

FTA RESEARCH

FEDERAL TRANSIT ADMINISTRATION

Transit-Oriented Development Technical Assistance: Second Summary Report

FEBRUARY 2018

FTA Report No. 0124
Federal Transit Administration

PREPARED BY
Smart Growth America



U.S. Department of Transportation
Federal Transit Administration

COVER PHOTO

Courtesy of Edwin Adilson Rodriguez, Federal Transit Administration

DISCLAIMER

This document is disseminated under the sponsorship of the U.S. Department of Transportation in the interest of information exchange. The United States Government assumes no liability for its contents or use thereof. The United States Government does not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the objective of this report.

Transit-Oriented Development Technical Assistance: Second Summary Report

FEBRUARY 2018

FTA Report No. 0124

PREPARED BY

Smart Growth America
1152 15th St. NW, Suite 450
Washington, DC 20005

SPONSORED BY

Federal Transit Administration
Office of Budget and Policy
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, DC 20590

AVAILABLE ONLINE

<https://www.transit.dot.gov/about/research-innovation>

Metric Conversion Table

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL
LENGTH				
in	inches	25.4	millimeters	mm
ft	feet	0.305	meters	m
yd	yards	0.914	meters	m
mi	miles	1.61	kilometers	km
VOLUME				
fl oz	fluid ounces	29.57	milliliters	mL
gal	gallons	3.785	liter	L
ft³	cubic feet	0.028	cubic meters	m ³
yd³	cubic yards	0.765	cubic meters	m ³
NOTE: volumes greater than 1000 L shall be shown in m ³				
MASS				
oz	ounces	28.35	grams	g
lb	pounds	0.454	kilograms	kg
T	short tons (2000 lb)	0.907	megagrams (or “metric ton”)	Mg (or “t”)
TEMPERATURE (exact degrees)				

REPORT DOCUMENTATION PAGE		Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.			
1. AGENCY USE ONLY	2. REPORT DATE February 2018	3. REPORT TYPE AND DATES COVERED Summary Report, January–December 2017	
4. TITLE AND SUBTITLE Transit-Oriented Development Technical Assistance: Second Summary Report		5. FUNDING NUMBERS DC-2017-003-00	
6. AUTHOR(S) Smart Growth America			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Smart Growth America 1152 15th St. NW, Suite 450 Washington, DC 20005		8. PERFORMING ORGANIZATION REPORT NUMBER FTA Report No. 0124	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Department of Transportation Federal Transit Administration Office of Budget and Policy East Building 1200 New Jersey Avenue, SE Washington, DC 20590		10. SPONSORING/MONITORING AGENCY REPORT NUMBER FTA Report No. 0124	
11. SUPPLEMENTARY NOTES [https://www.transit.dot.gov/about/research-innovation]			
12A. DISTRIBUTION/AVAILABILITY STATEMENT Available from: National Technical Information Service (NTIS), Springfield, VA 22161. Phone 703.605.6000, Fax 703.605.6900, email [orders@ntis.gov]		12B. DISTRIBUTION CODE TRI-20	
13. ABSTRACT Public transportation plays a critical role in providing safe and reliable mobility, as well as creating increased land value and economic opportunities in surrounding communities. The U.S. Department of Transportation's Federal Transit Administration (FTA) launched the Transit-Oriented Development Technical Assistance Initiative in 2015 to provide technical assistance activities leading to improved access to public transportation, new economic opportunities, pathways to employment, and support for transit-oriented development (TOD) within transportation corridors and around public transportation stations, with a focus on economic development through innovative financing.			
14. SUBJECT TERMS Transit-oriented development, TOD, technical assistance, Section 5314		15. NUMBER OF PAGES 58	
16. PRICE CODE			
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT

TABLE OF CONTENTS

1	Executive Summary
2	Section 1: Introduction
5	Section 2: On-Site Technical Assistance
24	Section 3: Common Themes from On-Site Technical Assistance
26	Section 4: Peer Network
28	Section 5: Project Web Site and Communications
30	Section 6: Outcomes from First-Year On-Site Technical Assistance
37	Section 7: Conclusion
39	Appendix A: Project Maps
44	Appendix B: Transit Project and Estimated Private Development Potential Identified through the Technical Assistance
47	Appendix C: Technical Assistance Project Team
49	Acronyms and Abbreviations

LIST OF FIGURES

4	Figure 1-1.	Second-year on-site technical assistance communities with associated transit project
8	Figure 2-1.	Five Points West readiness assessment
10	Figure 2-2.	Existing land use along Birmingham BRT corridor reveals opportunity for TOD
13	Figure 2-3.	Five Points Station District massing study from scenario plan
14	Figure 2-4.	Historic West End illustrative corridor plan
17	Figure 2-5.	Demand for development around ART San Mateo station area
20	Figure 2-6.	Heat map of station area readiness scores along Omaha Rapid Bus Transit
26	Figure 4-1.	Larry Hopper, TOD Peer Network member from Oklahoma City, speaks about TOD during 2017 LOCUS Summit
27	Figure 4-2.	SGA leads tour for Peer Network members in Courthouse neighborhood of Arlington, Virginia

ACKNOWLEDGMENTS

The Federal Transit Administration, Office of Budget and Policy, acknowledges the work of Smart Growth America, its multidisciplinary project team, and the communities of Birmingham, Alabama; Omaha, Nebraska; Albuquerque, New Mexico; Charlotte, North Carolina; and Tacoma, Washington for their contributions to this report. In addition, the Federal Transit Administration Office of Budget and Policy staff also contributed to the contents of this report.

ABSTRACT

Public transportation plays a critical role in providing safe and reliable mobility, as well as creating increased land value and economic opportunities in surrounding communities. The U.S. Department of Transportation's Federal Transit Administration (FTA) launched the Transit-Oriented Development Technical Assistance Initiative in 2015 to provide technical assistance activities leading to improved access to public transportation, new economic opportunities, pathways to employment, and support for transit-oriented development (TOD) within transportation corridors and around public transportation stations, with a focus on economic development through innovative financing.

EXECUTIVE SUMMARY

The U.S. Department of Transportation's Federal Transit Administration (FTA) launched the Transit-Oriented Development Technical Assistance Initiative in 2015 to help elected leaders, municipal and transit agency staff, developers, and community members work together to maximize the economic return on public transit investments by advancing transit-oriented development (TOD). The Initiative brings together resources and provides training on public transit, TOD, land use, innovative finance strategies, urban planning, affordable housing, and economic development. The Initiative advances TOD through on-site technical assistance, a peer network to exchange best practices and communications, outreach, and research. Specifically, the on-site technical assistance uses a three-pronged approach to assess local capacity to support TOD: background research and data analysis, on-site assessment, and delivery of technical assistance.

This report covers the second year of work on this Initiative. The second year focused on providing on-site technical assistance to five communities, building and educating a network of TOD professionals, and developing resources to support TOD efforts across the country. Although every community and the associated technical assistance delivered through the Initiative was unique, four common themes have emerged that are important to successfully implementing TOD:

- **Public transit as a focal point for investment** – Transit investments have the potential to be transformative, especially in terms of how residents and visitors navigate a city. TOD is characterized by a concentration of development that supports walkability and transit use. Transit, in turn, encourages and serves the development. However, development can occur near transit that does not enhance the transit investment, and localities promoting such development need to reevaluate transit's role as a focal point for investment.
- **Aligning citywide initiatives with public transit** – To maximize the economic return on transit investments, priorities around housing, development, and growth also must be aligned. Otherwise, initiatives elsewhere in the city can serve to undermine the impact of new and existing transit service.
- **Strong leadership that prioritizes TOD** – Strong leadership and cross-sector collaboration that cuts across silos to align land use and transit is crucial.
- **A need for private sector buy-in and support** – For TOD to realize its anticipated benefits, more vocal support from business leaders across all sectors is important.

Introduction

Public transit plays critical roles to support the communities served beyond providing safe and reliable mobility. One such role is creating increased land value and economic opportunities in surrounding communities through transit-oriented development (TOD), a type of mixed-use development primarily initiated by local municipalities because of land use planning, zoning laws, and changes to building codes. For example, individuals who live in or near TOD can use public transit and reduce or even eliminate the associated costs of owning a vehicle (e.g., fuel, insurance, maintenance, etc.). TODs also have environmental and societal benefits by encouraging dense and walkable communities that provide individuals a destination to eat, live, and work, among other activities. However, not all municipalities have the tools, experience, or political wherewithal to implement public transit in a way that achieves the desired TOD outcomes. Additionally, with new and existing federally-funded public transit services across the U.S., there is a need to maximize the impacts of such investments.

TOD is generally defined as a walkable community that is close to frequent, reliable public transit service with a mix of other transportation options and land uses.

In October 2015, the U.S. Department of Transportation's Federal Transit Administration (FTA) launched the Transit-Oriented Development Technical Assistance Initiative to provide technical assistance activities to support improved access to public transportation, new economic opportunities, pathways to employment, and TOD within transportation corridors and around public transportation stations and promote economic development through innovative financing. In addition, the Initiative aims to better leverage federal funds with state, local, and private investment.

This report covers the second year of the Initiative in collaboration with the national non-profit organization Smart Growth America (SGA), which administers the Initiative in partnership with FTA by providing the following:

- **On-site technical assistance** – in-depth technical assistance¹ to five communities to serve as national case studies in achieving economic outcomes (i.e., more efficient land use and public and private sector engagement and investment) to smaller-scale TOD projects across the country. Figure I-1 shows the second-year on-site technical assistance communities.

¹In-depth technical assistance is an extended engagement to support planning and policy changes needed to promote TOD. The in-depth technical assistance is intended not just to train, but also to build local technical capacity, support planning efforts, and examine development.

- **Peer network** – a forum for communities selected to receive technical assistance to help build relationships with each other and communities that have not received technical assistance. The peer network convened for the first time in April 2017, in conjunction with the LOCUS National Leadership Summit, at which members had the opportunity to experience various TOD environments, learn from fellow TOD professionals, and give their input on future Peer Network programming.
- **Communications** – resources to support both the communities receiving technical assistance and other communities who are planning for and implementing TOD, and to also bring expertise to the national conversation on TOD and bring the public and private sectors together.

To ensure the assistance delivered was comprehensive and addressed the multifaceted considerations in TOD, SGA assembled a multidisciplinary team for the project that included national experts in transportation, housing, community engagement, economic analysis, and real estate.

In contrast to the first year of the project, the five communities selected for on-site technical assistance received in-depth individual assistance for a period of 6–12 months. This change resulted in an expanded timeline that enabled SGA's project team to tailor the technical assistance to best fit the needs of the community, accommodate unique deliverables, and complete more technical assistance activities. Working with the communities that received on-site technical assistance over a longer period also enabled the project team to develop stronger relationships with the localities. Overall, a diversity of communities was supported by the technical assistance activities in the project's second year; this report provides a summary of outcomes and results of the types of technical assistance provided.



Source: Federal Transit Administration

Figure 1-1

Second-year on-site technical assistance communities with associated transit project

On-Site Technical Assistance

The primary type of technical assistance provided through this project focuses on direct delivery of assistance to communities contemplating or in the process of developing TOD. This on-site technical assistance helped elected leaders, municipal and transit agency staff, developers, and community members work together to maximize economic development return on transit investments and support community development by advancing TOD. Furthermore, the on-site technical assistance sought to support projects that promote access to housing, jobs, and transportation for low- and moderate-income residents.

In December 2016, FTA announced the five communities that were selected to receive on-site technical assistance: Birmingham, Alabama; Omaha, Nebraska; Albuquerque, New Mexico; Charlotte, North Carolina; and Tacoma, Washington. Following the announcement, SGA's project team developed a two-phased assessment and implementation approach to maximize the usefulness of the in-depth technical assistance. Under this approach, the project team could create a data-driven and qualitative foundation for local TOD work by dedicating a portion of the engagement to discovery, scoping, and assessment.

Phase One of technical assistance involved three stages to assess local capacity to support TOD. The first stage was background research and data collection on land use, market conditions, housing needs, and other information provided by the city and transit agency partner and other publicly available data sources. The second stage was an on-site assessment that included stakeholder interviews and a tour of the technical assistance study area, transit project, and adjacent neighborhoods. The final stage was to develop the scopes of work for in-depth technical assistance based on the background research, data analysis, and onsite observations, among other information.

