

Project Development

This section of the Transportation Management Plan (TMP) provides the basis for how transportation funding is spent, and provides guidance on what projects or programs the City should be focusing on to provide transportation services for the businesses and residents of Norwalk.

While the third section of this section of the TMP makes several specific recommendations about certain intersections and roadways, it is also intended to be a document that is reviewed and updated regularly as projects are completed; new projects are brought before the City; and as new opportunities or dynamics create the need to change how projects are completed.

This chapter provides an overview of how projects should be developed and advanced to the City for evaluation and consideration. Later, processes for evaluating the need for a project as well as its effectiveness are presented.

1.1 Project Development

Project Development is the process that takes a transportation improvement from initial concept through final construction. There are several goals for this process:

- ◆ To ensure context sensitivity through an open, consensus-building dialog among project proponents, reviewers, the public, and other parties.
- ◆ To foster thinking beyond the roadway pavement to achieve the optimum accommodation for all modes.
- ◆ To encourage early planning, public outreach, and evaluation so that project needs, goals and objectives, issues, and impacts can be identified before significant resources are expended.
- ◆ To achieve consistent expectations and understanding between project proponents and those entities who evaluate, prioritize, and fund projects.
- ◆ To ensure allocation of resources to projects that address local, regional, and statewide priorities and needs.



A clear and open process can flush out issues early so that opportunities for project delays and escalating costs are identified and dealt with early in the process and so that those parties involved are not discouraged. Additionally, it can prevent frustration by avoiding building projects in a way that does not meet expectations in addressing the perceived needs. This project development framework, and the principles that it embraces, will:

- ◆ Help carry out projects effectively;
- ◆ Ensure good project planning, design, and implementation; and,
- ◆ Set the stage for long-term success.

Effective partnerships on projects are important throughout project development and require strong commitment and action from all involved, whether they be elected officials, local planning and public works professionals, citizens, or consultants. Real partnerships require ongoing relationships of trust and collaboration.

The project development process is one of a set of tools needed to achieve context-sensitive design. The process is structured to encourage public outreach throughout planning, design, environmental review, and construction so that those affected by transportation projects are in general agreement regarding the project's need, the selected approach to meet this need, and the refinements to the project that result as the process evolves.

This project development process is complemented by the inclusion of the project's context as a basic design control. Flexibility for determining specific design elements that satisfy the project need, and are responsive to the context of the project, is essential and methods to accomplish these goals have been presented throughout this report.

1.1.1 Project Development Process Overview

The project development process is initiated in response to an identified need in the transportation system, and it covers a range of activities starting with this identification to a finished set of contract plans, and finally to construction.

The identified transportation need might include one or more of the following: a congestion problem, a safety concern, facility condition deterioration, a need for better multi-modal accommodation, an environmental enhancement, or an economic improvement opportunity.

The development of solutions to address these needs often involves input from transportation planners, community leaders, citizens, environmental specialists, landscape architects, natural resource agencies, local public works officials, permitting agencies, design engineers, financial managers, and agency executives. Solutions might

target a single mode of transportation, or address the range of road users including pedestrians, bicyclists, transit operators, automobile drivers, and truckers moving freight and goods. It is critical to the success of a project to engage the right team of people on the project from the beginning.

