

PLANNING FOR TOD AT THE REGIONAL SCALE

The Big Picture



One in a series of best practices guidebooks from The Center for Transit-Oriented Development **The Center for Transit-Oriented Development** (CTOD) is the only national nonprofit effort dedicated to providing best practices, research and tools to support market-based transit-oriented development. CTOD partners with both the public and private sectors to strategize about ways to encourage the development of high-performing communities around transit stations, and to build transit systems that maximize development potential. CTOD works to integrate local and regional planning; generate new tools for economic development, real estate and investment; improve affordability and livability for all members of communities; and to respond to imperatives for climate change and sustainability. CTOD is a partnership of Reconnecting America, the Center for Neighborhood Technology, and Strategic Economics. For more information go to CTOD's website at www.ctod.org.

Reconnecting America works to create better communities — places where transportation choices make it easy to get from place to place, where businesses flourish, and where people from all walks of life can afford to live, work and visit. Reconnecting America not only conducts research and advocates for public policy, but also builds on-the-ground partnerships and convenes the players necessary to accelerate decision-making.

The Center for Neighborhood Technology is a creative think-and-do tank that combines rigorous research with effective solutions. CNT works across disciplines and issues, including transportation and community development, energy, natural resources, and climate change. The goal is urban sustainability — the more effective use of resources and assets to improve the health of natural systems and the wealth of people.

Strategic Economics is a consulting and research firm specializing in urban and regional economics and planning. The firm helps local governments, community groups, developers and nonprofit organizations understand the economic and development context in which they operate in order to take strategic steps towards creating high-quality places for people to live and work.

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This best practices guidebook is one in an ongoing series explaining the theory and best practices of transitoriented development. All books in the series are available as downloadable PDFs at http://www.reconnectingamerica.org/resource-center/books-and-reports/

Other guidebooks in the series include:

- TOD 101 Why TOD And Why Now?
- TOD 201 Mixed-Income Housing Near Transit: Increasing Affordability With Location Efficiency
- TOD 202 Station Area Planning: How To Make Great Transit-Oriented Places
- TOD 202 Transit & Employment: Increasing Transit's Share Of The Commute Trip
- TOD 203 Transit Corridors and TOD: Connecting The Dots

On the Cover: Pittsburgh skyline. Photo by John Blough/Flickr



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TRANSIT-ORIENTED DEVELOPMENT, or TOD, is typically understood to be a mix of housing, retail and/or commercial development and amenities — referred to as "mixed-use development" — in a walkable neighborhood with high-quality public transportation. To learn the basics of TOD, see the first book in this series, *TOD 101: Why TOD and Why Now?*¹

Building successful TOD requires thinking beyond the individual station and understanding the role each neighborhood and station area plays in the regional network of transit-oriented places. It also requires an understanding of the real estate market, major employment centers, and travel patterns in the region. Regional planning for successful TOD projects is really about the coordination of existing plans for growth, transit, housing and jobs, as well as programs and policies at all levels of government.

Coordinating all these TOD actors is difficult, especially when a decision that works well for one conflicts with the goals of another. Local governments often have competing priorities for TOD projects along transit corridors, and conflicts

can arise over decisions about who should lead the TOD planning process and who has authority over implementation. Land use authority, for example, typically resides with local governments, but also plays an important role in determining whether a region will increase transit ridership, reduce greenhouse gas emissions, and improve job access.

Regional TOD planning can help identify common goals and facilitate coordination among regional agencies, transit agencies, cities, counties, towns, community residents and other TOD stakeholders. Coordination and collaboration will enhance the likelihood of successful TOD by allowing stakeholders to achieve multiple goals, including high transit ridership, improved connections between people and jobs, and flourishing transit-oriented neighborhoods.





Successful TOD provides these benefits:

- reduced automobile trips and greenhouse gas emissions;
- increased transit ridership and transit agency revenues;
- the potential to increase land and property values near transit;
- improved access to jobs for household of all incomes;
- reduced infrastructure costs for cities and counties, compared to what is required to support sprawling growth;
- reduced transportation costs for residents;
- improved public health due to increased walking and biking;
- creation of a sense of community and place.





Households in the Washington DC region have low monthly transportation costs compared to the national average, due in large part to the expansive transit network and TOD projects such as the Liberty Center in Arlington, VA.

What Is "A Region"?

It Depends On Transit System Size And Service

PLANNERS DEFINE A "region" or "metropolitan area" as the built and natural environment surrounding one or several population centers with a high degree of integration and overlapping commute patterns. A region may include several towns and cities or it may be composed of one primary city and the surrounding county or unincorporated areas.

The geographic area considered during a regional TOD planning effort may or may not be the same as the U.S. Census-defined metropolitan area. Moreover, different stakeholders can define the region in different ways. In all cases, the focus area for regional TOD planning depends on the size of the regional transit network — both the existing system and planned expansions — as well as the quality (frequency, safety, reliability) of service. The size of the system and quality of service matter because the more destinations that can be reached by transit, the stronger the demand will be for intensified housing, employment and commercial development near stations. "Fixed-guideway transit" — which runs in an exclusive right-of-way — has the greatest potential to support more intense development. A secondary network of bus corridors extends the reach of the fixed-guideway system and increases the development potential along high-frequency corridors.

In places with extensive transit networks, the transit region may include several metropolitan areas and even several states. In places with smaller transit systems, the transit region may be defined by the city or county boundary.



