

# Involvement in Transit Service Planning & Development Decisions

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## Introduction

This document provides a framework for examining the addition of transit services from a variety of perspectives, building on the material presented during the December 6, 2007 webinar - *Planning Transit Services that Meet Your Community's Goals* - sponsored by the Surface Transportation Policy Partnership and the Center of Neighborhood Technology, with support from the Federal Transit Administration, the Oak Foundation and AARP. It is intended to help interested citizens participate more effectively in bringing new or expanded transit service to their community.

In recent years transit has re-emerged as a desirable and viable auto alternative for a growing number of communities. Increasing levels of roadway congestion, shifting housing trends, higher gas prices, general health concerns, and the impact of greenhouse gas emissions and fossil fuel use are some of the reasons for this renewed interest in transit.

Construction of new development often occurs without coordination with transit service. While development proposals often require traffic analysis, the availability and frequency of transit services is rarely included. As a result, some regional officials and advocates express concern that development occurs too quickly and without thought of transit access. In other regions the concern is that public agencies do not integrate transit plans into plans for

growth. Those who live and work in these communities suffer the consequences of poor planning and wonder what they could do to ensure a more favorable outcome in the future.

Before the automobile became the primary form of travel, public transportation led development. In many areas, public transportation lines were built into undeveloped areas by real estate developers in order to sell their new housing developments. Transit was integrated into the community because transit was there first and the neighborhood was built around it.

Post WWII development patterns changed the urban landscape and the role transit played in the mobility equation. The popularity of the automobile made public transportation less of a necessity. For more than fifty years, real estate developers designed residential subdivisions, industrial parks and commercial developments with the automobile as the primary mobility option. A major result of this pattern has been increasing levels of auto congestion. In many suburban areas, transit service, if it exists, operates with sparse coverage, infrequent schedules, or both. The impact of minimal service levels is exacerbated by poor access to the mainline routes and site designs that don't encourage or support transit use. The lack of sidewalks, wide parking lots between buildings and major arterial roadways, winding, unconnected street networks combined with low density housing create a landscape that discourages the development and operation of efficient transit services.

So, how can we better integrate transit planning and implementation with development plans? And, how can community stakeholders participate in the process?

Part of the answer lies in education. Residents see when a new development is not enhancing the community but

don't understand how it happened or how to prevent a similar outcome in the future. This checklist is designed to begin the education process. It provides information in three areas: 1) Understanding the elements of transit planning, 2) Understanding the development process and 3) Tips for stakeholders.

The following sections provide a brief overview of each subject area. Tables 1-3 present frequently asked questions on each topic and provide the typical practice and recommended good practices for each.

### ***Understanding the Elements of Transit Planning***

Planning transit services for bus, rail or rural systems requires information on the following elements: number of existing and future riders, rider characteristics, land use, and operating costs.

Knowledge of rider characteristics such as frequency of use, destinations and demographics is important to ensure that the transit service is tailored to the needs of a wide range of customers. Information on the travel characteristics of existing and potential riders should be continually collected so that the transit agency can respond to changes in the market. Routine surveys of ridership preference assess the effectiveness of service in meeting the needs of the riding public.

While it is unusual for the land uses to be identical along an entire transit route, the types of land use along a transit service, particularly adjacent to station areas, have a great impact on the type of service provided and service frequencies. For example, a corridor of primarily offices would likely need a higher frequency of service during the traditional rush periods and lower demand for late night and weekend service while an industrial area with multiple shifts operating might need service on a 24/7 basis.

Geography of an area (e.g., hilly versus flat terrain) can also have a sizeable impact on how routes are designed.

Transit agencies are supported through a number of funding mechanisms including fare revenues. The type of funding varies among regions but virtually all require some type of public funding. The operating cost of transit service is a critical element in transit planning.

When planning new services, or restructuring existing service, transit planners analyze these elements to determine the viability of the proposed service change. The political environment can also have a great impact - both positive and negative - on the outcome of the project or proposed service.

### ***Understanding the Development Process***

Transit agencies rarely have control over the development process. One exception is the development of a new rail station where the transit agency owns a portion of land adjacent to the station that is slated for new development. Even in these cases, local governments still retain control over land use, permitting and zoning. Therefore, it is representatives from local government who conduct business with the developers.

The development process requires developers to have a variety of skills, including market research, financial analysis, marketing, technical expertise, negotiation, and project management. Real estate development involves substantial financial risk. Project delays can cost millions of dollars in interest expenses, insurance, taxes and construction overhead. Developers are reluctant to reassess their plans once a project begins.

