

**USING TRANSIT-ORIENTED DEVELOPMENT TO CREATE  
ECONOMIC VIBRANCY IN NEIGHBORHOODS**

*A Guide for Elected and Appointed Officials in Michigan*

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## **ABOUT MICHIGAN'S GOLDEN SPIKE**

Michigan's Golden Spike is a transit-oriented development (TOD) initiative focused on southeast Michigan's key transportation corridors. It is a collaborative effort between the Michigan Suburbs Alliance, Michigan Environmental Council, and Tourism and Economic Development Council and is funded by a grant from the People and Land program of the W.K. Kellogg Foundation.

On May 10, 1869, the Central and Union Pacific Railroad systems were united with the symbolic anchoring of a final golden spike to represent the economic prosperity to come from this linkage. Today, we are using this same metaphor for innovative neighborhood planning as an anchor for economic recovery and community vitality.

TOD neighborhood planning is about making ideal locations to live, work, shop and play. Through strategic collaboration among municipal leaders, commercial interests, citizen advocates and planners, we can make this vision a reality.

This opportunity is Michigan's Golden Spike.

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## INTRODUCTION

TOD is an approach to community planning and development focused on compact, walkable, mixed-use districts with easy access to public transportation. It accomplishes this by integrating development with public investment in transportation systems. Core TOD principles include: locating community assets within a diverse, pedestrian-friendly environment; providing convenient access to effective public transit stops; and mixing land uses and housing types to provide variety and support for civic structures and community spaces in a strong, community-based design.

TOD has led to impressive economic growth in other parts of the country and it can provide a similar spark for private investment in southeast Michigan. While this investment will be catalyzed most effectively by a robust, multi-modal regional transit system, community leaders should not wait until such a system is being built to begin reform. Cities that embrace TOD planning policies will encourage development of vibrant public places and downtowns, the type of development that will be successful even without transit. Walkable urban districts such as Ferndale, Ann Arbor and downtown Detroit are some of the most successful areas in Michigan. They are also well-prepared for future investments in transit, because they have the population density and mixture of uses to serve as hubs of activity.

As plans for regional transit advance, it is critical that local leaders adopt tools and strategies to ensure that public spending leads to increased private investment. Many of these tools already exist and can be applied by communities willing to examine and amend existing planning and land use regulations to smooth the way for TOD. This report provides definitions, case studies and a regulatory framework that elected and appointed officials can adapt to their own city's needs.

## TOD DEFINED

TOD creates a built environment that maximizes access to, and ridership of, transit. It includes a mixture of uses, including commercial, office and residential, within walking distance of transit stops.

Development density is generally higher near stations and progressively decreases at further distances.

One example of TOD, discussed in more detail in the case studies section, is Mockingbird Station in Dallas, Texas. In this case a vacant warehouse was converted into loft-style apartments and an eight-story office complex, movie theater and retail mall were constructed around a light rail station. However, TOD does not always have to be so massive in scale. Cities such as Ypsilanti and Wayne that already have pockets of pedestrian-friendly mixed-use development can balance historic preservation with TOD by gradually scaling up the density at appropriate sites while maintaining the existing character of the area. TOD also does not have to be built around rail. The Overlake Station case study presents an example of bus-oriented development, which may be more appropriate for some Michigan communities in the short term. TOD is highly case-sensitive. Communities can integrate TOD into their existing development strategies by focusing on the following principles:

- **Location Efficiency:** Compact in size, pedestrian-friendly in design, customized to offer a wide variety of housing options, with convenient access to services, jobs, and plenty of ways to get around without an automobile
- **Mix of Choices:** Mixed land-uses, such as residential, office, shopping, civic uses and entertainment within easy walking distance of transportation
- **Place-Making:** Thoughtfully designed community spaces, such as plazas and public buildings, as well as unique private buildings designed to create a special sense of place

- **Captured Value:** Increased property values and economic activity, as well as increased ridership for the transit agency, lead to increased government and private sector revenues
- **Balanced Regional and Local Identity:** A transit-oriented community increases connections to its neighbors through the regional transit system, as along with becoming a distinct place with its own unique redevelopment strategies

It is important to define TOD as a place, not just a stop on a transit line. A creative way to achieve this balance is the TOD Typology (see TOD Assessment Toolkit appendix) developed by the Center for Transit Oriented Development, which suggests development guidelines for six different kinds of communities. It recommends certain density and design standards that augment transit ridership, while allowing each community to integrate local development values into its unique urban fabric.

