Weaving Together Vibrant Communities through Transit-Oriented Development

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Introduction

Transit-oriented development (TOD) is a community development model focused on nurturing healthy people and places and better connecting them to one another through a robust, "multimodal"[1] transportation network. At its core, TOD is about connecting, or reconnecting, the fabric of our communities—imagine a quilt, if you will—where neighborhoods and places of varying shapes, colors, sizes and textures are integrated into a vibrant and cohesive region. Implementing equitable TOD involves rethinking the current paradigm, where a person's zip code can determine important outcomes such as educational attainment or employment opportunities.

To that end, fostering TOD requires collaboration and coordination among a varied set of actors from different disciplines. These different actors operate at all scales in a range of capacities including transportation and planning practitioners, elected officials, non-profit organizations, community-based advocates, for-profit and non-profit developers, financial institutions, the philanthropic sector, and service providers, to name a few! They come from fields such as transportation, community development, economic development, education, business, health, labor and the environment, among others. Given the wide range of actors and disciplines that need to be engaged in the TOD process and the variety of places and conditions where development can occur, TOD is a complex community development model to implement.

But, at the same time, the range of benefits that can be realized by optimizing the symbiotic relationship between public transportation and comprehensive community development is very real, particularly for low- and moderate-income (LMI) individuals and working families. Some of

these benefits include:

- Improved access to job centers and economic opportunity;
- Expanded mobility choices that reduce dependence on the automobile, reduce transportation costs and free up income for other purposes;
- Reduction in neighborhood isolation and concentrated poverty across a region;
- Walkable communities that accommodate more healthy and active lifestyles;
- Reduced vehicle miles traveled (VMT) and thereby lowered greenhouse gas emissions;
- Reduced dependence on foreign oil;
- Potential for added value created through increased and/or sustained property values where transit investments have occurred, which can be invested back into the community.

In recognition of these potential benefits, TOD has gained traction over the last ten years and is being embraced by federal agencies like the Department of Transportation (DOT), Housing and Urban Development (HUD) and the Environmental Protection Agency (EPA). DOT, HUD and EPA recently formed the Interagency Partnership for Sustainable Communities and have demonstrated a commitment to investing in equitable TOD at levels that can truly bring it to scale across the country. The Partnership also provides resources and tools to coordinated regional efforts that have introduced innovative approaches to advance equitable TOD goals around the nation.

The purpose of this article is to define TOD, introduce the concepts and principles behind the term, and to present strategies for implementing successful TOD initiatives, especially those that benefit LMI individuals and communities.

What's TOD Got to Do with It?

Let's be honest, the term "TOD" fails to strike an emotional chord and doesn't fully portray the wide range of benefits associated with TOD. At best, TOD conveys images of transportation infrastructure and pedestrian shopping malls. But TOD is much more than its name implies: it's about social equity and economic opportunity, cost savings and environmental benefits. TOD actually stands for a very complicated ideal, one that incorporates equitable development goals and improved access to regional transportation networks and economic opportunity.

Specifically, however, TOD refers to a mixture of housing, retail and/or commercial development and amenities, referred to as mixed-use development, integrated in the neighborhood within a half-mile radius of quality public transportation. The half-mile distance is based on research that has identified the average distance a person will walk to get to their destination, and is a proxy for a 10-minute walk. While a half-mile is a useful benchmark, there are characteristics that make some places more walkable than others and which contribute to people's willingness to walk more than a half-mile to access good quality transportation, or another destination. Factors that influence a neighborhood's "walkability" include the size of blocks, the width of the street and sidewalk, and the existence of amenities like street trees, benches, shops and services, and good signage that make the walking experience more enjoyable. People are much more likely to walk in places frequented by other pedestrians, where they feel safe and where they are visually engaged along the way.