Most developers do not participate in the land use planning and zoning decisions beyond their immediate site.

They look for clear directions on what the code requirements and limitations are for their developments. Unless a rail line is under construction or already in place it is a risk for them to factor rail service into their market feasibility research. The flexible nature of bus service, a positive attribute for some decisions, requires more innovative approaches to encourage developer consideration.

Communities can encourage transit supportive developments through changes in its zoning codes that offer relief from parking and other requirements, require pedestrian facilities and well designed areas at transit stops/stations to support mobility alternatives to the automobile.

### ***Tips for Stakeholders***

Community members understand the needs of their neighborhood best, but many feel left out of the decision-making process. Since 1991, Federal transportation law has required an open public participation process for all transportation planning. While many transit agencies have made progress, a large number of agencies are still often ill-equipped to deal with developers especially in areas experiencing new and rapid growth.

**Table 1: Understanding the Elements of Transit Planning**

Question	Typical Practice	Good Practice
<p>How does a transit agency decide when, where and how often service is provided?</p>	<p>Transit agencies that serve areas with a population of 200,000 or greater produce Service Standards which establish quantitative criteria for service characteristics appropriate to their service type, which may include the following: vehicle loads (crowding), service frequency, on-time performance, distribution of transit support infrastructure (bus shelters, sidewalks, etc.), and service availability (the distribution of routes within the service area).</p> <p>Transit agencies that have service area populations of less than 200,000 are not required to produce standards.</p> <p>While surveys of transit agencies across the country indicate an increasing number of large systems have formally adopted route evaluation standards, most small systems only perform system evaluations where standards exist.</p>	<p><b><i>For systems over 200,000 service area population:</i></b></p> <ul style="list-style-type: none"> <li>-Service Standard documents explain each service characteristic and describe the minimum and/or maximum criteria. Criteria are tied to community goals and performance is presented in comparison to industry standards. At minimum, standards are developed for route design, schedules, economics and productivity, service delivery, and passenger comfort and safety.</li> <li>-Additional criteria may be included such as system design, reduction of service duplication, network connectivity, service equity, route directness, origins and destinations served, directness of service, travel times, bus stop location and spacing, and minimization of transfers required.</li> <li>-Standards include all the service characteristics used in the decision making process when adding or deleting service.</li> <li>-Standards include a list and description of any intangible factors used in decision making.</li> <li>-Standards are formally adopted by transit agency’s Boards of Directors and will be easily accessible on its website.</li> </ul> <p><b><i>For systems under 200,000 service are population:</i></b></p> <ul style="list-style-type: none"> <li>-Develop guidelines or “rules of thumb” for similar service characteristics. These guidelines are adopted by their Board of Directors and readily available to interested parties.</li> </ul>

<p>What are some of the key factors to consider in coordinating services between different transit modes (bus vs rail) or among providers?</p>	<p>Service coordination efforts, where they exist, are generally focused at airports, rail stations, bus terminals, ferry wharves, taxi stands and park and ride lots.</p> <p>Coordination practices are often limited by facility design.</p>	<ul style="list-style-type: none"> <li>-Coordination of services between modes or between different providers is integrated into the design of all facilities, schedules, traveler information, fares, and the needs of special needs riders.</li> <li>-Service coordination goals and standards are developed for all transit modes within a region. Coordination elements include: <ul style="list-style-type: none"> <li>--Schedule integration to minimize wait times .</li> <li>--Fare policies and practices to allow seamless movement between transit modes and between service providers.</li> <li>--Trip planning tools to successfully coordinate between modes.</li> <li>-- Easily available travel information.</li> </ul> </li> <li>-New and rehabilitated intermodal facilities are designed to minimize walk time, provide clear sight lines, adequately sized pathways, and appropriate signage is standard practice for all service providers.</li> <li>-Strong local leadership is in place to overcome the obstacles identified in typical transit experiences.</li> </ul>
<p>How can I find out about projects planned in my community?</p>	<p>Transit agencies receiving federal funding are required to produce multi-year programs and an annual program and budget. These programs are also included in the capital programs prepared by the State DOT and by the designated metropolitan planning organization (MPO).</p>	<ul style="list-style-type: none"> <li>-Annual and multi-year programs by transit agencies, MPOs and State DOTs have enough detail so that citizens can determine what projects are planned for implementation.</li> <li>-All major capital projects including vehicle purchases are clearly identifiable.</li> <li>-Planning studies for major capital projects and service changes are included in the annual work</li> </ul>