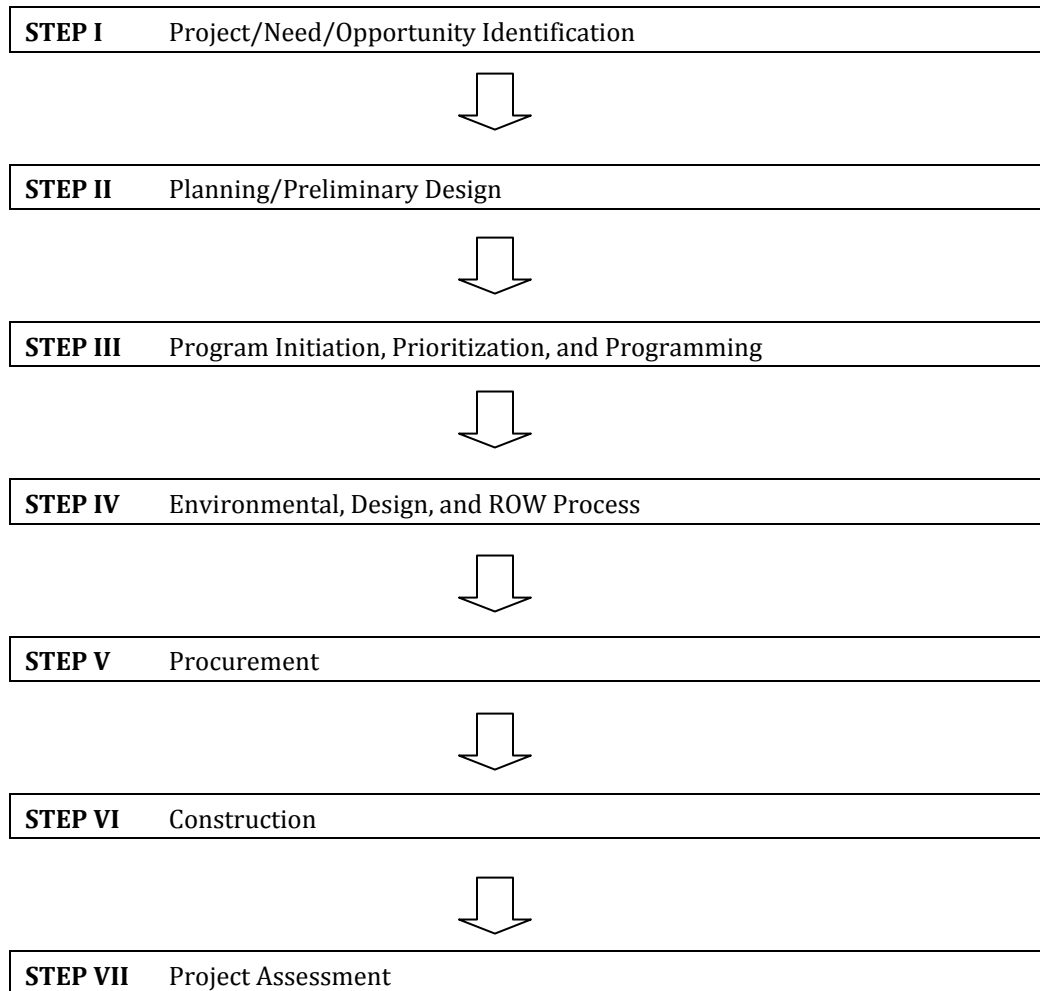
The sequence of decisions made through the project development process progressively narrows the project focus and, ultimately, leads to a project that addresses the identified needs. There should be ample opportunities for public participation throughout the process.

Transportation decision-making is complex and can be influenced by legislative mandates, environmental regulations, financial limitations, agency programmatic commitments, and partnering opportunities. Decision-makers and reviewing agencies, when consulted early and often throughout the project development process, can ensure that all participants understand the potential impact these factors can have on project implementation. A seven-step project development process is defined to move a project from problem identification to completion, as illustrated in Exhibit 2-1-1. It should be noted that this process is geared towards capital improvement projects, and therefore maintenance projects as well as traffic calming projects may follow different processes.

Within Section 2 of the TMP, Chapter 2 discusses Policies and Strategies that the city should undertake; Chapter 3 discusses how the City should approach Travel Demand Management; Chapter 4 discusses the City's approach to Traffic Calming, and Chapter 5 presents how Traffic Impact Studies should be conducted.



Exhibit 1-1 Overview of Project Development



These seven steps are described in detail in the subsequent sections of this chapter.