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By the very nature of the real estate development and financing process, there is a strong tendency to think of TOD as single projects, such as a mixed-use development project located near a train station. But a more expansive consideration of TOD requires analysis at multiple geographic scales so that TOD becomes a regional strategy for all communities, not just the urban core. Indeed, TOD can occur in a wide range of settings (for example new or well-established communities) and accommodate a variety of uses and densities, making it important to understand the implications that different types of "place" can have on an area's TOD potential. The Center for Transit-Oriented Development (CTOD)[2] published the first "TOD Place-type Typology" in 2004[3] (see Table 1) to begin to acknowledge that different strategies are necessary to create holistic transit-oriented neighborhoods in different types of places. CTOD has since developed new iterations of the typology for use in specific places—in Denver, Houston, the San Francisco Bay Area, and Los Angeles—and is in the process of expanding the place-type approach to further provide jurisdictions with tangible and realistic strategies they can implement in support of TOD.

Fostering and building healthy neighborhoods that enjoy the benefits of increased transit access and walkability requires thinking beyond projects immediately adjacent to transit stations. It requires an evaluation of the existing assets and conditions in a neighborhood and how a particular development project can enhance those features. It also requires an understanding of how the neighborhood is linked to opportunities along the transportation corridor and how a neighborhood's connection to other places contributes to a larger set of goals that can only be measured at the regional scale.

Table 1 *Tailoring TOD Strategies for Different Neighborhood Types*

TOD Type	Land Use Mix	Minimum Housing Density	Housing Types	Regional Connectivity	Transit Modes	Frequency of Service	Examples
Urban Downtown	Primary Office Center Urban Entertainment Multifamily Housing Retail	>60 units/acre	Multifamily Loft	High Hub of Radial System	All modes	<10 min.	Printers Row (Chicago) LoDo (Denver) South Beach (San Francisco)
Urban Neighborhood	Residential Retail Class B Commercial	>20 units/acre	Multifamily Loft Townhome Single Family	Medium Access to Downtown Subregional Circulation	Light-rail Streetcar Rapid bus Local bus Paratransit	10 min. peak 20 min. off-peak	Mockingbird (Dallas) Fullerton (Chicago) Barrio Logan (San Diego)
Suburban Center	Primary Office Center Urban Entertainment Multifamily Housing Retail	>50 units/acre	Multifamily Loft Townhome	High Access to Downtown Subregional Hub	Rail Streetcar Rapid bus Local bus Paratransit	10 min. peak 10-15 min. off-peak	Arlington County (VA) Addison Circle (Dallas) Evanston (IL)
Suburban Neighborhood	Residential Neighborhood Retail Local Office	>12 units/acre	Multifamily Townhome Single Family	Medium Access to Suburban Center Access to Downtown	Light-rail Rapid bus Local bus Paratransit	20 min. peak 30 min. off-peak	Crossings (Mountain View, CA) Ohlone-Chynoweth (San Jose, CA)
Neighborhood Transit Zone	Residential Neighborhood Retail	>7 units/acre	Townhome Single Family	Low	Local bus Paratransit	25-30 min. Demand responsive	
Commuter Town Town Center	Retail Center Residential	>12 units/acre	Multifamily Townhome Single Family	Low Access to Downtown	Commuter rail Rapid bus	Peak Service Demand responsive	Prarie Crossing (IL) Suisun City (CA)

Source: Center for Transit Oriented Development

Connecting People and Places

Transit is an essential neighborhood component that links people to opportunities, reduces economic and social isolation and plays a key role in making household budgets more manageable for low-income people and working families by reducing overall transportation costs. Over the last century, transportation costs have grown from an average of 2-3 percent of income to between 15-28 percent in different locations across the country.[4] The cause of this dramatic increase is the low-density, sprawling development patterns that have dominated over the last 50+ years, and is directly correlated with our rising dependence on the automobile to get everywhere we need to go. This direct correlation bears out in data illustrating that auto-ownership drops and transit-ridership grows as residential density increases.[5]

For working families earning between $20,000 and $50,000 and living on the outskirts of a region, auto ownership can be a real financial burden, with transportation costs exceeding housing costs in many instances.[6] A new study by the American Public Transportation Association (APTA) calculates that people in the U.S. who used transit in 2009 saved an average of $9,190.[7] This savings can be especially significant for LMI households, who may otherwise operate on a narrow financial margin, as the funds can be put toward other uses such as education, healthcare, healthy food or recreation.