	<p>Major capital projects seeking federal funds must also complete a series of feasibility and planning studies. These planning studies are included in the Unified Planning Work Program (UPWP) prepared by the MPO.</p> <p>These plans, programs and studies vary greatly in their level of detail. Most agencies reflect vehicle &amp; equipment purchases for the entire system not by route. New major capital projects are generally listed individually in plans and programs.</p> <p>Most agencies conduct a wide range of internal studies that are not specifically identified in their annual program and budget.</p> <p>Transit providers not seeking federal funds are only required to meet the conditions of local and state laws.</p>	<p>plan [UPWP] regardless of funding source.</p> <ul style="list-style-type: none"> <li>-Transit agencies include a list of all planning studies in their annual work programs.</li> <li>-Transit agencies provide easy access to their annual and multi-year capital programs on their websites. Websites provide easy access links to the projects listed in the state and regional programs and the long-range transportation plan covering their service areas.</li> <li>-Planning studies are readily accessed via the agency website. The transit agency makes the study background information, including the purpose and need for the project, current status, timetable, provide opportunities for public involvement and planned next steps.</li> <li>-All active transit planning studies and projects, regardless of sponsor, are available through the transit agency, MPO and State DOT websites.</li> </ul>
<p>What tools does the transit agency use when planning a transit project?</p>	<p>Information is the number one tool used by transit agencies. Typical data sources include: the national census for the travel characteristics of riders and potential riders.</p> <p>Geographic Information System (GIS) tools used by many transit agencies are used to analyze data spatially and present the results.</p> <p>Long-term planning for major</p>	<ul style="list-style-type: none"> <li>-Data that provides information by route, fare type, fare paid, day of week, time of day and transfer information. Automatic Passenger Counters (APC) provide boarding and alighting data by stop and by time of day, as well as the points on each route where the vehicle is most crowded.</li> <li>-Using the number of riders or those expected to use a proposed service to determine the type of vehicle, (van, bus or railcar), the frequency of</li> </ul>

	<p>projects uses transportation planning models to forecast the impact of future growth on travel patterns and ridership demand. The quality and use of transportation models varies widely across the country.</p>	<p>service and the hours/days of service.</p> <ul style="list-style-type: none"> <li>-Combining census information with surveys conducted in the service area for both riders and non-riders to provide a better sense of ridership potential and performance.</li> <li>-Continual analysis of markets through on-board surveys and other outreach methods to help determine customer satisfaction levels, non-rider attitudes, non-rider travel behavior, origins/destinations of transit riders, rider perceptions/attitudes, and transfer behavior.</li> <li>-Train control systems for rail systems and Automatic Vehicle Location (AVL) for bus or paratransit systems to provide data on operating characteristics such as travel time, speed and on-time performance.</li> <li>-The use of transportation models to evaluate the potential for new transit services.</li> <li>-Scenario planning and small area or detailed corridor models to evaluate the impact of new services.</li> </ul>
<p>How are transit agencies funded, and what are the sources of revenue?</p>	<p>Transit agency budgets are divided into two categories - operating and capital. Transit agencies receive public funding from a multitude of sources.</p> <p>Public funding sources include: sales tax, motor fuel tax, property tax,</p>	<ul style="list-style-type: none"> <li>-Revenues are dedicated to support transit operations and capital investment.</li> <li>-A strong state commitment is in place to support transit.</li> <li>-Transit agencies review their funding sources</li> </ul>

	<p>income tax, vehicle registration fees, parking tax, real estate transfer tax, payroll tax, cigarette tax, and congestion pricing.</p> <p>Federal support for operating expenses is not available in urban areas with a population greater than 200,000.</p> <p>States and regions determine the level of additional support for transit.</p> <p>Capital expenses include the costs of purchasing vehicles and equipment, as well as the construction costs of new stations, bus terminals, etc. In some cases, capital funds can also be used to repair or reconstruct rail track and structure. A critical percent of capital funds for a transit project is provided by U. S. Department of Transportation through the Federal Transit Administration (FTA). For most grant programs, the FTA provides up to 80 percent of the cost of the capital project, with local sources funding the remainder. However, new start projects rarely receive the full 80% share.</p>	<p>and mechanisms to assure they are sufficient to support the desired level of transit services over time.</p>
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**Table 2: Understanding the Development Process**