1.2 Step I: Problem/Need/Opportunity Identification

Projects begin with the identification of a problem, need, or opportunity. These projects reach across all modes of transportation (bus, rail, bike, pedestrian, auto, etc.) to make modal connections and improvements consistent with sound land use planning. A new project proposal can result through planning initiatives from the City of Norwalk or the State, as well as arise from community, legislative, or citizen input.

As problems, needs, or opportunities for improvements arise they can be simple and straightforward, or complex in nature without an obvious solution at the start.

As a first step in the project development process, the proponent would lead an effort to:

- ◆ Define the problem, need, or opportunity based on objective criteria;
- ◆ Establish preliminary project goals and objectives; and,
- ◆ Define the scope of planning and public outreach needed.

1.2.1 Goals

Through public outreach, discussions with City staff, and stakeholder interviews, a set of goals will be established. The goals reflect the City of Norwalk's priorities for the multi-modal transportation network and will enable the City to prioritize transportation improvements based on a data-driven needs assessment for each potential project. The goals for the City should be as follows:

1.2.1.1 Goal 1: Safety

Goal 1 aims to quantify existing safety deficiencies with the objective of improving the City of Norwalk's transportation system in a way to minimize crashes and other safety related incidents.

1.2.1.2 Goal 2: Vehicular Access and Mobility

Goal 3 aims to improve the City of Norwalk's roadway system thereby reducing congestion within the City with the objectives of facilitating commercial movement and access to activity centers and redevelopment areas, minimizing use of residential streets as cut-through and truck routes, and improving overall mobility for drivers.

1.2.1.3 Goal 3: Pedestrian and Bicycle Access and Mobility

Goal 3 aims to enhance the pedestrian and bicycle experience in the City of Norwalk with the objectives of providing a friendly, safe and convenient environment to better accommodate existing pedestrian and bicyclists as well as to encourage more people within the City to utilize these alternate modes.

1.2.1.4 Goal 4: Degree of Support

Goal 4 aims to allow for public input in decisions concerning the City of Norwalk's transportation system with the objective of providing a transparent forum that considers a wide variety of suggestions and concerns.



1.2.2 Transportation Evaluation Criteria

Transportation evaluation criteria (TEC) are typically used to assess whether proposed transportation projects should be supported with funding. Criteria for the City of Norwalk were developed after the overall goals described above were established. As part of the development of the TMP, unified weights were assigned to each goal and a point system (or level of effectiveness/importance) was developed for each criterion to reflect the City's priorities.

1.2.2.1 Goal 1: Safety

- ◆ Crash Ratio (RA/RC)- Safety is often evaluated by looking at the history of crashes to indicate where safety issues may exist. Intersections or roadways that have the greatest number of crashes per vehicular traffic volume may indicate that a pre-existing condition exists that is affecting the safety of the roadway. Locations with the highest crash rates should be prioritized for improvements.
- ◆ Number of Fatal Crashes – Although number of crashes is important to assess a location's safety level, the severity of the crash can also inform officials of an unsafe location. If a fatality occurred at a particular location, it warrants the need of a thorough evaluation and prioritization for improvements.
- ◆ SLOSSS List Inclusion – A location included in the SLOSSS list indicates it presents safety deficiencies. The SLOSSS list is maintained by ConnDOT for locations under State jurisdiction. Locations under the City of Norwalk jurisdiction may also be evaluated, however, by using the same methodology. If a location has a Crash Ratio greater than 1 and a number of crashes greater than 15, then this location should be treated as if it was included in the SLOSSS list.
- ◆ Pedestrian/Bicycle Crashes – Pedestrians and bicyclists are more vulnerable than people protected by vehicles. Thus, locations with these type of crashes will be prioritized for improvements.
- ◆ Vehicular Speeds – One of factors that contribute towards unsafe conditions is speeding. Locations where speeds are consistently above the speed limit create a potentially unsafe environment for drivers, pedestrians and bicyclists.

