

# Promoting Opportunity through Equitable Transit-Oriented Development (eTOD): Barriers to Success and Best Practices for Implementation

Authors: John K. Hersey, Program Officer, Transit-Oriented Development;  
Michael A. Spotts, Senior Analyst-Project Manager, Policy Development & Research





## Promoting Opportunity through Equitable Transit-Oriented Development (eTOD): Barriers and Best Practices for Implementation

Authors: John K. Hersey, Program Officer, Transit-Oriented Development  
Michael A. Spotts, Senior Analyst-Project Manager, Policy Development & Research

### ABOUT THE AUTHORS

**John K. Hersey** is the Enterprise TOD Initiative's Program Officer. In this role, John conducts research and writes on best practices in creating or preserving equitable station areas, administers the Initiative's Section 4 capacity-building program, and closely coordinates priorities with other Enterprise initiatives and markets. Prior to joining Enterprise, John worked in transportation planning in Boston and Washington, D.C., promoting transit-service accessibility, bicycle sharing, walkable communities, and community development. John earned a bachelor's degree in sustainable urban planning and a master's degree in regional planning from the University of Massachusetts, as well as a master's degree in real estate development from the University of Maryland.

**Michael A. Spotts** is a Senior Analyst, Project Manager for Enterprise Community Partners. He joined the Public Policy team in August 2009. In his position at Enterprise, he conducts research and analysis of affordable housing and community development policies, and manages Enterprise's federal transit-oriented development policy activities. He serves as a member of the Arlington County (VA) Community Development Citizen's Advisory Committee and a member of the Board of Directors for the Arlington Partnership for Affordable Housing. He also served as the Vice-Chair of the Arlington County (VA) Affordable Housing Study working group from 2013-2015, an advisory group that assisted in the development of the recently-adopted affordable housing element of the County's Comprehensive Plan.

Michael graduated with a Masters of Science in Public Policy and Management from the Heinz College at Carnegie Mellon University. Prior experience in the community development field includes work with the Housing Assistance Council, Sustainable Pittsburgh, Allegheny County (PA) Economic Development, and the Rural Local Initiatives Support Corporation. Michael graduated Summa Cum Laude from Dickinson College in 2006, and received a Post-Baccalaureate Certificate in Community and Economic Development from the Pennsylvania State University in 2008.

### ABOUT ENTERPRISE COMMUNITY PARTNERS

Enterprise works with partners nationwide to build opportunity. We create and advocate for affordable homes in thriving communities linked to jobs, good schools, health care and transportation. We lend funds, finance development and manage and build affordable housing, while shaping new strategies, solutions and policy. Over more than 30 years, Enterprise has created nearly 340,000 homes, invested nearly \$18.6 billion and touched millions of lives. Join us at [www.EnterpriseCommunity.org](http://www.EnterpriseCommunity.org).

Please send questions regarding usage of this information to:  
John K. Hersey, Program Officer, Transit-Oriented Development  
Enterprise Community Partners, Inc. | 110 16th Street, Suite 1310 | Denver, CO 80202  
202.403.8003 | [jhersey@enterprisecommunity.org](mailto:jhersey@enterprisecommunity.org)

Copyright © 2015 Enterprise Community Partners, Inc.  
Permission is granted to copy, distribute this document under the CC BY-ND license with EXCEPTIONS listed in the Terms of Use, which you may find on our website at [www.EnterpriseCommunity.org](http://www.EnterpriseCommunity.org).

Photo credits: cover photo and p. 23 by Gabor Ekecs; pp. 6, 8 and 50 by Warwick Green; p. 7 by Harry Connolly; pp. 9 and 33 by Cade Martin; pp. 12, 48, 60 and 62 by iStock Photography

## **CONTENTS**

<b>Introduction</b>	<b>5</b>
<b>Barriers and Best Practices for Implementing eTOD</b>	<b>7</b>
Affordable Housing Developments 101	8
FTA's Major Capital Investment Program	11
<b>SOLUTION 1: Adopt Proactive, Collaborative Strategies to Support eTOD</b>	<b>12</b>
Convene Cross-Sector Collaborative Groups to Develop Shared Priorities	13
Align Cross-Sectoral Priorities	14
Improve Planning Processes through Greater Coordination and Enhanced Data Analysis	15
Coordinate Pre-Development Activities	18
Support Citizen Engagement and Community Benefits	18
Create Typologies and Guidelines for eTOD	21
<b>SOLUTION 2: Reform Plans, Codes and Policies that Influence Station Area Development</b>	<b>23</b>
Amend Local Codes and Standards to Support eTOD and/or Adopt Inclusionary Housing Policies	24
Adopt State Legislation that Supports Affordable Housing	27
Reform Parking Policies	28
<b>SOLUTION 3: Expand Access to Capital with eTOD-Appropriate Terms and Conditions</b>	<b>33</b>
Corridor- and Neighborhood-Scale Uses of Capital	36
Housing-Related Uses of Capital	37
Allocate Transportation Resources for Transit and eTOD	38
Create Incentives for eTOD in Existing Affordable Housing Funding Programs	41
Link Environmental Resources to eTOD Activities	42
Provide State-Level Resources	43
Utilize Local and Regional Resources, Including Taxing and Bonding Authority	44
Use Public Resources to Leverage Private and Philanthropic Resources	46
Case Study: Using Transportation Resources to Support eTOD in the San Francisco Bay Region	48
<b>SOLUTION 4: Enhance Site-Access and Improve Site Viability</b>	<b>50</b>
Utilize Public- and Transit Agency-Owned Sites for Affordable Housing	50
Proactively Acquire and/or Assemble Land for Station Area Development	55
In Challenging Markets, Remove Regulatory Barriers and Take Catalytic Action to Support Redevelopment	57
Case Study: A Regional Snapshot of eTOD Support in Atlanta	60
<b>Conclusion</b>	<b>62</b>
<b>Appendix A: Promoting Opportunity through eTOD: Making the Case</b>	<b>63</b>
<b>Appendix B: Acknowledgements</b>	<b>65</b>
<b>Endnotes</b>	<b>67</b>



## INTRODUCTION

Development patterns directly relate to a community's strength. Individual families, the local economy, municipal governments and the environment all benefit when well-located housing, jobs and other necessary resources are connected by efficient transportation and infrastructure networks. Equitable transit-oriented development (eTOD) is an important approach to facilitating these connections. This paper defines eTOD as compact, often mixed-use development with multi-modal access to jobs, neighborhood-serving stores and other amenities that also serves the needs of low- and moderate-income people.<sup>1</sup> The preservation and creation of dedicated affordable housing is a primary approach to eTOD, which can ensure that high-opportunity neighborhoods are open to people from all walks of life. eTOD supports the achievement of multiple cross-sector goals, including regional economic growth, enhanced mobility and access, efficient municipal and transportation network operations, improved public health, and decreased cost of living. For more information and data on the benefits of eTOD, [See Appendix A, page 63.](#)

### What do we mean by “affordable housing?”

Housing is considered affordable if a household's full cost of shelter (rent plus utilities; or principal, interest, taxes, insurance and utilities for homeowners) is no more than 30 percent of their income.

While market-rate housing can be affordable to a wide range of households in some markets, there is a need for committed affordable units for those that the market cannot reach. “Affordable housing” units are income restricted and set or limit monthly payments at a specified level. They can be created or preserved through various means, including the federal Low-Income Housing Tax Credit program and through municipal inclusionary zoning policies.

Yet it is sometimes difficult for planning agencies, local governments, transit agencies, housing organizations, private developers, and other institutions that influence development to act in concert to overcome barriers to eTOD. Each stakeholder has a unique mission with disparate goals and compliance burdens and must comply with complex and sometimes contradictory rules and regulations. However, improving coordination between these sectors can shift a potentially adversarial relationship into a symbiotic partnership. As the public resources that support transportation and infrastructure networks and housing affordability remain threatened, such efficient coordination is an especially important goal.<sup>2</sup>

*Barriers to Success and Best Practices for Implementation* is the second report in the *Promoting Opportunity through eTOD* research series. This report updates and expands upon a 2010 paper on *Making Affordable Housing at Transit a Reality: Best Practices in Transit Agency Joint Development* to include a broader

1 For the purpose of this report, the terms “low-income” and “moderate-income” do not refer to specific income thresholds. The definition for these terms can vary by jurisdiction and government program. Some U.S. Department of Housing and Urban Development programs define low-income as households earning no more than 80 percent of area median income (AMI), while the federal Low-Income Housing Tax Credit program targets households at or below 60 percent of AMI. Various state and local standards are also set, in some cases reaching 120 percent of AMI for homeownership programs. In the context of eTOD, the target population for any intervention will depend on the specific needs of that community.

2 For more information on federal housing spending levels and challenges, visit the Enterprise Budget and Appropriations website and the Enterprise blog: <http://www.enterprisecommunity.com/policy-and-advocacy/issues/federal-budget-and-appropriations> and <http://blog.enterprisecommunity.com/budget-and-appropriations>

range of eTOD-supportive policies, including but not limited to those instituted by transit agencies, departments of transportation, metropolitan planning organizations (MPOs), state and local governments, and the housing sector.<sup>1</sup> This research is informed by a review of literature, analysis of regulatory changes, and direct insights from Enterprise Community Partners' work to support eTOD. It also reviews the policies and practices of 20 transportation agencies, based on direct interviews with agency staff as well as other transportation and housing professionals (for a full list of contributors to this research, see [Appendix B, page 65](#)). Based on this background information, the report addresses barriers to developing and preserving eTOD projects and communities and provides a non-exhaustive account of creative solutions to addressing those challenges.





### **BARRIERS AND BEST PRACTICES FOR IMPLEMENTING ETOD**

There are a number of barriers to TOD, making eTOD even more difficult to achieve. Single-use zoning, density limits, parking requirements and automobile-oriented development patterns complicate even market-rate TOD. Additionally, infill TOD often faces higher development costs than comparable “greenfield” projects related to regulatory compliance, site layout, the need to work around existing infrastructure, and demolition, remediation, or site-preparation work.<sup>ii</sup> This combination of scarce supply and high development costs often results in increased property values within transit-oriented neighborhoods, though such premiums are context-sensitive and influenced by other factors. These higher costs can create barriers to entry for lower-income families into transit-served neighborhoods and/or increase the likelihood that existing residents will experience housing cost burden<sup>3</sup> or displacement.<sup>iii</sup> Research indicates that neighborhoods with a high proportion of renters are particularly susceptible to these cost pressures.<sup>iv</sup>

It is within this framework and these constraints that the affordable housing sector works to support eTOD. As with real estate development of all types, the local and regional development context heavily influences a project’s success or failure. (For more information on the affordable housing development and preservation process, see [Affordable Housing 101](#), page 8). This context consists of a number of factors including but not limited to the strength of the local economy, the location and quality of supportive infrastructure (particularly transportation), existing land use, zoning and building codes, the permitting, approval and entitlement process and financing availability.

While all real estate development involves some risk, areas with planned (as opposed to existing) transit investments may have higher levels of risk for developers. Property values rise sometimes years in advance of the start of any transit service. Yet, as a result of the length and complexity of the transit development process (or in some cases controversy over transit plans), the transit project may never materialize. Navigating this process is especially difficult for a revenue-constrained affordable housing developer, who must remain ahead of significant property value increases as the transportation planning and development processes move forward – while having less margin for error if the transit service, market demand and/or financing availability never materializes.

<sup>3</sup> Housing is considered affordable if a household’s full cost of shelter (rent plus utilities; or principal, interest, taxes, insurance and utilities for homeowners) is no more than 30 percent of their income. Households spending more than this amount are considered cost burdened. Those spending 50 percent or more of their income on housing are considered severely cost burdened.



## AFFORDABLE HOUSING DEVELOPMENT 101

In order to better understand how stakeholders can support eTOD, it is helpful to understand the affordable housing development and preservation process. As with many larger-scale real estate projects, affordable housing development generally involves similar steps: pre-development; acquisition; construction; and operation. Affordable housing and standard market-rate developments share many financing and regulatory challenges, including access to development sites, property acquisition costs, zoning constraints, and the cost and risk associated with holding property until the market supports development. However, the forgone revenue associated with affordable housing accentuates these challenges. The following development scenario provides a general context for the challenges and best practices described in the following sections.

The affordable housing development process generally begins with a developer identifying market needs and performing due diligence to identify prospective sites. In addition to the consideration of whether the site's size, configuration, development potential, acquisition cost and financing availability correspond with market demand, the developer also considers potential structural deficiencies, environmental contamination, or other risk factors that could jeopardize the project. For new construction or rehabilitation, work also begins with the development team (including but not limited to architects, engineers, general contractors and property managers) to develop preliminary designs, plans and specifications for the site.

At the same time, the developer works to assemble the financing necessary to acquire and develop a given site or property. In some cases, a developer may have sufficient on-balance sheet funds to gain site control, or may have access to a dedicated pool of affordable housing acquisition capital. A developer with access to these or similar resources is better positioned to compete with market-rate developers for desirable sites and/or existing structures. Developers can also access other private acquisition loan sources, though these can have higher interest rates and shorter loan terms that make them less conducive to affordable housing development. Alternatively, a developer must negotiate an option to purchase the property, contingent on its ability to secure financing from other sources, such as the Low-Income Housing Tax Credit (Housing Credit) program. This approach can put the developer in an unfavorable negotiating position, as the owner may choose to sell to a market-rate developer or charge a premium for the added delay and risk.



The respective processes for preservation and new construction/substantial rehabilitation of affordable housing can diverge after acquisition. A developer who acquires an occupied property without immediate major capital needs may continue to operate the property until a more appropriate opportunity for rehabilitation or redevelopment. Otherwise, a developer with site control must assemble financing for construction or rehabilitation of the property, obtain construction loans and seek to assemble a permanent-financing package. This sometimes lengthy process may begin before site control is finalized, in an effort to expedite the process and mitigate risk and land holding costs. In most cases, a developer applies for an allocation of Housing Credits from a state housing finance agency, which can be used to attract equity investments in the property. Funding gaps can be filled with mortgage loans and other grants or secondary (sometimes forgivable) loans.

As the financial package is assembled, the developer works with architects, engineers and other contractors to finalize designs, plans and specifications. As with market-rate development, these must comply with local codes and regulations and lender requirements. An affordable housing developer must also adhere to requirements set by any subsidy programs that are utilized, including strict time frames for the expenditure of funds and commencement of construction, adding another layer of complexity to the development. Most subsidy programs require that construction be completed and the building occupied by income-eligible tenants within a specified period of time. From that point forward, the developer must operate the property in compliance with the aforementioned regulations and requirements until the building needs to be recapitalized or refinanced, and/or the end of the subsidy compliance period.



Municipal governments, regional planning entities and transit agencies play a significant role in creating a local development context that supports eTOD. Land use and zoning policies in particular should complement transportation planning. A supportive development framework (including but not limited to regulations – or a relative lack thereof – on density, parking, and land use) can facilitate the type of productive communities that enhance the effectiveness of existing transportation infrastructure or create the conditions under which new transit investments can succeed. Likewise, properly designed and sited investments in transportation infrastructure are an important component of local land use planning efforts. Missing either component can hinder the effectiveness of the other. An analysis by the Government Accountability Office found that the mixed success in attracting TOD around certain Federal Transit Administration (FTA)-funded transit developments was at least partially the result of the varying degrees to which local government policies supported TOD.<sup>v</sup>

Therefore, in many cases, eTOD requires proactive strategies and specific tools to preserve and create affordable housing opportunities in these neighborhoods. Our research and experience has found a number of promising solutions for addressing the most commonly faced barriers to eTOD:

- **Adopt proactive, collaborative strategies to support eTOD** to overcome jurisdiction- and sector-based fragmentation.
- **Take early action to reform plans, codes and policies that influence station area development** to remove regulatory deterrents to and create incentives for eTOD.
- **Expand access to capital with eTOD-appropriate terms and conditions** to overcome financial barriers to planning, preservation and development.
- **Enhance site-access and improve site viability** to counter market conditions that reduce the likelihood of eTOD.

Given the inherently interrelated nature of housing and transportation, we find that the most effective efforts to support eTOD include cross-sector engagement and commitment from both housing and transportation stakeholders. Furthermore, given the public sector's authority over crucial plans, codes, and policies, and the private sector's expertise in assembling capital and implementing development, we find that effective solutions most often incorporate both parties.

## ADVANCING EQUITY AROUND NEW TRANSIT INVESTMENTS: FTA'S MAJOR CAPITAL INVESTMENT GRANT PROGRAM



Recent changes to the FTA's Major Capital Investment Grant program (CIG; commonly referred to as New Starts) illustrate the importance of collaboration to achieve an eTOD-supportive strategy. The CIG program is the federal government's primary grant resource for new transit investments. This example is notable in two ways: the collaborative process for developing and adopting the rule changes, and the way the changes themselves encourage collaboration at the local and regional levels.

In 2010, the FTA began the process of revising the rules and guidance governing the program's evaluation and ratings system in order to more explicitly address the wide range of benefits that transit investments provide. In addition to consulting with HUD, FTA undertook an extensive and iterative public comment process on its proposals for achieving this goal. In response, various stakeholders in the affordable housing and community development industry submitted detailed public comment letters that promoted the coordination of affordable housing and community development activities with new transit investments in order to avoid displacement and expand opportunity.<sup>4</sup>

FTA released the Final Rule for the New Starts program (49 CFR Part 611) in January 2013 and detailed Policy Guidance in August 2013. The rule and guidance reflected several positive steps in the effort to advance eTOD. In particular, four separate rating categories include provisions related to providing transportation benefits to low- and moderate-income households. Moving forward, the evaluation system for potential grantees will include incentives to expand transit access to low-income communities, preserve existing affordable housing and develop additional affordable units near new stations. Achieving the vision set out in the program's rating system will require proactive coordination between CIG project sponsors, local governments, and the housing and community development sectors of the affected jurisdictions.

These changes represent a significant breakthrough, as CIG was the first federal transportation program to explicitly address affordable housing. For more information, read Enterprise's Policy Brief: *Leveraging the New Transit Policy Guidance to Create Inclusive Communities of Opportunity*.<sup>vi</sup>

<sup>4</sup> For additional details on specific comments offered and the partner organizations involved, visit the Enterprise Testimony and Public Comment webpage: <http://www.enterprisecommunity.com/policy-and-advocacy/testimony-and-public-comment>



## **SOLUTION 1: ADOPT PROACTIVE, COLLABORATIVE STRATEGIES TO SUPPORT ETOD**

Implementing eTOD requires engagement between both the housing and transportation sectors and various levels of government. However, inconsistent cross-sector coordination, the resulting lack of familiarity, and complex and sometimes contradictory rules and regulations for each sector complicate these critical partnerships. Improving coordination between the housing and transportation sectors and between various levels of government can shift a potentially adversarial relationship into one that is symbiotic. Furthermore, enhanced collaboration and efficiency is especially important as already limited public resources come under threat.

The federal Partnership for Sustainable Communities provides a model for cross-sector collaboration. Over the last several years, the FTA at the Department of Transportation (DOT) and the Department of Housing and Urban Development (HUD) have taken commendable steps outlined in the Livability Principles to support sustainable, equitable communities near transit.<sup>5</sup> The most notable example of a policy change driven by this broadened outlook is the 2013 revision to FTA's Major Capital Investment Grant Program regulations. As part of these changes, the program now rates applicants for transit capital on the extent to which the proposals account for affordable housing needs in the proposed station areas, among other factors (see [Advancing Equity Around New Transit Investments](#), page 11).

While federal support for coordination is helpful, coordination must be present at the regional and local levels to succeed. Multiple parties should collaborate, including the parties responsible for implementing transportation, housing and community development investments, as well as the stakeholders affected by relevant planning, policy and investment decisions. In the context of eTOD, it is important to involve, at minimum, the MPO, the transit agency, the local land-use planning authority, housing agencies, developers, the business community and employees, and residents. These parties' disparate backgrounds, interests, and concerns are crucial for informing decision-making, identifying and working through barriers, and ensuring effective implementation.

The following sections provide examples and best practices for advancing an effective, proactive eTOD strategy.

---

<sup>5</sup> For more information on the Partnership for Sustainable Communities and the Livability Principles, visit: <http://www.sustainablecommunities.gov/>

**CONVENE CROSS-SECTOR COLLABORATIVE GROUPS TO DEVELOP SHARED PRIORITIES**

While cross-sector coordination should be embedded into standard practice, there may also be a need to set up a separate initiative to focus attention on eTOD. In some regions, this initial engagement can serve as the platform for more systematic collaboration in the future. In others, the scale or scope of a region's eTOD challenges may necessitate a more intentional approach. Interdisciplinary partnerships of developers, lenders, local and state housing and transportation entities, nonprofit advocates, and philanthropies play an important role in focusing attention on eTOD-related challenges and identifying (and in some cases, implementing) potential solutions. Beginning these efforts well before transit build-out is crucial in order to ensure that transit plans incorporate the needs of low- and moderate-income households and to avoid falling behind property value increases and displacement pressures. Furthermore, collaborative groups can continue to play a role after new transit opens, as neighborhoods evolve and new equity-related challenges emerge. Collaborative groups have emerged throughout the country as particularly impactful partners in regions seeking significant expansions to their transit systems, including but not limited to Atlanta and Denver.

Atlanta's TransFormation Alliance is "dedicated to creating thriving mixed-income communities anchored by transit and linked to all the opportunities and amenities that make Atlanta great."<sup>vii</sup> The Alliance's membership of developers, transit planners, land-use planners, and elected officials considers barriers and solutions to eTOD across the regional transportation network and includes developers, transit planners, land-use planners and elected officials, among others.<sup>6</sup> The Atlanta Regional Commission (ARC; the region's MPO) provides staffing and resources to help the Alliance move from discussion toward implementation. The Alliance has worked to build eTOD capacity, aligned with the Metropolitan Atlanta Rapid Transit Authority's (MARTA) TOD program, engaged in station area visioning efforts, and produced a TOD typology report and equity evaluation tools.<sup>viii</sup>

In Denver, Enterprise joined with other regional stakeholders to create Mile High Connects (MHC) as a forum for ensuring that the region's FasTracks transit expansion delivered broad community benefits for housing, employment, education and health.<sup>ix</sup> With support from a broad coalition of community development organizations, MHC has engaged Denver's transit agency, the Regional Transportation District (RTD), on the issues of affordable fares for low-income riders, first- and last-mile connections in station areas, and inclusive station area development policies.

---

<sup>6</sup> Enterprise serves as co-convenor of the TransFormation Alliance.

### ALIGN CROSS-SECTORAL PRIORITIES

In addition to the aforementioned steps to align federal policies, some states have recognized the need to support eTOD across regions and have aligned programs to prepare station areas for redevelopment. These efforts range from adding transit-specific evaluation criteria into competitive housing funding programs to operating entire programs to facilitate eTOD.<sup>x</sup>

In Maryland, the Department of Housing and Community Development, the Department of Planning, and the Department of Transportation, which oversees the Maryland Transit Administration, align eTOD funding and technical assistance through the Sustainable Communities Program, Smart Growth Toolbox, and station area master plans.<sup>xi</sup> Of particular note, under the Sustainable Communities program local governments can apply for a “Sustainable Communities” designation, opening several funding opportunities for capital projects, including strategic demolition, mixed-use development and green infrastructure improvements. Sustainable Communities designees also receive between four and eight points in the state’s competition for Housing Credit financing for affordable housing.<sup>xii</sup>

New Jersey’s Transit Village initiative recognizes communities that have committed to transit-oriented growth. A municipality can receive this designation if it has:

- Adopted TOD-supportive zoning, design guidelines, parking requirements, and bicycle and pedestrian policies within one half-mile of a transit facility.
- Identified properties for transit-oriented redevelopment.
- Constructed bicycle and pedestrian improvements as well as place-making amenities such as parks and plazas.<sup>xiii</sup>

This recognition allows designated communities to receive priority funding consideration for pre-development activities as well as technical assistance from ten state agencies, including the Departments of Transportation and Community Affairs. The program also provides expedited permitting for station area housing and commercial development.<sup>xiv</sup>

Intervention Type	Jurisdiction	Details
Cross-agency consultation in developing program criteria	Arizona	In developing its Qualified Allocation Plan (QAP) for Housing Credits, the Department of Housing consulted with the Department of Transportation to determine separate scoring for rail and transit accessibility.
	Washington	The Puget Sound Regional Council worked with the Washington State Housing Finance Commission to create separate QAP criteria for urban areas that address location efficiency and different transit modes.
Create interagency entities/ working groups	Illinois	Illinois created the Housing/ Transportation/Employment Linkages Working Group to recommend strategies and to coordinate regionally.
Coordinate housing and transit investment	Connecticut	The Department of Transportation solicited input from housing officials when planning a bus rapid transit line to address affordable housing along the line and to assess the impact that the line has on the region's housing market.