<b>Question</b>	<b>Typical Practice</b>	<b>Good Practice</b>
<p>What steps are involved in the land development process?</p>	<p>Local communities are the unit of government with land use control.</p> <p>Development decisions are usually based upon comprehensive land use plans and related zoning ordinances.</p> <p>The most common steps in the development review process are: 1) Concept Development, 2) Feasibility Study, 3) Planning &amp; Financing, 4) Formal Commitments, 5) Project Construction, and 6) Asset Management.</p>	<ul style="list-style-type: none"> <li>-Municipalities have clear, written guidelines for developers that identify what is permitted and spells out the steps necessary to advance a development project.</li> <li>-Community is involved before the Planning &amp; Financing phase, preferably during the Concept Development stage.</li> <li>-Municipalities require that the developer seek resident involvement very early in the process.</li> <li>-Developers incorporate early public involvement as standard practice.</li> </ul>
<p>What changes in the zoning code would better support transit in my community?</p>	<p>The traditional zoning code used most frequently is the “Euclidean” code, which establishes a system of zoning districts, (residential, commercial, industrial, etc.), a list of uses associated with each district, and dimensional standards, (lot size, setbacks and building height). Euclidean zoning discourages mixed-use development which is conducive to transit.</p> <p>There are several zoning tools available to local governments that</p>	<ul style="list-style-type: none"> <li>-Zone size is reduced to bring compatible zones into closer proximity and encourages more pedestrian traffic.</li> <li>-Form-based zoning is utilized to regulate the “form” of the environment. It prescribes the desired physical form of a community, as opposed to traditional zoning which attempts to control land use and density. Form-based zoning is developed in concert with a community visioning process. Residents are asked how they want their neighborhood to look and a plan is drawn to fit that vision.</li> <li>-Municipalities use PUD zoning tools that have</li> </ul>

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	<p>are more flexible. Planned Development Zones or Planned Unit Developments (PUD) is a type of special use which is intended to encourage innovative and creative development while complementing existing neighborhoods.</p> <p>PUDS permit variations from existing zoning in favor of better site design and land use patterns. The advantages of these zones are maximum design flexibility and the ability to negotiate public benefits that would otherwise be unattainable.</p>	<p>clear guidelines in place for use by developers.</p> <p>Transit Overlay Zones/Districts are used to provide higher density, mixed-use developments where high-quality transit service operates. Minimum densities or floor area ratios (FAR) are set for these zones, along with reduced setback requirements, maximum parking requirements and use restrictions.</p>
<p>What are some of the keys to successfully integrating transit and development?</p>	<p>Existing rail transit is a catalyst for higher density development around the station area.</p> <p>New rail/bus rapid transit commitments encourage zoning for higher density developments adjacent to the station areas.</p> <p>Bus transit rarely has an impact on developer decisions.</p>	<p>-Municipalities create detailed land use plans for new and existing transit station areas.</p> <p>-Strong leadership and/or the existence of a “champion” for transit that encourages the developer to incorporate elements supportive of transit within a proposed project. Champions are often elected officials, but they may also be business leaders or community advocates.</p> <p>-Written agreements between the developer and the municipality on responsibilities and project timelines that avoid potential obstacles and keep the development on schedule.</p>

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Question	Typical Practice	Good Practice
		<p>-Municipalities evaluate their goals for the development and determine if they are consistent with those of the developer. If so, the municipality may become a partner in the project overseeing a streamlined approval process.</p> <p>-Adopted zoning codes that support transit oriented development, authority to assist in assembling land parcels, and provisions for the use of Tax Increment Financing (TIF) districts.</p> <p>-Good communication networks with all stakeholders in the process to ensure a smooth running project and a mechanism to handle unforeseen issues.</p> <p>-An entrepreneurial attitude by all involved that encourages new ideas and “out-of-the-box” problem-solving.</p>
<p>What are appropriate densities for a minimum level of transit service?</p>	<p>Generally accepted research recommends a minimum of four dwelling units per acre for hourly bus service and 15 dwelling units per acre for frequent (10 minute or less) bus service.</p> <p>The threshold for light rail service with five minute frequencies is nine dwelling units for acre.</p> <p>Rapid rail transit with five minute frequencies is 12 dwelling units per acre.</p> <p>Commuter rail service with</p>	<p>Mixed-use density is the prime determinant in transit use.</p> <p>Other aspects of the environment affect the level of transit use:</p> <p>-A level of funding to adequately cover the operating costs of the minimum service levels;</p> <p>-Land use design that supports accessibility to transit, especially the accessibility provided by the pedestrian environment; and</p> <p>-The characteristics of the transit service (frequency, route, performance, etc.).</p> <p>-Commitment to market and operate a service for</p>