## **THE REGIONAL NEED FOR TOD**

Most public transportation capital investment is heavily subsidized by the federal government, through the New Starts program, and the more riders that a system can project through modeling the better chance it has to receive funding. Currently no modeling can make up for the lack of appropriate land use planning around projected stations, even if future growth is predicted after construction of the transit system. From the perspective of the federal government, southeast Michigan lacks three crucial elements:

- An existing system to test routes and ridership;
- Dedicated transit funding at the state and regional levels; and
- Appropriate population densities to support a transit system.

The first two flaws are beyond the scope of TOD, but the third can be effectively addressed by reforming planning and zoning regulations and encouraging denser, pedestrian-friendly development in select locations along potential transit corridors. This is how TOD can help fund transit, creating an upward spiral of value creation.

## **WHAT WOULD TOD LOOK LIKE IN SOUTHEAST MICHIGAN?**

Despite the depressed real estate market in the state, urban living has enjoyed increasing popularity throughout the region in recent years. Condominium development, often with retail or office space in the same building, has exploded in downtowns like Royal Oak and Dearborn. Mixed-use lifestyle malls, which integrate residential units rather than keeping uses separate, are surpassing traditional shopping centers in distant suburbs like Novi and Brighton. These types of projects, if agglomerated in close proximity to one another and connected by pedestrian-friendly infrastructure, could be transit-oriented.

In Ann Arbor, a TOD project has been proposed that would change the City's skyline. Capitalizing on the successful bus system run by the Ann Arbor Transportation Authority (AATA), private and public entities are planning to partner to build two mixed-use towers, up to 14 stories high, atop a redeveloped central bus station that would be integrated into the buildings' ground floors. Uses would include retail, office and both low-income and market-rate housing. The City's central public library, post office and business district, as well as the University of Michigan's central campus, are all within walking distance of the site.

TOD need not be new and dramatic - it can also be adapted to sensitive historic areas. For example, Ypsilanti's Depot Town already has a retail and entertainment district as well as recreational amenities and a walkable scale. Redevelopment of existing industrial facilities, such as the city's old train depot and freight house or other underutilized historic structures near the rail line, would provide significant additional residential density to support a station without adding new buildings that disrupt the district's character.

The modes and level of investment in mass transit will also play a critical role in shaping and supporting TOD. There are existing high-volume bus routes and stations that could serve as TOD hubs. Many other cities in the region have bus transit centers, like Ann Arbor's, that serve hundreds to thousands of riders everyday. There are also several corridors where an expansion of transit investment is being contemplated, planned or tested. Communities in these areas should not wait for transit to arrive, but should begin making preparation for its arrival to ensure they are ready to take full advantage of this opportunity when it does arrive. Key targets include the Ann Arbor to Detroit corridor, the Woodward Avenue corridor, the north-south railway connecting Ann Arbor to Livingston County and the proposed Aerotropolis project.

## **BENEFITS OF TOD**

### **Increasing Prosperity**

TOD allows municipal governments to capture more value from the surging national housing market for dense urban living, particularly near transit stops. The Center for Transit Oriented Development projects that 16 million households will prefer transit accessibility in 2030, compared to the six million households that currently live near transit.<sup>i</sup> Urban living has become increasingly popular among young, college-educated individuals – the demographic every city is trying to attract. Research shows 25 to 34 year olds are 30 percent more likely than other Americans to live in or near a city's downtown.<sup>ii</sup> This increase in demand could be a huge boon for southeast Michigan's older urban communities that are currently battling dwindling tax revenues, an exodus of residents and businesses and rising costs. Underutilized properties in cities can be redeveloped into mixed-use buildings that raise taxable value and attract new residents and workers.