Two Transit Regions Shown At The Same Geographic Scale

In the New York region, the fixed-guideway transit network serves three states and several metropolitan regions. In Houston, the existing fixed-guideway transit system is contained within city boundaries, but there are long-term plans to expand transit throughout the region.



Regional TOD Planning Requires a Customized Approach

THERE IS NO ONE-SIZE-FITS-ALL approach to regional TOD planning because the political context, goals and characteristics of every place are different. This booklet provides tools that regional stakeholders can use to identify:

- WHO the right stakeholders are to lead and participate in regional TOD planning;
- WHAT actions are needed to unlock the regional market for TOD;
- WHEN and WHERE regional plans and investments will lead to the best community outcomes.

In some regions, building a successful network of transit-oriented places will require improving transit service or expanding the transit system. Other regions may need to provide incentives for private investment around stations or invest in pedestrian improvements and "place-making" near transit. In some cases, the transit network and urban form may support TOD, but bringing development to scale may require outreach and public education.

The strength of the regional economy and development market should be considered during planning efforts because they will influence the extent and the type of public sector intervention required to kick-start development. However, an integrated regional planning effort can help maximize community benefits whether the regional market is strong or weak.



Planning Must Consider Transit And TOD Investments At All Scales

REGION TOD planning at this scale can result in improved connections between people and jobs, and help ensure that disadvantaged communities share the benefits of improved access to opportunity.

CORRIDOR TOD planning can help ensure that development at one station complements development at other stations, resulting in a network of transit oriented places, a strong real estate market, and local demand for retail and services offered in neighborhoods near stations. To learn more about corridor-level planning see *TOD 203, Transit Corridors And TOD: Connecting The Dots.*

STATION AREA TOD plans typically focus on neighborhoods/districts within a half-mile radius of stations, and on promoting walk-ability, a good mix of uses, and improved transit access and ridership. To learn more read *TOD 202, Station Area Planning: How to Make Great Transit-Oriented Places.*

PROJECT Planning for individual TOD projects may include planning for streets and public spaces, and can have a very big impact on whether people will choose to ride transit, and whether they will walk, bike or drive to stations.



Projected Demand For Housing In Transit Zones In 10 U.S. Transit Regions

SMALLER TRANSIT SYSTEMS





EXTENSIVE TRANSIT SYSTEMS

Demand for housing near transit is growing, largely because of demographic changes, traffic congestion, and because so many regions are building new systems or extending existing systems. (CTOD, "Hidden In Plain Sight," 2004)



Transit Planning And Planning For Local And Regional Growth Are Iterative

TRANSIT AGENCIES OFTEN have different objectives and timelines for planning new systems and stations than local governments, counties and regional agencies have when planning for growth and development. A transit agency may choose to build a new transit corridor along an existing right-of-way, or down the middle of a freeway, because it is less expensive and less disruptive than other options — even though this may not maximize development opportunities near stations, and it may not support local and regional plans for growth and development. The public investment in transit will yield the best return in terms of real estate development, transit ridership and other public benefits when it supports existing plans for growth and development — and when these plans support the transit system. This requires that transit agencies, cities, counties and regional agencies work together to create a feedback loop that informs and integrates plans for transit, housing, jobs and other development.

Travel and Development Patterns Don't Conform To Political Boundaries

ANOTHER REASON PLANNING for TOD at the regional scale is important is because travel and development patterns aren't contained within the boundaries of local jurisdictions. TOD, like transit, is most successful when it is planned as part of a regional network of transit-oriented neighborhoods and destinations. This requires an understanding of how the transit network can generate high ridership by linking regional destinations, and what the right scale of development and mix of uses are in station areas along transit corridors. Planning should consider where and how people travel within the region, the key destinations — such as universities, employment centers and stadiums — that will boost demand for transit, and where demand for housing, jobs and services is likely to be in the future.







Linking Job Centers With Transit

Most planning for TOD has been focused on increasing the supply of mixed-use development near transit. "Mixed-use" is most often defined as housing over retail, but because the work trip accounts for nearly 60 percent of transit trips and studies show that concentrating employment near transit is more closely associated with higher ridership than housing, increasing jobs near transit should be a priority.

A CTOD study of 34 regions with fixed-guideway transit found that nearly a quarter of all jobs in these regions are located near transit.² Jobs in the U.S. have tended to become more decentralized over time, but job centers that are clustered along major urban travel corridors have strong potential to support transit enhancements. Transforming single-use suburban job centers into compact, mixed-use districts served by quality transit will not only increase the share of commute trips made by transit but also the share of midday trips that workers can make either on foot or by transit.

Many of the higher density employment centers that have the potential to support transit ridership are located in suburban contexts, such as the Buckhead neighborhood in Atlanta and the Scottsdale Airpark in Phoenix. In some cases, the total employment in suburban employment centers rivals that in central business districts. Suburban employment centers should be considered when planning transit investments.



Stakeholder Collaboration Makes TOD Planning Work

REGIONAL TOD PLANNING requires collaboration among stakeholders at all levels — the state, region, counties, cities and neighborhoods. These stakeholders may have different goals and objectives, but a regional TOD planning effort can create common ground and help ensure that responsibilities and rewards are shared.

A passionate and influential TOD champion can inspire and drive the planning process. During planning for Fastracks in Denver, Mayor John Hickenlooper was a vocal and consistent proponent of building equitable transit-oriented development that would support the public investment in 122 miles of rail, 18 miles of bus rapid transit, and enhanced bus service in eight counties. Maryland Governor Martin O'Malley designated priority TOD sites and created state-level programs to fund planning and development.