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	<p>approximate hourly service has a very low threshold at one to two dwelling units per acre.</p> <p>While these are recommended minimums, services are often operated at lower frequencies due to funding limitations, operational obstacles or other constraints.</p>	<p>a time period long enough to evaluate its reception by consumers.</p> <p>-Commitment to operating frequencies higher than minimums to provide convenient and reliable service to consumers.</p>
<p>What is the best way to get developers to look at the availability of transit service before they build a business?</p>	<p>Most developers do not consider transit as a component of their plan.</p> <p>Availability of bus transit is rarely considered by developers given the perception that bus transit lacks permanence.</p>	<p>-Local governments require consultation with transit agencies as well as road agencies early in the development process.</p> <p>-The development review and approval process incorporates requirements for early planning with transit agencies.</p> <p>-Developers look for investment opportunities in urban areas</p> <p>-State laws require a structured review process for certain, large scale developments that include participation by the transit agency. Maryland, Florida and California are states that have requirements in place. This creates a forum for the public to review and perhaps influence the form of proposed developments.</p> <p>-Zoning codes support transit services and include higher densities along corridors with existing transit service or designated for transit, reduced parking requirements for developments in transit overlay districts or along transit corridors and bicycle storage.</p>

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Question	Typical Practice	Good Practice
		<p>-Developers are required to provide transit and pedestrian infrastructure in their developments as part of the PUD process.</p> <p>-Transit agencies have clear transit-oriented design guidelines and aggressively market them to developers.</p> <p>-Programs for start-up or pilot service in new areas provide an incentive to developers to incorporate transit infrastructure assets in their projects.</p> <p>-Transit agencies have professional staff skilled in the development process.</p> <p>-A professional staff, formal design guidelines and incentive programs are in place to demonstrate to developers that a community and transit agency are committed to making transit a viable mode choice.</p>

**Table 3: Tips for Concerned Stakeholders**

Question	Typical Practice	Good Practice
<p>How can someone find out about upcoming transit projects?</p>	<p>Community stakeholders may be able to learn about upcoming transit projects by signing up for mail and email notifications from the local municipality, transit provider, and/or Metropolitan Planning Organization (MPO). This service provides an easy way to become aware of new projects.</p>	<p>A more active way to stay informed is to volunteer to serve on project task forces or MPO stakeholder committees. These committees may be formed by the local municipality, transit agency or MPO for specific projects or to act as advisory boards on policy issues.</p> <p>Individuals who are involved in local community</p>

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	<p>Interested parties should also periodically check the websites of these organizations. The website will often provide information on upcoming meetings and on the status of current projects. Many municipal websites will also provide information on projects planned within the community.</p>	<p>organizations are informed of upcoming projects through these networks. Residents learn of neighborhood projects through their membership in local community organizations, recreational facilities and churches. Becoming involved in local community activities provides opportunities to obtain and share information about projects in your neighborhood.</p> <p>Attend the meetings of your MPO, municipality and transit agency.</p> <p>Introduce yourself to agency staff and become knowledgeable about projects and processes. A good relationship is invaluable when a project does come up.</p>
<p>What can advocates do to become more effectively involved in supporting and promoting transit alternatives?</p>	<p>Be sure that you are plugged-in to agencies' communication network. Stay informed of both local and regional news. Local issues affect your community directly, but decisions made at the regional level may also affect what occurs in your community.</p> <p>Join community-based organizations in which you share common goals, or form a new organization. There is power in numbers. In addition, the organization will benefit by having new and multiple perspectives.</p>	<p>Learn about the goals and priorities of other stakeholders. Learn who the elected officials are and their stand on issues impacting your community. Meet with representatives from the transit agency, local government or MPO on issues relevant to your neighborhood. Share information with like-minded stakeholders.</p> <p>Help define a vision for the community and set achievable goals. This will focus your efforts and you will present an organized "face" to other stakeholders.</p> <p>For meetings, prepare talking points on specific issues - especially those that are likely to become controversial. State your position and the reasons for that position clearly.</p> <p>Invite representatives of the transit agency to</p>