In 2005, the CTOD and The Center for Neighborhood Technology (CNT), through support by the Brookings Institution, developed a model for understanding the combined household cost of housing and transportation.[8] The Housing + Transportation Affordability Index (H+T Index) is a comprehensive tool for measuring the true affordability of housing in different neighborhoods and illustrates the importance of preserving and building affordable housing in transit-friendly locations to better meet the financial needs of low-income people and working families.[9] Recognizing the interrelated costs of housing and transportation, it is important for community development professionals to consider the tradeoffs of building affordable housing in places that are isolated from transportation and far from job centers, where land is cheaper but services and amenities are few.

Affordable housing and transportation alone do not constitute a healthy neighborhood, but they are critical components of a larger comprehensive community development strategy that serves LMI individuals. Stakeholders should work together to ensure that neighborhoods located

near quality transportation preserve and produce the right mix of housing that is affordable to various income levels, and that future transportation investments better connect underserved communities to jobs, educational opportunities, services, amenities and recreation opportunities. A recent example of this is the Metropolitan Transportation Commission's (the regional transportation planning organization for the nine-county San Francisco Bay Area) official commitment in its long-range transportation plan to reduce the combined housing and transportation cost burden for LMI residents in the region by 10 percent.[10] Meeting and hopefully exceeding this goal will require a mix of transportation investments and efforts to permanently preserve and build mixed-income housing in a diversity of transit-rich places across the region. MTC recently committed $10 million as the first investment in a Bay Area Affordable Housing TOD Fund that will provide critical resources to help secure land in TOD neighborhoods across the region to provide permanent affordable housing opportunities. MTC's investment is contingent on fund partners raising an additional $30 million by August 2011.

As MTC leadership understands, congestion has the power to put an economic stranglehold on regions. Improving regional connectivity between employment centers, major attractions and the places where people live will ultimately make the region, and savvy cities and towns located in the region, a more competitive place to do business by offering workers a wider range of commute options. Linking jobs, housing and other important destinations by transit will also ensure increased transit ridership, which is the bottom line for every transit operator.

Place-Based, Context-Sensitive Approaches

In order to have a broad range of positive outcomes, TOD strategies need to be informed by current data and demographic trends. The National TOD Database, developed by CTOD in collaboration with the Federal Transit Administration, is a tool that allows local stakeholders to identify the most effective strategies for their community. The database includes information on over 4,200 existing and planned transit stations, as well as census information on the area within a half-mile radius around each station. Useful demographic, transit ridership, and other data can be drawn from this resource, providing the ability to quickly compare conditions across different areas of a city and with other regions around the country to develop context-sensitive, place-based TOD strategies.

In addition to its TOD database, CTOD recently launched an online, interactive tool called the Mixed-Income TOD Action Guide (www.mitod.org) that is geared towards local jurisdictions working to foster mixed-income TOD around planned transit stations. The goal of the guide is to help practitioners identify the most appropriate and effective planning tools for achieving mixed-income TOD in their transit station area, and ultimately to facilitate the development of mixed-income communities across the U.S. This is an example of a tool designed to help jurisdictions analyze data, demographic and market trends and existing conditions to meet specific outcomes in mixed-income TOD.

TOD strategies must also acknowledge shifting demographic trends. For example, over the next 20 years, the population of Americans age 65 or older is projected to be double the elderly population in 2000. Taking into account that more than 35 percent of older Americans today—more than 13 million—are considered low-income[11] and factoring in that many of these low-income older Americans will be transit-dependent, there is likely going to be a growing demand for affordable housing in TOD neighborhoods that are walkable, safe and close to

a range of amenities and services. Yet it appears that the supply of affordable housing near transit could dramatically shrink. Of the more than 250,000 federally subsidized apartments with rental assistance contracts within a half-mile of "quality transit" (and approximately 200,000 within one-quarter mile) in 20 metropolitan regions across the country, more than 70 percent are covered by federal contracts that will expire over the next five years.[12] A large portion of these units are occupied by low-income, transit dependent, older Americans who would be in significant hardship if they lost this affordable housing near quality transportation.