Phase Two of the technical assistance consisted of technical assistance delivery, in which the individual community project teams executed the scope developed with the communities. Specific technical assistance services were provided to the communities, including policy and regulatory analyses, zoning code reviews, and TOD maturity assessments, among other services.

The challenges in the communities that received in-depth assistance represent the types faced by communities building transit. The experience of the communities serves as case studies for best practices and lessons learned—knowledge that is currently scarce for cities of similar size. Summaries of the

in-depth technical assistance are presented below. The background information provides details of the transit project at the heart of the technical assistance, the applicant of technical assistance, and the transit agency partner.

Birmingham, Alabama (FTA Region 4)

Background Information

Transit Project Name: Birmingham Bus Rapid Transit (BRT)

Primary Federal Funding Source for Project: TIGER VII

Award Amount from Primary Federal Funding Source: \$20.00 million

Local Share: \$20.28 million

Applicant of Technical Assistance: Birmingham Jefferson County Transportation Authority (BJCTA)

Primary Partner: City of Birmingham

Challenge

The Birmingham BRT project is a 10-mile rapid transit corridor that will connect 25 neighborhoods from the east, west, and downtown areas of the city. In October 2015, the City of Birmingham was awarded \$20 million under the seventh round of U.S. Department of Transportation's Transportation Investment Generating Economic Recovery (TIGER) program for the project, which the City matched with an additional \$20 million in local funding. The BRT system will operate in an exclusive guideway, dedicated on-street bus lanes for about 20% of its route and mixed-traffic for the remainder. It will serve two transit centers at the eastern and western project termini in the Five Points West and Woodlawn communities. Beyond the transit centers, the BRT system will traverse through a variety of neighborhoods, including commercial, industrial, and residential. Because of the BRT alignment, the opportunities and strategies for TOD vary greatly along the corridor (see Appendix A for project map).

The corridor is an employment powerhouse, with 47,000 jobs that account for 27% of all jobs in Birmingham. Despite the high percentage of "knowledge-based" jobs in sectors such as health care, education, and finance, corridor residents tend to have lower incomes and lower levels of educational attainment than Birmingham or the region, and two-thirds of corridor residents are struggling with poverty. In addition, only 27,000 residents reside in the corridor, compared to the 47,000 jobs there. This presents an opportunity to attract the people who work in the corridor to also live there.

The Birmingham Jefferson County Transportation Authority (BJCTA) and the City of Birmingham, the local partner, are just beginning to realize the tremendous opportunity that the BRT project presents in terms of catalyzing redevelopment of the neighborhoods along the BRT corridor. The launch of the

BRT system essentially will introduce a new transit mode to the region and new service type for BJCTA. BJCTA has neither prior experience with high-capacity transit or TOD nor extensive experience working with land use issues beyond bus stop permitting.

Solutions

The Birmingham project team (see Appendix C) was tasked to assist the City and BJCTA in aligning their respective work along the BRT project, thus creating a focal point for public investment and positioning both the City and BJCTA as market actors for TOD. Through the in-depth technical assistance, the project team supported development for a TOD program along the BRT project. To achieve this, the Birmingham project team conducted three tasks.

First, the Birmingham project team completed a TOD readiness assessment for the BRT project, with focus on the Five Points West station area. The second task was the development of a TOD Strategy Framework. The framework would integrate existing local initiatives, market conditions, development barriers and opportunities, and strategies to support TOD at nodes along the BRT route. Finally, the project team was tasked to provide a TOD Toolbox (i.e., financial, partnership, policy, and programmatic tools) to help advance communication tools and public education training. The toolbox is designed to support the TOD readiness assessment and integrate within the TOD Strategy Framework.

Impact

The in-depth technical assistance provided to Birmingham led to increased capacity and created champions for the BRT project. The champions are both within and outside of the city, including developers, elected officials and municipal staff, and community members, allowing for a broader conversation to occur about the impact the BRT project will have on development in the city. Overall, the in-depth technical assistance demonstrated the City's ability to capitalize on the \$600 million in investment currently underway in private construction, such as the innovative Rotary Trail greenspace and Infinity headquarters relocation.

The TOD readiness assessments used a methodology adapted from the Denver TOD Strategic Plan and the Central Maryland TOD Strategy and incorporated economic and built form data (e.g., employment density, household density, percentage of vacant land) to help determine key distinguishing factors. Based on the results of the assessments, nodes along the BRT project were organized into "readiness" continuum (i.e., more to less ready). The Five Points West station area, a key study area during the in-depth technical assistance, was designated as an "emerging" submarket, primarily because of the presence of anchor institutions and an opportunity for growth in the commercial and housing markets (see Figure 2-1).

Five Points West CTC

Low density, single-family residential ▪ Sports anchored retail center ▪ Western Terminus ▪ Special Events

Readiness Assessment:

EMERGING

Economic &
Demographic Score:
Mid

Built Form Score:
Mid

Anchors

- Birmingham CrossPlex
- Five Points West Shopping Center
- CrossPlex Village (proposed)

Commercial Market

- Healthy but modest shopping center just beyond the ¼ mile walk-shed

Housing Market

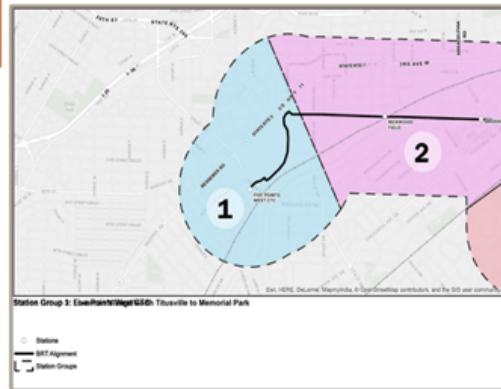
- Primarily lower-density single-family homes
- Many tax delinquent properties
- Significant vacancy

Planning Initiatives

- Proposed Form Based Code
- Western Area Framework Plan

Strategic Partners

- Development Community
- Jefferson County
- REV Birmingham



Actionable Items:

- Encourage underground and wrapped parking decks in future phases of development of the Crossplex
- Enforce the form-based code and overlay that was developed for Western Area Framework Plan
- Digitally inventory vacant properties

Transformation Potential

- Connectivity:
 - Walkscore: 67
 - Arterial Roads with no street fronting properties
- Market Strength:
 - Job density: stable retail center
- Gov. Partnerships and Anchors:
 - Crossplex, library, police department and city owned parking lot
- Land Availability:
 - High



Source: Birmingham CrossPlex, Brasfield & Gorrie.

Sources: Smart Growth America, Strategic Economics.

Source: Smart Growth America, Strategic Economics

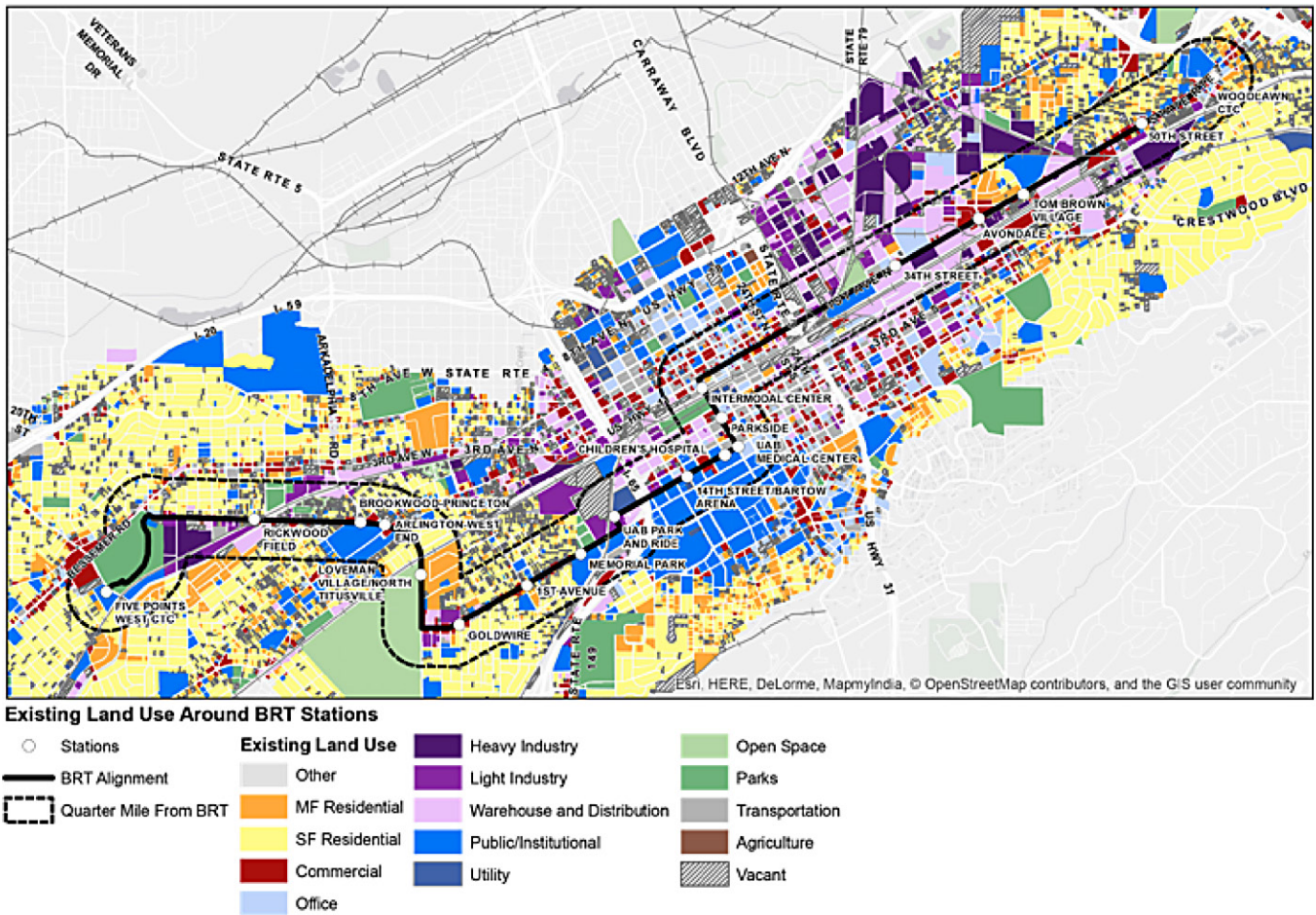
Figure 2-1

Five Points West readiness assessment

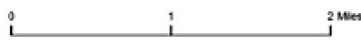
The TOD Strategy Framework aimed to build an overarching framework to organize policies, programs, and planning efforts across city departments, BJCTA, and other stakeholders. The framework also incorporated components of both the TOD readiness assessments and TOD Toolbox. The framework was completed throughout the entire technical assistance and will increase local knowledge of TOD best practices and their applicability to Birmingham, and develop effective messaging and leadership capacity to support implementation of TOD in the city.

The TOD Toolbox provided Birmingham with information that helped the City explain the benefits of the BRT system. For example, following the compilation of messaging guides and template materials, the Birmingham project team trained the local leadership team and stakeholders on how to use the marketing materials to engage their peers and the public when discussing the BRT project and/or TOD. As part of the communication tools, local leaders from Birmingham assisted the project team in identifying specific audiences to develop more strategic messaging materials for and the specific products that would best support ongoing outreach efforts (e.g., PowerPoint presentation, fact sheets, case studies, etc.).

Equipped with this information, Birmingham and BJCTA can act on development opportunities. For example, the City and BJCTA own a significant amount of land around BRT stations that they can leverage to create future growth. Whereas the land purchased will first be used for construction, staging, and other uses, after construction it can be sold to the private sector to maximize public and private benefit. Additionally, almost 12% of land in the BRT corridor is vacant, not including surface parking lots, totaling approximately 268 acres. These and the many low-density areas in the corridor have the highest near-term potential for TOD. Figure 2-2 shows the existing land use along the Birmingham BRT corridor.



Sources: Strada 2017; City of Birmingham, 2017; Strategic Economics, 2017.