TOD champions who are elected officials may not remain in office during the entire planning process, so it is important that there is strong support from other stakeholders such as the metropolitan planning organization (MPO), and the transit agency. The responsibilities, capacity and strengths of these agencies vary greatly from place to place. In some regions MPOs have broad authority over the distribution of federal transportation funds, while in other regions state departments of transportation or county transportation commissions have greater authority.

Governments don't always initiate TOD planning efforts. In Pittsburgh a collaborative of community development corporations formed the GoBurgh working group with the goal of elevating regional TOD planning on the MPO's agenda. In New Orleans, the Greater New Orleans Foundation helped convene agencies and community development organizations to apply for federal funding for sustainable community planning, and a coalition of nonprofit and community leaders called CONNECT is leading a regional conversation about transit and TOD in Southeast Louisiana.



The popular farmers market on the Nicollet Mall for transit and pedestrians in downtown Minneapolis, which is served by the Hiawatha light rail line and several bus lines.

The Benefits Of Regional TOD Planning

1 TOD Helps Make The Most Of Public Investments

SUCCESSFUL TOD leads to higher transit ridership, which means more revenue from fares. TOD also supports more walk-and-ride transit trips, which can be cheaper for transit agencies over time than building, maintaining and operating parking. Opportunities to increase ridership by building TOD are diminished if transit doesn't connect people to jobs or if station areas don't provide pedestrian connections to neighborhoods. Transit lines that run along freeway alignments, for example, may be cheaper to build due to lower right-of-way costs, but they are less likely to stimulate transit-oriented development.

Understanding where the real estate market will support TOD helps ensure that the public investment in transit will stimulate private investment in development and community benefits. CTOD estimates that for every dollar spent constructing the Central Corridor in the Twin Cities, an additional 50 cents of public investment will be needed for pedestrian and bicycle infrastructure, street improvements, utility upgrades and other improvements to station areas — and it costs more money to retrofit station areas than to make these improvements at the outset.³ Not all development around stations will be new development, however. Strategies such as adaptive re-use, historic preservation, and the preservation of existing affordable housing can build on assets that are already in place around stations.

20.000 18 000 16.000 14 000 12 000 10.000 8 000 6,000 4.000 2.000 1 154 Low-Intensity Stations Moderate-Intensity Moderate-Intensity High-Intensity Stations <6 000 workers/residents with Parking without Parking (>16.000 workers/residents) Average Intensity Average Parking Average Ridership

Development increases ridership and fares. At moderate-intensity stations in the Washington, DC region ridership increased as parking decreased and station intensity (housing units and jobs) increased. (CTOD analysis of 2006 WMATA ridership data.)

Daily Station Boardings and TOD Characteristics, WMATA







CASE STUDY

In order to become eligible for some U.S. Department of Housing and Urban Development funding programs, state and local governments are required to adopt a consolidated housing plan, which is a needs assessment and strategic plan for providing housing to low-income, homeless and special needs populations. In the past these plans have not taken transit access into consideration. But the City of Greensboro and Guilford County in North Carolina created a consolidated housing plan in 2010 that identified the spatial mismatch between affordable housing and transit access to services and jobs in the city and county, and outlined strategies for prioritizing housing in places with transportation choices.

2 TOD Increases Access To Opportunity For People From All Walks Of Life

ACCORDING TO CTOD demand estimates, more than 40 percent of future demand for housing near transit will come from households earning less than 80 percent of area median income.⁴ Families who live near public transportation can reduce household transportation costs by owning fewer cars and driving less. When TOD excludes moderate and low-income families, the "drive until you qualify" phenomenon — people have to drive to the outskirts of a region in order to find housing that is affordable, necessitating long commutes to jobs — will increase the vehicle miles traveled. This works against regional efforts to reduce congestion, commute times and greenhouse gas emissions.

Regional TOD planning that increases job access for people of all incomes strengthens the regional economy. Planning for affordable housing around stations along all transit corridors ensures that cities will share the responsibility of meeting the region's housing needs as well as the rewards of a strong regional economy. In the book *This Could Be the Start of Something Big*, authors Manuel Pastor, Chris Benner and Martha Matsuoka make the case that equity is fundamental to improving and maintaining regional competitiveness, and that transit systems should be planned to improve access to economic opportunity and all kinds of jobs.⁵ The authors note that unusual alliances of labor, community and business groups have come together across the U.S. to advocate for better transit connections.



Projected Demand For Housing Near Transit By Income For Smaller Transit Systems

⁴ CTOD, "Hidden in Plain Sight: Capturing the Demand for Housing Near Transit, Updated Estimates," 2008. ⁵ Pastor, M., Benner, C., & Matsuoka, M., *This Could Be the Start of Something Big*, Cornell University Press, 2009.

3 TOD Strengthens The Regional Economy

Transit and TOD can support a strong regional economy by reducing travel times, lowering transportation costs, improving job access, and creating distinct walkable places. Research shows that TOD can boost land values and increase sales tax revenues from local shops and restaurants within walking distance of stations. Building a regional TOD network increases access to jobs, housing and services around stations, allowing each place to thrive.

Moreover, money that households around stations would have spent on owning and maintaining one or more cars can be spent on consumer purchases instead, thereby boosting investment in the local economy. The nonprofit organization CEOs for Cities estimates that the 2 million people who live in the Portland, Oregon, region save a total of \$1.1 billion a year by commuting 4 less miles per day than the national average of 24.3 miles. While most of the money spent on cars and gasoline travels out of the state, this transportation savings can be spent in restaurants or on homes or other purchases that have a multiplier effect in the local economy.

