

TCRP

REPORT 182

TRANSIT
COOPERATIVE
RESEARCH
PROGRAM

Linking Transit Agencies and Land Use Decision Making

Guidebook for Transit Agencies

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TCRP REPORT 182

**Linking Transit Agencies and
Land Use Decision Making**

Guidebook for Transit Agencies

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Subject Areas

Public Transportation • Administration and Management

Research sponsored by the Federal Transit Administration in cooperation with the Transit Development Corporation

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WASHINGTON, D.C.
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TRANSIT COOPERATIVE RESEARCH PROGRAM

The nation's growth and the need to meet mobility, environmental, and energy objectives place demands on public transit systems. Current systems, some of which are old and in need of upgrading, must expand service area, increase service frequency, and improve efficiency to serve these demands. Research is necessary to solve operating problems, adapt appropriate new technologies from other industries, and introduce innovations into the transit industry. The Transit Cooperative Research Program (TCRP) serves as one of the principal means by which the transit industry can develop innovative near-term solutions to meet demands placed on it.

The need for TCRP was originally identified in *TRB Special Report 213—Research for Public Transit: New Directions*, published in 1987 and based on a study sponsored by the Urban Mass Transportation Administration—now the Federal Transit Administration (FTA). A report by the American Public Transportation Association (APTA), *Transportation 2000*, also recognized the need for local, problem-solving research. TCRP, modeled after the successful National Cooperative Highway Research Program (NCHRP), undertakes research and other technical activities in response to the needs of transit service providers. The scope of TCRP includes various transit research fields including planning, service configuration, equipment, facilities, operations, human resources, maintenance, policy, and administrative practices.

TCRP was established under FTA sponsorship in July 1992. Proposed by the U.S. Department of Transportation, TCRP was authorized as part of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). On May 13, 1992, a memorandum agreement outlining TCRP operating procedures was executed by the three cooperating organizations: FTA; the National Academies of Sciences, Engineering, and Medicine, acting through the Transportation Research Board (TRB); and the Transit Development Corporation, Inc. (TDC), a nonprofit educational and research organization established by APTA. TDC is responsible for forming the independent governing board, designated as the TCRP Oversight and Project Selection (TOPS) Committee.

Research problem statements for TCRP are solicited periodically but may be submitted to TRB by anyone at any time. It is the responsibility of the TOPS Committee to formulate the research program by identifying the highest priority projects. As part of the evaluation, the TOPS Committee defines funding levels and expected products.

Once selected, each project is assigned to an expert panel appointed by TRB. The panels prepare project statements (requests for proposals), select contractors, and provide technical guidance and counsel throughout the life of the project. The process for developing research problem statements and selecting research agencies has been used by TRB in managing cooperative research programs since 1962. As in other TRB activities, TCRP project panels serve voluntarily without compensation.

Because research cannot have the desired effect if products fail to reach the intended audience, special emphasis is placed on disseminating TCRP results to the intended users of the research: transit agencies, service providers, and suppliers. TRB provides a series of research reports, syntheses of transit practice, and other supporting material developed by TCRP research. APTA will arrange for workshops, training aids, field visits, and other activities to ensure that results are implemented by urban and rural transit industry practitioners.

TCRP provides a forum where transit agencies can cooperatively address common operational problems. TCRP results support and complement other ongoing transit research and training programs.

TCRP REPORT 182

Project H-47
ISSN 1073-4872
ISBN 978-0-309-37500-9

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TRANSIT COOPERATIVE RESEARCH PROGRAM

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The **Transportation Research Board** is one of seven major programs of the National Academies of Sciences, Engineering, and Medicine. The mission of the Transportation Research Board is to increase the benefits that transportation contributes to society by providing leadership in transportation innovation and progress through research and information exchange, conducted within a setting that is objective, interdisciplinary, and multimodal. The Board's varied committees, task forces, and panels annually engage about 7,000 engineers, scientists, and other transportation researchers and practitioners from the public and private sectors and academia, all of whom contribute their expertise in the public interest. The program is supported by state transportation departments, federal agencies including the component administrations of the U.S. Department of Transportation, and other organizations and individuals interested in the development of transportation.

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The research reported herein was performed under TCRP Project H-47 by WSP–Parsons Brinckerhoff under the coordination of the Principal Investigator, Brian McMahon. Authors included Brian McMahon and Ella Claney of WSP–Parsons Brinckerhoff; G. B. Arrington of GB Place Making; Robert Cervero, Professor of City and Regional Planning at the University of California at Berkeley; and Jeff Wood of the Overhead Wire. Additional research support was provided by Kimi Iboshi Sloop of WSP–Parsons Brinckerhoff and Sasha Forbes and Sarah Klein of Reconnecting America.

The research would not have been possible without the cooperation of and insight from numerous individuals from transit agencies, municipalities, developers, and other organizations. Many thanks to the following individuals who participated in this research:

Vivian Baker, NJ TRANSIT; Jennifer Barr, SEPTA; Richard Bascomb, City of Schaumburg, IL; Debbie Berry, Cleveland University Circle; Dena Belzer, Strategic Economics; Michael Bolton, Pace Suburban Bus Service; Nancy Bragado, City of San Diego, CA; Kelley Britt, Northeast Ohio Areawide Coordinating Agency; Jeff Burns, Charleston Area Regional Transportation Authority; Aaron Cain, City of Durham, NC; Brendan Cotter, Lehigh and Northampton Transportation Authority; Michael Coulum, Sandy City,

UT; Annette Darrow, IndyGo; Colin Driver, Borough of Somerville, NJ; Dan Emerine, District of Columbia; Mary Beth Feke, Greater Cleveland Regional Transit Authority; Jay Flint, Empire Transit District; Sasha Forbes, Natural Resources Defense Council; Mayor Brian Gallagher, Borough of Somerville, NJ; Ryan Gallagher, IndyGo; James Garner, Pace Suburban Bus Service; Simone Gore, NJ TRANSIT; Rick Gustafson, Shiels Oblatz Johnson; Shyam Kannan, WMATA; Ron Kilcoyne, Lane Transit District; Cheryl King, MARTA; Yuri Koslen, Asheville Transit Authority; Lillian Kuri, the Cleveland Foundation; Matthew Long, Central Arkansas Transit Authority; Sasha Luftig, Lane Transit District; Patrick McLaughlin, Regional Transportation District of Denver; Roger Millar, Smart Growth America; Tracey Nichols, City of Cleveland, OH; Owen O'Neil, Lehigh and Northampton Transportation Authority; Arthur Pearlman, Arthur Pearlman Corporation; Nick Saponara, LA Metro; Michael Schipper, Greater Cleveland Regional Transit Authority; Joel Schwartz, Landmark Companies; Kyle Smith, Center for Neighborhood Technology; Lorraine Snorden, Pace Suburban Bus Service; Armond Spikell, Roadside Development; Lucy Thompson, City of Saint Paul, MN; Brian Welch, Regional Transportation District of Denver; Jason Wong, Red Point Development; and Ken Zatarain, TriMet.



FOREWORD

By **Dianne S. Schwager**

Staff Officer

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TCRP Report 182: Linking Transit Agencies and Land Use Decision Making: Guidebook for Transit Agencies was developed to help transit agencies better address the connections among transit, land use planning, and development decision making. The guidebook promotes improved transit and land use decision making by providing transit agencies with the tools to be more effective at the decision-making table. The tools, which build on successful transit and land use decision-making experiences throughout the United States, will help transit agencies self-assess their readiness to participate effectively in the land use decision-making process and help improve their interactions with key stakeholders in the process, including local governments and developers.

Land use decisions play a key role in shaping the long-term success of virtually every transit system in the United States. Yet organizations other than transit agencies, in particular local and regional governments, hold the responsibility and authority for integrating land use and transit, and the role for transit agencies in land use decision making is often unclear. Research was needed to assess the state of the practice of transit and land use decision making and create a guidebook of approaches, techniques, and tools for transit agencies to improve their effectiveness at the land use decision-making table.

Under TCRP Project H-47, WSP–Parsons Brinckerhoff, GB Place Making, Robert Cervero, and the Overhead Wire were tasked to develop a guidebook to (1) enable transit agencies to effectively engage local governments, metropolitan planning organizations (MPOs), state departments of transportation (DOTs), and the development community; (2) present effective tools for transit agency participation in short- and long-range planning and development decisions; and (3) serve a wide spectrum of large, medium, and small communities and transit agencies that provide a range of transit services.

To meet the project objectives, the research team conducted a literature review, an inventory of existing land use and transit practices and tools, outreach to stakeholders through surveys and interviews, and case studies of exemplary transit agencies. The guidebook developed by the researchers:

- Identifies five preconditions for success to enhance a transit agency's involvement in land use decisions: (1) a supportive transit agency board; (2) a designated staff person with technical competency; (3) a coordination process; (4) a common understanding or language; and (5) a transit-supportive community;
- Provides self-assessment questionnaires for transit agencies to evaluate their effectiveness in fostering transit-supportive land use decision making among key stakeholders and helps a transit agency identify strategies to strengthen its effectiveness in affecting land use over the long term;

- Presents tools to help transit agencies foster effective interactions for enhancing communication and coordination as well as building a transit-supportive community. While transit agencies lack the jurisdictional authority to ensure that land use decisions are transit-supportive, they can collaborate with and proactively engage a broad range of major stakeholders and the general public to achieve the desired land use outcomes; and
- Provides an overview of typical transit agencies' interactions with various stakeholders and the planning processes.

The guidebook answers the key questions of what transit agencies can do to become more meaningful participants in land use decision making and when and how it is worthwhile for transit agencies to get involved.



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Linking Transit Agencies and Land Use Decision Making: Guidebook for Transit Agencies

Land use decisions play a key role in shaping the long-term success of virtually every transit system in the United States. Organizations other than transit agencies hold the responsibility and authority for integrating land use and transit. However, transit agencies can influence the framework for those stakeholders to routinely make transit-supportive land use decisions.

To be successful, transit agencies need to be invited to the table (i.e., to participate in land use decision making processes) and need the tools to be influential players when they arrive at the table. *TCRP Report 182: Linking Transit Agencies and Land Use Decision Making: Guidebook for Transit Agencies* promotes effective transit and land use decision making by providing transit agencies with the right set of tools to be effective at the decision-making table. This guidebook addresses the connections among transit, land use planning, and development decision making, and answers the following questions:

- What can transit agencies do to become more meaningful participants in land use decision making?
- When and how is it worthwhile for transit agencies to get involved?

How to Successfully Link Transit and Land Use

The research conducted in preparing this guidebook identified five preconditions for success in linking transit and land use:

- A supportive transit agency board,
- A designated transit agency staff person with technical competency,
- A coordination process,
- A common understanding or language, and
- A transit-supportive community.

Transit agencies can complete the self-evaluation process presented herein that enables them to assess whether they are well positioned to proceed with trying to shape a particular land use or development decision. The self-evaluation process allows a transit agency staff person to assess the agency's potential effectiveness at each geographic scale of planning. It also helps a transit agency identify strategies to strengthen its effectiveness in affecting land use over the long term.

Tools and Tips for Building a Transit-Supportive Community

This guidebook presents a range of tools and tips for enhancing communication and coordination as well as building a transit-supportive community. While transit agencies lack the jurisdictional authority to ensure that land use decisions are transit supportive, they can

collaborate with and proactively engage a broad range of major stakeholders and the general public to achieve the desired land use outcomes. The key tools for enhancing communication and coordination include those discussed in the following.

Partnering

Early and sustained communication provides the best outcomes and increases chances of better land use decisions. Formal and informal processes of engaging transit agencies in the decision-making process can both be effective in fostering early communication. Informal structures of coordination can be as worthwhile as formal structures of coordinating if both the transit agency and the local government value the participation and comments provided by each other. Encouraging cities to incorporate transit considerations during their development review process can allow local jurisdictions to identify potential transit issues early on. Key tools are working groups, workshops and educational programs, and monitoring and referrals.

Strategic Guidebooks

Many local governments, transit agencies, and nonprofit advocacy groups have developed handbooks and guidebooks related to transit-supportive development. The use of a guidebook or a website to highlight the importance of interagency communication, collaboration, and coordination is a common strategy used to address challenges and overcome barriers associated with implementing transit-supportive development projects.

Articulating the Costs and Benefits

Local government land use planners and private developers may not fully understand the service and operational issues related to their land use decisions, the benefits of and need for transit, or the relationship between transit and land use. Transit agencies can explain various transit requirements and make the case for including transit officials in future land use decisions. In making their case, transit agencies can explain the costs and benefits of land use decisions regarding transit.

Case Study Lessons

The lessons learned from the four case studies presented in this guidebook illustrate successful application of the five preconditions for success discussed earlier. The lessons learned can be used by transit agencies to help develop strategies for more effective interactions. The case studies show the importance of transit agencies being involved over a period of time with local governments to build partnerships, awareness, and support and to change land use plans and policies in order to realize transit-supportive outcomes.

In the case studies, the pivotal role in getting transit-supportive outcomes came from important local partners of the transit agency. In three cases, local governments were in the key position to shape the transit friendliness of development projects because of their regulatory role in planning and development. In the other case study, a nonprofit was in the key position to shape the outcome.

In addition, there are multiple partners, not just local governments and developers, in transportation and land use planning decision making. Transit agencies can participate with metropolitan planning organizations (MPOs), state governments, philanthropic organizations, and

nonprofit community development organizations to form partnerships for land use planning and decision making. Over time, the transit agency will want to work with a range of partners to improve its plans, policies, procedures, and processes to strengthen the link between transit and land use.

Land Use at Various Geographic Scales

This guidebook explains the key interaction points and activities at the various geographic scales of planning—the regional, municipal/county, corridor, subarea/district, and site scales. Ultimately, the goal of the transit agency is to increase ridership and maintain the efficient operations of the transit system. Toward that end, transit agencies can participate in appropriate land use activities at all geographic scales of planning.

The most frequent land use decisions are typically related to site-specific projects. On the surface, this may seem the most important area for a transit agency to focus its attention. However, as the research surveys, interviews, and case studies have shown, most individual site-related land use decisions—such as what land uses are allowed where or how much parking to provide—are shaped much earlier in the land use planning process. Regional-, corridor-, and municipal-scale planning decisions typically influence what happens at an individual site.

A transit agency will be more effective over the long term by focusing its efforts on influencing longer-term plans and policies that preclude the need to fight the more numerous short-term or site-scale decisions. One of the lessons learned for transit agencies is that this challenge is a little like juggling—one has to keep an eye on more than one ball at a time.



CHAPTER 1

Introduction

Why This Guidebook?

Land use decisions play a key role in shaping the long-term success of virtually every transit system in the United States. People ride transit because it provides them with a convenient or cost-effective way to get where they want to go. Land use decisions that influence where people want to go can make it easy or difficult for transit to serve those destinations. The relationship of transit and land use can be thought of as a balancing act. When transit and land use are in balance, the result is more riders at a lower cost. When they are out of balance, transit attracts fewer riders at a higher cost. Therefore, it is in the interest of a transit agency to help shape the outcome of land use decision making to achieve the desired balance.

Organizations other than transit agencies hold the responsibility and authority for integrating land use and transit. For example, metropolitan planning organizations (MPOs) and metropolitan councils shape growth and transit policies at a regional scale and in multi-jurisdictional corridors. Zoning authority gives local governments the responsibility for land use and public infrastructure (for example, sidewalks, bikeways, streets, and other public connections) decisions at a municipal, corridor, area, or site level. Private developers are typically more concerned with site-specific conditions that can influence access to and demand for transit. However, transit agencies can influence the framework for those stakeholders to routinely make transit-supportive land use decisions.

Transit-supportive development is defined as an approach to planning that integrates transit planning with local land use planning.¹ One purpose of transit-supportive development is to avoid land use decisions where something is planned or built in a manner that precludes quality transit. It gives consideration to five key features of the built environment (see the five Ds in Appendix A) that strongly influence use of public transit:

- Density of land uses,
- Diversity of land uses,
- Design of the streets,
- Destination accessibility, and
- Distance to transit.

To be successful, transit agencies need to be invited to the table (i.e., to participate in land use decision-making processes) and need the tools to be influential players when they arrive at the table. *TCRP Report 182: Linking Transit Agencies and Land Use Decision Making: Guidebook for Transit Agencies* promotes effective transit and land use decision making by providing transit agencies the right set of tools to use to be effective at the decision-making table. The guidebook addresses the connections among transit, land use planning, and development decision making, and answers the following questions:

- What can transit agencies do to become more meaningful participants in land use decision making?
- When and how is it worthwhile for transit agencies to get involved?

The guidebook explains how transit agencies can become more meaningful participants in the land use decision-making process and will aid transit agencies in maximizing the benefits of interactive transit land use planning.

Similarly, the guidebook does not strictly discuss land use decisions related to transit-oriented development (TOD). Many, if not the majority, of the land use decisions that support transit are not decisions related to TOD. Many happen at the broader regional, municipal, and corridor scale, as opposed to the subarea scale often associated with TOD. Even more frequent are the individual site or parcel development decisions. The guidebook covers the full range from site to regional decision making.

Research Behind the Guidebook

This guidebook is a product of TCRP Project H-47, which identified practices and tools that give voice to transit agencies on local and regional land use decisions in ways that improve transit operations, increase ridership, and enhance the performance of the overall transit system. This multifaceted effort included:

- Research of existing literature,
- Inventory of existing land use and transit practices and tools,
- Outreach to stakeholders through an online survey and interviews, and
- Case studies of effective transit agencies (Chapter 5 and Appendix C).

The results of the research form the basis of the guidebook. The survey results identified some of the key land use planning opportunities for transit agencies to effectively engage with local governments and developers. A copy of the survey can be found in Appendix B, and the results are discussed throughout the guidebook. As part of the case studies, the research effort identified success stories and reviewed the internal and external coordination processes that led to effective interactions with other stakeholders.

Organization of the Guidebook

The guidebook contains seven chapters and three appendices.

- Chapter 1 presents the purpose of the guidebook and outlines the challenges transit agencies face that were identified through the research effort.
- Chapter 2 describes the five preconditions for success that will enhance the value of a transit agency's involvement in land use decisions. These preconditions were determined based on literature research, surveys, and interviews conducted as part of this research.
- Chapter 3 provides transit agencies with a self-evaluation process that enables them to assess whether they are well positioned or have done the homework to proceed with trying to shape a particular land use or development decision. The self-evaluation process is designed to allow a transit agency staff person to assess the agency's potential effectiveness at each geographic scale of planning. It also enables a transit agency to identify strategies to strengthen its effectiveness in affecting land use over the long term.
- Chapter 4 discusses a range of tools and tips for enhancing communication and coordination as well as building a transit-supportive community. While transit agencies lack the jurisdictional authority to ensure that land use decisions are transit supportive, they can collaborate with a broad range of major stakeholders and the general public to achieve the desired land use outcomes.

- Chapter 5 summarizes the lessons learned from four case studies that illustrate successful application of the preconditions for success. The lessons learned can be used by transit agencies to help develop strategies for more effective interactions.
- Chapter 6 provides an overview of the key stakeholders in land use decision making. This chapter outlines the key partners in transportation and land use planning decision making. It also explains the role that transit agencies can play in the many different components of land use planning and decision making. Over time, transit agencies will want to work with their government partners to improve plans, policies, procedures, and processes to strengthen the link between transit and land use.
- Chapter 7 builds on the partnership opportunities identified in Chapter 6 and explains the key interaction points and activities at the various geographic scales of planning—regional, municipal/county, corridor, subarea/district, and site scales. This chapter outlines the most common land use planning activities and the opportunities for transit agencies to engage and influence decision making at different steps in the planning process.

Appendix A presents recent research on the 5 Ds of land use (i.e., density, diversity, design, destination accessibility, and distance to transit) that influence transit ridership and travel behavior. This appendix speaks to a wider audience—one that includes local government land use planners and private developers—and provides a bigger picture of the benefits of integrated transit and land use, emphasizing why inclusion of transit in decision making is important. In part, it addresses the question of what transit agencies can request as an outcome.

Appendix B includes the survey that was distributed to key stakeholders during this research. Findings from this survey are presented herein.

Appendix C provides additional information on the four case studies. The case studies represent a broad spectrum of transit service and land use contexts as well as geographic scales of planning. A brief background of the transit agency featured in the case study and a deeper explanation of the success story are provided.

Key Players

Transit agencies; local, regional, and state governments; and private developers all have important roles in shaping the success of transit within communities. It is important for transit agencies to determine the appropriate points of engagement with stakeholders and the context in which transit agencies can increase the effectiveness of their participation in land use decision making. These key players, discussed in the following, will be discussed throughout this guidebook.

- Transit agencies are responsible for transit service, operations, and facilities. They can be independent public agencies; a division or department of a city, county, or regional agency; or a nonprofit community service agency. Transit agencies can also be nonprofit agencies that provide paratransit services.
- State government agencies, such as departments of transportation (DOTs), are generally responsible for the public connections leading to the transit agencies on state roads, such as state highways serving as main streets and for setting state policy related to the integration of land use and transit.
- Regional agencies, such as MPOs, are responsible for transportation and land use policy on a regional scale, typically incorporating several cities or counties.
- Local governments are responsible for community land use decisions and public infrastructure connections to transit, including sidewalks, bikeways, and streets within the context of a city or county, through zoning authority.
- Developers and property owners are responsible for development on land adjacent to transit and use land in ways that affect and are affected by transit service and transit facilities.

Preconditions for Success

The path to achieving transit-supportive outcomes can be complex. Five preconditions for success in linking transit and land use have been identified:

- A supportive transit agency board,
- A designated staff person with technical competency,
- A coordination process,
- A common understanding or language, and
- A transit-supportive community.

These preconditions are detailed in this chapter. Each precondition is presented as an adopted practice followed by additional insights. The degree to which a transit agency meets or implements each of the preconditions may ultimately determine its success in influencing land use decision making.

Supportive Transit Agency Board

The experience and influence of a transit agency board can be used as an asset to gain support from a wider range of key stakeholders in the land use decision making process. Key traits of this precondition are:

- The transit agency board knows the fundamentals of the transit–land use connection and understands the important role that the transit agency can have in shaping land use decisions to achieve transit-supportive land use outcomes;
- Through its actions and policies, the board has signaled its support for building a transit-supportive land use culture within the transit agency through some combination of policy, budget decisions, service design, advocacy, and partnerships; and
- When transit-supportive land use is elevated to the attention of the transit agency’s executive management and the governing board, transit agency staff will identify land use coordination with local government, developers, and other stakeholders as a priority.

There are a number of examples of governing boards showing their support for their transit agency’s involvement in land use. For example, in 2013 the Metropolitan Council in Greater Minneapolis–Saint Paul established and funded the Office of TOD within Metro Transit, thereby confirming its active involvement in TOD.²

However, many transit agencies perceive community development as unrelated to providing transportation services, do not appreciate the importance of transit-supportive land uses, and do not understand how and when to become involved in land use decisions. Others lack adequate resources to address issues related to land use. In some instances, transit agencies may feel their role is limited to providing a particular type of transit service. Additionally, the governing board

of a transit agency may recognize the benefits of land use and transit integration, but the board is pressed by the issues of operating a safe and cost-efficient transit system that responds to the near-term travel needs of the community.

For transit agencies seeking to foster a supportive governing board, it may be useful to think of the situation in terms of an evolution rather than a revolution. For example, an early step would be education and advocacy of why land use matters. In addition, a transit agency can build on a larger regional transit–land use conversation that is already underway. Over time, the transit agency can then shift the question from “should we be involved in land use?” to “what is the most appropriate role we should be playing?” Ultimately, this internal dialogue can lead to the transit governing board acting to expand its role in shaping land use by adopting a strategic plan to formally usher in change.

Designated Staff Person with Technical Competency

With a dedicated staff person knowledgeable in transit land use, the transit agency is better able to monitor land use issues, develop relationships with local governments, and serve as a developer’s point of contact; ultimately, the transit agency can speak with one voice on land use issues. A project-specific project manager within the transit agency increases the chances of successful project outcomes and coordination. Without a responsible staff person for coordination, it is difficult to follow up with land use/transit needs.

Key traits of this precondition are:

- The transit agency has a dedicated staff person with technical competency who works full or part time on transit and land use issues;
- The transit agency staff person is fluent in the language and art of the transit land use connection;
- Through training and experience, transit agency staff understand the perspective of their land use and development partners; and
- Transit agency staff understand when transit brings value, where the key decision-making points are for both developers and local governments (where they can have an impact), and when it is likely too late to make a meaningful difference in land use decisions.

Notably, the size of a transit agency does not necessarily indicate a predisposition for better coordination; however, having a dedicated and knowledgeable staff member to coordinate land use and transit increases the chances for successful outcomes. Nearly eight in 10 transit agencies surveyed (78 percent) in this research reported having at least one employee dedicated to some combination of TOD/coordinating land use/joint development; typically they had one to three.

Successful transit agency involvement in land use decision making requires significant internal decision making by the transit agency. Transit agencies that are interested in participating in land use decisions need to understand where and when key decisions are made. They must exhibit a willingness to negotiate (and in some cases contribute) and make a commitment to provide service in return for attainment of minimum density/demand levels. While distributing guidelines or density goals can help shape land use decisions, a willingness to contribute financially or lend transit agency staff time and services to a project can have a much more direct influence. The Pace Suburban Bus Service case study (Chapter 5) illustrates the value of technically competent staff dedicated to land use decisions as well as a voluntary, early design review process for development proposals.

Coordination Process

Overall, early communication provides the best outcomes and increases the chances of better project design. Both formal and informal processes of engaging transit in the decision-making process can be effective in fostering early communication. In instances where both the transit

agency and the local government reciprocate the value of participation, informal structures of coordination can be as worthwhile as formal structures. Key attributes of this precondition are:

- The transit agency has formed a network of partners to achieve better transit land use outcomes;
- Key local governments have seen the value of regularly coordinating with the transit agency in the development of plans, policies, strategies, and development approvals in order to better integrate transit and land use; and
- Internal coordination processes have been established (since land use touches many aspects of a transit agency) to enable the timely and consistent decision making required by developers and local governments.

Planners, transit agencies, and developers have different constituents, customs, worldviews, values and perceptions, timelines, and definitions of success. These differences can all be hurdles to effective communication and negotiations. For example, the surveys of developers conducted as part of the preparation of this guidebook show that developers consider incentives such as expedited approvals and fee waivers the most helpful tools to coordinate transit and land use. Conversely, transit agencies and local governments did not rate developer incentives as highly effective. In another example, transit agencies viewed transit agency comments on development proposals (e.g., subdivision, project permits, entitlements) as part of a formal development process to be highly effective, but local governments and developers did not share this view.

Land use and transit agency relationships can be structured in numerous ways. Three examples are:

- **San Diego, CA.** The survey results showed that San Diego has a formal process for coordination that typically includes a mandate from an elected body or official, which requires municipal agencies to coordinate on a particular issue. San Diego provides an example of an institutionalized transit land use coordination process. The San Diego Metropolitan Transit System temporarily assigned a staff member to the San Diego Planning Department to better coordinate land use and transit projects.
- **Washington, D.C.** The Washington Metropolitan Area Transit Authority (WMATA) adopted a key performance indicator (KPI) to measure progress in improving regional mobility and connecting communities. The measure annually tracks the amount of new household growth located within the Metro’s “transit catchment area” (i.e., a half-mile radius for rail transit stops and a one-quarter-mile radius for bus transit stops). The KPI provides an opportunity for enhanced collaboration between jurisdictions and Metro, with the goal being better integration between land use development and transit service improvements within the catchment area.³
- **Portland, OR.** As shown in the Portland Pearl District case study (Chapter 5) and through the results of the survey research, an effective relationship between transit agencies and local governments can be informal. Some cities, like Sandy City, UT, and St. Paul, MN, rely on an informal process of simply picking up the phone, emailing, requesting meetings, and coordinating when necessary, based on a history of good working relationships.

Effective coordination relies on the success of prior working relationships and communication. The type and mode of project (bus or fixed guideway) and the stage of planning (long-range planning, transit-oriented development, station-area planning, or project-based development) influence the level and intensity of land use and transit coordination.

Common Understanding

Each stakeholder involved in transportation and land use–related planning and decision making has its own terminology and priorities that other stakeholders (transit agencies, land use planners, transportation planners, local governments, financiers, and developers) should strive

to understand. Part of being able to collaborate successfully is educating the different stakeholders about the requirements others are facing and arriving at a common definition of the concept, agreeing on the intent of the concept, and helping each other understand how land use planning and development decisions are made. Key characteristics of this precondition are:

- The various parties use common terms that the other parties can understand. For transit agencies, this means being able to speak and listen to land use and developer terminology.
- Transit agency staff realize that local governments, transit agencies, and developers each have different priorities.
- Transit agency staff seek to learn the basic terminology, timelines, priorities, and motivations of their local government and development partners engaged in land use decisions.

The definition of a word can vary depending on the perspective and knowledge of the person using it and the context in which it is used. As a result, the same word can take on many different meanings to people who represent different perspectives, such as a city planner, a transit service operator, a developer, or a citizen. For example, the term “land use” can have a broad definition or a limited definition, depending on context and perspective. In the broadest sense, “land use” is the use of the land. A more limited definition could equate land use with TOD, a specific zoning classification, a pattern of development, or the specific business on a piece of property.

The transit and land use language used at each scale of planning can be vastly different: the same word can have two different definitions depending on the scale in which it is applied. The challenge is that if people assume there is only one definition, they may not understand the concept as it is applied at a different scale. As shown in Table 2-1, the concepts of connectivity and accessibility make up a good example of how terminology can vary depending on the context.

TOD is another term often defined differently at the site, subarea/district, and corridor levels. There is even a conflict in what TOD stands for: transit-oriented development or transit-oriented design. The point is that TOD is a complex and not necessarily well-defined term that conjures different visions and examples depending on perspective. Some people think in terms of a project; others think in terms of a district along a corridor or in a center. Some consider TOD to be development that is served by transit, whereas others would consider development served by transit TOD only if it were oriented to, connected to, and integrated with transit.

Educational resources can enhance technical competency in transit land use issues within the transit agency as well as land use and development partners. Early and frequent communications between key stakeholders at various levels of planning can help avoid the miscommunication

Table 2-1. Connectivity and accessibility terminology at different scales of planning.

Scale of Planning	Connectivity and Accessibility Terminology Example
Site level	When transit agencies work with local government and developers to approve a land use development application, the discussion of connectivity and accessibility is one of pedestrian access to a transit stop from the front door of a business without having to cross a parking lot, street, or other barrier.
Subarea level	Connectivity and accessibility are addressed as elements of the urban design—being able to safely walk and bike from one destination to another.
Corridor level	The discussion shifts from being able to access specific destinations to having all services provided within a particular distance, such as a 20-minute walk. At this scale, the focus is less on site-specific access and more on accessibility to land use types.
Regional/ municipal level	At the larger city or regional scale, connectivity focuses more on a well-connected network of streets to provide convenient automobile, transit, freight, pedestrian, and bicycle access. The focus is on policy and the big-picture transportation connections of the community.

surrounding specific industry terms. The Pace Suburban Bus Service case study (Chapter 5) illustrates the role that an interactive, strategic guidebook that speaks to multiple stakeholders in the site-development approval process can play in creating effective interactions.

Transit-Supportive Community

The key attributes of a transit-supportive community are:

- The transit agency provides quality transit service, and local government is a willing partner and advocate for transit;
- Local government is sold on the benefits of transit;
- Experience, derived benefits, and community perceptions have created an environment where local government, developers, and civic leaders see and act on a collective value in connecting transit and land use; and
- Local governments will work with the private sector to overcome timing and cost-related issues.

As shown in the Portland Pearl District case study, by encouraging a transit-supportive community, the transit agency can be the beneficiary of its partners taking many of the steps necessary to link transit and land use.

Internal (transit agency and local government) and external (developers and community members) perceptions about the value of the transit system and connecting land use to transit have an impact on coordination. Therefore, sustained and continuous outreach and education are paramount to success. This is illustrated by the NJ TRANSIT case study regarding the Transit-Friendly Planning and Land Use Development program (Chapter 5).

Transit agencies can promote education on the importance of transit-supportive land uses by partnering with MPOs. For long-range land use and transportation planning, multiple jurisdictions have an impact on land use coordination, which increases the difficulty of coordination. In addition to an active MPO, a nonprofit partner can be helpful in fostering a transit-supportive community in these situations by helping to bridge any knowledge gap. In fact, as shown in the Cleveland HealthLine case study (Chapter 5), a nonprofit organization such as the Cleveland Foundation can be catalytic at the corridor and precinct scale as well.

Community support for linking transit and land use has resulted in adoption of new transit-friendly plans and zoning in communities such as Denver; Seattle; Boulder; Washington, D.C.; Grand Rapids; and Charlotte. Local governments in transit-supportive communities may even be willing to invest financially in producing better development outcomes. For example, even if a transit agency and local government seek to actively plan for and support TOD, there is a considerable cost for TOD relative to conventional development. In limited instances, the local government can provide subsidies to help a TOD developer generate profit levels that make it a more worthwhile investment.

Additional tools and tips for building a transit-supportive community are provided in Chapter 4.



CHAPTER 3

The Self-Evaluation Process

This chapter provides transit agencies with a self-evaluation process that can be used to help them be more effectively involved with transit, land use planning, and development decision-making processes. The self-evaluation process enables a transit agency to assess whether it is well positioned or has done the homework to proceed with trying to shape a particular land use or development decision. The process is designed to allow a transit agency to:

- Assess the agency's potential effectiveness at each geographic scale of planning;
- Identify and develop a strategy to strengthen its effectiveness in affecting land use over the long term;
- Identify where the transit agency may need to improve its partnerships, expertise, practices, or service to increase the impact and effectiveness of transit's voice in influencing land use decisions; and
- Determine whether enough groundwork has been done to warrant a transit agency's further involvement in a particular decision.