Source: Strategic Economics

Figure 2-2

Existing land use along Birmingham BRT corridor reveals opportunity for TOD

Charlotte, North Carolina (FTA Region 4)

Background Information

Transit Project Name: Gold Line Phase 2

Primary Federal Funding Source for Project: FTA Capital Investment Grant Program

Award Amount from Primary Federal Funding Source: \$74.99 million

Local Share: \$75.01 million

Applicant of Technical Assistance: City of Charlotte

Transit Agency Partner: Charlotte Area Transit System (CATS)

Challenge

The Charlotte Area Transit System (CATS) currently operates a 1.5-mile mixed traffic streetcar service called the CityLYNX Gold Line. Leveraging the success of the project, CATS applied for and was awarded a Small Starts Grant Agreement for an extension of the Gold Line. The Gold Line Phase 2 will be a 2.5-mile, 11-station extension that ultimately will create a 4-mile transit spine through Center City Charlotte (Uptown), linking the future intermodal Charlotte Gateway Station to the LYNX Blue Line light rail and more than 70 bus routes at the Charlotte Transportation Center (see Appendix A for project map).

The Historic West End (HWE) occupies a strategic location adjacent to Uptown and, with the future streetcar, traveling from the HWE to Uptown's employment opportunities and amenities will be more convenient. Development pressures incited by the proximity to Uptown, an increasing demand for walkable neighborhoods, and the future streetcar line have created a warming real estate market in the HWE, along with early warning signs of potential displacement of current residents. In addition, Charlotte is predicted to be the seventh-hottest U.S. housing market in 2018.² Conversations with local stakeholders and housing experts suggest that real estate prices have increased in the HWE and are becoming unaffordable for first time homebuyers.

The housing stock in the HWE is primarily single family residential, much of which is well maintained historic homes. The presence of single family residential correspond with low densities. The combination of the neighborhood's location and housing stock could make the HWE a very attractive neighborhood, with potential for displacement of current residents. Approximately 66% of households in the HWE are renters, who are most susceptible to rent increases³

²"Charlotte named hot housing market for 2018, which might be bad for first-time buyers," *Charlotte Observer*, November 2017. <http://www.charlotteobserver.com/news/business/article186960883.html>.

³2015 American Community Survey (ACS) 5-Year Estimates

In addition many households are low-income—the poverty rate in the HWE is 34%, and 33% of all households within the study area are housing-insecure.⁴ Housing stock in the HWE is valued about 50% lower than homes citywide.⁵ With the investment of the streetcar line, there is a need to balance the opportunities that TOD can provide with the need to maintain affordability for current and future residents and to preserve the cultural and historic character of the neighborhood.

Solutions

The Charlotte project team (see Appendix C) was tasked to help the City and CATS strategize TOD near the Gold Line extension while preserving established neighborhoods and minimizing displacement, with a specific focus on station areas in the HWE. Through the in-depth technical assistance, the project team helped the City develop a scenario plan that integrated existing local initiatives, market conditions, development barriers and opportunities, and TOD design guidelines. To achieve this, the Charlotte project team conducted three tasks.

First, the project team completed a policy and regulatory analysis to understand how zoning and land use regulations impact development possibilities in the HWE and how those regulations might affect the potential for TOD. The second task was a scenario plan to identify opportunities for development in the HWE; the plan serves as a modeling tool for assessing implications of and potential for TOD and helps address several questions about TOD, such as whether a TOD Overlay might be needed to accommodate development in the HWE. Finally, the project team was tasked with conducting a real estate market and housing assessment to identify the scope of potential displacement and loss of affordable housing in the HWE.

Impact

The in-depth technical assistance provided to Charlotte resulted in the identification of several regulatory barriers to mixed-use development and significant economic implications for the HWE. Overall, the in-depth technical assistance helped the City align its regulatory framework with feasible, market-driven development opportunities and coordinated the launch of the impending project with the priorities of the HWE.

The policy and regulatory analysis identified current policies and regulations that put restrictions on development along the future Gold Line in the HWE that are not present along various LYNX Blue Line light rail corridors. For example, the HWE is classified as a “wedge” area in the current *Centers Corridors and Wedges* plan. “Wedges” in this plan usually are not envisioned with rail transit, and there are no associated transit station area plans or TOD overlays. The project team

⁴Households that are paying 50% or more of their income on housing costs each month.

⁵2015 ACS 5-Year Estimates.

did note that the Pedestrian Overlay Zoning District currently applied to the HWE could accommodate TOD characteristics; however, the application of a local tree ordinance for new development within a “wedge” area greatly inhibits the practical ability to realize such development along the Gold Line in the HWE. If TOD is desired for the HWE, some regulatory modification will be necessary.

The scenario plan, which adopts modifications to the current tree ordinance, indicated the possibility for 2.6 million square feet of mixed-use development, including 2,000 units of multi-family housing, about 500,000 square feet of commercial office space, and nearly 170,000 square feet of retail space (Figure 2-3). The scenario is meant to show the full extent of an aggressive development concept, one that, if desired and permitted, would be accomplished only over many years. In the near term, some fraction of this buildout is possible, especially for residential and retail projects closest to the coming stations.



Source: Van Meter Williams Pollack

Figure 2-3

Five Points Station District massing study from scenario plan

The real estate market and housing assessment combined estimates of trends in real estate values in Uptown and an analysis of the impact of the LYNX Blue Line on mixed-use development in other Charlotte neighborhoods. Using this information, the project team created a range for the potential impact of the Gold Line on real estate values in the HWE. The project team then estimated the impact on rental housing in the HWE. After examining rental housing prices in the HWE, the project team found that if recent trends continue, rents would rise by 32% over the next 10 years, independent of any rail transit improvement. This increase alone could result in the loss of 166 market-rate units affordable

to households with incomes below 80% of area median income. This is a significant displacement risk, but it is the result of overall market forces in the area, not Gold Line extension transit improvements.

The project team concluded that with or without the Gold Line streetcar extension, and with or without accommodation of new TOD, the HWE is very likely to experience increases in land values in coming years due to the desirability of a walkable community within proximity to Uptown. These factors, among others, will drive rents upward, leading to displacement of households of low- and moderate-income residents. While introduction of the future streetcar service may tend to further boost land values, TOD presents an opportunity to address affordable housing needs, if the right provisions are included in City policies and tools.

We greatly appreciate the time and effort from the SGA and Enterprise team and look forward to the continuing collaboration through the TOD peer network. In a city growing as rapidly as Charlotte, issues such as affordable housing, development pressure, and mobility needs will only increase. Thank you for providing us with timely recommendations, insight, and advice.

– Jason Lawrence,
Senior Transportation Planner,
City of Charlotte



Source: Van Meter Williams Pollack

Figure 2-4

Historic West End illustrative corridor plan

Albuquerque, New Mexico (FTA Region 6)

Background Information

Transit Project Name: Albuquerque Rapid Transit (ART)

Primary Federal Funding Source for Project: FTA Capital Investment Grant Program

Award Amount from Primary Federal Funding Source: \$74.99 million

Local Share: \$54.35 million

Applicant of Technical Assistance: City of Albuquerque

Transit Agency Partner: ABQ Ride

Challenge

The Albuquerque Rapid Transit (ART) project is an 8.75-mile BRT system, the first in New Mexico. Once operational, it will run through the spine of the city along Route 66 (Central Avenue). The area served along the Central Avenue corridor will encompass 12,000 acres, 74,024 residents, and 81,157 jobs within a 15-minute walk of ART stations (see Appendix A for project map). Although ART will operate through the spine of Albuquerque and connect many destination centers, the corridor itself lingers behind the rest of the city in many respects, from population growth to median income to development. There is opportunity to leverage the pending ART project, spurring economic development along the corridor.

Rather than supporting projects and redevelopment efforts along the entire length of the Central Avenue corridor, a concentration of effort in specific districts or near transit stations has the capacity to provide transformation and spur TOD. The International District, in which the ART San Mateo station area is located, has traditionally served lower-income communities and lagged in investment compared to other ART station areas. Although displacement may not be a current concern, the International District has all the elements of communities that have seen rapid displacement once transit investment begins. Therefore, the City decided to focus on the International District and the San Mateo station area when applying for technical assistance to help prevent displacement.

Solutions

The Albuquerque project team (see Appendix C) was tasked to build capacity within the city to support and incentivize TOD projects with specific emphasis on the San Mateo station area. Through the in-depth technical assistance, the project team supported the City as it worked to educate key stakeholders and the public on TOD elements, ranging from financing options to the benefits TOD can bring to the city. To achieve this, the Albuquerque project team performed three tasks.

First, the project team worked with the City to understand stakeholder concerns around the ART project and to develop messaging tools that would best support

ongoing outreach efforts to build community support for TOD along the Central Avenue Corridor. The second task was a retail market analysis of the San Mateo station area to determine retail demand and development potential and other proposed projects for the station area. The market analysis would also support projects and priorities identified through the Pilot Program for TOD Planning grant's charrettes and station area planning.⁶ Finally, the project team was tasked to identify financial tools to support projects other than grant and operating budget allocations.

Impact

The in-depth technical assistance provided to the City of Albuquerque resulted in new tools to better align city resources to support TOD projects along the Central Avenue Corridor. Additionally, the in-depth technical assistance will help the city identify projects for investment. Overall, the in-depth technical assistance enhanced the city's ability to leverage the ART project as an economic development investment in addition to a transit investment.

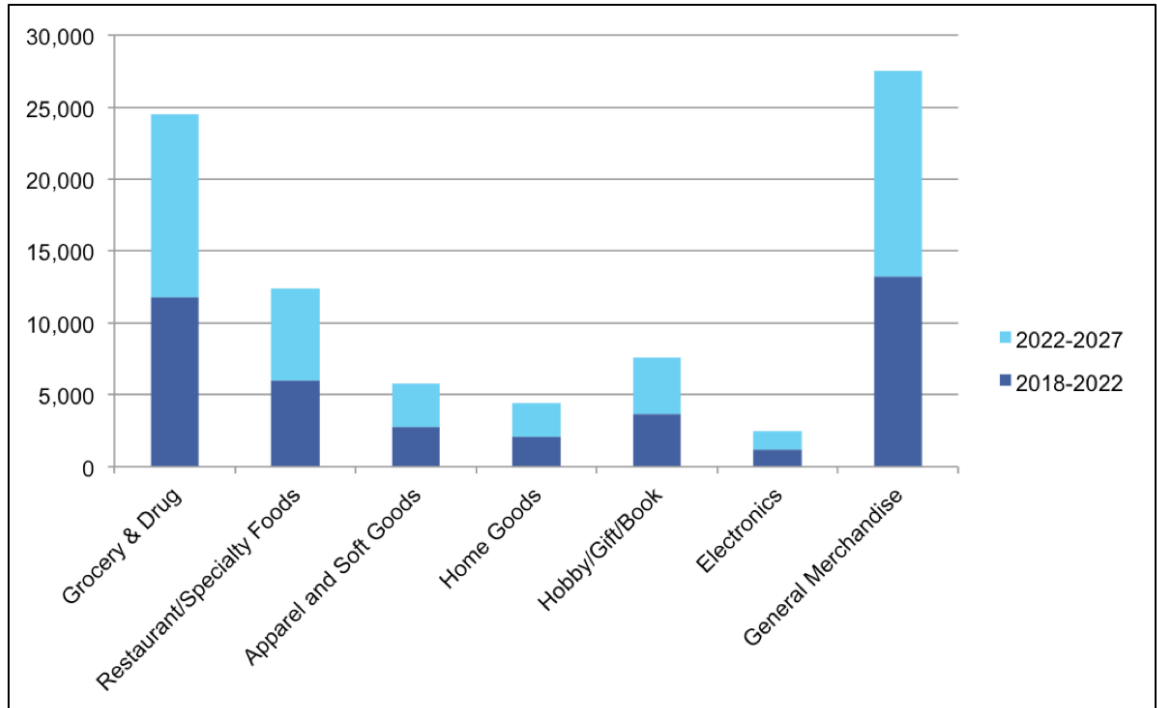
In general, TOD projects require buy-in from individual community members and decisions. Therefore, the project team developed specific messaging tools including a presentation slide deck outlining the benefits of TOD for Albuquerque, as well as a memorandum for the transition team of the newly-elected mayor. Those messaging tools will support the success of TOD through proactive and reactive education of residents that may have misgivings about new development, especially projects that include higher densities.