Transit also facilitates greater job density, knowledge agglomeration and the exchange of ideas — which can spur innovation. In knowledge-based industries, the per-capita invention rate or "patent intensity" of an urban region is positively correlated to the density of employment.⁶ Studies show that walkable places with urban character attract younger "knowledge talent," and that jobs near transit are more accessible to the increasing population of people in their twenties who are "transit-dependent by choice." National travel data from 2009 shows this age groups drives an average of 7.7 percent fewer miles per year than the same age group did a decade ago, even as driving increased overall.

Some jobs are more transit-oriented than others — including jobs in professional, scientific and technical services, and the financial and insurance industries. Economic and land use policies and investments can be used to encourage these sectors to locate near transit instead of in auto-dependent places, which will help foster sustainable growth.

Medium

CASE STUDY

Chicago Metropolis 2020, an organization of prominent civic and business leaders. issued a report in 2010 that makes the case that a strong transit system and connected network of urban neighborhoods are fundamental to a region's ability to compete in the global economy.7 The report contends that while the debate over transportation spending focuses on the \$12 billion that state and local agencies spend on transportation nobody is focusing on reducing the \$100 billion that families and businesses spend on transportation — six times more than what government spends. The report notes that, "Every 1 percent reduction in the private cost of transportation would free \$1 billion annually to meet family needs and improve the job-creating health of businesses."



Share Of Regional Jobs Near Transit By Industry And Transit System Size In 2008

⁶ Carlino, Gerald, Satyajit Chatterjee, and Robert Hunt, "Urban Density and the Rate of Invention," 2006. Working paper. Federal Reserve Bank of Philadelphia. ⁷ Chicago Metropolis 2020, "Building Our Economy: Transportation for a New Illinois," 2010.

The Delaware Valley Regional Planning Commission's GHG inventory found that the Philadelphia region's per capita transportation-related GHG emissions were 26 percent less than the national average. This is due in part to Philadelphia's extensive transit network.



4 TOD Can Help Reduce GHG Emissions

TRANSPORTATION CONTRIBUTES an estimated 28 percent of all greenhouse gas (GHG) emissions — and as much as 40 percent in states such as California. According to a 2002 study by the California Department of Transportation, TOD has the potential to reduce annual greenhouse gas emissions by 2.5 to 3.7 tons per year for each household. In 2010, CTOD found that in the Chicago metropolitan region, the transportation-related GHG emissions of households within one-half mile of fixed-guideway public transportation are 43 percent lower than the regional average, and that the emissions of households located in central business districts — which typically have the highest concentration of transit, jobs, housing, shopping and other destinations — are 78 percent lower than regional averages.

Because a regional network of transit-oriented destinations enables people to drive less and produce less GHG emissions, regions and cities increasingly view coordinated transportation and land use strategies as essential components of an effective climate action plan. For this reason, some MPOs support station area plans and development to reduce GHG emmissions. For example, in Atlanta, local governments can apply for grants from the Atlanta Regional Council's Livable Centers Initiative to complete station areas plans, and then apply for capital funding to implement their plans. As of 2009, 34 station area plans had been adopted and will reduce greenhouse gas emissions in all but one station area.⁸

CASE STUDY

California's SB 375 is the first state law to codify the role of regions in reducing GHG emissions through transportation and land use planning. SB 375 required the state to set regional targets for GHG emission reduction from cars and light trucks and requires regions to develop a "Sustainable Communities Strategy" (SCS) as an element of the regional transportation planning process. The SCS will include all the transportation and land use strategies that will be used to meet the GHG reduction targets, and demonstrate how and where the region will house future population growth, including households of all income levels. Because households located near transit produce fewer transportation-related GHG emissions, TOD will be a key strategy for meeting GHG reduction targets.

■ In the Philadelphia region, the Delaware Valley Regional Planning Commission (DVRPC) recognized that quantifying baseline emissions is an important first step in identifying strategies for reducing GHGs, and created an inventory of emissions from residential, commercial and industrial energy use as well as transportation and other sources. Then the DVRPC, which is the region's MPO, analyzed the energy use and GHG emissions of each municipality. The inventory and assessments, which are now being replicated by other MPOs, will be used to develop policies, programs and investment priorities for the region, and can be used by local governments as a basis for local analysis and action.

⁸Atlanta Regional Council, "2009 Livable Centers Initiative: Indicators and Benefits Study."

Eight Key Strategies

View from the Sky Train platform in Vancouver, BC.

For Regional TOD Planning

THIS BOOK OFFERS eight strategies for linking housing, land use and transportation planning at the regional level with the goal of building a coordinated regional network of transit-oriented destinations. Each region should tailor its approach, acknowledging regional goals, the region's unique characteristics, and other relevant planning initiatives.

- Plan For The Plan
- 2 Get To Know Your Region
- Invest In Capacity Building, Education And Technical Assistance
- 4 Develop A Regional Vision For TOD
- **I** Identify A Strategy For Prioritizing And Phasing Investments
- **6** Create Incentives For Local Action
- Provide Funding For Implementation
- Measure And Evaluate Progress

A high-profile TOD champion such as a passionate mayor or influential community group can help unlock a region's transit-oriented development potential by generating interest in the regional TOD planning process. Similarly, a catalytic issue, such as construction of a new transit system, the award of a federal grant or other major funding, or a crisis in affordable housing can accelerate the planning process and amplify the regional dialogue about TOD. Often, it takes a combination of these forces to bring TOD planning to the forefront of the regional agenda.