Some key strategies for ensuring low-income people, particularly the most vulnerable, including seniors, children, and people with disabilities, have access to affordable housing near quality transportation include: 1) Permanently preserving existing federally subsidized apartments near quality transportation, and 2) Permanently preserving affordable market rate housing through community land trusts or TOD property acquisition funds. In addition to preservation of permanent affordability, other policies such as rent control or inclusionary zoning can be useful, but need to be used in appropriate contexts.

Recognizing the limits of a one-size-fits-all approach, planning for TOD can involve a diversity of approaches and investments, such as those outlined in Table 2 below.

Another important strategy for a successful TOD implementation process is incorporating protections against displacement. Communities can become more desirable through improved transportation connectivity and/or the introduction of new amenities and services, potentially pricing out existing LMI residents. There are some key demographic indicators that give a sense of the vulnerability of local residents to future displacement as market changes draw new households to the communities surrounding transit stations, including: 1) Median household income; 2) Percent of renter households; and 3) The share of expiring affordable units.

Understanding how the local neighborhood is changing over time can also inform TOD planning. Neighborhood level change indicators can include: 1) Change in educational attainment; 2) Change in family structure; 3) Change in median household income; and, 4) Change in income diversity.[13] Dramatic changes in these indicators can help planners identify which neighborhoods are experiencing gentrification and displacement, and which may be struggling with disinvestment, each calling for its own unique TOD strategy.

Recent work by CTOD in the City of Los Angeles used this type of analysis to show how investment strategies could be tailored to each of the 71 transit station areas in the City and identified unique characteristics that would make communities more vulnerable to displacement than others including demographics, market conditions, development opportunities, and transit connectivity characteristics. The report identified the following types of rapid demographic changes that characterize more vulnerable TOD neighborhoods:

Disinvesting: In these neighborhoods, there are an increasing number of residents in lower-income and educational attainment categories, while there is a decline in the number of residents in higher-income and educational attainment categories. Strategies that could help change this dynamic would be major public investment in catalytic development projects and public infrastructure improvements, such as parks, schools, and safe streets, to spur private investment. Improved access to jobs for local residents and the support for local economic development and job training should also be a priority.

Increased Risk of Displacement: In these neighborhoods, there is growth in the number of residents in higher-income and educational attainment categories, while there is decline in the number of residents in lower-income and educational attainment categories. This is sometimes the result of existing households experiencing upward mobility, but may be a sign of displacement.

Table 2 *Multiple Approaches to Support TOD*

Revitalization & Intensification	Neighborhood Preservation & Stability	Access & Connectivity
Increase density/development	Prevent displacement of vulnerable households	Increase transit ridership
Revitalize commercial corridors	Preserve historic buildings	Overcome barriers to walking/biking
Develop Affordable Housing	Preserve single-family neighborhoods	Improve safety
Assist existing residents economically (workforce development)	Enhance community activities (parks, schools, etc.)	Improve urban design
Enhance economic/job growth	Maintain and enhance a particular local identity	

Fostering TOD that preserves and builds permanent opportunities for LMI individuals to reap the benefits of living and working in healthy communities near quality transportation requires collaboration and coordination across multiple stakeholders.

Strategies to address vulnerability issues may include permanently preserving existing affordable housing through property acquisition and land banking or programs such as rent control, inclusionary housing and stricter condo-conversion ordinances.