Through the retail market analysis (Figure 2-5), the project team identified that the San Mateo station area will be able to support 84,700 square feet of additional grocery and drug, food, general merchandise, and hard- and soft-good retail space over the next 10 years, assuming household and employment growth continues as projected. Due to the limited amount of new retail development potential in the San Mateo station area, the project team suggested that the core retail strategy should be to consolidate new development with existing retail into concentrated nodes near existing neighborhoods and along the Central Avenue Corridor instead of allowing it to be spread thinly across the area.

Finally, the project team noted that the City should leverage its resources across departments (e.g., Metropolitan Redevelopment Agency, Department of Community and Family Services, etc.) in a targeted strategy to implement TOD projects. This strategy could help spur development along the Central Avenue Corridor and, more specifically, in the San Mateo station area. In today's current

⁶The [Pilot Program for TOD Planning](#) is a competitive grant program administered by FTA that was established by the Moving Ahead for Progress in the 21st Century Act (MAP-21). The program funds comprehensive planning associated with an eligible transit capital project or a significant capacity expansion along an existing fixed guideway that is at or nearing capacity. In 2015, through the pilot program, FTA selected the City of Albuquerque in 2015 to support TOD activities along a majority of the ART corridor.

environment of resource scarcity, publicly-owned parcels represent an important opportunity to provide affordable housing and community benefits. Public agencies have several tools at their disposal to advance TOD, including affordable housing on publicly-owned parcels



Source: Smart Growth America

Figure 2-5

Demand for development around ART San Mateo station area

Omaha, Nebraska (FTA Region 7)

Background Information

Transit Project Name: Omaha Rapid Bus Transit (ORBT)

Primary Federal Funding Source for Project: TIGER VI

Award Amount from Primary Federal Funding Source: \$14.96 million

Local Share: \$15.60 million

Applicant of Technical Assistance: City of Omaha

Transit Agency Partner: Metro Transit

Challenge

The Omaha Rapid Bus Transit (ORBT) is an 8-mile long BRT project and the first major transit infrastructure investment of its kind in Nebraska. In September 2014, the City of Omaha was awarded \$14.9 million under the sixth round of

the TIGER program for the project, which the City matched with an additional \$15.60 million in local funding. The BRT system will be deployed along Dodge Street, an urban arterial at the heart of Omaha's transportation network. This corridor connects nearly every major activity center in the city along one direct route (see Appendix A for project map).

There are high stakes for a well-executed BRT project on Dodge Street. The 2017 mayoral election became a flashpoint for transit, as controversy about the estimated financing of a proposed streetcar line arose as a hot-button issue. As such, several local stakeholders noted that the BRT project offers an opportunity to shift the local mindset on transportation. Executed and communicated well, the ORBT could serve as a springboard for public faith in transit and expand support for future transit investments, such as the costlier streetcar.

Staff has had limited success in communicating transit-related benefits to the public. Thus, there has been resistance by both public and private sector developers to some of the components of successful TOD. A need for a shared vocabulary and vision further emerged in conversations around Dodge Street. Omaha and the Dodge Street corridor benefit from a relatively robust real estate market that delivers large-scale projects. However, there has been limited discussion on directing development efforts and resources into target areas along the corridor.

Solutions

The Omaha project team (see Appendix C) was tasked to help the City provide a model for possible development along Dodge Street and organize and focus local efforts to calibrate development along the corridor. Through the technical assistance, the project team supported the City with the creation of TOD Pilot Projects along the Dodge Street BRT corridor, which increased internal capacity for implementation. Altogether, the Omaha project team conducted three tasks.

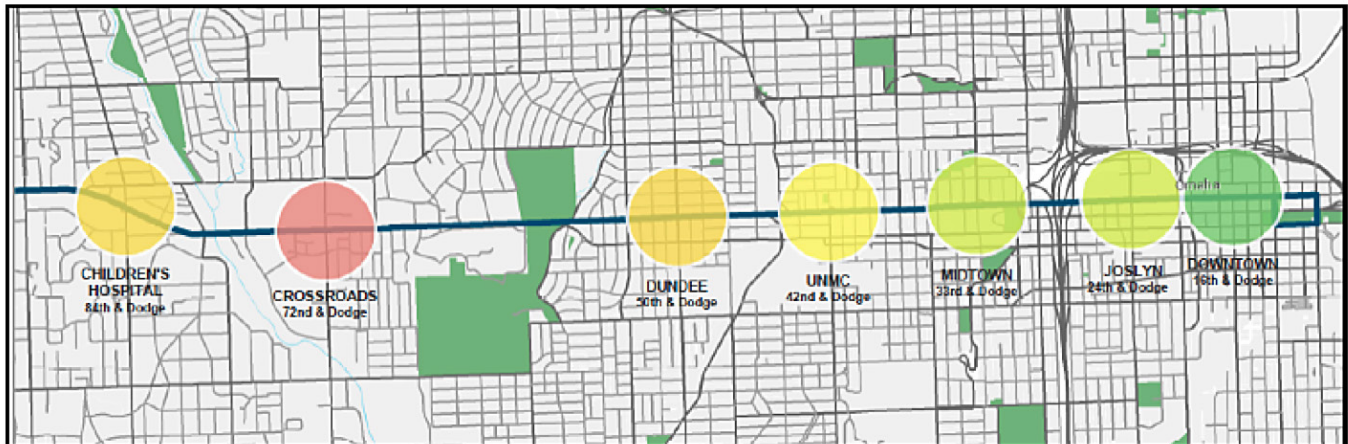
First, the project team completed a revenue- and cost-driven analysis to provide a baseline of information on existing conditions related to fiscal implications of development patterns, housing needs, and TOD maturity. This analysis helped determine fiscal justification for prioritizing TOD across three development scenarios—low, medium, and high density. The second task was a TOD readiness workshop to lead the City through a review of national TOD best practices and help it understand how they can be applied along the Dodge Street corridor. Finally, the project team was tasked to support City staff in conducting TOD pilot projects, which would be selected from the outputs of both the analysis and workshop.

Impact

The in-depth technical assistance provided to Omaha resulted in achieving additional economic benefits through the alignment of the City's regulatory framework and development patterns to complement its investment in transit. The revenues and cost-driven analysis found that accommodating growth at higher density levels, including attracting new or existing households to move into the urban core rather than annexing neighborhoods at the periphery, would save Omaha money in the form of reduced infrastructure costs. Overall, at lower densities, infrastructure costs have a negative fiscal impact for the City. Hypothetically, if the 6,052 households that Omaha gained by annexation in 2016 had moved into downtown areas instead of outlying neighborhoods, the City would save \$171.1 million over 20 years. Based on this analysis, it is in the City's fiscal interest to focus its TOD-related efforts on achieving densities consistent with Midtown and Downtown neighborhoods.

To realize the anticipated benefits of the ORBT and engender more vocal support from business leaders across all sectors, the Omaha project team held a two-day workshop in Omaha in October 2017. The workshop was designed to lead the city through a review of national TOD best practices and understand how they can be applied along the Dodge Street corridor. As part of the workshop efforts, the project team engaged additional local stakeholders that had yet to coalesce around the BRT project and discussed their incentives and roles in furthering transit and TOD. After the workshop, local stakeholders collaboratively developed a series of overarching goals to guide TOD in Omaha, prioritized strategies, and recommended actions for activity along Dodge Street. From this workshop, two station areas were selected for TOD Pilot Projects: Joslyn and Children's Hospital.

Following the TOD readiness workshop, the Omaha project team analyzed market, regulatory, and financing barriers to achieving TOD, which resulted in several findings such as Omaha's use of Tax Increment Financing (TIF). The project team noted that Omaha's use of TIF differs from other jurisdictions in several ways, in particular the sheer number of TIF projects approved under the program. Additionally, Omaha's designated Community Redevelopment Area (CRA) is large, and the City has approved only project-specific TIF districts that are always developer-financed, rather than corridor-based or area-wide TIF districts, as some cities have done. Therefore, the project team recommended that Omaha adopt an explicit TOD goal for the TIF program and explicitly require TIF projects in TOD areas to follow the design standards in the Omaha Downtown Master Plan.



Source: Smart Growth America

Figure 2-6

Heat map of station area readiness scores along Omaha Rapid Bus Transit

Finally, for both pilot areas, the project team completed a market analysis to reflect recent market conditions and development opportunities across various property types to a 10-year planning horizon. The project team identified development opportunity in both pilot areas totaling 1,870 for-sale residential units, 4,420 for-rent residential units, 414,400 square feet of commercial office space, and 325,000 square feet of retail space. In the Joslyn pilot area, the project team identified the existence of retail leakage that may represent an opportunity for the area to not only cater more to existing residents, but also to achieve a larger draw of regional demand. In addition to identifying development opportunities, the project team helped the City focus its land use policy and development incentives in a way that compounds economic outcomes along the corridor.

Per City staff, the impact of this technical assistance is already evident in new partnerships with other people and private entities that had not been previously engaged. This is true of business leaders, non-profits, and real estate industry members, including developers and investors. Several developers and landowners present at the workshop expressed an interest in capitalizing on new opportunistic product types that, although historically may have been difficult to get underwritten, also offer an increased return on investment and use the transit project as leverage.

Thank you so much for your hard work over the last year. We're extremely happy with everything you've produced, which should provide us with a solid foundation from which to establish our TOD program (and clean up some of our other larger issues related to our development patterns).

– Stephen Osberg,
City Planner—Long Range
Planning, City of Omaha

Tacoma, Washington (FTA Region 10)

Background Information

Transit Project Name: Tacoma Link Extension Light Rail (LRT)

Primary Federal Funding Source for Project: FTA Capital Investment Grant Program

Award Amount from Primary Federal Funding Source: \$74.99 million

Local Share: \$142.00 million

Applicant of Technical Assistance: City of Tacoma

Transit Agency Partner: Central Puget Sound Regional Transit Authority

Challenge

The Tacoma Link Extension is a 2.4-mile, 6-station extension of the Tacoma Link light rail (LRT). The current 1.6-mile Tacoma Link LRT serves 6 stations between the Theater District and Tacoma Dome Station. The Stadium Way portion of the extension will relocate an existing stop and add 2 stations. The Hilltop (MLK Jr. Way) portion of the extension will include 4 new stations that will span about 16 city blocks (see Appendix A for project map).

The Hilltop neighborhood, located directly adjacent to Tacoma's downtown core, is a historic neighborhood that has long been home to a large share of the city's African-American population. Over recent decades, Hilltop has seen relatively low levels of economic development, resulting in a variety of negative impacts on the community, including underutilized property, limited economic opportunity, buildings in disrepair, loss of historic structures, and a lack of urban livability in general.

In general, the City and the Hilltop community have a good understanding of TOD and its potential for long-term benefits. However, Hilltop residents have voiced concern over whether the most vulnerable citizens will be able to share in the wealth and benefits generated. Hilltop demonstrates several indicators of a neighborhood that is at risk for displacement, including a high percentage of renters, lower education attainment levels, and lower incomes compared to the rest of the city, in an area where home sale prices have rapidly increased. Housing affordability is becoming a main concern and driver of displacement. Moreover, Hilltop, has experienced a decline in its African-American population. The shortage of social services for young children and aging minority residents (especially those that support aging in place) has driven the faith-based community to step in and fill some of the gaps. The neighborhood lacks affirmative policies and programs that encourage investment and help residents build equity in their homes or businesses.

Based on Hilltop's proximity to Downtown Tacoma and the ability to create TOD along the extension, opportunity exists within the neighborhood to create

economic growth and jobs. However, the primary challenge is how to facilitate new development, including with TOD projects, while also ensuring that existing residents continue to live in Hilltop and benefit from expanded economic opportunity.

Solutions

The Tacoma project team (see Appendix C) was tasked to support Tacoma in better understanding the existing and future housing market conditions and needs of the Hilltop community in anticipation for the light rail expansion into the neighborhood. Through the in-depth technical assistance, the project team delivered a housing market study and supported the City in establishing housing goals for the next five years.

First, the project team analyzed current and projected housing market conditions and quantified the potential impact of the Link Extension on the area's affordability, in addition to analyzing the area's stage of gentrification. The second task was an assessment of existing conditions and current policies, programs, and resources, and development of new tools for the City to modify and adopt. Finally, the project team synthesized the existing conditions analysis and strategy recommendations into a cohesive report.

Impact

The in-depth technical assistance provided to Tacoma aided the City in bridging the growing disconnect between Hilltop's changing housing market and making Hilltop a focal point for TOD investment. Furthermore, the technical assistance sought to counter concerns among residents that economic gains generated by the Link Extension would not reach them, but, instead, would have a negative impact on the cost of housing.