By implementing TOD, cities can also benefit from the additional household income reduced automobile dependence frees up for their residents. Easy access to public transportation, as well as businesses and other destinations within walking or biking distance, reduces the estimated \$6,312 that the average U.S. citizen spends on transportation annually.<sup>iii</sup> The savings can translate into increased ability to afford housing and more disposable income to spend locally.

### **Supporting Transit**

TOD can increase transit ridership. Transit agencies such as AATA, the Suburban Mobility Authority for Regional Transportation (SMART) and the Detroit Department of Transportation could then see an increase in their farebox returns. Proper land use planning can increase transit use dramatically. Research has shown that 45 percent of workers in TOD zones commute using transit or non-motorized transportation compared to just 14 percent of commuters in areas with transit, but no TOD planning.<sup>iv</sup>

## **Protecting the Environment**

By refocusing growth in urban cores, TOD reduces the environmental harms of suburban sprawl, which include increased air pollution, destruction of animal habitats and agricultural land and greenhouse gas emissions. The US Department of Transportation reports that more than 50 percent of the total increase in driving in the US from 1983 to 1990 was related directly to sprawl.<sup>v</sup> As communities become more automobile-dependent, fossil fuel consumption increases. Despite fuel efficiency improvements, gasoline consumption increased by 53 percent between 1970 and 1998.<sup>vi</sup> One study of a proposed TOD in Atlanta predicts that vehicle miles traveled generated by the project would be less than half of those created by the same project if it were located at the urban fringe. The California Department of Transportation estimates that TOD can reduce greenhouse gas emissions by 2.5 to 3.7 tons per year for each household.<sup>vii</sup>

## **CASE STUDIES**

TOD is extremely context-sensitive, but the following case studies show a variety of approaches different communities have taken, with mixed results. Each Michigan city will need to make its own difficult choices on how to make change, but these examples can serve as a guide. Additional case studies and resources can be accessed through MichiganTOD.org.

### **Village at Overlake Station**

*Redmond, Washington*

Redmond leaders struggled to provide access to jobs for the city's low-to-middle income population. Although there were several major employers near the bus transit facility, there was no housing. In 2001, King County, led by its transit and housing authorities, struck upon a creative solution by sponsoring a 308-unit apartment development atop the Overlake Bus Transit Center. The site includes a daycare facility and a small park and ride lot. City officials adopted zoning regulations designed to encourage this type of development and have worked with the private sector to implement their vision. The King County Department of Transportation estimates ridership tripled in the first two years after project completion.

Lessons Learned:

1. Bus transit offers sufficient density for TOD, especially when integrated with a regional redevelopment strategy
2. TOD can link residents with job opportunities and affordable housing

### **Mockingbird Station**

*Dallas, Texas*

The Dallas-Fort Worth region is historically automobile-dependent, much like southeast Michigan. However it has seen unprecedented transit-oriented private investment in recent years since the launch of the Dallas Area Rapid Transit light rail system in the mid-1990s. The total value of investment along light rail corridors between 1997 and 2001 is estimated at \$3.3 billion. Mockingbird Station alone has garnered approximately \$270 million.<sup>viii</sup> More than 200 loft-style apartments are integrated with an eight-story office complex and several retail and entertainment venues including an eight-screen movie complex. Dallas has a flexible zoning code that allows for several different kinds of mixed-use districts. Notably, the city does not require parking for developments near transit stations in central business districts and only requires a site review process for parking in other cases.<sup>ix</sup>

Lessons Learned:

1. TOD policies can catalyze major private investments
2. TOD can be economically and socially successful even in a region that has been traditionally dominated by automobile-dependent planning and uses