**IMPROVE PLANNING PROCESSES THROUGH GREATER COORDINATION AND ENHANCED DATA ANALYSIS**

States, metropolitan regions, and cities all undertake extensive planning processes that guide transportation and land use decisions, and federal agencies require funding recipients to adopt formal plans for the use of those funds. In addition, a recent HUD rulemaking affirms the obligation of states and municipalities to Affirmatively Further Fair Housing under the Fair Housing Act. HUD will increasingly focus on how jurisdictions use plans and policies to overcome barriers to opportunity.<sup>7</sup>

These plans can influence or ultimately determine the nature and location of transportation and real estate development decisions both large and small. In doing so, they significantly impact the health and inclusiveness of neighborhoods, cities and regions. Just as cross-sectoral priorities should be aligned, these plans should be coordinated to the greatest practical extent to reflect the interrelated nature of transportation, land use, housing, economic development and social equity considerations.

<sup>7</sup> The new Affirmatively Furthering Fair Housing rule institutes planning-related measures to replace the inconsistently applied Analysis of Impediments, including guidance, tools and data resources. Jurisdictions must now assess fair housing issues by identifying patterns of racially or ethnically concentrated areas of poverty and detecting disparities in access to opportunity or disproportionate housing needs for protected classes. HUD funding is contingent on the completion of an Assessment of Fair Housing that is accepted by HUD. For more information on the AFFH rule, read the Enterprise summary at: [http://bit.ly/Enterprise\\_AFFH\\_Summary](http://bit.ly/Enterprise_AFFH_Summary).

**Examples of the Importance of Metrics in Influencing Decision Making**

*Congestion reduction:* Measuring average travel times rather than level-of-service can be more relevant to the daily needs of residents and commuters. For example, an individual whose average travel speed is 15 miles per hour but can access most daily needs within a five-mile trip is functionally no worse off than someone whose average speed is 45 miles an hour but has a 15-mile commute. Many congestion metrics do not reflect this fact, skewing the distribution of scarce resources toward road widening and other highway projects that can be destructive to urban neighborhoods.<sup>xv</sup>

*Combined housing and transportation costs:* Both the Center for Neighborhood Technology’s Housing + Transportation (H+T) Affordability Index and the HUD Location Affordability Portal provide data on the potential trade-offs between housing and transportation costs. For example, although housing costs may be lower in suburban locations further from the urban core, those gains may be lost if the household has to incur extra transportation costs to reach employment or other daily necessities.

The quality of these plans (and associated development decisions) depends on the accuracy and comprehensiveness of the data that informs them. This applies to identifying existing needs and projecting the outcomes of proposed policy changes. The use of metrics that skew toward automobile-centric development patterns or fail to consider the unintended impacts of plans and policies on low- and moderate-income households can negatively impact eTOD.

Several MPOs have adopted measures of mobility and planning efficacy that go beyond traditional transportation metrics such as vehicle-miles traveled and level-of-service (a measure of traffic flow). MPOs often have institutional planning processes and data analysis capacity to expand the range of factors examined to include social equity, land use and housing affordability.<sup>xvi</sup> Arguably, the most notable of these metrics is the combined cost of housing and transportation, which measures location efficiency and affordability (see sidebar).

Illinois was the first state to require an analysis of housing and transportation costs when funding housing, transportation or economic development projects in metropolitan planning areas. The Champaign-Urbana Urbanized Area Transportation Study used this analysis in 2006 to make the case for reducing transit fares, expanding transit service, and improving conditions for bicyclists and pedestrians, increasing by approximately 90 percent the number of residents living within a quarter-mile of a weekday bus route.<sup>xvii</sup>

Intervention Type	Jurisdiction	Details
Incorporate opportunity-based indicators into transportation plans	Seattle	The Puget Sound Regional Council’s planning factors include affordable housing and TOD alongside more traditional transportation and environmental factors. <sup>xviii</sup>  Sacramento Area Council of Governments utilizes opportunity indicators such as access to jobs and higher education for lower-income or minority communities, and affordable housing, among others. <sup>xix</sup>



Intervention Type	Jurisdiction	Details
Use data to identify challenges and set goals	<p>Nashville, Tenn.</p> <p>Knoxville, Tenn.</p> <p>Saint Louis</p> <p>San Francisco Bay Area</p>	<p>The Nashville Area Metropolitan Planning Organization used the H+T Affordability Index to find that 90 percent of the region’s households spent at least 20 percent of their income on transportation, leading the agency to target affordability in its 2040 Regional Transportation Plan.<sup>xx</sup></p> <p>The Knoxville Regional Transportation Planning Organization used the H+T Affordability Index to project the impact of preferred regional growth scenarios on household transportation costs.<sup>xxi</sup></p> <p>The East-West Gateway Council of Governments used the H+T Affordability Index in part to develop a strategy that balances commercial and residential development, considers workforce housing in decisions about commercial development, and increases employment opportunities in the urban core.<sup>xxii</sup></p> <p>The Metropolitan Transportation Commission (MTC) has set a number of data-based goals, including “Decrease share of low and lower-middle income residents’ household transportation and housing expenditures by 10 percent.”<sup>xxiii</sup></p>
Disseminate data in support of TOD plans	Chicago	As a resource for developers, the Metropolitan Planning Council’s Grow Chicago data portal identifies properties that fit into the region’s TOD plans and aggregates information on economic development, jobs, schools, transportation access and city services. <sup>xxiv</sup>
Track and monitor progress in achieving goals	Minneapolis/St. Paul	In association with a recent transit expansion, the Central Corridor Funders Collaborative conducts monitoring of indicators related to affordable housing, economic development, neighborhood vibrancy, and effective coordination and collaboration. This data is reported in an annual Central Corridor Tracker report. <sup>xxv</sup>

### COORDINATE PRE-DEVELOPMENT ACTIVITIES

As illustrated in [Affordable Housing 101](#), developers often must incur significant due diligence expenses when exploring a potential site's viability. This is a particularly risky time, as the developer loses any funds expended on preliminary plans or environmental reviews if the development does not proceed. Affordable housing developers have lower margins for error in making decisions at this stage, as losses are not readily recouped by raising rents. The aforementioned examples of cross-sector collaboration and interagency coordination present early-stage opportunities to identify specific areas for joint pre-development activities.

As new transit development often requires extensive environmental reviews and site analysis, there is an opportunity for pre-development coordination that could streamline the due-diligence process. When planning the T-Third light-rail project in eastern San Francisco, the city conducted a blanket environmental impact review (EIR) throughout the corridor, reducing the cost of similar EIRs for each development and expediting the entitlement process.<sup>xxvi</sup> The GAO also found that this innovation assisted in managing the public input process. Developers stated that development is concentrated in neighborhoods with area plans and entitlement processes in these areas are shorter.<sup>xxvii</sup>

### SUPPORT CITIZEN ENGAGEMENT AND COMMUNITY BENEFITS

Transit projects can transform neighborhoods, and some station area residents may worry about the potential “side effects” of the new transit service: property owners may fear eminent domain or undervalued compensation for the project's right-of-way; construction may disrupt nearby businesses and residents; and demand for new transit access may displace residents who tolerated construction without benefitting from the improvement. Transit planners and developers should proactively engage local stakeholders to identify and address a broad range of neighborhood concerns. One potential outcome of this engagement is the adoption of community-benefits agreements (CBAs), legally-binding commitments to a package of policies and benefits that offset negative externalities, with the community subsequently offering their support for the project.<sup>xxviii</sup> Affordable housing can be an important component of a CBA.

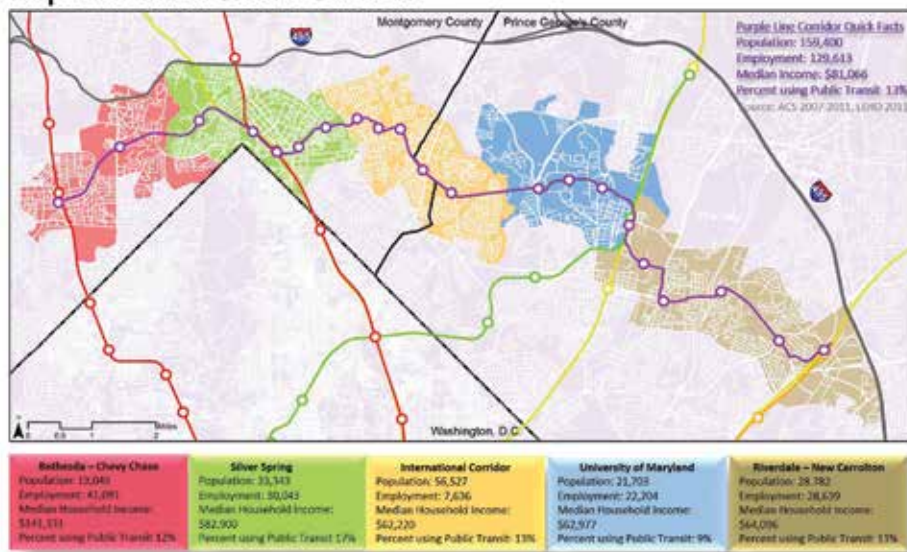
The Purple Line Corridor Coalition was formed in response to ongoing plans to create a light-rail corridor in suburban Washington, D.C. The Purple Line will connect branches of the region's core heavy rail system as well as some of suburban Maryland's

low- to moderate-income neighborhoods (see maps below).<sup>xxix</sup> The Coalition is developing the Purple Line Community Compact to revitalize and stabilize neighborhoods, support small businesses, connect workers with jobs, and create vibrant and healthy communities. Led by the University of Maryland’s National Center for Smart Growth Research and Education, the Coalition represents communities, public institutions, community and nonprofit organizations, and businesses sited along the 16-mile corridor.<sup>xxx</sup>

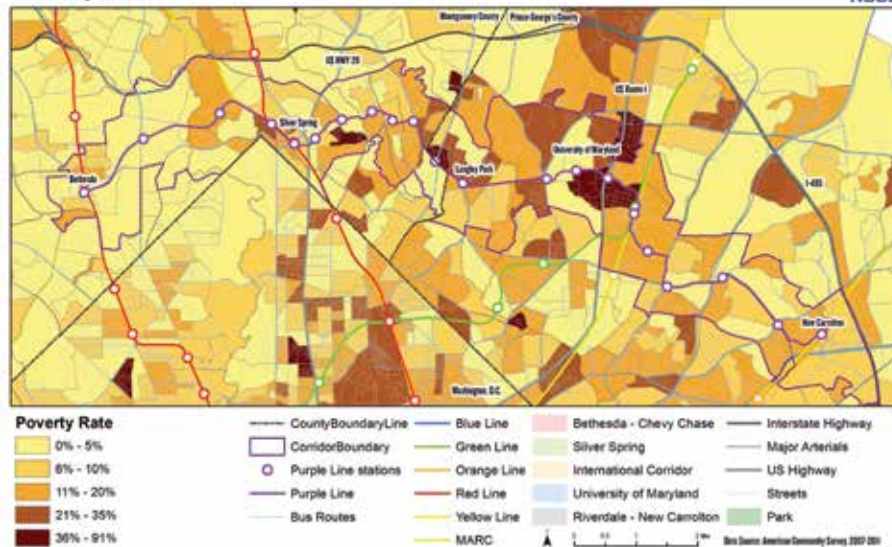
**PURPLE LINE CORRIDOR ANALYSIS**

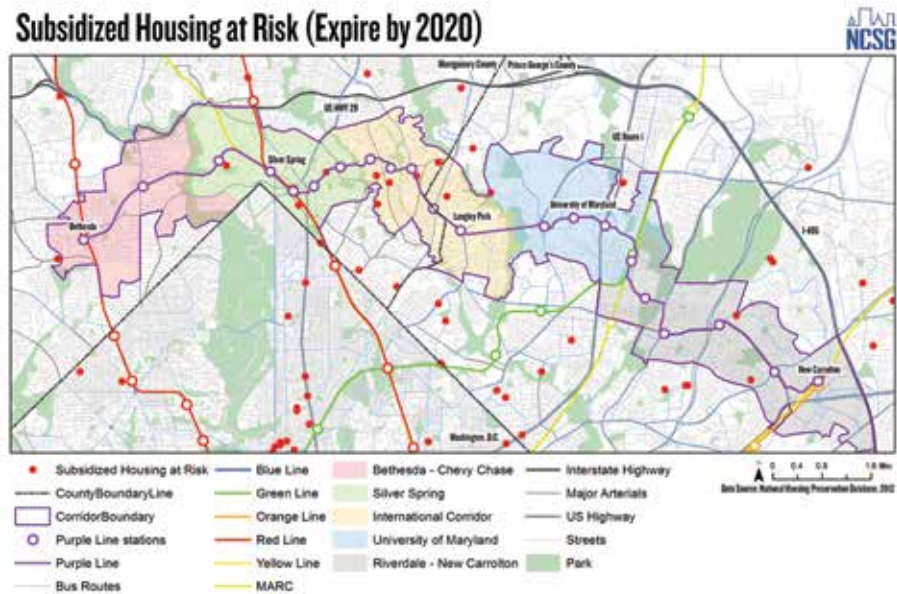
Maps were produced by the University of Maryland’s National Center for Smart Growth Research and Education and included with permission.

**Purple Line Transit Corridor Subareas**



**Poverty Rate**





The Baltimore region had been preparing for an investment in a new light-rail line until the project’s cancellation by state authorities in June 2015. Before the cancellation, representatives from the City of Baltimore, the Maryland Department of Transportation, the Maryland Transit Administration, and three neighborhood organizations signed the Red Line Community Compact on behalf of 70 community organizations. The Compact would have ensured that the new transit asset not only enhanced mobility but also addressed workforce training for local residents, environmental remediation and restoration, community engagement in station area design, and construction-related impacts on station area businesses.<sup>xxxii</sup> Although the project will not move forward as originally envisioned, this collaboration laid the groundwork for stakeholders to immediately begin discussions on the future of transit along that corridor.

Intervention Type	Jurisdiction	Details
Facilitate community engagement	Minneapolis-Saint Paul	The Metropolitan Council (MPO for the Twin Cities region) created the Corridors of Opportunity program to sponsor community engagement and provide technical assistance to communities around equity-related issues. <sup>xxxii</sup>
Support local workforce development	Portland, Ore.	Portland’s TriMet has agreed to provisions that ensured that local residents have an opportunity to contribute to new transit construction. As a result, local disadvantaged businesses were awarded 18 percent of contract dollars for construction of the Yellow Line and ¼ of Milwaukie MAX Line contractors were disadvantaged businesses. <sup>xxxiii</sup>
Address environmental concerns	Seattle	When Sound Transit’s Link project construction impacted a small wetland, the agency restored another wetland, monitored the area for five years, and installed educational materials about the wetland’s history and habitat. <sup>xxxiv</sup>
Address ongoing concerns	Salt Lake City	The city hired an ombudsman during construction of the 400 South TRAX light-rail line to prepare for and immediately respond to issues related to business access, traffic, parking, utility interruption, noise disruptions, and other concerns. <sup>xxxv</sup>

**CREATE TYPOLOGIES AND GUIDELINES FOR ETOD**

As previously discussed, successful planning and development efforts require engaging a range of stakeholders and sectors. These individuals’ and organizations’ familiarity with the technical aspects of development will inevitably vary. While some may be comfortable speaking to details such as floor-area ratios and walkability metrics, others may find such discussion inaccessible, potentially creating a barrier to obtaining broad community support necessary for successful eTOD. Illustrative eTOD typologies and guidelines can help translate technical discussion into the more readily observable implications for the community, thus facilitating more robust community engagement.

The federal government and philanthropic institutions have both supported national efforts to develop eTOD typologies. The Center for Transit-Oriented Development (CTOD) partnered with FTA to publish the Mixed-Income Transit-Oriented Development Action Guide, which helps users collect data, learn about potential tools, assess policies and site potential, and develop frameworks for eTOD planning.<sup>xxxvi</sup> CTOD also created a Performance-Based Transit-Oriented Development Typology Guidebook (supported by the Rockefeller Foundation) and other regionally-specific typologies as tools for practitioners.<sup>xxxvii</sup>

At the regional level, MARTA has developed station area typologies and TOD Guidelines to facilitate discussions between lenders, developers, local governments, and residents about how stations can valuably serve their communities – an important preliminary step towards MARTA’s goals of initiating five station area developments and reserving 20 percent of units on average for affordable housing.<sup>xxxviii</sup>

In addition, Austin, Texas’s Capital Metro produced a Transit-Friendly Development Guide to disseminate leading principles in station area growth, including the complementary link between affordable housing and transit. The Guide includes easily understood graphics and clear language and features a chart that outlines the individual and aggregate housing and transportation costs of 10 station areas in and around Austin.<sup>xxxix</sup>

The Metropolitan Washington Council of Government’s Transportation/Land-Use Connections program was created “to facilitate coordination between transportation and land use planning for transportation and development projects.”<sup>xi</sup> The program seeks to advance several strategies to achieve this goal, including:

- “Integrate transportation and land use planning at all scales.”
- “Build and plan for communities today and in the future with a mix of jobs, housing and civic uses.”
- “Develop housing affordable for a range of incomes around regional transit networks.”
- “Maximize existing investments and effectively link new infrastructure by focusing development around transit.”<sup>xii</sup>

Since 2007, the program issued grants totaling \$2.3 million and provided technical assistance on 72 occasions, with outcomes including the development of healthy design standards for affordable housing.<sup>xlii</sup>



## SOLUTION 2: REFORM PLANS, CODES AND POLICIES THAT INFLUENCE STATION AREA DEVELOPMENT

A jurisdiction’s regulatory environment significantly impacts the amount and type of development that occurs. Many local governments impose a number of restrictions that make station area development more difficult. While many of these restrictions apply to all types of development, they may disproportionately inhibit financially-constrained affordable housing developers.

According to research from Enterprise and the Urban Land Institute – Terwilliger Center for Housing, “many state and local regulations and fees have reasonable justifications, including environmental protection and ensuring adequate infrastructure... However, other regulations are inefficient at best and discriminatory at worst.”<sup>xiii</sup> The study found that barriers to affordable housing included:

- Limits on by-right development, notably density, building height, and unit-size restrictions;
- Overly restrictive and/or prescriptive building codes;
- Excessive permitting and impact fees;
- Drawn out and/or unpredictable timeframes for the permitting and entitlement process;
- Poorly-managed public-engagement processes;
- Excessive parking requirements.<sup>xiv</sup>

GAO research confirms the relationship between regulatory barriers and successful TOD. Land-use, zoning, and building codes can significantly impact the form and viability of development. In areas where site challenges diminish demand for TOD, greater allowance for density and building height or less required parking may result in incremental financial returns sufficient to fund upfront investments in infrastructure.<sup>xiv</sup>

While the impact of each individual regulatory barrier may be minimal, in the aggregate they create significant costs, both direct (such as fees and hard costs) and indirect (including drawn out development timelines and added complexity). These incremental costs can threaten financial viability. Density restrictions can particularly inhibit TOD, as they lower the number of potential riders for the transit system and limit the developer’s ability to recoup elevated land costs. The following recommendations provide details on how jurisdictions can create an eTOD-supportive regulatory environment.

### AMEND LOCAL CODES AND STANDARDS TO SUPPORT ETOD AND/OR ADOPT INCLUSIONARY HOUSING POLICIES

Municipalities have several tools at their disposal to create an eTOD supportive environment. At the most basic level, they can facilitate eTOD by adopting zoning, building and land-use codes and parking standards that allow for the density levels, building types and uses that are characteristic of walkable, transit-friendly communities. They can also ensure that their public infrastructure standards (and/or direct infrastructure investments) facilitate a multi-modal environment. These measures could lead to the creation of more neighborhoods with eTOD characteristics, potentially reducing the housing supply pressures – and costs – in existing eTOD neighborhoods.

#### FTA's Capital Investment Grant Program: The nexus between local policy and transportation funding decisions

eTOD-supportive municipal policies have benefits beyond promoting vibrant and inclusive station areas. They can also assist the transit agency compete for grant funds for new transit investments.

As described above, the FTA awards funding to transit project sponsors based on a number of criteria, including existing plans, policies and tools to support the preservation and development of affordable housing along the proposed corridor. Many of these plans, policies and tools are necessarily implemented at the municipal level rather than by the transit agency. Therefore, coordinated action between the municipality and the transit agency in the creation of an eTOD-supportive environment can increase the likelihood that the jurisdiction will receive this federal infrastructure investment.

Communities can also proactively promote affordability through inclusionary housing policies (often referred to as inclusionary or incentive zoning). These policies require and/or create incentives for new developments to contribute to affordable housing. This contribution can generally be fulfilled in one of three ways: the provision of on-site units; the provision of units at another site; or the payment of a fee-in-lieu, which can be used to support other affordable housing developments or policies. Inclusionary housing policies can be mandatory or voluntary, and often provide incentives to the developer to reduce the financial cost of the contribution. These incentives include but are not limited to increases in allowable density or height, reduced fees, expedited review, and reduced parking ratios.

An opportune time to consider inclusionary housing policies is when a community explores changes to existing zoning and land use to accommodate growth. Increasing allowable density creates a significant amount of value for existing property owners and creates an incentive to redevelop older (and presumably less expensive) housing stock. While substantial increases in the housing supply can relieve affordability pressures in the long-run, shorter-term affordability may be challenged as new units are likely to rent at a higher price-point than the units they are replacing. Therefore, it is appropriate to tie value-creating changes in zoning to enhanced affordability requirements/incentives, a process referred to as “inclusionary upzoning.”<sup>xlvi</sup>

Communities should tailor inclusionary and incentive-based zoning to their specific needs. The optimal balance of affordability requirements and offsetting incentives depends on local market conditions. If a policy lacks ambition, an opportunity to promote mixed-income development may be lost. If too restrictive, a policy can



impede development and investment. To that end, successful policies often welcome input and support from both market-rate and affordable housing development partners.

Greater Washington, D.C. presents two notable examples of inclusionary housing. Montgomery County, Md. is a large suburban jurisdiction that extends from denser, inner-ring neighborhoods to the more rural segments of the metropolitan region. The county created the Moderately Priced Dwelling Unit (MPDU) program in 1973 to ensure the development of affordable housing throughout the county.<sup>xlvii</sup> The MPDU program requires developers to reserve at least 12.5 percent of units in new subdivisions of at least 20 units for affordable housing.<sup>xlviii</sup> Although this requirement is not limited to transit-served neighborhoods, a significant amount of growth has occurred within the urban core, especially near the county's Metrorail (heavy-rail) stations. This has ensured that a portion of station area growth is affordable. Currently, there are 1,401 ownership and 1,742 rental units with ongoing affordability restrictions as a result of this program.<sup>xlix</sup>

Jurisdictions can also adopt policies specific to certain transit corridors. Across the Potomac River, the Metrorail system's new Silver Line includes five new stations in Fairfax County, Va. with a further expansion under construction.<sup>8</sup> The current stations serve Tysons Corner, a portion of the county historically home to significant amounts of predominantly automobile-oriented office, retail and commercial activity with few residential units. In 2010, Fairfax County adopted ambitious plans and policies to utilize the Silver Line as a catalyst to transform Tysons Corner into an urban center with TOD-conducive building types and densities, an improved pedestrian environment, and greater balance between jobs and homes.<sup>1</sup> In addition, the county adopted affordability provisions for the corridor that expand upon their existing inclusionary housing policy to allow unlimited floor area ratios within one-quarter mile of Metrorail stations in exchange for a 20 percent low- and moderate-income housing requirement. Developments further out but within defined transit-oriented development districts can develop at higher density levels if a portion of the units are affordable. Office, retail and hotel development benefitting from density bonuses must contribute either \$3.00 per square foot once or \$0.25 per square foot annually for 16 years to the county's affordable housing trust fund.<sup>li</sup> If all proposals in the development pipeline are completed, they could yield over 4,000 affordable units and \$64.5 million in contributions to the affordable housing trust fund targeted for Tysons Corner.<sup>li</sup>

---

<sup>8</sup> Silver Line phase 1 opened in 2014. Phase 2 to Dulles International Airport is projected to open in 2018.