The housing market and needs analysis examined market conditions and unmet housing needs among Hilltop residents, based on secondary data sources such as the American Community Survey (ACS), Comprehensive Housing Affordability Strategy, and CoStar. The Tacoma project team noted that most block groups in Hilltop have experienced changes that suggest they are in the early stages of gentrification, based on a framework and analysis that measures three changes characteristic of gentrification (market changes, socioeconomic characteristics, and demographic changes). Although early stages of gentrification indicate that housing costs and displacement pressures may be increasing, opportunities still exist to ensure that existing residents can stay in these areas and benefit from new growth and development before significant displacement occurs.

The addition of light rail could exacerbate projected increases in housing prices. Modeling suggests that rents could rise as much as 46% over the next 10 years in Hilltop, much of which will be related to general increases in housing costs over

time and not necessarily the result of transit. Even without an increase associated with the Link Extension, rents could increase by 20% by 2022. Layering on transit's projected impact, this increase could be as high as 29%. In total, the area could lose nearly 1,500 units priced for low-income households in the next 5–10 years. These losses would be the result of federal subsidies expiring and unrestricted but affordable units increasing in price.

Following the housing market and needs analysis, the Tacoma project team identified ways for the City and its partners to cultivate new resources to support TOD and target its existing federal resources for housing and community development to Hilltop. Through the analysis, the project team documented that Tacoma relies primarily on federal funding to support a range of community development and housing-related activities. Therefore, the project team recommended several options to create a value capture tool (in line with Washington State law provisions) as well as other best practices from the Seattle-Tacoma region. This value capture tool could help offset negative impacts of the Link Extension and assist with property acquisition by lowering overall development costs (i.e., public health or streetscape improvements).

Finally, the project team synthesized the existing conditions analysis and strategy recommendations into a cohesive report. The content of the report was refined with feedback from the local project team, elected officials, and stakeholders. The project team made formal presentations to a wide range of stakeholders, including the City's Planning Commission in November 2017 and the City Council and Hilltop Engagement Committee in December 2017. The final report includes various strategies, including the creation of a value capture tool, increased tenant protections, and forming a community land trust in Hilltop, among others.

Hilltop's changing market conditions and major public investments empowered residents, community leaders, City staff, and elected officials to move swiftly in their effort to ensure that current residents can stay in Hilltop and benefit from the Link Extension. Stakeholders who participated in the technical assistance agreed that the City and its partners need to act quickly to address the unmet needs of Hilltop and to ensure that they do not miss near-term opportunities to stabilize existing residents.

Common Themes from On-Site Technical Assistance

Throughout the technical assistance delivery, several themes emerged with which many or all communities struggled:

- **Public transit as a focal point for investment** – Transit investments have the potential to be transformative, especially in terms of how residents and visitors navigate a city. However, not all development near transit is transit-oriented. TOD is characterized by a concentration of development that supports walkability and transit use. Transit, in turn, encourages and serves the development. However, development can occur near transit that does not enhance that transit investment. Some development fully undermines transit use; for example, wide, fast roads near transit stops can make walking dangerous, discouraging transit use and making adjacent sites less attractive for development. Communities new to TOD do not always maximize transit's role in harnessing the potential to connect multiple, seemingly far-flung destinations and create new destinations. This thinking is largely missing from existing conversations about harnessing the long-term impact of TOD projects.
- **Aligning citywide initiatives with public transit** – High-capital transit investments sometimes have the power to attract new developers and embolden a new development style, even where there is little history of it and where the local land use code does not encourage it. Such cases typically involve fixed and permanent alignments, such as rail service—but even in these ideal circumstances, there are many examples of missed opportunities. To maximize the economic return on transit investments, priorities around housing, development, and growth must also be aligned. Otherwise, initiatives elsewhere in the city can serve to undermine the impact of new or existing transit service. Communities without this alignment tend to over-rely on transit investment to catalyze the development results.
- **Strong leadership that prioritizes TOD** – Many communities have enthusiastic and competent staff dedicated to transit and TOD—but these staff are not always empowered to leverage their expertise to advance TOD in the city. In these cases, transit and TOD are not adequately integrated in existing programs. Instead, decision-making occurs on a project-by-project basis, creating a regulatory environment in which preferred developments are not prioritized over others. Overall, decision-making criteria need to factor in how to prioritize value-generating development and incorporate

seemingly isolated efforts and partners into a targeted strategy. Regarding TOD, City departments tend to operate largely independently (or “in silos”) without a formal or informal process to coordinate planning, community development, economic development, and transit investments in a targeted way. Transit investments are not always factored into planning initiatives, or do not influence community development or economic development overall. However, opportunities for coordination typically already exist, whether around development and implementation of existing plans or decision-making around publicly-controlled property.

- **A need for private sector buy-in and support** – For TOD to realize its anticipated benefits, more vocal support from business leaders across all sectors is important. Real estate developers and investors play an active role in shaping a community’s built environment, but can have difficulty envisioning or underwriting new concepts for development along a transit line. Similarly, large businesses and anchor institutions often are active in large-scale public projects and can be an important partner when they emerge as champions for TOD. Urban investment in infrastructure and logistics, property and amenities, and public realm or green spaces creates value beyond the direct assets that are the focus of investment, and there are many opportunities for private partners to capitalize on these opportunities. Broader public information campaigns can be important to educate a range of audiences (e.g., anchor institutions, developers, banks, etc.) on the concept of TOD and its benefits and status at various stages. Several communities noted the need for widespread education about TOD, elements of successful TOD, ways to ensure that low- and moderate-income residents benefit from large-scale transit investments, and national examples and best practices. Similarly, local stakeholders in the banking and community development fields were not always well-versed in the status and components of transit projects and the development implications.

SECTION

4

Peer Network

To build upon the on-site technical assistance provided through the project, SGA continued cultivation of the TOD Peer Network launched in July 2016. The network is designed to help communities that receive on-site technical assistance connect with and learn from one another. The Peer Network also includes TOD professionals in other communities acting as mentors who share examples regarding successful implementation of TOD.

On April 23–24, 2017, more than 25 Peer Network members from 13 of the 14 communities attended the inaugural TOD Peer Network Convening,

which was held in conjunction with the 2017 LOCUS National Leadership Summit. The 2017 Summit explored the themes of partnerships, placemaking, and policy change, particularly as they relate to TOD, walkable cities, retrofitting suburban neighborhoods, and community engagement. The summit was structured to allow for additional sessions pertaining to TOD topics and the goals of the Initiative. One

Figure 4-1

Larry Hopper, TOD Peer Network member from Oklahoma City, speaks about TOD during 2017 LOCUS Summit



Source: Smart Growth America

session was exclusively for Peer Network members, at which they provided input to FTA and SGA regarding future programming and opportunities for the Peer Network. During the Summit, Peer Network members joined real estate developers, investors, advocates, and local elected officials from around the country to share information and learn new approaches regarding TOD challenges facing localities and developers.

As part of the TOD Peer Network Convening, members had the opportunity to experience four TOD site visits around the Washington, DC region—the Courthouse and Shirlington neighborhoods of Arlington, Virginia, and the H Street and Mount Vernon Triangle corridors of Washington, DC. The tours were developed to study various examples of TOD, as several of the projects at the focus of the on-site technical assistance are representative of light rail, BRT, and streetcar systems. SGA Project Manager Chris Zimmerman shared his personal experience of moving the Shirlington project forward while serving as an elected official, which gave members more perspective on their own interactions with local elected officials as their projects continue to develop. Local developers also were invited to share details regarding their projects on each of these tours.

The tours provided Peer Network members the unique opportunity to experience much of the DC region’s transit options, including Metrorail,

Metrobus, Arlington Transit, and the DC Streetcar. The members took advantage of the opportunity to meet with members in other communities, discover the examples of TOD and TOD programs discussed at the

Figure 4-2

SGA leads tour for Peer Network members in Courthouse neighborhood of Arlington, Virginia



Source: Smart Growth America

Summit, and learn about each other’s local projects. Because of the Convening, some members began planning trips to see each other’s projects and learn from other agencies later in the year.

Following the inaugural TOD Peer Network Convening, SGA began developing a work plan to use event and travel scholarship opportunities for members to continue learning, both with other Peer Network members and with TOD professionals outside the Peer Network. In Fall 2017, SGA began developing new strategies to engage members at the 2018 TOD Peer Network Convening in a way that can best support and expand the 2017 experiences. With this goal in mind, not just for Peer Network members but also for the developers and elected officials who garnered new lessons in TOD at the 2017 Summit, LOCUS adopted the theme “Rebuild America’s Neighborhoods” for the 2018 LOCUS National Leadership Summit and opted to focus on bringing in speakers to share value-capture strategies. The second TOD Peer Network Convening is scheduled to be held in conjunction with the 2018 Summit on April 22–24, 2018 in Washington, DC.

Project Web Site and Communications

TODresources.org continues to help more communities advance their TOD projects and to scale the benefits of the Initiative to a national level. The project website includes an online database that provides research conducted in recent years about TOD on the national, state, and local scales. One informative resource added to the database this year, “Empty Spaces: Real Parking Needs at Five TODs,” was a joint study completed by SGA and the University of Utah that sought to determine the amount of parking required at TODs and how many fewer vehicle trips are generated than standard industry estimates. Consistent with other research, the study found that the five TODs generated fewer vehicle trips than the Institute of Transportation Engineers (ITE) publications estimate and used less parking than many regulations require for similar land uses. Additionally, in one case, actual vehicle trips were just one third of what ITE guidelines estimate. The joint study, along with other resources added to the database during the year, continue to help developers, planners, and engineers make more-informed decisions about the value of land near transit stations.

Beyond the online database, TODresources.org continues to serve as a platform that supports the efforts of all types of communities engaged in economic development activities related to public transit. This is evident through a weekly TOD blog/newsletter that informs subscribers about upcoming TOD activities, programs, and projects across the country. The blog is posted on TODresources.org, and the newsletter is distributed to more than 2,200 subscribers each week—up from about 1,500 the previous year. In addition, advocates can directly reach out to a professional regarding TOD by sending an email to info@todresources.org or calling the TOD hotline at 1-866-508-3349.

To facilitate coordination between public and private sectors, SGA contributed to the production of the 2017 Federal Financing Toolkit to help real estate developers, investors, and local elected officials come together to achieve respective development goals. The toolkit was released in July 2017 under the aegis of SGA’s LOCUS coalition of responsible real estate developers and publicized to TODresources.org members as a valuable resource. More than 1,000 people signed up for the toolkit’s launch discussion at which FTA representatives joined private sector developers and SGA staff to provide tips on navigating the federal application process, assessing eligibility requirements, and determining which programs are the best fit for moving TOD projects forward.

FTA and SGA also collaborated to launch the [Building Better Communities with Transit](#) podcast, which provides a forum for discussion of local policies that encourage TOD, strategies for engaging the public, tools for securing sources for funding, and other topics. Whereas technical guides and documents are always useful, a platform on which local leaders, advocates, planners, and developers can share personal stories of success and lessons learned is just as informative. The inaugural episode debuted in January 2018 and featured Breen Masciotra, TOD Manager for the Port Authority of Allegheny County, Pennsylvania, and Karina Ricks, Director of the Department of Mobility and Infrastructure for the City of Pittsburgh. Breen and Karina discussed actions both agencies are taking to make Pittsburgh a more walkable and multi-modal city, including new BRT projects, TOD initiatives, and “eco innovation districts.” Future episodes of the podcast will continue to focus on the various components of TOD and goals of the Initiative, including an emphasis on value-capture strategies.

Outcomes from First-Year On-Site Technical Assistance

As SGA's project team worked to advance TOD in five communities during 2017, the first-year communities continued work on the recommendations provided during 2016. Following the conclusion of the on-site technical assistance, SGA tracked the progress of these communities. Summarized below are some of the outcomes of the first-year communities that received TOD technical assistance. As a reference, three communities received in-depth technical assistance and five communities received targeted technical assistance during the first-year. The eight communities were Richmond, Virginia; Louisville, Kentucky; Lynnwood, Washington; Stamford, Connecticut; Oklahoma City, Oklahoma; San Antonio, Texas; Kansas City, Kansas; and Moline, Illinois.