## **Denver, Colorado Region**

Metropolitan Denver boasts the most extensive TOD strategic planning process in the nation, coordinated between the City of Denver, the regional transit agency, the metropolitan planning organization and all of the participating local governments. To implement the specifics of the strategic plan the City of Denver chose to focus on the TOD typology matrix developed by the Center for Transit Oriented Development (see the TOD Assessment Toolkit appendix). Its principles are also integrated into a mixed-use zoning code, which permits a floor-area ratio of five and allows for building heights of up to 220 feet near transit stations.<sup>x</sup>

### Lessons Learned:

1. A long-term regional vision can ease the process of planning TOD
2. Intergovernmental cooperation is key to successful implementation

## **Barrio Logan**

*San Diego, California*

The San Diego Metropolitan Transit Development Board adopted a TOD strategic plan in 2002 that called for walkable communities, more recreational spaces and affordable housing. One area of focus was Barrio Logan, a mostly poor Hispanic neighborhood sandwiched in between a major highway bridge and the San Diego port. The proposed TOD was 133-acres including a multi-family affordable apartment complex and a major retail center. The apartment complex was successfully developed. It includes job training, Head Start and small business assistance centers. However, the retail section of the project, planned for the middle of the site, did not find the same success. The developer was a traditional suburban strip mall developer and his vision was incompatible with the goals of the community. Although the City had TOD plans, it had yet to adopt any TOD ordinances, so the community's vision was optional. The dispute could not be resolved and the planned retail site remained vacant.

### Lessons Learned:

1. Community vision documents and plans should become part of the zoning ordinance
2. Implementation guidelines should be built into the planning process
3. Developers should be chosen or engaged carefully
4. Municipalities should take an active role in planning specific projects

## **Lindbergh City Center**

*Atlanta, Georgia*

In the early 1990s, BellSouth collaborated with the Metropolitan Atlanta Rapid Transit Authority and a private developer to plan its new consolidated headquarters in downtown Atlanta around the Lindbergh Station. It includes more than one million square feet of office space and over 13,000 parking spaces. Although the plan also incorporated housing designed to fit an urban paradigm, the development currently lacks many of the hallmarks of TOD. It is situated between railroad tracks and two major freeways. Without the appropriate design features to alleviate these problems, like pedestrian and bike bridges, the buildings are cut off from surrounding neighborhoods. The extensive parking included evokes the image of a suburban office park mistakenly placed in an urban environment. The project also lacks other land uses to complement the office towers.

### Lessons Learned:

1. City leaders and neighboring communities should be involved in the planning of large TOD
2. Parking requirements should be identified early and dealt with creatively
3. Urban TOD generally starts with entertainment and housing development - a project that begins with office development must incorporate a long-term mixed-use development strategy
4. TOD plans should include pedestrian access to surrounding areas

## PLANNING AND ZONING FRAMEWORK

While TOD is possible within the zoning structure of most southeast Michigan cities, reforming policies and plans will make TOD easier and incorporate its values into each community's vision. The exact allowable density, parking regulations and design standards will vary from city to city, depending on the community and its existing standards. This section is intended to suggest a general framework for change. More detailed assessment tools are included in the TOD Assessment Toolkit appendix.

### **Mixed Use**

Transit-oriented development is most successful in mixed-use communities. For the appropriate amount of foot traffic, local regulations should allow for a variety of land uses within a TOD district. Common projects include urban condominiums with the ground floor zoned for retail or commercial and the top floors zoned for multi-family residential and office. Mixed-use zoning should allow the full range of desirable uses by right. Uses that will not generate pedestrian activity should be discouraged from ground floor locations on major streets in walkable districts.<sup>xi</sup> Mixed use regulations should also address the inclusion of civic or open space. Parks, fountains, public squares and community centers are the hallmarks of distinct places in an urban fabric. Often their construction or preservation can be tied into an incentive program for a developer. For example, a municipality could increase the allowable density of a project or lower parking requirements if a developer agrees to build or enhance an urban public space or preserve non-adjacent open space in less developed portions of the municipality.