STRATEGY 1 Plan For The Plan

In order to ensure a coordinated, inclusive and productive TOD planning process it is important to bring the right people to the table, develop a robust strategy for public involvement, and create an inventory of existing plans. A TOD working group or steering committee can spearhead the planning process, and should include elected officials and staff from local, state and federal agencies as well as community groups and residents, philanthropic organizations, property owners, developers, major employers and other private sector interests.

Community-based organizations and other stakeholders must be engaged in a way that allows them to provide meaningful input. Design charettes have proven to be one effective way to successfully engage the public because they allow participants to visualize the outcomes of the planning process and understand the impact of their decisions about density, the mix of uses and access to station areas. One early benefit of involving the public is that it provides planners with a better understanding of the messaging that resonates best with stakeholders. Planners in Houston, for example, found that residents were very interested in improving quality of life, while stakeholders in Southern California cared more about sustainable economic development.

CASE STUDY

In the Greater Seattle region, the Puget Sound Regional Council wants to focus housing and job growth around the 100-plus stations that will be built during the next 20 years, and is taking a new approach to public participation. With support from a 2010 Sustainable Communities Regional Planning grant from the U.S. Department of Housing and Urban Development, the council is creating a Regional Equity Network that is a partnership among regional and local agency staff, community organizations and foundations dedicated to promoting equitable community development. The network will provide sub-grants to community organizations for neighborhood planning and public involvement.



Another very important element of the planning process is an inventory of existing plans and policies — at the local, regional and state levels — that could have an impact on TOD. During the early stages of Detroit's Woodward Avenue transit planning effort, for example, the project team conducted an analysis of existing conditions that included an assessment of adopted master plans, streetscape plans and development proposals. Key questions that should be asked include:

- Do comprehensive plans and zoning codes allow for transit-supportive densities, mixed-use development and affordable housing?
- Are land-use plans coordinated with the transportation improvement program and long-range transportation plan?
- If there are plans to expand transit, have the alignments been identified?
- Do planned expansions of the transit system serve significant regional destinations and job centers?

• Do state policies support TOD by allowing localities to use tax increment financing districts or other financing mechanisms near transit?

Get To Know Your Region

A **REGIONAL TOD PLAN** must be built on a strong foundation of data, in order to help stakeholders and decision-makers understand existing conditions and benchmark performance. Mapping and modeling can help engage elected leaders and the general public by making the choices and outcomes of the planning process clear. The mapping and modeling efforts should include information about:

• regional market dynamics and the TOD "readiness" of station areas, including changes in land values over time, permit and sales activity, and median income — and this data should be collected for existing and planned station areas as well as the region;

• the location of employment clusters and industry sectors, the types of jobs that located near transit, and the size and location of commute sheds;

• the combined cost of housing and transportation in transit-oriented neighborhoods compared to the regional and national averages, the location of affordable housing, the location of expiring contracts on federally-subsidized housing, and an analysis of neighborhoods where there is a threat of displacement.

• indicators that neighborhoods are changing — such as changes in household composition, income diversity, housing costs, and the educational achievement of residents;

• an assessment of development opportunity including the acreage of vacant, underutilized land and non-programmed public, commercial and industrial land, and the "holding capacity" of this land at full build-out;

• commute patterns, transit ridership, jobs-housing balance, and jobs-housing "fit" — a measure of the relationship between wages and housing costs, which is used to determine whether people of all incomes can afford to live near their jobs.

Collecting and evaluating this data will help identify key TOD corridors and strategic infill opportunities, which will help target resources to the station areas where it will have the most effect.

CASE STUDY

■ The Bay Area is one of the most expensive housing markets in the U.S., with the average household spending 39 percent of income on housing. UC-Berkeley's Center for Community Innovation used demographic and housing data to evaluate whether neighborhoods in the San Francisco Bay Area were changing in a way that created the potential for the displacement of current residents. The report, entitled "Mapping Susceptibility to Gentrification: An Early Warning Toolkit," found that from 1990 to 2000 the number of middle-income households in Bay Area urban core neighborhoods decreased, while only the inner ring suburbs saw increases in neighborhood income levels.⁹





Regions can use the CTOD database to analyze existing conditions at station areas and plan for development (from top left): Greensboro, NC; musicians on a station platform in San Francisco; Atlanta's Atlantic Station; Pleasant Hill BART station in the San Francisco Bay Area; map of car ownership in Los Angeles.

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CTOD's National TOD Database

CTOD made its National TOD Database available to the public in 2010 with support from the Federal Transit Administration. The database is a free online tool that provides important demographic and employment data for the half-mile radius surrounding 4,610 existing and planned transit stations in the U.S., and is available at toddata.cnt. org. This database allows TOD practitioners to measure existing and future demand for transit, identify existing and potential markets for TOD, and evaluate TOD-related changes in communities over time. The National TOD Database, which is updated annually with new stations and data sets, has been used to:

• show that job growth in the Twin Cities was higher along the Hiawatha Light Rail line than in the region as a whole;

• examine the market potential for development near transit in the Baltimore region;

• help justify reduced parking near transit stations in the City of Los Angeles.