Richmond – In-Depth

Following the completion of Richmond's on-site technical assistance, the Richmond City Council adopted the Pulse Corridor Plan in July 2017 per the Richmond project team's recommendation. In October 2017, the City Council rezoned Scott's Addition; thus, two high-intensity projects are under development immediately adjacent to the Pulse Cleveland Station. In addition, the Planning and Development Review Department has started the process to rezone the Monroe Ward neighborhood, and a request for proposal (RFP) was issued to redevelop the Coliseum site, which was identified as an "Opportunity Area" in the Pulse Corridor Plan.

City investments and planning efforts have helped catalyze several development projects in key parcels and station areas. The Science Museum of Virginia, located at the Pulse Robinson Station, is proceeding with plans to create a great lawn in front of its building and construct a parking deck. At the Arts District Station, a new building at 100 Marshall Street will have one level of underground parking as a direct result of proximity to the Pulse BRT. At the Pulse Shockoe Bottom Station, a new building will be built on a surface lot as a direct result of the Pulse BRT. A Whole Foods Market is under construction at the Pulse Alison Street Station and is set to open in October 2018.

Several infrastructure improvements either have taken place or are in the works, such as Maggie Walker Plaza opening in July 2017 at the Art District station. With the Pulse BRT and new bus network slated for revenue service in June

2018, a new roundabout at Main and Dock will open in May to precede them. Similarly, a two-way cycle-track is set to open on Franklin, which runs parallel to the Pulse BRT, in a similar time frame. The City is also beginning to plan for bike lanes on Malvern Avenue and on 1st, 2nd, and 3rd Streets (near the Arts District Station).

A total of \$6 million was awarded to improve the streetscape along Broad Street between Laurel and Hamilton Streets, with the City just beginning design development for the improvements.

Louisville – In-Depth

In December 2017, U.S. Secretary of Transportation Elaine Chao officially kicked off construction of the Dixie Highway BRT, which is slated for revenue service in 2019. In concert with the BRT construction, Louisville Metro has implemented several initiatives following the completion of the on-site technical assistance.

Around the Dixie Highway and 18th Street/Broadway realignment, the City completed right-of-way (ROW) acquisition and began improvements to the intersection that will provide safer pedestrian access and improved mobility for motorists and transit. Construction of the realignment will begin in Spring 2018, with completion slated by summer. In April 2017, Passport Healthcare announced construction of its corporate headquarters on the southwest corner of Dixie Highway and Broadway. The headquarters replaces a proposed Walmart development that did not materialize and will include sound urban design and facilitate transit access. An outparcel of the site currently is being considered for a mixed-use development per the Louisville project team's recommendation. Additionally, a new \$28 million YMCA facility is opening across the street that will include a comprehensive center for community-focused health equity.

Louisville Metro Government also has established a coordination committee of various stakeholders at and around the Dixie Highway/Broadway intersection. This group is working to establish coordinated efforts to fully capitalize on the investments being made along the corridor. Enhanced transit stops, improved access management, establishment of a business improvement district (BID), and coordinated branding are some of the efforts the group is pursuing.

Finally, the establishment of a Planned Development District for a large area on Dixie Highway near Lower Hunters Trace is in the process of being adopted by the Metro Council. The new zoning classification will encourage suburban retrofitting of existing retail into a walkable town center. Similarly, a proposed

town center for the Shively area along Dixie Highway is in the planning and design phase. The project will look to establish the area as a premium transit center supported by mixed-use, walkable development.

Lynnwood – In-Depth

Following the completion of Lynnwood’s on-site technical assistance, 655 urban housing units have been completed within Lynnwood’s City Center, including 308 senior housing units with both income-restricted and market rate options and 347 units of affordable-workforce apartments. In addition, construction also has started on a new 155-room hotel to be located at City Center. The City also has launched a new initiative, Partner Lynnwood, to bring together stakeholders, including Edmonds Community College and the Economic Alliance of Snohomish County, to coordinate efforts aligning educational and economic development goals within Lynnwood.

Following the Lynnwood project team’s recommendation, the City is advancing a Comprehensive Plan and Zoning Update to add properties near the transit station but that are not currently included in City Center zoning into the City Center designation. Lynnwood recently completed a multi-modal accessibility plan for the transit center with a strong focus on improvements in the areas most immediate to the transit center.

Lynnwood also has followed the project team’s recommendation to make gateway and signage improvements and has initiated the development and adoption of a Gateway and Neighborhood Signage Plan, with anticipation of installing at least one gateway sign. The City has partnered with the Washington State Department of Transportation to apply for a Federal Highway Administration grant to plan, design, and construct improvements to the 44th Avenue West and Interstate 5 underpass to enhance multi-modal connections to the regional Interurban Trail, City Center, and the Lynnwood Transit Center.

The project team’s recommendations have been implemented through the City’s budget. The City allocated funding in the 2017–2018 capital projects budget to initiate an update to the citywide non-motorized transportation plan, which is expected to include updates to City standard details for bicycle and pedestrian facilities, as well as the development of a Complete Streets ordinance and associated policy manual.

Finally, the City has worked directly with Sound Transit on the light rail station site plan to identify and develop public spaces, plazas, promenades, landscaping, streetscape, art opportunities, programming, and circulation patterns to provide a unique experience for transit users as they enter, linger in, and leave Lynnwood. Connections to key nodes, gateways, regional trail systems, and City Center

are emphasized through site planning and urban design. Additional opportunities for placemaking will arrive as the final landscape plan, public art program, and construction details advance.

Stamford – Targeted

The City of Stamford has directly implemented several of the short-term recommendations in the final report. It has engaged a consultant team to prepare a South End Neighborhood & Historic Preservation Plan. One of the tasks of the study is to prepare an inventory of the area's built environment, including housing, community facilities, businesses, transportation and connectivity, historic and open space resources, and vacant and underutilized land. The study is scheduled to begin in September 2018 and take a year to complete. However, the inventory should be completed as one of the first tasks.

As part of the work plan, the South End Neighborhood & Historic Preservation Plan will include proposals for urban design guidelines and zoning modifications. In addition, the City's planning staff is currently engaged with a developer that is proposing zoning modifications to properties south of the Stamford Transportation Center. This will include provisions for greater density along with design standards.

The Land Use Bureau is engaged in a comprehensive review of the City's housing program. The consultant for the South End Neighborhood & Historic Preservation Plan also has been tasked with developing tools for maintaining housing affordability.

In addition to the specific short-term recommendations, Stamford is engaged in several activities. First, a bus shuttle study funded by FTA is nearing completion. The portion of the study relating to shuttles has been completed, and among the study recommendations is consideration of a transportation management association. The portion of the study related to buses is nearing completion and is considering bus route modifications, which could impact accessibility to the Stamford Transportation Center (STC). There remains a need to look comprehensively at all transportation modes accessing the STC to address issues of accessibility and congestion.

On June 9, 2017, Stamford was one of four Connecticut municipalities to be designated an "Innovation Place" by the CTNext Board of Directors and will receive up to \$2 million in implementation grant funds in FY 2018. The innovation "impact areas" will include neighborhoods within a half-mile radius of the STC. Among the projects being considered are wayfinding to link the STC to anchor institutions and key venues, accelerating innovative capacity of young companies in office space close to the STC, and an on-demand and autonomous vehicle technology study.

Moline – Targeted

Following the completion of Moline’s on-site technical assistance, two new construction infill residential projects have been proposed within the TOD district area of the Q Multimodal Station, which would add approximately 150–200 new market-rate residential units within the TOD district. Per the Moline project team’s recommendations, the City strategically selected these infill development sites using publicly-owned land as project sites.

Moline also began incremental streetscape and pedestrian improvements, which have been designed into the Q Multimodal Station, and is working on the reconstruction of 12th Street along the west side of the station. The City currently is reviewing other streetscape and placemaking concepts for the TOD district.

The City has formed a Parking Committee to evaluate the project team’s recommendation on downtown parking requirements and will be presenting recommendations to the City Council. In the short term, the City hired a private firm to conduct parking enforcement as an initial step in moving forward with parking system enhancements.

Finally, Moline is moving forward with the project team’s recommendation to adopt a form-based code. City staff have begun working with the Moline Plan Commission on an evaluation of the City’s various development-related plans and, in part, how well they align with the various implementation tools such as development codes. To this end, City staff recommended serious consideration for the adoption of a form-based code overlay or district for the Interstate 74 bridge realignment zone that serves as the eastern edge of the downtown TOD district.

San Antonio – Targeted

Following the completion of San Antonio’s on-site technical assistance, the City issued a six-month moratorium on development incentives in the downtown area and will evaluate the need incentives for housing development in other areas. The Mayor also initiated a Housing Task Force to address incentives for housing and affordability. The 2017 bond issue (at a record-breaking \$850 million) identified and provided \$20 million in funding for a new category of Neighborhood Improvements. The City plans to use that funding to work with private sector to acquire and prepare sites for construction of affordable housing and is planning rapid transit corridors in many of those identified sites.

In addition, VIA Metropolitan Transit conducted a Board education session on TOD and market conditions and is following up with a report on how the

agency can address development in a larger context. Two Vision Plans were produced to examine future development potential and housing opportunities for approximately 20 acres that are adjacent to two downtown transit facilities. VIA has purchased a 300,000 square foot structure adjacent to its primary Transit Plaza to preserve the right for future transit supportive development. VIA also is currently working jointly with the City on procurement of an Urban Land Institute Advisory Panel to evaluate development opportunities near its Centro Plaza transit hub.

Overall, greater collaboration between City and VIA staff persons has been significant and continuous. With the adoption of the City's Comprehensive Plan and the VIA Vision2040 Long Range Plan, there has been a significant partnership among many City departments to ensure that both planning efforts are synchronized. The City and VIA staff are actively engaged in detailed discussions about design guidelines for rapid transit corridors and station area design.

Finally, the most significant deliverable underway is preparation of a set of Unified Development Code (UDC) amendment changes that will be assembled and presented by the City for adoption at the next cycle of UDC amendments in 2020. These code changes will address both right-of-way and streetscape design to effect better transit integration, but also will evaluate rough proportionality mitigation requirements to support pedestrian, bicycle, and transit users in lieu of the more standard vehicle efficient mitigation measures.

Oklahoma City – Targeted

Following the completion of Oklahoma City's on-site technical assistance, City staff initiated a multi-agency collaborative effort to track TOD and associated economic development along the downtown streetcar circulator project. Since the Central Oklahoma Transportation and Parking Authority (dba EMBARK, the transit agency) started this, the local Alliance for Economic Development Alliance of Oklahoma City, which includes the Urban Renewal Authority and other functions, has taken more of a leadership role. The Alliance started convening the group on the third Thursday of every other month and should transition to being more engaged in TOD on the front end with EMBARK's influence. The downtown streetcar circulator will start operation in late 2018 and will stop at the two sides of the TIGER Santa Fe intermodal center.

Since the workshop, investors and developers in the Downtown area have been "voting with their dollars," as evidenced by the construction of many large private sector buildings, the addition of stories to existing buildings, and more. The focus is apparent along and near the streetcar line.

In early 2017, the City began a 3–6-year process to revamp and recodify the City’s zoning ordinance and subdivision regulations for which TOD has been identified as key factor. EMBARK has discussed with developers/owners the benefit of holding design or finance charrettes for sites along the proposed Northwest BRT route. If the TIGER grant for the Northwest BRT project is approved, the plan is to hold a charrette focusing on and strengthening the marketability and reactivation of the historic dome bank building on the site. Finally, joint development, as envisioned by FTA guidance, has been conceptually discussed with one major developer at a strategic location along the proposed Northwest BRT route.

Conclusion

In the second year, SGA provided on-site technical assistance to five communities, held the inaugural TOD Peer Network Convening, launched a new monthly podcast, and expanded offerings on [TODresources.org](https://www.todresources.org). In addition, SGA's project team conducted 11 site visits to ground the assistance in local conditions and needs, build understanding of local strengths and weaknesses, and undertake more focused technical assistance work. The on-site technical assistance has addressed a variety of TOD challenges and helped communities begin to unlock significant economic potential from their capital transportation investments.