Beyond individual land use decisions, policy makers and transit planners at a transit agency are encouraged to step back and use the process as a means to strategically audit the transit agency's readiness to effectively engage in shaping land use decisions and identify areas where it can take action to improve its effectiveness.

In addition, transit agencies may find it beneficial to invite regional and local government partners to jointly conduct a 360-degree audit of the transit agency's potential effectiveness. To some extent, the individual questions in the self-evaluation may vary depending on each stakeholder's perspective. In turn, the 360-degree audit presents an opportunity to strengthen partnerships. For example, the self-evaluation process could be used in a charrette-style workshop led by a facilitator working through the self-evaluation questions together with the regional and local government partners. This approach might uncover areas of shared strengths and weaknesses and highlight areas that were previously thought resolved but where tensions and inefficiencies remain.

Using the Self-Evaluation Process

Determine the Specific Scale of the Decision

It is important to remember that land use decision making occurs at multiple geographic scales where transit's voice needs to be heard. For this reason, the self-evaluation process is organized in a series of steps for the following geographic scales of land use decision making:

- Regional-scale decisions (such as those involving a regional transportation plan);
- Corridor-scale decisions (such as those involving a high-capacity transit investment study, a roadway access management study, and an arterial road-calming study);

- Municipal/county-scale decisions (such as for developing a comprehensive plan or for revisions to policies and regulations affecting land use); and
- Site-scale decisions (such as for a site development application).

Additional detail on the typical land use decisions and roles of transit agencies at each of these scales is provided in Chapter 7.

Users should follow the steps in the self-evaluation process for the particular geographic scale pertaining to the land use decision in which they are interested. The user does not need to use the self-evaluation for all four scales.

The self-evaluation process enables transit agencies to consider the perspectives of the major participants in typical transit, land use, and development decisions at the four geographic scales. The role of the stakeholders differs at each scale, as the examples in the following bullet points illustrate. As a result, there will likely be a different set of stakeholders depending on the scale.

- A transit agency is typically involved at all four scales.
- Developers are likely to be most active at the site scale. They may be involved at a corridor or municipal/county level if a comprehensive plan update or rezoning could affect a property they are seeking to develop.
- Municipal and county governments are active at all four scales.
- MPOs, regional councils, and state governments are typically involved at the broader, regional scale and the corridor scale (but may provide technical assistance or consistency reviews at other scales).
- Regional-scale decisions will likely involve multiple municipalities and counties.
- Depending on a transit corridor's length, corridor-scale land use decisions may occur within one municipality or county or may involve multiple municipalities and counties.

The questions in the self-evaluation reflect the typical stakeholders at each geographic scale.

Follow the Steps for Each Geographic Scale

The self-evaluation process is organized in a series of individual steps for each geographic scale. The steps are designed to help transit agencies understand key points in land use decision making and to assess the likelihood of achieving transit-supportive decisions. There are three to five steps, depending on the scale at which the decision is occurring.

Depending on the scale, each step involves different questions for the transit agency to consider. However, as shown in Figure 3-1, there is a common set of preconditions for success that should be in place regardless of the scale of the land use and development decision faced by a transit agency. Accordingly, Step 1 for all scales uses a common set of questions that are presented prior to the breakout of the steps for the individual scales.

The self-evaluation process is designed to enable a transit agency to consider a specific opportunity to address a land use or development decision. As a result, the transit agency will find that there is a similarity to the questions in each step among the various scales. Once the transit agency decides on the scale of the decision, it can follow the steps for that particular scale. A transit agency does not need to use the steps for all four geographic scales for a particular land use or development decision.

The stepwise design of the process provides a score for each individual step. The score serves as a guide to help a transit agency evaluate, if it proceeds further, whether the critical pieces necessary to achieve a transit-supportive land use decision are in place. The scoring is based on “yes” or “no” answers to a series of questions. The process is arranged so that the answers in

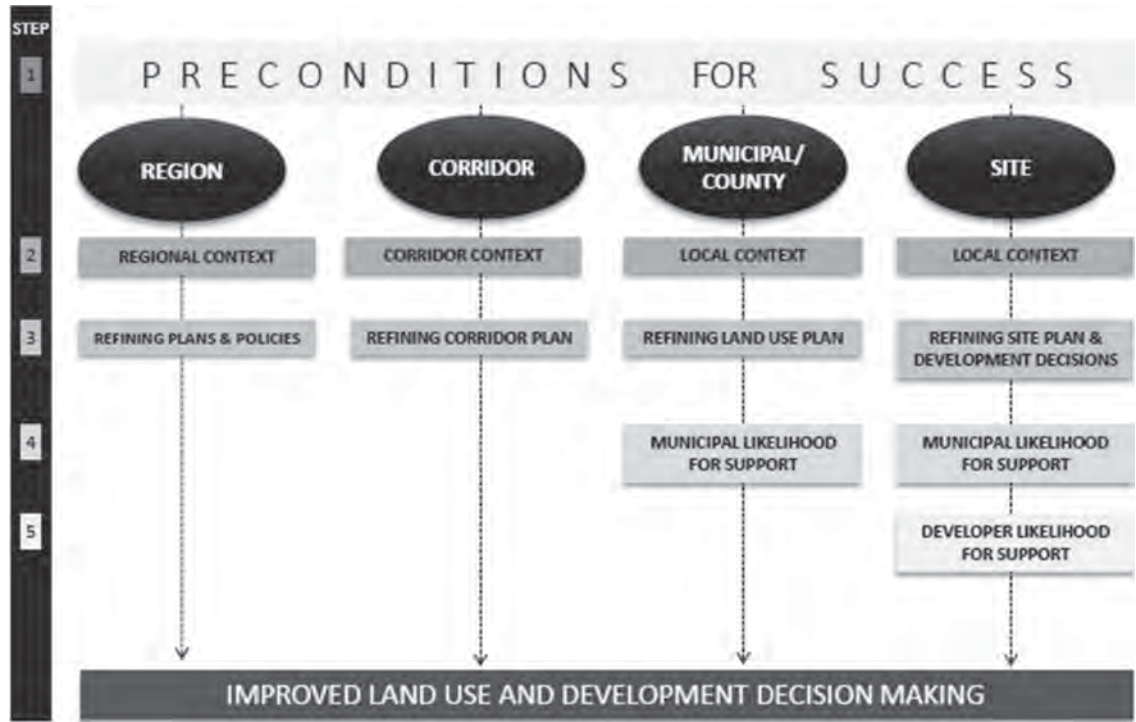


Figure 3-1. Transit agency self-evaluation process.

the far left column of the tables indicate a stronger likelihood of realizing a transit-supportive land use decision; the far right column represents a lower likelihood of a transit-supportive decision.

The transit agency can use its score in two ways. First, the score provides an indication of whether the transit agency is well positioned to proceed with trying to shape a particular decision. Second, questions with answers in the right column highlight areas where the transit agency might consider developing a strategy to address an issue and strengthen its effectiveness in affecting land use over the long term.

The scores for each step are not cumulative. However, if the transit agency’s scores are low in more than one step for a particular scale of decision making, it is likely that the transit agency would benefit from a longer-term, comprehensive strategy to improve its effectiveness in land use decision making. This is especially important if a transit agency finds that it has a low score for Step 1 – Preconditions for Success. A series of strategies and tips are provided for use in Chapter 4 if a transit agency finds it does not have the precondition of a transit-supportive community.

Step 1 for All Scales – Preconditions for Success

As described in Chapter 2, five preconditions for transit agency success in linking transit and land use have been identified:

- A supportive transit agency board,
- A designated staff person with technical competency,
- A coordination process,
- A common language, and
- A transit-supportive community.

Table 3-1. All scales Step 1: transit agency self-diagnosis/preconditions for success.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
YES	Does the transit agency board/general manager see the rationale for involving the agency in shaping land use decisions and provide support as appropriate to achieve transit-supportive land use results?	NO
YES	Does the transit agency have a seat at the table as a voting member or have equivalent representation on the MPO's policy board?	NO
YES	Has the transit agency built a network of willing partners to achieve better transit/land use decisions?	NO
YES	Does the transit agency have staff reasonably fluent in the language of the transit land use decisions at each scale of land use decision making?	NO
YES	Does the transit agency have an adopted TOD policy, a TOD guidebook, or a dedicated staff person working full or part time on transit and land use issues?	NO
TOTAL SCORE (1 point for each answer circled in left column)		

The degree to which a transit agency meets each of the conditions in Table 3-1 may ultimately determine its success in influencing land use decision making. By answering the questions in Step 1 in Table 3-1, the transit agency can perform a self-diagnosis regarding the preconditions for success. If the agency finds that it is lacking the necessary preconditions for success at any scale, it can refer to Chapter 4 to learn more about the tools for improving its effectiveness. Chapter 5 provides real-world examples of these tools in action through case studies.

A score of three or more in the left column of Table 3-1 indicates that the transit agency has the foundation in place to influence land use and development decisions. Three or more items circled in the right column indicates that the transit agency has not yet cultivated the necessary preconditions for success to be effectively participating in land use and development decisions. Answers in the right column highlight areas where the transit agency might consider developing a plan to strengthen its effectiveness in affecting land use using the process presented in Chapter 4 and Chapter 5. Chapter 6 provides more information regarding the required role of a transit agency on an MPO policy board.

Regional-Scale Planning

The user may use this section when interested in more effective participation in regional-scale decisions. This version of the self-evaluation process is targeted at regional land use planning decisions that affect transit such as developing a regional transportation plan (RTP), regional funding strategies, climate plans, and regional land use blueprint plans or similar scenario-based integrated land use and transportation plans.

Self-Assessment: Regional Scale

If your transit agency would like to affect land use decisions at the regional scale, answer the series of questions for Steps 1 through 3.

- Step 1: transit agency self-diagnosis/preconditions for success (Table 3-1)
- Step 2: regional context for linking transit and land use (Table 3-2)
- Step 3: refining plans and policies to be transit supportive (Table 3-3)

A score of three or more in the left column of Table 3-2 indicates that the agency has a strong foundation in place to help shape land use decisions. Two or more items circled in the right column indicates that the transit agency has further opportunity to use this guidebook's process to shape land use and development decisions. Answers in the right column highlight areas where the transit agency might consider developing a plan to strengthen its effectiveness.

Table 3-2. Regional scale Step 2: regional context for linking transit and land use.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
YES	Is there already some positive discussion (a buzz) at the policy or community level about the potential benefits of linking transit and land use in your region?	NO
YES	Has the MPO or regional planning agency adopted plans, policies, or regulations that seek to better link transit and land use within your region?	NO
YES	Does the quality of transit service in your financially constrained regional transportation plan provide a level of service sufficient to warrant linking transit and land use in many of the region's major centers and corridors?	NO
NO	Are there major technical, policy, or political barriers to successfully achieving better transit land use integration in regional plans?	YES
TOTAL SCORE (1 point for each answer circled in left column)		

Table 3-3. Regional scale Step 3: refining plans and policies to be transit supportive.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
YES	Does the transit agency have a seat at the table at the appropriate technical venues where its voice can be heard and it can advocate transit-supportive principles as part of plans, policy, and funding decisions?	NO
YES	Has the transit agency or others at the regional planning table articulated specific policies, strategies, funding allocations, or investment projects that capitalize on better linking transit and land use?	NO
YES	Can the necessary resources be mobilized and a case for action be completed within a time frame that is useful for influencing land use decision making?	NO
YES	Is the transit agency willing and able to act as the lead in seeking the outcome or has it contacted another organization that will?	NO
TOTAL SCORE (1 point for each answer circled in left column)		

If a transit agency obtains a score of three or more in the left column of Table 3-3, it is well positioned to affect the land use decision. Two or more items circled in the right column indicates that the transit agency still faces certain challenges in seeking to shape this regional decision. The transit agency can use this as a lesson learned and seek to work internally to build support for transit-supportive land use and development decisions and to increase its understanding of how to make the case to regional decision makers. Additional strategies for effectively partnering with MPOs can be found in Table 6-2.

Corridor-Scale Planning

This section addresses more effective participation in corridor-scale transportation and land use decision making. The corridor-scale tool is targeted at connections among transit, land use planning, and development decision-making processes such as developing a high-capacity transit project.

Self-Assessment: Corridor Scale

If you are considering influencing land use decisions at the scale of a corridor, answer the series of questions for Steps 1 through 3.

- Step 1: transit agency self-diagnosis/preconditions for success (Table 3-1)
- Step 2: corridor context for linking transit and land use (Table 3-4)
- Step 3: refining the corridor plan to support transit-friendly land use (Table 3-5)

Table 3-4. Corridor scale Step 2: corridor context for linking transit and land use.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
YES	Is there already positive discussion (a buzz) at the policy or community level about the potential benefits of linking transit and land use in your community as part of a corridor investment?	NO
YES	Are there examples of the project sponsor or other agencies undertaking corridor projects that proactively consider transit and land use within your region?	NO
YES	Is the quality of existing or planned transit service within a safe 5-minute walk of most of the plan area sufficient to warrant linking transit and land use?	NO
NO	Are there major obstacles/barriers to successfully achieving a transit-supportive decision?	YES
TOTAL SCORE (1 point for each answer circled in left column)		

Table 3-5. Corridor scale Step 3: refining the corridor plan to support transit-friendly land use.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
YES	Does the transit agency have a seat at the table where its voice can be heard and it can advocate the principles of Complete Streets/transit-supportive design in the design and related planning for the corridor project?	NO
YES	Has the transit agency or a partner defined transit-supportive land use outcomes consistent with the stated objectives of the corridor project?	NO
YES	Can the necessary support be mobilized and a case for action be completed within the necessary time frame to influence decision making?	NO
YES	Does the community have a track record of transit-supportive plans, policies, or zoning codes here or elsewhere?	NO
YES	Is your transit agency willing and able to act as the lead in seeking the outcome or has it contacted another organization that will?	NO
TOTAL SCORE (1 point for each answer circled in left column)		

A score of three or more in the left column of Table 3-4 indicates that the transit agency has the foundation in place to influence land use and development decisions. Two or more items circled in the right column indicates that the transit agency has not yet cultivated the necessary preconditions for success to be effectively participating in land use and development decisions. Answers in the right column highlight areas where the transit agency might consider developing a plan to strengthen its effectiveness in affecting land use.

A score of four or more in the left column of Table 3-5 indicates that the transit agency has built the necessary framework to support transit-friendly land use along the corridor. The transit agency is able to work internally to build support for transit-supportive land use decisions and to increase its understanding of how to influence corridor-level land use planning and development projects. Three or more items circled in the right column indicates that the transit agency has further to go in gaining support for a transit-supportive land use decision.

Municipal/County-Scale Planning

Transit agencies may use this section when interested in more effective participation in regional-scale decisions. This part of the process is targeted toward municipal-wide decisions regarding connections among transit, land use planning, and development decision-making processes such as developing a comprehensive plan or revisions to policies and regulations affecting land use.

Self-Assessment: Municipal/County Scale

If your transit agency is considering influencing connections among transit, land use planning, and development decision-making processes at the scale of a municipality or county, answer the series of questions for Steps 1 through 4.

- Step 1: transit agency self-diagnosis/preconditions for success (Table 3-1)
- Step 2: local context for linking transit and land use (Table 3-6)
- Step 3: refining land use plans to be transit supportive (Table 3-7)
- Step 4: municipality/county likelihood to support a transit-friendly outcome (Table 3-8)

A score of three or more in the left column of Table 3-6 indicates that the transit agency has a solid foundation in place to help shape transit and land use decisions. Two or more items circled in the right column indicates that the transit agency may still find challenges ahead while seeking

Table 3-6. Step 2: local context for linking transit and land use.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
YES	Is there already some positive discussion (a buzz) at the policy or community level about the potential benefits of linking transit and land use in your community?	NO
YES	Are there examples of municipalities adopting transit-supportive plans, policies, or zoning codes within your region?	NO
YES	Is the frequency of the transit service within a safe 5-minute or ¼-mile walk of most of the plan area sufficient to warrant linking transit and land use?	NO
NO	Are there major obstacles/barriers to successfully achieving a transit-supportive decision?	YES
TOTAL SCORE (1 point for each answer circled in left column)		

Table 3-7. Step 3: refining land use plans to be transit supportive.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
YES	Does the transit agency have a seat at the table where its voice can be heard and it can advocate transit-supportive principles as part of the plan, policy, or zoning?	NO
YES	Are the transit agency's desired outcomes consistent with the stated objectives for the land use plan, policy, or zoning?	NO
YES	Can the necessary support be mobilized and a case for action be completed within the necessary time frame to influence decision making?	NO
YES	Does the community have a track record of transit-supportive plans, policies, or codes here or elsewhere?	NO
YES	Is your transit agency willing and able to act as the lead in seeking the outcome or has it contacted another organization that will?	NO
TOTAL SCORE (1 point for each answer circled in left column)		

Table 3-8. Step 4: municipality/county likelihood to support a transit-friendly outcome.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
YES	Is there support from neighborhood and community groups for a transit-friendly outcome?	NO
NO	Is there vocal opposition from members of the development community to transit-friendly provisions of the proposal?	YES
YES	Has a staff recommendation for a transit-friendly plan, policy, or code been prepared, and is it in circulation?	NO
YES	Is there sufficient support from the community, planning commission, and city council to approve a transit-friendly outcome?	NO
TOTAL SCORE (1 point for each answer circled in left column)		

to influence land use and development decisions. Answers in the right column highlight areas where the transit agency might consider developing strategies to strengthen its effectiveness.

A score of four or more in the left column of Table 3-7 indicates that the transit agency has a solid foundation in place to help influence site planning decisions. If the agency achieves a score of between zero and three in the left column, it should work internally to build support for transit-supportive land use decisions and increase its understanding of how municipal and county governments view transit and land use integration.

A score of four in the left column of Table 3-8 indicates that the transit agency has a solid foundation in place to help influence site planning decisions. A score of one to three in the left column indicates that the transit agency should gain additional support for a transit-supportive decision. The transit agency can use this as a lesson learned and seek to work with its partners to build greater support and understanding for transit-supportive land use decisions.

Site-Scale Planning

Transit agencies may use this section when interested in more effective participation in site-scale decisions. This part of the self-evaluation process is targeted at site-level real estate development decisions such as a proposal to develop an apartment building, an office complex, or a retail center. It applies when:

- A development team is conducting its initial due diligence on the feasibility of the development project, or
- A development proposal is under review by a municipality or county.

Agencies seeking guidance on transit-supportive site design principles are encouraged to refer examples such as the Pace Suburban Bus Service's Transit Supportive Guidelines (<http://pacebus.com/guidelines/index.asp>). Examples of effective strategic guidebooks are provided in Chapter 4.

Self-Assessment: Site Scale

If you are considering influencing land use and development decisions at the scale of a development site, answer the series of questions for Steps 1 through 5.

- Step 1: transit agency self-diagnosis/preconditions for success (Table 3-1)
- Step 2: local context for linking transit and land use (Table 3-9)
- Step 3: refining land use plans to be transit supportive (Table 3-10)
- Step 4: municipality likelihood to support a transit-friendly outcome (Table 3-11)
- Step 5: developer likelihood to support a transit-friendly outcome (Table 3-12)

A score of five or more in the left column of Table 3-9 indicates that the transit agency has a strong foundation in place to help shape development decisions for this site. A score of less than five in the left column indicates that the transit agency could consider developing a plan to strengthen its effectiveness for this site.

A score of four or more in the left column of Table 3-10 indicates that the transit agency has a strong foundation in place to help shape development decisions for this site. However, a "yes" answer to the first question might cause the transit agency to consider whether further involvement is warranted since the developer's investment of time and resources may make changing course highly problematic. A score of less than four in the left column indicates that the transit agency has further to go in shaping a support structure or a modification to the developer's development proposal in order to realize a more transit-supportive decision. Consequently, the

Table 3-9. Site scale Step 2: local context for linking transit and development.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
YES	Is there already some positive discussion (a buzz) at the policy or community level about the potential benefits of linking transit and development in your community?	NO
YES	Are community groups such as neighborhood associations likely to be supportive of making the development proposal more transit supportive?	NO
YES	Is the frequency of the transit service within a safe 5-minute walk of most of the development site sufficient to warrant linking transit and land use?	NO
YES	Where service is not currently sufficient to meet the service needs of the development proposal, do the transit agency's service standards indicate that improving service within the area in question is warranted?	NO
YES	Is there a mechanism in place at the municipality to flag relevant development proposals and alert the transit agency in a timeframe where it has the opportunity to affect land use decision making?	NO
YES	Are there successful development projects within a few miles with transit-supportive elements?	NO
NO	Are there major obstacles/barriers to successfully achieving a transit-supportive decision?	YES
YES	Would the developer's proposal benefit from having support from the transit agency?	NO
TOTAL SCORE (1 point for each answer circled in left column)		

Table 3-10. Step 3: refining transit-supportive land use and development decisions.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
NO	Has the development proposal progressed well into the development stage, typically beyond a point where the developer is likely to be open to changes in the project?	YES
YES	Has the transit agency defined specific changes to the developer's proposal that are generally consistent with the developer's needs and are likely to result in a transit-supportive, financially successful development project?	NO
YES	Is the transit agency's desired outcome consistent with existing land use plans/zoning for the site?	NO
YES	Can the necessary support be mobilized and a case for action be completed within the necessary time frame to influence decision making by the developer or municipality?	NO
YES	Land use decisions at this scale often get politicized. Is there executive-level support in your transit agency for achieving your desired outcome? And is your agency willing and able to act as the lead in seeking the outcome or has it contacted another organization that will?	NO
TOTAL SCORE (1 point for each answer circled in left column)		

Table 3-11. Step 4: municipality/county likelihood to support a transit-friendly outcome.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
YES	Does the developer's proposal require discretionary action by the municipality (e.g., a variance, zone change, conditional use, waivers, funding for infrastructure, tax breaks)?	NO
NO	Is the developer's proposal an allowable use under existing local plans and zoning?	YES
NO	Is the developer's proposal generally consistent with current land use and zoning plans (e.g., comprehensive plan, neighborhood plan, station-area plan)?	YES
NO	Is there political support from the municipality for the developer's development proposal?	YES
YES	Does the municipality/county have a track record of encouraging/requiring transit-supportive outcomes here or elsewhere?	NO
YES	Is the appropriate municipality/county (staff, planning commission, city council) likely to be supportive of the transit agency's desired outcome?	NO
TOTAL SCORE (1 point for each answer circled in left column)		

Table 3-12. Step 5: developer likelihood to support a transit-friendly outcome.

CIRCLE ONE RESPONSE FOR EACH QUESTION		
NO	Has the developer received the necessary development approvals from the municipality for the project?	YES
NO	Has the developer substantially completed predevelopment tasks (feasibility study, preliminary design, decision to proceed)?	YES
NO	Has the developer substantially completed development tasks (entitlement applications, final project designs, financing/loan)?	YES
NO	Are other institutions (e.g., lenders, insurance companies, environmental advocacy organizations) likely supportive of the developer's proposal?	YES
TOTAL SCORE (1 point for each answer circled in left column)		

transit agency may face challenges in seeking to shape this site-level land use decision. The transit agency can use this as a lesson learned and seek to build support for transit-supportive land use decisions and to increase its understanding of how developers see projects.

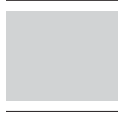
Step 4 in Table 3-11 focuses on decision points where the transit agency may have some leverage for achieving a more transit-supportive decision. A score of five or more in the left column is the most encouraging for this step. A score of less than five in the left column indicates that the transit agency faces challenges in seeking to shape land use decisions for this site. The transit agency can use answers in the right column as lessons learned and seek to build its internal land use capability and partnerships to increase its effectiveness in shaping land use decisions.

For Step 5 in Table 3-12, the total score is less important than the individual questions. The questions reveal where the developer is in its due diligence and development process. In general, the earlier the developer is in the process, the easier it is to influence a development proposal. Once municipality/county approval is granted (question 1 in Table 3-12) and the development phase is completed (question 3 in Table 3-12), changing a development proposal to get a transit-supportive outcome will be quite difficult. Likewise, a “no” answer for the first two questions could mean the transit agency’s timing is appropriate for seeking a transit-supportive outcome.

Next Steps

The self-evaluation process can help transit agencies determine their best course of action at the specific geographic scale of the land use decision. On completing the assessment, transit agencies will possess a better understanding of the opportunities and challenges with which they may be presented. The next course of action is to identify constructive actions to confront the challenges. Transit agencies can use the process and the case studies presented in Chapter 4 and Chapter 5, respectively, to help outline a course of action. Chapter 6 can assist in developing a better understanding of potential planning partners, and Chapter 7 discusses the planning processes at each geographic scale.

In addition, a transit agency can periodically repeat the self-evaluation to gauge its progress based on the constructive activities put in place. The frequency of these updates will vary with the geographic scale of the land use decisions.



CHAPTER 4

Building a Transit-Supportive Community

As discussed throughout this guidebook, transit agencies can proactively engage decision makers and other stakeholders in discussions about transit and land use. This chapter provides an overview of a range of tools and tips for enhancing communication and coordination, including:

- Partnering,
- Using strategic guidebooks, and
- Articulating the costs and benefits.

This guidebook emphasizes the importance of fostering positive working relationships among key partners. This is particularly true for transit agencies seeking to influence land use decisions at any geographic scale. On their own, transit agencies lack the jurisdictional authority to ensure that land use decisions are transit supportive. As a result, it is paramount that transit agencies collaborate with a broad range of major stakeholders and the general public.

Planners, transit agencies, and developers have different constituents, customs, worldviews, values, perceptions, timelines, and definitions of success. These differences can all be blockers to effective negotiations. For example, the research survey indicated that developers rated incentives such as expedited approvals and fee waivers as the most helpful tool to coordinate transit and land use. Transit agencies and local governments did not rate developer incentives as highly effective. In another example, transit agencies viewed transit agency comments on development proposals (e.g., subdivision, project permits, entitlements) as part of a formal development process to be highly effective, but local governments and developers did not share this view.

Early and continuous discussions and collaboration provide the best outcomes and increase the chances of better project design. Both formal and informal processes of engaging transit in the decision-making process can be effective in fostering collaboration. Informal structures of coordination can be as worthwhile as formal structures of coordination if both the transit agency and the local government value the participation and comments provided by the other.

Partnering

There are multiple ways in which a transit agency can forge an understanding with other partners that lead to an acceptable outcome for all parties. The discussion that follows highlights how working groups, workshops, educational programs, and monitoring and referrals can be effective partnering tools for a transit agency.

The Oregon Transportation and Growth Management Program offers several useful tips for building a transit-supportive community in *Transit in Small Cities: A Primer for Planning, Siting,*

and *Designing Transit Facilities in Oregon*. Some tips from the primer are summarized in the following:

- **Go to meetings where your partners are.** Often, development projects are mentioned at chamber of commerce or downtown association meetings before a developer starts the application review process. By attending these meetings, you will learn about development projects early and can build relationships.
- **Make sure the developer is on board.** Demonstrating how transit benefits a private development may help avoid a potential conflict over transit access. Since many bus stops are located on private property, property owners can ask that stops be relocated. Having written proof that an owner agreed to a stop can minimize future misunderstandings, so always get it in writing.
- **Don't let transit be an afterthought.** Educate local and county governments at the staff and elected level to help them recognize that transit is a vital component of any development.
- **Share data on ridership benefits.** Tie it to community livability and economic development. Transit agencies may fully understand the benefits of transit, but many local decision makers may need more information.⁴

Working Groups

The use of working groups is among the most effective practices for creating long-term partnerships with regional and local government partners as well as developers. Over time, formal meetings and working groups can build trust between municipal and transit agency staff so that collaboration can occur on an ad hoc basis. For example, Sandy City, UT, and the Utah Transit Authority have cultivated prior collaborations on joint development and a downtown circulator into an informal relationship. Through regular communication, both parties have come to understand the needs and interests of the other. For example, when the Utah Transit Authority releases a request for proposal for one of its parcels, it solicits projects that match the vision of Sandy City and its residents.

Regardless of the geographic scale, honesty and transparency matter above all else in working groups. For example, when a developer shares a pro forma with municipal staff, the municipality will understand the developer's needs, and the developer may be more likely to secure the financial incentives that the development needs to proceed. Developers can also help set expectations for municipal staff regarding the level and character of retail that an infill site or transit-served area could support.

Partnerships help ensure that relevant stakeholders are given an opportunity to identify key issues in the planning process. *Transit in Small Cities* offers several useful tips for forging partnerships:

- Identify partners in key departments and agencies. Maintain a reference guide for those with whom you need to work on a regular basis.
- Communicate with your land use and transportation partners, whether through formal, scheduled meetings, informal conversations, or both. Communicate frequently enough to build a strong relationship—one where either party is comfortable enough to pick up the phone and have a candid conversation about land use and transit issues.
- Develop bus stop location criteria and agreements for private development. Recommend that local governments include these provisions in their zoning codes.
- Engage in project development review at the earliest possible stage, such as at the pre-proposal land use conference, which is often held with city or county planning staff.
- Establish a citizen committee to focus on pedestrian safety, connections to transit facilities, and other relevant topics.⁵

Workshops and Educational Programs

An education and outreach strategy can be developed in order for partners/stakeholders to fulfill their responsibilities in making transit-supportive land uses a part of the community fabric. Educating partners and the public is often a prerequisite to forming a transit-supportive community. Effective practices to increase the understanding of transit-supportive land uses include:

- Building strong relationships with partners based on trust to enable candid conversations about land use and transit issues.
- Engaging land use agencies, the community, and developers early in project development reviews.
- Holding workshops to discuss pedestrian safety, land use mix, and other issues with local jurisdictions, nonprofit organizations, developers, and the public.
- Highlighting the benefits of transit-supportive land uses, such as economic development and livability, in order to engage partners' particular interests.
- Holding a developer forum to educate developers about the benefits of TOD and discuss strategies to overcome perceived challenges.
- Inviting professionals and groups (such as the Urban Land Institute) with familiarity in implementing TOD to speak to partners and the public about their experiences. Topics can include the fundamentals, a specific issue that local governments or developers are struggling with, or lessons learned from a recent development process.
- Preparing a guidebook for local governments and transit agencies to illustrate the characteristics of transit-supportive development with developers.
- Developing design guidelines or model ordinances for transit-supportive/transit-oriented development that can be used by local governments as a basis for discussion with policy makers.

Following are examples of educational programs:

- The Southern California Association of Governments sponsors Toolbox Tuesdays. This training program provides instruction on computer-based tools and education in planning issues such as TOD.
- Portland Metro sponsors the Get Centered! program to increase the knowledge of business and property owners, nonprofit groups, and local government staff for making investments along transit lines and in downtown areas and centers. The program includes local agencies sharing their stories, national experts sharing the latest research and best practices, and field trips to other best-practice communities.
- In the spring of 2013, the South Florida Regional Transportation Authority (SFRTA) sponsored an interactive forum with the Urban Land Institute of Southeast Florida/Caribbean to discuss the development opportunities on the proposed Tri-Rail Coastal Link, an 85-mile commuter-rail corridor that connects 28 communities in eastern Miami-Dade, Broward, and Palm Beach counties. Approximately 235 developers, city officials, consultants, and other stakeholders attended the forum. The purpose of the forum was to share preliminary city plans for the areas around the proposed station sites and to engage developers in a discussion of what it would take to make the proposed development happen. Prior to the forum, SFRTA produced a document that summarized the city plans for each of the 29 station areas, including a market forecast and strengths and challenges for each station area.⁶

Monitoring and Referrals

As stated previously, transit agencies have the best opportunity to engage local land use planners and developers when zoning reviews or amendments are up for discussion. As a low-cost approach to seek out opportunities for land use planning involvement, transit agencies can

monitor their geographic area's land use and zoning agencies to identify when any rezoning or land use changes may affect station areas. Alternatively, some transit agencies have built strong relationships with their local land use agencies and are referred to during the decision-making process when a land use decision will directly affect transit. This approach is best used for fixed assets, such as stations, and can be less helpful when trying to identify land use changes that may affect bus lines.

Since transit agencies may receive multiple referrals, they have introduced methods of prioritization to monitor which land use changes that affect many transit types will be most worth the investment of their limited time and resources. Project prioritization criteria will vary from agency to agency based on specific needs and resources. For example, coordination of land use decisions at the Metropolitan Atlanta Rapid Transit Authority (MARTA) is highly influenced by the type of plans or projects. During the long-range and station-area planning process, there is increased interaction around TOD station areas and along transit corridors of importance. MARTA has also prioritized five station areas to coordinate with planners in DeKalb County.⁷ Coordination on projects involving a regular fixed-route bus service is primarily on an as-needed, project-by-project basis.

In areas where fixed-guideway transit exists, some transit agencies focus their monitoring on areas with the greatest density and highest market/TOD potential. For example, WMATA typically takes a hands-off approach to land use and allows the city to take the lead. However, land use coordination by WMATA is increased in areas where WMATA wants to maximize the full potential of transit-supportive station areas.

These monitoring and referral practices can provide a valuable opportunity to engage in the land use decision-making process. Fostering relationships with the local land use agencies early on can take some of the monitoring pressures off smaller transit agencies and can help them rely more heavily on referrals. Either way, staying informed about local development plans and land use conversations is an important practice that transit agencies can adopt.