Invest in Capacity Building, Education and Technical Assistance

ONE OF THE BIGGEST challenges when creating programs and policies that encourage TOD is that many political leaders and community residents don't understand why or how transit-oriented development can benefit their communities. Seminars and workshops can help stakeholders understand the potential benefits of TOD and provide them with the vocabulary and information they will need to make the case for TOD to others. In the Tri-State Region of New York, New Jersey and Connecticut, the Regional Plan Association and its Mayors' Institute on Community Design held a work session on "transit-centered design" over several days with the goal of inspiring and mobilizing elected officials in Long Island. Agency staff also need training and technical support to help them manage the TOD planning and public participation processes; there are many local and national providers of tailored technical assistance that can help.

In metropolitan regions with extensive transit networks, MPOs have large professional staffs with the expertise required to develop plans and policies and analyze investment alternatives. MPOs representing smaller regions typically have less technical capacity and resources for TOD planning and implementation, and more investment in education and technical assistance is needed in these places.

CASE STUDY

- The Denver Regional Council of Governments (DRCOG) created a "TOD Information Exchange Program" to provide relevant and timely information that can help policymakers, business leaders and the public make informed decisions about TOD. The TOD Information Exchange includes:
 a website that provides resources such as case studies, reports, interactive maps, station area plans and profiles, and information on development activity around current and planned station areas;
- "The Planner Idea Exchange," where local agency staff can share their experiences with planning and implementing TOD, and learn about topics of interest from experts. In 2010 this program was renamed the "Metro Vision Idea Exchange," and became a best practices workshop series on regional topics of interest for members of the public and private sectors;
- a study entitled "Who is TOD in Metro Denver?" that benchmarks how the attitudes, perceptions and behaviors of businesses, employees and residents are changing as TOD takes root.

Commuters wait for the Long Island Rail Road. Through the RPA Mayor's Institute on Community Design, Long Island leaders recommended supporting TOD around stations by creating walkable, mixed-use main streets, building more workforce housing, phasing in higher densities, and encouraging shared parking.



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Develop A Regional Vision For TOD

DEVELOPING A REGIONAL TOD vision will help align jurisdictions and stakeholders around shared goals and objectives, and the development of performance measures will help the region track progress. Regional visions are often developed through a "blueprint planning process" that compares and contrasts several growth scenarios in order to demonstrate how various policies and transportation investments will affect urban form, traffic congestion and other outcomes. The federal government actively supports scenario planning by distributing information on best practices across the U.S., providing technical assistance, and facilitating peer-to-peer workshops.

Once a regional vision is identified, it can be helpful to negotiate a formal agreement on how it will be realized. In the Denver region, 48 of 52 local governments have signed "The Mile High Compact," a voluntary agreement to adhere to the growth principles outlined in the region's long-range growth plan. The "Louisiana Speaks" regional plan lays out a vision for long-term community planning efforts that will help residents in Southern Louisiana recover from hurricanes Katrina and Rita and avoid developing in floodplains. The plan identified three broad goals — to recover sustainably, grow smarter, and think regionally — and included more than 100 action items, such as focusing growth in existing communities, and building a robust and integrated transportation network that provides people with travel choices.



CASE STUDY



The Southern California Association of Government's Compass Blueprint Demonstration Project program funds the planning efforts necessary to achieve the goals of the regional blueprint vision, which focuses growth in walkable, mixed-use centers around transit stations and major transportation corridors. The program has grown from a few projects funded with \$250,000 in 2005 to 60 project funded with \$4 million in the 2011 funding cycle — with the best projects feted at an awards program at SCAG's General Assembly. The importance of this program has been immeasurable in terms of broadening support for smart growth strategies and promoting understanding of their applicability in cities large and small. Some projects are truly innovative: The City of Redlands is investigating a transfer of development rights that will facilitate development and private investment around five planned light rail stations, in the meantime allowing the city to establish a greenbelt of undeveloped canyons and citrus groves on the urban fringe.

Create A Strategy For Phasing And Prioritizing Investment

REGIONAL PLANNING CAN help ensure that existing funding is used effectively by prioritizing and phasing transit and TOD investments. In the greater Baltimore region, CTOD, working with a multi-sector steering committee, evaluated development opportunity and market activity in the half-mile radius around transit stations and then prioritized different types of investments that could be made by TOD stakeholders, including affordable housing developers, the State of Maryland, the City of Baltimore and surrounding counties, and both nonprofit organizations and philanthropic groups. This information was used to develop a TOD Strategic Plan that enabled the region to move forward in a thoughtful and systematic way, rather than merely reacting to opportunities when they arise and if funding is available.



The Central Maryland Typology and TOD Strategic Plan evaluated development and demographic characteristics to define future investment priorities.





■ The South Suburban Mayors and Managers Association, a subregional council of governments in the south suburbs of Chicago, has assessed opportunities for TOD around 33 stations along three suburban commuter rail corridors to determine the most intense level of development allowed by existing plans and market conditions. The nonprofit Center for Neighborhood Technology has developed a computer program called the "Optimizer" that defines "ideal" development opportunities for both transit-oriented development and "cargo-oriented development," or "COD," defined as the development of supportive business clusters near intermodal terminals and freight rail assets. The Optimizer ranks sites according to how well they match the ideal, providing an empirical basis for site selection and allowing a development team to focus on high-opportunity projects. The goal was to prioritize south suburban sites for infill development and simultaneously create living wage jobs in the manufacturing and logistics industries. The Regional Transportation Authority then provided funding for detailed implementation plans at high-priority stations.

Portland, OR, Denver and the Twin Cities have all used typologies to prioritize investments (from bottom left): Pedestrian mall on the Central Corridor light rail line in St. Paul, Minnesota; LoDo station in Denver; multi-use trail along the Hiawatha Line in Minneapolis; the Crossings at the Gresham station in Portland, OR.