Looking back at on-site technical assistance provided during the first year, several communities are in the process of adopting policy changes because of the work. The Louisville Metro Council is in the process of adopting a Planned Development District for a large area on Dixie Highway that will encourage suburban retrofitting of existing retail into TOD characteristics. The City of Lynnwood is advancing a Comprehensive Plan and Zoning Update and has allocated funding to update the citywide non-motorized transportation plan. The City of Moline is considering the adoption of a form-based code and has formed a parking committee to provide recommendations to City Council based on the Moline project team's parking recommendations. Beyond the policy changes, construction has begun on the Dixie Highway BRT system and associated pedestrian improvements, and Passport Healthcare announced construction of its corporate headquarters on the Dixie Highway BRT corridor. In Lynnwood's City Center, more than 655 urban housing units have been completed, and construction has started on a new 155-room hotel. In Moline, two new construction infill residential projects have been proposed within the TOD district area of the Q Multimodal Station.

During the second year, among other outcomes, SGA's project team identified 1,870 for-sale residential units, 4,420 for-rent residential units, 414,400 square feet of office, and 325,000 square feet of retail space of developable opportunity along the Dodge Street corridor in Omaha, identified regulatory barriers to development in the Historic West End in Charlotte and recommended solutions to support more private sector development, guided Albuquerque to better understanding the type and amount of retail that is feasible in the San Mateo station area, provided Birmingham with the tools to coordinate properties that are publicly- or institutionally-owned along the BRT corridor to help facilitate TOD transactions, and quantified the potential impact of the Link Extension on the Hilltop's affordability in Tacoma.

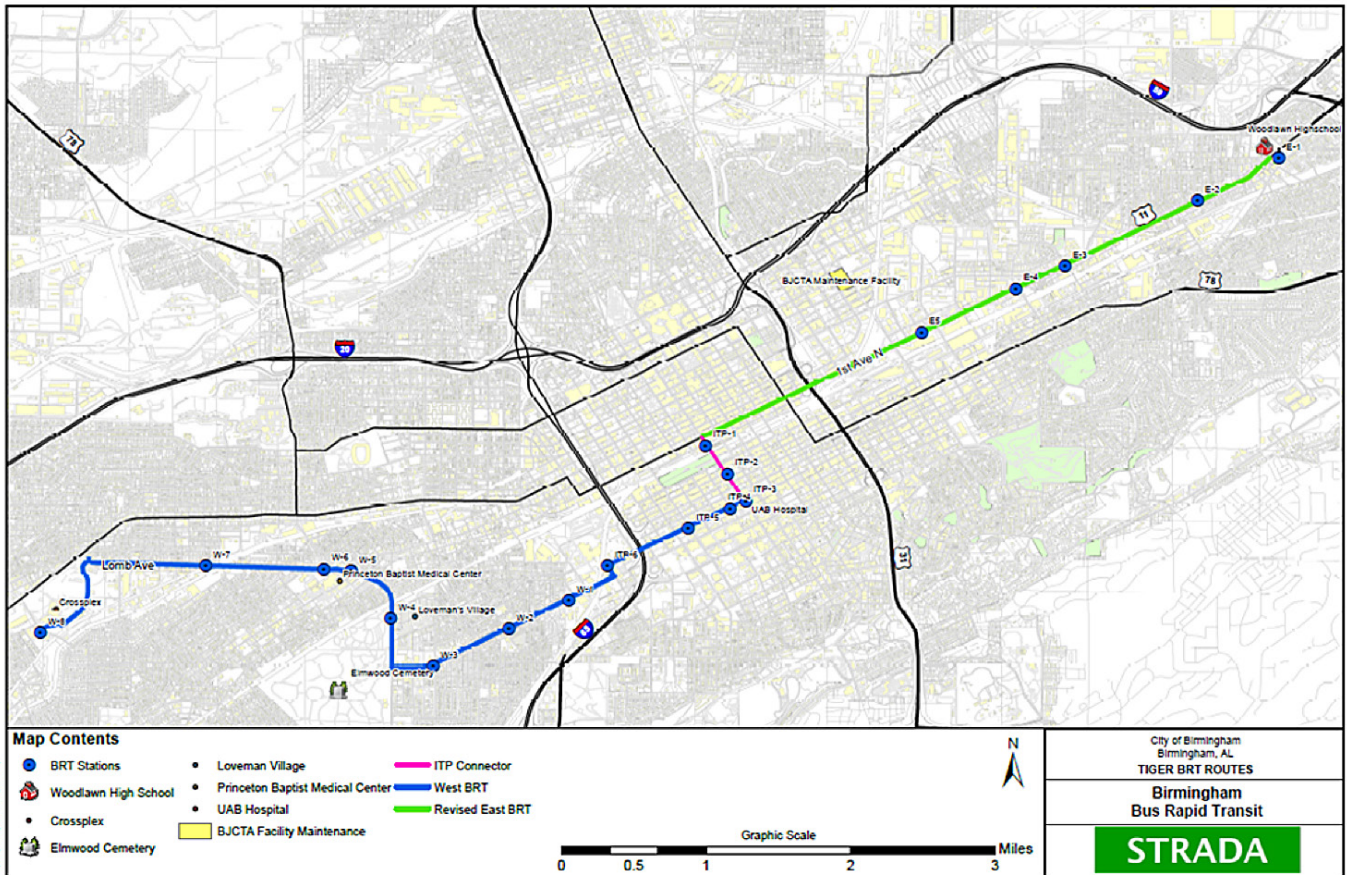
Although immediate impacts are already becoming apparent from the technical assistance, many may take years to materialize. Subsequent years of the project will continue to help communities capture the value of transit investments and maximize federal investments with state, local, and private investment.

APPENDIX

A

Project Maps

Birmingham, Alabama



Charlotte, North Carolina



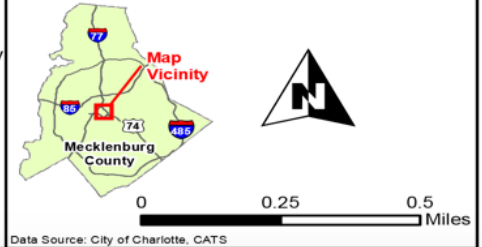
Phase Two Small Starts Project Map Charlotte, North Carolina



CityLYNX Gold Line Phase Two Small Starts Project Map Submission.pdf

Legend

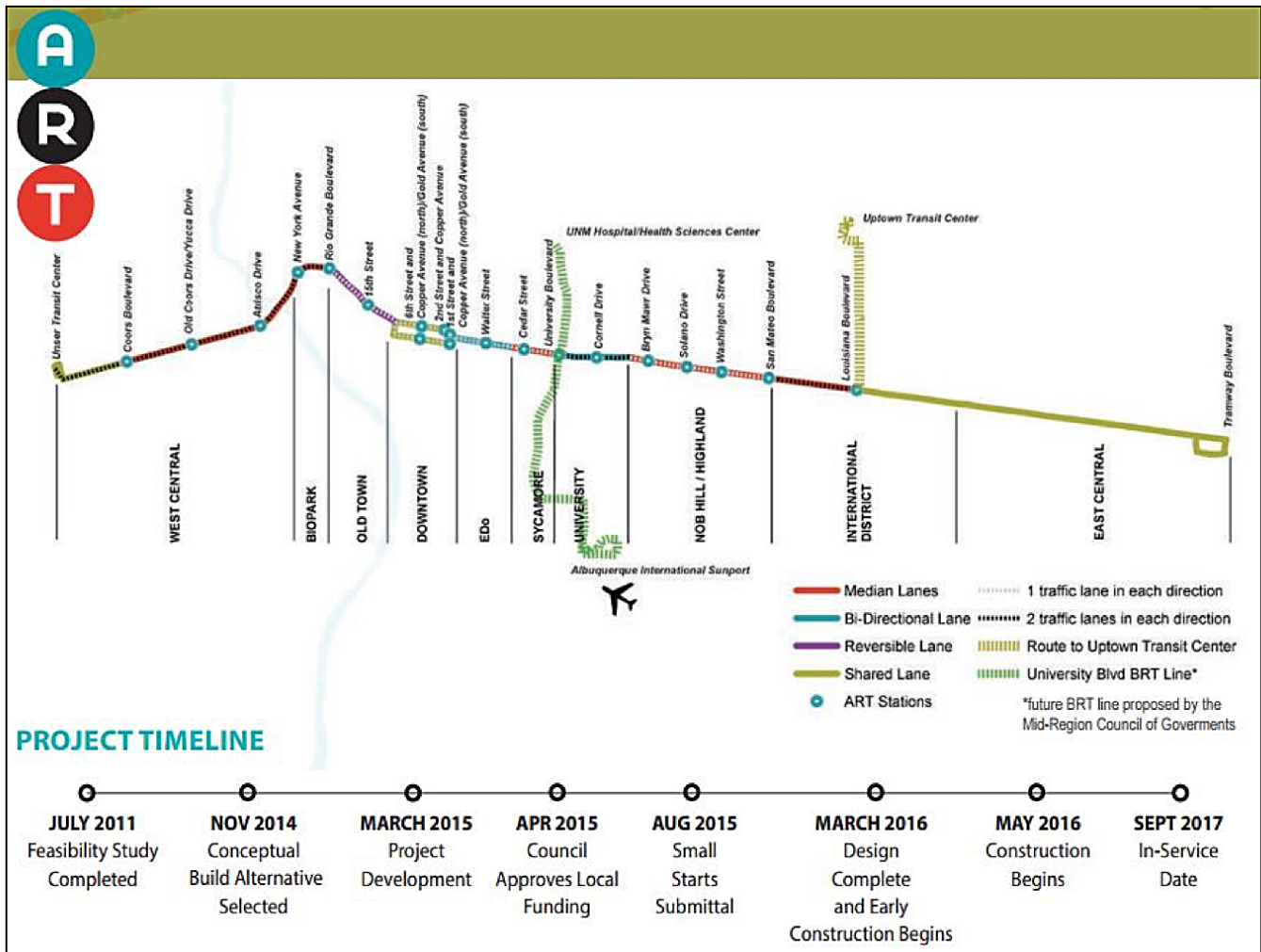
CityLYNX Gold Line		LYNX Rapid Transit	— Major Highway
	Phase One Opens in 2015		— Streets
	Phase One Stop		—+—+—+ Railroad
	Phase Two		— Streams
	Phase Two Stop		
			Parks