### **Parking Flexibility**

Most southeast Michigan municipalities have unnecessarily strict parking regulations. Many require one or more parking spaces per person at the maximum building occupancy. These regulations often lead to a sea of empty surface parking lots in the middle of commercial districts. For example, Detroit is almost 60 percent surface parking lots and vacant land. These parcels are prime sites for redevelopment. For TOD to take hold, parking regulations often need to be amended or eliminated.

#### *Strategies for Increasing Parking Flexibility*

1. Assess current parking facilities and their use
2. Eliminate or reduce parking requirements near transit facilities and TOD districts through zoning incentives
3. Require parking to be placed behind buildings
4. Change design standards to fit more parked vehicles on roads and in existing parking structures
5. Provide shuttle services to bring people into the downtown areas
6. Eliminate free parking in business districts
7. Encourage shared parking between adjacent facilities and their users at different times of day
8. Allow developers to avoid parking requirements in exchange for supporting other forms of transportation, such as providing transit passes for residents or employees
9. Change parking minimums to parking maximums, and let developers decide how they want to use the land
10. Provide car-sharing services

## Density

Increasing density is often contentious in land use planning discussion. While it is necessary to increase density to facilitate transit ridership and TOD, standards must be adapted to each unique municipal situation. For example, a density of 50 residential units per acre may be appropriate in downtown Detroit, but inappropriate in Ypsilanti's Depot Town. The rule of thumb is that TOD generally requires at least seven units per acre in residential areas and 25 employees per acre in commercial centers for bus transit. Double those densities are necessary for premium quality transit, such as rail service.<sup>xiii</sup> Also, a floor-area ratio of one or more is preferred. Once again, this can be assessed on a community-by-community basis using the TOD typology and the zoning checklist in the TOD Assessment Toolkit appendix.

Higher densities, however, are not necessarily incompatible with existing community character. Single family detached home neighborhoods can easily reach densities of 12 or 13 units per acre, while four-story brownstones can result in neighborhoods of double or triple that. Careful community planning can provide high-quality neighborhoods with sufficient density to support transit within the context of any southeast Michigan city.

## Design Guidelines

For TOD to take hold in an area, buildings and infrastructure need to be oriented towards pedestrians. Development that will not generate pedestrian activity should be discouraged from ground floor locations on major streets in walkable districts.<sup>xiii</sup> Many communities have taken a proactive approach to insuring pedestrian orientation of TOD. The City of Austin, Texas has listed auto-dependent uses, like drive-through businesses and car dealerships, as prohibited within a quarter-mile of transit stations.<sup>xiv</sup> Restricting these types of development while simultaneously encouraging pedestrian-friendly design sends a clear message about the community's vision for the district.

There are several standards for pedestrian accessibility that cities can adopt. One of the best guides to these standards is the Smart Growth Network's *Pedestrian and Transit-Friendly Design: A Primer for Smart Growth*. The list below is drawn from that resource.

### *Pedestrian and Transit-Friendly Design Standards*

1. Two-to-four lane streets with multi-modal capabilities
2. Grid or traditional street pattern
3. Two-way streets with boulevards
4. Continuous wide sidewalks (10 to 25 feet depending on context)
5. Well-lit and defined road crossings
6. Buffers separating pedestrians from automobile traffic using trees, on-street parking and dedicated bike or transit lanes
7. Quality parks, squares and other public spaces
8. Activated sidewalks with ground-level retail with large, interesting windows
9. Destination objects, such as sculptures and fountains
10. Pedestrian-level signage and way-finding
11. No pedestrian dead zones created by ground-level parking or large windowless buildings
12. Frequent spots to rest and linger on benches or planters

## **Incentives**

Developer incentives can be a contentious and complicated subject, but they help to show a wary potential investor that a community is serious about revitalization in a TOD framework. They are also a way for cities to achieve preferred design goals without making them mandatory.

