zoning	■	■	■	■	■	■	■
Carsharing	■	■	■	■	■	■	■
Walkability and Wayfinding	■	■	■	■	■	■	■
<b>2. Parking Requirements</b>							
Reduced Parking Requirements	■	■	■	■	■	■	■
TOD Friendly Parking Requirements	■	■	■	■	■	■	■
Parking Maximums	■	■	■	■	■	■	■
Shared Parking	■	■	■	■	■	■	■
<b>3. Parking Pricing</b>							
On-street Parking Pricing	■	■	■	■	■	■	■
Variable Rate Parking Pricing	■	■	■	■	■	■	■
Coordinated Off-street and On-street Pricing	■	■	■	■	■	■	■
Unbundled Parking	■	■	■	■	■	■	■
Parking Cash-Out	■	■	■	■	■	■	■
<b>4. Parking Management Strategies</b>							
Parking Payment Technology	■	■	■	■	■	■	■
Parking Database	■	■	■	■	■	■	■
Real-time Parking Information	■	■	■	■	■	■	■
<b>5. Parking Districts</b>							
Assessment Districts	■	■	■	■	■	■	■
Revenue Districts	■	■	■	■	■	■	■
Residential Permit Parking	■	■	■	■	■	■	■
<b>6. Parking Financing</b>							
In-Lieu Fees	■	■	■	■	■	■	■
Risk Fund	■	■	■	■	■	■	■
Parking Occupancy Tax	■	■	■	■	■	■	■
Parking Tax by Space	■	■	■	■	■	■	■
Tax Exemptions and Variable Rate Tax	■	■	■	■	■	■	■

The appropriate mix of parking policies and parking management strategies are unique for each agency and jurisdiction.

The mix must consider various factors, such as local objectives, existing parking occupancy, investment that is occurring, auto ownership and alternative travel mode availability.

However, there are some general approaches that can be used for different types of areas. The matrix on this page presents the general strategies that can be applied in each type of area. Learn more about these strategies by referring to the Best Practices section of this report

Excerpt from:

**REFORMING PARKING POLICIES TO SUPPORT SMART GROWTH - Toolbox/Handbook:**

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Metropolitan Transportation Commission

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# Parking and Transportation Strategies for City Centers & Urban Neighborhoods

## 1. Transit/TOD Supportive Policies

These policies and programs are designed to support the use of transit and to create a walkable transit friendly environment, reducing or eliminating the need for a private automobile. Relevant examples include:

- Transit Incentive Programs
- Carsharing
- Transit Friendly Parking Design
- Walkability and Wayfinding

## 2. Parking Requirements

Managing the amount of parking associated with new development is an effective way to allow increased density and to support transit. These policies focus on reducing or limiting the amount of parking that is required and encourage efficient use of the parking. Examples of this approach which are relevant to urban neighborhoods and city centers include:

- Reduced Parking Requirements
- TOD Friendly Parking Requirements
- Parking Maximums
- Shared Parking

## 3. Parking Pricing

Pricing has long been recognized as the most powerful parking management tool. Effective pricing policies can be used to discourage commuter parking in key locations and increase customer access to convenient short term parking supplies. Revenues from parking can be used to fund transit supportive parking and transportation improvements. A broad range of pricing policies are available for application in city centers/urban neighborhoods:

- On-street Parking Pricing
- Variable Rate Parking Pricing
- Coordinated Off-street and On-street Pricing
- Unbundled Parking
- Parking Cash-Out

## 4. Parking Management Strategies

Information is a key element of parking management. Effective management of the parking supply and pricing requires access to accurate data defining existing and historic parking characteristics. Research has also shown that consumers respond well to new parking technologies which provide them with information about parking and make paying for parking more convenient. The types of strategies include:

- Parking Payment Technology
- Parking Database
- Real-time Parking Information

## 5. Parking Districts

A parking district is a tool which supports the development of parking and transportation improvements within a given area. Recently it has been shown that property owners, businesses, and residents are very supportive of programs designed to return revenues from parking back to the district in which they were collected as a means of making desired improvements to the area. Three basic types of districts exist:

- Assessment Districts
- Revenue Districts
- Residential Permit Parking

## 6. Parking Financing

There are many tools and methods available to finance the development of parking and parking related transportation improvements. These include:

- In-Lieu Fees
- Risk Fund
- Parking Occupancy Tax
- Parking Tax by Space
- Tax Exemptions and Variable Rate Tax

Within urban settings, there exist neighborhoods that are well integrated with key transit providers and direct connections to an urban downtown. As such, these areas that are served by rail transit or provide good bus connections to nearby rail transit are identified as urban neighborhoods.