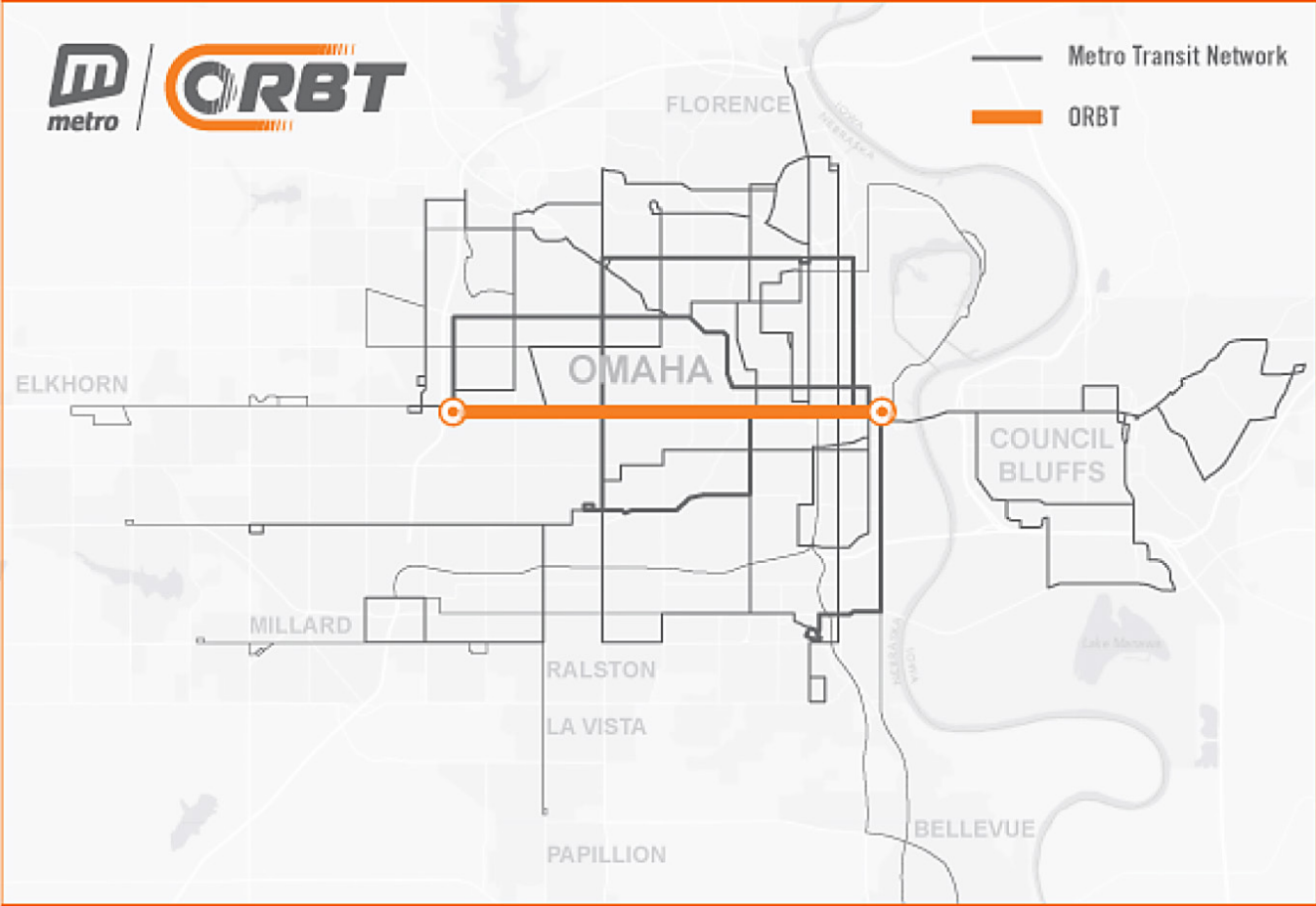
Data Source: City of Charlotte, CATS

P1 30 60

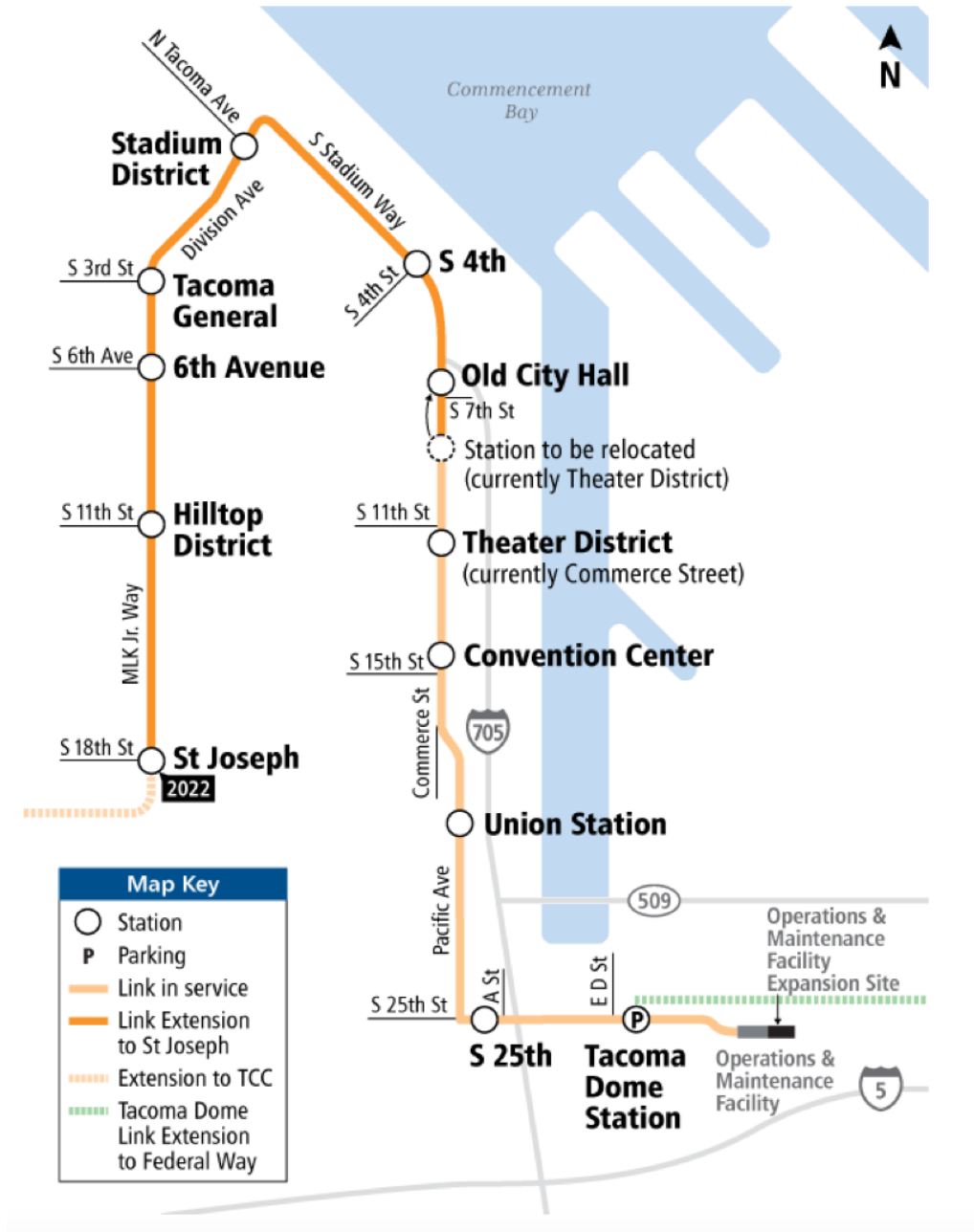
Albuquerque, New Mexico



Omaha, Nebraska



Tacoma, Washington



APPENDIX

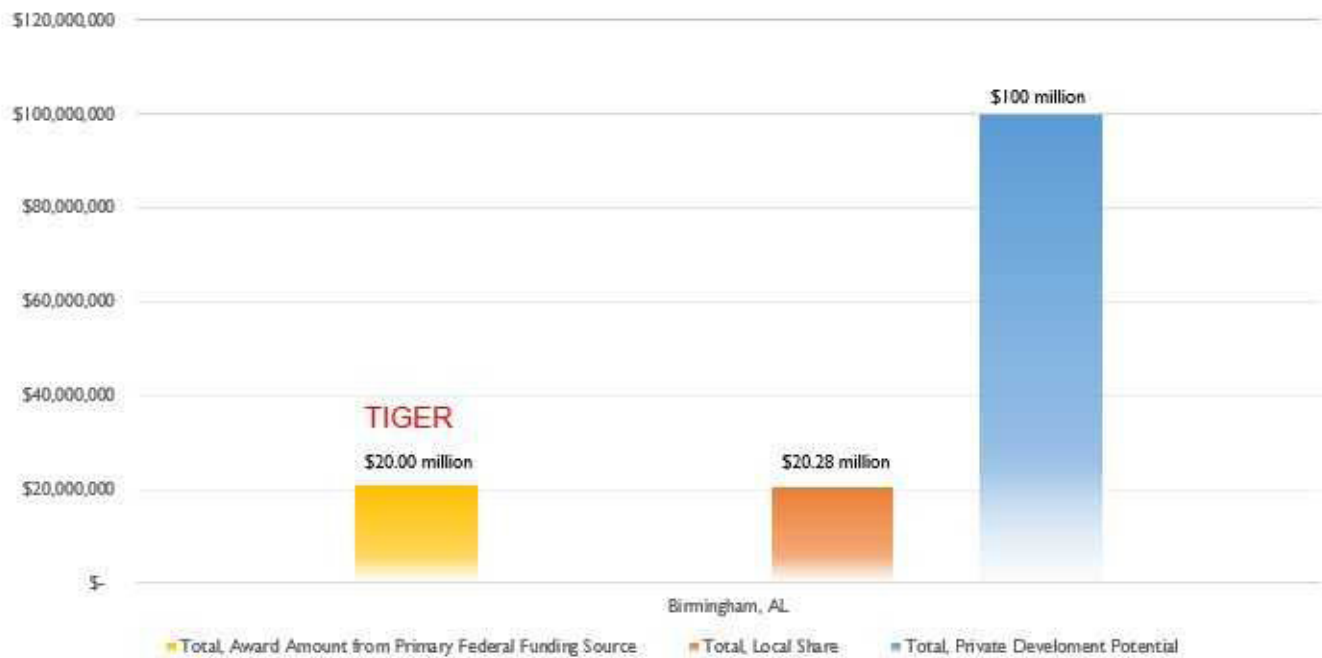
B

Transit Project and Estimated Private Development Potential Identified through the Technical Assistance

Birmingham, AL | Birmingham BRT

Population: 212,157

TRANSIT PROJECT & ESTIMATED DEVELOPMENT



Charlotte, NC | Gold Line Street Car (Phase 2)

Population: 842,051

TRANSIT PROJECT & ESTIMATED DEVELOPMENT



Omaha, NE | Omaha Rapid Bus Transit

Population: 446,970

TRANSIT PROJECT & ESTIMATED DEVELOPMENT



C

Technical Assistance Project Teams

Albuquerque Project Team

Susan Anderson, Enterprise Community Partners

Yuri Chang, Smart Growth America

Ellie Dominguez, Smart Growth America

Andrew Peng, Smart Growth America

Anna Ravindranath, Enterprise Community Partners

Francis Wang, Enterprise Community Partners

Chris Zimmerman, Smart Growth America

Birmingham Project Team

Dena Belzer, Strategic Economics

Paul Bernard, Enterprise Community Partners

Ellie Dominguez, Smart Growth America

Alex Hutchinson, Smart Growth America

Patrick Jordan, Enterprise Community Partners;

Andrew Peng, Smart Growth America

John Robert Smith, Smart Growth America

Laura Searfoss, AICP, Enterprise Community Partners

Chris Zimmerman, Smart Growth America

Charlotte Project Team

Sarah Absetz, Smart Growth America

Ellie Dominguez, Smart Growth America

Sean Doyle, Smart Growth America

Tina Dudley, Enterprise Community Partners

Patrick Jordan, Enterprise Community Partners

Sarah Kline, SK Solutions

Andrew Peng, Smart Growth America

Michael Rodriguez, Smart Growth America

Stephen Skilton, Smart Growth America

Tim Van Meter, Van Meter Williams Pollack

Christopher Zimmerman, Smart Growth America

Omaha Project Team

Ellie Dominguez, Smart Growth America
Tina Dudley, Enterprise Community Partners
Chris Glover, City of Mesa
Marta Goldsmith, Form-Based Codes Institute
Sarah Kline, SK Solutions
Breen Masciotra, Port Authority of Alleghany County
Paul Morris, Atlanta Beltline
Beth Osborne, Smart Growth America
Andrew Peng, Smart Growth America
Kris Sadoris, Hubbell Realty
Laura Searfoss, Enterprise Community Partners
Stephen Skilton, Smart Growth America
Tim Van Meter, Van Meter Williams Pollack
Hara Wright-Smith, Enterprise Community Partners
Chris Zimmerman, Smart Growth America

Tacoma Project Team

Paul Bernard, Enterprise Community Partners
Steve Davis, Smart Growth America
Alex Hutchinson, Smart Growth America
Anne Jordan, Enterprise Community Partners
Patrick Jordan, Enterprise Community Partners
James Madden, Enterprise Community Partners
Michael Rodriguez, Smart Growth America
Laura Searfoss, AICP, Enterprise Community Partners
Stephen Skilton, Smart Growth America
Chris Zimmerman, Smart Growth America

ACRONYMS AND ABBREVIATIONS

BJCTA	Birmingham Jefferson County Transit Authority
BRT	Bus Rapid Transit
CATS	Charlotte Area Transit System
FTA	Federal Transit Administration
HWE	Historic West End
ITE	Institute of Transportation Engineers
LRT	Light Rail Transit
ORBT	Omaha Rapid Bus Transit
SGA	Smart Growth America
STC	Stamford Transportation Center
TOD	Transit-Oriented Development
TIGER	Transportation Investment Generating Economic Recovery
UDC	Unified Development Code
VIA	VIA Metropolitan Transit



U.S. Department of Transportation
Federal Transit Administration

U.S. Department of Transportation
Federal Transit Administration
East Building
1200 New Jersey Avenue, SE
Washington, DC 20590
<https://www.transit.dot.gov/about/research-innovation>