1.2.2.2 Goal 2: Pedestrian and Bicycle Access and Mobility

- ◆ Condition of Pedestrian Facilities – Adequate, convenient and well-maintained facilities are essential to provide a safe and comfortable pedestrian environment. Locations with inadequate or lacking pedestrian facilities will be prioritized for improvements.
- ◆ Existing Pedestrian Volumes – Pedestrian volumes is a good indication of the need for pedestrian facilities at a particular location. Locations with high pedestrian volumes will be prioritized for improvements. If appropriate, locations that

currently have low pedestrian volumes, but would likely see an increase if facilities were provided, may consider using projected future volumes.

- ◆ Condition of Bicycle Facilities – Adequate, convenient and well-maintained facilities are essential to provide a safe and comfortable bicycling environment. Locations with inadequate or lacking bicycle facilities will be prioritized for improvements.
- ◆ Existing Bicycle Volumes – Bicycle volumes is a good indication of the need for bicycle facilities at a particular location. Locations with high cyclist volumes will be prioritized for improvements. If appropriate, projected future volumes may be used as in some situations low bicycle volumes are the result of the lacking in bicycle facilities.
- ◆ Designated Pedestrian/Bicycle Corridor – The City of Norwalk has recently completed the Pedestrian & Bikeway Transportation Plan¹ which presents a detailed plan for current conditions of bike/pedestrian facilities, priority corridors, schematic designs, and a recommended improvement Plan for the City. These priority corridors were identified as locations deemed most appropriate for use by pedestrians and/or cyclists by the City and should be considered when developing Project Need statements. These facilities will be prioritized for improvements. Additionally, there are a number of other studies and projects that are on-going in and around the City that should also be considered. A complete and updated listing of these projects and plans can be found on the City of Norwalk's website, and include:
 - Norwalk's Connectivity Plan
 - Central Norwalk Transportation & Pedestrian Master Plan
 - Circulator Study
 - Oyster Shell Park Plan
 - The Connecticut Statewide Bicycle and Pedestrian Plan
 - SWRPA Bicycle & Pedestrian Studies (including the Merritt Parkway Trail Study, the Norwalk River Valley Trail, and the Connecticut Coastal Access Guide).
- ◆ Primary Access to Transit Service – Efficient use of transit services require that adequate, convenient and safe access to stations and stops be provided. Thus, pedestrian facilities in particular, but also bicycle facilities, that connect people to transit will be prioritized for improvements.
- ◆ Primary Access to Activity Center – Facilities that provide access to an activity center such as schools, libraries, churches, parks or recreation areas, neighborhood centers and hospitals, among others, will be prioritized for improvements.

¹ Norwalk Pedestrian & Bikeway Transportation Plan, Fitzgerald & Halliday, Inc. (FHI), 2011



1.2.2.3 Goal 3: Vehicular Access and Mobility

- ◆ Existing Traffic Volume – One component of improving access and mobility is to target projects that improve travel for the greatest number of people. Traffic volumes provide an indication of which facilities receive the greatest use based on existing travel patterns. Therefore, road links with higher traffic volumes indicate a greater existing travel demand and should receive priority over links with lower traffic volumes.
- ◆ Heavy Truck Traffic – Economic development is a key component of access and mobility. Those roadways or intersections that carry heavy truck traffic are assumed to be critical to economic development and will be prioritized over facilities that do not carry heavy truck traffic. Conversely, when truck traffic travels along residential streets, it creates an undesirable environment. In this case, residential roadways or intersection that carry heavy truck traffic are assumed to present a neighborhood issue and should receive priority over other residential facilities that do not suffer from heavy truck traffic.
- ◆ Operations – Congestion is one of the main deterrents in allowing for good vehicular access and mobility. Unaccountable hours of productivity are lost to congestion every day. As such, heavily congested locations will be prioritized for improvements. If appropriate, these improvements may occur at a nearby facility (such as a parallel route) in case of cut-through situations or inadequate use of a facility based on its functional classification.
- ◆ Pavement Condition – The quality of the pavement condition is a major factor in providing high-quality access and mobility. Therefore, roadways with lower pavement condition ratings will receive higher priority than links with higher ratings.
- ◆ Primary Access to Commercial Areas – The City of Norwalk’s transportation network not only provides access for residents, it also plays a critical role in economic development within the City. Therefore, facilities that are proximate to Priority Development zones and/or targeted commercial areas may serve as important access routes for economic development activities and should receive priority over roadway links that are further from these areas. Consultation with the City’s Redevelopment and/or Planning and Zoning Staff should be made to determine if the area falls within or near one of the Cities economic development areas.
- ◆ Transit Corridor – Transit has the ability of transporting a much larger number of users than any other mode of transportation. As such, emphasis on facilities that serve public transportation can potentially benefit mobility to the greatest extent. Transit corridors, consequently, will be prioritized for improvements.