City centers and urban neighborhoods are served by vehicles, transit, and pedestrian systems. The neighborhood's built environment is defined by a mix of land use types whose collective synergy promotes one another to create a livable environment.

Potential policies that can be applied to city center/urban neighborhoods are listed below.

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# Transit-Oriented Development



## PARKING STUDY

# Effectiveness: A Quick Look at Major Strategies

Different parking policies have a range of effectiveness on parking demand depending on various local factors such as mix of land uses, degree of mode choice, development density and the cost of parking versus other modes in the area. The table to the left summarizes the potential effectiveness of various parking policies and additional factors that should be considered prior to their selection. It is difficult to generalize about the effectiveness of various parking policies and programs in terms of their ability to reduce parking demand.

Before and after studies are seldom available. In addition, the effectiveness of the policies and programs is highly dependent upon the particular context — for example, pricing parking can be highly effective in a location of high demand, or quite ineffective in a lower demand situation or one with high levels of free parking close by. That being said, from the limited information available, this table summarizes the relative effectiveness of the major types of smart growth supportive parking policies and programs. Note that these programs work best when combined, and customized to the particular setting.

Policy/Program	Potential Effectiveness (percent reduction in demand)	Comments
Parking Pricing	<b>HIGH</b> TYPICALLY 5-30% Depending on the amount of the parking fee and the surrounding/controls on parking	Pricing is known as the most effective way to manage parking demand. There are a number of specific approaches to address different settings.
Shared Parking	<b>MEDIUM/HIGH</b> TYPICALLY 10-20% Depending on the mix of land uses and parking demand in relatively close proximity	Shared parking reductions can be readily calculated once the actual land use types are known
Reduced Parking Requirements	<b>MEDIUM</b> TYPICALLY 10-15% Depending on how close the requirements are to actual demand rates	Reduces the supply, which in turn may reduce demand, or reflect a lower demand, especially adjacent to transit or combined with shared parking and pricing.
Unbundling and Cash-Out Options	<b>MEDIUM</b> TYPICALLY 10-15% Depending on the price demand and convenience of parking in the area	This is really a variation of parking pricing and is quite effective. Can be used in both residential and work environments.
Transit Passes and Incentives	<b>MEDIUM/LOW</b> TYPICALLY 5-10% Depending on how close the requirements are to actual demand rates. Depends on transit access + relative convenience between transit and destinations + price/income levels	The cost-effectiveness of these measures appears to be very high for development immediately adjacent to transit stations/corridors.
Car Sharing	<b>LOW</b> TYPICALLY 3-5% Depending on the auto-ownership levels, density and level of mixed use development in the area, and transit quality	Car sharing supports lower household auto ownership rates, transit and other parking policies. It may indirectly contribute to higher reductions in demand.

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### Parking Policies Under Review Nationally and Locally

1. Much of the classic literature on parking is oriented towards free, auto-dependent suburban land uses.
2. Cities seeking to develop new parking policies and programs have a number of technical resources available to them. However, many of the resources offer limited and confusing information for cities seeking to modify their parking requirements or to develop other parking management policies.
3. Cities tend to copy the parking requirements adopted by their neighbors and other peer cities rather than invest the major effort required to develop requirements that are truly relevant to the city's characteristics and goals.
4. Most cities have a one-size-fits-all uniform parking requirement which covers the entire city. Parking requirements in these cities do not change with density and transit availability, which inhibits TOD in those areas which have good levels of transit access.
5. Many cities have already adopted policies and programs specifically designed to promote smart growth and TOD, but have not been able to implement these policies.
6. Widely held concepts of land use and parking are hard to displace. Any successful effort to adopt progressive parking policies must address the numerous concerns of the various stakeholder groups and the political decision makers.
7. Because many cities have already taken the steps to adopt progressive parking management policies and measures, the other cities can benefit directly from their experience. The perceived risks of being a pioneering community can be diminished through sharing of experiences and information, which is one of the key objectives of this project.



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### Transit/TOD Supportive Policies

Transit improvements and incentives help reduce parking demand and create viable alternative modes in areas trying to implement parking management and pricing programs.

Downtowns and town centers with high-quality transit benefit greatly by using transit as a resource in-lieu of parking spaces. This can result in a reduction of parking demand that, combined with transit use and pedestrian improvements, creates a more vibrant, walkable area.