Polarizing: In these neighborhoods, there are an increasing number of residents at each end of the income and educational attainment spectrum, and a decline of middle class residents. This can be reflected in the data by a decline in the income diversity of residents, while the median income stays fairly stable. Residents in neighborhoods with this profile are especially vulnerable to sudden upward shifts in housing costs or to rapid disinvestment. A range of strategies could be deployed to address this condition including a greater focus on workforce and mixed-income housing, strengthening local public schools, improving access to jobs and the preservation of affordable housing, with special attention paid to moderate-income rentals and ownership opportunities.

Of course, not all neighborhoods are experiencing rapid change. There are a variety of conditions that influence what strategies to deploy. What is important to recognize is that the ability to achieve a successful TOD plan is often influenced by local context, not only at the neighborhood level, but also in the context of that neighborhood's location within the region (e.g. is it at the outskirt of the region, near a major job center, etc.). Ultimately, using data and context-sensitive analysis to identify effective approaches and to strategically target TOD investments is critical to ensuring that LMI families are the beneficiaries, rather than the victims, of TOD.

Conclusion

People living in diverse regions across the country are clamoring for more and better public transportation, realizing that having access to quality transportation choices can translate into a higher quality of life. TOD holds promise as a community development model to meet this demand, but we need to ensure that such development adequately serves the needs of LMI individuals and working families, and meets a broad set of local, regional, state and federal goals. The success of TOD shouldn't be based on an arbitrary formula prescribing a particular mix of land uses, densities, and urban design applied across the board to communities large and small. Rather, the success of TOD should be measured by how neighborhoods, as an integral part of regions, are experiencing the multiple benefits of TOD that include lowered transportation costs for LMI households, improved access to economic opportunity, reduced VMT, and an overall reduction in greenhouse gas emissions.

Fostering TOD that preserves and builds permanent opportunities for LMI individuals to reap the benefits of living and working in healthy communities near quality transportation requires collaboration and coordination across multiple stakeholders. A big challenge in the TOD planning and implementation process is identifying the champion(s) who will hold the vision and big picture over the many years it takes to bring a successful TOD effort to fruition. TOD efforts require intermediaries that bring the diverse set of actors to the table (a silo buster!), identify needed expertise at the right time, and access necessary investments to make key components fall into place or to fill in gaps. Having long-term and reliable champions for TOD from the public sector, philanthropy, and the nonprofit and/or community development fields is particularly important for seeing TOD through a comprehensive community development lens, rather than simply interpreting TOD as a project near a train station.

The Interagency Partnership for Sustainable Communities between HUD, DOT and EPA has the ability to invest in equitable TOD champions and align federal resources to support innovative multi-sector approaches at all levels of government. Building a strong and diverse constituency for these efforts to increase the tools, resources and strategies for success will be important if we are to bring equitable TOD to scale across the country and foster healthy and sustainable neighborhoods for all. CI