The FTA's *Planning for Transit-Supportive Development: A Practitioner's Guide* offers a number of lessons learned for integration of local land use planning and policy with strategies for transit investment. The relevant lessons for effective partnerships are summarized in the following:

- **Develop a community of champions.** Assemble a collaborative team of forward-thinking and dedicated community members. Select champions from the public, private, and not-for-profit sectors who represent a broad range of interests. Seek to ensure that these champions communicate frequently, collaborate closely on goals and agendas, and trust each other. Consider engaging champions through small task forces or committees that meet regularly and can provide information, support, and inspiration.
- **Educate and engage the public.** Educating the public early and often is critical in gaining support. Clearly and effectively articulate the long-term vision for the transit system. Develop a clear and well-defined transit or transit-supportive development message. It is essential that the message be understandable and valuable to a large constituency. Images, key messaging, numbers, quantified results, and benefits need to be carefully planned and consistent. Since there are many challenges in implementing a new transit system or transit-supportive development, performance outcomes are often the best way to explain the objectives, choices, and support needed. Place an emphasis on protecting and enhancing the existing community.
- **Emphasize the community context.** Many components are needed to create a livable community. Transit is an important component, but it is not the only piece of a sustainable community. Throughout the design and planning processes for transit systems and transit-supportive development, transit agencies and local governments should engage the community in developing plans and designs that reflect diverse neighborhoods with a strong sense of community.

Give attention to community-building goals instead of focusing solely on mobility objectives. The perspectives of transit agencies and other planning departments should be broadened so that transit is taken as a consideration and is not the only driver of community goals.

- **Coordinate and collaborate with public agencies.** Public agency coordination and collaboration are critical. Organizational structure and institutional policies can help ensure integrated land use and transit planning and implementation. In many cases, even within a single jurisdiction, it is difficult to work past the silos of multiple departments that each have their own missions and obligations. A municipality's organizational structure that places planning, economic development, transportation, and transit all under the municipality's purview can greatly streamline the way that transit planning is coordinated.
- **Form partnerships among agencies.** For transit projects controlled by a municipality, coordination between the transit agency and the other departments, such as planning, should help streamline planning efforts. Policies to prioritize transit improvements along select corridors and activity centers should be incorporated into citywide plans and programs and translated to street infrastructure investments as well as the new transit service. Cross-departmental coordination can facilitate efficient planning activities for route selections and station locations, as well as actions to encourage and enable transit-supportive development.⁸

Using Strategic Resources

The use of a guidebook or website to highlight the importance of interagency communication, collaboration, and coordination is a common strategy to address challenges and overcome barriers associated with implementing transit-supportive development projects. Many local governments, transit agencies, and nonprofit advocacy groups have developed handbooks or guidebooks related to transit-supportive development. An extensive library of these resources is maintained at Reconnecting America's Resource Center (<http://www.reconnectingamerica.org/resource-center/>). The documents contained within this center are a continuation of the Best Practices database originally funded by the FTA.

Following are three examples of communities that use a guidebook or a website to educate partners on transit-supportive land use.

Eliciting Transit Agency Inputs to Local Land Use Decisions: Ontario Transit-Supportive Guidelines

Transit agencies can develop their own guidance on how and where staff should get involved in land use decisions. One of the leading examples of this practice is the Ontario Ministry of Transportation's 2012 *Transit-Supportive Guidelines*. The Ontario Ministry of Transportation was one of the first non-local governmental entities to publish a guidebook, called *Transit-Supportive Land Use Planning Guidelines*, which was released in 1992. In 2012, an updated version of the report was released, providing design standards and illustrations that can be implemented at any geographical scale, whether at a site, area, municipality, or regional level. Guidelines are detailed and reinforced with case examples and links to additional resources and consultation opportunities, with clear instructions on how to access resources.

The Ontario Ministry of Transportation's 2012 *Transit-Supportive Guidelines* provide specific examples regarding how and where transit agencies should be involved. The six key elements of meaningful transit agency involvement in local land use decisions addressed in the guidebook are:

- **Effective communication, consultation, and the fostering of partnerships.** Top government officials need to design interagency forums and communication channels that ensure municipal, regional, and provincial (state) departments and agencies are aware of transit agency needs.

For decisions on regional trip generators like shopping centers, transit agencies need to have an active voice on factors like facility siting and on-site transit service design.

- **Coordination.** Coordination of municipal/regional/provincial and transit planning activities is needed, at minimum, in these areas: review of proposed densities and road networks by transit planners to ensure optimized bus services; review of official plans, transportation master plans, secondary plans, and district plans; opportunities to propose requirements for developers to incorporate transit infrastructure, such as stop facilities, into development plans; and review of draft bylaws by transit agencies to ensure that regulations regarding lot frontages, densities, and permitted uses along transit routes will support the service and financial objectives of the transit agency.
- **Transit and community benefits.** Support for transit-supportive land use changes can be built by clearly linking the benefits of expanded transit services to larger, longer-term future visions for communities. The best available local evidence needs to be brought to bear that ties transit improvements to such hoped-for outcomes as economic development, urban regeneration, environmental protection, energy, land conservation, and the creation of fully accessible, complete communities.
- **Inclusiveness.** Effective planning and consultation should actively engage all stakeholders in land use decision making at every stage of the development process to identify potential win-win solutions and stave off concerns that can become, if not handled properly and early enough, irreparably divisive.
- **Strategic partnerships.** Forging alliances between public- and private-sector interests can tap into the diverse assets and resources offered by different groups to promote and facilitate more transit-supportive environments. The special tax statuses and regulatory powers of governments can complement the access to capital markets and entrepreneurial instincts of private interests in mutually beneficial ways in taking on the risks often inherent with TOD.
- **Evaluation.** Municipalities should partner with transit agencies to evaluate the positive contributions of design guidebooks and site plan controls in creating financially successful transit-supportive communities. Matched-pair comparisons of the real estate market performance of otherwise comparable communities that have and have not embraced transit-friendly design practices can be carried out to gauge economic benefits.⁹

Urban Regeneration Through TOD: Central Maryland TOD Strategy

The 2009 *Central Maryland TOD Strategy: A Regional Action Plan for Transit-Centered Communities* provides a regional strategy to link transit and community development. The strategy was prepared by the community-based Central Maryland Transportation Alliance and a steering committee made up of several local and state government agencies and community organizations. A key strategy identified by the community planners of the greater Baltimore region focuses on small improvements that have the potential to signal a neighborhood turnaround and thus help leverage private investments and, ultimately, TOD. In a time of fiscal constraints and risk-averse real estate markets, the report notes that not all transit-supportive investments need to be substantial infrastructure upgrades or new transit lines. Improvements to bicycle and pedestrian access and safety can boost transit ridership and seed the transformation of neighborhoods into more people-oriented, transit-supportive areas.

The *Central Maryland TOD Strategy* acknowledges that physical redesigns alone will not turn around struggling neighborhoods. Institutional reforms are also needed. The report calls for the formation of a TOD strategy steering committee made up of key departments from local and state agencies as well as private and neighborhood interests. Ideally, a designated TOD coordinator would be hired and tasked with working across government departments to accelerate TOD implementation. The coordinator would become the point person to see to it that the

recommendations of the steering committee are given a full airing and coordinated as well as possible among local and state agencies.

The report closes with five strategies that can bring attention to and extend the reach of TOD in the region:

- Complete existing projects to demonstrate high-quality transit-centered communities in the region.
- Make new investments in key regional locations for TOD to build momentum for market-driven TOD and address neighborhood change.
- Modify local, regional, and state policies to support TOD as the standard development practice.
- Construct transit and multimodal transportation systems to build the market and expand the geographic reach of transit and TOD.
- Foster cross-sector partnerships and build local capacity for TOD implementation among all stakeholders.¹⁰

Metropolitan TOD: Denver Regional Council of Governments TOD

The Denver Regional Council of Governments (DRCOG) launched a TOD program in 2006, mainly in the form of a website and outreach program that provide relevant, locally packaged, and timely information to policy makers, business leaders, and the public on TOD activities throughout the region. Increasingly, websites, blogs, and other real-time media have become the 21st century version of transit-supportive design guidebooks. DRCOG uses online resources, an idea exchange, and best practices to promote TOD throughout the greater Denver area:

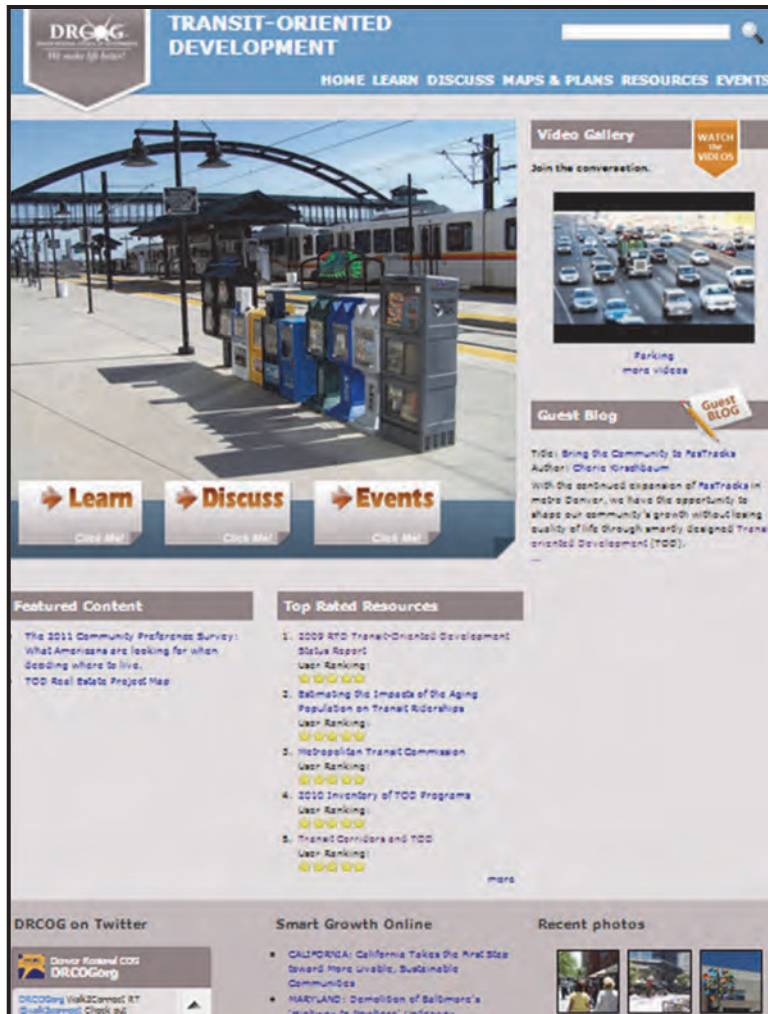
- **Online resources.** The TOD website (<http://tod.drcog.org/>) provides an extensive compilation of resources including case studies, reports, interactive maps, station-area plans, and profiles and information on development activity in current and planned transit station areas (Figure 4-1). A guest blog has become a popular venue for local residents to share their views and opinions on all aspects of transit development in the region.
- **Planner idea exchange.** DRCOG holds regular meetings and brown-bag sessions for local government planning staff to share their experiences in planning for and implementing TOD and to learn from subject-matter experts on topics of particular interest.
- **TOD best practices series.** DRCOG has sponsored a series of workshops in collaboration with the Urban Land Institute and other organizations that bring together members of the public and private sector for discussions on timely topics related to transit and urban development.¹¹

It is also useful for transit agencies to encourage the participation of local residents and transit champions when local governments are creating a vision for a transit corridor. This will make it easier to develop transit-supportive land uses in an established neighborhood. Without their participation, residents may react negatively to a proposed project, particularly one that increases density.

Developers seeking to advance transit-supportive projects may also find it helpful for municipal and transit agency staff to communicate the benefits of a development to the public. For example, traffic impact assessments of a mixed-use development can quantify positive traffic changes such as overall reduced driving behavior. When residents understand the total impact of compact development on driving behavior, they may be more willing to support a developer's project.

Articulating the Costs and Benefits

Local government land use planners and private developers may not fully understand the transit service and operational issues related their land use decisions, the benefits and need for transit, or the relationship between transit and land use. Transit agencies can explain various



Source: <http://tod.drcog.org/>.

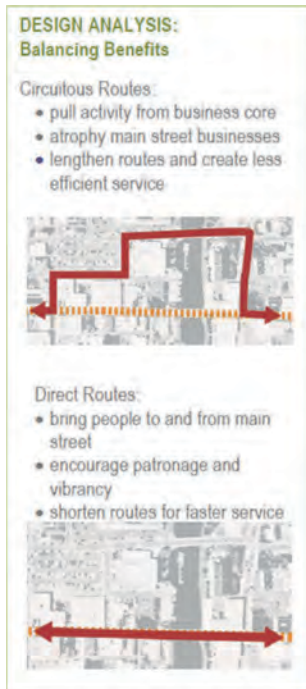
Figure 4-1. Sample strategic website.

transit requirements and make the case for including transit officials in future land use decisions. In making their case, transit agencies can explain the costs and benefits discussed in the following.

Costs

One challenge in creating transit-supportive places is the lack of understanding about the necessary elements of transit-supportive land uses and the importance that new developments incorporate those elements regardless of whether transit currently serves the area. The responsibility for developing transit-supportive land uses falls on all partners: local governments, developers, and transit agencies. Local governments must articulate transit-supportive elements through their comprehensive plans, zoning codes, and design standards to ensure that what is built is consistent with the desired transit-supportive development near transit. Developers and financial institutions must be willing to take the risk to develop compact, mixed-use developments even if it is outside their comfort zone. Transit agencies must be advocates for transit-supportive development along their existing and future transit routes.

Transit agencies can help local governments and developers better appreciate the drivers and fundamentals of transit network and corridor planning. For example, the Oregon Transportation



Source: Oregon Transportation and Growth Management Program (2013).

Figure 4-2. Sample page from Transit in Small Cities primer.

and Growth Management Program’s *Transit in Small Cities* gives across-the-board guidance on the basic transit planning process, provides tips for success, and as shown in Figure 4-2, illustrates some of the benefits of direct transit routes in regard to downtown areas.

In the land use planning process, transit planners can explain the measures needed to enhance street design, improve destination accessibility, and minimize the distance to transit. Understanding these measures is essential because these three factors have a significant impact on ridership. For example, the Lehigh and Northampton Transportation Authority (LANta), which operates the LANta bus system, published *Transit Supportive Land Use for the Lehigh Valley* in 2013. The report discusses why the site planning elements it sets forth are important for effective transit service. It also provides a series of vignettes that illustrate the amount of time that is required for a bus to leave the main thoroughfare to directly serve individual developments. The LANta report explains the impacts of multiple detours on an individual bus route’s round-trip running time, recovery time, frequency of service, and the number of buses required to maintain a given frequency.¹²

Benefits

Transit providers have opportunities to build alliances with the public and key decision makers throughout the decision-making process by articulating the benefits of transit. Early and frequent public involvement will help educate non-riders about the benefits of transit for the community as a whole (see Figure 4-3).

The American Public Transportation Association (APTA) publishes a summary of the benefits of transit in its annual *Public Transportation Fact Book*. The fact book contains useful national aggregate statistical data covering all aspects of the transit industry in the United States and Canada that can help explain the benefits of transit. A summary of the benefits is provided at <http://www.apta.com/mediacenter/ptbenefits/Pages/default.aspx>.

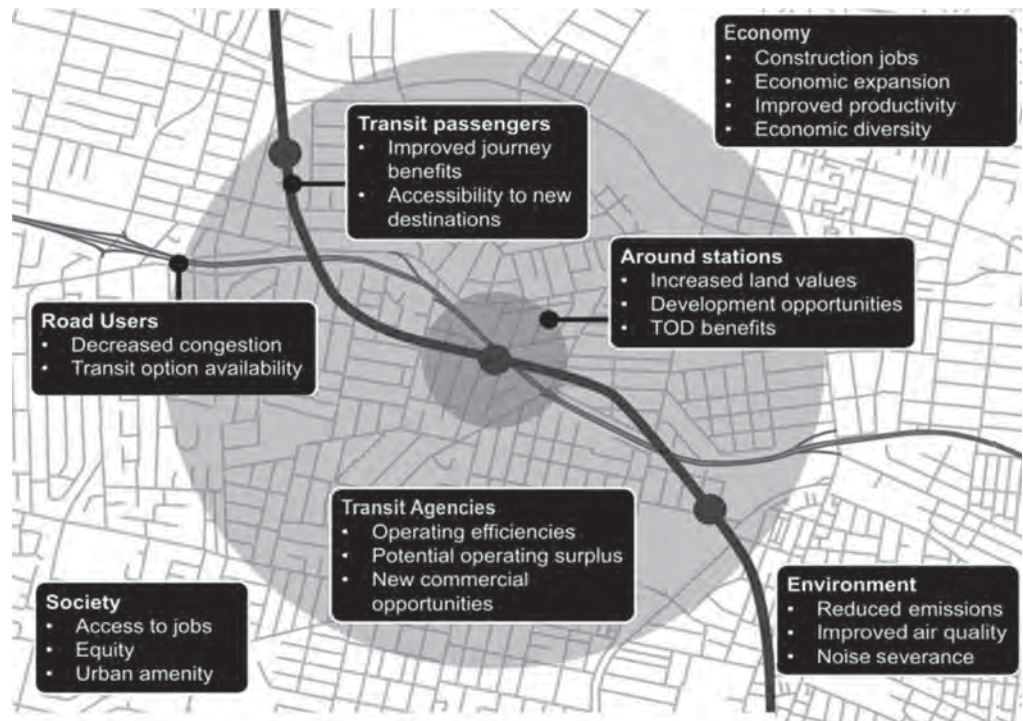


Figure 4-3. Range of benefits for transit-supportive land use decisions.

TYPES OF ENGAGEMENT	INFORMATION SHARING AND EDUCATION	INFORMATION GATHERING	CONSULTATION	PART OF THE DECISION-MAKING PROCESS
PURPOSE	To share information to educate about changes or to encourage changes in behavior.	To collect information on attitudes, opinions, and preferences for the policy or alternative creation.	To obtain specific feedback on policy options or alternatives. This level of involvement is required for land use reviews.	To actively engage citizens at key points in the decision-making process.
TECHNIQUES	<ul style="list-style-type: none"> Website Blogs Direct mailing (e-blasts or regular mail) Factsheets Newsletters Newspaper articles, advertising, or inserts Public meetings Booths at public events 	<ul style="list-style-type: none"> Focus groups Surveys or opinion polls Public meetings Interviews Coffee chats (informal discussion groups sponsored by citizens) 	<ul style="list-style-type: none"> Public meetings Public hearings Written testimony 	<ul style="list-style-type: none"> Citizen advisory committee Workshops Charrettes Online forums Webchats

Source: Oregon Transportation and Growth Management Program (2013).

Figure 4-4. Sample public engagement methods.

A transit agency can publish materials to help convey the value of a transit system to the community. For example, WMATA articulated the benefits of transit through the publication of *Making the Case for Transit: WMATA Regional Benefits of Transit*. *Making the Case for Transit* began with the premise that without transit, the region would look and operate very differently than it does today. By imagining the region without transit, WMATA explained transit’s role and value to the Washington economy.¹³ The study was not a formal cost–benefit analysis. Instead, it presented the benefits of transit in several ways to demonstrate the magnitude of its impact. The study showed that while transit is an integral part of many of these benefits, the impacts brought about by zoning, development decisions, and long-term transit-supportive policies at the local and state levels can significantly affect these benefits.

The public can be an important ally for transit agencies during land use decision-making processes at any scale. Sample public engagement methods are provided in Figure 4-4. Land use decisions are often influenced more by personal stories than by statistics or reports. For that reason, it is important during land use planning processes to encourage the public to explain the value of transit to their daily lives in their own words.

Summary of Resources and Tools

Table 4-1 and Table 4-2 list resources and tools for building a transit-supportive community.

Table 4-1. Transit-supportive resources.

Organization	Publication	Website
MARTA	<i>Transit-Oriented Guidelines</i>	http://www.reconnectingamerica.org/assets/Uploads/MARTATODGuidelines11-2010-Final.pdf
Chicago Transit Authority	<i>Transit Friends Development Guide—Station Area Typology</i>	http://www.cct.org/wpcontent/uploads/2015/05/11StationAreaTypology2009.pdf
Pace Suburban Bus Service	<i>Transit Supportive Guidelines</i>	http://www.pacebus.com/guidelines/Pace_Design_Guidelines.pdf
NJ TRANSIT	<i>Transit Friendly Land Use Handbook</i>	http://www.njtransit.com/tm/tm_servlet.srv?hdnPageAction=CorpInfoTo#Handbook
FTA	<i>Planning for Transit-Supportive Development: A Practitioner’s Guide</i>	http://www.fta.dot.gov/16046_16042.html

(continued on next page)

Table 4-1. (Continued).

Organization	Publication	Website
Ontario Ministry of Transportation	<i>Transit-Supportive Guidelines</i>	http://conf.tac-atc.ca/english/transit/pdfs/transit-supportive-guidelines.pdf
Oregon Transportation and Growth Management Program	<i>Transit in Small Cities: A Primer for Planning, Siting, and Designing Transit Facilities in Oregon</i>	http://www.oregon.gov/ODOT/PT/resources/guidance-library/transit-in-small-cities.pdf
WMATA	<i>Making the Case for Transit: WMATA Regional Benefits of Transit</i>	https://www.wmata.com/pdfs/planning/WMATA%20Making%20the%20Case%20for%20Transit%20Final%20Report%20Jan-2012.pdf
LANta	<i>Transit Supportive Land Use for the Lehigh Valley</i>	http://www.lantabus.com/planning-and-studies/

Table 4-2. TOD online tools.

Organization	Tool	Website
LA Metro	TOD Toolkit	http://www.metro.net/projects/toolkit/
Metropolitan Washington Council of Governments	TOD in the Washington metro area	http://www.mwcog.org/transportation/activities/tlc/program/tod.asp
Denver Regional Council of Governments	TOD program – online tools	https://tod.drcog.org/
Santa Clara Valley Transportation Authority	Transit-Oriented Development Program	http://www.vta.org/projects-and-programs/Programs/Projects-Studies-and-Programs-TransitOriented-Development-TOD-Program
Metropolitan Council	Transit-Oriented Development plan	http://www.metrotransit.org/tod
Reconnecting America's Resource Center	Online best practices database for TOD	http://www.reconnectingamerica.org/resource-center/

Case Studies

This chapter contains four case studies that illustrate effective transit agency interactions with local governments and developers:

- **NJ TRANSIT:** Transit Friendly Planning Land Use and Development (TFPLUD) program.
- **Pace Suburban Bus Service:** Transit Supportive Guidelines and Design Review Assistance for Transit.
- **TriMet:** Portland Pearl District – Transit and Land Use Integration.
- **Greater Cleveland Regional Transit Authority (GCRTA):** HealthLine and Greater University Circle Initiative.

The case studies represent a broad spectrum of transit service and land use contexts as well as geographic scales of planning. The introduction to each case study identifies the relevant contexts and scales so that readers can find situations relevant to their transit agency (see Table 5-1). Lessons learned are also presented. Appendix C contains the case studies in more detail with further background information and a deeper analysis of the key elements of each scenario introduced in this chapter.

Two of the case studies illustrate the benefit of ongoing coordination for existing transit service, and the other two show project development for new transit services. By coincidence, the four case studies represent large transit agencies; however, as shown in the following summary, many of the lessons learned are applicable regardless of the transit agency size. This is especially true for building and sustaining relationships over the long term.

Summary

The effective interactions shown in the four case studies are, in part, the result of unique circumstances in each. The lessons learned and key takeaways show that there are a number of reoccurring ingredients for success, which are summarized in this section.

The cases show the importance of transit agencies being involved over a period of time with local governments to build partnerships, awareness, and support and to change land use plans and policies in order to realize transit-supportive outcomes. If transit agencies want to participate in land use decision making, they need to work to establish productive relationships with communities early on.

A common thread throughout the case studies is the pivotal role in getting transit-supportive outcomes from important local partners of the transit agency. In three cases, local governments were in the key position to shape the transit friendliness of development projects because of their regulatory role in planning and development. In the other example, a nonprofit was in

Table 5-1. Case study contexts.

Case Study	Transit Context	Land Use Context	Planning Scale
NJ TRANSIT (rail, light rail, and bus)	Legacy/existing service	Redevelopment or infill	Regional, corridor, subarea, site
Pace Suburban Bus Service (bus)	Existing bus service	Suburban	Site
TriMet/City of Portland Pearl District (streetcar and bus)	New streetcar service	Urban core	Subarea
GCRTA Cleveland HealthLine (bus rapid transit)	New bus rapid transit service	Urban core	Corridor, subarea

the key position to shape the outcome. The four transit agencies in the case studies each used different paths to get to a similar place. Through education, advocacy, and participating in local planning, each was able to raise awareness and reshape development projects to varying degrees.

- In New Jersey, NJ TRANSIT believes partnerships are the key to success, including engagement and funding among state agencies, MPOs, counties, municipalities, the private sector, and not-for-profits. The transit agency focuses on communities where it provides service and is invited to participate. The transit agency begins with TOD vision planning technical assistance and encourages local governments to perform the next step with transit-supportive zoning changes. In some cases, NJ TRANSIT encourages communities to reshape projects to be more transit-supportive than what was originally proposed. The dedicated staff person is at the forefront of forging the necessary partnerships and actively manages the process. Professional consulting guidance and technical expertise are often provided since many communities do not have the specialized capacity to undertake this work.
- In the suburban Chicago area, Pace Suburban Bus Service has a history of using partnerships and advocacy with local governments. Development projects have been reshaped where cities see the opportunity and take the initiative to make them transit supportive. The village of Schaumburg is a notable example. Schaumburg planners recently turned to Pace's TOD guidelines to ensure that a major new corporate headquarters was transit accessible and highly walkable.
- In Portland, by the time the developers came to the table, the City of Portland's policy and regulatory framework for the Pearl District was largely established and required a transit-supportive outcome. The key role of Portland's transit agency, TriMet, occurred much earlier as a participant, funder, and advocate in helping to create a robust transit-supportive planning and implementation framework.
- In Cleveland, the GCRTA HealthLine brought improved infrastructure and connected major economic development nodes identified in local master plans such as that of the nonprofit MidTown Partnership. Private developers, foundations, and local community development corporations (CDCs) saw the opportunity to reshape development and address the corridor in a transit-supportive manner. The MidTown Partnership saw the opportunity for transit to link the corridor together and provide key infrastructure. The HealthLine was embraced by those driving redevelopment of the corridor because it was in line with the master plan and vision, and the transit investment would bring with it improved infrastructure and connect major economic development nodes identified in the master plan. Private development was reshaped to address Euclid Avenue in a transit-supportive manner.

NJ TRANSIT – Transit Friendly Planning Land Use and Development Program

In 1999, NJ TRANSIT established its Transit-Friendly Planning Land Use and Development program as a tool to increase ridership and make more effective use of the transit system. Internally, the program is felt to have a direct relationship to NJ TRANSIT's core business.¹⁴ The TFPLUD program encourages growth and development where public transportation already exists. Much of the program's focus is on fostering TOD along NJ TRANSIT's rail system. However, the majority of the rail system is a legacy system, and stations are located in established communities, which sometimes makes it challenging to encourage new transit-supportive development.

The program's success can be tied to its ability to:

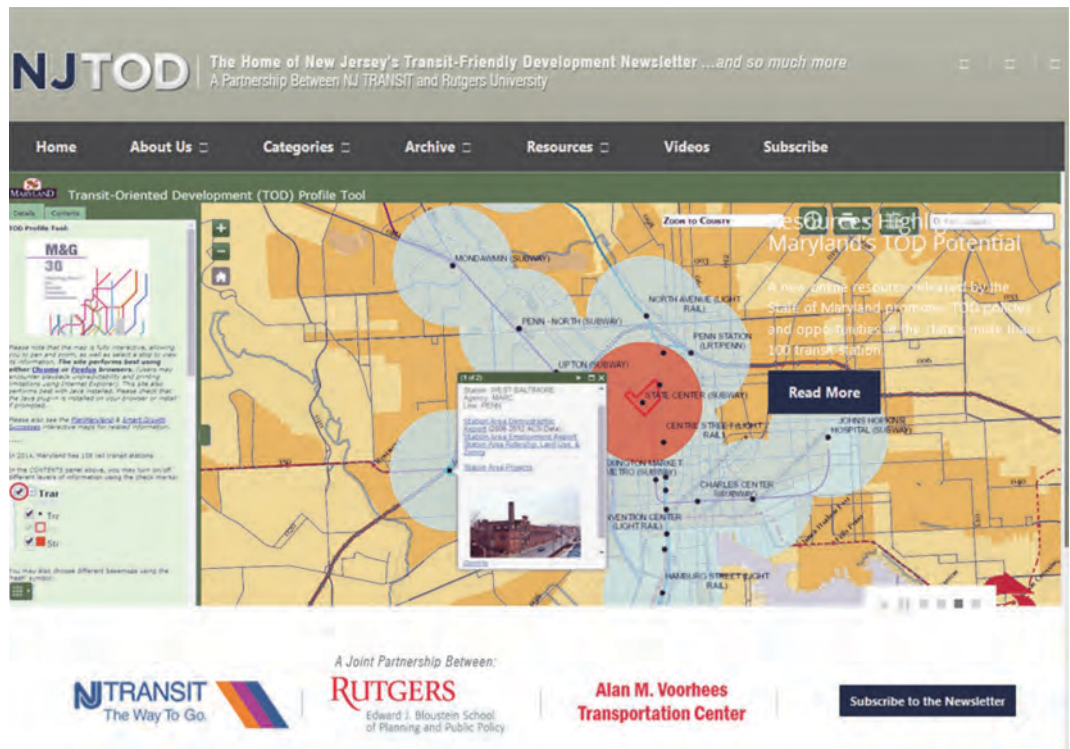
- Focus analysis on land use issues surrounding transit through a community-driven process, which includes extensive visioning, community workshops, seminars, and focus groups;
- Engage community leaders, residents, business owners, advocates, and stakeholders;
- Collaborate with local, county, regional, and state partners to build consensus;
- Emphasize that the community leads and creates a vision and then adopts transit-supportive land use codes through its zoning ordinances and redevelopment plans; and
- Encourage creation of market-realistic plans.

The result has been the creation of several consensus-based, transit-supportive land use vision plans that communities are using to guide development and redevelopment at and surrounding existing or proposed transit facilities.

The TFPLUD case study provides the following lessons regarding successful transit and land use decision making:

- Investment and technical assistance in local government transit-supportive planning activities (e.g., vision plans) can forge broader partnerships among local governments, developers, state approval agencies, MPOs, counties, and community development organizations. In turn, these partnerships help the transit-supportive plans advance to implementation.
- A sustained effort has facilitated brand recognition, local government support, and widespread partnering for transit-supportive outcomes.
- Education regarding transit and land use best practices must be continuous and can be done through low-cost partnerships with independent organizations, such as a university, that aid in educating policy makers and the public. The program sponsors a website (www.NJTOD.org) that is dedicated to TOD activities within New Jersey and is maintained by Rutgers University (Figure 5-1). The website provides timely information on best practices for transit-friendly development in a manner that is low in cost for NJ TRANSIT.
- Dedicated staff advocating for transit-friendly outcomes drives effective interactions with local governments and developers.
- New partners, such as community-based organizations and not-for-profits, can be important allies in shaping transit-supportive land use outcomes.
- Collaborative, multi-jurisdictional partnerships for transit-supportive land use planning can be useful in addressing housing affordability, access to jobs, and other community development issues.

More information on the TFPLUD program can be found in Appendix C or through the NJ TRANSIT website (www.njtransit.com).



Source: Copyright NJ TRANSIT, Alan. M. Vorhees Transportation Center, Rutgers University.

Figure 5-1. NJTOD website.

Pace Suburban Bus Service – Transit Supportive Guidelines and Design Review Assistance for Transit

Pace Suburban Bus Service wins high marks for coordination of transit and land use, both internal and external to the organization. According to several people interviewed outside the organization, Pace speaks with one voice on land use planning, invoking the board-approved policies on transit-supportive design. In the words of one Pace staff member who was interviewed, “transit-supportive planning and design is universally accepted within the organization, from the Executive Director to the driver on the street.”

Pace’s experiences reveal that the process of advancing transit-supportive development can be every bit as important as the end-products (i.e., guidelines or built environments). The Pace story is one of effort and inputs rather than outputs or outcomes. The jury is still out as to whether cumulatively Pace’s initiatives will alter the region’s suburban landscape in ways that appreciably promote transit usage; however, all sides agree that the Pace’s actions to date have been positive steps in the right direction.

Pace’s success with advancing transit orientation has largely taken the form of proactive stakeholder engagement. In preparing updated design guidelines, an advisory committee—made up of local developers, municipal planners, and private company representatives—was formed to guide the process. Through such inclusive, participatory processes, the idea of transit-supportive design is now part of the local planning culture. While the ad hoc advisory committee no longer meets, those who were interviewed volunteered that they routinely seek advice and share experiences on transit-supportive designs with former committee members and Pace staff.

Several lessons spring from Pace’s experiences. One is to engage as many people as possible as early in the development process as possible. In Pace’s case, there has been no single political

champion to advance the cause of transit orientation. Rather, through an ongoing, carefully crafted, collaborative process, transit-supportive principles have become the accepted norm within and outside the organization. Such liaisons have paid off in the form of not only promoting transit-oriented growth but also helping Pace secure competitive grants to finance upgrading of transit-supportive guidelines and initiation of the DRAFT (design review assessment for transit) program.