#### Transit Incentive Programs

Transit Incentive programs vary from passive and indirect to planned under an overall strategy mandated through local ordinance, law or promulgated rulemaking. Although broadly considered as part of Transportation Demand Management actions, incentive programs are generally implemented at the local level by transit providers (bus passes, fare free zones, fare discounts to seniors, school kids, etc.), individual employers or through TMAs, and through special user-side subsidies from social service agencies or school districts. The most common incentive is a pass program. In areas with a parking shortage, group discount pass programs may reduce parking demand, shifting commuters and residents from driving alone to transit.

#### Carsharing

Carsharing programs provide participants with access to a fleet of centrally owned and maintained vehicles located near residences, workplaces, or transit hubs. Members typically reserve shared vehicles for a specific timeframe and pay for use through some combination of hourly, overhead, and mileage based rates. Implementation of carsharing offers compelling parking management benefits. First, by distributing the fixed costs of car ownership into the marginal cost of every trip made, carsharing reduces the total number of trips made by participants. Second, by offering an alternative to individual car ownership, carsharing programs have helped participants eliminate one or more existing household vehicles, contributing to lower auto ownership rates.



#### TOD Friendly Parking Design

Good design features greatly improve the impact of parking garages on the community and the environment. Street alignment and wrapping with retail supports a lively pedestrian realm.

Shared parking between transit stations and other uses — entertainment, retail, office and residential — provides significant potential benefits. Good design can reduce the impact on the environment through techniques such as permeable paving, landscaping and innovative storm water management.

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# Transit-Oriented Development

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### Transit/TOD Supportive Policies

#### Transit Supportive Zoning/Transit Overlay Zones

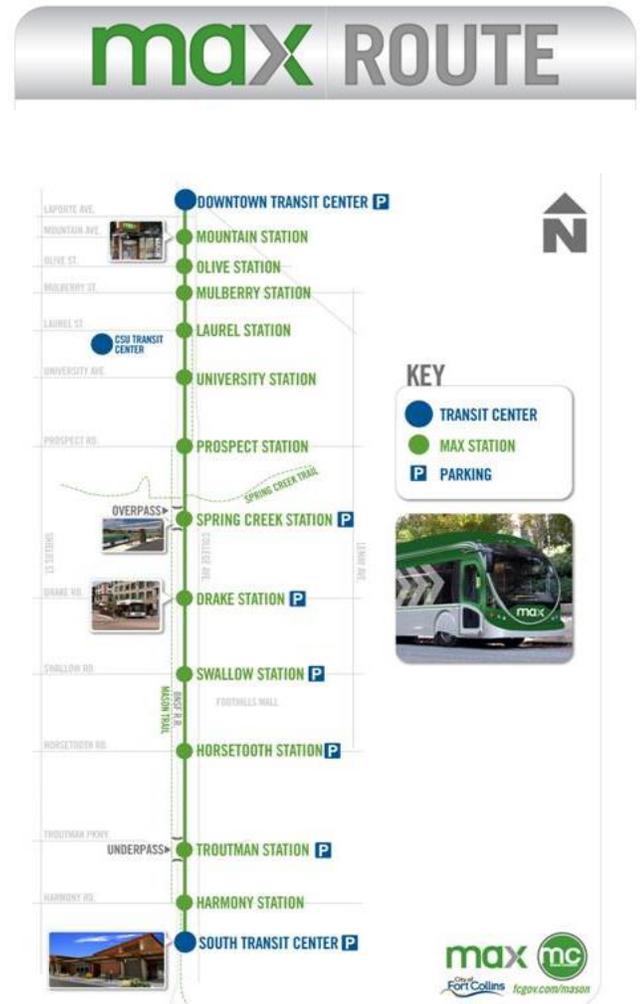
Transit can also be supported by the use of transit supportive zoning and overlay zones. In a transit overlay zone, cities modify the underlying zoning regulations to ensure that development encourages greater transit use and supports efficient transit service. For example, the Transit Overlay Zone in the City of Mountain View allows for the creation of corporate neighborhoods that are integrated with a new light rail station.

TOD and Transit Overlay Zones allow for more density while reducing parking requirements. It is directly linked to transit incentives (employer or other sponsored bus passes). New developments, at a minimum, must meet existing peak hour transit mode split through the use of TDM actions, allowing shared parking use and granting density bonuses for certain uses or developments.