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Endnotes

The Role of Transportation Planning and Policy in Shaping Communities

1. Massey, Douglas and Nancy Denton. (1998). American Apartheid: Segregation and the making of the underclass. Harvard University Press.
2. Logan, John and Reid Golden. (1986). "Suburbs and Satellites: Two Decades of Change." American Sociological Review, Vol. 51.
3. "Putting the 'There' There: Historical Archaeologies of West Oakland." Antropological Studies Center, Sonoma State University, 2004, prepared for the California Department of Transportation. (http://www.sonoma.edu/asc/cypress/finalreport/); "Cypress Freeway Replacement Project", US DOT, http://www.fhwa.dot.gov/environment/ejustice/case/case5.htm
4. Boothe, Vickie and Derek Shendell. (2008). "Potential health effects associated with residential proximity to freeways and primary roads: review of scientific literature, 1999-2006." Journal of Environmental Health. Vol 70(8):33-41, 55-6.
5. Gunier, Robert , Andrew Hertz, Julie von Behren and Peggy Reynolds. (2003). "Traffic density in California: Socioeconomic and ethnic differences among potentially exposed children." Journal of Exposure Analysis and Environmental Epidemiology. Vol. 13, 240–246.
6. McGuckin, Nancy and Nanda Srinivasan. (2003). "Journey to Work Trends in the United States and its Major Metropolitan Areas, 1960 – 2000. " Prepared for: US Department of Transportation, Federal Highway Administration. Publication No. FHWA -EP-03-058, available at: http://www.fhwa.dot.gov/ctpp/jtw/index.htm; US Energy Information Administraion: www.eia.doe.gov/petroleum/data_publications/wrgp/mogas_history.html
7. Carruthers, John and Gudmundur Ulfarsson (2003). "Urban sprawl and the cost of public services." Environment and Planning B: Planning and Design. 30(4) 503 – 522.
8. "2009 Public Transportation Fact Book,"(2009). The American Public Transportation Association. Available at: http://www.apta.com/gap/policyresearch/Documents/APTA_2009_Fact_Book.pdf
9. "Impacts of the Recession on Public Transportation Agencies: Survey Results" (2010). The American Public Transit Association. Available at: http://www.apta.com/mediacenter/pressreleases/2010/Pages/100401_funding_crisis.aspx
10. "Stranded at the Station: The Impact of the Financial Crisis in Public Transportation" (2009). Transportation for America, Nelson/Nygaard, The Transportation Equity Network, and the Gamaliel Foundation. Available at: http://t4america.org/resources/stranded/1
11. "National State of Good Repair Assessment" (2010). Federal Transit Administration. Available at: http://www.fta.dot.gov/documents/National_SGR_Study_072010%282%29.pdf
12. Enterprise Community Partners. Press release: "Enterprise Announces First Loan through Denver Transit-Oriented Development Fund Urban Land Conservancy to Purchase and Preserve Affordable Housing in NE Denver." Columbia, Md., May 6, 2010.
13. "MTC Pledges $10 Million for New Affordable Housing Fund." Oakland, Calif., Feb. 24, 2010.

Weaving Together Vibrant Communities through Transit-Oriented Development

1. Multi-modal refers to the existence of different transportation modes that are coordinated with one another to help people reach desired destinations in the most efficient way possible. A robust transportation network would include integrated options for walking, biking, driving and taking transit, which might include buses, bus-rapid transit, light rail, and/or commuter rail.
2. The Center for Transit-Oriented Development (CTOD) is a partnership between Reconnecting America, the Center for Neighborhood Technology (CNT) and Strategic Economics.
3. *The New Transit Town,* 2004, Island Press, Edited by Hank Dittmar and Gloria Ohland.
4. Pennywise Pound Fuelish: New Measures of Housing + Transportation Affordability, CNT, March 2010.
5. Pushkarev and Zupan. (1977). *Public Transportation & Land Use Policy.* A Regional Plan Association Book, Indiana University Press.
6. The average cost of vehicle ownership is calculated at $5,000 a year with an additional $2,000 added for fuel and maintenance. (Center for Housing Policy, 2006, A Heavy Load).
7. American Public Transportation Association (APTA). (2009). The Transit Savings Report. December 2009.
8. The Affordability Index: A New Tool for Measuring the True Affordability of a Housing Choice, The Center for Transit-Oriented Development and the Center for Neighborhood Technology, The Brookings Institution Urban Markets Initiative, Market Innovation Brief, January 2006.
9. http://www.htaindex.org
10. Pennywise Pound Fuelish: New Measures of Housing + Transportation Affordability, CNT, March 2010 pulled from the Transportation 2035 Plan for the San Francisco Bay Area
11. Federal Interagency Forum on Aging-Related Statistics, Older Americans 2008: Key Indicators of Well-Being, http://www.agingstats.gov; low income is defined as family incomes of less than 200 percent of the poverty threshold.
12. Harrell, Brooks and Nedwick. (2009). Preserving Affordability and Access in Livable Communities: Subsidized Housing Opportunities Near Transit and the 50+ Population. AARP Public Policy Institute Research Report, September 2009.
13. The Center for Transit-Oriented Development (2010). Creating Successful Transit-Oriented Districts in Los Angeles: A Citywide Toolkit for Achieving Regional Goals, February 2010.
14. Ibid