1.2.2.4 Goal 4: Degree of Support

- ◆ Degree of Public Support – As emphasized throughout this Chapter, public involvement during all steps of this process is crucial. A project that is well received by most interested parties has a higher chance of success and is likely to be more beneficial to the City. Thus, projects with a higher level of support will be prioritized for improvements.
- ◆ Potential Funding Sources- A variety of funding alternatives exists for transportation improvements aside from City moneys. Projects with alternate funding sources, either partial or full, have some advantage over those that would require full City funding.

1.2.3 Project Need Form

This step in the project development process leads to completion of a Project Need Form (PNF). The PNF provides sufficient material to allow City staff to understand the transportation need(s), and results in one of the following three outcomes:

- ◆ Verification of the problem, need, or opportunity to enable it to move forward for consideration of design efforts;
- ◆ Determination of the level of further project planning warranted; or,
- ◆ Dismissal of a project from further consideration.

A copy of the Project Need Form is provided in Appendix of this report. Electronic versions of this form and instructions for completion can be found on the City of Norwalk's website (www.norwalkct.org).

At the beginning of this process, the proponent should meet with appropriate City staff. This proactive, informal review and consultation can help ensure the project will develop with fewer problems in future phases.

The Project Need Form is important to define the condition, deficiency, or situation that indicates the need for action — the project need. The statement should be supported by facts, statistics, or even by plans or photographs to the extent that information is available.

It is critical that the proponent understand that project “need” is not a project “description” (such as “replace a bridge” or “reconstruct a road”). That approach “decides” the project outcome too early in the process. A goal of the PNF is to state, in general terms, the deficiencies or needs related to the transportation facility (such as “the bridge is structurally deficient” or “the pavement is in poor condition”). The Project Need Form should document the problems and explain why corrective action is needed. Example of a need could be:



- ◆ The intersection is hazardous. The high-crash rate at the intersection illustrates this problem.
- ◆ There is significant congestion at the intersection. During peak periods, traffic from the side street has difficulty exiting onto the main street and long queues develop.
- ◆ There is no formal accommodation for bicycles or pedestrians between the elementary school and the large residential neighborhood to the north where a significant portion of the student body live.

The purpose of a project is driven by these needs. As examples, the purpose might be to improve safety, to enhance mobility, to enhance commercial development, to improve structural capacity, to enhance pedestrian and bicycle movement, etc., or some combination of these. The Transportation Evaluation Criteria discussed above are part of the Project Need Form, and will allow the City to objectively develop a preliminary project priority list.

1.2.3.1 Identify Project Constituents and Public Outreach Plan

When defining the project need, the proponent should also think about public support of the project. To achieve this, the Project Need Form includes a degree public support section. To demonstrate the degree of support, the Proponent should include with the Project Need Form:

- ◆ Identification likely interested parties and stakeholders;
- ◆ Documentation of public outreach and feedback to date (if any); and
- ◆ Outline of a public participation process for moving forward.

It is important that the proponent be fair and objective in selecting who might be interested in a particular project. Simply identifying “supporters” and “like minded” individuals, while excluding potential “detractors” and “alternative minded” individuals, does not serve to advance the project cooperatively. If unsure, the proponent should work with the City staff to identify and seek assistance in reaching out to all possibly affected parties.