Intervention Type	Jurisdiction	Details
Adjust zoning to create more housing in eTOD neighborhoods	Seattle	Seattle recently recommended a number of policy changes to support affordable housing, including but not limited to increasing the amount of land zoned for multifamily housing near transit and allowing more housing options in “Urban Villages.” <sup>liii</sup>
Adopt TOD ordinance	Austin, Texas  Charlotte, N.C.	The city requires all station area plans to identify strategies to achieve affordability in at least 25 percent of units in new housing developments near rail and bus service. <sup>liv</sup>  In 2013, the City Council approved the Voluntary Mixed-Income Housing Development Program which creates incentives for developers to dedicate from 5-20 percent of units to households earning 80 percent of AMI or less. <sup>lv</sup>
Zone for additional density near transit and/or adopt density bonuses	Arlington, Va.  Denver  Seattle	The county allows developers to build to higher density levels in exchange for meeting certain requirements, including achieving green building certification or providing affordable units. <sup>lvi</sup>  Denver allows higher densities in station areas. The higher density levels allowed the Denver Housing Authority to create a more mixed-income station area through its Mariposa Apartment development, which included 147 market-rate units in addition to the redevelopment of the former Lincoln Homes, a 270-unit public housing development. <sup>lvii</sup>  The Seattle Housing Authority’s Yesler Terrace redevelopment will replace 561 public housing units with 661 units for residents up to 30 percent of AMI, 290 units at 30-60 percent of AMI, 850 units of workforce housing for those earning up to 80 percent of of AMI, and between 1,200 and 3,200 market-rate homes. <sup>lviii</sup>
Utilize form-based codes	Arlington, Va.	To facilitate more urban-style development around the (since cancelled) Columbia Pike streetcar project, the county created form-based codes for neighborhoods and commercial nodes. These voluntary codes provided a streamlined approval process for developments meeting certain standards related to form, density and design. The Neighborhoods Form-Based Code includes requirements for on-site affordable housing. <sup>lix</sup>

**Innovation in Action: Leveraging Climate Action to Support eTOD**

In 2006, California passed the Global Warming Solutions Act to empower the California Air Resources Board (CARB) to develop a program to reduce greenhouse gas emissions. In following years, CARB opted to pursue a cap-and-trade program that limited approximately 350 large companies’ emissions and required them to either trade emissions allowances with companies below that limit or purchase allowances at a quarterly state auction. These purchases should generate revenue for sustainable development and other programs. In 2014, Governor Brown signed a budget that includes \$135 million from cap-and-trade revenue for planning, transportation and affordable housing activities and requires at least ten percent of ongoing cap-and-trade revenue (estimated at approximately \$250 million annually) for affordable housing. California projects that coordinated investments in housing and transportation could reduce annual vehicle miles traveled by 100 million miles.<sup>lx</sup>

**ADOPT STATE LEGISLATION THAT SUPPORTS AFFORDABLE HOUSING**

Local and regional entities are responsible for setting most of the policies that either promote or inhibit eTOD. However, state policy also plays a role. In some cases, the state may adopt an explicit eTOD policy. In others, the state’s affordable housing, urban/regional planning and/or transportation policy frameworks allows for eTOD-supportive actions at the local and regional levels.

One notable policy that states could emulate to create incentives for eTOD is Massachusetts’ Chapter 40B Comprehensive Permit Act. Passed in 1969, the law mandates that 10 percent of a jurisdiction’s year-round housing stock be affordable at 80 percent of AMI or less.<sup>lxi</sup> If that target is not met, developers are able to bypass restrictive zoning if a percentage of the proposed units are affordable. The ideal application of this law is for municipalities to proactively craft plans and zoning laws that allow it to meet the 10 percent threshold, thus making the zoning override unnecessary. This preserves municipalities’ closely-guarded ability to shape development while ensuring more equitable access to those communities. To some extent this has occurred, as the number of municipalities meeting this standard has grown from four in 1972 to 48 in 2015 (with another 39 at or above eight percent).<sup>lxii</sup> For other jurisdictions, 40B has been useful in facilitating rental development, particularly in municipalities with higher job access and more stringent restrictions on multifamily development.<sup>lxiii</sup> In total, the policy has resulted in the construction or rehabilitation of more than 60,000 affordable units.<sup>lxiv</sup>

Intervention Type	Jurisdiction	Details
Local share requirements	New Jersey	In two separate court cases, the New Jersey Supreme Court established the Mt. Laurel Doctrine, which states that municipalities must take affirmative steps to ensure a “fair share” of housing is affordable to low- and moderate-income households. <sup>lxv</sup>
Funding eligibility decisions	Maryland	The state officially considers TOD as a transportation purpose, providing pre-development planning and technical assistance, allocating property and infrastructure resources, and facilitating coordination between state, local and private sector partners. <sup>lxvi</sup>

Intervention Type	Jurisdiction	Details
Facilitate affordable housing preservation	District of Columbia (D.C.); Massachusetts	Under certain circumstances, both D.C. and the Commonwealth of Massachusetts have enacted policies that allow tenants to organize and purchase (or assign the right to purchase) their homes when a sale of the property threatens future affordability. <sup>lxvii</sup>
Allow municipalities to develop local revenue sources	Massachusetts	The Community Preservation Act allows jurisdictions to impose a property tax surcharge, which can then be used to support affordable housing, among other eligible activities. <sup>lxviii</sup>
Provide financial support for compact development	Massachusetts	The Commonwealth’s 40R and 40S programs provide incentives for compact, mixed-use and mixed-income development by providing financial support for zoning changes and to cover cost to schools of the increase in school-aged children. <sup>lxix</sup>

**REFORM PARKING POLICIES**

The effectiveness of public policies that support density, walkability and affordability in transit station areas may suffer if countervailing policies and practices support automobile-centric development. Given existing development patterns and varying levels of transit availability in many U.S. cities, it may be necessary to include some parking in many developments. This may be particularly true for some affordable developments, where a portion of residents may hold jobs with varying locations and/or schedules (such as in-home health workers, construction workers, or those working second- or third-shift) that are not well-served by transit. However, in many – if not most – cases, the scale tilts too far in favor of parking infrastructure. Excess parking – whether mandated by public policy or investor requirements, or by the developer’s choice – is therefore a particularly prevalent barrier to eTOD felt by jurisdictions, neighbors, developers, and residents.

At a broader level, a Los Angeles-based natural experiment found that parking minimums can decrease the overall supply of housing, discourage certain development types and increase rents.<sup>lxx</sup> At the neighborhood scale, dedicating large amounts of land for surface parking lots can reduce the area’s potential for a critical mass of population, variety of uses, and other amenities necessary for a thriving walkable and transit-oriented district. This can create a self-reinforcing negative cycle, where an inefficient or unpleasant pedestrian or transit-user experiences leads to more automobile use, creating more demand for parking and automobile infrastructure, which further degrades walkability and transit service.

Large surface lots also reduce the development potential of the structure, reducing economies of scale, driving up per-unit development costs, reducing the overall amount of productive residential and retail/commercial space, and thus inhibiting affordability. Alternatively, developers can incorporate costly structured parking that may make the development more difficult to finance. One report estimates that a typical parking space in San Francisco adds \$25,000 to \$50,000 in construction costs for new housing, which is consistent with anecdotal evidence provided by practitioners in other markets across the country.<sup>lxxi</sup> A 2013 cost-benefit analysis and review of literature by the Victoria Transport Policy Institute found that the cost of structured parking may vary widely by market, with estimates ranging from approximately \$12,000 to \$31,000 in construction costs per space, which excludes both land costs and “soft costs” such as planning, design and permitting.<sup>lxxii</sup> Developers may assess fees to defray the cost of parking construction, but insufficient demand for parking would hurt the development’s financial performance. For affordable developments financed with Housing Credit equity, the developer cannot charge optional fees. Instead, the cost of parking must be included as part of the tenant’s rental payment. Since rent levels are restricted, the developer has limited ability to recoup the construction costs for extraneous parking spaces.<sup>lxxiii</sup> This diverts limited capital resources from housing families to parking cars.

While traditional zoning codes often drive parking capacity, other factors are also influential. Elected officials or municipal agencies may react to constituent concerns and push for more spaces. Cautious lenders and investors may use car-oriented performance models to institute their own requirements. Public funding sources may set their own requirements. Therefore, shifting toward more efficient parking standards will require multifaceted action. As an initial step, local governments and transit agencies should review parking requirements based on utilization studies, and lenders and funders should consider the cost of providing parking relative to demand and accounting for factors such as the site’s multi-modal transportation options. Stakeholders should amend existing policies accordingly to reduce or eliminate minimum-parking requirements, establish shared-parking policies, or pursue a number of other innovations (see table, page 31).

Denver’s RTD studied parking utilization and ridership data at the Alameda Station. Though existing lots were being utilized, the agency found that many of those using the parking were driving from an area soon to be served by a new rail line, and that many transit riders did not drive to the station. In an effort to achieve longer-term ridership gains through more intensive development, RTD reduced parking within the station area from 502 to 300 spaces. Doing so allowed the agency to sell property for a 275-unit residential development with an average of one parking space per unit. After build-out of both the station area and the broader regional transit network, RTD expects ridership to further increase.<sup>9</sup>

---

<sup>9</sup> The Denver region’s FasTracks transit expansion will add 122 miles of rail service and 18 miles of bus rapid transit (BRT), with several lines opened to-date and construction underway on five additional rail lines and one BRT line. For more information, visit: <http://www.rtd-fastracks.com/>.

Once the government acquires and analyzes parking-demand data, it may wish to adjust minimum-parking requirements for eTOD accordingly. In highly walkable areas with particularly strong transit service, it may be possible to eliminate minimums altogether, creating a market for parking based on actual demand. In 2012, the city of Sacramento removed minimum parking requirements in the Central Business District (CBD) and for some mixed-use projects, allowing a 35 percent reduction of required parking for projects that incorporate transportation-demand management measures, authorizing the zoning administrator to reduce required parking by 75 percent, and requiring bicycle parking in the CBD and Urban and Traditional zones. Parking for four bicycles can replace one vehicular parking space.<sup>lxxvii</sup>

Shared-parking strategies hold promise for reducing the number of parking spaces needed in mixed-use neighborhoods. Demand for parking varies by use and time of day – residential buildings and restaurants, theaters and bars may have many vacant spaces during the day, whereas office buildings are likely to have excess capacity in the evenings and at night. RTD’s Transit Village Garage in Boulder, Colo. will accommodate commuters as well as hotel guests, residents, and the general public thanks to a parking-management agreement. The agreement utilizes what RTD refers to as the “SUMP Principles:” shared parking spaces between complementary uses; unbundled parking fees from commercial or residential rents; managed spaces to maximize the facility’s efficiency; and payments to off-set construction costs and influence travel behavior (such as varying parking rates based on time-of-day or demand for spaces).

Such agreements may be complex to model and negotiate, and will require the acceptance of the local municipality, investors and funders, the individual developers and property owners, and potentially the transit agency (in the event that agency land is being used). Furthermore, there may be federal restrictions to the use of certain parking facilities if federal transportation sources were used in their acquisition and/or construction.<sup>10</sup> However, given the aforementioned direct and indirect cost of each parking space, the benefits are significant and worth exploring.

Jurisdictions may also consider adopting lower parking requirements for affordable properties, whose residents may be more likely to utilize transit and other alternative modes of transportation. Research from California indicates that households earning less than 80 percent of AMI rode transit more and made fewer vehicle trips per day than those above that threshold, and those earning 30 percent of AMI or less took 50 percent more trips than households earning 120 percent of AMI or more.<sup>lxxviii</sup> A 2009 survey of affordability in station area development found that more than 10 percent of low-income residents living in station

---

10 The topic of navigating federal regulations will be addressed in the third installment of the *Promoting Opportunity through eTOD* research series: [bit.ly/eTOD-opportunity](http://bit.ly/eTOD-opportunity).

areas in Denver use transit as their primary commute mode – more than twice the rate of any other income group.<sup>lxxvi</sup> Arlington County, Va. adopted a form-based code for the bus-served Columbia Pike corridor that includes an incentive to include affordable units beyond the basic level required.<sup>11</sup> If the developer provides at least one-percent more affordable units, the parking ratio for all affordable units is reduced from 1.125 spaces per-unit to 0.825 spaces per-unit.<sup>lxxvii</sup>

When structured parking must be built, local governments and transit agencies should ensure that any applicable design requirements balance safety and accessibility with costs. A GAO study cited a developer as testifying that transit agency design specifications resulted in a cost per parking space that was double what would normally be built.<sup>lxxviii</sup>

The predominance of automobile centric development patterns and policies in the U.S. challenges efforts to address parking-related barriers to eTOD. However, this issue does present an opportunity for jurisdictions to experiment with different innovations and solutions. While it may be understandable to push for widespread change to parking requirements, the value of incremental progress should not be discounted. Targeted neighborhood-scale changes or pilot programs can provide valuable data points to inform broader decision making, and can help build popular support for a politically-sensitive changes.

Intervention Type	Jurisdiction	Details
Study parking utilization	San Diego	The San Diego Metropolitan Transit System (MTS) monitored typical weekday usage at its Encanto Station and allowed for the site’s redevelopment with correspondingly fewer parking spaces.
	Santa Clara, Calif.	Following a utilization study, Valley Transit Authority (VTA) opted to lease the 1,100-space Ohlone/Chynoweth Station parking lot to Eden Housing to accommodate 195 affordable-housing units, 4,400 square feet of retail, and only 240 parking spaces. <sup>lxxix</sup>
	Arizona	The Arizona Department of Housing has documented parking utilization rates at Housing Credit properties to convince local governments to revise their parking requirements. <sup>lxxx</sup>

11 Previous transit plans for Columbia Pike that proceeded simultaneously with the development of the Form-Based Code included a new streetcar system. The streetcar project was cancelled in 2014. As of August 2015, planning is underway for a new transit enhancement plan for the corridor. For more information, visit: [http://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/31/2015/04/DES-Transit-Stations-Columbia\\_Pike\\_Open\\_House\\_April\\_2015.pdf](http://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/31/2015/04/DES-Transit-Stations-Columbia_Pike_Open_House_April_2015.pdf).

Intervention Type	Jurisdiction	Details
Reduce or eliminate minimum-parking standards	<p>Minneapolis</p> <p>Prince George's County, Md.</p> <p>Boston</p>	<p>In July 2015, the City Council passed a new parking ordinance that reduces parking requirements for residential developments in transit served areas. The reduction is scaled according to the size of the development as well as the proximity and frequency of transit service, including a full waiver for smaller-scale properties within ¼ mile of frequent bus or ½ mile of frequent rail service.<sup>lxxxix</sup></p> <p>The county (which borders Washington, D.C. to the east) routinely uses station area zoning-overlay tools to allow less parking than prescribed for similar uses in other areas, even waiving minimum parking requirements in some heavy-rail station areas.</p> <p>In 2006, the Massachusetts Bay Transportation Authority (MBTA) elected not to replace parking at a heavy-rail terminal in a joint development lease for a 116-unit mixed-income property. Opening in 2020, a light-rail extension will prohibit parking at most stations.</p>
Share parking between complementary uses	<p>Atlanta, GA</p> <p>Prince George's County, Md.</p>	<p>MARTA's TOD Guidelines encourage on-site shared parking by-right as long as the users and affected property owners formally agree on complementary uses.<sup>lxxxix</sup></p> <p>In addition to reduced minimum-parking requirements in station areas, some overlay zones allow mixed-use projects to further reduce parking by applying shared-parking factors depending on the mix of uses.</p>
Allow "proof of parking" flexibility	Twin Cities region, Minn.	<p>The suburban Cities of Woodbury and St. Louis Park allow developers to refrain from initially providing the full required amount of parking if they can demonstrate that the amount exceeds demand, provided that they can prove that the site can accommodate additional parking in the future.<sup>lxxxix</sup></p> <p>While the latter stipulation may prevent the addition of incremental density, landscaped areas would provide a better pedestrian experience than surface lots. Such policies could also provide data points for consideration in efforts to reduce parking minimums.</p>





### **SOLUTION 3: EXPAND ACCESS TO CAPITAL WITH ETOD-APPROPRIATE TERMS AND CONDITIONS**

**e**TOD depends on the availability of capital with terms and conditions that make the development financially feasible. In some markets, developers may have difficulty accessing financial products for TOD, particularly in areas just building out their transit network or without a long history of mixed-use, higher-density development.<sup>lxxxiv</sup> However, in other markets with strong demand for TOD – as evidenced by market research, the success of actual developments, and/or rising property values – affordable housing developers may be at a disadvantage when competing with their market-rate peers.<sup>lxxxv</sup> Often, assembling financing for affordable housing involves a more difficult and lengthy process, which can raise development costs and limit access to developable sites.<sup>lxxxvi</sup>

Different types of capital are necessary at different phases of both the transit and eTOD build-out processes. Resources are needed to plan both the transit project and development in the surrounding communities, to build transit and other public infrastructure, and to finance affordable housing development and preservation. Identifying a region’s or community’s specific capital needs requires proactive engagement between the housing entities, transportation organizations, state, local and regional governments, private and nonprofit developers, and the financial community. Given the difficulty and complexity of both raising and distributing capital, it is important that efforts to provide eTOD financing are backed by data and targeted appropriately. To that end, local and regional stakeholders should proactively evaluate specific capital gaps and needs. For example, Enterprise and the Low Income Investment Fund conducted “capital absorption near transit” analyses in several markets to determine whether there was sufficient capital at the right terms and conditions to facilitate eTOD, and whether existing local stakeholders had the capacity to use available capital.<sup>lxxxvii</sup> From this analysis, each jurisdiction could tailor its capital-raising efforts for the specific needs of that market.

The next two sections will illustrate different eTOD capital needs, followed by best practices in raising capital for these needs. For more details on the stages of the affordable housing development process, read [Affordable Housing 101, page 8](#). The following table provides a matrix of sources and uses of funds.

**TABLE 1: MATRIX OF SOURCES AND USES OF ETOD CAPITAL**

	Transportation Funding Resources	Housing Funding Resources	Environmental Resources	State-level funds	Local and regional revenues	Structured or leverage funds
<b>Corridor/ Neighborhood</b>						
Planning	LACMTA use of DOT funds for planning grants (Page 38)	HUD Sustainable Communities Regional Planning Grants <sup>12</sup>	Utilizing DOT Congestion Mitigation and Air Quality funds for station area planning (multiple regions; Pages 38, 42 and 48)		Atlanta Regional Commission Livable Communities Initiative (Pages 39 and 61)	
Transit Capital	FTA Capital Investment Grant Program (Pages 11, 12, 24, 52 and 56)		Sound Transit Green Municipal Bonds (Page 43)		Seattle’s ST3 transit funding initiative (Page 39)	
Supportive Infrastructure	Atlanta Regional Commission Livable Centers Initiative (Pages 39 and 61)	HUD Community Development Block Grant <sup>13</sup>		Maryland Economic Development Corporation Bonding Authority (Page 44)		
Environmental Remediation and/or site preparation	Twin Cities Livable Communities Grant - Tax-Base Revitalization Act (Page 40)	HUD Brownfields Economic Development Initiative <sup>14</sup>		Maryland Strategic Demolition and Smart Growth Fund (Page 44)		

12 For more information, visit: [http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/economic\\_resilience/sustainable\\_communities\\_regional\\_planning\\_grants](http://portal.hud.gov/hudportal/HUD?src=/program_offices/economic_resilience/sustainable_communities_regional_planning_grants).

13 For more information, visit: [hud.gov/cdbg](http://hud.gov/cdbg).

14 For more information, visit: <https://www.hudexchange.info/programs/bedi/>.

**TABLE 1: MATRIX OF SOURCES AND USES OF ETOD CAPITAL (continued)**

	Transportation Funding Resources	Housing Funding Resources	Environmental Resources	State-level funds	Local and regional revenues	Structured or leverage funds
<b>Real Estate Development</b>						
Affordable Housing - General			California Cap-and-Trade funding (Pages 27 and 42)  HUD HOME Program <sup>15</sup>			
Pre-Development	Bay Area TOAH Fund (Page 48)			Maryland Sustainable Communities Program (Pages 14 and 43)		Bay Area TOAH Fund (Page 48)
Acquisition	Bay Area TOAH Fund (Page 48)			Maryland Sustainable Communities Program (Pages 14 and 43)	Denver Regional TOD Fund (Pages 46 and 55)	Denver Regional TOD Fund (Pages 46 and 55)
Construction	Bay Area TOAH Fund (Page 48)			Connecticut State Housing Trust Fund (Page 42)	Atlanta BeltLine Tax Allocation District (Pages 45 and 60)	
Permanent Financing		Low-Income Housing Tax Credits <sup>16</sup>		Low-Income Housing Tax Credits		
Gap and/or Mezzanine Financing					Arlington, Va. Affordable Housing Investment Fund (Page 44)	

15 For more information, visit: [http://portal.hud.gov/hudportal/HUD?src=/program\\_offices/comm\\_planning/affordablehousing/programs/home/](http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/affordablehousing/programs/home/).

16 For more information, visit: <http://www.enterprisecommunity.com/financing-and-development/low-income-housing-tax-credits/about-lihtc>.

## **CORRIDOR- AND NEIGHBORHOOD-SCALE USES OF CAPITAL**

### **Planning**

Planning processes for both new transportation infrastructure and policies governing surrounding development require extensive data analysis, interagency collaboration and community/stakeholder outreach. While existing resources and capacity can be used in some contexts, others will require new funding for work done outside stakeholders' standard operating procedures. MPOs, transit agencies, governments and stakeholder coalitions may receive planning funds.

### **Transit Capital**

Transit agencies and departments of transportation must raise funds – including grants, debt products and/or credit support – to construct, expand and/or improve transit systems. All levels of government generally provide some funds, and in some cases leverage private sector capital. Funds are used for due diligence, site acquisition and preparation, hard construction costs and soft costs.

### **Supportive Infrastructure**

The more intensive development that characterizes eTOD may require significant upgrades in street, pedestrian, water/sewer, electrical and/or other hard infrastructure. “Green” infrastructure, which uses more natural methods to mitigate – rather than capture and treat – impacts such as storm water runoff can also complement eTOD. Though developers may build some of these improvements, municipalities and transit agencies may also play a leadership role in larger-scale projects that serve more than just an individual site.<sup>lxxxviii</sup>

### **Environmental Remediation**

Communities may intend to leverage new transit projects (or redevelopment along existing lines) to catalyze redevelopment of underutilized industrial areas to mixed-use neighborhoods. However, the prior uses may have caused environmental damage that requires extensive remediation. As with infrastructure, capital may be needed at both the neighborhood and property levels, with municipalities, transit agencies and real estate developers potentially being responsible for remediation work depending on the specifics of the sites.

## HOUSING-RELATED USES OF CAPITAL

### Pre-Development

Developers need resources to identify market needs, perform due diligence to identify prospective sites, and develop preliminary plans and specifications to determine feasibility, among other activities. At this point in the development schedule developers bear a significant amount of risk, as resources expended may not be recouped if the development does not proceed. To address this challenge, public and philanthropic entities can provide forgivable pre-development loans that are only repaid if the development effort is successful.

### Acquisition

Affordable housing developers generally have lower amounts of on-balance sheet resources or upfront equity from investors when compared to their market-rate peers. The costs and delays associated with assembling financing to acquire property puts affordable housing at a disadvantage in the competition for sites. Acquisition financing for eTOD projects will often need lower interest rates and longer terms in order to accommodate the lengthy transit development process and the diminished revenue potential of affordable housing.

### Construction

Developers generally access shorter-term debt capital to finance construction. Funds are drawn down throughout the process and repaid in full after closing on permanent financing. Affordable developers generally utilize the same sources – traditionally bank capital – as market-rate developers.

### Permanent Financing

Though permanent financing is the last to be fully executed, planning for these resources begins in the pre-development phase. Permanent financing for affordable housing generally includes an equity investment through the Housing Credit program, a first mortgage, and gap funding that can consist of secondary and/or forgivable loans. The development has to be planned in a way that conforms to the requirements of these various investors, increasing complexity.