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		<p>community group meetings and include them in plans for local festivals and other gatherings.</p> <p>Make effective use of the media. Provide noteworthy news to the local and regional media outlets. Become a source of reliable information. Create your own media outlets through a website or newsletter. Prepare news stories on the benefits of transit in your community.</p>
<p>What are the requirements for public involvement in transportation decision-making?</p>	<p>Public involvement activities are required under the Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU) which was signed into law in 2005. State departments of transportation, Metropolitan Planning Organizations (MPO) and transit agencies are required to develop and use a documented public participation plan that involves all interested stakeholders in the transportation planning process. Among other requirements, the law specifies that the public participation plan(s) will meet the following conditions:</p> <ul style="list-style-type: none"> <li>• Provide adequate notice of public participation activities and adequate time for public review and comment,</li> <li>• Provide timely notice and reasonable access to information,</li> </ul>	<p>While the federal regulations require public information and participation in transportation planning activities, the level of compliance varies from area to area. In assessing the adequacy of compliance the following questions should be asked:</p> <ul style="list-style-type: none"> <li>• The number and variety of methods used to notify the public of review and comment opportunities. How do they compare with the characteristics of the general population? Are ethnically diverse channels used that reflect the community profile?</li> <li>• How much time is given for review and comment? Is it adequate for complexity of the issue?</li> <li>• Type and quality of visualization techniques used? Are they appropriate for complexity of issue presented?</li> <li>• Availability of information electronically and ease of access to it? Is availability well publicized?</li> <li>• Are meeting formats, locations and times responsive to needs and customs of the</li> </ul>

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	<ul style="list-style-type: none"> <li>• Employ visualization techniques to describe plans,</li> <li>• Make information available in electronically accessible formats and means,</li> <li>• Hold public meetings at convenient and accessible locations and times,</li> <li>• Demonstrate explicit consideration and response to public input,</li> <li>• Seek out and consider the needs of those traditionally underserved by existing transportation systems who face challenges accessing employment and other services.</li> </ul> <p>All transit capital projects financially supported by federal funds are subject to statewide transportation planning requirements, and in metropolitan areas, to metropolitan planning requirements. In addition, should the project substantially affect a community or the public transportation service of a community, the transit agency is required to:</p> <ul style="list-style-type: none"> <li>• Provide an adequate opportunity for public review and comment on the project,</li> <li>• Provide adequate notice and hold a public hearing on the</li> </ul>	<p>populations whose comments are being sought?</p> <ul style="list-style-type: none"> <li>• How are comments and responses considered and reported?</li> <li>• What efforts are made to identify and engage stakeholders, particularly those who are underserved?</li> </ul> <p>Again, while transit agencies are guided by federal regulations, the level of compliance varies. Good practice in this area can be measured by the quality of the outreach initiatives and level of effort to engage affected populations.</p>
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**Table 3: Tips for Concerned Stakeholders**

	<p>project if the project affects significant economic, social, or environmental interests,</p> <ul style="list-style-type: none"><li>• Provide a concise description of the proposed project in the public hearing notice, which shall be published in a newspaper of general circulation in the geographic area the project will serve.</li><li>• Consider the economic, social and environmental effects of the project,</li><li>• Ensure that the project is consistent with official plans for developing the community,</li></ul>	
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## Resources:

Transit development occurs in two ways. First, large scale transit development follows a distinct path through transit agencies. Planning processes that go through transit agencies typically are large scale, and compass a larger region. A second way transit development occurs is through the development process. As new developments such as malls, shopping areas, the renovation of downtown areas, and housing developments are brought before local planning boards and communities, local citizens can demand that these developments consider transit and design these developments in such a way as to encourage biking, walking, public transportation, and to optimize the flow of cars. Land use and transportation planning are symbiotic: development density and location influence regional travel patterns and, in turn, the degree of access provided by the transportation system can influence land use and development trends. Local planning of developments can influence the density, location, parking, street patterns, sidewalks and other factors that influence how well a new development meets the transit needs of a community. In order to influence transit development local activists must work with larger transit agencies but just as importantly look locally and work with local planning boards/commissions and village boards to influence local developments.

The references described below are intended to provide the reader with information on the general transit planning process. In addition, there are references for the general development process which is important to understand because transit planning is an often neglected during the design of large residential and commercial developments. Finally, references are provided that describe how the public can effectively be involved in the transit planning process and examples of transit oriented development that was influenced by public involvement.

1. General Reference Materials
2. The Transit Planning Process
3. The Development Process
4. Public Involvement in the Transit Planning Process
5. Examples of Transit Oriented Development

### 1. General Reference Materials

*From the Margins to the Mainstream: A Guide to Transportation Opportunities in Your Community*, Surface Transportation Policy Partnership, 2006. <http://www.transact.org/>

#### **Federal Planning Regulations – requirements for public involvement in the transit planning process**

Metropolitan Planning Organization requirements, 23 CFR 450.316: <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=7f5985b5d2fe301f3fd5a6f537e6bfb8&rgn=div5&view=text&node=23:1.0.1.5.11&idno=23#23:1.0.1.5.11.3.1.9>

Requirements for public involvement in statewide transit planning process.