### *Possible TOD Incentives*

1. Density allowance bonuses
2. Parking requirement waivers
3. Property tax abatements
4. Location-efficient mortgages
5. Transportation enhancement grants
6. Tax increment financing
7. Public-private financing partnerships

## **IMPLEMENTATION RECOMMENDATIONS**

Full integration of TOD best practices is a long-term, complicated process. However, many southeast Michigan cities have urban cores that could serve as the basis for some positive changes in the short term. The following list of recommendations includes relatively achievable first steps that will encourage economically beneficial redevelopment that will help set the stage for regional mass transit.

1. Assess the actual use of parking and set parking maximums instead of minimums that can be met through shared parking, on-street parking or flexible policy innovations
2. Improve community walkability by increasing the safety and attractiveness of pedestrian amenities and design standards
3. Identify and catalogue vacant, obsolete and brownfield sites in accessible locations that are in need of development and could be potential targets for state and federal incentive programs
4. Adopt simple density and mixed use regulations, like allowing accessory dwelling units, density bonuses and planned unit developments
5. Examine the service provided by the existing transit system and determine if current land use regulations are taking appropriate advantage of it, particularly in more heavily transit-dependent communities
6. Start a TOD visioning process that includes educational components for citizens and government officials
7. Review your existing ordinances using the zoning checklist in the TOD Assessment Toolkit appendix

## **APPENDIX I: GLOSSARY**

### **Affordable housing**

Housing that results in annual costs less than 30 percent of the residents' gross income

### **Automobile-dependent/oriented**

development pattern which is difficult to navigate without a personal automobile

### **Brownfield**

abandoned property that may be polluted, blighted or functionally obsolete

### **Floor-Area Ratio (FAR)**

Ratio of total floor area of all levels of a building to the area of the parcel of land it sits on

### **Mixed-Use**

A building or district which hosts multiple integrated land uses, such as residential, office and retail

### **Multimodal**

Transportation system that includes more than one type of transportation, such as biking, walking, rail and automobiles

### **Public Transportation/Transit**

Transportation using shared vehicles, primarily understood to mean rail or bus

### **Smart Growth**

Planning and development movement that prioritizes growth in existing cities and developed communities over new development in rural or low-density areas

### **Sprawl**

low-density development spreading out from the fringe of the urban area

### **TOD**

Transit-oriented development, a physical development pattern that maximizes access to, and ridership of, transit

### **Vehicle Miles Traveled (VMT)**

Total miles traveled by all vehicles accessing a particular city, area or development

### **Walkable/Pedestrian-friendly/Pedestrian-oriented**

Development that encourages pedestrian accessibility and an active street life through density, a mixture of land uses and quality infrastructure