### Mezzanine Financing

Given the longer development timeline and added complexity of eTOD deals, an affordable housing developer may need non-traditional sources of capital that bridge gaps. An example of such a product is mezzanine debt, which refers to unsecured subordinated loans with equity-like characteristics.<sup>lxxxix</sup>

The other crucial – and often more difficult – component of facilitating eTOD capital is identifying sources of funding. While traditional housing and transportation funding sources must have a role, resources at all levels of government have been subject to significant budget constraints. Therefore, it is often necessary to coordinate existing resources to maximize efficiency and identify potential new capital strategies, including:

- Allocate transportation resources for transit and eTOD
- Create eTOD incentives in existing affordable housing funding programs
- Link environmental resources to eTOD activities
- Provide state-level resources
- Utilize local resources, including taxing and bonding authority
- Use public resources to leverage private and philanthropic resources

The following sections describe each of these potential resources in more detail.

#### **ALLOCATE TRANSPORTATION RESOURCES FOR TRANSIT AND ETOD**

It is important to acknowledge that the core function of transportation resources is to support mobility. As demonstrated in the preceding sections and *Promoting Opportunity through eTOD: Making the Case*, transit is one means of supporting improved mobility, particularly for those with limited incomes.<sup>xc</sup> As a first step, metropolitan planning agencies and transportation agencies at all levels of government should ensure that an appropriate level of funding and staff capacity is dedicated to transit. eTOD will continue to face barriers if predispositions toward highway projects continue to limit transit access across cities and regions.

It is also important to break down the silos between the eligible uses of transportation and housing funding sources in order to support eTOD. This step is justified by the inextricable links between effective transit service and the surrounding land-use and development patterns, as well as the need to more effectively target scarce resources. Stakeholders can use flexible capital for neighborhood-, corridor-, and regional-scale eTOD investments.

In the past, some planning activities funded via transportation entities or funding streams have included a housing nexus, as such activities were necessary to develop estimates of existing and future transportation infrastructure use. Since 2011, the Los Angeles County Metropolitan Transit Authority (LACMTA) has allocated federal surface transportation program (STP) and congestion mitigation and air quality (CMAQ) program funds through planning grants to local government to adopt land-use regulations that support TOD.<sup>xcii</sup> Since

the TOD Planning Grant program launched in 2011, LACMTA has awarded \$21 million to municipalities, councils of government, and joint powers authorities for zoning amendments, environmental impact reports, and plans for multi-modal corridors and station areas.<sup>xcii</sup>

In recent years, this more comprehensive approach has expanded beyond planning to include implementation and a particular focus on station area development activities with a clear benefit to the transportation system. In 2015, the state of Washington passed legislation granting Sound Transit (which serves the greater Seattle region) the authority to seek voter approval to raise transportation capital.<sup>xcviii</sup> If approved by ballot measure, the agency would have the authority to use revenues from new taxes to support a variety of transportation-related priorities by requiring Sound Transit to invest at least \$20 million over five years into a revolving loan fund for affordable housing development.<sup>xciv</sup> In addition, Sound Transit must give developers of affordable housing the first opportunity to bid on 80 percent of its surplus property suitable for housing.<sup>xcv</sup>

Intervention Type	Jurisdiction	Details
Use regional capital to support eTOD planning	Atlanta	Atlanta Regional Commission’s Livable Centers Initiative (LCI) will award \$18 million by 2017 for transit corridor and city growth planning. Many of these grants support MARTA’s effort to construct affordable housing at five stations. <sup>xcvi</sup>
	San Francisco Bay Region	The MTC One Bay Area Grant (OBAG) program targets funding to transit-accessible priority development areas that emphasize connections between transit and housing. <sup>xcvii</sup>

Intervention Type	Jurisdiction	Details
Fund eTOD-supportive infrastructure and site preparation	Twin Cities Region	The Metro Council’s (the MPO) Livable Communities Demonstration Account funds infrastructure and site assembly for projects that link housing, jobs, services, and transit, and its Tax-Base Revitalization Act funds clean-up of polluted land or buildings. <sup>xcviii</sup>
	San Francisco Bay Region	In 2010, MTC expanded eligible Transportation for Livable Communities (TLC) program activities to include non-transportation infrastructure, such as sewer upgrades in priority development areas. <sup>xcvix</sup>
	Atlanta	ARC’s LCI Program also funds local governments and non-profit organizations to construct transportation infrastructure prioritized in LCI plans. ARC has approved \$500 million for infrastructure investments. <sup>c</sup>
Provide flexible pools of capital to fund investment in eTOD	Portland, Ore.	Metro (the regional MPO) operates a TOD Program that dedicates grants to affordable housing developers who either own transit-oriented properties or partner to develop Metro property. Funds can support “urban living infrastructure,” site acquisition, and TOD projects. <sup>ci</sup>
	San Francisco Bay Region	<p>In addition to infrastructure, MTC’s TLC program supports land banking and site assembly for TOD projects in priority development areas.<sup>cii</sup></p> <p>MTC also provided seed funding for the Bay Area Transit-Oriented Affordable Housing (TOAH) Fund, which provides capital for eTOD pre-development, acquisition, site preparation and construction activities (See page 48 for additional details).<sup>ciii</sup></p>



### CREATE INCENTIVES FOR ETOD IN EXISTING AFFORDABLE HOUSING FUNDING PROGRAMS

Just as transportation resources can support eTOD while fulfilling their core purpose, existing housing funding programs should include incentives for development in areas with robust transit access. The most notable examples of this coordination come from the Housing Credit program, which attracts and allocates equity investments for affordable housing development through a competitive process based on each state's QAP. In recent years, several states have tailored QAP criteria to prioritize eTOD, increasingly including explicit criteria specifically for transit proximity.<sup>civ</sup> In addition, QAPs may include incentives for neighborhood amenities (such as access to retail or health centers) that are often correlated with walkable, vibrant communities. A national analysis by the National Housing Trust (NHT) found that the number of QAPs with TOD incentives increased from 17 to 35 from 2003-2013.<sup>cv</sup>

In developing these requirements and/or incentives for eTOD, housing agencies should consult with both the housing and transportation communities to determine meaningful standards and thresholds within the state or local development context. Supported in part by a HUD Sustainable Communities Regional Planning Grant, the Puget Sound Regional Council collaborated with the Washington State Housing Finance Commission to determine appropriate transit-incentive criteria in the state's QAP.<sup>cvi</sup> The MPO encouraged the Commission to create separate criteria for urbanized King County, provide preferences for locations near rail stations and to consider other factors such as walkability and density.<sup>cvii</sup> For more examples of best practices in collaboration between the housing and transportation sector, read [Align Cross-Sectoral Priorities, page 14](#).

Housing program incentives can be structured to support eTOD using different methods. An agency can focus on proximity to transit service. California's 2013 QAP supported developments located less than one-quarter mile from a rail station or less than one-third of a mile from a bus stop with peak service every 30 minutes.<sup>cviii</sup> Another option is to provide additional points for developments located within neighborhoods that have met certain official criteria. While Maryland's 2013 QAP awarded four points to proposals located less than one-half mile from a planned or existing rail station or a bus stop serving two lines, sites located within a Department of Transportation-designated TOD area received eight points.<sup>cix</sup> Agencies can also provide incentives for both transit proximity and proximity to other amenities. Massachusetts' 2013 QAP awarded points to developments located (a) less than one-half mile from a bus stop or three-quarters of a mile from a rail station; and (b) near community-serving retail and civic institutions.<sup>cx</sup>

The NHT analysis also stresses the need for balance when setting program incentives, including between geographies (urban, suburban, rural) and transit type (bus, rail, paratransit service).<sup>cxii</sup> This necessitates against taking a “one size fits all” approach. Reflecting divergent urban- and rural-development needs, Minnesota’s 2013 QAP considers proposed developments inside and outside metropolitan areas separately. In the metropolitan pool, points are awarded based on proximity to a transit node. In the non-metropolitan pool, points are awarded if a development is located less than one-half mile from a fixed-route service stop or located less than five miles from a job center, community services, or dial-a-ride service.<sup>cxii</sup>

While the above examples focused on the Housing Credit program, the incentives embedded in the QAPs can apply to other funding programs as well. Existing resources for housing planning, preservation and development should adopt a holistic approach that considers proximity to transit as a crucial component of resident opportunity. For example, the Connecticut Department of Economic and Community Development utilizes a preference for eTOD projects when administering the state’s housing trust fund, which provides gap funding for construction.<sup>cxiii</sup>

#### LINK ENVIRONMENTAL RESOURCES TO ETOD ACTIVITIES

Several states and regions have taken a leadership role in combating harmful emissions that stem in part from development patterns and automobile travel. eTOD supports more efficient development patterns and links likely transit users to transit service.<sup>17</sup> The federal CMAQ program provides funding for regions struggling with air pollution to undertake a number of activities to reduce automobile emissions, including “projects or programs that shift travel demand to nonpeak hours or other transportation modes, increase vehicle occupancy rates, or otherwise reduce demand.”<sup>cxiv</sup> Multiple jurisdictions, including Atlanta and Los Angeles (referenced above), have used this funding source to support regional, city, neighborhood and station area plans and policies that support TOD.<sup>cxv</sup>

As highlighted in the [Adopt State Legislation that Supports Affordable Housing](#) section (page 27), California’s new “cap-and-trade” program will limit certain types of emissions and raise revenue through the sale of emissions allowances. A portion of resulting revenues will be used for planning, transportation and affordable housing activities, with at least 10 percent of

---

17 For an in-depth discussion of the connection between eTOD and the environment, read: Hersey, John, and Michael A. Spotts. 2015. “Promoting Opportunity through Equitable Transit-Oriented Development: Making the Case.” Washington, DC: Enterprise Community Partners. [https://s3.amazonaws.com/KSPPProd/ERC\\_Upload/0100617.pdf](https://s3.amazonaws.com/KSPPProd/ERC_Upload/0100617.pdf).

ongoing cap-and-trade revenue (estimated at approximately \$250 million annually) dedicated to affordable housing. California projects that coordinated investments in housing and transportation could reduce annual vehicle miles traveled by 100 million miles.<sup>cxvi</sup>

A potential – if untested – model for eTOD can be found in the “green investment” market. Seattle’s Sound Transit recently announced plans to issue \$923 million in green bonds, which help finance environmentally friendly projects. Funds raised through the sale of these bonds will support new transit investments and the repayment of past debt.<sup>cxvii</sup> Such funding products tap into a subset of investors specifically looking for a social or environmental return on their investment. In this context, repayment of the bonds is tied to sales tax collections.<sup>cxviii</sup> While there are no current public plans to use the bond proceeds for eTOD, this model deserves consideration going forward.

### PROVIDE STATE-LEVEL RESOURCES

Many of the aforementioned eTOD capital sources either originate at the state level or are federal funds that are passed through based on state needs and priorities. States therefore have a substantial amount of discretion in how much funding is available and for what purposes. In addition, states can have a direct influence on the ability of local units of government to support eTOD, as enabling legislation may be needed to adopt inclusionary zoning policies or issue levies or taxes to raise funds. For example, Minnesota’s Livable Communities Act (LCA) permits the Twin Cities Metropolitan Council Livable Communities Program to raise property tax revenue to fund eTOD-supportive grants for the creation of publicly-accessible infrastructure, site remediation, and other activities related to affordable housing.<sup>cxix</sup> Oregon allows tax-increment financing (TIF) only in urban renewal areas that enjoy transit access, and 30 percent of TIF revenue is set aside for affordable housing. This structure attracts affordable housing developers who combine TIF with Housing Credit allocations.<sup>cxx</sup>

Although Maryland’s recently elected governor cancelled state funding for a major transit investment, the state has historically provided multifaceted support to local eTOD efforts.<sup>cxxi</sup> As discussed earlier in the [Aligning Cross-Sector Priorities](#) section (page 14), the state Department of Housing and Community Development (DHCD), the Department of Planning, and the Department of Transportation (MDOT) provide a range of capital products. The Sustainable Communities program provides funding for pre-development (including architectural and engineering activities), site acquisition, land assembly, site preparation and demolition, and construction.<sup>cxxii</sup> The program has provided infrastructure

grants to 83 municipalities and/or TOD areas selected by either DHCD or MDOT.<sup>cxviii</sup> DHCD scores applications in part based on access to high-quality affordable housing.<sup>cxvix</sup> Designated communities may also establish tax-increment financing (TIF) districts to utilize the bonding authority of the Maryland Economic Development Corporation for a broad range of infrastructure projects, including parking, affordable and mixed-income housing and site preparation.<sup>cxv</sup> Designated communities can also access the Strategic Demolition and Smart Growth Fund, which provides grants to projects with high economic impact for revitalization.<sup>cxvii</sup>

### UTILIZE LOCAL AND REGIONAL RESOURCES, INCLUDING TAXING AND BONDING AUTHORITY

Local municipalities and certain regional forms of governance have their own ability to raise revenues to support government functions. Though levels of support for both affordable housing and transit vary throughout the country, many local and regional entities have committed substantial resources toward eTOD activities. These resources can come from the general government budget or be tied to a specific funding mechanism such as a recordation tax or TIF.<sup>18</sup>

Given limited federal and state resources (and match requirements when resources are provided), local governments are often the lead funders for major transportation investments. These investments can be supported by general revenues and/or local taxation, as described below. Regional resources can play a role as well. In addition to funding planning grants and technical assistance, the Atlanta Regional Commission's Livable Communities Initiative (LCI) funds local governments and non-profit organizations to construct transportation infrastructure prioritized in LCI plans.<sup>cxvii</sup>

Many municipalities have also worked to address the housing component of eTOD. Similar to states, many municipalities have set up housing trust funds. The Arlington County, Va. Affordable Housing Investment Fund is a revolving loan fund seeded with funding from a range of sources: developer contributions (a state-required alternative to on-site units under the county's inclusionary housing policy); federal Community Development Block Grant and HOME funds; a portion of property recordation fees; general revenue; and loan repayments.<sup>cxviii</sup> These combined resources support a number of affordable housing activities, including serving as a critical source of gap financing for affordable housing developers.

---

18 TIF is a tool in which a portion of future property tax increases within a given geographical area is dedicated for a specific purpose. TIF districts are often enacted in coordination with a specific catalytic investment in an area, such as new transit service. Though TIF is a promising "value capture" strategy and has been successfully used in some jurisdictions, its value may be significantly impacted by broader market pressures. In addition, poorly-designed TIF policies and/or an over-reliance on this tool within a given municipality can starve a government of revenue it needs to provide core government services. For more information on TIF, read the Urban Land Institute's *Tax Increment Financing: Tweaking TIF for the 21st Century* (<http://urbanland.uli.org/economy-markets-trends/tax-increment-financing-tweaking-tif-21st-century/>) and the Lincoln Institute of Land Policy's *Tax Increment Financing: A Tool for Local Economic Development* ([http://www.lincolinst.edu/pubs/1078\\_Tax-Increment-Financing](http://www.lincolinst.edu/pubs/1078_Tax-Increment-Financing)).

When used effectively, local tax structures and policies can raise capital for both incremental improvements as well as transformative change at the corridor, neighborhood, or property levels. While jurisdictions have multiple tools at their disposal – including sales taxes and recordation taxes – many of the most prominent examples focus on property taxes.

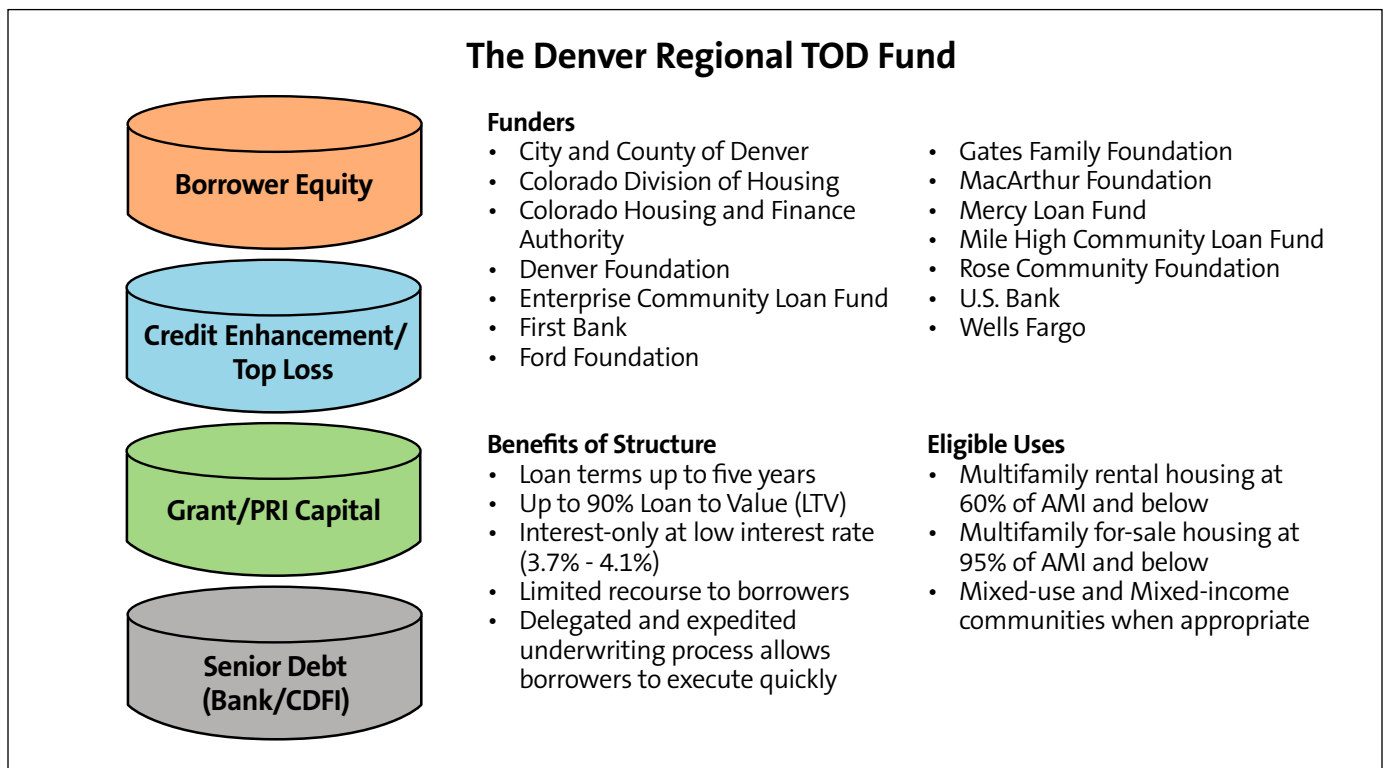
The Atlanta BeltLine project seeks to transform neighborhoods across the city by redeveloping an existing 22-mile rail corridor with transit service, trails, greenspace, housing and art.<sup>cxxxix</sup> Atlanta established the BeltLine Tax Allocation District (TAD; the term Georgia uses for TIF) to provide financing for this initiative.<sup>cxxx</sup> Fifteen percent of revenues support the Beltline Affordable Housing Trust Fund, which provides acquisition, rehabilitation, and construction capital for affordable multi-family apartments and condominiums.<sup>cxxxi</sup> From 2005-2014, the Atlanta BeltLine TAD generated \$124 million.<sup>cxxxii</sup> While this is a substantial amount, it has fallen significantly short of initial projections as a result of the Great Recession and other market factors, making the completion of this initiative uncertain.<sup>cxxxiii</sup> Therefore, while the BeltLine TAD remains an example of a best practice, it does underscore the need for careful projections and underwriting when planning an effort of this magnitude.

On a more limited scale, property tax policy can be used to create incentives for individual property owners to support eTOD. For example, the property tax burden for a given owner will generally increase when the property is rehabilitated or redeveloped. In hot markets, this creates an incentive to maximize the revenue potential of the property to offset this burden, potentially harming affordability. In weaker markets, tax increases can serve as a disincentive to improving properties in need of revitalization. When properly calibrated, limited and targeted property tax exemptions or abatements can encourage rehabilitation while supporting affordability. For example, Portland's Multiple-Unit Limited Tax Exemption program provides a 10-year property tax exemption on structural improvements to station area properties where at least 20 percent of units accommodate tenant households earning 60 percent of AMI or less.<sup>cxxxiv</sup>

**USE PUBLIC RESOURCES TO LEVERAGE PRIVATE AND PHILANTHROPIC RESOURCES**

The preceding sections highlight what are often individual sources of eTOD-supportive capital. These public resources can often have greater impact when coordinated and used to leverage private capital. Blending public and private capital from multiple sources can allow for more flexible terms and conditions, as risk can be shared amongst multiple stakeholders with different investment goals, return expectations and timelines. While such funds tend to be complex to set up and administer, there are several successful examples throughout the country focused specifically on eTOD capital.

Denver’s aforementioned FasTracks expansion (page 13) represents both an opportunity and a challenge to the region. Significantly enhanced transit access could promote greater mobility and improve neighborhoods, but could also lead to the displacement of low- and moderate-income households who could most benefit from the service. To respond to this challenge, local stakeholders began working to set up an acquisition fund to preserve and develop affordable housing near planned transit stations before escalating property values put those sites out of reach.



This effort led in 2010 to the creation of the Denver TOD Fund, which Enterprise manages. Denver's initial contribution of \$2.5 million in first-loss capital was leveraged with other private and philanthropic resources to create an initial funding pool of \$15 million. Other investors included the Colorado Housing and Finance Authority, several philanthropies, banks, and community development financial institutions (CDFIs). The fund served as a line of credit to the Urban Land Conservancy (ULC), a land trust. ULC would purchase and hold properties until the sites were ready for development or rehabilitation and permanent financing was secured. In addition to increasing the amount of available capital, the fund offered lending terms tailored to the unique needs of providing eTOD in this market (in this case a lengthier three- to five-year holding period and a lower interest rate of approximately 3.5 percent). In December 2014, the fund was expanded to \$24 million. Rebranded as the Denver Regional TOD Fund, resources can now be utilized across the seven-county region and multiple borrowers can access funds. As of June 2015, the fund has loaned more than \$15 million for 11 sites that will create or preserve nearly 900 units of affordable housing, as well as other community resources.<sup>cxxxv</sup>

These eTOD investments are not limited to local governments or housing agencies. In 2011, the San Francisco Bay region's MTC became the first metropolitan planning organization (MPO) to invest in a regional eTOD fund, the Bay Area Transit Oriented Affordable Housing (TOAH) Fund. MPC's initial investment of \$10 million was able to leverage an additional \$40 million in private and philanthropic capital. The Bay Area TOAH Fund provides a range of capital products for transit-oriented affordable housing and community development projects across the region. For more information, read the [full case study](#) on page 48.



## CASE STUDY: USING TRANSPORTATION RESOURCES TO SUPPORT ETOD IN THE SAN FRANCISCO BAY REGION

The San Francisco Bay region is in the midst of a well-documented housing insecurity crisis. A combination of a robust economy with growing wage disparities, geological barriers and years of insufficient housing supply growth have resulted in high housing costs. The Metropolitan Transportation Commission (MTC) is the metropolitan planning organization serving the nine-county San Francisco Bay region.<sup>19</sup> Within this area, there are nearly 1.2 million severely cost-burdened renter households, 25.7 percent of all renters in the region. An additional 24.2 percent of renter households spends more than 30 percent of their income on housing.<sup>cxv</sup> According to the Center for Neighborhood Technology's Housing + Transportation Affordability Index, the "Regional Typical Household" spends approximately 50 percent of income on these expenses, above the 45 percent benchmark for affordability.