Pace's experiences show that transit-supportive guidelines play a functional role but can also have a more subtle, nuanced influence on design practices. Thanks to a user-friendly and visually attractive website that relies less on text and more on illustrations, Pace has successfully advanced transit-friendly design principles in ways that appeal to multiple stakeholder interests. Yet it has been behind-the-scenes interactions with highly knowledgeable and devoted Pace staff members where, all sides agree, the transit agency has had the greatest influence in making people aware and mindful of the benefits of transit orientation. Pace's experiences show that informal processes can be as important as formal documents in influencing outcomes.

The case study of the Pace transit system also highlights the importance of the following elements of the transit and land use program:

- The behind-the-scenes interactions with Pace staff members have had the greatest influence. Informal processes have proven to be as important as formal documents in influencing outcomes.
- The process of advancing transit-supportive development can be every bit as important as the end-products (i.e., guidelines or built environments).
- The engagement of as many people as possible as early in the development process as possible through an ongoing, collaborative process has allowed transit-supportive principles to become the accepted norm within and outside Pace.
- The packaging of information and illustrations for different audiences is an effective tool for presenting guidance and explaining why transit-supportive practices are important.
- The organizational culture embraces land use planning and urban design as a central mission of Pace.

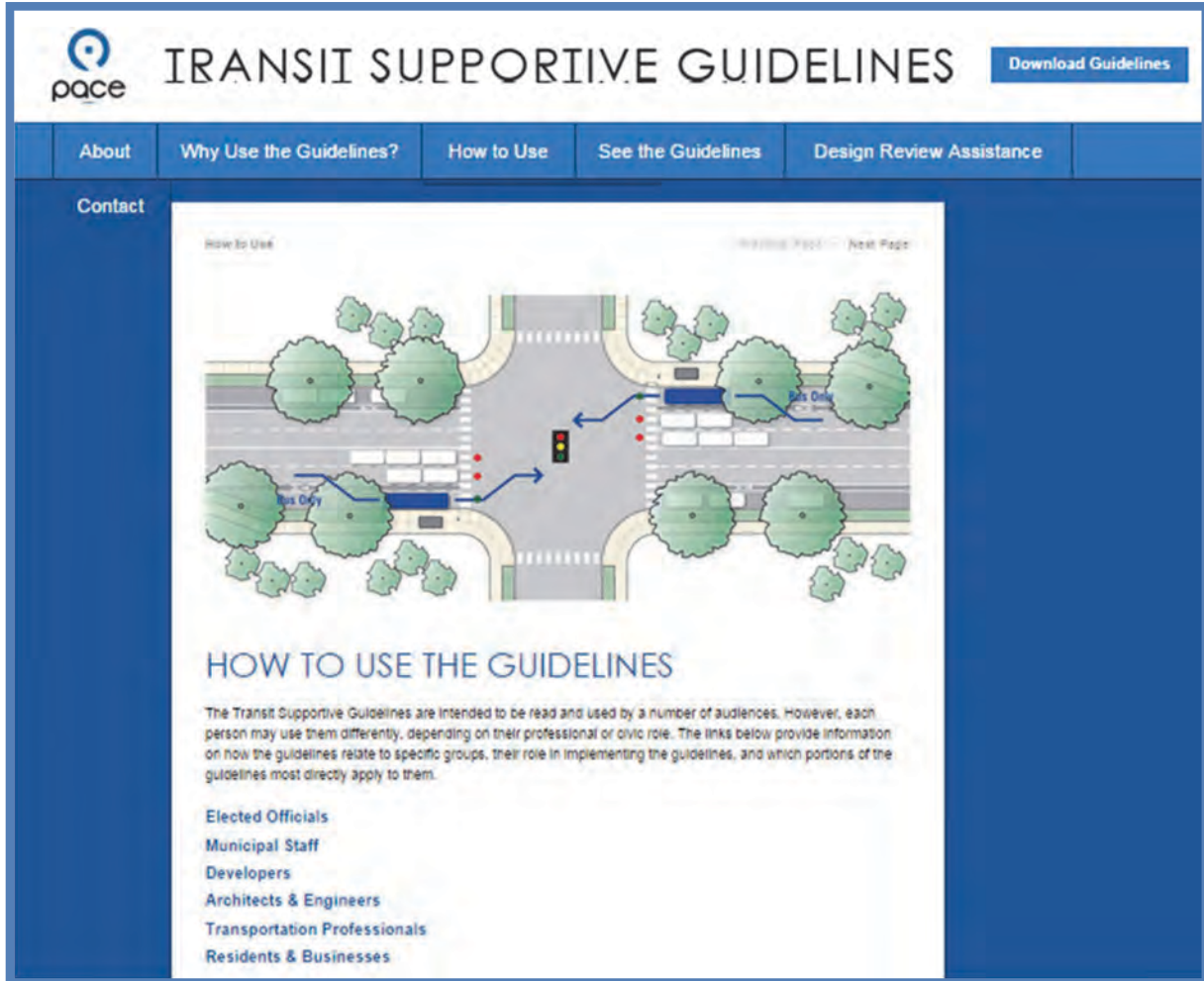
A unique feature of the online guidelines is the packaging of information and illustrations for different audiences—notably, elected officials, municipal staff, developers, architects and engineers, transportation professionals, residents, and businesses. Figure 5-2 shows a screenshot of Pace's Transit Supportive Guidelines; the site provides links for how the guidelines might be used by different stakeholder interests.

Further information on these tools can be found in Appendix C or on the Pace website (<http://www.pacebus.com/>).

TriMet – Portland Pearl District Transit and Land Use Integration

The Pearl District is a redeveloped urban neighborhood located just north of Portland's traditional downtown. Like many urban neighborhoods that developed or were redeveloped near downtowns in the late 1990s and early 2000s, the Pearl District saw a tremendous amount of growth and development success that continues today. In 1990, 1,643 people lived in Census Tract 51, which makes up most of the Pearl District. As shown in Figure 5-3, the predominant land use in the area before the redevelopment of the Pearl District was rail yards and light industrial/warehouse uses. The Portland streetcar, which serves the district and other parts of the city, began operations in 2001. Today the Pearl District is a thriving mixed-use precinct served by the streetcar and buses; its population increased to 7,926 in 2010.¹⁵

Transportation agencies, including regional transit provider TriMet and the Portland Bureau of Transportation, helped influence the basic thinking of how transportation and land use should



Source: Pace Suburban Bus Service.

Figure 5-2. Pace's Transit Supportive Guidelines screenshot.



Source: Bob Heims, U.S. Army Corps of Engineers, http://en.wikipedia.org/wiki/File:USACE_Fremont_Bridge_Portland.jpg.

Figure 5-3. Pearl District before redevelopment.

interconnect in the Pearl District through specific policies that were adopted during the state, regional, downtown, and local planning processes as well advocated for by local actors such as the founders of Portland Streetcar, Inc. More visible examples of the Pearl District's transportation legacy include the construction of the streetcar and the continuation of the street grid. Following two decades of linking the land use and transportation planning processes, the Pearl District has evolved into a place where, in 2008, 58 percent of residents reported using modes other than driving to get to work.¹⁶ By developing space in the district that encourages the movement of people instead of cars, the Pearl District has become a desirable place to live.

It can be difficult and costly for transit agency staff to devote enough time to follow each individual development project. Alternatively, the planning processes that predated the creation of the Pearl District and Portland streetcar made it easy for the local government, the community at large, and developers to advocate for transit-supportive outcomes. This was done through the transportation agencies and advocates immersing themselves in long-term planning processes in a sustained manner rather than focusing on individual development proposals.

In summary, the best way for a transit agency to influence land use decisions is to be involved early in the overall planning process for a region, downtown, or district. Later, if the long-term planning was performed correctly, the developer's need for transportation improvements will give city and regional transit agencies more leverage on the project. In addition, a land use and transit partnership is highly dependent on effective communication between agencies, stakeholders, and the public. It was sustained formal and informal coordination among many people, rather than a dominant single entity, that led to successful completion of the various plans and, ultimately, the creation of the Pearl District. The key stakeholders need to be engaged, and they, in turn, need to engage others to participate in the land use and transportation planning processes.

The case study highlights how a sustained partnership, even if it is informal, can help deliver a new transit service that is complementary to the transit agency's core business and attain desired land use outcomes. The prioritization of access through transit and walking was a major part of the downtown planning process and has resulted in the great success of the Pearl District.

The Pearl District case study shows the value of the following points in creating transit-supportive outcomes:

- Sustained formal and informal coordination among many people rather than the presence of a dominant single entity;
- Continuous involvement (even informally) over a period of time (e.g., decades) with local governments to build partnerships, awareness, and support;
- A transit agency board and mission that support an advocacy role in land use (i.e., the transit agency has a broader role than just being a means to move people); and
- Full-time staff that speak the development language, have relationships with the development community, and understand developer priorities and aversion to risk.

Additional information on TOD in the Pearl District can be found in Appendix C or at TriMet's website (<https://trimet.org/>).

GCRTA – Cleveland HealthLine and Greater University Circle Initiative

Cleveland, the central city in northeastern Ohio, has been shrinking for decades. At its peak in 1950, almost 1 million people called the city home. Through years of economic and industrial decline, the population decreased significantly, to 390,000 in 2013.¹⁷ The region has experienced its own population changes, but overall has steadily balanced itself during national

economic swings to maintain some equilibrium in population. In a much championed effort of collaboration, the city, GCRTA, community foundations, and local anchor institutions focused their efforts on creating an economically thriving region, using the bus rapid transit route, the HealthLine along the Euclid Avenue corridor, as a driver for growth. The HealthLine is managed through GCRTA.

The 6.8-mile Euclid Avenue corridor stretches from downtown Cleveland east toward Cleveland Heights and connects downtown, midtown, and a major hospital and university district known as University Circle. This important corridor has been the center of transportation discussions for decades given its role as an employment destination and home of major employers such as the Cleveland Clinic and other health care and university institutions, which make up a solid base of employment for at least 50,000 people.¹⁸ The corridor is also home to over 10,000 residences. Cleveland's University Circle acts as the cultural heart of the region and has established itself as a national leader in innovation and technology transfer. Figure 5-4 shows the infrastructure and streetscape improvements associated with the HealthLine bus rapid transit (BRT) route in downtown Cleveland.

When completed in 2008, the street reconstruction with utility relocation, street treatments, and new BRT lanes (costing \$200 million of primarily federal funding) resulted in greater connections between major destinations in the corridor and seven local neighborhoods. The transit line and related investments knit together several nodes of existing and potential development. The corridor can also show success on several other fronts:

- Travel time was cut by 12 minutes,
- The previously crowded No. 6 bus added over 7,000 riders and now reaches over 15,000 riders per day,
- Economic development and investments along the corridor have totaled \$5.8 billion, and
- Street improvements are projected to have a useful life of 50 years before needing repairs.¹⁹

In addition, neighborhoods, which previously felt disconnected from the economic engines of the community in the universities, hospitals, and major employment center downtown, are now experiencing significant investment and increased property values. All of these factors contributed to the corridor's Urban Land Institute (ULI) award for economic development as well its achievement of a silver ranking in BRT by the Institute for Transportation and Development Policy.



Source: http://commons.wikimedia.org/wiki/File:Downtown_Cleveland_Euclid_Avenue.jpg.

Figure 5-4. Euclid Avenue.

Key takeaways regarding the HealthLine case study are:

- The GCRTA board did not necessarily advocate for involvement in shaping the land use decisions but supported the infrastructure investment along the transit corridor to set the stage for transit-supportive land use.
- By being involved from the beginning, the transit agency was able to set the proper framework for the corridor. The transit agency could then focus on optimizing its system, creating reliable transit, and building out any station areas through joint development.
- Unconventional partners lead to more successful outcomes. In the transit planning process, because of the long timeline for federal funding, more opportunities were taken to involve both public and private stakeholders. GCRTA outreach and the development of awareness of the project likely led to greater coordination later on. The Greater University Circle leadership group (developed in part by the Cleveland Foundation), the institutions, and other corridor stakeholders created a structure for future sharing and collaboration to strengthen ties between all the groups that remain important. The partnership's commitment to mobility for all increased opportunities for employment opportunities and fostered a sense of project ownership in lower-income populations.
- Partnerships, people, and relationships are important. The best project outcomes occurred where the transit agency, land use planners, and funders had an established relationship and open process for communication. Long-term relationships are a running theme for planning successful integration of transit and land use.

More information on GCRTA's HealthLine can be found in Appendix C or at the HealthLine website (<http://www.rtahealthline.com/>).



CHAPTER 6

Key Partners

Transit agencies; local, regional, and state governments; and private developers all have important roles in shaping the success of transit within communities. It is important for transit agencies to determine the appropriate points of engagement with stakeholders and the context in which transit agencies can increase the effectiveness of their participation in land use decision making. Table 6-1 illustrates important responsibilities and priorities of the key partners.

This chapter outlines the key partners in transportation and land use planning decision making. The role of transit agencies in transportation and land use planning can change at different levels:

- **State level.** Transit agencies can work with the state DOT to identify transit investment priorities and access federal operating and capital transit funds.
- **Regional level.** Transit agencies can be involved in MPO decisions related to economic development, land use, and transportation investment priorities.
- **Local level.** Transit agencies can be involved in the land use development process, as an applicant and a reviewer, and in long-range visioning and strategic planning.
- **Site level.** Developers lead or initiate the majority of the land use development activities that affect transit.

In order to understand the relationship between the partners, it is important to understand the types and structures of governments at each scale. This chapter will help transit agencies identify partners and seek out opportunities to ensure that transit is part of the land use decision-making dialogue.

State Governments

State governments consist of executive, legislative, and judicial branches along with implementing administrative bodies. The administrative departments include separate state departments for transportation and land uses. The state DOT is responsible for transportation planning, programming, and project implementation for the state.

The two primary transportation planning functions of a state DOT that help shape land use and influence decisions by local governments and developers are:

- **The long-range statewide transportation plan.** The long-range statewide transportation plan is a 20-year plan that identifies the state's future goals, strategies, and projects as they relate to transportation. The detailed content of these plans varies from state to state. Some statewide transportation plans are broad, policy-oriented documents addressing the vision and goals, such as air quality standards or multimodal elements, desired for local and regional transportation plans in the state. Other plans may contain a list of specific projects.

Table 6-1. Key partners' roles and objectives.

Stakeholder	Roles and Responsibilities	Objectives and Goals
Transit agencies	Transit services, operations, and facility management	Positively influence future land use decisions to support transit locally, regionally, or statewide
State governments	Public connections leading to transit services on state roads	Build, operate, and maintain safe and effective state transportation facilities
Regional agencies (e.g., MPOs)	Transportation and land use policy on a regional scale, typically incorporating several cities or counties	Establish an impartial setting for effective regional decision making in the metropolitan area
Local/county governments	Community land use decisions and public infrastructure connections to transit (i.e., sidewalks, bikeways, and streets within the context of a city)	Conduct long-range planning and site-specific land use decisions that affect transit services
Developers	Development on land adjacent to transit and use land in ways that affect and are affected by transit service and transit facilities	Seek timely land use development approvals and successful financial returns

- The Statewide Transportation Improvement Program (STIP).** The STIP is the funding and scheduling program and document for surface transportation projects: major road, highway, bridge, and transit projects in the state. The STIP typically covers a 4-year period and is updated every 4 years. Projects included in the STIP have state and federal funding identified for the first 3 years. Projects programmed in the fourth year are advisory only, and funding is not obligated. The STIP must be consistent with the long-range statewide and metropolitan transportation plans and is developed in cooperation with MPOs and transit agencies. The STIP must incorporate the individual transportation improvement plans (TIPs) of the metropolitan areas in the state. Each state has its own internal process to approve the STIP. The final STIP is approved by the FHWA and FTA.

In addition, a state DOT has the responsibility for the design, construction, operation, and maintenance of state transportation facilities such as highways. Depending on the state and intergovernmental agreements in place, the state DOT may yield some of its responsibility for urban highways to the local city/county or transit agency because the road functions more like a local arterial than a state highway. State DOTs work cooperatively with other transportation stakeholders such as tolling authorities, ports, special districts, regional governments, local governments, and transit agencies. The state is also responsible for actively involving the public in planning, programming, and project implementation.

Transit Agency Involvement with State Governments

At the state level, transportation planning documents are essentially a compilation of the transportation plans and capital projects created at the local and regional levels. Federal requirements ensure that the plans and projects identified at each level are consistent with each other. If the transit agency is engaged in planning at the local and regional level, the priorities identified by the transit agency should be reflected at the state level.

Regional Agencies

Regional governments, also known as metropolitan councils or councils of government, typically have governing boards consisting of local elected officials and regional stakeholders or have directly elected governing boards. For urban areas with a population of 50,000 or more, the regional government also serves as the federally mandated MPO responsible for making transportation policy and allocating transportation funds within the metropolitan planning area. MPOs ensure that transportation planning is based on a continuing, cooperative, and comprehensive process.

The five core functions of an MPO are:

1. Establish an impartial setting for effective regional decision making in the metropolitan area,
2. Identify and evaluate alternative transportation improvement options,
3. Prepare and maintain a long-range transportation plan (LRTP),
4. Develop a TIP, and
5. Involve the public in the decision-making process.

The organization, membership, and voting rights of an MPO are based on federal requirements and intergovernmental agreements. Many transit agencies obtain voting status, or seats, on influential committees through the intergovernmental agreements. As a result, the role of transit agencies on MPO boards varies. Enacted in 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) federal transportation authorization requires that the structure of all MPOs include officials of public agencies that administer or operate public transportation systems. These officials are not necessarily required to be voting members of the MPO. Even so, this gives transit agencies a more effective voice in the activities discussed here. Whether or not they have a vote, their presence on an MPO board is a positive step.

The MPOs usually include a variety of committees as well as a professional staff. In many regions, a transit agency is a member of the policy committee—the top-level decision-making body for the planning organization. The day-to-day work of the MPO is done by professional staff along with technical committees that act as advisory bodies.

Guidance for transit agencies on how to gain policy and program support from MPOs is provided in the FTA's *Transit at the Table: A Guide to Participation in Metropolitan Decisionmaking*.²⁰ The report provides the observations, perspectives, and recommendations of a cross-section of transit agencies from large metropolitan areas on how to secure strategic positions in the MPO planning processes. The findings of the research were used to develop a checklist as a starting point for transit agencies in considering how to be more effective in MPO decisions. Similar guidance was prepared for small to mid-sized metropolitan areas.²¹ Transit agencies can review the self-assessment checklist in Table 6-2 to identify ways to more effectively engage with MPOs.

Transit Agency Involvement with Regional Governments

The MPO is the forum for discussing the region's multimodal transportation priorities and investment needs. There are challenges for transit agencies in the MPO planning processes. The extent to which planning at MPOs is inclusive and open to broader multimodal representation varies. Some MPOs focus primarily on administering the federally required process, whereas other MPOs seek comprehensive inclusion of all modes. In addition, some state DOTs conduct the transportation planning and programming activities and tightly control the MPO programs. MPOs can also contribute to the development of long-term regional land use vision plans.

Through involvement with the MPO, transit agencies can be collaborative partners with other transportation stakeholders within the region to set policy (assuming that the transit agency is

Table 6-2. Self-assessment checklist for transit operators.

1. Representation on the MPO board and committees	<ul style="list-style-type: none"> ■ Is the signed memorandum of understanding (MOU) between your agency and the MPO up-to-date and reflecting policy, responsibility, and funding changes? ■ Does the MOU identify explicit roles for transit operators in the MPO process? ■ Are you a voting member of the MPO board (or have board representation)? ■ Are you represented on and active in MPO policy and technical committees?
2. Involvement with planning and special studies	<ul style="list-style-type: none"> ■ Are you involved in developing the metropolitan area long-range plan? ■ Do you monitor progress and products of the metropolitan planning process? ■ Does the transportation plan integrate public transportation elements with highway, pedestrian, bicycle, air, and other modes? ■ Is the metropolitan transportation plan coordinated with local land use plans? ■ Are transit-supportive development policies and strategies included in the plan? ■ Are transportation system management, maintenance, and operations included? ■ Does the MPO plan include plans/policies that highlight the benefits of transit? ■ Does the MPO plan consider economic development, job access, air quality, social services, health and safety, or historic preservation? ■ Are you involved in educating the public or promoting regional comprehensive plans and politics? ■ Are you involved in corridor studies to ensure that all modes are considered? ■ Do you propose work tasks for the Unified Planning Work Program (UPWP)? ■ Does the UPWP respond to transit needs?
3. Involvement in funding and implementation	<ul style="list-style-type: none"> ■ Are you involved in identifying, prioritizing, and scheduling projects for the TIP? ■ Do you feel that the TIP prioritization process is objective and fact-based? ■ Do you feel that you receive a fair share of the region's project funding? ■ Is the MPO's status reporting of TIP project funding timely and reliable? ■ Are you involved in cooperatively forecasting revenues for the plan and TIP? ■ Are your revenues considered and incorporated in these estimates? ■ Are you able to assume future revenue enhancement plans and proposals?
4. Involvement in planning certification reviews	<ul style="list-style-type: none"> ■ Are you involved in the planning certification review process? ■ Do you provide materials for the FTA–FHWA desk review? ■ Are you involved in the on-site review? ■ Have you suggested other agencies/people for the federal team to contact? ■ Have you identified issues for the federal review team to consider?

Source: *Transit at the Table: A Guide to Participation in Metropolitan Decisionmaking* (Federal Transit Administration 2004).

a voting member of the MPO or sits on committees charged with setting priorities). In order to ensure that the transit agency perspective is heard, the transit agency representative must be an active participant. Transit agency representation should be engaged in the discussion of all regional issues, including economic development, air quality, urban development, and active transportation, since they all affect or are affected by transit in some way.

Transit agencies can engage in regional planning during the creation and evaluation of alternative transportation improvement options through planning studies that consider various improvement options and travel demand forecasts. Planning studies may include corridor studies, active transportation and air quality studies/policy, growth management plans, and center or focus area development plans. Transit agencies can be involved with the development, testing, and application of travel forecasting models to ensure that transit has been adequately addressed.

In addition, transit agencies can be involved in the three planning processes led by MPOs: the Unified Planning Work Program (UPWP), the LRTP, and the TIP. These are explored further in Chapter 7.

The Metropolitan Washington Council of Governments (MWCOG) is an independent, nonprofit association made up of representatives from 22 local governments, the Maryland and Virginia state legislatures, and the U.S. Congress. The National Capital Region Transportation Planning Board, functioning under the MWCOG umbrella, serves as the region's MPO. In 2014, MWCOG approved an updated set of activity centers for metropolitan Washington.²² The activity centers will be used by MWCOG and local governments to support land use planning, help guide investments in infrastructure, guide development, and analyze growth. The activity centers

are diverse in size and form; they include existing urban centers, traditional towns, transit hubs, and areas expecting future growth.

While the activity centers vary in scale and type, the basic concept behind them is the same: concentrate development in areas that will have the planning and infrastructure in place to support it. By focusing growth in activity centers, the region will improve connections between housing and jobs, reduce environmental impact, and make better use of limited funds. The centers promote development around area transit such as Silver Line Metrorail stations in Northern Virginia and Green Line Metrorail stations in Prince George's County, MD. About two-thirds of the centers are or will be served by the region's rail transit network of Metrorail, commuter rail, and light rail.

Local Governments

Historically, transportation and land use planning functions have generally been the responsibility of local governments. Local governments, including both cities and counties, tend to have a consistent governance structure with an elected governing board and mayor/board chair. The authority of local governments varies depending on the degree of authority that it is granted by the state government. Cities and counties that abide by what is known as "Dillon's rule" have a limited range of authority since they can exercise only those powers granted to them by the state. Cities and counties that have home-rule authority have a broader governmental authority for specific functions. Typically, local government has the authority to carry out the following land use activities:

- Comprehensive land use planning,
- Zoning and development regulations,
- Transportation system planning,
- Establishing land use and transportation standards and guidelines, and
- Conducting land development application reviews.

Additional detail on these planning processes is provided in Chapter 7.

Transit Agency Involvement with Local Governments

There are several different opportunities for transit agency involvement with local governments in various land use planning and decision-making activities:

- Policy and planning coordination is a two-way, ongoing dialogue between regional and local land use agencies and transit agencies. Transit agency staff review and comment on regional and local comprehensive land use and transportation plans and policies. Likewise, land use agencies review and comment on transit plans.
- Site/facility development involves a conversation with the permitting jurisdiction or directly with the developer focusing higher-density, mixed-use development in and around transit stations and corridors through TOD or joint development.
- Project-specific coordination includes review of zoning districts, land use, and development plans by transit agencies on specific development proposals either by invitation or through the statutory environmental review and permitting process. Ideally, coordination on a project level would occur after coordination at the policy/planning and site/facility development phases.
- Financial participation at the site level may include providing transit amenities or engaging in joint development. The conversation can be through the permitting jurisdiction or directly with the developer.
- Service provision provides transit service to areas based on criteria consistent with characteristics of high transit ridership and locations of projected growth.

Transit agencies can influence interactions in these activities by thinking in terms of what they can bring to the table that would be of value to the other stakeholders. However, the value added can be the broad array of benefits offered by transit service, not necessarily contributions to the cost of facilities. Contributions to the cost of a private facility used by transit require a degree of funding capacity that does not exist in most transit agencies. Instead, transit agencies should focus on (1) developing long-term relationships with stakeholders to develop a transit-supportive community; (2) engaging early in the regional, local, and corridor scales of planning decisions that shape the site planning decisions; and (3) getting invited early in the site planning approval process to have local governments require the developer to provide the necessary transit improvements that are consistent with the longer-term plans.

Developers

The majority of site development activities are initiated or led by private developers. Developers typically finance real estate deals and manage the process of development from the beginning to the end. Understanding the steps in the real estate development process is fundamental to the success of influencing site-level real estate development decisions. Table 6-3 explains the five stages of development, with the steps and outcomes involved in each stage. Think of the table as an introduction into the developer's world—what the developer is thinking about and trying to accomplish as it moves a development project from concept to predevelopment, development, construction, and operation.

Table 6-3. Real estate development process.

Stage	Steps	Outcome
Concept	Identify: <ul style="list-style-type: none"> ■ Population served ■ Location ■ Site alternatives ■ Market conditions ■ Potential financing 	<ul style="list-style-type: none"> ■ Concept paper ■ Decision to proceed
Predevelopment	<ul style="list-style-type: none"> ■ Feasibility analysis ■ Assemble team ■ Determine site availability/costs ■ Obtain site control ■ Investigate entitlement issues ■ Solve financing constraints ■ Create site plan/schematic design ■ Outreach to community ■ Procure cost estimates ■ Develop construction pro forma ■ Model cash flow/operating income 	<ul style="list-style-type: none"> ■ Feasibility study ■ Preliminary design ■ Decision to proceed
Development	<ul style="list-style-type: none"> ■ Deal making and negotiating ■ Complete design/working drawings ■ Secure land use entitlements ■ Acquire property ■ Secure construction financing ■ Secure permanent financing ■ Outreach to community ■ Complete bidding package 	<ul style="list-style-type: none"> ■ Entitlement applications ■ Final project designs ■ Financing/loan contracts
Construction	<ul style="list-style-type: none"> ■ Award construction contract ■ Hire construction manager ■ Complete construction ■ Develop management plan ■ Begin marketing 	<ul style="list-style-type: none"> ■ Completed project
Operation	<ul style="list-style-type: none"> ■ Lease-up of units ■ Oversee property management ■ Complete compliance reports 	

Source: Los Angeles Housing Department.²³

As part of the development process, developers generally take on risk in order to receive a financial return. The fact that developers must take on this risk means that they are deeply invested in the success of their project and are open to ideas that will ensure success. As a transit agency, the opportunity lies primarily in the concept and predevelopment phases to help the developer realize the benefits from incorporating transit-supportive design. Developers are typically interested in less regulation, not more, and they invariably have concerns about cost and delay. They are also pragmatic and are seeking the most direct path to project approval while balancing the financial realities of their project along with the concerns of the community and the needs of the municipality.

A developer will likely meet with the community during the predevelopment phase of its project to gauge and address community concerns. Real estate development is a financially driven process. At this phase, the developer will have run financial models testing various development scenarios to see which are financially feasible. Once the project has reached the development phase, and land use approvals (entitlements) are being sought, the developer has settled on a financially feasible development plan and will have incurred significant out-of-pocket costs to refine the proposal before formally submitting it to the municipality for approval. Consequently, at this stage the developer will be less interested in hearing suggestions that will significantly alter its project. At the same time, through its development scenario modeling, the developer probably understands what compromises can be made to address community concerns while protecting the project's financial viability.

In many situations, these compromises involve lowering the density and increasing the amount of parking in the development to address community traffic concerns. The result of lowering density and increasing parking will often decrease profit margins for developers and may result in a project that is less transit supportive. This can become an opportunity for the transit agency and the developer to collaborate for the most mutually beneficial and transit-supportive outcome. In a perfect world, the municipality understands the transit agency's needs and communicates those directly to the developer during the predevelopment phase.

For large transit agencies with their own real estate departments, staying up-to-date with changes and trends in the local development community can be beneficial. Transit agencies can do this by participating in local industry groups (e.g., ULI), events, and meetings.

Transit Agency Involvement with Developers

The most common opportunity for transit agencies to work with developers comes at the site scale. Developers work with a broad range of parties, including city planners, architects, engineers, surveyors, inspectors, contractors, and the general public. Due to the land use approval process, developers typically see a greater need for coordination with municipal staff than with transit agency staff.

However, for certain types of projects—such as market-rate multifamily developments, mixed-use developments, office developments, and institutional developments—developers will commonly approach transit agencies for feedback on the overall project development plan and transit service availability. For example, transit agencies may be approached with regard to the location of stops and stations near proposed developments to generate foot traffic for retail development. Conversely, developers typically do not consider transit when planning market-rate single-family housing (subdivisions).

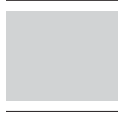
When working with a transit agency, developers are seeking communication, cooperation, flexibility, and connectivity. From the developer's point of view, any tool or agreement that speeds up the development approval process or improves the financial aspects of a project is desirable.

From a communication perspective at the site scale, transit agencies rarely possess all the skills used in the real estate development sector, which include market research, financial analysis, marketing, technical expertise, negotiation, and project management. This gap can make it difficult for the two parties to reach common ground.

Traditionally, completion of a new fixed-route transit line can take anywhere from 10 to 15 years from initial feasibility studies to the beginning of operation. This is a much longer timeframe than that for typical development projects. Generally, key development activities such as site acquisition, entitlements, design, construction, and initial leasing take 3 to 5 years. This time differential between transit and development discourages most developers from focusing on future station areas as viable investments.²⁴ It is difficult to justify spending much time, effort, or money on site acquisition for station-area development when the payoff is so far down the road.

However, transit agencies may find it beneficial to seek to partner with developers at the beginning of the corridor planning process when they are applying for federal funding such as a Transportation Investment Generating Economic Recovery (TIGER) grant or a New Starts/Small Starts grant. Inclusion of development partners and development considerations that show positive economic benefits surrounding transit stations or stops at the time of grant application submission will have a positive effect on a transit agencies' application.

Transit agencies can attract developer partners by conducting market analyses for real estate near planned stations to highlight the demand for transit-supportive land uses. Developers can also be engaged by explaining that the transit investment is unlikely to obtain federal funding without the developer involvement. In turn, the developers would lose the opportunity for the market created by the transit improvement.



CHAPTER 7

Planning Processes

This chapter builds on the partnership opportunities identified in Chapter 6 and explains the key interaction points and activities at the various geographic scales of planning—regional, municipal/county, corridor, area (subarea/district), and site. This chapter outlines the most common land use planning activities and the opportunities for transit agencies to engage in and influence decision making at different steps in the planning process.

Ultimately, the goals of the transit agency are to increase ridership and maintain efficient operation of the transit system. Toward that end, transit agencies can participate in appropriate land use activities at all geographic scales of planning.

Geographic Scales of Land Use Planning

Ideally, transit agencies would seek out opportunities to participate at each of the various geographic scales of planning illustrated in Figure 7-1. The level of transit agency involvement will vary depending on the impact the planning activity has on transit service. The typical land use planning process includes multiple stages of progression, with each stage becoming more specific in both the geographic area of coverage and the level of specific detail.

The most frequent land use decisions are typically related to site-specific projects. On the surface, this may seem the most important area for a transit agency to focus its attention. However, as the research surveys, interviews, and case studies demonstrate, most individual site-related land use decisions—such as what land uses are allowed where or how much parking to provide—are shaped much earlier in the land use planning process. Regional-, corridor-, and municipal-scale planning decisions typically influence what happens at an individual site.

A transit agency will be more effective over the long term by focusing its efforts on influencing longer-term plans and policies that preclude the need to influence the more numerous short-term or site-scale decisions. However, when the transit agency proposes to expand parking or make station improvements, such involvement is inevitable. One of the lessons learned for transit agencies is that this challenge is a little like juggling—one has to keep an eye on more than one ball at a time.

Several possibilities exist for transit service and transit-supportive land use to be shaped by a transit agency within each of the planning components identified in Figure 7-2.

Regional planning involves multiple jurisdictions coming together to create a long-range (20+ year) vision for the region that will guide planning at the local level. Regional plans address regional partnerships and policies that foster the efficient placement of settlement, land use activities, infrastructure, and services across areas broader than a single local government. This includes the regional transit network.



Figure 7-1. Geographic scales of land use decision making.