Statewide requirements, 23 CFR 450.210: <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=7f5985b5d2fe301f3fd5a6f537e6bfb8&rgn=div5&view=text&node=23:1.0.1.5.11&idno=23#23:1.0.1.5.11.2.1.6>

Federal requirements for public input for capital projects – code defining what should be considered by the transit planning organization during public hearings.

Public Transportation requirements, 49USC5323: [http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse\\_usc&docid=Cite:+49USC5323](http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+49USC5323)

## 2. The Transit Planning Process

*TCRP Synthesis 10, Bus Route Evaluation Standards: A Synthesis of Transit Practice*, Transportation Research Board, National Research Council, 1995. <http://onlinepubs.trb.org/onlinepubs/tcrp/tsyn10.pdf>

“Title VI and Title VI-Dependent Guidelines for Federal Transit Administration Recipients: Circular FTA C 4702.1A”, U. S. Department of Transportation, Federal Transit Administration, May 13, 2007. [http://www.fta.dot.gov/documents/Title\\_VI\\_Circular\\_4702.1A.pdf](http://www.fta.dot.gov/documents/Title_VI_Circular_4702.1A.pdf)

*Central Florida Mobility Design Manual*, Central Florida Regional Transportation Authority, 2000. [http://www.golynx.com/assets/userfiles/media/pdf/lynxdocs\\_mobility\\_manual.pdf](http://www.golynx.com/assets/userfiles/media/pdf/lynxdocs_mobility_manual.pdf)

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*From the Margins to the Mainstream: A Guide to Transportation Opportunities in Your Community*, Surface Transportation Policy Partnership, 2006. <http://www.transact.org/>

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<http://www.ampo.org/content/index.php?pid=56>

**Public Involvement and the Hiawatha Light Rail Transit Design-Build Project**, The Metropolitan Council (of the Twin Cities)  
<http://www.planning.dot.gov/Documents/PublicInvolvement/hiawatha.htm>

**Public Involvement Evaluation**: Brevard Metropolitan Planning Organization (Viera, Florida)  
<http://www.fhwa.dot.gov/environment/brevard.htm>

**The Coordinated Plan, 2008-2012 SANDAG** – Chapter 2, Community Outreach and Public Involvement  
<http://www.dot.ca.gov/hq/MassTrans/Docs-Pdfs/CoordinatedPlng/SANDAG.pdf>

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<http://www.dot.ca.gov/hq/MassTrans/Docs-Pdfs/CoordinatedPlng/SANDAG.pdf>

**RTP Public Involvement Program**  
*SJTPO Regional Transportation Plan – 2035 Update Public Involvement*  
<http://www.sjtpo.org/2035-rtp-public%20involvement%20program.pdf>

**Wilmington Area Planning Council – Public Advisory Committee Bylaws**

<http://www.wilmapco.org/pac/PAC%20bylaws.pdf>

**How to Engage Low Literacy and Limited English Proficiency Populations** -- Federal Highway Administration

<http://www.fhwa.dot.gov/hep/lowlim/index.htm>

**Public Involvement Techniques** – Federal Highway Administration

<http://www.planning.dot.gov/Pitool/toc-foreword.asp>

**Public Involvement Case Studies** – Federal Highway Administration

<http://www.fhwa.dot.gov/environment/pubcase.htm>

**Public Involvement Techniques for Transportation Decision-Making** – Federal Highway Administration

<http://www.fhwa.dot.gov/reports/pittd/cover.htm>

**Public Involvement Toolbox** – Kentucky Transportation Cabinet

<http://transportation.ky.gov/envanalysis/pi/pitoolbox.html>

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1995.

<http://www.rtachicago.com/CMS200Sample/uploadedFiles/TOD.pdf>

**A Citizen's Guide to Transportation Decision-Making**, U. S. Department of Transportation, Federal Highway Administration,

<http://www.fhwa.dot.gov/planning/citizen/index.htm>

## **5. Examples of Transit Oriented Development:**

From the American Public Transportation Association web site: [http://www.apta.com/research/info/briefings/briefing\\_8.cfm](http://www.apta.com/research/info/briefings/briefing_8.cfm)

### **Oakland, CA**

The city of Oakland's reports much progress in its plans and activities for developing its eight BART heavy rail stations into transit-oriented villages such as Fruitvale, a \$100 million mixed use project that was once a dingy and dangerous neighborhood short of jobs and housing.