These struggles make eTOD an increasingly important strategy as the region works to accommodate growth. MTC has been at the forefront in recognizing the need to comprehensively address both housing and transportation needs. Since 1998, MTC has awarded over \$200 million in federal Surface Transportation Program (STP) funding through its Transportation for Livable Communities (TLC) program.<sup>cxvii</sup> These grants have been used by local jurisdictions and developers to link land-use and transportation decisions, support the creation of walkable downtowns and commercial cores, and improve neighborhood access to transit, amenities and services.<sup>cxviii</sup>

In 2006, the Great Communities Collaborative (GCC) was formed by several philanthropic and nonprofit organizations to advance sustainable and equitable communities in the Bay Area with a focus on eTOD. GCC began engaging MTC and other key stakeholders around a range of issues, including barriers to land acquisition within the region. In 2007, GCC partners began due diligence to assess the feasibility of a land acquisition fund in order to take advantage of depressed land values linked to the Great Recession. The scope was broadened in 2009 to investigate the possibility of providing a wider range of products to meet affordable housing and community development needs. In 2010, a consortium of six Community Development Financial Institutions (CDFIs) was selected through a request-for-proposals process to act as fund manager.<sup>20</sup>

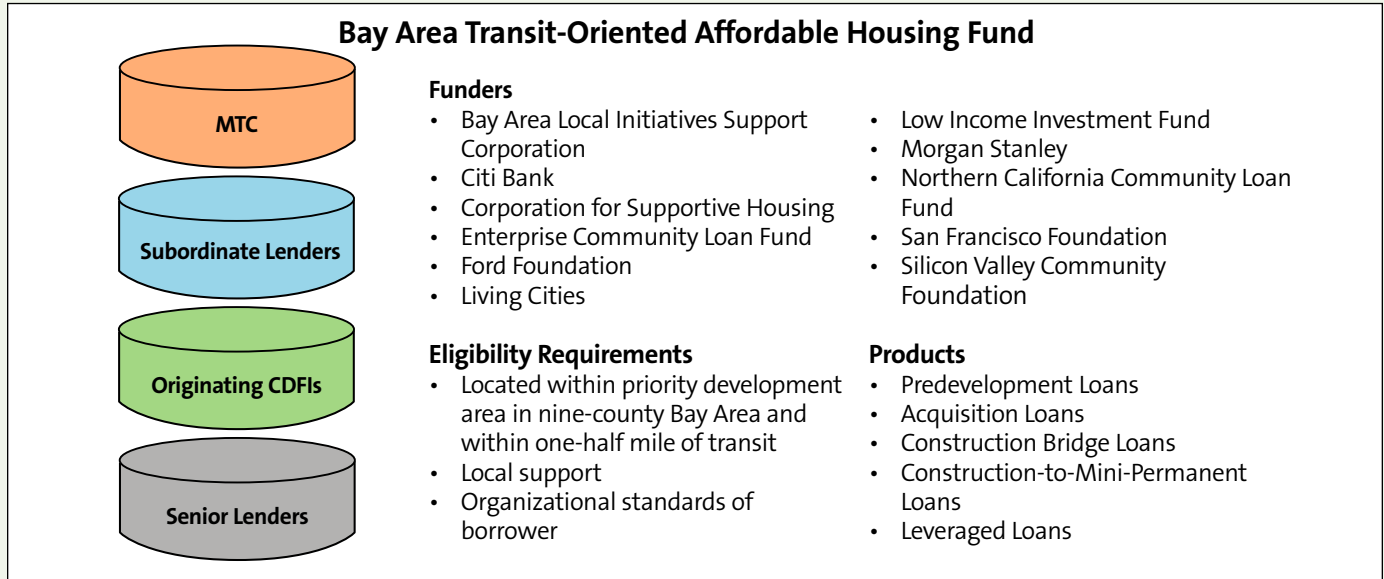
MTC participated throughout this process and decided to commit \$10 million to seed what would become the Bay Area Transit-Oriented Affordable Housing (TOAH) Fund. To raise the funds, MTC utilized its Exchange Program, where local jurisdictions provided capital to MTC in exchange for allocations of federal STP and/or CMAQ funding for eligible transportation projects. In order to receive the MTC funds, the managing consortium was required to leverage additional capital at a 3-to-1 ratio.<sup>cxvix</sup>

<sup>19</sup> This service area includes Alameda (which includes Oakland), Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma Counties. For more information, see [http://www.mtc.ca.gov/about\\_mtc/about.htm](http://www.mtc.ca.gov/about_mtc/about.htm).

<sup>20</sup> This consortium consisted of the Low Income Investment Fund, Corporation for Supportive Housing, Enterprise Community Loan Fund, Local Initiative Support Corporation, Northern California Community Loan Fund, and Opportunity Fund.



The managing consortium was able to exceed that amount, raising a total of \$40 million to create the \$50 million Bay Area TOAH Fund. The capital was provided in tiers, based on repayment priority:



To receive funding, a site must be within a “Priority Development Area” (neighborhoods that have been designated for growth in the region’s transportation and land use plan), and must be located within a half-mile of high quality transit.<sup>cxl</sup> Loan products range from predevelopment to permanent gap financing, with terms favorable for eTOD.<sup>21</sup> Development types include “affordable housing, retail space and other critical services, such as child care centers, fresh food outlets and health clinics.”<sup>cxli</sup>

The TOAH Fund has deployed over \$30 million of the total \$50 million capital pool within its first three years of operation, all against a backdrop of lost federal and state affordable housing resources. The portfolio currently consists of six active loans across the Bay Area worth \$26.3 million collectively, and two lessees have repaid in full. Combined, these communities will create over 700 units of affordable housing throughout the region. The TOAH Fund also provided funding to preserve and expand community serving retail in downtown Oakland.

In June 2015, MTC committed an additional \$10 million to TOAH, which will be leveraged to expand the fund to \$87.5 million. An additional component of the TOAH Fund includes a \$2.5 million impact grant pool, which provides catalytic and companion grants to support predevelopment. The expansion of the TOAH Fund coincides with the state’s new Cap-and-Trade program, of which 20 percent of proceeds are dedicated towards the Affordable Housing and Sustainable Communities program. It is anticipated that this new source of state funding will accelerate the deployment of the TOAH Fund.

21 Product types include: predevelopment loans, acquisition loans, construction bridge loans, construction-to-mini-permanent loans, and leveraged loans for New Market Tax Credit developments. For more information, visit: <http://bayareatod.com/products/>.

### **SOLUTION 4: ENHANCE SITE-ACCESS AND IMPROVE SITE VIABILITY**

Local real estate market conditions drive eTOD viability. In particularly strong markets, affordable housing developers often struggle to compete with profit-driven developers and/or property owners to redevelop station areas. Acquisition costs (especially for “performing sites” that generate revenue even before redevelopment) may be prohibitive even for specially-tailored financial products. Furthermore, while inclusionary housing policies do guard against a community becoming completely unaffordable, the number of units added may not make up for broader losses throughout the market if existing properties cannot be preserved. In hot markets, transportation organizations and other public entities may need to expand their efforts beyond policy and financing, and consider the utilization of public land.



In other contexts, a combination of relatively weak demand, costly infrastructure development needs, and less-compatible surrounding land use can make station area development generally less viable. If market-rate developers are reluctant to develop properties at higher price points, policies that attempt to compel public benefits (such as inclusionary housing policies or infrastructure development requirements) can further hinder station area redevelopment. In these markets, it is even more important to examine the regulatory and land use barriers that may be inhibiting market viability. There also may be opportunities for public sector or nonprofit led catalytic redevelopment activities that can spur additional growth throughout the station area or corridor.

The following sections highlight activities taken in both strong and struggling markets to support eTOD.

#### **UTILIZE PUBLIC- AND TRANSIT AGENCY-OWNED SITES FOR AFFORDABLE HOUSING**

The most direct way for public agencies to support eTOD is to make public land available for affordable housing development. Sites can either be leased or sold directly to affordable housing developers, or the agency can require that a portion of a larger development be affordable. While opportunistic or ad-hoc use of sites can support eTOD, a systematic approach toward equitable public land use/disposition may have greater impact.

In 1996, King County, Wash. (Seattle metropolitan region) instituted a Surplus Property Program for Affordable Housing.<sup>cxliii</sup> All county-owned property deemed “surplus” is reviewed in order to determine suitability for residential development, based on

considerations such as location and zoning. Acceptable sites are then marketed for development, with a portion of units developed reserved for affordable housing.

Public entities can also pair affordable housing with other community facilities to achieve more efficient and equitable use of scarce land. The Arlington Mill Residences in Arlington County, Va. include 122 units of affordable rental housing for households earning up to 60 percent of AMI, including 13 units for extremely low-income families and formerly homeless individuals with access to a full-time supportive service coordinator.<sup>cxliii</sup> The residential building shares a site with the county-owned and -operated Arlington Mill Community Center, and the two facilities share a parking garage. The county also provided the development rights for the site at a discount to the Arlington Partnership for Affordable Housing (APAH), a nonprofit developer. APAH entered into a 75-year ground lease for the property, paying a \$1.5 million lump sum for a site with an estimated value of \$8.5 million on the open market.<sup>cxliv</sup>

Public land strategies can ensure that a portion of large-scale, catalytic redevelopment projects remains affordable. Located one stop from downtown Austin on the Red Line commuter-rail corridor, Capital Metro's first joint development project, Plaza Saltillo, will redevelop an 11-acre brownfield into retail space, a grocery store, and 800 residential units, including 100 affordable to seniors and 100 affordable to other households.<sup>cxlv</sup>

Boston's MBTA supported the creation of an equitable, mixed-income community in 2006, when it leased a parcel adjacent to a terminal heavy-rail station to Trinity Financial, Inc., under the condition that the project's rental units remain affordable for 85 years. As a result, the Carruth at Ashmont Station includes 66 affordable rental units for households earning up to 60 percent of AMI and eight units for households earning up to 30 percent of AMI, 42 market-rate for-sale units, and 10,000 square feet of community-retail space.<sup>cxlvi</sup> Reflecting the location's transit accessibility, the development includes only 80 underground parking spaces.<sup>cxlvii</sup>

Jurisdictions may face regulatory hurdles in utilizing public land for eTOD. Some states and/or municipalities have laws that require the sale of land at fair market price or through an open-bidding process, which can serve as a disadvantage to affordable developers. While municipalities may offer other incentives – such as added height or density – to encourage affordable units on public sites, transit agencies or other entities without land-use and zoning authority may not have that option. Development on sites purchased in-full or in-part with federal Department of Transportation funds must comply with federal policies regarding property disposition and joint development. (Navigating the federal regulatory process will be the subject of the third installment of the *Promoting Opportunity through eTOD* series).

Despite these challenges, public land remains a promising and versatile strategy. Transit agencies seeking FTA Major Capital Investment Grant funding for new transit projects have a particularly strong incentive for directly promoting affordability on agency-owned land. As [previously discussed](#), FTA will assess applicants for funding based in part on the extent to which the project and associated planning and development efforts meet the needs of low-income individuals and support the development and preservation of affordable housing near transit. Unlike many of the eTOD tools detailed in the preceding sections which rely on the actions of municipalities, housing organizations or other stakeholders, the transit agency has significantly more control over the development of its own sites.

The following sections detail methods of incorporating affordable housing into public land policies.

#### **Adopt Transit Agency Policies that Encourage or Require Affordable Housing in Station Areas**

Transit agency station area development policies can complement local inclusionary housing policies, or assist in overcoming a lack of such policies. While a transit agency must adhere to varying municipal, state and federal laws that may influence or limit on their options, many have adopted policies, rules and procedures that promote affordable housing near both new and existing transit stations.

Transportation organizations must balance a number of priorities, including efficient system design and operations, ongoing maintenance and capital improvements, financial sustainability, and mobility needs.

Asked about their priorities for TOD, all transportation agency staff members interviewed for this report emphasized the importance of increased ridership and increased farebox revenue, which align well with the aforementioned evidence linking eTOD with these priorities.

Nineteen out of 20 transportation organizations interviewed for this research have pursued real estate activities of some sort, whether through joint development, partnerships with local governments, provision of grants, or other means. In identifying priorities for development of transportation agency-owned real estate, all interviewees stated that they largely deferred to the priorities of the local municipal and/or land-use planning authority on specifics, such as the density and type of development, despite the impact that these factors may have on other agency priorities such as increased ridership

and reduced VMT. In doing so, transportation agencies may defer to existing local frameworks to a degree that is often absent from the development sector, which is often aggressive in seeking variances, waivers and/or rezoning. While specific contexts may warrant such deference, in general we recommend that transit agencies consider a more aggressive stance toward advancing their own development priorities on land they control, given the significant operational and financial impact that such development would have on the organization.

While interviewees also cited the complexity involved in affordable housing development as a concern, this barrier is by no means insurmountable. Most regions large enough to support a robust transit system also have high-capacity providers of affordable housing (whether public, nonprofit, or for-profit) adept at navigating this system and willing to either directly develop the site or provide technical assistance to facilitate such development. When transit organizations do support eTOD, it can have a significant impact. A small sample of six transportation entities reported either selling or leasing station area real estate for housing production between 2009 and 2014, resulting in 327 affordable for-sale homes and 970 affordable apartments.

Atlanta's MARTA has created an impressive suite of eTOD-supportive policies. In 2010, the agency adopted TOD Guidelines outlining transportation-demand management policies that reduce development costs and illustrate TOD's benefits to community stakeholders.<sup>cxlviii</sup> The agency's board of directors also adopted implementation policies for these guidelines that address affordable housing and station area development. With that foundation, the agency set a policy to encourage local governments to permit zoning relief for greater density.

MARTA set a goal to enter into five station area development contracts that would reserve, on average, 20 percent of units for renters earning between 60 percent and 80 percent of AMI and for owners earning between 80 percent and 100 percent of AMI. The policy goes on to state that MARTA's requests for proposals will establish a percentage floor for number of units required and will encourage developers to propose reserving more units.<sup>cxlix</sup>

Intervention Type	Jurisdiction	Details
Adopt eTOD goals within station area development programs	Austin, Texas	Complementing a municipal inclusionary housing requirement, Capital Metro’s Joint Development Project Selection Guidelines require projects to demonstrate responsiveness to social equity issues, including community needs for affordable housing. <sup>ci</sup>
	Los Angeles	In 2014, LACMTA passed a motion that sets a 30 percent affordability threshold for the agency’s direct station area development activities. <sup>ci</sup>
Partner with municipalities to unlock additional resources for eTOD	Dallas	In Texas, municipalities – not transit agencies – may leverage funds from a variety of sources, including tax-increment financing (TIF), to improve infrastructure or support re-development that advance public-policy initiatives. In the past, Dallas Area Rapid Transit has transferred property to the city of Dallas, which requires projects that benefit from public funding to reserve 10 percent to 20 percent of units for affordable housing. <sup>cii</sup>

**Encourage Affordable Housing through the Solicitation Process**

When transit agencies make parcels available for development, they often have the authority to set the terms under which these transactions are made. The solicitation and procurement process can be used to ensure that other community goals can be met even if an explicit, agency-wide affordability policy is absent. Requests-for-proposals (RFPs) can include either specific requirements or negotiable targets for affordable housing, either on a case-by-case or systematic basis.

To achieve the aforementioned affordability goals across its real estate portfolio, MARTA’s standard RFP sets a minimum affordability level for a given site and rewards developers whose projects include more affordable units.<sup>ciii</sup> Portland’s TriMet has incorporated affordability requirements into RFPs in an effort to attract developers able to achieve that vision from the beginning and to signal a preference for affordability to the local community.<sup>civ</sup>

**Provide Flexible Land Sale/Lease Terms for Affordable Housing**

Transportation organizations and other public entities can also facilitate eTOD through the terms and conditions on which they sell or lease public land. While monetary discounts may be most helpful, public entities can also support affordability through increased flexibility – for example, by offering a purchase option to an affordable developer but not fully executing the sale until development subsidies are secured.

The aforementioned LACMTA policy permits the agency to discount sale and lease prices to facilitate affordable housing development on agency-owned land, allowing the developer to account for the lost revenue potential from including affordability units.<sup>clv</sup> In the past, Portland's TriMet has discounted land prices for affordable housing developers based on the incremental amount of farebox revenue expected from the addition of the project's new residents. The agency may also provide free site control in order to relieve resource-constrained non-profit developers of considerable holding costs.<sup>clvi</sup>

Transit agencies can provide eTOD incentives even in jurisdictions that more strictly regulate the sale of public land. Boston's MBTA requires sale to the highest responsible bidder – a standard that allows the agency an increased level of control over awards – and reserves the right to reject all bids. In an effort to expand eTOD opportunities, Boston has filed legislation at the State House to exempt it from a requirement to sell land to the highest bidder. The exemption would allow the city to partner with affordable housing developers to potentially create thousands of units along heavy- and light-rail corridors.<sup>clvii</sup>

**PROACTIVELY ACQUIRE AND/OR ASSEMBLE LAND FOR STATION AREA DEVELOPMENT**

The best time to plan for and begin to implement eTOD is well before the transit infrastructure is developed. Speculative investment in property near a planned line can push purchase prices upward even during the planning phase. Public entities may be in a position to support strategic site acquisition to preserve or develop affordable properties. The aforementioned Denver Regional TOD Fund provides an example of a public-private partnership to support this effort.

One method of assembling property for preservation and development is through community land trusts (CLTs). Nonprofit CLTs such as Denver's Urban Land Conservancy (initially the sole borrower for the Denver TOD Fund before it expanded in December 2014) can purchase and hold properties for a public use, including but not limited to affordable housing and community development. The CLT can manage and/or develop the property themselves, or partner with developers to undertake eTOD at an appropriate time. As the land owner, CLTs can patiently dictate development terms such as the depth and duration of affordability restrictions.

The public sector can also directly acquire land for eTOD. Baltimore Housing (the City's combined housing authority and department of housing and community development) operates the Vacants to Value program to strategically purchase abandoned or derelict properties and facilitate private redevelopment of severely distressed blocks and to sustain healthy neighborhoods.<sup>clviii</sup>

Transit plans should take a long-term view of costs and benefits and should coordinate with other land use and infrastructure plans to better align existing tools and resources. To that end, transportation organizations have also been involved in supporting eTOD through direct investments in sites. Portland (Ore.) Metro (the MPO) has launched an Equitable Housing Initiative to support affordable housing throughout the region. Its efforts have included the purchase of properties for eTOD along its MAX light rail line, and it recently purchased an empty store on a half-acre site for \$685,000, on which it intends to include affordable housing.<sup>clvix</sup>

A transit agency undertaking a capital investment project must acquire land for transit right-of-way, stations, and construction staging. In the Twin Cities, the Minnesota Department of Transportation (MnDOT) purchased the right of way for the Hiawatha Line between Minneapolis, Humphrey International Airport, and the Mall of America, including staging areas for construction equipment. When the project was complete, MnDOT sold the property for a nominal fee to the Metropolitan Council (the Twin Cities MPO), which leased or sold the property to developers in coordination with the City of Minneapolis.

Taking the above example a step further, purchasing additional land during the site assembly process for transit-supportive station area development can potentially pre-empt inflationary market pressures and allow for more cost-effective site control for eTOD. However, prior to a 2013 rule change, transit projects seeking FTA Major Capital Investment Grant funding had a disincentive to do so. Past evaluations of cost-effectiveness were structured in a manner that penalized project sponsors that planned to incur these additional costs. For example, if a half-acre was needed for construction staging but a full acre would be required for a viable real-estate development, the agency could not purchase the incremental half-acre without harming its cost-effectiveness rating. In 2013, FTA took a major step in remedying this challenge. The program's [2013 final rule and guidance](#) (see page 11) now exempt certain beneficial expenditures from the cost-effectiveness rating, including expenses related to certain types of station area development, meaning that transit agencies can now purchase additional land to improve the development without negative scoring repercussions.<sup>22</sup>

---

22 More information on the FTA rules and regulations is included in the Enterprise Policy Focus Issue Brief: *New Starts: Leveraging the New Transit Policy Guidance to Create Inclusive Communities of Opportunity* (<http://www.enterprisecommunity.com/resources/ResourceDetails?ID=0085215>), and will be discussed in more detail in the third installment of the *Promoting Opportunity through eTOD* series ([bit.ly/eTOD-opportunity](http://bit.ly/eTOD-opportunity)).



### **IN CHALLENGING MARKETS, REMOVE REGULATORY BARRIERS AND TAKE CATALYTIC ACTION TO SUPPORT REDEVELOPMENT**

Many of the previous barriers and best practices were particularly relevant to strong markets where competition from a robust market-rate development sector inhibits eTOD. However, there may also be eTOD challenges in markets or neighborhoods with marginal demand for TOD. While the economics of development always depend on the local context, successful eTOD often relies on achieving a “critical mass” of residents, business activity, and multi-modal infrastructure to induce developers and property owners to switch from an automobile-oriented approach to one that facilitates greater multi-modal activity. In transitional areas, higher perceptions of risk may inhibit “early adopters” of TOD. Additionally, for cost and/or local political reasons, a transit project may follow a right-of-way (such as an unused freight rail corridor or highway median) that is relatively inhospitable to TOD without major infrastructure upgrades.<sup>clx</sup> If market demand is not robust enough to generate sufficient revenue to fund these improvements, station area development may remain constrained. This issue underscores the importance of making prudent choices during the transit planning process, as immediate budget considerations could harm the long-term ridership and viability of a transit line or system. However, for stations already built, the public sector and transit agency should consider taking a leadership role in catalyzing development in these areas. This action can take a number of forms, with varying levels of risk.

The first step is to determine the true nature of the station area challenges. The most fundamental question for transit agencies, municipalities and the development community to ask is: is market demand insufficient to support development generally, or is it insufficient to support development within the existing regulatory framework? Market demand may exist for residential and/or mixed-use development, but not be strong enough to command high enough prices at a given density level or cover costly infrastructure or parking development costs. If this is the case, a first lower-cost and low-risk step is to provide greater regulatory flexibility.

The next step is to identify the specific factors that are suppressing market demand or inhibiting local development – such as infrastructure needs or pedestrian safety issues – and the specific actions and costs associated with addressing those issues. In a resource-constrained environment, stakeholders may have to “triage” and identify sites with more immediate eTOD promise.

That being said, there may be compelling reasons to invest capital, time and effort in transforming difficult sites or neighborhoods. For example, a park-and-ride lot in a high-opportunity suburb with good schools could present a rare chance to improve economic integration through fully-affordable or mixed-income development on the site. On a case-by-case basis, the benefits of opening more economic or educational opportunities to residents may be sufficient to outweigh concerns about increased infrastructure costs, higher parking ratios and/or less-than-ideal multi-modality.

If it is determined that development should proceed in either the near or long term, there are a number of catalytic actions that can be taken to support redevelopment on more marginal transit-oriented sites.

#### **Undertake Incremental “Place-making” Improvements**

If there is uncertainty as to whether a station area will ever be able to support TOD, a local government or transit agency may want to undertake low-cost, low-risk activities that improve the pedestrian environment and create a sense of place. These can include incorporating safety improvements for pedestrians, or allowing public or transit agency-owned land to host events such as farmers markets or recreational activities. If successful, these actions can demonstrate that there is some market acceptance for the type of uses and activities characterized by TOD. For example, Atlanta’s TransFormation Alliance and MARTA have partnered with a local nonprofit to support public art that enhances the station area experience for neighborhood residents and transit users.<sup>clxi</sup>

#### **Strategically Utilize Public Land**

As previously discussed, local governments and transit agencies can make publicly-owned properties and/or air rights available for catalytic eTOD activities using direct sales, creative deal structures, and/or land cost discounts. In some cases affordable housing resources can opportunistically replace absent private market-rate capital, if only temporarily.

For example, capital for real estate development can become scarcer during economic downturns. In such contexts, affordable housing capital can fill the development gap left by the fully private market, facilitate locally- and regionally-stimulative development, and lead to increases in ridership and revenue during periods when local transit subsidies may become threatened, all while ensuring that a portion of station area housing remains affordable. During the Great Recession, market-rate housing developers of LACMTA station area projects could not easily access conventional financing. As a result, affordable housing developers advanced proposed projects with public financing, which required affordability and produced a significant amount of affordable housing (32 percent) in station areas even prior to the agency’s adoption of explicit affordability policies.

**Invest in Initiatives that Support Private-Sector Development**

Public entities and transit agencies can work with the private sector to address other development barriers. In areas lacking large enough lots to facilitate larger-scale, financially viable development, a public entity can acquire and assemble smaller parcels for redevelopment.

Alternatively, regulations can be relaxed to facilitate smaller-scale, lower-risk development on smaller parcels, including “microunits” or “tiny homes” that have developed diverse niches, often serving young urbanites or providing a more-permanent affordable and/or supportive housing solution for homeless individuals. The public sector and nonprofits can also acquire and prepare more difficult individual sites for redevelopment. As previously mentioned, Baltimore’s Vacants to Value program provides an opportunity to redevelop dilapidated properties and promote healthier neighborhoods.

Another potential method may be targeted infrastructure investment. Agencies can also consider adopting “value capture” tools such as TIF to accompany these investments, which allow them to recoup and reinvest public resources. Given that these activities require the upfront expenditure of public capital and increased risk exposure, it is important for agencies to first ensure that a supportive regulatory environment is in place and that there is a reasonable certainty of resulting market demand. Failure of high-profile public investments to spur development can tie up resources and/or erode public confidence in future efforts to support eTOD.