### **Walking distance**

Five to ten minute walk, between one-quarter and one-half mile

## APPENDIX II: TOD ASSESSMENT TOOLKIT

### Center for Transit Oriented Development Typology

| TOD Typology                          | Desired Land Use Mix                                       | Desired Housing Types                              | Commercial/ Employment Types   | Proposed Scale      | Transit System Function  |
|---------------------------------------|--|--|--|---------------------|--|
| <b>Downtown</b>                       | Office, residential, retail, entertainment, and civic uses | Multi-family and loft                              | Prime office and shopping location   | 5 stories and above | <b>Intermodal facility/transit hub.</b> Major regional destination with high quality feeder bus/streetcar connections  |
| <b>Major Urban Center</b>             | Office, retail, residential and entertainment              | Multi-family and townhome                          | Employment emphasis, with more than 250,000 sf office and 50,000 sf retail | 5 stories and above | <b>Sub-Regional destination.</b> Some Park-n-ride. Linked with district circulator transit and express feeder bus      |
| <b>Urban Center</b>                   | Residential, retail and office                             | Multi-family and townhome                          | Limited office Less than 250,000 sf office. More than 50,000 sf retail     | 3 stories and above | <b>Sub-Regional destination.</b> Some Park-n-ride. Linked with district circulator transit and express feeder bus      |
| <b>Urban Neighborhood</b>             | Residential, neighborhood retail                           | Multi-family, townhome and small lot single family | Local-serving retail. No more than 50,000 sf                               | 2-7 stories         | <b>Neighborhood walk-up station.</b> Very small park-and-ride, if any. Local and express bus connections               |
| <b>Commuter Town Center</b>           | Office, retail, residential                                | Multi-family, townhome, small lot single-family    | Local and commuter-serving. No more than 25,000 sf                         | 2-7 stories         | <b>Capture station for in-bound commuters.</b> Large park-n-ride   |
| <b>Campus/ Special Events Station</b> | University Campus, Sports Facilities                       | Limited multi-family                               | Limited office/retail varies   |                     | <b>Large Commuter destination.</b> Large park-n-ride   |
| <b>Main Street</b>                    | Residential, neighborhood retail                           | Multi-family                                       | Main street retail infill  | 2-7 stories         | <b>Bus or streetcar corridors.</b> District circulator or feeder transit service.... Walk-up stops. No transit parking |

Source: Denver TOD Strategic Plan, <http://www.denvergov.org/TOD/template325670.asp?cview=2>

## **Zoning Checklist**

The purpose of this checklist is to provide framework for municipal planning officials to do a gap analysis of their zoning ordinance in terms of Transit Oriented Development (TOD).

Municipalities also need to be able to define TOD in terms of their specific mode of transit. The checklist notes recommendations that are mode-specific.

Finally, it should be noted that the every TOD is unique. So while this checklist reviews general standards of TOD there needs to be a more significant review of the on-the-ground situation and general planning policy for a municipality to truly integrate TOD into its land-use planning.

These zoning changes should be considered within walking distance of transit stations or within a designated TOD district

### **Development Density**

- Residential density (10 – 20 units per acre for bus, 20 to 60 for rail)
- Commercial density (50 employees per acre)
- Floor-area ratio (one at minimum, maximum depends on existing urban form)
- Accessory dwelling units

### **Land Use Flexibility**

- Encourage mixed-use development
- Limit automobile-oriented uses
- Eliminate required setbacks
- Allow for planned unit developments
- Allow for pedestrian or transit overlay zones

### **Parking Codes**

- Abatement of new required parking spaces for residential development
- In-lieu payments used for transit/pedestrian/bike infrastructure improvements
- Prohibit off-street parking between pedestrians and building frontage
- Allow shared parking to meet requirements

### **Design Standards**

- Form-based code
- Increase sidewalk width
- Curb bump-out at major crosswalks
- Pedestrian streetscaping (benches, trees, etc.)
- Pocket parks
- Pedestrian-level signage and way-finding

Also consider the following qualitative evaluations at both the site and district levels:

- Are key sites designated for transit-oriented land uses and densities?
- Is the mix of uses generating pedestrian traffic concentrated within walking distance of transit?
- Are buildings and primary entrances sited to be easily accessible from the street?
- Does the design of buildings and public spaces allow direct pedestrian movement between transit and surrounding land uses?
- Does the district's design allow for the intensification of density over time?
- Are ground-level uses active and pedestrian-oriented?
- Are amenities provided to create an interesting and enjoyable pedestrian environment along and between buildings?
- Are there sidewalks along building frontage? Do they connect to sidewalks and streets on adjacent and nearby properties?
- Are there trees sheltering streets and sidewalks?
- Is there pedestrian-scale lighting?
- Is most of the parking located to the side or to the rear of the buildings?
- Are street patterns based on a grid or other interconnected network that simplifies access?
- Are pedestrian routes buffered from fast-moving traffic and parking lots?
- Are there convenient crosswalks?
- Can residents and employees safely walk or bicycle to a store, post office, etc.?