S

TOD Investment Typology

A TOD typology is an analytical tool that groups station areas and transit corridors into several "types" in order to provide parameters for the intensity of development, mix of uses, parking ratios, and transit service that can be expected. New typologies are emerging that categorize station areas according to the strategies and types of investment that will be most effective in promoting TOD.

Metro, the regional planning agency in Portland, Oregon, released the regional TOD Strategic Plan, which analyzed station areas and frequent bus corridors using an investment typology that identifies locations where small public investments can promote significant development activity, increased community support, or the physical transformation of transit-oriented districts.¹⁰ Metro's TOD typology focuses on two key variables that determine the TOD potential of station areas — market activity and urban form. Market activity provides a rough measure of development feasibility and local real estate conditions. The degree to which the urban form, or physical characteristics, of each station area will support TOD is assessed using the following five measures:

• People: The number of people who live and work near transit is directly correlated to the number of miles traveled in a region.

Places: Neighborhoods with more retail, services and amenities attract more transit riders because they
are able to complete daily activities and errands without having to drive.

• Physical Form: Smaller blocks are more walkable.

Performance: Frequent high-quality service makes public transportation a more reliable means of getting around, thereby increasing the likelihood people won't drive and reducing the number of vehicle miles traveled.
Pedestrian/Bicycle Connectivity: Access to sidewalks and "low-stress" bikeways increases safety and makes bicyclists and pedestrians feel more comfortable, which leads to more walking and biking. Using this methodology, the Portland TOD typology sorts station areas and corridors into nine place types and identifies the strategies and investments for each type that are most appropriate in the short-, mid-, and long terms.

WHH-NWST

Create Incentives For Local Action

WHILE VERY FEW regional planning agencies have direct control over land use, they can provide strong incentives that encourage member jurisdictions to coordinate their land-use planning efforts with the regional plan, and to zone for and implement transit-oriented development. Many MPOs receive funding from a variety of sources and have the authority to decide how to spend it. They can incentivize local TOD initiatives by funding station area planning, market studies, station access studies, corridor analyses and technical assistance programs — all of which fall under the federally-defined MPO work program. For example, the Metropolitan Transportation Commission (MTC), which is the MPO in the San Francisco Bay Area, has no authority over land use, but conditions capital funding for transit corridors on whether jurisdictions have planned for transit-supportive levels of housing density. MTC also provides funding to local jurisdictions and transit agencies for station area planning.



CASE STUDY

In Massachusetts, the Smart Growth Zoning Overlay District Act (Chapter 40R) encourages communities to zone for and implement residential or mixed-use projects in existing town centers or sites near transit. If cities and towns adopt zoning that meets minimum density thresholds, allows mixed-use development, and requires at least 20 percent of housing to be affordable, they become eligible for between \$10,000 and \$600,000 in state funding to implement projects in their smart growth zones. Local governments receive an additional \$3,000 for every new housing unit created. Another law, called "Chapter 40S," provides state reimbursement for the cost of educating school-age children who move into a Smart Growth 40R district.

The Delaware Valley Regional Planning Commission's "Transportation and Community Development Initiative" (TCDI) program awards grants to local governments in the Philadelphia region to conduct community planning in city centers, older communities and other locations prioritized for regional growth. Once communities complete a plan, they become eligible to buy in to the commission's "Classic Towns" marketing program, which advertises these "main street communities" to prospective homebuyers, businesses and tourists (at http://www. classictowns.org).



The State Role in TOD

While regional agencies often play an important role in TOD planning, states can also provide incentives for TOD planning and implementation, including regional planning and visioning that links transportation and land use. California's Regional Blueprints program supports collaborative regional planning efforts with grants, support services and interagency coordination. States can also encourage TOD by awarding extra points to applicants for low-income housing tax credits — the most important resource for creating affordable housing in the U.S. today — if their projects are located close to high-frequency transit. Thirty states currently award extra points to proposed projects near transit.

The State of Maryland has several programs that support TOD. In 2008, the General Assembly passed a law identifying TOD as a "transportation purpose," meaning that the Maryland Department of Transportation (MDOT) can dedicate departmental resources including land, funding and staff to support designated TOD projects. After receiving nominations from local governments, the state designated 14 TODs in 2010. These TODs receive:

- access to MDOT funds for planning and capital projects;
- expanded authority to use tax increment financing and special tax districts;
- priority as prospective sites for the location of new state offices;
- technical assistance from the Maryland State Highway Administration to help with pedestrian, bicycle and vehicular access;
- tax credits for the rehabilitation of non-historic structures;
- priority for support from other state departments, including Housing and Community Development, Business and Economic Development, the Environment, General Services, Natural Resources, and Planning;
- priority for federal funding that supports sustainable development.

The states of Connecticut and Illinois support TOD through programs that provide incentives; Pennsylvania and California provide planning and implementation grants (from bottom right): Broad Street subway station in Philadelphia; Metra commuter rail in downtown Chicago; San Diego's Gas Lamp District; Metro North Railroad near Danbury, Connecticut;.

HOTO BY PASA47/FLICKR

STRATEGY 7 **Provide Funding For Implementation**

THERE ARE PLACES WHERE regional and station-area plans have been developed and supportive policies and zoning are in place, but TOD projects still aren't moving forward. This may mean that public funding is needed to kick-start the market for development by providing the infrastructure and other improvements that make development more likely. Public funding can be used to build TOD-supportive infrastructure including sidewalks, plazas or parking structures; to supplement the cost of affordable housing in a development; and to offset development costs. Several MPOs have grant programs that provide funding to local public agencies for station area improvements. Metro, the regional planning agency in Portland, Oregon, also provides financial assistance to private developers who push the market for density near public transit.