Municipal/county planning includes comprehensive plan policies that promote the priorities and vision of the city or county. It also includes the associated implementing of land use regulations and guidelines, such as zoning regulations, development guidelines, and minimum density thresholds.

Corridor planning can be unique in that it is often the transit agencies themselves that initiate or conduct planning processes that involve the interaction of transit and land use. Typical planning activities include both major capital investments studies and service changes.

Subarea planning is for a subset of the municipality/county and provides greater detail as to the desired vision for a specific area. These focus areas typically include neighborhoods, centers,

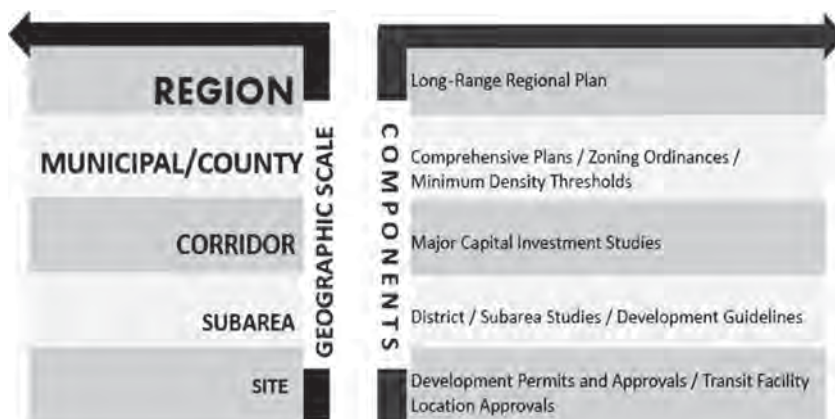


Figure 7-2. Geographic scales of land use planning and corresponding planning components.

corridors, or station areas. Subarea plans can provide additional design or land use standards or requirements that are consistent with, and add detail to, the comprehensive plan policies.

Site planning includes all aspects of land development on a particular parcel. All development must have the appropriate permits and must comply with city and county policies for development as well as have adequate provision of service. In the review of land use development applications, municipal governments and counties take into consideration the ability to provide community services (including transit) to the development. Some communities have developed transit-supportive design guidelines to foster improved land use outcomes.

Local government processes at the various geographic scales of land use planning vary throughout the country. These planning processes are presented in the remainder of this chapter by the appropriate geographic scale of land use planning.

Land use decision making at any scale is inherently political. Transit agencies can increase their effectiveness in influencing land use policies by considering the political dynamics surrounding various land use decisions. These dynamics vary considerably depending on the geographic scale of the decision.

Transit agencies typically can be most effective when involved in the larger geographic scales. As land use decisions move toward the site-specific scale, the influence of a transit agency declines, while the influence of local community groups rises. Transit agencies often have more influence at the broader scales of regional, municipal/county, and corridor decisions because the discussions tend to be largely among and between government agencies. These high-level decisions also create the broader planning and regulatory context that ultimately will be applied to site-specific land use decisions. Once land use decisions shift to a specific site, community groups hold considerable sway in influencing decisions. Community groups are experts on their community and are highly motivated since they are likely to experience the bulk of impacts related to a development project.

Transit Agency Involvement in Land Use Decisions

As part of this research, transit agencies were asked in an online survey to consider their opportunities to engage with local governments at four typical land use interaction points:

- Long-range planning,
- Economic revitalization/neighborhood planning,
- Zoning and land use regulation, and
- Site development.

The majority (93 percent) of transit agency respondents noted that they were invited to participate in long-range planning, whereas only 33 percent of the transit agency respondents were invited to discussions of zoning and land use regulations.

The survey indicated that over 62 percent of transit agencies view long-range planning, such as is typical for the regional and municipal/county scales, as having the biggest influence on long-term transit system performance. The transit agencies felt that they had the most effective interaction opportunities with local government staff and developers during long-range planning. Both local governments and transit agencies noted that the long-range regional/county/city planning process provided the greatest opportunity for meaningful interactions. Transit agencies that responded to the survey felt that they had the least effective interaction with local governments and developers during the zoning and land use regulation process.

Local governments were likely to consult with the transit agency during the long-range planning process as shown in Figure 7-3.

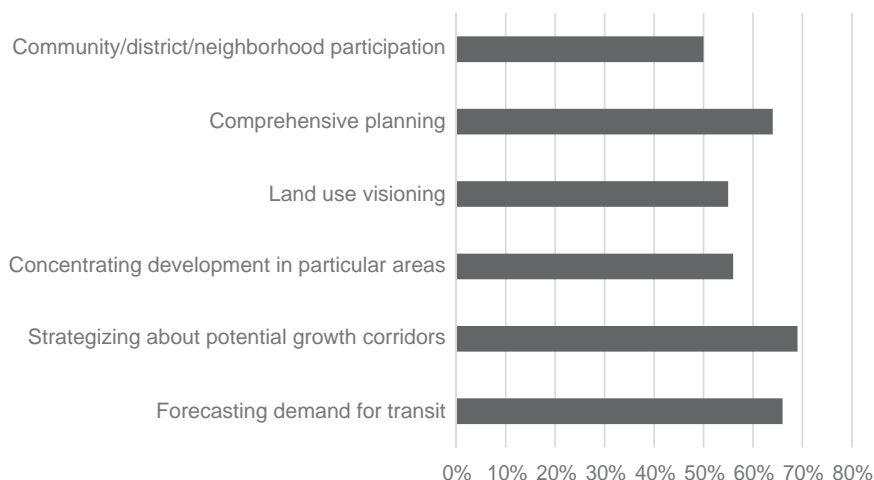


Figure 7-3. Likelihood of local governments to consult with transit agency during the long-range planning process.

Local governments were also surveyed as part of the research and noted that they were most likely to consult transit agencies on bus and station siting, service availability, and on-site access to transit. Developers were also more likely to contact transit agencies regarding these issues. According to the survey, local governments were most likely to contact transit agencies during the zoning and land use regulation process for those items shown in Figure 7-4(a) and Figure 7-4(b).

Regional Planning

The regional plan is conducted at the regional scale and is often a 20-year plan that allocates regional land use and employment forecasts to cities and counties within the region. Within the regional context, the plan provides a vision of where and how residential and employment growth should occur. The framework set by the regional plan also guides regionally funded infrastructure improvements such as transportation.

The federal government provides a common framework for many aspects of regional planning through the requirements guiding the LRTP. As part of the requirements for federal transportation funding, each region is required to have an LRTP. LRTPs are completed in multiyear cycles and provide an important opportunity for the transit agency to influence transportation land use integration, plans, policies, and funding.

The federal government has increased the importance of performance measures in regional planning. To better link transit and land use, areas such as Portland, OR, have shifted from measures focused on conditions (congestion, delay, ridership, air quality) to outcomes (cost of freight delay, job growth, travel time reliability, reduced climate impacts, land consumption, household growth, and affordability) in their RTP updates.

Transit Agency Participation in Long-Range Transportation Planning

Transit agencies are often invited to participate in long-range transportation planning conducted by regional agencies such as MPOs. The LRTP, also known as the metropolitan transportation plan (MTP), establishes the 20-year vision for the regional transportation network. The LRTP is a multimodal policy document that incorporates the policies and priorities for automobiles, transit, pedestrians, bicycles, aviation, rail, and freight. Therefore, the LRTP also guides planning for all modes, including future transit investments in the transportation system.

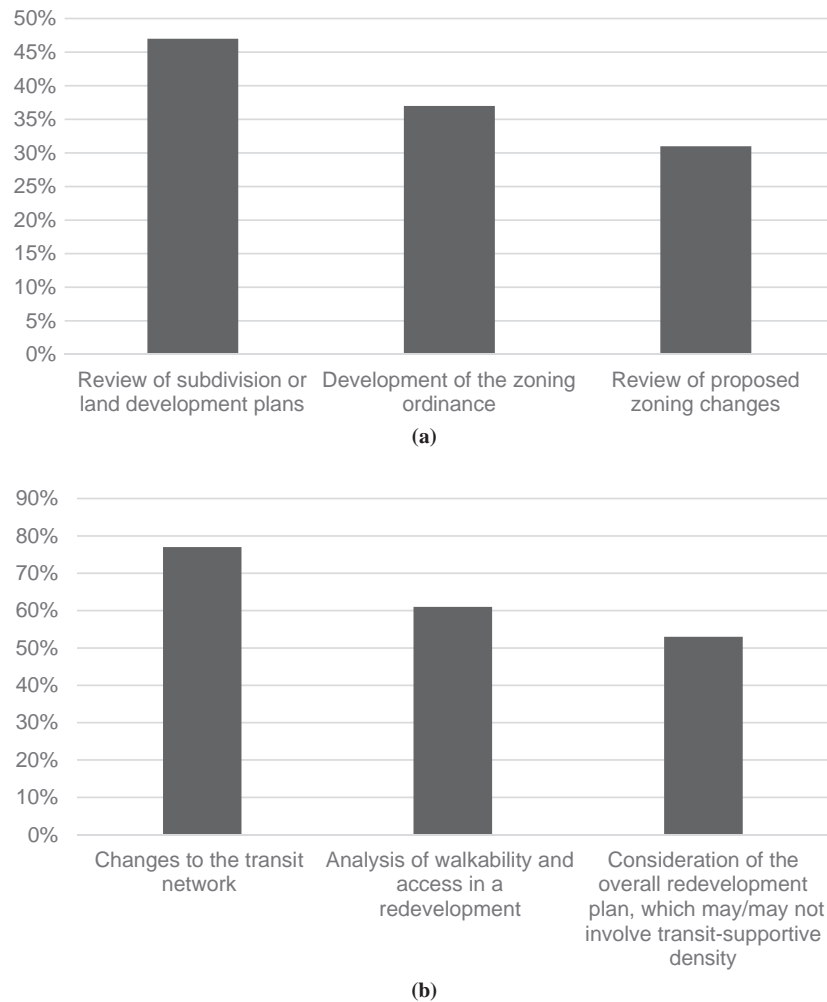


Figure 7-4. Local governments to consult with transit agency.

Federal regulations state that the plan shall “include both long-range and short-range program strategies/actions that lead to the development of an integrated intermodal transportation system that facilitates the efficient movement of people and goods.”²⁵

The LRTP process includes identifying potential corridors in which to concentrate further development and growth as well as visioning exercises to identify the type of place that is desired in the future. As part of the development of LRTPs, projections are made on where future population and employment growth will occur. Various factors influence future land use allocations, such as levels of accessibility to major infrastructure (i.e., high-capacity transit services). Future land use allocations also determine anticipated population and employment densities in specific corridors, which contribute to forecasting demand for transit.

Some of the key transit considerations for the LRTP process are:

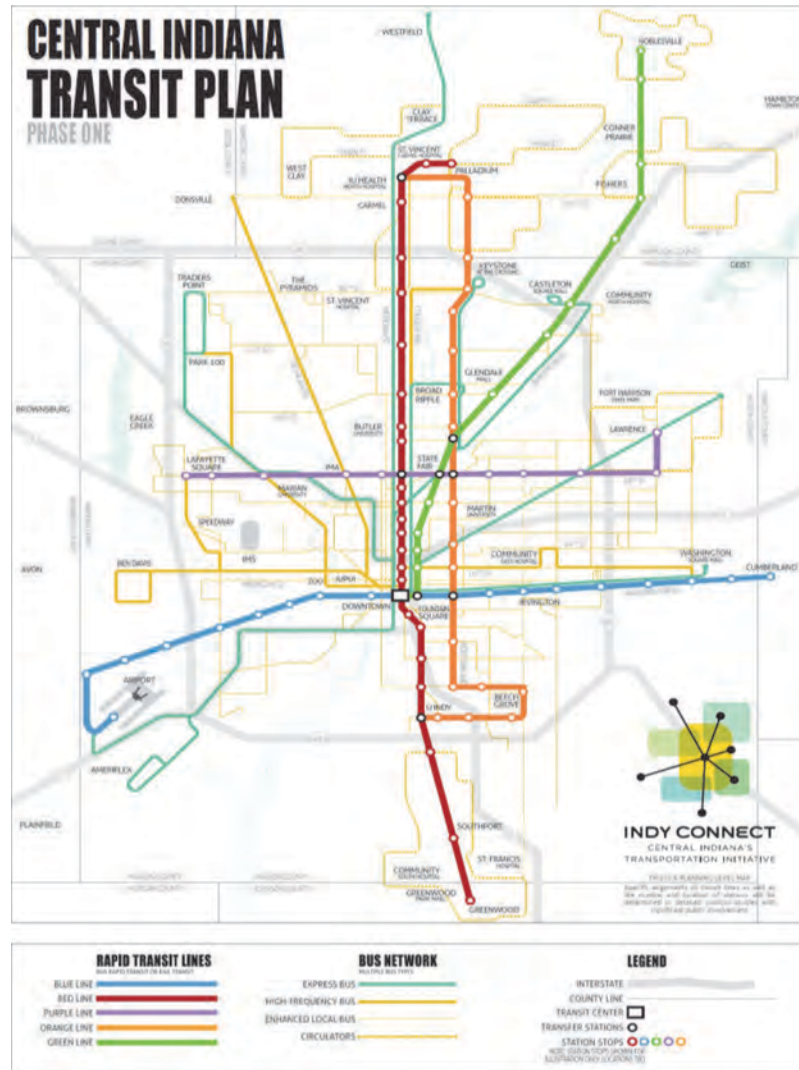
- What is the spatial allocation of future land development?
- Do plans to expand services or invest in new fixed-guideway facilities influence the allocation of population and employment growth?
- Are projected densities sufficiently high to support cost-effective services and meet thresholds set for the FTA Capital Investment Grant Program?

Part of the challenge of engaging in regional planning to achieve transit-supportive outcomes can be the breadth of activities undertaken as part of regional planning. Drawing from regions such as Sacramento, CA, that have developed integrated land use and transit-supportive regional plans and policies, transit agencies can consider the following questions to help identify regional planning decision points:

- **Regional land use vision.** Does the regional planning agency (or a generally accepted public or nonprofit group) have a regional land use vision/blueprint plan depicting a way for the region to grow that links land use and transportation? Does the vision include scenario planning that objectively defines cause-and-effect relationships between land use patterns, travel behavior, and external effects such as air quality?
- **Integrated transportation and land use planning.** Is the region seeking to design a transportation system to support transit-supportive growth patterns, including increased housing and transportation options that focus more growth inward instead of outward? Does a regional planning entity provide planning grants to municipalities to better link transportation and land use such as transit-supportive vision plans, Complete Streets, updated zoning codes, or suburban placemaking?
- **Stakeholder engagement and education.** Does the regional planning process actively engage a broad base of decision makers, residents, and stakeholders with the regional land use vision/ results of scenario planning and seek their opinions on how they want their neighborhoods, communities, and region to grow? Is there technical analysis and education to inform policy and decision makers, local staff, and regional stakeholders about the benefits of strategic growth management/transit-supportive development patterns? Has the transit agency, MPO, or an advocacy group developed educational materials to inform local discussions—particularly in infill areas—about neighborhood travel behavior, health, and effects of higher density on traffic, transit, walking, and bicycling?
- **Multimodal transportation models and design.** Do regional transportation models consider active transportation modes (transit, bicycling, walking) in determining travel demand? Does the region have street standards that allow/encourage multimodal street designs for major streets and arterials?
- **Transit participation.** Does the MPO policy board have a transit agency as a voting member? Is a transit agency actively participating on MPO technical committees involved with topics such as funding, the RTP, multimodal planning, and scenario planning?
- **Best practices.** Has the region developed a regional toolbox identifying and encouraging the best practices to link transit and land use? Does the toolbox include plans to calm streets to encourage active transportation modes?
- **Funding to support transportation land use priorities.** Has the funding section of the regional transportation plan increased the share of federal funding devoted to transit and other active transportation modes?

The Indy Connect Plan is a typical LRTP.²⁶ The map from the plan in Figure 7-5 shows the long-range planning design without final transit stops represented. The plan illustrates a network of multimodal connectivity that serves small, outer-ring communities while providing access downtown to the transit center.

The TIP is an outgrowth of the LRTP. The TIP identifies the transportation projects and strategies that will be implemented over the next 4 years. The TIP is a fiscally constrained list of projects, meaning that it includes priority projects based on the estimated cost of the projects and the anticipated available federal, state, and local funds. In order to receive federal funding, the project must be listed in the TIP. The TIP does not include all projects listed in the LRTP and is updated, at a minimum, every 4 years. Once the TIP is approved by the MPO policy board, it is forwarded to the state for incorporation into the STIP and for governor approval. Transit agencies that are



Source: The Indy Connect Initiative (<http://www.indyconnect.org/pages/Long-Range-Map/default.aspx>).

Figure 7-5. Typical LRTP.

involved in the MPO decision-making processes have more opportunities to obtain funding for their capital projects.

The UPWP is the planning work program of the MPO. It covers a 1- to 2-year period and identifies the planning priorities and activities for the MPO region. The UPWP includes a description of the work to be done, desired outcomes, timeframe, budget, source of funding, and entities responsible for completion of the work. These programs often include regional mobility needs assessments, corridor and subarea systems planning studies, federally required plans and programs, and database/forecasting methodology, as well as analysis thereof. The MPO is not necessarily responsible for carrying out the planning studies and programs; however, they must be identified in the UPWP to receive funding from the FTA or FHWA.

Municipal/County Planning

Municipal and county plans and policies are most responsible for shaping land use. The major tools used by municipalities and counties are comprehensive plans, area plans, and zoning codes (discussed in the following bullet points). Transit agencies can influence the development and

application of comprehensive plans, small-area plans, and the related policies and zoning codes so that they give appropriate consideration to transit. In addition, transit agencies can argue for changes in land use policies before agreeing to provide service. Transit agencies have an opportunity to partner with local governments and should ask to be involved in land use planning activities.

- Comprehensive plans, which give a generalized picture of how the city will grow and evolve over time using a combination of policies and maps.
- Area plans, which are used at a smaller scale to zoom in to a defined area. The City of Denver explains that area plans “address the issues of a portion of the municipality. Small-area plans can cover three different geographic scales—neighborhood, corridor, and district regardless of the size of the area.”²⁷
- Zoning codes, which zoom in further and define what land uses are permitted on a site and the dimensions of land use in terms of size, height, lot area, floor density, setbacks, and other requirements.

Transportation plans establish a coordinated network of transportation facilities to serve state, regional, and local transportation needs. The transportation plan should include a public transit plan that identifies existing and future transit routes, exclusive transit rights-of-way, and exclusive transit facilities such as transit centers, major transit stops, and park-and-rides. It should also include land use and design elements that support efficient transit service. Local governments should coordinate with transit agencies to identify existing conditions such as routes, ridership levels, facilities, and service deficiencies on existing routes (based on service standards). In addition to coordination with staff, the transit agency’s public transportation plan may be a helpful resource for local governments.

Land use and transportation standards and guidelines implement the policies set out in the comprehensive plan. Since transit typically requires pedestrian travel on both ends of the transit trip, it is imperative that local standards and guidelines allow for transit facilities to be integrated into the desired physical design of the community. Pedestrian-supportive standards and guidelines establish safe access to and from transit routes and provide connectivity to key destinations.

Transit Agency Involvement with Comprehensive Planning and Zoning

Comprehensive land use plans provide an overall vision and future direction for how a community wants to develop. The plan addresses land use elements such as the urban form, type and mix of land uses, and connectivity, all of which have a direct impact on transit service. Transit agencies can add to the discussion by providing guidance as to how urban form affects the location, type, and frequency of transit service. The comprehensive plan also includes a transportation element that often covers regional transportation, congestion management, auto mobility, transit, the pedestrian/bicycle network, and parking. It is essential that a local government prepare a comprehensive plan with the inclusion of the transit agency in order to produce a plan that effectively integrates transit service within the various plan elements.

Conducted at the local government level (e.g., county, city, town, or village), comprehensive planning presents a community’s goals and aspirations for the built and natural environment. The comprehensive plan is the framework that guides future growth and development in the city or county; it contains policies, goals, and objectives that apply to the entire jurisdiction. While fairly broad in scope, key elements of a comprehensive plan include both land use and transportation components. This long-range land use planning process identifies how land will be used in the future, whether for residential, employment, or civic uses. In addition to identifying the

different uses of the land, the land use planning process can guide the scale and design of development to best address the goals of individual communities with regard to economic development and livability.

All public service plans and subarea land use plans and policies must be consistent with the policies outlined in the comprehensive plan. Economic development, redevelopment, and transportation plans for the local government (county or municipality) are intended to implement the comprehensive plans.

In addition, zoning decisions—new classifications, rezonings, and amendments—are made by local governments as they implement long-range comprehensive plans. Zoning influences development through the regulation of the types of land uses, densities, and on-site provisions (such as parking requirements). The minimum and maximum allowable density requirements of zoning ordinances directly relate to the viability of transit service. Transit agencies can get involved in community planning by reviewing zoning amendments as they relate to transit. In order to avoid the lengthy process of creating zoning overlays to accommodate transit projects, transit agencies can collaborate with planning departments to guide the base zoning determinations along existing and potential transit corridors.

In addition, zoning ordinance development and updates may include identifying the appropriate land use zones to allow the siting of transit centers or stations, park-and-ride locations, and transit shelters. In cases where the allowance may be conditional, the transit agency may be asked (or may choose) to provide input regarding standards for development. Transit agencies will also have the responsibility of educating land use planners and developers at the community level about viable density for types of transit.

When participating in comprehensive planning and in zoning decisions, transit agencies can use the research regarding the 5 Ds of land use presented in the following bullet points and Appendix A to better focus on what to ask for when working with other stakeholders:

- Density is determined to be of moderate importance;
- Diversity in land uses is found to be of lesser importance;
- Design of the streets, particularly grid-like street patterns, is second in importance;
- Destination accessibility is found to be of lesser importance; and
- Distance to transit is the most important factor influencing transit ridership.

These factors are always important, but the order may change based on local conditions. The APTA Standards Development Urban Design (SUDS) Working Group's *Defining Transit Areas of Influence* provides guidance on delineating spatial areas that are most likely to have land use and development impacts on increasing ridership and density near existing or proposed transit stations or stops.²⁸ This guidance from APTA may be considered when discussing land use decisions surrounding transit.

Relating Zoning and Service Standards

The minimum and maximum allowable density requirements of zoning ordinances directly relate to the viability of transit service. However, few local governments are aware of or take into consideration what a transit agency believes to be the minimum viable density for various forms of transit. Many transit agencies have service standards related to transit system design and performance. Transit agencies can explain to local governments that are considering zoning amendments how these provisions provide a blueprint for transit planners to consider requests for new or modified service (both extensions and cutbacks). Local governments are also likely to be unaware that many transit agencies periodically evaluate existing routes against performance systems to ensure an efficient and cost-effective service network.

It also may be useful to explain that one of the key elements in transit planning is service availability, which is the passenger's ability to access and use transit. In considering availability, the aim of a transit agency is to not over- or under-serve any one area. Among the primary typical service characteristics are population and employment density. Obviously, the higher the density and the greater the diversity of uses within the typical walking distance of a stop or station, the higher the transit market potential. However, as discussed previously, variables such as distance to transit and design of the street network are even more important factors to incorporate into service standards.

Comprehensive Plans Are Infrequent Opportunities

Comprehensive plans and land use zoning codes are infrequently updated, which gives transit agencies limited opportunities to influence them. Decades can pass between updates of zoning codes and comprehensive plans, leading to development decisions being shaped by conventional suburban codes that require auto-oriented development patterns.

A few recent examples help to underscore this point. The 2014 City of Los Angeles zoning code rewrite starts by noting that when “the current zoning code for the City was written in 1946, Harry Truman was president, World War II had just ended, and the population of the City was just under two million (roughly half what it is today).”²⁹ On a similar note, Washington, D.C.; Baltimore; Buffalo; and New York City were mentioned in a 2012 *Washington Post* article as examples of cities rewriting outdated zoning codes predicated on the cars’ “universal use as the principal means of transportation.”³⁰ The article noted that Washington’s “zoning code was last overhauled in 1958, when urban planning was consumed with how to adapt large cities to the automobile.”

Waiting five or six decades to rewrite a comprehensive plan or land use zoning codes may well be the exception instead of the rule. Even though these opportunities seldom arise, getting transit agencies to the table as effective partners when rewrites occur is critical. In addition, smaller-scale plans such as those discussed in the Subarea Planning section may provide more frequent opportunities for transit agencies.

Figure 7-6 shows a portion of the transit element of a typical comprehensive plan.

Assessing the Transit Supportiveness of Plans and Policies

The transit supportiveness of local plans, policies, and codes can cover a broad continuum depending on how the language is written. It is one thing to allow development to be transit supportive; it is quite another to require it to be transit supportive. For some communities beginning to understand the importance of transit-oriented land use plans, allowing development to be transit supportive sends a positive signal. However, experience shows that requiring transit-supportive land uses is often necessary for realizing transit-friendly results.

When determining its strategy for working with municipalities, a transit agency can benchmark where the municipality stands on the continuum of transit supportiveness. In simple terms, this is how far the municipality has gone (or how far it is willing to go) in writing its plans, policies, and zoning codes along this continuum:

- Level 1: allowing transit-supportive development to happen,
- Level 2: encouraging transit-supportive development,
- Level 3: incentivizing transit-supportive development, and
- Level 4: requiring transit-supportive development.

A transit agency can move its assessment to another level by considering factors such as the quality of transit service, community attitudes, development community experience, and the



Source: City of Albuquerque, NM.

Figure 7-6. Typical comprehensive plan transit element.

pattern of development. All of these serve to shape how far a municipality is likely to proceed with linking transit and land use policies. By researching further, the transit agency can look at some key factors that can help determine the transit friendliness of municipality codes and policies. For instance:

- Have zoning codes been updated to allow development that is consistent with transit-supportive development principles (a defined center, density higher than the community average, a mix of uses, limited and managed parking, compact and oriented toward pedestrians) along frequent transit corridors?
- Are transit-supportive uses allowed as an outright permitted use at most major transit stops, or would a developer be required to take an extra step and seek discretionary approval?
- Do the codes, plans, and capital improvement programs give attention to creating walkable places—requiring sidewalks, calming major streets, and requiring designs that orient buildings to the street?
- Do the land use plans and zoning codes emphasize centers and corridors?
- Do the land use plans and zoning codes focus density and a mix of uses along major transit streets?
- Do municipal or county plans and policies encourage development proposals that support high-quality transit service?
- Have parking requirements been updated? For example, have minimum parking requirements replaced maximum requirements?

Corridor Planning

In their studies of major capital investments and service changes, transit agencies conduct planning processes that involve the interaction of transit and land use. Local governments are typically first brought into discussions about land uses surrounding new planned transit projects during initial planning/visioning and evaluation of alternatives. The focus of this coordination is typically data collection, choosing locations for proposed stations, and planning/visioning for station areas (see Figure 7-7).

Transit agencies and local governments are brought together via the Section 5309 Capital Investment Grants program, which is administered by the FTA. The program provides funding for the establishment of new rail or busway projects and is commonly referred to as New Starts/Small Starts funding. The New Starts/Small Starts grant program is the FTA's primary funding source for major transit capital investments, including heavy rail, light rail, bus rapid transit, commuter rail, and ferries. The FTA is required by law to evaluate and rate all transit projects seeking Section 5309 grant funding from that agency. Two key criteria of this evaluation are land use and economic development, which directly shape land use decisions surrounding transit projects at the local level.

Transit Agency Involvement in Corridor Planning

Major transit corridor investments provide some of the best opportunities for a transit agency/project sponsor to take a leadership role in linking transit, land use planning, and development. Land use considerations have increasingly become important aspects of corridor studies and provide an opportunity to explicitly explore multiple facets of the transit and land use relationship. Transit projects frequently include a land use planning element that can range from scenario planning to the development of detailed land use plans reflecting strategies to mitigate project impacts or to capitalize on the city-shaping opportunities flowing from the transportation investment.

An often-overlooked aspect of corridor studies is that federal transportation funds can be used to pay for land use planning related to the transportation project. Communities such as Columbus, OH; Los Angeles, CA; Miami–Dade County, FL; Phoenix, AZ; Portland, OR; and Seattle, WA, have used transit project development funds to pay for land use planning activities



Figure 7-7. Map from a typical corridor plan.

at the scale of the corridor and individual station areas at various stages of project development.³¹ This can be an important opportunity for transit agencies seeking to influence land use.

Opportunities in Corridor Planning

One factor of the transportation land use equation is that while transportation agencies face budget pressures, they tend to have more financial resources than local land use planning agencies. Consequently, there is an opportunity to provide transportation funds to support land use planning and to develop policies and regulations that are more transit friendly, which can be important in shaping land use in a transit-supportive manner.

In some instances, transit agencies provide funding directly to municipalities to pay for TOD-related planning as part of major transit investments. Los Angeles Metro has the largest program; between 2011 and 2014, Metro awarded \$21,000,000 to local governments for TOD planning.³² The Los Angeles Transit-Oriented Development Planning Grant Program is designed to spur the adoption of local land use regulations that support TOD. Goals for the program include to:

- Increase access to transit by assisting local governments in accelerating the adoption of TOD regulatory frameworks,
- Improve utilization of public transit by reducing the number of modes of transportation necessary to access regional and local transit,
- Further the reduction of greenhouse gases through encouraging transit use and infill development along transit corridors, and
- Support and implement sustainable development principles.³³

Corridor planning also presents another opportunity to incorporate community development goals such as household affordability, access to employment, education, health and community services, and sustainability into transit improvements. In turn, this can provide an opportunity for nontraditional partners such as not-for-profits, community development organizations, philanthropies, and major institutions to become involved and reinforce transit-supportive land use outcomes. It may also provide an opportunity for multiple municipalities to work together to shape land uses.

Optimally, leveraging transit and land use should to be a two-way street. Major transit investments need to be designed with land use in mind. In the same way, land use investments need to consider transit. As illustrated by the Cleveland HealthLine case study, there is now clear evidence that high-capacity transit projects can be both for moving people and for shaping the community. Taking a “development-oriented transit” approach, as Portland describes it, requires balancing both aspects throughout the transit facility design, corridor selection, and station location decisions to optimize transit operations, community fit, urban design, and economic development.

Roadway improvements and management projects can also provide an opportunity for transit agencies to influence land use. In particular, the move toward Complete Streets in recent years has created an opportunity to better integrate transit and land use in the design and execution of transportation projects. By considering land use, transit, pedestrians, and bikes in facility design, Complete Streets shift the thought process to achieve outcomes that better link transit and land use as a matter of course.

The Red Line alternatives analysis conducted in Indianapolis provides an early example of a strong partnership. In the planning phase, the Indianapolis MPO, IndyGo (the Indianapolis Public Transportation Corporation), and the Central Indiana Regional Transportation Authority (CIRTA) formed a management team to oversee the analysis and to implement the project’s public involvement plan.³⁴ The partnership produced a recommended alternative, including mode, route, service plan, station locations, priority treatment, and branding. The FTA land use criteria were used to screen alternatives and to select the preferred alternative. This approach enabled the

project sponsor to identify which land use plans and policies needed to be prepared in the project development phase to make a competitive grant application.

Subarea Planning

While still long-range plans, subarea and district plans (see Figure 7-8) begin to narrow the land use and transit planning focus down to a smaller geographic location, such as downtown areas, special districts, or designated neighborhoods. At this level of planning, local governments may seek transit agency input on:

- Realigning transit service to serve new land uses,
- Making last-mile connections with bicycle/pedestrian strategies,
- Providing input into redevelopment plans and locations of high ridership districts (such as mixed-use, entertainment, and employment districts),
- Assessing the impact on transit service, and
- Forming potential partnerships to finance redevelopment districts and other value-capture options.



Figure 7-8. Typical subarea plan.

Subarea plans can be created for both greenfield developments and urban infill projects. While the physical and economic landscapes will provide a variety of land use opportunities and transit needs, the transit agency can play an integral role in either type of subarea planning.

Transit Agency Involvement with Subarea Planning

Given the broad spectrum of municipality involvement with land use, there is no one-size-fits-all approach for how transit agencies should get involved. While complete rewrites of zoning codes and comprehensive plans may happen infrequently, the opportunity to help shape land use plans, codes, and policy more often presents itself at a smaller scale. Communities use many names—small-area, neighborhood, district, station-area, and sector plans—to describe these more geographically focused plans. Planning at this scale often translates directly into site-level development regulations that will help determine whether development is transit-supportive. Depending on how they are structured, these planning processes provide transit agencies with an excellent opportunity to get involved in shaping policy and guiding regulations cutting across land use and transportation. As highlighted in the case studies, NJ TRANSIT’s Transit Friendly Planning Land Use and Development Program funds vision plans that contribute to the preparation of station areas by local municipalities.

Transit agencies have a particular stake in redevelopment that serves traditional, more transit-dependent neighborhoods. Given the number of stakeholders typically involved in redevelopment (local and state agencies, lenders and financiers, developers, nongovernment organizations, and charitable organizations), the question is: Do transit agencies have an effective voice in the collaborative decision-making process?

A station-area plan is typically a collaborative undertaking between transit agencies that deliver bus and rail services and local governments that control zoning and land use decisions. Transit agencies often work through local planning agencies to generate station-area plans, sometimes providing funding assistance, as has been the case in Portland, OR, and Santa Clara County, CA.³⁵ In perhaps the largest program of its kind, Los Angeles Metro has provided planning grants for TOD to local governments since 2012. Several states and MPOs provide funding support for station-area planning. These include New Jersey, Maryland, Oregon, and California and the MPOs in Atlanta, Philadelphia, Chicago, Portland, Los Angeles, Minneapolis/St. Paul, and the San Francisco area.