## CASE STUDY: A REGIONAL SNAPSHOT OF ETOD SUPPORT IN ATLANTA

Greater Atlanta is commonly characterized as sprawling and automobile-oriented. As the region works to change this perception and improve its transit connectivity, it has also provided a useful illustration of how housing and transportation stakeholders, municipal governments and the private and nonprofit sector have created and aligned a range of products and initiatives to support eTOD. The following is a non-exhaustive list of actions taken by diverse stakeholders to support eTOD in the region.

### MUNICIPAL LEADERSHIP: Atlanta and the Atlanta BeltLine, Inc.

One of the highlights of Atlanta's transit expansion efforts is the Atlanta BeltLine project, which seeks to "transform" neighborhoods across the city by redeveloping an existing 22-mile rail corridor with transit service, trails, greenspace, housing and art.<sup>clxii</sup> If the BeltLine's vision is fully implemented, a new light-rail line and shared-use path encircling Greater Atlanta and connecting a number of suburban centers and existing MARTA train stations.

To support this effort, in 2005 Atlanta and Invest Atlanta (the city's development authority) formed the Atlanta BeltLine Partnership to plan and support the project. In the same year, the BeltLine Redevelopment Plan and Tax Allocation District were approved.<sup>clxiii</sup> The next year, Atlanta BeltLine, Inc. was created to oversee the initiative.

Equity has been a major consideration for regional stakeholders. Atlanta BeltLine Inc. and the Tax Allocation District Advisory Committee developed the BeltLine Equitable Development Plan, which sets standards for transformative investment, sustainable growth, and equitable development.<sup>clxiv</sup> Ultimately, 15 percent of revenues from the Tax Allocation District were pledged to support the Beltline Affordable Housing Trust Fund (BAHTF), which provides acquisition, rehabilitation, and construction capital for affordable multi-family apartments and condominiums.<sup>clxv</sup>

A Mixed-Income Transit-Oriented Development Implementation Strategy was also developed to leverage BAHTF to create 5,600 owner- or renter-occupied affordable units in the next 25 years, primarily through acquiring or rehabilitating foreclosed property, extending affordability covenants on existing affordable properties, and leveraging BAHTF funds to secure complementary funding sources.<sup>clxvi</sup> To date, the BAHTF has capitalized \$8.8 million to provide down payment assistance to homebuyers and incentives to affordable housing developers. With Invest Atlanta, BAHTF has helped to create 985 affordable units along the Atlanta BeltLine corridor.<sup>clxvii</sup>

Overall, from 2005-2014 the Atlanta BeltLine TAD has generated \$124 million.<sup>clxviii</sup> While this is a substantial amount, it has fallen significantly short of initial projections as a result of the Great Recession and other market factors, making the completion of this initiative uncertain.<sup>clxix</sup>

### TRANSIT AGENCY ACTION: MARTA

MARTA has also created an impressive suite of eTOD-supportive policies. In 2010, the agency adopted TOD guidelines outlining transportation-demand management policies that reduce development costs and illustrating TOD's myriad benefits to community stakeholders.<sup>clxx</sup>

The agency's board of directors also adopted implementation policies for these guidelines that address affordable housing and station area development. With that foundation, the agency set a policy to encourage local governments to permit zoning relief for greater density.

MARTA set a goal to enter into five station area development contracts that would reserve, on average, 20 percent of units for renters earning between 60 percent and 80 percent of AMI and for owners earning between 80 percent and 100 percent of AMI. The policy goes on to state that MARTA's RFPs will establish a percentage floor for number of units required and will encourage developers to propose reserving more units.<sup>clxxi</sup>

#### **REGIONAL SUPPORT: Atlanta Regional Commission (ARC)**

ARC (the region's MPO) has complemented MARTA's effort by targeting Livable Communities Initiative (LCI) funds to those five stations, as well as others. LCI funding helps cities and towns to plan for and invest in efficient, inclusive development. By 2017, LCI will award \$18 million to plan and enhance community centers and transit corridors and to help cities and counties to enact growth policies.<sup>clxxii</sup>

In addition, ARC has created the Equitable Target Area (ETA) Index, which identifies communities based on age, education, median housing value, race, and poverty in order to prioritize funding for transportation projects.

#### **HOUSING SECTOR COORDINATION: Georgia Department of Community Affairs (DCA)**

DCA manages the state's Housing Credit program. Like many other states, DCA gives preference to eTOD projects, awarding three points to developments that satisfy a local government's place-based strategic initiative for improving a neighborhood, which could include TOD.<sup>clxxiii</sup>

#### **PRIVATE SECTOR AND COMMUNITY ENGAGEMENT: Atlanta TransFormation Alliance and Enterprise's Local Engagement**

Enterprise co-leads the Atlanta TransFormation Alliance, a collaborative of housing and transportation agencies, community development corporations, nonprofit organizations, lenders, and philanthropies committed to advancing eTOD in the region.<sup>clxxiv</sup> ARC provides staffing and resources to support the Alliance, providing it with additional capacity to move from discussion toward implementation. The Alliance has worked to build eTOD capacity, aligned with MARTA's TOD program, engaged in station area visioning efforts, and produced work products such as a TOD typology report and equity evaluations tools.<sup>clxxv</sup> The Alliance and MARTA have also partnered with WonderRoot, a local nonprofit, to support public art that enhances the station area experience for neighborhood residents and transit users.<sup>clxxvi</sup>

In addition, Enterprise's Proactive Preservation through Partnerships program preserves the affordability of expiring, distressed, or at-risk multi-family properties by identifying opportunities for expiring Housing Credit and HUD-subsidized properties, affordable homes near transit and/or employment centers, and other assets. The program also provides technical assistance to renters and homeowners.<sup>clxxvii</sup>



## CONCLUSION

**M**ajor transportation infrastructure investments have the ability to connect, but can also divide. There are many examples of transportation projects that connect people – of all incomes – to jobs, educational opportunities and services. However, there are numerous others that have the opposite effect – a new highway that cuts off a lower-income neighborhood from the urban core, or rising costs in transit served communities that risk displacing longtime residents just as a neighborhood begins to revitalize.

Therefore, community leaders share an obligation to proactively ensure that transportation investments – potentially the largest and most impactful public investment a neighborhood can receive – advance the cause of social equity, inclusion and opportunity. eTOD is one tool to achieve that vision. Fortunately, supporting eTOD is not a zero-sum game where low-income households benefit but others lose out. As highlighted in *Promoting Opportunity through eTOD: Making the Case*, a robust evidence base indicates eTOD can bring a range of benefits to the neighborhood and broader regional economy, the environment, municipal finances, public health and transportation system performance.

Despite numerous benefits, implementing eTOD faces many hurdles. As this report highlights, a number of barriers exist that stakeholders are working to overcome. The diversity and complexity of eTOD challenges prevent the creation of an easy, one-size-fits-all solution. However, this same diversity and complexity can create a “laboratory” for experimentation for local practitioners. While the preceding pages highlight individual best practices that vary by market and jurisdiction, one common thread does link these actions – alignment of priorities and engagement among key stakeholders in transportation, housing, government, finance and development are paramount. This collective action is crucial to bringing the necessary resources to bear – whether human, financial, or real estate – to tackle this complex but vital challenge.

**APPENDIX A: Promoting Opportunity through eTOD: Making the Case**

eTOD can expand mobility options, lower commuting expenses and enhance access to employment, child care, schools, stores and critical services. This development model also conveys ancillary benefits to the broader community, the economy, the environment and the transportation system. The following tables highlight examples of these benefits, based on a non-exhaustive review of the evidence and literature. For more information, read: *Promoting Opportunity through Equitable TOD: Making the Case*.<sup>23</sup>

**The Importance of eTOD to Families**

Benefit	Source
<b>eTOD Can Improve Access to Employment Opportunities</b>	
Job accessibility is correlated with decreases in the length of unemployment for certain lower-paid workers who had recently lost their jobs.	Job Displacement and the Duration of Joblessness: The Role of Spatial Mismatch: <a href="http://www.nber.org/papers/w20066">http://www.nber.org/papers/w20066</a>
New York City neighborhoods with limited transit access had higher rates of unemployment compared to those with substantial access.	Mobility, Economic Opportunity and New York City Neighborhoods: <a href="http://wagner.nyu.edu/rudincenter/wp-content/uploads/2014/12/NYURudinJobAccessReport.pdf">http://wagner.nyu.edu/rudincenter/wp-content/uploads/2014/12/NYURudinJobAccessReport.pdf</a>
Three-quarters of all jobs in the nation’s 100 largest metro regions are transit accessible.	Where the Jobs Are: Employer Access to Labor by Transit: <a href="http://www.brookings.edu/research/papers/2012/07/11-transit-jobs-tomer">http://www.brookings.edu/research/papers/2012/07/11-transit-jobs-tomer</a>
<b>eTOD Can Lower the Cost-of-Living for Low- and Moderate-Income Households</b>	
In 2014, the annual cost of owning, using, and maintaining an average sedan in the U.S. was \$8,876.	AAA 2014 Your Driving Costs Study: <a href="http://newsroom.aaa.com/2014/05/owning-and-operating-your-vehicle-just-got-a-little-cheaper-aaas-2014-your-driving-costs-study/">http://newsroom.aaa.com/2014/05/owning-and-operating-your-vehicle-just-got-a-little-cheaper-aaas-2014-your-driving-costs-study/</a>
Illinois Housing Development Agency-financed projects near bus and rail services saved residents an average of \$3,000 in annual transportation costs.	Safe, Decent, and Affordable: Transportation Costs of Affordable Housing in the Chicago Region: <a href="http://www.cnt.org/publications/safe-decent-and-affordable-transportation-costs-of-affordable-housing-in-the-chicago">http://www.cnt.org/publications/safe-decent-and-affordable-transportation-costs-of-affordable-housing-in-the-chicago</a>
Households in transit-accessible neighborhoods in California reduced vehicle ownership across all income levels.	Why Creating and Preserving Affordable Homes Near Transit Is a Highly Effective Climate Protection Strategy: <a href="http://www.transformca.org/transform-report/why-creating-and-preserving-affordable-homes-near-transit-highly-effective-climate">http://www.transformca.org/transform-report/why-creating-and-preserving-affordable-homes-near-transit-highly-effective-climate</a>
<b>eTOD Can Contribute to Improved Health and Well-Being</b>	
TOD encourages highly accessible multi-modal environments for routine, affordable, and healthy mobility options such as walking and biking. Conversely, auto-dependent development patterns promote less active lifestyles that contribute to a number of illnesses prevalent in low-income populations, including obesity, heart disease, and asthma.	Transit Oriented Development at the Quitman Light Rail Station - Health Impact Assessment: <a href="http://www.pewtrusts.org/~media/assets/2012/06/6/houstontodhifinalreport.pdf">http://www.pewtrusts.org/~media/assets/2012/06/6/houstontodhifinalreport.pdf</a>  Community Design, Street Networks, and Public Health: <a href="http://www.sciencedirect.com/science/article/pii/S2214140514000486">http://www.sciencedirect.com/science/article/pii/S2214140514000486</a>
In Charlotte, N.C., a study found transit access to be associated with a reduction in body mass.	Locating Affordable Housing near Transit: A Strategic Economic Decision: <a href="http://www.reconnectingamerica.org/assets/Uploads/20120904AHpolicybrief.pdf">http://www.reconnectingamerica.org/assets/Uploads/20120904AHpolicybrief.pdf</a>
eTOD can particularly benefit seniors: those with a medical condition are more likely to use transit; transit’s mode share is largest among those 85 years old and older; and that cohort’s car use significantly declined between 2001 and 2009.	Travel Behavior and Mobility of Transportation-Disadvantaged Populations: Evidence from the National Household Travel Survey: <a href="http://www.ugpti.org/pubs/pdf/DP258.pdf">http://www.ugpti.org/pubs/pdf/DP258.pdf</a>
Those with easier access to medical facilities are more likely to receive recommended care.	Locating Affordable Housing near Transit: A Strategic Economic Decision: <a href="http://www.reconnectingamerica.org/assets/Uploads/20120904AHpolicybrief.pdf">http://www.reconnectingamerica.org/assets/Uploads/20120904AHpolicybrief.pdf</a>

23 Hersey, John, and Michael A. Spotts. 2015. “Promoting Opportunity through Equitable Transit-Oriented Development: Making the Case.” Washington, DC: Enterprise Community Partners. [https://s3.amazonaws.com/KSPProd/ERC\\_Upload/0100617.pdf](https://s3.amazonaws.com/KSPProd/ERC_Upload/0100617.pdf)

### The Importance of eTOD to the Broader Community, Region and Economy

Benefit	Source
<b>eTOD Supports More Efficient Transportation Networks</b>	
In 2004, nearly 66 percent of transit users had annual household incomes below \$50,000.	A Profile of Public Transportation Passenger Demographics and Travel Characteristics Reported in On-Board Surveys: <a href="http://www.apta.com/resources/statistics/Documents/transit_passenger_characteristics_text_5_29_2007.pdf">http://www.apta.com/resources/statistics/Documents/transit_passenger_characteristics_text_5_29_2007.pdf</a>
In 2009, the less a household earned (under \$100,000), the more likely it is to utilize transit.	Travel Behavior and Mobility of Transportation-Disadvantaged Populations: Evidence from the National Household Travel Survey: <a href="http://www.ugpti.org/pubs/pdf/DP258.pdf">http://www.ugpti.org/pubs/pdf/DP258.pdf</a>
Households in California earning less than 80 percent of AMI rode transit more and made fewer daily automobile trips than those who earned more. Those earning 30 percent of AMI or less took 50 percent more transit trips than households earning 120 percent or more.	Why Creating and Preserving Affordable Homes Near Transit Is a Highly Effective Climate Protection Strategy: <a href="http://www.transformca.org/transform-report/why-creating-and-preserving-affordable-homes-near-transit-highly-effective-climate">http://www.transformca.org/transform-report/why-creating-and-preserving-affordable-homes-near-transit-highly-effective-climate</a>
In 2009, more than ten percent of low-income residents of Denver station areas used transit as their primary commute mode – more than twice the rate of any other income group.	Making Affordable Housing at Transit a Reality: Best Practices in Transit Agency Joint Development: <a href="http://www.enterprisecommunity.com/resources/ResourceDetails?ID=67359.pdf">http://www.enterprisecommunity.com/resources/ResourceDetails?ID=67359.pdf</a>
<b>eTOD Can Contribute to Local and Regional Economic Development</b>	
TOD's clustering effect and greater accessibility can spur "agglomeration economies," increased labor productivity, and increased information exchange.	Transit Service, Physical Agglomeration and Productivity in US Metropolitan Areas: <a href="http://usj.sagepub.com/content/early/2013/08/01/0042098013494426.abstract?papetoc">http://usj.sagepub.com/content/early/2013/08/01/0042098013494426.abstract?papetoc</a>
TOD can reduce demand for parking (between 20 percent and 50 percent), allowing land and resources to support more productive economic uses.	Getting the Parking Right for Transit-Oriented Development: <a href="http://metro.kingcounty.gov/up/projects/right-size-parking/pdf/getting-the-parking-right-transit-oriented-development.pdf">http://metro.kingcounty.gov/up/projects/right-size-parking/pdf/getting-the-parking-right-transit-oriented-development.pdf</a>
<b>eTOD Can Strengthen Municipal Finances</b>	
Compared to conventional suburban development, dense, mixed-use and connected development exhibits a ten-fold increase in tax revenue, one-third reduction in infrastructure costs, and ten percent reduction in service-delivery costs.	Building Better Budgets: A National Examination of the Fiscal Benefits of Smart Growth Development: <a href="http://www.smartgrowthamerica.org/building-better-budgets">http://www.smartgrowthamerica.org/building-better-budgets</a>
Compact development yields a 35 percent annual return on infrastructure investment, compared to two percent for sprawling development.	Understanding Smart Growth Savings: What We Know About Public Infrastructure and Service Cost Savings, and How They Are Misrepresented by Critics: <a href="http://www.vtpi.org/sg_save.pdf">http://www.vtpi.org/sg_save.pdf</a>



## APPENDIX B: Acknowledgements

We would like to thank the following people for their contributions to this research effort:

Tim Allison, Manager, Real Estate Assets; Metropolitan Transit System (San Diego, Calif.)

Vivian Baker, Assistant Director, Transit Friendly Land Use and Development; New Jersey Transit

Allison Bell, Program Manager, Transit-Oriented Development; Metro Transit (Twin Cities, Minn.)

Zelleka Biermann, Supervisor, Housing Services; City of Charlotte, N.C.

Teri Bond, Planning Supervisor, Community Planning; Maryland National Capital Parks and Planning Commission

Mark Boyle, Assistant General Manager, Real Estate and Asset Development; Massachusetts Bay Transportation Authority (Boston)

Traci Canfield, Planner; Regional Transit (Sacramento, Calif.)

RoseMary Covington, Assistance General Manager, Transit System Development; Regional Transit (Sacramento, Calif.)

John Crocker, Director, Development and Regional Coordination; Metropolitan Atlanta Rapid Transit Authority

David Dunneback, Senior Planner, Transportation; King County, Wash.

Danielle Esser, Policy Research Administrator; New Jersey Housing and Mortgage Finance Agency Maribeth Feke, Director, Planning; Greater Cleveland Regional Transit Authority

Lucy Galbraith, Director, Transit-Oriented Development; Metro Transit (Twin Cities, Minn.)

Marisa Ghani, Senior Planner, Land Use; Atlanta Regional Commission

Leroy Gould, Coordinator, Transit Village Initiative; New Jersey Department of Transportation

Sparky Harris, Principal Planner, Department of Public Works; City of Sacramento, Calif.

Tanya Hedgepeth, Planner Coordinator; Maryland National Capital Parks and Planning Commission

Todd Hemingson, Vice President, Strategic Planning and Development; Capital Metro (Austin, Texas)

Cal Hollis, Managing Executive Officer, Countywide Planning and Development; Los Angeles County Metropolitan Transit Authority

Kate Iverson, Manager, Transit-Oriented Development; Regional Transit District (Denver, Colo.)

Andrew Jakobovics, Senior Director, Public Policy; Enterprise

Patrick Jordan, Senior Director, Enterprise Advisors; Enterprise

Henry Kay, Executive Director, Transit Development and Delivery; Maryland Transit Administration

Mary Kendall, Program Officer, Division of Neighborhood Revitalization; Maryland Department of Housing and Community Development

Rebekah King, Policy Associate; National Housing Conference

Kathryn Krieger; TriMet (Portland, Ore.)

Odetta MacLeish-White, Program Director, Southeast; Enterprise

Jolinda Marshall, Principal Planner, Transit-Oriented Development; Capital Metro (Austin, Texas)

Patrick McLaughlin, Senior Associate, Transit-Oriented Development; Regional Transit District (Denver, Colo.)

Andrea Osgood, Associate Director, Real Estate Development; Eden Housing

Jeff Ordway, Manager, Property Development; Bay Area Rapid Transit (San Francisco)

Joyce Paul, Senior Policy Advisor; New Jersey Department of Community Affairs

Melinda Pollack, Vice President, Transit-Oriented Development; Enterprise

Andrea Ponsor, Policy Director; Local Initiatives Support Corporation (LISC)

Gary Prince, Manager; King County, Wash.

Suzanne Probst, Senior Graphics Designer, Marketing & Communications; Enterprise

Geeta Rao, Senior Program Director, Northern California; Enterprise

Amanda Rhein, Senior Director, Transit-Oriented Development; Metropolitan Atlanta Rapid Transit Authority

Jennifer Rocci, Senior Planner, Real Estate; Valley Transit Authority (Santa Clara, Calif.)

Andy Scott, former Director, Office of Real Estate; Maryland Department of Transportation

Bill Sirois, Senior Manager, Transit-Oriented Development; Regional Transit District (Denver, Colo.)

Karl Stundins, Program Manager, Area Re-development; City of Dallas

Marie Sullivan, Transportation Planner, Countywide Planning and Development; Los Angeles County Metropolitan Transit Authority

Heather Tabbert, Manager, Local Planning and Programs; Regional Transportation Authority (Chicago)

Tina Votaw, Manager, Transit-Oriented Development; City of Charlotte, N.C.

Stan Wall, Director, Real Estate; Washington (D.C.) Metropolitan Area Transit Authority

Jason Ward, Manager, Joint Development; Metropolitan Atlanta Rapid Transit Authority

Susan Weber, Supervising Transportation Analyst, Division of Statewide Planning; New Jersey Department of Transportation

Karen Whitaker, Communications Manager, Marketing & Communications, Enterprise

Jack Wierzenski, Director, Economic Development; Dallas Area Rapid Transit

Chad Williams, Project Manager; Maryland National Capital Parks and Planning Commission

Brian Wolak, Senior Communications Manager, Marketing & Communications; Enterprise