Source: California Department of Transportation TOD Compendium  
[http://www.dot.ca.gov/hq/MassTrans/doc\\_pdf/TOD2/TODC\\_Ch1.pdf](http://www.dot.ca.gov/hq/MassTrans/doc_pdf/TOD2/TODC_Ch1.pdf)

### **APPENDIX III: MODEL ORDINANCES AND OTHER RESOURCES**

Arlington County, VA

<http://www.arlingtonva.us/Departments/CPHD/forums/columbia/current/CPHDForumsColumbiaCurrentCurrentStatus.aspx>

City of Austin, TX

[http://www.ci.austin.tx.us/development/transit\\_development.htm](http://www.ci.austin.tx.us/development/transit_development.htm)

State of California

<http://transitorienteddevelopment.dot.ca.gov/miscellaneous/NewHome.jsp>

City of Dallas

<http://www.forwarddallas.org/files/up/20061011/strat-engagemnt-plan.pdf>

City of Denver, CO

<http://www.denvergov.org/Default.aspx?alias=www.denvergov.org/TOD>

State of Georgia (Georgia Department of Community Affairs)

[http://www.dca.state.ga.us/intra\\_nonpub/Toolkit/ModelOrdinances/TODModOrd.pdf](http://www.dca.state.ga.us/intra_nonpub/Toolkit/ModelOrdinances/TODModOrd.pdf)

King County, WA

<http://www.metrokc.gov/kcdot/tod/>

State of Massachusetts

<http://www.mass.gov/?pageID=ocdsbtopic&L=3&L0=Home&L1=Transportation&L2=Transit-Oriented+Development&sid=Eocd>

City of Minneapolis, MN

<http://www.ci.minneapolis.mn.us/lrtrezoning/>

City of Phoenix, AZ

<http://phoenix.gov/PLANNING/lrtindex.html>

Portland, OR

[http://www.pdc.us/housing\\_serv/hsg\\_development/todguide.asp](http://www.pdc.us/housing_serv/hsg_development/todguide.asp)

## APPENDIX IV: ENDNOTES

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<sup>i</sup> Belzer, Dana, et. al., *Preserving and Promoting Diverse Transit-Oriented Neighborhoods*, Center for Transit Oriented Development: A collaboration of the Center for Neighborhood Technology, Reconnecting America, and Strategic Economics October 2006, [http://www.cnt.org/repository/diverseTOD\\_FullReport.pdf](http://www.cnt.org/repository/diverseTOD_FullReport.pdf)

<sup>ii</sup> CEOs for Cities report:  
<http://www.ceosforcities.org/rethink/research/files/CEOsforCitiesAttractingYoungEducatedPres2006.pdf>

<sup>iii</sup> Surface Transportation Policy Project, Driven to Spend, Chapter One: Transportation is Expensive, March 20, 2000, <http://www.transact.org/report.asp?id=41>

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<sup>vii</sup> Terry Parker and GB Arrington, Statewide Transit-Oriented Development Study: Factors for Success in California; for the California Department of Transportation; Final Report, September 2002.

<sup>viii</sup> Bernard L. Weinstein and Terry L. Clower, *The Estimated Value Of New Investment Adjacent To Dart LRT Stations: 1999-2005*, September 27, 2005, <http://www.dart.org/about/WeinsteinDARTDevelopment2005.pdf>

<sup>ix</sup> Dallas Zoning Website: [http://www.dallascityhall.com/zoning/html/transportation - transit\\_passe1.html](http://www.dallascityhall.com/zoning/html/transportation - transit_passe1.html)

<sup>x</sup> Ibid, p. 76

<sup>xi</sup> *The New Transit Town: Best Practices in Transit-Oriented Development*, eds. Hank Dittmar and Gloria Ohland (Washington: Island Press, 2003), p.70

<sup>xii</sup> “Using Public Transit to Create More Accessible and Livable Neighborhoods”, TDM Encyclopedia, Victoria Transport Policy Institute, March 7, 2007, available online at: <http://www.vtpi.org/tm/tm45.htm>

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