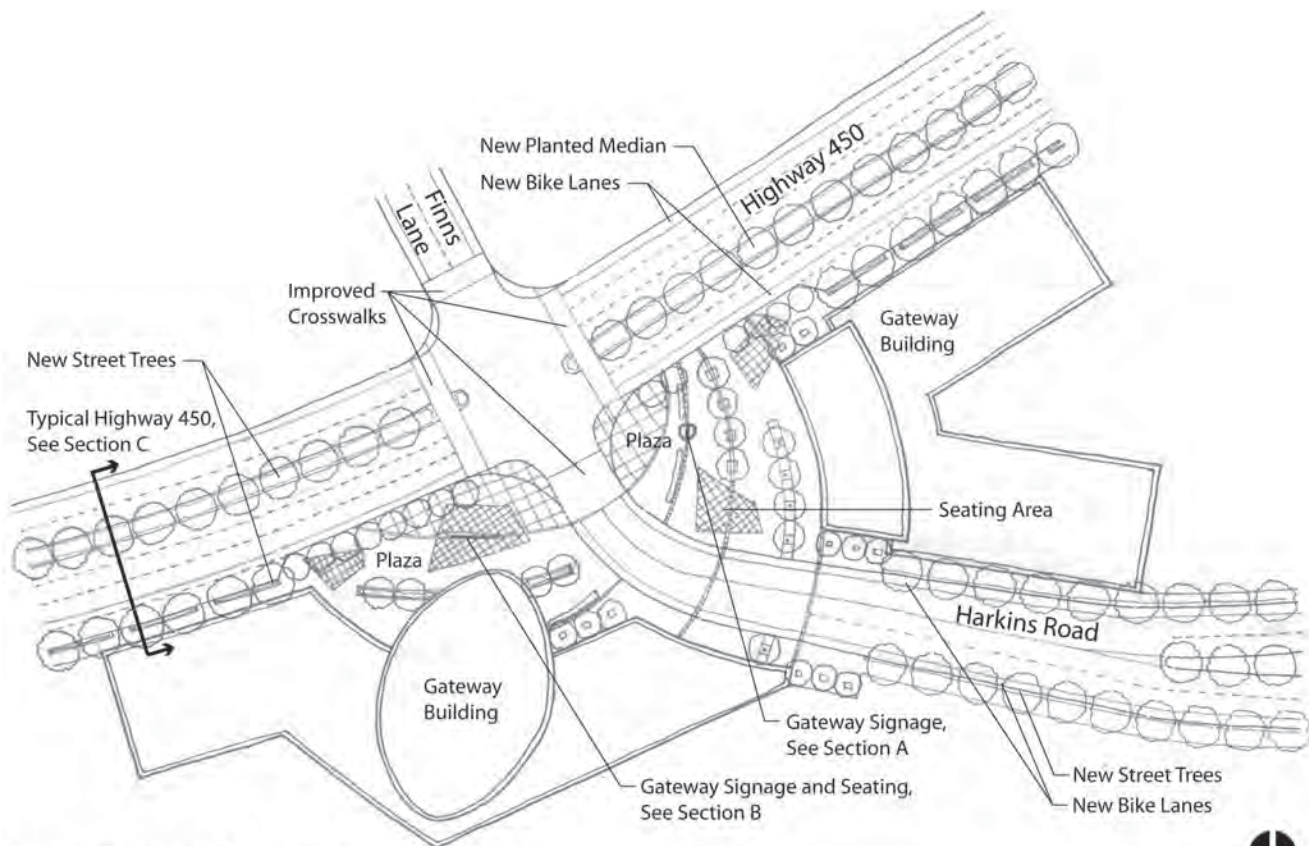
A number of U.S. cities are termed as “shrinking cities” due to population and employment loss. Shrinking cities exhibit both declining and decentralizing populations. Extensive areas of vacant land are the most visible indicator of a declining economy and deter real estate investment. The 2009 *Central Maryland TOD Strategy* identifies vacant buildings, abandonments, and other forms of disinvestments as major obstacles to promoting urban TODs.³⁶ Another key challenge for local governments and transit agencies in shrinking cities is right-sizing the community infrastructure and services, including the transit network. Transit agencies in shrinking cities face the issue of ensuring that areas prioritized for economic revitalization investment and activity are aligned with transit routes. Bus routes can be modified to retain service to the remaining residents and reduce service to areas of greatest population loss.

On the surface, it may seem that the easiest solution is for the transit agency to adapt on fixed routes by offering less frequent service. Ironically though, the demand for public transit could increase in shrinking cities as populations exhibit high levels of poverty and lower-than-average rates of car ownership. This results in a higher percentage of people who rely on transit. Thus, transit agencies are challenged to consider whether expansions in public transport might reduce the need for private vehicle use in cost-effective ways. Regardless, changes in service must be coordinated closely with local governments as demographic factors have significant impact on transit use.

Site Development Planning

Local governments make land use and development decisions to advance community goals or in response to site-specific developer proposals. These decisions can have a significant influence on existing transit services or the prospects of new services and yet are often reached without full consideration of the community’s potential to affect or benefit from transit connections. Many transit agencies or local governments offer or apply design guidelines to influence site design outcomes. Site development planning provides unique opportunities for transit agencies to engage with developers and local land use officials. Figure 7-9 shows a typical site plan schematic.

Additionally, site design challenges differ by development type—employment centers, shopping centers, residential communities, and mixed-use projects—partly because the demand for transit (including time of day) varies. The approach to land use and transit coordination may differ for some transit agencies depending on the mode of transit (e.g., rail, bus rapid transit, or bus). For transit around fixed-guideway projects, planning or the coordination of land use is often more proactive and intentional than around conventional bus routes, which are typically planned on a site-by-site basis. The City of San Diego has a formalized process for planning coordination to include all high-quality transit, including buses (particularly bus rapid transit). In Durham, NC, coordination is based on distance of a project to a station area. The City–County Planning Department notifies Triangle Transit if potential site-development projects are within a half-mile radius of a transit-oriented development station area.



Plan of Typical Gateway
 New Carrollton Metro Station TOD Study



Figure 7-9. Typical site plan schematic.

Transit Agency Involvement with Site Development

Transit agencies, local governments, and developers were asked in the research survey to characterize the extent of transit agency involvement in site development decisions:

- Transit agencies viewed site development as having the greatest influence on transit operations (47 percent), followed by long-range planning (33 percent).
- The type of site development affects the likelihood of whether the transit agency will be engaged by the local government. Local governments are most likely to consult transit agencies when developing commercial or mixed-use centers (89 percent) and multifamily residential developments (62 percent). For these types of development, local governments typically first consult with transit agencies before the permitting/site planning stages. Transit agencies were consulted the least for single-family subdivision site design (35 percent).
- Most transit agencies reported that they were typically first consulted about site design either before permitting or during the site planning stage (71 percent). About 10 percent of respondents were consulted either after the permitting stage or on realization that patrons or residents of a development lacked access to transit facilities.
- Most transit agencies were consulted for bus and transit stop locations (81 percent), reviewing site plans for proposed TOD areas (60 percent), and service availability (56 percent).
- It is unlikely that engagement with the transit agency will be initiated by a developer for market-rate single-family housing (subdivisions). Of these projects, transit agencies had the least amount of involvement with street layout in new subdivisions (30 percent were consulted), on-site access (36 percent), and last-mile connections (38 percent).
- In general, developers believe that transit is an important aspect when developing mixed-use, multifamily, and affordable housing projects. The majority of respondents (69 percent) indicated that during the project development process, they first communicated with transit providers during the early stages of site planning.

The best opportunities for a transit agency to actively participate in planning a private development are during the conceptual and predevelopment stages prior to the developer securing land use approvals (i.e., entitlements) during the development stage. An important concern at the site scale is whether a development proposal has progressed well into the development stage, typically beyond the point where the developer is likely to be open to changes in the project. The Pace Suburban Bus Service's Transit Supportive Guidelines and Design Review Assistance for Transit discussed in the case studies demonstrate two tools used to open the door to early discussions with private developers.³⁷

As part of site development reviews, transit agencies may be asked to comment on service availability, including the siting of bus stops, shelters and transit stations, and last-mile connections to transit service. Depending on the size of the land use proposal, transit agencies may comment on the street layout and on-site access for the development.

It is important for transit agencies to get involved early in the development process of major subdivisions and real estate projects to influence project site design. Engaging early in the conversation can influence road designs, parking siting, internal vehicular and pedestrian circulation, and the placement of bus stops, transportation hubs, and the like. Transit agency involvement should not be an afterthought but rather an integral, up-front part of the project conceptualization and design process.

Developers understand that local community groups such as neighborhood associations can have a considerable impact on the creation of development proposals and the selection of the developer at a site-specific level. Gaining the community's support for a transit-supportive project from the onset of a project is an opportunity for the transit agency and the developer

to collaborate early on. The transit agency and the developer may share a common objective of desiring higher density/more intensive development on a site in the face of community concerns about localized impacts. By incorporating a transit-supportive design, the developer may be able to demonstrate to the municipality how many of the perceived impacts can be addressed in the face of community concerns.

Participating in Site-Specific Decisions

Transit agencies that participate in a site-specific land use decision should understand the perspectives of three key stakeholders involved in a typical decision: the developer, the local community, and the municipal/county government. Municipal site-specific land use decisions typically occur at three levels, depending on the size and type of development proposal and the local government's specific approval process:

- Level 1: Planning staff;
- Level 2: Planning staff and board/commission; and
- Level 3: Planning staff, board/commission, and municipal or county board/council.

Professional local **planning staff** conduct development review of the developers' proposal. Development review staff evaluate how a site-based proposal fits into the existing plans, policies, and strategies of the municipality. The review process can start with a pre-application meeting between the local planning staff and the developer to provide feedback on the development proposal. This may result in the developer adjusting the proposal to ensure a smoother approval process once its proposal is submitted. Altering development plans to satisfy the community and local decision makers during this early stage is in the best interest of the developer. Staff will then prepare a staff report and recommendations to the planning commission reflecting to what extent the development proposal conforms to existing plans and policies.

Transit agency staff should comprehend the perspective of the development review staff and help them understand a transit agency's perspective, particularly at the pre-application stage if possible. If transit-supportive land use policies have already been adopted, the transit agency may not need to be directly involved in the development review process, as was the case with the Pearl District case study.

Transit agencies may also need to be prepared to explain to local planning staff the operating costs of serving new developments. The transit agency, the community, and the developers need to reach agreement on the type, frequency, and operating hours of transit service. The stakeholders also need to reach agreement on who will pay for the service.

The **planning board/commission** is made up of a cross-section of citizens who donate their time and have been appointed by the municipality/county. Like the planning staff, it takes a broader, long-range view of development and considers land use issues in light of the community as a whole. Citizens and neighborhood associations will typically receive notice of meetings and the details regarding the development proposal. In many instances, a letter in support or opposition of a project from an official neighborhood organization can carry weight with the commission. The commission meetings are public, and at the meetings, the commission takes testimony and makes recommendations on whether to approve a development proposal and what, if any, conditions to impose. The commission's comments may result in the developer adjusting its proposal and coming back to the commission.

The **municipal or county board/council** of local elected officials will approve or reject the project after receiving the recommendations of the planning commission. The board/council typically takes a nuanced view, balancing community-wide concerns and the views of its constituents. Like the planning commission, the board/council will hold hearings. It is not obligated to

adhere to the planning commission's recommendation. The final decision as to whether a development will be approved rests with these elected officials; consequently, political considerations may also influence how they cast their vote.

Community Involvement

In regard to site-specific land use decisions, Saint et al. note that "More and more citizens have found that when they unite, organize, and commit to fight developers and investors at the local political level, they can and do win. Over time, they have become increasingly sophisticated in their techniques. A prolonged fight against a well-funded, organized and committed NIMBY (not in my backyard) citizen group can cost a developer tens or hundreds of thousands of dollars and even prevent them from building at all."³⁸

Transit agencies can be more effective at the site-specific scale when their concerns align with citizen groups and/or the local planning agency staff. For example, citizens concerned about local traffic may favor a development project that follows transit-supportive design principles, resulting in a reduction of traffic.

Transit agencies can also increase their effectiveness by aligning with a developer to help convey the benefits of projects that are transit supportive. However, the benefits of these projects should be presented thoughtfully to citizen groups since citizen groups across the country have opposed many higher-density transit-supportive projects, in part because they were concerned about the increased traffic impacts on their neighborhood. California reformed its landmark state environmental law (the California Environmental Quality Act) because citizens were using the law to hinder efforts to increase infill, transit-oriented development, bicycle plans, and affordable housing, among other things.

Transit-Supportive Guidelines

At the site scale, transit-supportive design guidelines can help influence the creation of site and precinct plans, particularly in terms of influencing standards and designs for new subdivisions, mixed-use neighborhoods, and master-planned communities. The applicability of such guidelines for creating transit-supportive outcomes is discussed in the following.

Transit-supportive land use and design guidelines provided by transit agencies have the most to offer in the creation of site plans, particularly in terms of influencing standards and designs for new subdivisions and master-planned communities. Typically, recommendations are provided on the siting of parking lots, building setbacks and orientations, minimum walking distances to bus stops, integration with connecting roads and access points, on-site road designs to accommodate buses, and elimination of pedestrian access barriers such as perimeter walls and berms.

Large transit agencies, particularly those with rail operations, often suggest minimum residential densities in station areas. For example, the San Francisco's Bay Area Rapid Transit (BART) system calls for a minimum of 40 units per acre for individual multifamily housing projects and an overall station-area average of 20 units per gross acre.³⁹ Many guidelines also call for station-area zoning that reduces minimum parking levels. Some transit agencies, such as the Chicago Transit Authority (CTA), have created station typologies, suggesting different urban design approaches and sometimes different standards (for example, minimum residential densities and parking levels) for each.⁴⁰

Some guidelines can be characterized as land planning/urban design manuals with a transit orientation. These provide suggestions and illustrations for designing more compact, mixed-use development that is pedestrian friendly and easily accessible to transit. Other guidelines function more as transit facility design manuals that aim to ensure efficient operation of buses, paying secondary attention to land planning and urban design. Thus, the former emphasizes the needs

of transit users accessing the system, while the latter stresses the needs of the transit operator running the system.⁴¹

Local transit agencies can advocate for the formal inclusion of some design standards that would help favor transit-oriented land use policies in official land use and zoning laws. Since land use decisions are ultimately the purview of local governments, the guidelines are meant to influence the thinking and practices of local planning agencies as much as private developers.

Design standards embraced by most U.S. transit agencies are similar to those set by new urbanists and other advocates of less car-oriented built environments. The grid of city blocks with an interconnected network of sidewalks and bikeways and a healthy mix of land uses helps create a 24/7 place (one that generates transit trips at night and on weekends). The MARTA *Transit-Oriented Development Guidelines*, for example, make the point that mixed-use projects help fill trains and buses in off-peak periods, thus increasing transit's daily load factors and fare-box recovery rates. MARTA encourages the use of TOD overlay districts to intermix land uses so as to generate all-day/all-week transit trips in transit-served corridors.⁴² Increasingly, design guidelines—including those from Chicago, San Francisco, Denver, and Austin—promote place-making, arguing for high-quality, human-scale designs that make transit stations neighborhood centerpieces.

Interestingly, based on the surveys conducted during this research, local governments find guidebooks/guidelines more effective than do transit agencies. This may result from the fact that local governments have the authority to enforce land use guidelines or reinforce policies using land use development and zoning codes. Forty-one percent of transit agency survey respondents have a guidebook or policy related to transit and land use coordination. These guidebooks have mostly been placed on websites, with printed copies available for distribution. The majority of those with guidebooks have seen policies/procedures recommended by the guidebook adopted by local jurisdictions (64 percent).

Likewise, the majority of local government respondents have design/development policy guidelines to support transit-supportive land uses (approximately 71 percent). These local governments view the guidelines as being somewhat effective (approximately 63 percent). As for developers, approximately half (48 percent) of developer respondents were provided with guidelines for transit-supportive design/land use by their local transit agency, and few (24 percent) have any sort of internal guidelines concerning coordination of transit with development projects.

Transit Agency Site Development

In some instances, such as for a new parking facility or bus transfer facility, the transit agency may find itself issuing requests for proposals (RFPs) to directly solicit a developer's involvement. Each RFP released by a transit agency will have been crafted to meet multiple policy goals that will address necessary conditions for design, uses, and restrictions. Transit agencies may also have land holdings near existing or proposed transit stations that they can sell or lease to private developers to create superb TOD destinations. These situations allow transit agencies to have a much more direct impact on the land use decisions surrounding transit on a site-based level. While still collaborating with developers, often through a competitive selection process, the transit agency has control over the development and design guidelines for the site, which it can detail in their initial RFP. Private developers may be interested in partnering with transit agencies on agency-owned sites to gain access to land at a discounted rate through the deal structure or access to competitive transit-oriented funds that may be available at the local or state level. In increasingly urban areas, land owned by a transit agency near an existing or proposed station is highly desired by developers.

In such instances, there are questions that a transit agency may ask itself before issuing an RFP to developers.

- Has the transit agency built a network of supportive partners to achieve the desired outcome?
- Has the transit agency consulted with the local government and community early in the planning process to understand potential concerns?
- Has the transit agency clearly articulated the benefits to the community for the proposed improvement?
- Is there already some positive discussion (a buzz) at the policy or community level about the potential benefits of the proposed transit agency project?
- Has the transit agency sought to mitigate impacts to the community and help to resolve other community issues (e.g., co-locate another community facility in the proposed transit agency project)?
- Are community groups such as neighborhood associations likely to be supportive of the transit agency proposal?
- Are there major obstacles/barriers to successfully achieving a transit-supportive decision?
- Has the transit agency proposal progressed well into the development stage, typically beyond a point where the transit agency is likely to be open to changes in the project?
- Is the transit agency's proposal generally consistent with current land use and zoning plans (e.g., comprehensive plan, neighborhood plan, station-area plan)?
- Does the municipality/county have a track record of encouraging/requiring transit-supportive outcomes?
- Is the appropriate municipality/county (staff, planning commission, city council) likely to be supportive of the transit agency's desired outcome?

Many rail transit agencies throughout the United States pursue joint development of property owned by the transit agency, such as leasing air rights above or around stations. Often, a property development department or real estate division within the transit agency oversees joint development activities. In recent years, transit agencies in San Francisco; Washington, D.C.; Chicago; and Denver have leased or sold land previously used for parking to private development and applied some of the proceeds to pay for replacement structured parking. Some transit agencies, such as those in Baltimore; Washington, D.C.; San Francisco; and Portland, have taken to selling extra land holdings to private interests to promote TOD.

For instance, WMATA formed a real estate office early in the organization's existence that has, over time, amassed a large portfolio of land holdings. Rather than waiting and reacting to developer proposals, WMATA's real estate office aggressively seeks out mutually advantageous transit joint development opportunities.⁴⁵ WMATA's preferred means of recapturing value created through transit investments has been through long-term, unsubordinated ground leases with private developers.



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Impact of the 5 Ds on Transit Ridership

Key Variables

There are five features of the built environment that powerfully influence the number of trips made, the modes chosen (including public transit), and the distances traveled. These variables are commonly known as the “5 Ds”:

- **Density** is a measure of intensity; how many people, workers, or built structures occupy a specified land area, such as gross hectares or residentially zoned land.
- **Diversity** reflects the mix of land uses and the degree to which they are spatially balanced (e.g., jobs–housing balance) as well as the variety of housing types and mobility options (e.g., bikeways and motorways).
- **Design** entails details that influence the likelihood of walking or biking (e.g., street network characteristics: pedestrian- and bike-friendliness). Street networks vary from dense urban grids of highly interconnected, straight streets to sparse suburban networks of curvilinear streets and cul-de-sacs.
- **Destination accessibility** measures ease of access to trip destinations at the city, regional, and corridor levels. Destination is an important measure of the job–housing balance (e.g., the number of jobs or other attractions reachable within 30 minutes travel time).
- **Distance to transit** is usually measured as the shortest street routes from the residences or workplaces in an area to the nearest rail station or bus stop. Greater density and diversity typically reduces distance.

By understanding the role that each of these variables plays with regard to transit ridership, transit agencies can better focus on what to ask for when working with other stakeholders. As shown in research summarized in this appendix, distance to transit is the most important factor influencing transit ridership. Design, particularly grid-like street patterns, is second in importance.

Transit agencies can also help shape land use decisions by appreciating the impact of the 5 Ds on vehicle miles traveled (VMT) by motorists. The accessibility of destinations from transit has the greatest impact on the percent change in VMT, and a doubling of access to key destinations (such as jobs) results in a 20 percent decline in VMT. In comparison, land use density and distance to transit have less influence on VMT.

Supporting Research

The positive effect that the 5 Ds can have on increasing transit ridership and reducing the number of VMT has been documented through various research. An analysis in 2010 by Ewing and Cervero examined the impact of the 5 Ds on transit ridership.⁴⁴ The analysis, which used transit ridership as the dependent variable, summarized more than 50 of the most rigorous statistical studies from 2009 and earlier and nearly 20 additional studies in 2010.

For three studies in the Ewing and Cervero analysis, the weighted-average elasticity of transit use with respect to distance to transit stops and stations was 0.29. This means that, all else being equal, cutting the distance to transit in half was associated with a 29 percent increase in transit use.

- Among design variables, the “percent of 4-way intersections,” which serves as a proxy for grid-street patterns, was most strongly correlated with transit ridership; it also had an elasticity of 0.29. This finding, drawn from five separate U.S. studies, implies that doubling the degree to which local street patterns follow a grid is associated with a 29 percent boost in transit ridership. Having many intersections (reflected by intersections/street density) was found to be moderately associated with transit use, although not as strongly as a grid-street pattern.⁴⁵
- Based on four U.S. studies, the weighted-average elasticity of transit use to the variable “intersection/street density” was 0.23. This means that doubling the density of intersections was associated with a 23 percent increase in transit ridership. While sidewalks are important in pedestrian-friendly environments, their influence was considerably weaker in comparison to having grid-like street patterns with short blocks.⁴⁶
- Land use diversity was moderately associated with transit ridership, with a weighted-average elasticity of 0.12. Although based on the results of just three studies, the “job-housing balance” was found to influence transit use the most of the diversity factors.⁴⁷ This could reflect the perception that, if residences are located too far from job sites, regular transit service with intermediate stops every quarter mile or so is too slow compared with the private car to compete for most journey-to-work trips.⁴⁸
- The analysis found the influence of land use diversity on transit ridership to be less than one-half that of “distance to transit” and “design variables,” and the influences of population and employment densities were even weaker.⁴⁹
- Lastly and somewhat surprisingly, destination accessibility to jobs (by car and transit within 30 minutes) had the weakest average influence on transit use among the 5 Ds; however, the results varied considerably.⁵⁰

Additional recent research supports nearness to transit as the single most important factor influencing transit ridership. This confirms the U.S. transit industry’s view that as much development as possible should be located within a quarter to one-half mile of transit stops and stations. In addition, the close proximity of residences to transit more strongly influences transit use than the nearness of jobs.⁵¹ The research highlighted that, in more than 20 U.S. transit markets, the average distance between rail stations and job sites was less than the distance between rail stations and residential neighborhoods.

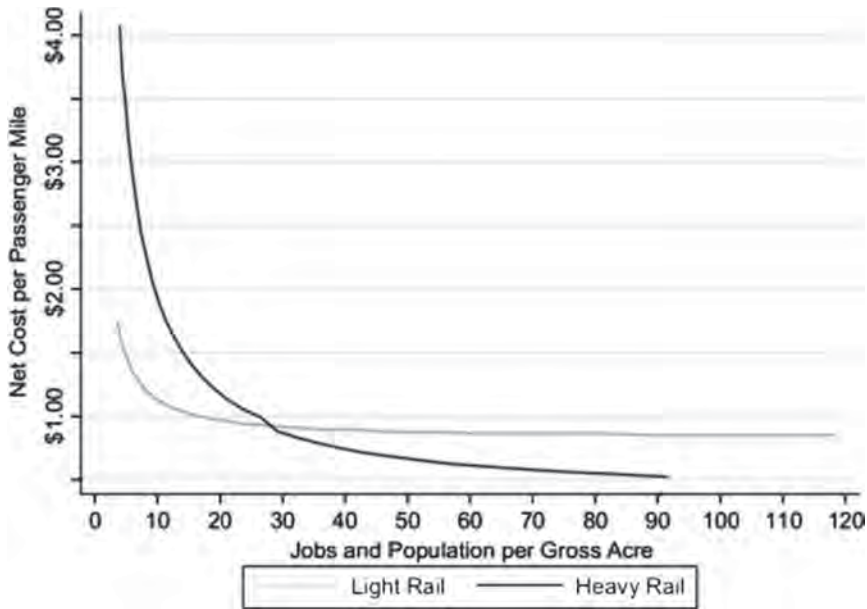
Minimum Density Thresholds

Concerns over cost-effectiveness have prompted a growing number of U.S. cities to adopt density thresholds in justifying fixed-guideway transit investments. The City of San Diego, for instance, has adopted TOD guidelines that call for a minimum of 25 dwelling units per acre for light-rail transit serving urban transit-oriented districts. Portland has set slightly higher thresholds in its TOD guidelines—three dwelling units per acre for development within one city block of its light-rail line.

Research findings from Guerra and Cervero supporting the benefit of minimum density thresholds found that the concentration of residents and jobs has a considerable influence on transit use. The weighted-average elasticities of 0.13 residents to 0.15 jobs support the popular view that “mass transit needs mass.”⁵²

Research also indicates the minimum desirable thresholds for densities to support transit:

- In the 1960s and 1970s, research by Pushkarev et al. set minimum density thresholds for investing in various forms of fixed-guideway transit in the United States. For example, the high costs of heavy-rail transit systems required a minimum density of at least 12 dwelling



Source: Guerra and Cervero (2011).

Figure A-1. Net capital investment cost per passenger mile by job and population density among light and heavy rail in U.S. cities.

units per residential acre, whereas the minimum density for light-rail investment would be nine dwelling units per residential acre.⁵³

- The Guerra and Cervero study examined 59 U.S. transit projects since 1970 and found light rail to be more cost-effective than heavy rail for up to 28 residents and jobs per gross acre (Figure A-1). These U.S. transit projects showed that a 10 percent increase in total residents and jobs per acre corresponded with a 3.2 percent decrease in annualized capital costs per rider. While financial costs rise with density, U.S. experience shows that the increased ridership more than offsets these costs per passenger mile.⁵⁴
- The Guerra and Cervero analysis identified the level of urban densities needed to place fixed-guideway systems in the top 25 percent of cost-effective transit investments (based on costs per rider). Their research indicated that a BRT system that costs \$50 million per mile (2009 dollars) would need around 18 jobs and residents per acre within a half mile of its station to be in the top 75 percent of cost-effective investments. A light-rail investment at the same per-mile cost would need nearly 50 jobs and residents per acre, and a heavy-rail investment would need nearly 60 jobs and residents per acre.⁵⁵

Land Use Impacts by Transit Types and City Sizes

Research findings also highlight the relationship between built environments and transit use in terms of type of transit (for example, bus only, bus and rail, and rail only) and of city population size. The sample sizes in the research were small; therefore, the differences are presented by order of magnitude.

Table A-1 presents elasticities between the 5 Ds and transit ridership for three types of transit operations: bus only, bus and rail, and rail only. For example, in cities with bus service only, 16 different variables were used to estimate transit ridership, yielding a weighted-average elasticity of 0.12. Analysis indicates that built environments appear to have the strongest influence on ridership in cities with rail-only services compared with those with either bus only or a mix of bus and rail. Based on the size differences in elasticities, one might infer that built environments

Table A-1. Effect of type of transit and built-environment variables on transit use.⁵⁶

	Built Environment Variables	Total Number of Built Environment Variables	Weighted Average Elasticity of Transit Use	Weighted Standard Deviation for Elasticity of Transit Use
Bus only	Household/population density	16	0.12	0.15
	Commercial floor area ratio			
	Land use mix			
	Intersection/street density			
	Sidewalk features			
	Distance to nearest transit stop			
Bus & rail (light, commuter, & heavy)	Household/population density	30	0.15	0.35
	Job density			
	Commercial floor area ratio			
	Land use mix			
	Job-housing balance			
	Distance to a store			
	Intersection/street density			
	Percent four-way intersections			
	Sidewalk features			
	Distance to nearest transit stop			
Job accessibility				
Rail only (light, commuter, & heavy)	Household/population density	6	0.44	0.42
	Distance to nearest transit stop			
	Percent four-way intersections			

Source: Ewing and Cervero (2010).

have roughly three times the influence on transit use in rail-only cities than in cities with bus only or a mix of services.

Table A-2 illustrates the effect of city size and built-environment variables on transit ridership. Studies of regions with more than 2 million residents yielded the most reliable results due to the larger sample size. The weighted-average elasticity of all built-environment variables combined of 0.19 appears to be considerably larger than the elasticity for areas with 1 to 2 million residents and is slightly above the average (0.16) for all of the 5 Ds and studies reported earlier. The standard deviations are fairly high; however, it is apparent that the influence of built environments on transit use is the strongest in large cities with rail systems. This reinforces the notion that coordination with transit agencies during local land use decisions is especially important in large cities with rail systems—the very places where transit-oriented developments have most often appeared in the United States.^{57,58}

Land Use Impacts on Vehicle Miles Traveled

Accessibility to destinations had the strongest influence on VMT for private vehicles. In fact, on average, a doubling of access to destinations (for example, the number of jobs that can be reached within 30 minutes by transit) was associated with a 20 percent decline in VMT. Design

Table A-2. Effect of city size and built-environment variables on transit use.⁵⁹

City Size	Built Environment Variables	Total Number of Studies	Average Elasticity of Transit Use	Standard Deviation for Elasticity of Transit Use
Below 500,000	Household/population density	2	0.06	0.16
	Land use mix			
	Sidewalk features			
Above 500,000 to 1,000,000	Household/population density	1	0.36	0.15
	Land use mix			
	Sidewalk features			
Above 1,000,000 to 2,000,000	Household/population density	3	0.09	0.14
	Land use mix			
	Intersection/street density			
	Sidewalk features			
	Distance to nearest transit stop			
Above 2,000,000*	Job accessibility	11	0.19	0.36
	Household/population density			
	Job density			
	Commercial floor area ratio			
	Land use mix			
	Job-housing balance			
	Distance to a store			
	Intersection/street density			
	Percent four-way intersections			
	Sidewalk features			
	Distance to nearest transit stop			
Job accessibility				

* Includes multiple cities, counties, or metropolitan statistical areas (MSAs)

Source: Ewing and Cervero (2010).

attributes like the presence of sidewalks and street connections had the second strongest influence on total VMT, followed by diversity of land uses, which tends to exert stronger influences on travel modes and distances to access job sites than residences. Urban density was found to have a fairly weak influence on VMT. This weak statistical relationship between density and travel in the United States could reflect the fact that density is intertwined with the other 5 Ds. For example, dense areas commonly have mixed land uses, small city blocks, and central locations, all of which shorten trips and encourage walking. The distance to transit, typically a hallmark characteristic of TOD, was also found to have a comparatively weak influence on VMT.

While individual elasticities might appear low in Table A-3, it is important to recognize that their influences are cumulative. Compact areas with diverse land uses and accessible destinations generally have sufficient pedestrian facilities and proximity to high-quality transit. The sum of elasticities from Table A-1 (to a value of 0.45, in absolute values) suggests that built environments can strongly influence VMT by influencing the mode of travel that people choose. A study of the link between land use and travel behavior in 114 U.S. metropolitan areas found that multiple land use variables produced VMT reductions appreciably larger than changing any one land use variable. This result verifies the influence of the 5 Ds on VMT.⁶⁰

Table A-3. Influences of the 5 Ds of land use on VMT.⁶¹

	Elasticity	Percent Change in VMT from a Doubling of Value of the "D" Variable
Density (intensity of use)	-0.05	-5 percent
Diversity (mix of use)	-0.07	-7 percent
Design (walkability)	0.08	8 percent
Destination (accessibility)	.20	20 percent
Distance (to transit)	-.05	5 percent

Source: Ewing and Cervero (2010).

Distributed Survey

This appendix shows the survey that was distributed to key stakeholders during the research process.

Welcome

Welcome. The purpose of this survey is to identify the most effective engagement practices for transit agencies, local governments, and developers in land use decision making. The results of this survey will be used to inform a TCRP guidebook on linking transit agencies and land use decision making to improving the connections among transit, land use planning, and development decision-making processes.

Which of the choices below best describes who you represent as a survey respondent?

- Transit Agency
 - Local Government
 - Real Estate Developer
-

Transit Agency: Background Information

This survey should be completed by a transit agency planning director or staff person whose responsibilities include working with local agencies on neighborhood, city, or regional land use planning and zoning. We appreciate your help in this effort.

Please provide the name and location (city and state) of your transit agency or department.

What size population do you serve?

- Less than 49,999
- 50,000 – 249,999
- 250,000 – 999,999
- 1 million – 4.9 million
- 5 million – 10 million
- More than 10 million

What types of public transportation does your transit agency provide?

- Bus
- Paratransit/On Demand

- Bus Rapid Transit
- Streetcar
- Light Rail
- Heavy Rail
- Commuter Rail
- Other

Is your transit agency a separate entity or a department of another entity such as a local government or regional planning body?