**Websites:** <http://www.business2oakland.com/main/documents/oaklandNOW.Spring03.pdf>

<http://www.fruitvalevillage.net/>

### **Tampa, FL**

Tampa's historic replica streetcar system, opened in October 2002, has linked its downtown business center with historic Ybor City and a new entertainment and residential district.

**Website:** <http://www.tecolinestreetcar.org/main.htm>

### **Hudson County, NJ**

**Hudson-Bergen Light Rail System and Economic Development on the Waterfront.** Neal Fitzsimmons & Whitney Birch, November 2003.

As the Hudson-Bergen Light Rail System has been implemented, developers are investing in properties along the alignment, are showing more attention to the residential market, and are "selling" the amenities and connectivity that the light rail line provides.

**Source:** 9th National Light Rail Transit Conference, sponsored by APTA and TRB.

**Website:** <http://trb.org/publications/circulars/ec058/ec058.pdf>

### **Denver, CO**

TOD is an integral part of the planning for Denver RTD's T-REX light rail system's 13 transit stations. Its stated goals are to build transit ridership and discourage sprawl.

**Website:** [http://www.trexproject.com/trex\\_channels/business/oriented.asp](http://www.trexproject.com/trex_channels/business/oriented.asp)

### **Portland, OR**

Tri-Met's *Community Building Sourcebook* includes descriptions of 19 bus or rail TOD projects in Portland, including Orenco Station, the largest master-planned community on the MAX system.

**Website:** <http://www.trimet.org/inside/publications/pdf/sourcebook.pdf>

### **Dallas, TX**

Research by economists at the University of North Texas reports that the Dallas Area Rapid Transit is driving more than \$3.3 billion in development through its 45-mile light rail system.

**Source:** <http://www.dart.org/WeinsteinDARTDevelopment2005.pdf>

### **Minneapolis, MN**

All along Metro Transit's Hiawatha Line light rail, which began revenue service in June, 2004, are springing up examples of new housing and commercial development in a corridor that once had large tracts of vacant and under-utilized land. Over the last five years, more than 5,400 new housing units have been built within walking distance of the rail line, with another 7,000 units on the drawing board.

**Source:** <http://www.metrocouncil.org/planning/sor2006/sor2006.htm>

### **Multi-location Sources**

- The **Seattle Department of Transportation** offers eleven brief case studies from Atlanta to Vancouver which highlight exemplary station-area projects within the transit corridors served.

**Website:** [http://www.ci.seattle.wa.us/transportation/ppmp\\_sap\\_todstudies.htm](http://www.ci.seattle.wa.us/transportation/ppmp_sap_todstudies.htm)

- The **Pennsylvania Environmental Council** has gathered a number of TOD examples from both Pennsylvania communities and cities like Washington DC and Atlanta.  
*Website:* [http://www.pecpa.org/\\_final\\_pec/html/TOD.htm](http://www.pecpa.org/_final_pec/html/TOD.htm)
- The **Transit Village Initiative**, spearheaded by **NJ Transit** and **New Jersey DOT**, has designated 14 Transit Villages in northern New Jersey between 1999 and 2003. These municipalities have demonstrated a commitment to revitalizing and redeveloping the area around its transit facility into a compact mixed-use neighborhood with a strong residential component. The Voorhees Transportation Center at Rutgers University has published a number of [evaluative studies](#) of the Transit Village Initiative.  
*Website:* <http://www.state.nj.us/transportation/community/village/index.shtml>
- **Caltrans** has developed a database of information on 21 TODs in California that includes maps, photos, financing and zoning, design features, etc.  
*Website:* <http://transitorienteddevelopment.dot.ca.gov/>

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**From: Transit Oriented Development: Northeastern Illinois Planning Commission**  
**Transit oriented development for the Chicago Transit Authority; Oak Park; Deerfield, Palatine; Arlington Heights; Mokena; Homewood; Tinley Park**  
[http://www.nipc.org/planning/pdf/nipc\\_transit.pdf](http://www.nipc.org/planning/pdf/nipc_transit.pdf)

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**From: *Urban Design Strategy Report: GOTO 2040* Chicago Metropolitan Agency for Planning**  
**Transit oriented development for The Bethel Center, Chicago; Palatine; Blue Island; Elmhurst; Evanston; Park Forest; Schaumburg**  
<http://www.goto2040.org/uploadedFiles/RCP/Forum/UrbanDesignStrategyReport.pdf>