Mariia Zimmerman, Principal; MZ Strategies

## ENDNOTES

- i Kniech, Robin, and Melinda Pollack. 2010. "Making Affordable Housing at Transit a Reality: Best Practices in Transit Agency Joint Development." Denver, CO: Enterprise Community Partners & FRESA. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=67359.pdf>.
- ii Jakabovics, Andrew, Lynn M. Ross, Molly Simpson, and Michael A. Spotts. Bending the Cost Curve: Solutions to Expand the Supply of Affordable Rentals. Washington, D.C.: Enterprise Community Partners & ULI Terwilliger Center for Housing, January 2014. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=0086703>.
- iii Wardrip, Keith. Public Transit's Impact on Housing Costs: A Review of the Literature. Insights from Housing Policy Research. Washington, D.C.: Center for Housing Policy, August 2011. <http://www.reconnectingamerica.org/assets/Uploads/TransitImpactonHsgCostsfinal-Aug1020111.pdf>.  
 Leinberger, Christopher B. The WalkUP Wake-Up Call: Atlanta. The WalkUP Wake-Up Call. Washington, D.C.: The George Washington University School of Business & LOCUS. Accessed March 11, 2015. <http://www.smartgrowthamerica.org/documents/walkup-wake-up-atlanta.pdf>.  
 Leinberger, Christopher B., and Patrick Lynch. The WalkUP Wake-Up Call: Boston. The WalkUP Wake-Up Call. Washington, D.C.: The George Washington University School of Business & LOCUS, 2015. <http://www.smartgrowthamerica.org/locus/walkup-boston>.  
 Leinberger, Christopher B. The WalkUP Wake-Up Call: The Nation's Capital As a National Model for Walkable Urban Places. The WalkUP Wake-Up Call. Washington, D.C.: The George Washington University School of Business & LOCUS. Accessed March 11, 2015. <http://www.smartgrowthamerica.org/documents/Walkup-report.pdf>.  
 Pollack, Stephanie, Barry Bluestone, and Chase Billingham. Maintaining Diversity in America's Transit-Rich Neighborhoods: Tools for Equitable Neighborhood Change. Boston, MA: Dukakis Center for Urban and Regional Policy at Northeastern University, October 2010. [http://nuweb9.neu.edu/dukakiscenter/wp-content/uploads/TRN\\_Equity\\_final.pdf](http://nuweb9.neu.edu/dukakiscenter/wp-content/uploads/TRN_Equity_final.pdf).
- iv Pollack, Stephanie, Barry Bluestone, and Chase Billingham. Maintaining Diversity in America's Transit-Rich Neighborhoods: Tools for Equitable Neighborhood Change. Boston, MA: Dukakis Center for Urban and Regional Policy at Northeastern University, October 2010. [http://nuweb9.neu.edu/dukakiscenter/wp-content/uploads/TRN\\_Equity\\_final.pdf](http://nuweb9.neu.edu/dukakiscenter/wp-content/uploads/TRN_Equity_final.pdf).
- v Government Accountability Office. Public Transportation: Multiple Factors Influence Extent of Transit-Oriented Development. Washington, D.C.: Government Accountability Office, November 2014. <http://www.gao.gov/products/GAO-15-70?source=ra>.
- vi Spotts, Michael A. 2013. "New Starts: Leveraging the New Transit Policy Guidance to Create Inclusive Communities of Opportunity." Washington, D.C.: Enterprise Community Partners. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=0085215#>.
- vii The Atlanta Equitable TOD Collaborative. 2015. "TransFormation Alliance - Strengthening Communities through Transit." TranFormation Alliance. Accessed August 17. <http://www.atltransformationalliance.org/index.html>.
- viii TransFormation Alliance. 2015. "The Challenge: People." TransFormation Alliance. Accessed September 1. <http://www.atltransformationalliance.org/people.html>.
- ix "Mile High Connects." 2015. Accessed October 13. <http://milehighconnects.org/>.
- x Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, DC: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>.
- xi Maryland Department of Housing and Community Development. n.d. "Sustainable Communities: Enhancing Maryland Communities by Prioritizing Investment." Maryland Department of Housing and Community Development. <http://www.mdhousing.org/website/programs/dn/Default.aspx>.  
 Maryland Department of Planning. n.d. "Smart Growth Toolbox." Maryland Department of Planning. <http://planning.maryland.gov/OurWork/toolbox/sgtoolbox.shtml>.  
 Maryland Department of Transportation. 2015. "Maryland." Maryland Department of Transportation. Accessed August 3. [http://www.mdot.maryland.gov/Office\\_of\\_Planning\\_and\\_Capital\\_Programming/TOD/TOD\\_Maryland.html](http://www.mdot.maryland.gov/Office_of_Planning_and_Capital_Programming/TOD/TOD_Maryland.html).
- xii Maryland Department of Housing and Community Development. 2015. "Sustainable Communities: Partnering to Revitalize Maryland Communities." Accessed August 18. <http://www.mdhousing.org/website/programs/dn/Documents/Benefits.pdf>.
- xiii New Jersey Department of Transportation. 2015. "Transit Village Initiative, Transit Village Criteria and Scoring Guide." New Jersey Department of Transportation. <http://www.state.nj.us/transportation/community/village/doc/guide.rtf>.
- xiv New Jersey Department of Transportation. 2015. "Overview, Community Programs." New Jersey Department of Transportation Transit Village Initiative. Accessed October 13. <http://www.state.nj.us/transportation/community/village/>.
- xv Pollack, Melinda. Public Comment Letter. 2014. "Enterprise Community Partners Response to: Docket No. FHWA-2013-0037; FHWA RIN 2125-AF52; FTA RIN 2132-AB10 – Notice of Proposed Rulemaking for Statewide and Nonmetropolitan Transportation Planning and Metropolitan Transportation Planning," August 29. <http://www.enterprisecommunity.com/servlet/servlet.FileDownload?file=00P1400000Zjwr4EAB>.
- xvi Zimmerman, Mariia. 2013. "Unlocking MAP-21's Potential to Fund Equitable Transit-Oriented Development." Enterprise Community Partners & Mile High Connects. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=0083547#>.
- xvii Transportation for America. The Innovative MPO - Smart Planning, Strong Communities: A Guidebook for Metropolitan Transportation Planning. Washington, D.C.: Transportation for America, December 2014. <http://t4america.org/maps-tools/the-innovative-mpo/>, page 77.
- xviii Transportation for America. The Innovative MPO - Smart Planning, Strong Communities: A Guidebook for Metropolitan Transportation Planning. Washington, D.C.: Transportation for America, December 2014. <http://t4america.org/maps-tools/the-innovative-mpo/>, page 13.
- xix Transportation for America. The Innovative MPO - Smart Planning, Strong Communities: A Guidebook for Metropolitan Transportation Planning. Washington, D.C.: Transportation for America, December 2014. <http://t4america.org/maps-tools/the-innovative-mpo/>, page 73.
- xx Transportation for America. The Innovative MPO - Smart Planning, Strong Communities: A Guidebook for Metropolitan Transportation Planning. Washington, D.C.: Transportation for America, December 2014. <http://t4america.org/maps-tools/the-innovative-mpo/>, pages 76-77.
- xxi Transportation for America. The Innovative MPO - Smart Planning, Strong Communities: A Guidebook for Metropolitan Transportation Planning. Washington, D.C.: Transportation for America, December 2014. <http://t4america.org/maps-tools/the-innovative-mpo/>, page 78.

- xxii Transportation for America. The Innovative MPO - Smart Planning, Strong Communities: A Guidebook for Metropolitan Transportation Planning. Washington, D.C.: Transportation for America, December 2014. <http://t4america.org/maps-tools/the-innovative-mpo/>, pages 77-78.
- xxiii Transportation for America. The Innovative MPO - Smart Planning, Strong Communities: A Guidebook for Metropolitan Transportation Planning. Washington, D.C.: Transportation for America, December 2014. <http://t4america.org/maps-tools/the-innovative-mpo/>, pages 82.
- xxiv Metropolitan Planning Council. 2015. "Calculator - Grow Chicago: Why We Should Focus Development near Transit." Accessed July 20. <http://metroplanning-tod.s.webitects.com/calculator#1/>.
- xxv Central Corridor Funders Collaborative. 2015. "Tracking Outcomes In The Corridor." Central Corridor Funders Collaborative: Investing Beyond the Rail. <http://www.funderscollaborative.org/tracker>.
- xxvi Government Accountability Office. 2014. "Public Transportation: Multiple Factors Influence Extent of Transit-Oriented Development." Washington, D.C.: Government Accountability Office. <http://www.gao.gov/products/GAO-15-70?source=ra>.
- xxvii Government Accountability Office. 2014. "Public Transportation: Multiple Factors Influence Extent of Transit-Oriented Development." Washington, D.C.: Government Accountability Office. <http://www.gao.gov/products/GAO-15-70?source=ra>.
- xxviii Partnership for Working Families. Community Benefits Law Center. Oakland, CA. June 2015. <http://www.forworkingfamilies.org/cblc>
- xxix Metropolitan Washington Council of Governments. 2014. "Place + Opportunity: Strategies for Creating Great Communities and a Stronger Region." Washington, D.C. [http://www.regionforward.org/wp-content/uploads/Place+-+Opportunity-updated\\_2-14-14\\_web.pdf](http://www.regionforward.org/wp-content/uploads/Place+-+Opportunity-updated_2-14-14_web.pdf).
- xxx Purple Line Corridor Coalition. 2014. "Purple Line Community Compact." College Park, MD. <http://smartgrowth.umd.edu/PLCompact>.
- xxxi City of Baltimore, Maryland Department of Transportation, Maryland Transit Administration, Lafayette Square Association, Citizen's Planning and Housing Association, and Baltimore Heritage, Inc. 2008. "Red Line Community Compact: Defining the Success of Baltimore's Red Line Transit Project." [http://gobaltimoreredline.com/pdf/Community\\_Compact\\_11\\_4\\_09.pdf](http://gobaltimoreredline.com/pdf/Community_Compact_11_4_09.pdf).
- xxxii Transportation for America. 2014. "The Innovative MPO - Smart Planning, Strong Communities: A Guidebook for Metropolitan Transportation Planning." Washington, D.C.: Transportation for America. <http://t4america.org/maps-tools/the-innovative-mpo/>. Page 41.
- xxxiii TriMet. 2014. "10 Years of MAX Yellow Line." TriMet: Portland, OR. [http://news.trimet.org/wordpress/wp-content/uploads/2014/05/TRIMET-YellowLine\\_Combined\\_-sm.pdf](http://news.trimet.org/wordpress/wp-content/uploads/2014/05/TRIMET-YellowLine_Combined_-sm.pdf).
- xxxiv City of Baltimore, Maryland Department of Transportation, Maryland Transit Administration, Lafayette Square Association, Citizen's Planning and Housing Association, and Baltimore Heritage, Inc. 2008. "Red Line Community Compact: Defining the Success of Baltimore's Red Line Transit Project." [http://gobaltimoreredline.com/pdf/Community\\_Compact\\_11\\_4\\_09.pdf](http://gobaltimoreredline.com/pdf/Community_Compact_11_4_09.pdf).
- xxxv City of Baltimore, Maryland Department of Transportation, Maryland Transit Administration, Lafayette Square Association, Citizen's Planning and Housing Association, and Baltimore Heritage, Inc. 2008. "Red Line Community Compact: Defining the Success of Baltimore's Red Line Transit Project." [http://gobaltimoreredline.com/pdf/Community\\_Compact\\_11\\_4\\_09.pdf](http://gobaltimoreredline.com/pdf/Community_Compact_11_4_09.pdf).
- xxxvi Center for Transit-Oriented Development. 2015. "Mixed-Income Transit-Oriented Development National Action Guide." Accessed September 16. <http://mitod.org/home.php>.
- xxvii Austin, Mason, Dena Belzer, Albert Benedict, Paul Esling, Peter Haas, Gajus Miknaitis, Elizabeth Wampler, Jeff Wood, Linda Young, and Sam Zimbabwe. 2010. "Performance-Based Transit-Oriented Development Typology Guidebook." Center for Transit-Oriented Development.  
Center for Transit-Oriented Development. 2015. "CTOD Plans and Strategies." Center for Transit-Oriented Development. Accessed September 16. <http://www.ctod.org/ctod-plans.php>.  
Center for Transit-Oriented Development. 2015. "Transit-Oriented Development Typology Strategy for Allegheny County." Accessed September 16. <http://www.ctod.org/pittsburgh/>.
- xxxviii Reconnecting America. MARTA Transit-Oriented Development Guidelines. Washington, D.C. November 2010. <http://www.reconnectingamerica.org/resource-center/browse-research/2010/marta-transit-oriented-development-guidelines/>
- xxxix Capital Metro. Transit-Friendly Development Guide. Austin, TX. 2013. [http://www.capmetro.org/uploadedFiles/Capmetroorg/Future\\_Plans/Transit-Oriented\\_Development/transit-ready-development-guide2010.pdf](http://www.capmetro.org/uploadedFiles/Capmetroorg/Future_Plans/Transit-Oriented_Development/transit-ready-development-guide2010.pdf)
- xl Metropolitan Washington Council of Governments. 2015. "Transportation/Land-Use Connections Program - Strategies." Metropolitan Washington Council of Governments. Accessed September 1. <https://www.mwcog.org/transportation/activities/tlc/clearinghouse/strategies.asp>.
- xli Metropolitan Washington Council of Governments. 2015. "Transportation/Land-Use Connections Program - Strategies." Metropolitan Washington Council of Governments. Accessed September 1. <https://www.mwcog.org/transportation/activities/tlc/clearinghouse/strategies.asp>.
- xlii Transportation for America. 2014. "The Innovative MPO - Smart Planning, Strong Communities: A Guidebook for Metropolitan Transportation Planning." Washington, D.C.: Transportation for America. <http://t4america.org/maps-tools/the-innovative-mpo/>: Page 99.
- xliii Jakabovics, Andrew, Lynn M. Ross, Molly Simpson, and Michael A. Spotts. Bending the Cost Curve: Solutions to Expand the Supply of Affordable Rentals. Washington, D.C.: Enterprise Community Partners & ULI Terwilliger Center for Housing, January 2014. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=0086703>, page 18.
- xliv Jakabovics, Andrew, Lynn M. Ross, Molly Simpson, and Michael A. Spotts. Bending the Cost Curve: Solutions to Expand the Supply of Affordable Rentals. Washington, D.C.: Enterprise Community Partners & ULI Terwilliger Center for Housing, January 2014. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=0086703>, pages 18-20.
- xlv Government Accountability Office. Public Transportation: Multiple Factors Influence Extent of Transit-Oriented Development. Washington, D.C.: Government Accountability Office, November 2014. <http://www.gao.gov/products/GAO-15-70?source=ra>.
- xlvi Hickey, Robert. 2014. "Inclusionary Upzoning: Tying Growth to Affordability." Washington, D.C.: Center for Housing Policy. <http://www.nhc.org/#!2014-inclusionary-upzoning/h2m9r>.

- xlvi Trombka, Aron, Michael Faden, Sonya Healy, Marlene Michaelson, Ralph Wilson, and Sally Roman. 2004. "Strengthening the Moderately Priced Dwelling Unit Program: A 30 Year Review. A Report to the Montgomery County Council on Future Program and Policy Options." [http://www.montgomerycountymd.gov/DHCA/Resources/Files/housing/singlefamily/mpdu/report\\_mpdu30yearreview.pdf](http://www.montgomerycountymd.gov/DHCA/Resources/Files/housing/singlefamily/mpdu/report_mpdu30yearreview.pdf).
- xlvii U.S. Government Accountability Office. 2009. "Affordable Housing in Transit-Oriented Development: Key Practices Could Enhance Recent Collaboration Efforts between DOT-FTA and HUD." Washington, D.C.: U.S. Government Accountability Office. <http://www.gao.gov/products/GAO-09-871>, Page 25.
- xlvi Montgomery County (MD). 2015. "Number of Moderately Priced Dwelling Units Produced Since 1976." Montgomery County (MD) Department of Housing and Community Affairs. Accessed July 30. <http://www.montgomerycountymd.gov/DHCA/housing/singlefamily/mpdu/produced.html>.
- l Hickey, Robert. 2014. "Inclusionary Upzoning: Tying Growth to Affordability." Washington, D.C.: Center for Housing Policy. <http://www.nhc.org/#!2014-inclusionary-upzoning/h2m9r>, page 9.
- li Hickey, Robert. 2014. "Inclusionary Upzoning: Tying Growth to Affordability." Washington, D.C.: Center for Housing Policy. <http://www.nhc.org/#!2014-inclusionary-upzoning/h2m9r>, page 9.
- lii Hickey, Robert. 2014. "Inclusionary Upzoning: Tying Growth to Affordability." Washington, D.C.: Center for Housing Policy. <http://www.nhc.org/#!2014-inclusionary-upzoning/h2m9r>, page 9.
- liiii Housing Affordability and Livability Agenda Steering and Advisory Committees. 2015. "Seattle Housing Affordability and Livability Agenda: Final Advisory Committee Recommendations to Mayor Edward B. Murray and the Seattle City Council." Seattle, WA. <http://murray.seattle.gov/housing/#sthash.b063KSEs.qilPGXX5.dpbs>.
- liv City of Austin, Ordinance No. 200150519-008: An ordinance amending chapters 25-2 and 25-6 of the City Code to add a new zoning district relating to transit-oriented development. Austin, TX. May 30, 2005. <http://www.cityofaustin.org/edims/document.cfm?id=78718>
- lv Charlotte-Mecklenburg Planning. 2013. "Voluntary Mixed Income Housing Development Program." Charlotte, NC: City of Charlotte & Mecklenburg County. <http://charmeck.org/city/charlotte/planning/Pages/VoluntaryMixedIncomeHousingDevelopmentProgram.aspx>.
- lvi Arlington County, VA. 2015. "Land Use & Zoning Tools." Arlington County Housing. Accessed July 30. <https://housing.arlingtonva.us/development/land-use-zoning-tools/>.
- lvii Arlington County, VA. 2015. "Green Buildings - New Construction." Arlington Initiative to Rethink Energy. Accessed July 30. <http://freshaireva.us/2012/01/new-development-site-plan-projects/>.
- lviii Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>, pages 28-29.
- lix Seattle Housing Authority. Housing, Yesler Terrace Redevelopment. Seattle, WA. August 16, 2015. <http://seattlehousing.net/redevelopment/yesler-terrace/housing/>.
- lxi Arlington County, VA. 2015. "Projects & Planning: Columbia Pike Form Based Codes." Arlington County, VA. Accessed July 30. <http://projects.arlingtonva.us/neighborhoods/columbia-pike-form-based-codes/>.
- lxii Housing California. n.d. "Cap-and-Trade." Housing California. <http://www.housingca.org/#!cap-and-trade/c1rev>.
- lxiii Bratt, Rachel. 2015. "A Record of Steady Progress: Gov. Patrick and Predecessors Should Be Proud of Chapter 40B Contributions." Housing Perspectives (from the Harvard Joint Center for Housing Studies). May 14. <http://housingperspectives.blogspot.com/2015/05/a-record-of-steady-progress-gov-patrick.html>.
- lxiv Bratt, Rachel. 2015. "A Record of Steady Progress: Gov. Patrick and Predecessors Should Be Proud of Chapter 40B Contributions." Housing Perspectives (from the Harvard Joint Center for Housing Studies). May 14. <http://housingperspectives.blogspot.com/2015/05/a-record-of-steady-progress-gov-patrick.html>.
- lxv Fisher, Lynn M., and Nicholas J. Marantz. 2015. "Can State Law Combat Exclusionary Zoning? Evidence from Massachusetts." *Urban Studies* 52 (6): 1071–89. doi:10.1177/0042098014534906. <http://usj.sagepub.com/content/52/6/1071.abstract>
- lxvi Bratt, Rachel. 2015. "A Record of Steady Progress: Gov. Patrick and Predecessors Should Be Proud of Chapter 40B Contributions." Housing Perspectives (from the Harvard Joint Center for Housing Studies). May 14. <http://housingperspectives.blogspot.com/2015/05/a-record-of-steady-progress-gov-patrick.html>.
- lxvii Fair Share Housing Center. 2015. "What Is the Mount Laurel Doctrine?" Mount Laurel Doctrine. Accessed August 3. <http://fairsharehousing.org/mount-laurel-doctrine/>.
- lxviii Maryland Department of Transportation. 2015. "Maryland." Maryland Department of Transportation. Accessed August 3. [http://www.mdot.maryland.gov/Office\\_of\\_Planning\\_and\\_Capital\\_Programming/TOD/TOD\\_Maryland.html](http://www.mdot.maryland.gov/Office_of_Planning_and_Capital_Programming/TOD/TOD_Maryland.html).
- lxix ULS Homeworks. 2015. "Tenant Opportunity to Purchase Act - Overview." ULS Homeworks. Accessed August 5. [http://www.uls-homeworks.org/tenant/tenant\\_opp.aspx](http://www.uls-homeworks.org/tenant/tenant_opp.aspx).
- District of Columbia Office of the Tenant Advocate. 2015. "Tenant Opportunity to Purchase Act (TOPA)." DC.gov Office of the Tenant Advocate. Accessed August 5. <http://ota.dc.gov/page/tenant-opportunity-purchase-act-topa>.
- Commonwealth of Massachusetts. 2015. "General Laws: CHAPTER 40T, Section 3." The 189th General Court of the Commonwealth of Massachusetts. Accessed August 5. <https://malegislature.gov/Laws/GeneralLaws/PartI/TitleVII/Chapter40T/Section3>.
- lxx Community Preservation Coalition. 2015. "CPA: An Overview." Community Preservation Act. Accessed August 5. <http://www.communitypreservation.org/content/cpa-overview>.
- lxxi Massachusetts Executive Office of Housing and Economic Development. 2007. "Chapter 40S and 40R Explained: Reaping the Benefits of Compact Development." Housing and Economic Development. November 26. <http://www.mass.gov/hed/community/planning/chapter-40-s.html>.
- lxxii Manville, Michael "Parking Requirements as a Barrier to Housing Development: Regulation and Reform in Los Angeles" (Los Angeles: Lewis Center for Regional Policy Studies, Institute of Transportation Studies, UCLA, March 2010): <http://escholarship.org/uc/item/1qr84990>.

- lxxi SPUR, “Reducing Housing Costs by Rethinking Parking Requirements” (June 1, 2006): <http://www.spur.org/publications/spur-report/2006-06-01/reducing-housing-costs-rethinking-parking-requirements>.
- lxxii Victoria Transport Policy Institute. 2013. “Transportation Cost and Benefit Analysis II - Parking Costs.” Victoria Transport Policy Institute. <http://www.vtpi.org/tca/tca0504.pdf>.
- lxxiii Jakabovics, Andrew, Lynn M. Ross, Molly Simpson, and Michael A. Spotts. 2014. “Bending the Cost Curve: Solutions to Expand the Supply of Affordable Rentals.” Washington, DC: Enterprise Community Partners & ULI Terwilliger Center for Housing. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=0086703>.
- lxxiv City of Sacramento. n.d. “Zoning Code Parking Regulations: Summary Sheet.” <http://portal.cityofsacramento.org/~media/Corporate/Files/CDD/Planning/Zoning/SummarySheetforNewZoningRequirementsforParking1.pdf>.
- lxxv Transform, and California Housing Partnership Corporation. 2014. “Why Creating and Preserving Affordable Homes Near Transit Is a Highly Effective Climate Protection Strategy.” California. <http://www.transformca.org/transform-report/why-creating-and-preserving-affordable-homes-near-transit-highly-effective-climate>.
- lxxvi Kniech, Robin, and Melinda Pollack. “Making Affordable Housing at Transit a Reality: Best Practices in Transit Agency Joint Development.” Denver, CO: Enterprise Community Partners & FRESA, 2010. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=67359.pdf>.
- lxxvii Arlington County (VA). “Columbia Pike Form Based Code - Neighborhoods.” Projects & Planning. Accessed August 13, 2015. <http://projects.arlingtonva.us/neighborhoods/neighborhoods-form-based-code/>.
- lxxviii Government Accountability Office. 2014. “Public Transportation: Multiple Factors Influence Extent of Transit-Oriented Development.” Washington, DC: Government Accountability Office. <http://www.gao.gov/products/GAO-15-70?source=ra>.
- lxxix Greater Cleveland Regional Transit Authority. n.d. “TOD - Best Practices (Bay Area Rapid Transit (BART) and Santa Clara County Valley Transportation Authority (VTA): San Francisco Bay Area, CA).” <http://www.riderta.com/tod/bestpractices#sf>.
- lxxx Nedwick, Todd, and Kimberly Burnett. 2014. “How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?” Washington, DC: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>.
- lxxxi City of Minneapolis. “15-00058 Title 20: Off-Street Parking Ordinance.” Minneapolis City Council, July 15, 2015. <http://www.ci.minneapolis.mn.us/meetings/legislation/WCMS1Q-075185>.
- lxxxii MARTA. n.d. “Transit-Oriented Development Guidelines.” Atlanta: MARTA. <http://www.itsmarta.com/TOD%20Guidelines%202010-11.pdf>.
- lxxxiii City of Woodbury. “Demand-Side Travel Planning.” City of Woodbury - Environment, n.d. <http://ci.woodbury.mn.us/14-demand-side-travel-planning>.
- City of St. Louis Park. “Zoning Code: Article V. Special Provisions - Sec. 36-361. Off-Street Parking Areas, Paved Areas, and Loading Spaces.” Accessed August 13, 2015. [http://www.stlouispark.org/webfiles/file/zoning-code/Article\\_V\\_Special\\_Provisions.pdf](http://www.stlouispark.org/webfiles/file/zoning-code/Article_V_Special_Provisions.pdf).
- lxxxiv Government Accountability Office. 2014. “Public Transportation: Multiple Factors Influence Extent of Transit-Oriented Development.” Washington, DC: Government Accountability Office. <http://www.gao.gov/products/GAO-15-70?source=ra>.
- lxxxv Urban Land Institute - Terwilliger Center for Housing. 2013. “America in 2013: A ULI Survey of Views on Housing, Transportation, and Community.” Washington, DC: Urban Land Institute. <http://uli.org/report/america-in-2013-a-uli-survey-of-views-on-housing-transportation-and-community/>.
- The Rockefeller Foundation. 2014. “Access to Public Transportation a Top Criterion for Millennials When Deciding Where to Live, New Survey Shows.” April 22. <https://www.rockefellerfoundation.org/about-us/news-media/access-public-transportation-top/>.
- Nelson, Arthur C. 2014. “A Decade of Changing Housing Demand.” Utah. Accessed April 17. <http://www.arch.utah.edu/cgi-bin/wordpress-metroresearch/wp-content/uploads/2013/09/Presentations/Ivory%20University%20Presentation%2011-18-11.pdf>.
- Government Accountability Office. 2014. “Public Transportation: Multiple Factors Influence Extent of Transit-Oriented Development.” Washington, DC: Government Accountability Office. <http://www.gao.gov/products/GAO-15-70?source=ra>.
- lxxxvi Jakabovics, Andrew, Lynn M. Ross, Molly Simpson, and Michael A. Spotts. 2014. “Bending the Cost Curve: Solutions to Expand the Supply of Affordable Rentals.” Washington, DC: Enterprise Community Partners & ULI Terwilliger Center for Housing. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=0086703>.
- Pollack, Melinda, and Brian Prater. 2013. “Filling the Financing Gap for Equitable Transit-Oriented Development.” Enterprise Community Partners, Low Income Investment Fund, & Living Cities. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=67920.pdf>.
- lxxxvii Ramos, Noni. 2012. “New Financial Tools to Support Equitable TOD: Capital Absorption Near Transit.” presented at the Rail~volution Conference, Los Angeles, October 17. [http://www.railvolution.org/rv2012\\_pdfs/20121710\\_10a\\_EquitFin\\_Ramos.pdf](http://www.railvolution.org/rv2012_pdfs/20121710_10a_EquitFin_Ramos.pdf).
- Adelman, Craig, and Devin Culbertson. 2015. “The Data Divide: How to Navigate Big Data for Equitable Transit Oriented Development.” Living Cities. August 4. <https://www.livingcities.org/blog/881-the-data-divide-how-to-navigate-big-data-for-equitable-transit-oriented-development>.
- lxxxviii Pollack, Melinda, and Brian Prater. 2013. “Filling the Financing Gap for Equitable Transit-Oriented Development.” Enterprise Community Partners, Low Income Investment Fund, & Living Cities. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=67920.pdf>.
- lxxxix Pollack, Melinda, and Brian Prater. 2013. “Filling the Financing Gap for Equitable Transit-Oriented Development.” Enterprise Community Partners, Low Income Investment Fund, & Living Cities. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=67920.pdf>, page 15.
- xc Hersey, John, and Michael A. Spotts. 2015. “Promoting Opportunity through Equitable Transit-Oriented Development: Making the Case.” Washington, DC: Enterprise Community Partners. [https://s3.amazonaws.com/KSPProd/ERC\\_Upload/0100616.pdf](https://s3.amazonaws.com/KSPProd/ERC_Upload/0100616.pdf).
- lxxci Los Angeles County Metropolitan Transit Authority. 2015. “Transit Oriented Development Planning Grant.” Metro. Accessed October 13. <http://www.metro.net/projects/tod/>.
- lxxcii Los Angeles County Metropolitan Transit Authority. 2015. “Transit Oriented Development Planning Grant.” Metro. Accessed October 13. <http://www.metro.net/projects/tod/>.