Local or regional agencies can target general funds or federal dollars, such as Surface Transportation Program funds, for station-area improvements. TOD has the potential to generate revenues through tax-increment financing, real estate lease and sales revenues, property and sales taxes, farebox revenues, and fees on everything from parking to business licenses — and these revenues can be reinvested in community projects. Funding to jumpstart development may be necessary in places with moderate or weak real estate markets, as higher-density development and infill are typically more expensive to build than lower-density suburban development.

CASE STUDY



The North Central Texas Council of Governments (NCTCOG) provides planning and capital grants for projects that support the region's vision for growth. NCTCOG's Sustainable Development Call for Projects allocated \$43 million in 2009 to foster development in and around historic downtowns and Main Streets, infill areas, and passenger rail lines and stations. Capital projects are awarded an average of \$2.5 million,

and fund construction of sidewalks, trails and other infrastructure. The program also helps fund development projects, like the Atmos Lofts project in downtown Dallas, which will include 200 units of affordable housing in historic buildings near light rail, a grocery store, park, law school, several entertainment districts, and tens of thousands of jobs.



Acquisition funds are being used to purchase property for affordable housing (from bottom left) in priority development areas in the Bay Area; for affordable family apartments with a groundfloor grocery in San Francisco; along the South Corridor in Charlotte; and in Denver's West Colfax neighborhoods.

FOCUS Sonoma County MAP BY THE olano ounty Marin County intra Costa County Map Legend Priority Development Areas Pignest Sar Francisco in Wiban Footprint Arturn departs Limit. lameda ounts FOCUS is led by the Association of Bay Area Governments, the Metropolitan Transportation Commission, the Bay Area Air **Quality Management District**,

and the Bay Conservation and Development Commission.

S P O T L I G H T Property Acquisition Funds

The property acquisition fund is one type of public financing for project implementation that is becoming more common in the U.S. Property acquisition funds allow the public sector, community foundations, community development finance institutions, and private investors to combine resources for the purchase of property before planned transit projects drive up land and property values. These funds are most often used to acquire sites for the development and/or preservation of affordable housing, and can help bridge the gap between when sites become available and when traditional affordable housing financing mechanisms kick-in and provide permanent financing.

In 2010 the San Francisco region developed the Bay Area Transit-Oriented Affordable Housing Fund, a revolving loan fund to finance the acquisition of sites near transit for affordable housing. This fund was created by the Great Communities Collaborative, a partnership of five nonprofit organizations and two regional foundations, and will be managed by a consortium of six community development financial institutions. The San Francisco Bay Area's Metropolitan Transportation Commission committed \$10 million to launch the fund on the condition that money would only be spent in areas designated for growth in the region's long-range development and land conservation strategy. Affordable housing developers can apply for funding for projects that improve access to transit and housing for low-income residents.

Denver's TOD acquisition fund was capitalized with \$2.5 million in city funding to match a grant from the MacArthur Foundation, and has grown to \$15 million with funding from other investors. The fund is managed by Enterprise Community Partners, with land purchases overseen by the nonprofit Urban Land Conservancy, which acts as the sole borrower. The goal of the fund is to create and preserve more than 1,200 units of affordable housing along transit corridors. In Charlotte, North Carolina, the City Council appropriated \$5 million to fund land acquisition for affordable housing along the South Corridor light rail line. The city used the fund to purchase 17 acres of land for a flagship mixed-use, mixed-income transit village that will include 80 affordable housing units and 820 market-rate units, as well as retail space, a hotel and park.

Measure and Evaluate Progress

IT IS IMPORTANT TO measure and evaluate progress toward TOD goals and targets identified during the regional visioning process, so that regions can evaluate the effectiveness of policies and funding programs and communicate the value of these investments to elected officials and the public. For example, a regional agency can track the number of station area plans that have been adopted, the adoption of TOD-supportive zoning codes or other policies, or any changes to TOD-related goals such as increased transit ridership,



an increase in the number of housing units near transit, greenhouse gas emission reductions, or reductions in the combined cost of housing and transportation.

The Atlanta Regional Council conducts an ongoing evaluation of investments made through its Livable Centers Initiative (LCI) program, publishing a review of the status of LCI-funded projects every six months and a more detailed analysis of the program's impacts every two years. The detailed analysis provides updates on the status of plans and projects, a summary of changes to land use policies and regulations that have resulted, and an overview of changes in community attitudes about quality of life, housing choices, transit service and other TOD-related topics.

More than 85,000 housing units and 38 million square feet of office have been proposed or built in communities as the result of plans funded through the Atlanta Regional Commission's Livable Centers Initiative.

CASE STUDY



The Chicago Metropolitan Agency for Planning (CMAP) has developed a user-friendly, customizable website called MetroPulse that tracks the region's progress toward goals identified in the 2040 comprehensive plan. Designed to facilitate effective decision-making and to allow the general public to assess changes in quality of life over time, MetroPulse tracks indicators in 12 categories including transportation, housing and coordinated planning. CMAP uses more than 200 indicators to measure and evaluate progress, including: • average number of vehicles per household;

- number of jobs located near affordable housing;
- transit trips per capita;
- combined cost of housing and transportation;
- acres of infill potential;
- Number of vacant commercial properties.

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