#### Walkability and Wayfinding

Walkable and bike-able environments are key to developing vibrant downtowns, city centers, and transit neighborhoods. In areas around transit stations, people walk for half of their close destinations. Better pedestrian environments are key to encouraging walking. *Pedestrian District Studies* are designed to assist local jurisdictions in defining the types and costs of pedestrian facilities that have the greatest impact on improving the pedestrian environment.

Bicycle accessibility is strengthened by explicit connections local and regional bicycle facilities; good signage is key.



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# Transit-Oriented Development PARKING STUDY



## Transit Oriented Development & Transit Station Area Design Principles

### Land Use and Development

Concentrate a mix of complementary, well-integrated land uses within walking distance of the transit station.

#### Mixture of Complementary Transit-Supportive Uses

- Provide a range of higher intensity uses including residential, office, retail and civic uses.
- Disallow automobile-dependent uses.
- Provide uses that attract/generate pedestrian activity.
- Consider locating special traffic generators, such as stadiums or colleges, adjacent or within station areas.
- Encourage multi-use developments.
- Encourage a mixture of housing types.
- Preserve and protect existing stable neighborhoods.
- Encourage development of workforce/ affordable housing.
- Encourage upgrading of existing uses to make them more pedestrian friendly.

#### Increase Land Use Intensity

- Encourage higher densities for new development near the transit stations, with lower densities adjacent to existing single-family neighborhoods.
- Ensure minimum densities for new residential development within 1/4 mile walk from a transit station are 20 units per acre or greater, where appropriate.
- Ensure non-residential intensities within 1/4 mile walk from a transit station will be, at a minimum, 0.75 FAR, where appropriate.
- Allow lesser intensities or densities for new development, if necessary, to preserve existing structures, character, neighborhoods, or to mitigate traffic impacts.

### Mobility Management

Enhance the existing transportation network to promote good walking, bicycle, parking and transit connections.

#### Pedestrian & Bicycle System

- Provide an extensive pedestrian system throughout the station area to minimize walking distances.
- Eliminate gaps in the station area pedestrian networks.
- Establish pedestrian and bicycle connections `between station areas `and surrounding `neighborhoods.
- Design the pedestrian `system to be accessible, `safe, and attractive for `all users.
- Ensure that the pedestrian network will accommodate large groups of pedestrians.
- Utilize planting strips/street trees, on-street parking, and/or bicycle lanes to separate pedestrians from vehicles.
- Encourage the provision of bicycle amenities, especially bicycle parking.

#### Street Network

- Design streets to be multi-modal, with emphasis on pedestrian and bicycle circulation.
- Redesign existing street intersections, with a greater emphasis on pedestrian and bicycle crossing.
- Develop an interconnected street network designed around a block system, with blocks a maximum length of 400'.
- Ensure that the pedestrian network will accommodate large groups of pedestrians comfortably.
- Consider new mid-block street crosswalks.
- Incorporated traffic calming into the design of new streets.
- Consider landscaped "bulb-outs" at intersections to improve sight distances.

#### Parking & Transportation Demand Mgmt.

- Reduce parking requirements over time in station areas and establish parking maximums.
- Minimize large surface parking lots for private development.
- Encourage shared parking facilities.
- Encourage the development of integrated access management strategies.
- Build in TDM strategies complement parking and transit programs.
- Promote "unbundling" of parking.
- Promote "Car Sharing" programs.
- Tie parking to overall district management.
- Effectively manage on-street parking .
- Provide effective parking and transportation information and wayfinding.

### Community Design

Use urban design to enhance the community identity of station areas and to make them attractive, safe and convenient places.

#### Building & Site Design

- Design buildings to front on public streets or on open spaces, with windows and doors at street level.
- Locate building entrances to minimize walking distance between the transit station and the buildings.
- Located surface parking to the rear of the buildings.
- Design parking structures to include active uses on the ground floor street frontage.
- Limit building heights to 120', with the tallest and most intensely developed structures located near the transit station.
- Screen unsightly elements, such as dumpsters, loading docks, service entrances, and outdoor storage.
- Take safety and security concerns into account during design.

#### Streetscape

- Design the streetscape to encourage pedestrian activity.
- Include elements such as street trees, pedestrian-scale lighting, and benches in streetscape design.
- Place utilities underground whenever possible.

#### Open Space

- Establish public open spaces around transit stations.
- Design open spaces to be centers of activity.
- Orient surrounding buildings onto the open spaces.