- xciii Washington State Legislative Evaluation & Accountability Program Committee. 2015. "Senate 2015-17 Transportation Budget & Funding Proposals." <http://leap.leg.wa.gov/leap/budget/detail/2015/st1517p.asp>.
- Lawson, David. 2015. "Compromise Transportation Package Details Online." Seattle Transit Blog. June 29. <http://seattletransitblog.com/2015/06/29/transportation-package-details-online/>.
- xciv Washington State Legislative Evaluation & Accountability Program Committee. 2015. "Senate 2015-17 Transportation Budget & Funding Proposals." <http://leap.leg.wa.gov/leap/budget/detail/2015/st1517p.asp>.
- Lawson, David. 2015. "Compromise Transportation Package Details Online." Seattle Transit Blog. June 29. <http://seattletransitblog.com/2015/06/29/transportation-package-details-online/>.
- xcv Washington State Legislative Evaluation & Accountability Program Committee. 2015. "Senate 2015-17 Transportation Budget & Funding Proposals." <http://leap.leg.wa.gov/leap/budget/detail/2015/st1517p.asp>.
- Lawson, David. 2015. "Compromise Transportation Package Details Online." Seattle Transit Blog. June 29. <http://seattletransitblog.com/2015/06/29/transportation-package-details-online/>.
- xcvi Atlanta Regional Commission. 2015. "Livable Centers Initiative." Atlanta Regional Commission - Land Use. Accessed October 13. <http://www.atlantaregional.com/land-use/livable-centers-initiative>.
- xcvii Metropolitan Transportation Commission. 2015. "OneBayArea Grant Program." MTC - Funding. Accessed October 13. <http://www.mtc.ca.gov/funding/onebayarea/>.
- xcviii Twin Cities Metropolitan Council. Livable Communities Grants. St. Paul, MN. <http://www.metrocouncil.org/Communities/Services/Livable-Communities-Grants.aspx>.
- xcix Metropolitan Transportation Commission. Transportation for Livable Communities Program. Oakland, CA. [http://www.mtc.ca.gov/planning/smart\\_growth/tlc/](http://www.mtc.ca.gov/planning/smart_growth/tlc/).
- c Atlanta Regional Commission, Livable Communities Initiative - Transportation Program. Atlanta, GA. <http://www.atlantaregional.com/land-use/livable-centers-initiative/lci-transportation-program>.
- ci Metro. Transit-Oriented Development Program. Portland, OR. <http://www.oregonmetro.gov/tools-partners/grants-and-resources/transit-oriented-development-program>.
- cii Metropolitan Transportation Commission. Transportation for Livable Communities Program. Oakland, CA. [http://www.mtc.ca.gov/planning/smart\\_growth/tlc/](http://www.mtc.ca.gov/planning/smart_growth/tlc/).
- ciii Bay Area Transit-Oriented Affordable Housing Fund. 2015. "Bay Area TOAH - Home." Bay Area Transit-Oriented Affordable Housing Fund. Accessed August 28. <http://bayareatod.com/>.
- civ Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>.
- cv Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>, Page 13.
- cvi Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>, Page 37.
- cvii Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>, Page 37.
- cviii Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>.
- cix Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>.
- cx Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>.
- cxii Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>.
- cxiii Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>.
- cxiv Federal Highway Administration. 2013. "Congestion Mitigation and Air Quality (CMAQ) Program Interim Guidance." MAP-21 - Moving Ahead for Progress in the 21st Century. September 12. <https://www.fhwa.dot.gov/map21/guidance/guidcmaq.cfm>.
- cxv Transportation for America. 2012. "Making the Most of MAP-21: A Guide to the 2012 Federal Transportation Law - And How to Use It for Positive Change in Your Community." Transportation for America. <http://t4america.org/wp-content/uploads/2012/11/MAP-21-Handbook-Web.pdf>.

- cxvi Housing California. Cap-and-Trade. Sacramento, CA. June 2015. <http://www.housingca.org/#!cap-and-trade/c1rev>.
- cxvii Cherney, Mike. 2015. "Seattle Transit Authority Plans Biggest-Ever Green Muni Bond." Wall Street Journal, August 3. <http://blogs.wsj.com/moneybeat/2015/08/03/seattle-transit-authority-plans-biggest-ever-green-muni-bond/>.
- cxviii Cherney, Mike. 2015. "Seattle Transit Authority Plans Biggest-Ever Green Muni Bond." Wall Street Journal, August 3. <http://blogs.wsj.com/moneybeat/2015/08/03/seattle-transit-authority-plans-biggest-ever-green-muni-bond/>.
- cxix Metropolitan Council. 2015. "Livable Communities Grants." Metropolitan Council. Accessed October 13. <http://www.metrocouncil.org/Communities/Services/Livable-Communities-Grants.aspx>.
- cxx Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.precat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>.
- cxixi Dresser, Michael, and Luke Broadwater. 2015. "Hogan Says No to Red Line, Yes to Purple - Baltimore Sun." The Baltimore Sun, June 25. <http://www.baltimoresun.com/news/maryland/politics/bs-md-hogan-transportation-20150624-story.html>.
- cxixii Maryland Department of Housing and Community Development. 2015. "Community Legacy Program." Community Legacy Program. Accessed October 13. <http://www.neighborhoodrevitalization.org/programs/cl/cl.aspx>.
- Maryland Department of Housing and Community Development. n.d. "Sustainable Communities: Enhancing Maryland Communities by Prioritizing Investment." Maryland Department of Housing and Community Development. <http://www.mdhousing.org/website/programs/dn/Default.aspx>.
- cxixiii Maryland Department of Transportation. 2015. "Designation." Transit-Oriented Development. Accessed October 14. [http://www.mdot.maryland.gov/Office\\_of\\_Planning\\_and\\_Capital\\_Programming/TOD/TOD\\_Designation\\_New.html](http://www.mdot.maryland.gov/Office_of_Planning_and_Capital_Programming/TOD/TOD_Designation_New.html).
- cxixiv Maryland Department of Housing and Community Development. Sustainable Community Designation 2014/2015. Lanham, MD. <http://www.mdhousing.org/Website/programs/dn/default.aspx>.
- cxixv Maryland Department of Planning, Sustainable Communities Tax-Increment Financing Designation and Financing Law. [http://www.mdp.state.md.us/PDF/YourPart/SustainableCommunities/2013\\_TIF\\_law\\_summary.pdf](http://www.mdp.state.md.us/PDF/YourPart/SustainableCommunities/2013_TIF_law_summary.pdf).
- cxixvi Maryland Strategic Demolition and Smart Growth Impact Fund. Annapolis, MD. <http://www.neighborhoodrevitalization.org/Programs/SGIF/Default.aspx>.
- cxixvii Atlanta Regional Commission, LCI Transportation Program. Atlanta, GA. <http://www.atlantaregional.com/land-use/livable-centers-initiative/lci-transportation-program>.
- cxixviii Arlington County, VA. 2015. "Affordable Housing Study." Arlington County Housing. Accessed August 27. <https://housing.arlingtonva.us/affordable-housing-study/>.
- cxixix Atlanta BeltLine, Inc. 2015. "Atlanta BeltLine Overview." The Atlanta BeltLine: Where Atlanta Comes Together. Accessed August 27. <http://beltline.org/about/the-atlanta-beltline-project/atlanta-beltline-overview/>.
- cxixxx Atlanta BeltLine, Inc. 2015. "Funding." The Atlanta BeltLine: Where Atlanta Comes Together. Accessed August 27. <http://beltline.org/about/the-atlanta-beltline-project/funding/>.
- cxixxxi Atlanta Development Authority. Atlanta Beltline Affordable Housing Trust Fund Developer Grants. <http://beltline.org/wp-content/uploads/2012/04/Atlanta-BeltLine-Affordable-Housing-Trust-Fund-Developer-Grants-Application.pdf>.
- cxixxxii Atlanta BeltLine, Inc. 2015. "Funding." The Atlanta BeltLine: Where Atlanta Comes Together. Accessed August 27. <http://beltline.org/about/the-atlanta-beltline-project/funding/>.
- cxixxxiii Atlanta BeltLine, Inc. 2015. "Funding." The Atlanta BeltLine: Where Atlanta Comes Together. Accessed August 27. <http://beltline.org/about/the-atlanta-beltline-project/funding/>.
- cxixxxiv City of Portland, OR. 2015. "Multiple-Unit Limited Tax Exemption." Portland Housing Bureau. Accessed October 14. <https://www.portlandoregon.gov/phb/61191>.
- cxixxxv Enterprise Community Partners. 2015. "Denver Regional Transit-Oriented Development Fund." Enterprise Community Partners. Accessed October 14. <http://www.enterprisecommunity.com/financing-and-development/community-development-financing/denver-tod-fund>.
- Enterprise Community Partners. 2015. "Term Sheet." Denver Regional TOD Fund. Accessed October 14. <http://www.enterprisecommunity.com/financing-and-development/community-development-financing/loan-fund-products/denver-regional-tod-fund-term-sheet>.
- cxixxxvi Enterprise analysis of 2013 1-year ACS Public Use Microdata as provided by IPUMS-USA, University of Minnesota, [www.ipums.org](http://www.ipums.org).
- Steven Ruggles, Katie Genadek, Ronald Goeken, Josiah Grover, and Matthew Sobek. Integrated Public Use Microdata Series: Version 6.0 [Machine-readable database]. Minneapolis: University of Minnesota, 2015.
- cxixxxvii Zimmerman, Mariia. 2013. "Unlocking MAP-21's Potential to Fund Equitable Transit-Oriented Development." Enterprise Community Partners & Mile High Connects. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=0083547#>.
- Metropolitan Transportation Commission. 2015. "Smart Growth: Transportation for Livable Communities Program." Metropolitan Transportation Commission - Planning. Accessed August 28. [http://www.mtc.ca.gov/planning/smart\\_growth/tlc/](http://www.mtc.ca.gov/planning/smart_growth/tlc/).
- cxixxxviii Zimmerman, Mariia. 2013. "Unlocking MAP-21's Potential to Fund Equitable Transit-Oriented Development." Enterprise Community Partners & Mile High Connects. <http://www.enterprisecommunity.com/resources/ResourceDetails?ID=0083547#>.
- Metropolitan Transportation Commission. 2015. "Smart Growth: Transportation for Livable Communities Program." Metropolitan Transportation Commission - Planning. Accessed August 28. [http://www.mtc.ca.gov/planning/smart\\_growth/tlc/](http://www.mtc.ca.gov/planning/smart_growth/tlc/).
- cxixxxix For more information, reference Metropolitan Transportation Commission Resolution Number: 3940 ([http://apps.mtc.ca.gov/meeting\\_packet\\_documents/agenda\\_1449/6a\\_tmp-3940.pdf](http://apps.mtc.ca.gov/meeting_packet_documents/agenda_1449/6a_tmp-3940.pdf)) and Resolution Number 3989 ([http://apps.mtc.ca.gov/meeting\\_packet\\_documents/agenda\\_1607/3b\\_tmp-3989.pdf](http://apps.mtc.ca.gov/meeting_packet_documents/agenda_1607/3b_tmp-3989.pdf)).
- cxl Bay Area Transit-Oriented Affordable Housing Fund. 2015. "Eligibility." Bay Area Transit-Oriented Affordable Housing Fund. Accessed August 28. <http://bayareatod.com/>.



- cxli Bay Area Transit-Oriented Affordable Housing Fund. 2015. "Bay Area TOAH - Home." Bay Area Transit-Oriented Affordable Housing Fund. Accessed August 28. <http://bayareatod.com/>.
- cxlii King County, WA. 2015. "Affordable Housing Incentive Programs Overview." King County Housing & Community Development Program. Accessed September 1. <http://www.kingcounty.gov/socialservices/Housing/ServicesAndPrograms/Programs/HousingDevelopment/Incentives.aspx>.
- cxliii Hickey, Robert, and Lisa Sturtevant, PhD. 2015. "Public Land and Affordable Housing in the Washington D.C. Region: Best Practices and Recommendations." Washington, D.C.: Center for Housing Policy and National Housing Conference. [http://washington.uli.org/wp-content/uploads/sites/56/2015/02/ULI\\_PublicLandReport\\_Final020215.pdf](http://washington.uli.org/wp-content/uploads/sites/56/2015/02/ULI_PublicLandReport_Final020215.pdf), Pages 12-13.
- cxliv Hickey, Robert, and Lisa Sturtevant, PhD. 2015. "Public Land and Affordable Housing in the Washington D.C. Region: Best Practices and Recommendations." Washington, D.C.: Center for Housing Policy and National Housing Conference. [http://washington.uli.org/wp-content/uploads/sites/56/2015/02/ULI\\_PublicLandReport\\_Final020215.pdf](http://washington.uli.org/wp-content/uploads/sites/56/2015/02/ULI_PublicLandReport_Final020215.pdf), Pages 12-13.
- cxlv Endeavour Real Estate Group, and Columbus Realty. 2014. "Plaza Saltillo: Capital Metro Board Presentation." April 15. <http://www.documentcloud.org/documents/1165263-4-15-14-endeavor-real-estate-group-plaza.html>.
- cxlvi MassHousing. The Carruth. Boston, MA. September 2015. [https://www.masshousing.com/portal/server.pt/community/transit-oriented\\_development/250/the\\_carruth](https://www.masshousing.com/portal/server.pt/community/transit-oriented_development/250/the_carruth)
- cxlvii MassHousing. The Carruth. Boston, MA. September 2015. [https://www.masshousing.com/portal/server.pt/community/transit-oriented\\_development/250/the\\_carruth](https://www.masshousing.com/portal/server.pt/community/transit-oriented_development/250/the_carruth)
- cxlviii Reconnecting America. MARTA Transit-Oriented Development Guidelines. Washington, D.C.. November 2010. <http://www.reconnectingamerica.org/resource-center/browse-research/2010/marta-transit-oriented-development-guidelines/>.
- cxlix MARTA Board of Directors. Policies for Implementing MARTA's TOD Guidelines. November 2010. [http://www.itsmarta.com/uploadedFiles/About\\_MARTA/Planning\\_and\\_Projects/TOD\\_and\\_Real\\_Estate/MARTA%20TOD%20Implementation%20Policies%20Adopted%20Text%20November%202010.pdf](http://www.itsmarta.com/uploadedFiles/About_MARTA/Planning_and_Projects/TOD_and_Real_Estate/MARTA%20TOD%20Implementation%20Policies%20Adopted%20Text%20November%202010.pdf).
- cl Capital Metro Joint Development Project Selection Guidelines. [https://www.capmetro.org/uploadedFiles/Capmetroorg/Future\\_Plans/Transit-Oriented\\_Development/TOD-Joint-Development-Project-Selection-Guidelines-20130826.pdf](https://www.capmetro.org/uploadedFiles/Capmetroorg/Future_Plans/Transit-Oriented_Development/TOD-Joint-Development-Project-Selection-Guidelines-20130826.pdf).
- cli Linton, Joe. 2014. "Garcetti Motion Encourages Affordable Housing At Metro Stations." Streetsblog LA. November 13. <http://la.streetsblog.org/2014/11/13/garcetti-motion-encourages-affordable-housing-at-metro-stations/>.
- clii City of Dallas Office of Economic Development. 2007. "Downtown Dallas 'Living for All': Update on Affordable Housing." Dallas: City of Dallas. [http://www3.dallascityhall.com/committee\\_briefings/briefings0307/ED\\_DowntownAffordable\\_031907.pdf](http://www3.dallascityhall.com/committee_briefings/briefings0307/ED_DowntownAffordable_031907.pdf).
- cliii MARTA. 2010. "Policies for Implementing MARTA's TOD Guidelines: Adopted by the MARTA Board of Directors." Atlanta: MARTA. [http://www.itsmarta.com/uploadedFiles/About\\_MARTA/Planning\\_and\\_Projects/TOD\\_and\\_Real\\_Estate/MARTA%20TOD%20Implementation%20Policies%20Adopted%20Text%20November%202010.pdf](http://www.itsmarta.com/uploadedFiles/About_MARTA/Planning_and_Projects/TOD_and_Real_Estate/MARTA%20TOD%20Implementation%20Policies%20Adopted%20Text%20November%202010.pdf).
- cliv Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>.
- clv Linton, Joe. 2014. "Garcetti Motion Encourages Affordable Housing At Metro Stations." Streetsblog LA. November 13. <http://la.streetsblog.org/2014/11/13/garcetti-motion-encourages-affordable-housing-at-metro-stations/>.
- clvi Nedwick, Todd, and Kimberly Burnett. 2014. "How Can the Low Income Housing Tax Credit Program Most Effectively Be Used to Provide Affordable Rental Housing near Transit?" Washington, D.C.: US Department of Housing and Urban Development. <http://www.prezcat.org/related-catalog-content/how-can-low-income-housing-tax-credit-program-most-effectively-be-used>
- clvii Van Voorhis, Scott. 2015. "A Plan to Add Thousands of Affordable Housing Units Along MBTA Lines." Boston.Com Real Estate, May 4. <http://www.boston.com/real-estate/news/2015/05/04/plan-add-thousands-affordable-housing-units-along-mbta-lines/jYw61ziRVhwqkEgBtQhfoK/story.html#sthash.gs0hwbn3AeDrRjQ.dpbs>.
- Relevant legislation includes:
- Holmes, Russell E. 2015. "Bill H: 2756: An Act to Facilitate Disposition of Surplus Property for the Development of Affordable and Workforce Housing." 189th General Court of the Commonwealth of Massachusetts. Accessed October 14. <https://malegislature.gov/Bills/189/House/H2756>.
- Sanchez, Jeffrey. 2015. "Bill H.2815: An Act Providing for Disposition of Surplus State Real Property Based on Smart Growth Land Use Policies." 189th General Court of the Commonwealth of Massachusetts. Accessed October 14. <https://malegislature.gov/Bills/189/House/H2815>.
- clviii Baltimore Housing. 2015. "Vacants to Value - Welcome." Baltimore Housing. Accessed September 3. <http://www.vacantstovalue.org/>.
- clix Redden, Jim. 2015. "Metro Dives into Affordable Housing." Portland Tribune, May 14. <http://portlandtribune.com/pt/9-news/260170-129981-metro-dives-into-affordable-housing>.
- clx Government Accountability Office. 2014. "Public Transportation: Multiple Factors Influence Extent of Transit-Oriented Development." Washington, DC: Government Accountability Office. <http://www.gao.gov/products/GAO-15-70?source=ra>.
- clxi WonderRoot. 2015. "En Route." WonderRoot. Accessed September 3. <http://www.wonderroot.org/public-programs/public-art/>.
- clxii Atlanta BeltLine, Inc. 2015. "Atlanta BeltLine Overview." The Atlanta BeltLine: Where Atlanta Comes Together. Accessed August 27. <http://beltline.org/about/the-atlanta-beltline-project/atlanta-beltline-overview/>.
- clxiii Atlanta BeltLine, Inc. 2015. "Project History." Atlanta BeltLine, Inc. Accessed September 3. <http://beltline.org/progress/progress/project-history/>.
- clxiv Atlanta BeltLine, Inc. 2015. "Economic Development Progress: A Catalyst for Economic Growth and Renewal." Atlanta BeltLine. Accessed October 14. <http://beltline.org/progress/progress/economic-development-progress/>.

- clxv Atlanta Development Authority. [Atlanta Beltline Affordable Housing Trust Fund: Developer Grants: Complete 2011 Application for Funding. Atlanta, GA.](#)
- clxvi Enterprise Community Partners. 2015. "Enterprise and Atlanta Beltline - Mixed Income TOD Strategy." Enterprise Southeast. Accessed October 14. <http://www.enterprisecommunity.com/where-we-work/southeast/priorities-and-impact/mixed-income-tod>.
- clxvii Atlanta BeltLine, Inc. 2015. "Affordable Housing." Atlanta BeltLine. Accessed October 14. <http://beltline.org/programs/affordable-housing/>.
- clxviii Atlanta BeltLine, Inc. 2015. "Funding." The Atlanta BeltLine: Where Atlanta Comes Together. Accessed August 27. <http://beltline.org/about/the-atlanta-beltline-project/funding/>.
- clxix Atlanta BeltLine, Inc. 2015. "Funding." The Atlanta BeltLine: Where Atlanta Comes Together. Accessed August 27. <http://beltline.org/about/the-atlanta-beltline-project/funding/>.
- clxx Reconnecting America. MARTA Transit-Oriented Development Guidelines. Washington, D.C. November 2010. <http://www.reconnectingamerica.org/resource-center/browse-research/2010/marta-transit-oriented-development-guidelines/>.
- clxxi MARTA Board of Directors. Policies for Implementing MARTA's TOD Guidelines. November 2010. [http://www.itsmarta.com/uploadedFiles/About\\_MARTA/Planning\\_and\\_Projects/TOD\\_and\\_Real\\_Estate/MARTA%20TOD%20Implementation%20Policies%20Adopted%20Text%20November%202010.pdf](http://www.itsmarta.com/uploadedFiles/About_MARTA/Planning_and_Projects/TOD_and_Real_Estate/MARTA%20TOD%20Implementation%20Policies%20Adopted%20Text%20November%202010.pdf).
- clxxii Atlanta Regional Commission. 2015. "Livable Centers Initiative." Atlanta Regional Commission - Land Use. Accessed October 13. <http://www.atlantaregional.com/land-use/livable-centers-initiative>.
- clxxiii National Housing Trust, and Novogradac & Company, LLP. 2015. "Low Income Housing Tax Credits & Sustainable Development in Georgia, 2014." Preservation Catalog. Accessed October 14. <http://prezcat.org/catalog/low-income-housing-tax-credits-sustainable-development-georgia-2014>.
- clxxiv Reed, Robert. 2015. "Announcing TransFormation Alliance -Transforming the Atlanta Region Through Sustainable, Equitable Transit-Oriented Development." Saporta Report - Sustainable Communities. April 27. <http://saportareport.com/leadership/sustainable-communities/2015/04/27/transforming-the-atlanta-region-through-sustainable-equitable-transit-oriented-development/>.
- clxxv TransFormation Alliance. 2015. "The Challenge: People." TransFormation Alliance. Accessed September 1. <http://www.atltransformationalliance.org/people.html>.
- clxxvi WonderRoot. 2015. "En Route." WonderRoot. Accessed September 3. <http://www.wonderroot.org/public-programs/public-art/en-route/>.
- clxxvii Enterprise Community Partners. 2015. "Proactive Preservation Thru Partnerships." Enterprise Southeast. Accessed October 14. <http://www.enterprisecommunity.com/where-we-work/southeast/priorities-and-impact/proactive-preservation-thru-partnerships>.





[www.EnterpriseCommunity.org](http://www.EnterpriseCommunity.org)  
[www.EnterpriseCommunity.com](http://www.EnterpriseCommunity.com)

70 Corporate Center  
11000 Broken Land Parkway, Suite 700  
Columbia, MD 21044