- Separate entity
- Department of another entity

If your transit agency is a department of another entity, please specify which one (e.g., city transit agency also acting as a metropolitan planning organization)

- Regional Authority (Specify): _____
 - Municipal Entity (Specify): _____
 - Nonprofit Entity
 - Other: _____
-

Transit Agency: Organizational Role in Land Use

Does your transit agency consider transit and land use coordination as a priority? Please rate from (1) low priority to (5) very high priority.

- 1
- 2
- 3
- 4
- 5

Does your transit agency have staff whose duties specifically include coordinating land use, transit-oriented development, and/or joint development projects?

- Yes
- No

If so, how many people and approximately what percentage of their time is dedicated to these responsibilities?

How would you characterize the role your transit agency plays in the land use planning process of local jurisdictions?

- Frequent and meaningful engagement on a variety of decisions
- Regular opportunities to engage on particular decisions (e.g., commenting on land use proposals)

- Occasional consultation
- Only engaged when agency-owned land is included
- Not engaged

If your agency is not engaged, why not?

- Management or board policy
- Lack of staff
- Lack of staff expertise
- Competing work/budget priorities
- Other

Does your transit agency have a guidebook or policy related to transit and land use coordination?

- Yes
- No

How has it been distributed? Please select all that apply.

- Available on website
- Printed copy available for distribution
- Copies available upon request
- Other

To whom has it been distributed? Please select all that apply.

- Local government
- Developers
- Elected officials
- Community stakeholders
- Available on website to all stakeholders
- Local architectural/design firms
- Other

Have any of the policies and procedures highlighted by the guidebook been adopted by local jurisdictions?

- Yes
- No

How would you rate the effectiveness of the guidebook in shaping land use outcomes?

- Highly effective
- Somewhat effective
- Not effective at all

Does your department or agency offer to contribute to the cost of transit-supportive facilities (sidewalks, bus shelters, etc.) in connection with development projects planned around existing or future transit facilities?

- Yes
- No

Are funds for this purpose specifically identified in the annual budget?

- Yes
- No

What are the three most important things you would want a land use and planning agency to consider in its decision making?

To clarify or further discuss any responses on this page, please check the comments box below.

- Comments
-

Transit Agency: Opportunities for Interaction

The following questions pertain to opportunities for interaction and describe points during which a transit agency has/should have the opportunity to interject or coordinate with local/regional land use decision making.

Transit Agency Interaction with Land Use Processes:

For each of the opportunities for interaction, were you invited into the process (through a local working group for example) or did you insert yourself into the discussion?

Note: "Self" can also include instruction from an internal transit agency staff member to participate.

	Invited To Participate	Self-Inserted	N/A
Long-Range Regional/City/County Planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zoning or Other Land Use Regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economic Development and Revitalization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Development (development review and approval)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Long-Range Regional/City/County Planning:

If you have a role in the Long-Range Regional/City/County planning process, what activities are you invited to participate in? Please select all that apply.

- Forecasting demand for transit
- Strategizing about potential growth corridors
- Concentrating development in a particular area (job centers, entertainment districts, etc.)

- Land use visioning
- Reviewing potential transit projects
- Not involved
- Other

Zoning and Other Land Use Regulation:

If you have a role in zoning and other land use regulation, what activities are you invited to participate in? Please select all that apply.

- Zoning ordinance development
- Review of proposed zoning changes
- Review of proposed permits or variances
- Review of subdivision/land development plans
- Not involved
- Other

Economic Revitalization and Neighborhood Planning:

If your transit agency has played a role in the economic revitalization and neighborhood planning discussions surrounding transit-served (and transit-dependent) areas, what activities is your agency invited to participate in? Please select all that apply.

- Realignment of transit service or new service to serve new land uses
- Last-mile connections and bike/pedestrian strategies
- Consideration of overall redevelopment plans (which may/may not include transit-supportive density)
- Financing of redevelopment district and discussion of value-capture options
- Location of entertainment and employment districts
- Other
- Not involved

Site Design for New Development:

If your transit agency has a role in the site design or subdivision planning process for new development, what activities is your agency invited to participate in? Please select all that apply.

- Review of site plans for proposed developments in TOD areas
- Review of site plans adjacent to tracks, especially concerning proposed driveways and streets
- Service availability
- Street layout (during site planning for subdivisions etc.)
- On-site access
- Siting of bus stops and transit stations
- Last-mile connections
- Other
- Not involved

What types of development projects is your transit agency usually consulted on? Please select all that apply.

- Multifamily residential
- Single-family subdivisions
- Large city-owned parcels
- Commercial or mixed-use centers
- Other

For the development types selected in the question above, when is your transit agency first consulted in the process?

- Before permitting (i.e., during the site planning stage)
- During permitting
- After permitting stage
- Project completion and realization of issue (such as lack of access for residents or patrons)
- Not involved
- Other: _____

During the opportunities for interaction below, where has your transit agency had the most effective interactions with local government and/or developers? Please rank each from (1) least effective interaction to (5) most effective interaction.

	1	2	3	4	5
Long-Range Regional/City/County Planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zoning or Other Land Use Regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economic Revitalization and Neighborhood Planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Development (Development Review and Approval)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What stage of planning has had the greatest influence on your transit system?

	Long-Range Regional/City/County Planning	Zoning or Other Land Use Regulations	Economic Revitalization and Neighborhood Planning	New Development (Development Review and Approval)
Operations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Long-Term System Performance (ability to sustain your transit system through transit-supportive environments and development such as TOD)

What strategies have you engaged in that have resulted in the best outcomes for your coordination of transit and land use?

What suggestions do you have for overcoming the challenges in coordinating land use and transit service?

To clarify or further discuss any responses on this page, please check the comments box below.

Comments

Transit Agency: Opportunities for Interaction

Land Use Aspects of Transit Agency Activities

Major Capital Investments or Service Changes:

When does your transit agency first consult with municipal/county land use agencies about land uses around newly planned transit projects (e.g., new bus line or New Starts/Small Starts projects)?

- Initial planning or visioning phase
- Evaluation of alternatives
- Engineering phase
- During construction
- Other: _____
- Not applicable

What is the subject of your transit agency's interaction with the land use agencies around new transit projects? Please select all that apply.

- Data collection for proposed station areas (e.g., number of residential units, jobs)
- Choosing locations for proposed stations
- Visioning/planning for station areas
- Zoning for station areas
- Access to station areas
- New or modified supportive transit services
- Other

Not applicable

How would you rate the effectiveness of that interaction (e.g., were your needs understood, were goals and challenges clearly communicated, and was the outcome satisfactory)?

- Highly effective
- Somewhat effective
- Not effective

Access to Transit Stations/Stops Other Than as Part of a Major Service Change or New Project:

What is the primary challenge your agency faces with regard to the accessibility of your stations/stops?

- Transit infrastructure constraints (e.g., historic station cannot accommodate accessibility improvements)
- Transit agency funding constraints
- Non-transit infrastructure constraints (e.g., utility pole blocks sidewalk access to bus stop)
- Local/county government funding constraints
- Lack of coordination between transit agency and land use or other municipal agencies (e.g., city DOT)
- Rules and regulations
- Other

How often does your transit agency interact with local government agencies and developers regarding Americans with Disabilities Act (ADA) access to transit stations/stops?

- Frequently
- Sometimes
- Rarely
- Never

How would you rate the effectiveness of that interaction (e.g., were your needs understood, were goals and challenges clearly communicated, and was the outcome satisfactory)?

- Highly effective
- Somewhat effective
- Not effective

To clarify or further discuss any responses on this page, please check the comments box below.

Comments

- | | | | | | | |
|---|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Complete Streets ordinance | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Incentives for employees and businesses to locate in transit corridors | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bond-funded city authority to assemble development sites for future TOD | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Way-finding signage to transit stops for new development | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Targeted infrastructure investments (e.g., civic spaces, sidewalks) in transit-oriented districts | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Special assessment districts in transit-served neighborhoods | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Traffic impact assessment | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

To clarify or further discuss any responses on this page, please check the comments box below.

Comments

Local Governments: Background Information

This survey should be completed by a director of planning, land use, and/or community development or appropriate designee. We appreciate your help in this effort.

Please provide the name and location (city and state) of your agency

Please indicate the population of your jurisdiction (city or county)

- Less than 49,999
- 50,000 – 249,999
- 250,000 – 499,999
- 500,000 – 999,999
- 1 million – 5 million
- More than 5 million

What types of public transportation currently exist within your jurisdiction? Please select all that apply.

- Bus
- Paratransit/On Demand
- Bus Rapid Transit
- Streetcar
- Light Rail
- Heavy Rail
- Commuter Rail
- Other

How would you rate the usefulness of public transportation in your municipality? Please rate from (1) not useful to (5) very useful.

- 1
 - 2
 - 3
 - 4
 - 5
-

Local Governments: Organizational Policies

How many land use planning (excluding permitting) staff include transit issues in their job duties?

Approximately what percentage of staff time is devoted to issues of land use and transit in an average week?

Does your jurisdiction have design and/or other development policies and guidelines describing transit-supportive land uses?

- Yes
- No

How have the policies/guidelines been distributed? Please select all that apply.

- Available on website
- Printed copy available for distribution
- Copies available upon request
- Received during the permit process
- Other

To whom have they been distributed? Please select all that apply.

- Local government
- Developers
- Elected officials
- Community stakeholders
- Available on website to all stakeholders
- Other

How would you rate the effectiveness of the guidelines to date in shaping land use outcomes?

- Highly effective
- Somewhat effective
- Not effective at all
- Too soon to tell
- Don't know

Do the land development codes provide special designations for areas surrounding transit stations and stops?

- Yes
- No

How often do you consider or encourage developers to consider public transportation availability (existence of transit service) and accessibility (ability to get to a transit stop) while reviewing plans for new development?

- Always consider
- Usually consider
- Sometimes consider
- Rarely consider
- Depends on the site

If transit agencies wanted to be more effective in coordinating with local governments on land use issues, what are the three most important issues for them to consider?

To clarify or further discuss any responses on this page, please check the comments box below.

- Comments
-

Local Governments: Opportunities for Interaction

The following questions pertain to opportunities for interaction and describe points during which a transit agency has/should have the opportunity to interject or coordinate with local/regional land use decision making.

Transit Agency Interaction with Land Use Processes

During which of the following processes have you had the most effective interaction with transit agencies? Please rank each in terms of (1) least effective interaction to (5) most effective interaction.

	1	2	3	4	5
Long-Range Regional/City/County Planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zoning or Other Land Use Regulations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economic Revitalization and Neighborhood Planning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
New Development (Development Review and Approval)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Long-Range Regional/City/County Planning:

In what areas are you most likely to consult with the public transportation agency or department? Please select all that apply.

- Forecasting demand for transit
- Strategizing about potential growth corridors
- Concentrating development in a particular area (job centers, entertainment districts, etc.)
- Land use visioning
- Comprehensive plan
- Community, district, or neighborhood plan
- Other
- Not involved

Zoning and Other Land Use Regulation:

For which of the following are you likely to consult with the public transportation agency or department? Please select all that apply.

- Zoning ordinance development
- Review of proposed zoning changes
- Review of proposed permits or variances
- Review of subdivision/land development plans
- Other
- None of the above

Has your department created any of the following transit-supportive zoning for specific transit stations or stops?

- Specific station-area zoning ordinances
- Relaxed parking requirements
- Overlay zoning
- Design standards ordinances
- Other
- None of the above

How was the public transportation agency or department involved in the development of the transit-supportive zoning for specific transit stations or stops listed in the previous question?

- Highly involved
- Somewhat involved
- Minimally involved
- Not involved

Did the transit-supportive zoning for specific transit stations or stops achieve the desired result (e.g., transit-supportive development/transit-oriented development around stations)?

- Yes

No

Economic Revitalization and Neighborhood Planning:

About which of the following are you likely to consult with the public transportation agency or department? Please select all that apply.

- Changing land uses/density in a redevelopment area
- Walkability and access in a redevelopment area
- Consideration of overall redevelopment plan (which may/may not include transit-supportive density)
- Financing of redevelopment district and discussion of value-capture options
- Location of entertainment and employment districts
- Changes to transit network (e.g., stop location or operating characteristics such as hours or frequency)
- Other
- None of the above

Site Design for New Development:

About which of the following are you likely to consult with the public transportation agency or department? Please select all that apply.

- Service availability
- Street layout (during site planning)
- Design for on-site access to transit
- Siting of bus stops or transit stations
- Last-mile connections (bike, pedestrian, or other connections)
- Environmental impact assessments
- Environmental justice concerns
- Traffic impact assessments
- Other
- None of the above

Do you require developers to consult with the public transportation agency or department during site planning for new developments?

- Yes, for all types of developments
- Yes, for some types of developments: _____
- Yes, under certain conditions: _____
- No

On what type of development projects do you seek input from transit agencies? Please select all that apply.

- Multifamily residential
- Single-family subdivision
- Commercial or mixed-use centers
- Other

For the development types listed above, when do you first consult transportation agencies?

- Before permitting (i.e., during the site planning stage)
- During permitting
- After permitting stage
- Project completion and realization of issue (such as lack of access for residents or patrons)
- During construction
- After occupancy
- Other: _____

Please provide an example of a situation in which you feel that your department effectively engaged with the public transportation agency/department or a developer in coordinating land use with transit. In that example, to what do you attribute that effectiveness?

What is the greatest challenge for your jurisdiction in trying to coordinate land use issues and transit agencies?

- Lack of knowledge about whom to contact for assistance/coordination
- Attitude of transit staff about involvement with land use/transportation issues
- Limited interest of developers for transit-oriented development or transit service for their proposed developments
- Other: _____

To clarify or further discuss any responses on this page, please check the comments box below.

- Comments
-

Local Governments: Opportunities for Interaction

Land Use Aspects of Transit Agency Activities

Major Capital Investments or Service Changes:

When are you usually brought into the discussion about land uses around new planned transit projects (e.g., new bus line or New Starts/Small Starts projects)? Please select all that apply.

- Initial planning or visioning phase
- Evaluation of alternatives
- Engineering phase
- During construction
- Other
- Not applicable
- Never asked

What is the main focus of your interaction with the transit agency around new transit projects or major service changes? Please select all that apply.

- Data collection for proposed station areas (e.g., number of residential units, jobs)
- Choosing locations for proposed stations
- Visioning/planning for station areas
- Zoning for station areas
- Access to station areas
- Not applicable
- Other

How would you rate the effectiveness of that interaction (e.g., were your needs understood, were goals and challenges clearly communicated, and was the outcome satisfactory)?

- Highly effective
- Somewhat effective
- Not effective

Access to Transit Stations/Stops Other Than as Part of a Major Service Change or New Project:

What is the biggest challenge you face with regard to accessibility (for all modes and users) of transit stations/stops in your community?

- Transit infrastructure constraints (e.g., historic station cannot accommodate accessibility improvements)
- Transit agency funding constraints
- Non-transit infrastructure constraints (e.g., utility pole blocks sidewalk access to bus stop)
- Local government funding constraints
- Lack of coordination between transit agency and land use or other municipal, county, or state agencies (e.g., DOT)
- Rules and regulations
- Other

How often do you interact with transit agencies regarding Americans with Disabilities Act (ADA) access to transit stations/stops?

- Frequently
- Sometimes
- Rarely
- Never

How would you rate the effectiveness of that interaction (e.g., were your needs understood, were goals and challenges clearly communicated, and was the outcome satisfactory)?

- Highly effective
- Somewhat effective
- Not effective

To clarify or further discuss any responses on this page, please check the comments box below.

() Comments

Local Government: Strategies and Tools

Please rate your experience with the strategies and tools below and their overall effectiveness in helping to promote transit-supportive land uses. Rate from (1) low effectiveness to (5) high effectiveness.

	1	2	3	4	5	N/A
Interagency working groups for coordinating transit and land use	()	()	()	()	()	()
Zoning ordinance (or other model ordinance)	()	()	()	()	()	()
Parking Exemptions for transit-supportive areas	()	()	()	()	()	()
Transit-oriented development zoning overlay	()	()	()	()	()	()
Interim-use zoning that prevents auto-oriented development in future transit corridors	()	()	()	()	()	()
Transit-supportive guidelines and design standards for residential and commercial development	()	()	()	()	()	()
Transferable development rights (TDR) applied to station areas	()	()	()	()	()	()
Brownfield cleanup funds for transit-served neighborhoods	()	()	()	()	()	()
Priority use of low-income housing tax credits funds in transit districts	()	()	()	()	()	()
Location-efficient mortgages in transit service jurisdictions	()	()	()	()	()	()
Property tax abatements in transit-oriented districts	()	()	()	()	()	()
Transit agency comments on development proposals (e.g., subdivision, project permits, entitlements) as part of a formal review process	()	()	()	()	()	()
Complete Streets ordinance	()	()	()	()	()	()
Incentives for employees and businesses to locate in transit corridors	()	()	()	()	()	()
Bond-funded city authority to assemble development sites for future TOD	()	()	()	()	()	()
Way-finding signage to transit stops for new development	()	()	()	()	()	()
Targeted infrastructure investments (e.g., civic spaces, sidewalks) in transit-oriented districts	()	()	()	()	()	()
Special assessment districts in transit-served neighborhoods	()	()	()	()	()	()
Traffic impact assessment	()	()	()	()	()	()

To clarify or further discuss any responses on this page, please check the comments box below.

Comments

Developers: Background Information

This survey should be completed by individuals working in the field of real estate and property development. We appreciate your help in this effort.

Please provide the name and location (city and state) of your organization or company.

How many employees are in your company?

- 0–19
- 20–99
- 100–499
- 500 or more

What type of projects do you develop? Please select all that apply.

- Market-rate multifamily
- Market-rate single family (subdivisions)
- Affordable housing (multifamily or single family)
- Mixed use
- Office
- Retail
- Institutional (educational, health care, etc.)
- Other

In how many states does your company operate?

- 1–2
 - 3–5
 - 6–9
 - 10 or more
-

Developers: Transit Access

What are the three most important factors in determining where to locate one of your projects?

When planning a new development, what consideration do you give to coordinating the location of your development with access to transit?

- Greatly consider

- Often consider
- Sometimes consider
- Rarely consider
- Never consider

What are the factors that determine whether you will consider transit access for your development? Please select all that apply.

- Type of transit (e.g., bus, streetcar, subway)
- Demand for sustainable development from potential tenants
- Usefulness of transit in the region
- Financial feasibility/financial support
- Type of development
- LEED certification
- Reduced parking potential
- Other

What issues do you believe are most important to work with the transit agency on? Please select all that apply.

- Service availability
- Bike/pedestrian strategies (to encourage travel between transit station and a destination within a mile of the stop)
- Overall development plan
- Site design
- Siting of bus stops and transit stations
- Financing or value-capture options
- Rezoning support
- None
- Other

For which type(s) of development is transit access important?

	Very unimportant	Somewhat unimportant	Indifferent	Somewhat important	Very important
Market-rate multifamily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Market-rate single family (subdivisions)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Affordable housing (multifamily or single family)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mixed use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Office	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Retail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Institutional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Assuming that there is a strong market for development in a community, how important are the following to you when working on a development project?

	Very Unimportant	Somewhat Unimportant	Indifferent	Somewhat Important	Very Important
Availability of government financing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking requirements	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presence of a rail transit system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Presence of bus service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ease of getting permits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other developments in the area	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interest rates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of schools	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Location in high-demand submarket	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to highways	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to airports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance to major employers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Distance to city center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cost of land	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

To clarify or further discuss any responses on this page, please check the comments box below.

Comments

Developers: Development Process

At what point in your project development process do you first communicate with your local transit provider?

- Before permitting (i.e., during the site planning/zoning stage)
- During permitting
- After permitting stage
- During construction

- After occupancy
- Do not communicate with it

Are you ever provided with guidelines for transit-supportive land use and/or design from a local jurisdiction or transit agency?

- Yes
- No

If so, at what point in the process do you receive these guidelines?

- Before permitting (i.e., during the site planning/zoning stage)
- During permitting
- After permitting stage
- Project completion and realization of issue (such as lack of access for residents or patrons)
- Never received these guidelines

Were the guidelines helpful? Why or why not?

Do you have internal guidelines or policies relating to coordinating transit with your development project?

- Yes
- In development
- No

If transit agencies wanted to be more effective in coordinating with land use, what are the three most important issues for them to consider?

Please provide an example of a situation in which you feel that a public transit agency or department was either effectively engaged or not effectively engaged, in coordinating transit service with your project.

In that example, to what do you attribute that effectiveness or lack of effectiveness?

- Agency had/did not have staff knowledgeable in the real estate development process
- Agency did/did not have TOD expertise
- Agency did/did not have dedicated staff to work with developers
- Other: _____

To clarify or further discuss any responses on this page, please check the comments box below.

- Comments
-

Developers: Strategies and Tools

What tools and strategies have you found most helpful in creating better projects that link land use and transit?

To clarify or further discuss any responses on this page, please check the comments box below.

Comments

Follow-up Information

Please provide your name, position, organization, phone number, and email address. We anticipate some additional follow-up interviews and would appreciate your participation.

Name:

Position

Phone Number

Email

Please check the box if you would prefer not to be contacted

Do not contact

Case Studies

Four case studies are presented to illustrate effective transit agency interaction with local governments and developers:

- **NJ TRANSIT:** Transit Friendly Planning Land Use and Development Program.
- **Pace Suburban Bus Service:** Transit Supportive Guidelines and Design Review Assistance for Transit.
- **TriMet:** Portland Pearl District Transit and Land Use Integration.
- **GCRTA:** Cleveland HealthLine and Greater University Circle Initiative.

The case studies represent a broad spectrum of transit service and land use contexts as well as geographic scales of planning. A brief background of the transit agency featured in the case study and an explanation of the success story is provided.

NJ TRANSIT – Transit Friendly Planning Land Use and Development Program

Transit Context – Large-scale system, legacy

Land Use Context – Redevelopment or infill

Planning Scale – Regional, corridor, precinct, site

Background

NJ TRANSIT is New Jersey's public transportation corporation. The transit agency covers a statewide service area of 5,325 square miles and is the nation's third largest provider of bus, rail, and light-rail transit. It operates 236 bus routes and 12 rail lines providing approximately 223 million passenger trips each year.⁶² NJ TRANSIT serves 164 rails stations, 60 light-rail stations, and nearly 20,000 bus stops.⁶³

In 1999, the NJ TRANSIT established its TFPLUD program as a tool to increase ridership and make more effective use of the transit system. Internally, the program is felt to have a direct relationship to NJ TRANSIT's core business. The TFPLUD program encourages growth and development where public transportation already exists. Much of the program's focus is on fostering TOD along its rail system. However, the majority of the NJ TRANSIT rail system is legacy, and stations are located in established communities, which sometimes makes it challenging to encourage new transit-supportive development.

As noted by NJ TRANSIT, transit stations are situated on older, long-established rail lines in a wide variety of settings throughout New Jersey. These locations range from older downtowns

to established suburban commuter towns and villages to urban cities. There is often a backlash against increased development densities near stations due to concerns such as increased demand for municipal services and schools in downtown core areas. This has made it difficult to balance competing priorities and to encourage integrated, sustainable growth that takes advantage of the presence of the established transit lines.

Key Elements

The TFPLUD program provides an example of how a transit agency can be effective in land use and transit decision making through:

- Strategic planning assistance,
- Community development partnerships and education, and
- A dedicated staff person.

The program is strategic in working with communities and transit stations that need and request assistance. The technical assistance is meant to be a win–win for a community and the transit agency. The TFPLUD program takes the approach that TOD should not be forced on to a community since push-back may occur in the form of anti-growth policies and actions. Thus, continuous education and partnerships are central to success. Decisions on how and where to strategically apply the TFPLUD program resources are based on factors such as a stable local political environment and the presence of a local champion. Transparent engagement of local officials and the community is a must.

Strategic Planning Assistance

The TFPLUD program provides transit-friendly planning assistance to help municipalities create and implement community-based plans to guide growth in areas where transit exists, stimulating new development opportunities. Assistance is provided to interested communities through on-call consultants with expertise in transportation planning, urban design, market analysis, economic development, downtown revitalization, parking, community engagement, and public outreach.

In most cases, the visioning process builds sufficient community support for the local governments to implement the vision plans through transit-supportive land use codes. In turn, developers then execute projects in conformance with the vision plans and new codes. The Residences at Bay Street Station (Montclair, NJ), the Highlands at Morristown Station (Morristown, NJ), and Cranford Crossing at Cranford Station (Cranford, NJ) are built examples of this successful process.

The plans are intended to create a platform for the community to take further action (e.g., grant application, rezoning, and redevelopment). As an example, Linden, NJ, adopted a TOD zoning ordinance in 2010 creating new zones adjacent to the city’s historic business and civic district. At its center is the Core Transit Village District, which is a “high-density core area of TOD and a mixed-use downtown for commercial and residential uses in the vicinity of Linden Station.”⁶⁴

If land owned by NJ TRANSIT is involved in the vision plan, the transit agency assists with the subsequent development and implementation of the competitive developer selection process and the subsequent development and conveyance agreements. The redevelopment of a 160-acre site in Somerville, NJ, adjacent to the Raritan Valley Line station is an example of this practice. In developing the RFP for the approximately 25 acres of the area owned by the transit agency, NJ TRANSIT incorporated the goals of the community expressed by the vision plan. It also included the local government in the preparation of the RFP to ensure it reflected local government requirements and included the local government in the ensuing selection of the preferred developer.

One local government official interviewed for the case study noted that the program guided its plan through the visioning and subsequent development process but let the community create the plan. Thus it met the economic development goals of the local government and the ridership goals of NJ TRANSIT. The official further noted that the resulting development deal would have been difficult to achieve without the efforts of the TFPLUD program.

In many instances, the TFPLUD visioning process has enabled local governments to take advantage of the Transit Village Initiative, administered jointly by the New Jersey Department of Transportation and NJ TRANSIT. The initiative, which began in 1999, recognizes efforts to create transit-supportive land use outcomes in designated communities. There have been 28 designated communities based on criteria including local government adoption of TOD in the government's master plan (i.e., vision plan) and zoning code and redevelopment plan as well as the creation of TOD-friendly design guidelines. These communities are eligible for discretionary and competitive grant funding available only to designees (<http://www.state.nj.us/transportation/community/village/>).

Community Development Partnerships

The TFPLUD program has initiated a new focus to address sustainable community issues surrounding housing affordability and social inclusion. In 2011, NJ TRANSIT became a core member of a coalition⁶⁵ that was awarded \$5,000,000⁶⁶ from the U.S. Department of Housing and Urban Development to develop a regional plan for sustainable development (RPSD) for the 13-county North Jersey Transportation Authority region. The grant was intended for use in the northern New Jersey counties to bring land use, mobility, and equity planning together.

The regional plan will be both place-based and issue-based and will use sustainability, transit system connectivity, and transit-oriented development as the central framework for integrating plans, regulations, investments, and incentive programs at all levels of government to improve economic and environmental conditions, while promoting regional equity and resource efficiency. The aim is to foster investment in existing communities where housing, jobs, educational, cultural, and recreational opportunities are made more easily accessible to most residents of the region.

The resulting Together North Jersey partnership represents the next generation of linking transit and land use connections for NJ TRANSIT. The partnership includes regional and state government agencies, educational institutions, municipalities, and not-for-profit/advocacy agencies. Part of the success in obtaining the grant was due to NJ TRANSIT committing to provide financial support through the TFPLUD program for the entire 3-year grant period.

The RPSD will continue to use sustainability and transit connectivity as the central framework for integrating plans and investments at all levels of government. In addition to the regional plan, a portion of the federal grant and the NJ TRANSIT's TFPLUD investment are funding local demonstration projects (LDPs) throughout the 13-county region. The 18 LDPs are intended to provide technical assistance to local partners (e.g., municipalities, community-based organizations) throughout northern New Jersey to undertake strategic planning activities promoting sustainable and livable transit-oriented development and advance the broader goals of the RPSD. The TFPLUD program is taking a proactive approach with the LDP initiative by focusing on those corridors that have multiple communities willing to engage in a collaborative demonstration project. This regional corridor concept approach will apply to rail, light-rail, and bus-based transit-supportive development opportunities.

The transit agency has adapted its vision planning process to reflect the aspirations described here. For example, NJ TRANSIT is pursuing a broader sustainability and economic development agenda in its planning for the Union County Sustainability Corridor. The BRT project proposes

to connect the NJ TRANSIT Raritan Valley Line and AMTRAK's Northeast Rail Corridor to the Port of New Jersey, Newark Airport, and major employment opportunities for economically disadvantaged populations. It is envisioned as a sustainability corridor with the BRT and walking and bicycling facilities sharing a dedicated right-of-way. The planning features up-front collaboration with communities to evaluate and, where appropriate, change land use codes to allow TOD, identify and market potential TOD sites, and secure local government, not-for-profit, and private-sector support for implementing the community vision.

As a lesson learned from the regional partnership, the TFPLUD program has found that community-based organizations, not-for-profit developers, and community development finance institutions need to be engaged in the planning of transit-supportive communities. In addition, the planning should be conducted at the corridor level and should consider the sustainable benefits of transit-supportive land use, including greenhouse gas reductions, brownfield reuse, and healthier lifestyles. These approaches could represent a significant change in how transit agencies approach land use planning.

Education

The TFPLUD program staff believe that education must be continuous. Staff collect and share information regarding the state of the practice with local government leaders and staff that are felt to have an interest or could benefit from the information. The program regularly keeps in touch with 60 to 70 communities that have been involved with the program in the past.

The TFPLUD program found a relatively inexpensive yet effective way to disseminate information by maintaining a website and preparing a quarterly newsletter through a partnership with Rutgers University's Voorhees Transportation Center. The Transit-Friendly Development Newsletter provides municipal officials, planners, and advocates with up-to-date information on tools and best practices for the transit-oriented development and redevelopment around transit stations. The newsletter was an instant success and, with a nationwide mailing list, is distributed across the country.

Dedicated Staff Person

The TFPLUD program benefits from the active role of two dedicated, full-time staff. Due in part to the efforts of the dedicated staff, there is strong brand recognition of the TFPLUD program, both within New Jersey and nationally. The principal staff person is frequently on the road around New Jersey advocating for transit-friendly outcomes to raise awareness about the TFPLUD program and the benefits of linking land use and mobility decisions and investments. The principal staff person spends a large amount of time speaking to others and advocating for TOD. The staff person also stays involved in TOD through personal relationships as well as webinars and websites that provide the latest news and information across the nation on TOD (e.g., Smart Growth America, Congress for New Urbanism, American Planning Association—New Jersey chapter, and other sources such as business blogs). Consequently, the program is well-known to municipal leaders, county leaders, developers, and other state agency partners.

The staff frequently receive calls from planners, developers, and others to discuss and learn about various aspects of the program in the hope of duplicating elements of success (e.g., transit-supportive zoning changes) in other communities. A developer interviewed for the case study noted the significant value of the principal staff person as a clearinghouse for obtaining information regarding both NJ TRANSIT and other state agencies. This was particularly useful to the developer during the due diligence phase of whether to proceed with a potential development. The developer also felt the principal staff person had become a resource in subsequent steps in the process, such as participating in design workshops. Examples of where the principal

staff person's assistance contributed to the decision to invest in transit-supportive development include Franklin Square in Metuchen, NJ, and Park Square I and II in Rahway, NJ. Another interviewee noted that the principal staff person made it apparent that anything the TFPLUD program could do to help around a station to increase ridership was part of its mission.

The TFPLUD staff at NJ TRANSIT serve different capacities on various committees and task forces and engage individuals in dialogue/discussions on the intersections of land use, transit, and mobility. In this role, the staff continuously focus on why the land use component is so important to transit. The staff also manage the strategic technical assistance discussed previously. A local government official interviewed for the case study noted that the principal staff person drives ideas both within NJ TRANSIT and in the local community.

Typically, NJ TRANSIT's TFPLUD staff do not attend zoning or land development approval meetings and are not asked by communities to review and comment on individual approvals. However, the staff are proactive and, if necessary, will reach out to a municipality to ask why transit-supportive land use changes have not occurred as discussed and agreed to during the NJ TRANSIT-funded planning initiatives.

The principal staff person constantly monitors the success of the TFPLUD program to gauge how the program is contributing to economic development and mobility throughout New Jersey. In general, the staff track the number of grants, zoning changes, offshoot grants, and other supportive actions. In turn, this information can be used to highlight the benefits of the TFPLUD program.

Sustained Effort

NJ TRANSIT has been actively promoting transit-friendly places for over two decades, and the current program evolved from earlier pilot programs. This sustained effort has facilitated the brand recognition and widespread partnering that currently exists. Three of the key early activities are discussed here.

In 1994, NJ TRANSIT created a handbook specifically designed to assist elected and appointed planning officials, members of planning and zoning boards, technical planning staff members and consultants, community representatives, and individual citizens interested in improving the relationship between land use planning and transit. *Planning for Transit-Friendly Land Use: A Handbook for New Jersey Communities* (available on CD-ROM) is a tool communities can use to create and implement transit-friendly land use plans around their transit stations, along their major transit corridors, and for proposed new areas of development.

Prior to the start of the current program, transit planning was done in the transit agency's planning unit using on-call planning services on a case-by-case basis (i.e., NJ TRANSIT addressed ADA needs at a station and, as part of that activity, looked at the overall access needs of the station and development potential for vacant properties surrounding the station). These case-by-case projects served as the test cases leading to development of the formal program. Most often, when NJ TRANSIT brought financial and technical assistance to a community, the municipality was appreciative.

A related program, the Transit-Friendly Communities Program, started in 1999 through a competitive Transportation Community and System Preservation (TCSP) program grant from FHWA. The grant was used to initiate an on-call technical assistance program primarily for communities to support economic development, visioning, and other activities that would help the transit system with increasing ridership, supportive land use changes, and related activities. Eleven communities were chosen as part of the first round, which was successful and worked well with existing programs. Under the program, the transit agency partnered with the communities, nonprofits, and Rutgers University, and the effort was received positively.

Pace Suburban Bus Service – Transit Supportive Guidelines and Design Review Assistance for Transit

Transit Context – Large bus system, existing service

Land Use Context – Suburban

Planning Scale – Site

Background

As with most suburban transit operators, Northeast Illinois’s Pace Suburban Bus Service competes with the private car in order to provide cost-effective transit services. In a landscape of sprawling residential subdivisions, campus-style office parks, mega-retail shopping complexes, and abundant surface parking, drawing travelers out of cars and into buses has been an uphill struggle. Pace has taken on this challenge with an unwavering commitment to working with local municipalities, land developers, and large employers to create built environments and facility designs that are transit supportive in all respects. While it remains to be seen how successful Pace will be in integrating a substantially more transit-supportive built form in the suburbs of Chicago, with regard to effort and initiatives, Pace is a national leader among suburban transit agencies.

Pace is the suburban bus operator of the six-county Regional Transportation Authority (RTA) that serves the greater Chicago metropolitan area.⁶⁷ Pace operates some 200 fixed bus routes that serve more than 220 communities, made up mostly of low-density residential areas but also employment hubs and hospitals, schools, shopping centers of all sizes, and other suburban facilities. Pace also sponsors vanpools, employer shuttles, commuter-rail feeders, and door-to-door van services for special-needs populations; however, the vast majority of service miles and ridership are on its fixed-route, fixed-schedule bus routes.

Key Elements

The Pace case study illustrates how transit agencies can create more effective interactions through:

- Education,
- Strategic planning assistance, and
- Dedicated staff.

Education

Transit-supportive design guidelines have remained the chief instrument Pace has relied on for more than two decades to engage local municipalities, the development community, and other stakeholders in transit issues. Pace was one of the first suburban transit operators in the United States to actively promote transit-oriented development through the preparation of guidelines, available as both hard-copy reports and video tapes, as early as 1993.⁶⁸ In keeping with 21st century styles of communications, Pace applied for and competitively won a grant from the Chicago Metropolitan Agency for Planning (CMAP), the Chicago region’s MPO, to update and disseminate its guidelines with a user-friendly, visually enticing, and interactive website called “Pace – Transit Supportive Guidelines.”⁶⁹

One section of the guidelines details all components of a typical transit trip, highlighting the needs of the rider, the development, the transit station, transit vehicles, and “the Public Walk” of the guidelines. The Public Walk, illustrated in Figure C-1, represents the critical link from the development lot—whether an office building or an apartment complex—to the transit access point, which in the case of Pace is normally a bus stop. “The Public Realm” section suggests good



Figure C-1. Pace's components of the transit trip. Good design displays for the first- and last-mile legs of a transit trip (component of Transit Trip: The Public Walk).

design practices for everything from road layouts and streetscape designs to scaling and platting city blocks. A companion section called "the Private Realm" emphasizes suburban settings and shows transit-supportive examples of project land uses, densities, parking management, and building designs (Figure C-2). An example of how the Pace guidelines were applied in Schaumburg, IL, is provided in Figure C-3.

Rolled out in October 2013, Pace's interactive website has been well-received, attracting nationwide and even international interest. A webinar held in early 2014, for example, drew participants from 49 states as well as several foreign countries. Monthly hits of the website nearly doubled from 3,700 in June 2013 to 7,300 in June 2014. Another important outreach tool has been the sponsorship of workshops on the guidelines, such as a well-attended workshop at this year's annual Transport Chicago conference.⁷⁰

Strategic Planning Advice

A second tool to engage the development community and shape practice has been the DRAFT program. DRAFT is a "complementary in-house technical review" that gives developers a chance to receive feedback on their project proposals early in the development process, thus helping to ensure that no downstream problems, such as poorly sited bus stops or poorly designed roadways, are faced. DRAFT is completely voluntary and nonbinding but does allow Pace staff to provide comments and make suggestions on all aspects of project designs. The reviews are

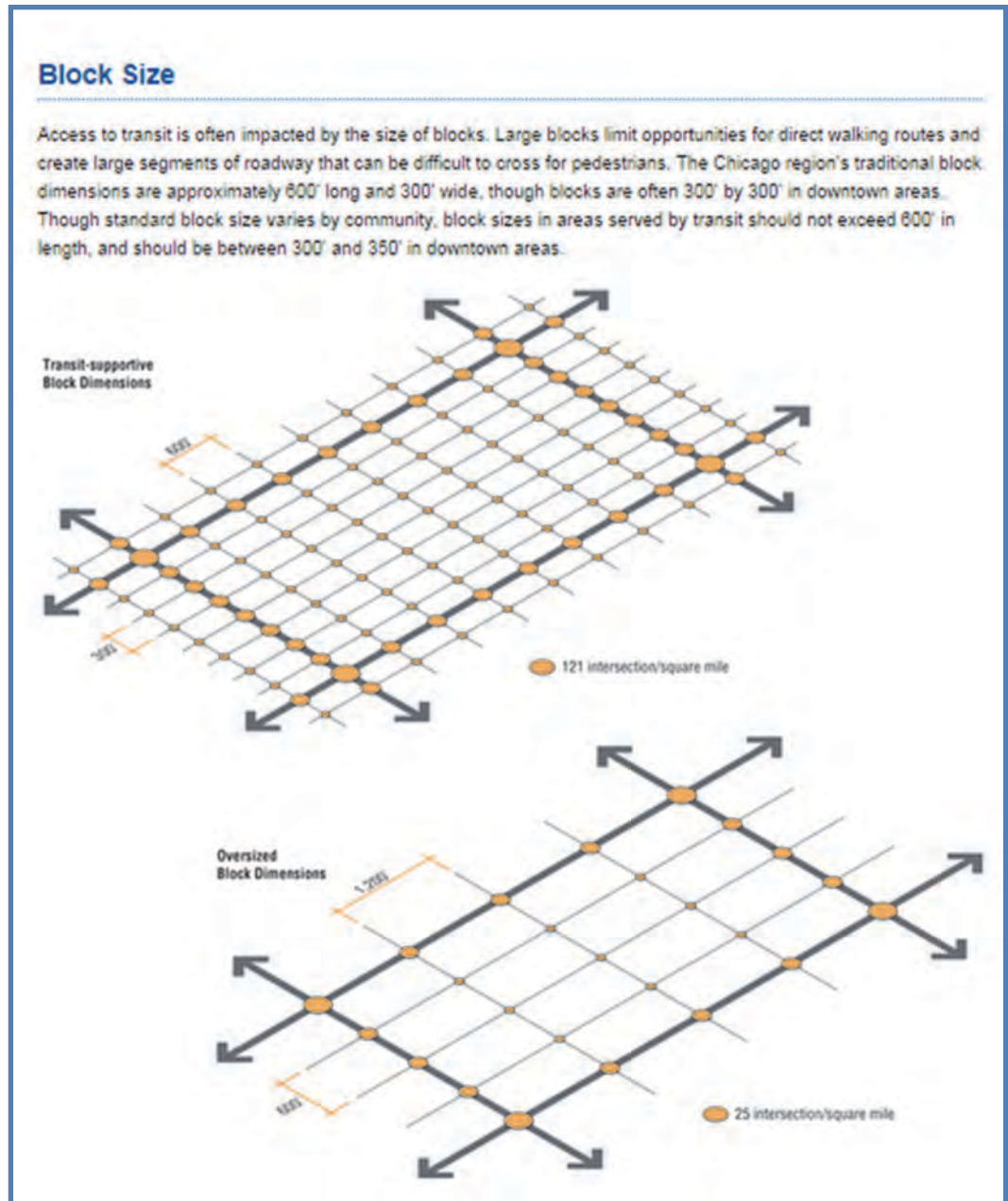


Figure C-2. Pace's recommended street network. Options for scaling and designing blocks and road frontages, elements of the Private Realm, in Pace's Transit Supportive Guidelines.

conducted by Pace's transportation engineer to allow input not only on the designs of buildings and facilities but also proposed on-site provisions of bus services. On its website, Pace notes that the intent of the DRAFT program "is not to impose undue burdens on developers and designers, but rather to integrate Pace review in a manner that is as seamless and unobtrusive as possible."⁷¹

To date, DRAFT has been used sparingly by developers, in part because of the real estate market downturn and quite likely because most developers want to simplify the project review process.⁷² DRAFT's limited acceptance could also be due to the availability of transit-supportive design guidelines that in many ways serve the same purpose as DRAFT, as well the possible preference

The most notable example of Pace's guidelines having had an impact comes from the village of Schaumburg, a large suburban employment hub west of Chicago's O'Hare International Airport. Because Schaumburg is today largely built-out, municipal planners seek out redevelopment opportunities where they avail themselves. Through the leadership of a proactive mayor, the City of Schaumburg recently opened a transit center that provides fixed-route and dial-a-ride bus and van connections to regional rail and bus routes. Working closely with Pace staff, Schaumburg planners recently turned to Pace guidelines to ensure that a new corporate headquarters was transit accessible and highly walkable. A multinational insurance company, which has long been based in Illinois, sought to build a new North America corporate headquarters. The company hinted at leaving the state if a suitable site could not be found. At the urging of Illinois's governor and other political leaders, Schaumburg officials worked with another large employer to sell part of its half-century-old campus site to the insurance company.

Corporate campuses are traditionally understood to be predominantly car-oriented places where the vast majority of commuters and visitors drive cars. Thus, marginal changes to traditional suburban campus designs that contribute to more transit-usable and pedestrian-friendly environs count as small victories. Using the Pace guidelines, Schaumburg planners worked with the developer's designers and engineers to incorporate transit elements throughout the project design. The guidelines influenced not only the site layout and street designs but also the locations of bus stops and surface parking.

The corporate headquarters project is more compact and inviting to pedestrians and transit riders than what is typically found on suburban corporate campuses. The guidelines are also credited with the provision of on-site bus shelters, the first ones ever built on a corporate campus in Schaumburg. Through an iterative and flexible review process that involved a fair amount of back-and-forth between staff of the city, Pace, and the developer's designer, transit-supportive design elements were incorporated to the maximum extent throughout the project. By all accounts, the corporate campus—which was slated to open in late 2015 and to make up some 750,000 square feet of office space for 1,200 workers—is a step in the right direction of creating a more bus-friendly suburban design.

The campus is to be laced with pedestrian paths, features front-door transit passenger pick-ups and drop-offs as well as close access to mainline bus stops on the project's periphery, and places a decked parking structure on the periphery.

Figure C-3. Pace guidelines – Schaumburg, IL, example.

of developers to minimize the amount of government oversight in seeing their projects through to completion.

DRAFT and the transit-supportive guidelines are Pace's formal tools for shaping growth. Less formal but according to many interviewees just as effective have been a series of community outreach initiatives. Pace assigns a team of staff members to work with public and private interests from each of the six counties within its service jurisdictions on land use matters. Teams of staff conduct land use surveys of all parcels within walking distance of bus stops. The resulting database helps with projecting ridership and adjusting bus schedules, based on time-of-day distributions of demand among nearby land uses. Staffers also interface with regional organizations, including RTA, CTA, Metra (suburban rail agency), and CMAP on an assortment of transportation and urban development issues.

To the degree that there are internal disagreements on land use matters, everyone agrees that safety considerations take precedence over all others. Pace's safety department mediates potential conflicts, such as that of narrowing roads to create human-scale, pedestrian-friendly designs on the one hand and widening them to accommodate the turning radii of 50-foot buses on the other. Safety is an integral part of the development review process.

Naperville has experienced the traffic woes of many fast-growing edge cities over the past two decades. Consequently, Naperville staff now routinely recommend that developers and their design teams solicit Pace inputs on project designs early in the development review and permitting process. As a result of Pace input and recommendations, the developer of a large-scale

commercial project altered its original building design and orientation to enhance pedestrian access to a nearby bus stop. This recommendation was in keeping with Pace’s service policy of not redirecting buses from main routes to circulate within complexes but instead encouraging designers to bring buildings and internal pedestrian-ways closer to bus routes. Along the Interstate 90 toll-way corridor, Pace’s guidelines were similarly used by the designers of a large employment center to minimize pedestrian walking distances from office buildings to nearby bus stops. New ramps off of a major arterial were also financed through this project to enhance transit access to the site.

Dedicated Staff

Pace also maintains nine service planning groups, each of which includes staff members who are trained in land use planning. Most staff hired in the past few years have some background in land use planning. Pace management states that the line between transit staff and land use staff is becoming increasingly blurred.

Pace is strongly committed to making various stakeholders outside the transit agency aware of the importance and value of designing projects and communities for better transit access. Outreach and consciousness-raising have been the key benefits of the DRAFT program. For example, transit considerations are routinely weighed in roadway reviews by the engineering departments of local communities within Pace’s service jurisdiction. Transit-supportive designs are routinely considered by local traffic-engineering staff and Illinois DOT when development proposals are reviewed.

Invoking a basketball analogy, Pace’s approach to engaging the public on transit-supportive planning and design has been a full-court press. Multiple staff routinely provide advice and feedback on local zoning proposals, project designs, bus stop placements, and other outside requests that, cumulatively, contribute to a more bus-serviceable suburban environment.

TriMet – Portland Pearl District Transit and Land Use Integration

Transit Context – Streetcar and bus, new service

Land Use Context – Urban core

Planning Scale – Subarea

Background

Portland, Oregon’s the Pearl District is located north of and adjacent to the city’s downtown. The district is served by the Portland streetcar, operated by the City of Portland, and five bus lines operated by TriMet. The MAX light-rail service, operated by TriMet, is also available in close proximity. The majority of the mixed-use district was rebuilt in the past 15 years, coinciding with the extension of the Portland streetcar to serve the area. In addition, the district is laid out with a transit-supportive grid-street system similar to the downtown and adjacent Old Town/Chinatown.

Key Elements

The case study illustrates four key elements of success in creating more effective transit and land use outcomes:

- Sustained planning partnership,
- Project delivery partnership,

- A supportive transit agency board, and
- A transit-supportive community.

Sustained Planning Partnership

Despite all the success and acclaim for the Pearl District, the final outcome was not the result of a single area planning process but occurred through cooperation, relationship building, and planning that began decades earlier. In the early 1970s, Portland's civic organizations banded together to oppose rapid freeway expansion and organizations like the transit agency. TriMet and the regional government, Metro, were in the early stages of their current incarnations. The Transportation Plan for 1990, which would have built as many as 54 new highway projects, was replaced by a new era in planning for transportation in Portland based more on consensus. TriMet, the Portland Bureau of Transportation, and other local stakeholders became key partners in a series of initiatives that provided a foundation for the success of downtown and the Pearl District.

The first major planning exercise focused on downtown Portland in 1972. The 1972 Downtown Plan and its impact would be felt for years to come. The effect on downtown was clear when local advocates were able to “re-conceptualize the problem of parking to one of access” based on the guidelines put forth in the plan. This idea led to preserving access over automobile movement. “By one estimate, if those downtown trips had not been served by transit, six 40-story garages would have been needed.”⁷³ As shown in Figure C-4, TriMet planners illustrated the parking garages that would have been needed without transit to highlight the innovations in the Downtown Plan such as the transit mall on 5th and 6th avenues. The trust created during this process formed the basis for an extremely collaborative planning culture, and the inclusion of all voices allowed participants to claim ownership over some piece.⁷⁴ “The Downtown Plan represented a critical return to public life” after decades of movement toward private cars and private houses.⁷⁵ The 1972 Downtown Plan led to continued success in transportation planning.

In 1975, the Portland City Council adopted the Downtown Parking and Circulation Policy, implementing the transportation goals and policies of the Downtown Plan. In part, as a response to continuous violations of U.S. Environmental Protection Agency air quality standards, the policy set maximum parking ratios for new development and restricted surface parking.⁷⁶

Also in 1975, Governor Tom McCall created a task force to focus on regional travel corridors. The resulting Interim Transportation Plan reversed planning for 54 highway projects from the



Source: G. B. Arrington.

Figure C-4. Downtown Portland illustrated with parking garages that would have been needed without transit.

Transportation Plan for 1990.⁷⁷ Supported by TriMet and its president,⁷⁸ this plan would represent the first time that an urban area adopted a philosophy of connecting regional transportation decisions and land use.⁷⁹

A number of successful transit projects were completed in the following decade. Transportation improvements included the implementation of fareless square in 1975 and the transit mall in 1977. In 1986, the opening of the Eastside MAX Blue Line light rail with two stations at Pioneer Square reinforced the connection between land use and transportation. These projects would lead to the success of downtown Portland and the Pearl District.

Subsequently, the 1988 Central City Plan set the groundwork for future transit planning in each of the districts near downtown that would support the desired land uses. As the Central City Plan was crafted, transportation planners were heavily involved in the transportation element of the plan. The two major transportation pieces were the Downtown Parking and Circulation Policy and the Arterial Streets Classification Policy.⁸⁰ Rather than an unlimited resource, parking was viewed as an amenity that should be limited and constrained by available land. This policy and the subsequent developer's handbook associated with it prompted plans for a vintage-styled streetcar line. In 1990, the Portland City Council approved a basic alignment, and planning continued for the streetcar.⁸¹ TriMet and the Portland Office of Transportation were part of the working group that created this plan and confirmed its benefits to the Portland City Council. The Central City Transportation Management Plan was completed in 1995.⁸²

In 1995, the planning department updated the Central City Plan to reflect the River District Development Plan, which included the Pearl District. The plan increased housing targets by 10,000 units and noted the effect on regional transportation by locating more workers near the region's major employment center and encouraging biking and walking to work.⁸³ The result of the update would be a new 24-hour neighborhood with increased amenities and active street-level uses. Once the River District Development Plan was completed, the Portland Development Commission responded with the River District Urban Renewal Plan, and in 1997, developers and the City of Portland entered into a development agreement that set milestones for transit-supportive densities based on city actions. Ultimately, the Portland City Council adopted the Pearl District Development Plan: A Future Vision for a Neighborhood in Transition in 2001 as the basis of the current development.

Project Delivery Partnership

This case study highlights how a sustained partnership, even if it is informal, can help deliver a new transit service that is complementary to the transit agency's core business and attain desired land use outcomes.

The prioritization of access through transit and walking was a major part of the downtown planning process and has resulted in the success of the Pearl District. Currently, five TriMet bus lines serve the district. A 2008 travel survey highlighted the success of developing transit and land use together since over 58 percent of respondents stated that they usually walk, bike, or take transit to work. Although the streetcar is only one piece of the larger transportation network, it is the most visible transportation investment in the Pearl District.⁸⁴

The streetcar became a key component of the River District planning process. Businesses, hospitals, Portland State University, and others supported the idea. TriMet was not involved in the initial design of the streetcar and, although it favored using trolley buses, it supported public decisions.⁸⁵

After deciding how the streetcar would be constructed by the city, TriMet was part of the operational planning and funding process. Without TriMet agreeing to help with operations costs, the project would not have been viable. Instead of just paying for operations in full, TriMet

and the City of Portland estimated how much operations would cost. Since the Central City Plan discussed the streetcar alignment, it was not an unexpected expenditure, and service was needed as the River District developed.⁸⁶

Many people thought that capital investment in downtown transit signal priority (TSP) systems would save TriMet operations money. So, after implementation of TSP through a federal grant to the city, it was decided that TriMet would provide one-third of the operations cost through funds that would have gone to a bus line running on the same alignment, another third would come from savings from TSP, and the city would provide the final third. TriMet operators in the transit union agreed to drive the streetcars, and TriMet and the city agreed on specialized tasks and upkeep of the overhead wires and equipment along the corridor.⁸⁷

Capital was collected from a number of sources, with the main source being bonds on parking garage revenues downtown. In order to continue with the project and out of respect for TriMet's existing capital plans, streetcar planners did not request federal transit funds for the project. At the time, TriMet was putting together funding for regional light-rail lines, including for the \$965 million Westside light-rail transit line. In order to build the streetcar, planners had to find other funding sources to preserve TriMet's ability to obtain federal funding.⁸⁸

Informally, a group made up of key staff from the City of Portland, the Oregon DOT, the three counties, the Port of Portland, Metro, and TriMet met every Friday morning to coordinate the funding for major transportation projects. This group, called the Transportation Managers Advisory Committee, coordinated federal funding, lobbying efforts, legislative activity, and the structuring of different projects to get regional consensus. Like all other projects and programs in the region, the streetcar was part of informal and formal regional strategic planning processes.

With the city's focus on access since the 1972 Downtown Plan, the Portland Office of Transportation was the appropriate agency to lead the streetcar planning process in the central city. TriMet, as the regional agency, was implementing a regional vision of light-rail and transit service. From a political standpoint, other parts of the region perceived any attention paid to downtown Portland as favoritism. Therefore, it was important for the city to take the lead in advancing the project and protecting TriMet's regional progress.⁸⁹

TriMet and the City of Portland benefited from the city having to fund the project. For example, less expensive construction processes were developed. Instead of relocating utilities (like those required for the MAX light-rail construction downtown), planners developed a process for laying track slabs at less depth and over utilities. Subsequent construction of light rail by TriMet on Interstate Avenue and the Transit Mall benefited from these innovations.

Supportive Transit Agency Board

The success of transit in the Pearl District resulted, in part, from many instances in history where the TriMet board of directors was involved in supporting the integration of land use and transit in the greater Portland area. TriMet began operation in December 1969 and immediately adopted a culture of supporting land use in an advocacy role. In part, the TriMet board of directors took on this role as a way to address declining patronage and investment. In 1971, the state published the Transportation Plan for 1990 and recommended 54 major new highway projects, many of them freeways and expressways. It predicted that the declining bus system would remain insignificant as a transportation source except for the rush-hour commute to downtown. As a response, TriMet completed the 1973 Immediate Action Plan and the 1990 Master Plan to reverse the transit system's decline.

At the same time, TriMet began to define its role in land use. For example, in the 1970s, TriMet produced Design with Transit guidelines, the forerunner to today's station-area design guidelines.

By the mid-1980s, TriMet employed land use planners that formerly worked for the City of Portland. In 1988, TriMet transportation experts participated in central city planning processes, which continued to prioritize access over automobile mobility.

In many areas of the country, transit agencies see themselves as only providing a means to move people. However, in Portland, TriMet expanded its role to the regional transit provider that serves as the connector between major growth centers to facilitate good land use planning.

Transit was also viewed as a way to enhance access within centers rather than just providing rides between them. This is made clearer with the idea of the trip not taken, which is that if you build places that have all the services and amenities one needs for daily life within walking distance, there is no need to drive a car. Transit service that provides access in and around developing areas is supportive of the trip not taken.

In March 1993, the TriMet board of directors approved a new mission statement and set the agency on a new course for the future by adopting a new strategic plan that elevated the importance of land use planning: “TriMet’s mission is to assure people increased mobility in our growing, compact urban region.”⁹⁰

The strategic plan noted that TriMet would advocate for three major public policy initiatives:

- Containing growth within the existing urban growth boundary,
- Substantially increasing development in transit corridors, and
- Helping to ensure that transit efficiently serves land uses.

TriMet issued two discussion drafts of its new strategic plan—one in April 1992 and one in December 1992—for regional review and discussion. Some 5,000 copies of each draft were distributed to local jurisdictions, community groups, interested businesses, and TriMet employees. TriMet intentionally sought regional debate and discussion of the strategic plan for two reasons:

- To determine what the region expects of its transit agency and begin working toward a common vision for the future
- To gain a better understanding of how TriMet can best serve its customers and the region as a whole.

In addition to distributing copies of the drafts for comment, the TriMet board of directors held six working sessions in January and February of 1993 with representatives of local governments to discuss the second draft of the strategic plan.

In the 1990s, TriMet hired a general manager with experience in land use and development and actively advocated for a tight urban growth boundary and regional growth management strategy to support community livability. By the time the Pearl District redevelopment and streetcar line were completed, TriMet had a number of full-time staff that spoke the development language, had relationships with the development community, and understood developer priorities and aversion to risk.

Transit-Supportive Community

Ultimately, there were a large number of people that participated in the planning and development of the Pearl District. Notably, the participants shared an awareness of transit issues that helped to shape the discussions, take advantage of the existing market dynamics, and establish meaningful formal and informal relationships among agencies, developers, and other stakeholders. In other words, TriMet’s sustained, long-term efforts from the early 1970s to the Portland City Council’s adoption of the 2001 vision (i.e., Pearl District Development Plan: A Future Vision for a Neighborhood in Transition) allowed others to integrate transit and land use in the Pearl District.

As explained in *Beyond the Field of Dreams: Light Rail and Growth Management in Portland*, a successful land use and transit strategy requires a working partnership between local governments and transit agencies.⁹¹ Like any partnership, each side has expectations of the other. TriMet asked local governments to make developments physically more dependent on transit by limiting parking, constraining automobile access, widening sidewalks, improving pedestrian access, and allowing a mix of land uses and higher-density development. In exchange, local governments expected TriMet to provide the necessary service to accommodate their growth. This benefited local governments in that they were shifting a sizable portion of the cost of growth to transit.

Another example of TriMet's efforts to build a transit-supportive community is its contribution to the funding of LUTRAQ: Making the Land Use, Transportation, Air Quality Connection, the ground-breaking study led by the organization 1000 Friends of Oregon. The LUTRAQ study applied the principles of TOD to reallocate a projected population growth of 160,000 in Washington County from standard sprawl to a mixed-use pattern that supports planned light-rail and bus network extensions. The study illustrated how effective land use planning can reduce dependence on the automobile, increase mobility, improve air quality, and create more affordable communities. It rearranged land uses predicted to develop in the ensuing 20 years without altering overall density and the proportion of different housing types. Potential growth areas were identified on the basis of environmental factors, existing development trends, and proximity to transit. The LUTRAQ study illustrated that the study area did not need a new suburban bypass freeway if transit and land use were integrated in this manner.

GCRTA – Cleveland HealthLine and Greater University Circle Initiative

Transit Context – Bus rapid transit, new service

Land Use Context – Urban core

Planning Scale – Corridor, subarea

Background

Cleveland, the central city in northeastern Ohio, has been shrinking for decades. At its peak in 1950, almost 1 million people called the city home. Through years of economic and industrial decline, the population decreased significantly to 390,000 in 2013. The region itself has experienced its own population changes, but overall has steadily balanced itself during national economic swings to maintain some equilibrium in population. In a much championed effort of collaboration, the city, GCRTA, community foundations, and local anchor institutions have focused their efforts on creating an economically thriving region, using the bus rapid transit route, the HealthLine, along the Euclid Avenue corridor as a driver for growth.

The 6.8-mile Euclid Avenue corridor stretches from downtown Cleveland east toward Cleveland Heights and connects downtown, midtown, and a major hospital and university district known as University Circle. This important corridor has been the center of transportation discussions for decades given its role as an employment destination and home of major employers such as the Cleveland Clinic and other health care and university institutions, which make up a solid base of employment for at least 50,000 people.

In the 1980s and 1990s, plans were developed for a subway under Euclid Avenue called the Dual Hub. The proposed cost of more than 1 billion dollars proved to be expensive and was rejected for federal funding because it was not deemed economically viable. The City of Cleveland and the GCRTA maintained that increased service along the corridor was important and so began in earnest on a less expensive bus rapid transit line in 1997.

Investing along the Euclid Avenue corridor was about much more than providing transit service; planners in both the city and transit agency emphasized a regeneration of the entire corridor. Much of the corridor felt disconnected, with hospitals, universities, and several businesses facing away from the corridor. The impetus was to encourage everyone to think differently about the Euclid Avenue corridor given its regional importance. Three goals were put forward:

- Improve the corridor for residents,
- Deliver better transit service, and
- Increase/enhance economic development.

During the many years spent planning and constructing the line, the transit agency and the City of Cleveland planning department and economic development department met with several stakeholders and local businesses along the corridor. Discussions initially centered on the provision of infrastructure and land uses along the corridor. New leadership and renewed priorities at several local institutions and organizations, such as the Cleveland Foundation, the city's economic development department, and the mayor's office, soon injected more life and funding and greater planned outcomes into the planning and implementation process. Discussions went from ideas to renewed investment along the Euclid Avenue corridor.

The Cleveland Clinic and the universities all sought to reconnect their institutions with the surrounding community—understanding that their success lay partly in being located in a thriving and connected region. They created new master plans to orient toward Euclid Avenue and provided funding to help employees reinvest in the neighborhoods.

Additionally, different institutions along the corridor began to work together to support further collaboration and growth along Euclid Avenue. The Cleveland Foundation helped form the Greater University Circle leadership group in 2005, bringing together institutions, CDCs, and community groups to discuss district planning efforts and share future planning goals. Born out of this collaboration was the establishment of plans for a health technology corridor meant to spur industry growth in Cleveland.

Also during that time, private developers bought land in the area, and the city's economic development and planning departments began bolstering midtown development prospects. Midtown had been seen as a dead zone, but with a greater connection to downtown and University Circle, it was seen as having a larger opportunity for growth. With zoning and design review in place, higher-density and mixed-use developments were constructed. After the city's economic development department financially supported an initial building, more development began to occur with increasingly less public assistance.

Key Elements

This case study illustrates four key elements of success in creating more effective transit and land use outcomes. These are:

- A supportive transit agency board,
- Dedicated staff,
- A transit-supportive community, and
- Sustained planning partnership.

Supportive Transit Agency Board

The Euclid Avenue corridor had been in development for decades, with previous plans for a subway being rejected and replaced by the current bus rapid transit line. The transit agency board was not supportive per se of involvement in shaping the land use decisions, but rather was

supportive of the transit and necessary infrastructure along the corridor to connect the region. The redevelopment of Euclid Avenue was broader than a transit project; it was considered an urban infrastructure project. The transit agency helped support the rebuilding of new water infrastructure, gas lines, curbs, and electric lines to create a desirable place for others to invest in and develop. GCRTA's willingness to incorporate broad community goals in the transit investment is what helped make the corridor a success.

Dedicated Staff

GCRTA does have dedicated staff focused on TOD and land use. GCRTA is becoming a more important part of the dialogue with land use leaders and the greater community, especially on TOD projects. Much of the regional discussions around land use have taken place in working groups or committees, in some of which GCRTA has played a minimal role. As more of the larger corridor and regional discussions take place in working groups or committees, it will be important for GCRTA to continue involvement in station-area planning.

GCRTA staff are knowledgeable and able to work collaboratively with developers and land use planners. It has been proven over time that these investments rely not only on a single organization's understanding, but on the regional or citywide partners' knowledge and the relationships that have been nurtured over time. Each group had the general knowledge that transit and TOD could help to create a successful region.

Transit-Supportive Community

"The success of our project is not what we did. It is what other people did in response to what we did. They really saw this as an opportunity and a way to leverage investment." – Joe Calabrese, CEO, Greater Cleveland Regional Transit Authority

In Cleveland, from a land use perspective, change came from having willing partners in the anchor institutions, CDCs, and city agencies. While the transit agency and the city indeed saw the value in the corridor, it was the local partners and foundations that drove the economic development and revitalization along the HealthLine. The regional leaders understood the value of connecting transit, land use, and economic development initiatives—even when GCRTA was not present at the table. Based on the community support for the transit system, the community advocated for development around transit, based especially on the knowledge of economic benefits that can occur around transit. Previously prepared plans for new buildings were changed to orient development toward the street rather than inward.

Sustained Partnership

The success of the HealthLine is based on collaboration. The transit investment was much more than the provision of transit; it was a modern urban infrastructure project. In fact, the cost of the infrastructure improvements was nearly three-quarters of the overall project costs. Transit provided the physical connection that was needed to consider the corridor a worthwhile project that could benefit from a unified vision.

Conclusion

The transit agency's connection to the land use decision-making process was part of a partnership among many stakeholders:

- Transit agency – creating a quality transit system.
- City planning department – enabling the visioning, land use, zoning, and design regulations process.

- Anchor institutions – providing funding, support, and internal planning.
- CDCs – supporting community involvement, neighborhood visioning, general placemaking support, and funding.
- Local foundation (primarily the Cleveland Foundation) – playing the role of the convener, providing funding and support.
- City economic development department – providing funding and a motivation to do more than just plan.
- Private partners – seeing the value of the corridor and making the investments.

It was a combination of each that made the project a success.



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Abbreviations and acronyms used without definitions in TRB publications:

A4A	Airlines for America
AAAAE	American Association of Airport Executives
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ACI-NA	Airports Council International-North America
ACRP	Airport Cooperative Research Program
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATA	American Trucking Associations
CTAA	Community Transportation Association of America
CTBSSP	Commercial Truck and Bus Safety Synthesis Program
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAST	Fixing America's Surface Transportation Act (2015)
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HMCRP	Hazardous Materials Cooperative Research Program
IEEE	Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
MAP-21	Moving Ahead for Progress in the 21st Century Act (2012)
NASA	National Aeronautics and Space Administration
NASAO	National Association of State Aviation Officials
NCFRP	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NTSB	National Transportation Safety Board
PHMSA	Pipeline and Hazardous Materials Safety Administration
RITA	Research and Innovative Technology Administration
SAE	Society of Automotive Engineers
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
TCRP	Transit Cooperative Research Program
TDC	Transit Development Corporation
TEA-21	Transportation Equity Act for the 21st Century (1998)
TRB	Transportation Research Board
TSA	Transportation Security Administration
U.S.DOT	United States Department of Transportation

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ISBN 978-0-309-37500-9



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