1.2.3.2 Project Need Form Review

Once the Project Need Form is prepared, it is submitted to the City staff for initial review.

The intent of the Project Need Form review process is to allow the proponent to propose a project at its most basic level to the City. Through this process, City staff can provide guidance for project scoping and planning considerations, in addition to suggestions for likely steps needed for project approvals. This guidance can be very valuable, especially if given before the proponent invests significant time and resources in the project design.

Through this review, the proponent may be asked to answer questions that arise from the PNF review, to provide further documentation on the alternatives considered, and/or to complete (additional) public outreach.

After the Project Need Form has been reviewed and evaluated by the City, the project would be inserted on the preliminary priority list based on the points scored on the PNF per the Transportation Evaluation Criteria discussed previously. If the project places high enough on the list, it would then become eligible to move into Planning/Preliminary Design (Step II). Some projects that are straightforward, or are supported by prior planning studies, are expected to move directly to Project Initiation (Step III).

Step I Outcomes

The following are potential outcomes from Step I of the development process:

- ◆ Agreement by the project proponent and the City on the problem and project definition (extent and magnitude) to enable it to move forward into planning/design (no further documentation required);
- ◆ Determination that there is a problem, need, or opportunity to address but further project planning is warranted to better define the project need (resubmission of PNF);
- ◆ Advice on alternatives to consider in the planning/preliminary design process;
- ◆ Placement of the project in the preliminary priority list; or
- ◆ A recommendation that the project need is not great enough to advance to implementation/design efforts and (in its current form) should be dismissed from further consideration.

1.3 Step II: Planning/Preliminary Design

In this phase, the proponent advances the project design at a minimum to the extent that issues, impacts, and potential approvals required can be identified.

The Project Need Form and its review will help to outline the scope of issues to be considered in this phase. The level of planning and design need will vary widely based on the complexity of the project (from streamlined to more involved and complex). A more involved alternatives analysis is integrated as part of this process for all new facilities. It is also required for improvement or expansion projects where the feasibility of achieving the desired enhancements with acceptable impacts and reasonable investment is unclear at the outset. During the review of the Project Need Form, the necessary level of effort and responsibilities for planning will be determined. Typical planning requirements for different project types are illustrated in Exhibit 1-2.



For a straightforward project (examples might include a sidewalk project, roadway resurfacing, or a traffic signal equipment upgrade), the proponent can seek approval to proceed directly to Project Initiation from the Project Need Form. In this case, the proponent defines the actions proposed to address the project need(s), describes the alternatives considered (if necessary), and documents any anticipated impacts as part of the Project Need Form. (This may also be the best approach where detailed planning for the project has already occurred and is documented).

For more complex projects (as examples, if there are several alternatives to consider, if there are contextual constraints which add complexity to the solution, or if there is keen public interest), the proponent should advance the proposed project further to provide the City with sufficient information for the next step in the process, Project Initiation.

Exhibit 1-2 Likely Planning Approaches for Different Types of Projects

	Likely Planning Approach		
	Project Need Form	Project Planning Focused on a Clear and Feasible Solution and Minor Variants	Full Alternatives Analysis
<i>System Preservation</i>			
<i>Roadways, Sidewalks, and Multiuse Paths</i>			
Resurfacing	▲		
Reconstruction/Reconfiguration within Existing Pavement	▲	●	
<i>Bridges</i>			
Rehabilitation	▲		
Replacement	▲	●	
<i>System Improvement or Expansion</i>			
New Roadway or Multiuse Path	▲	▲	●
Widened Roadway, Sidewalk or Addition or Multiuse Path Widening	▲	●	●
Intersection, Roundabout, or Traffic Signal Modification	▲	●	
New Interchange or Interchange Reconfiguration	▲		▲
Median, Roadside Safety, or Signage Improvements	▲	●	
Traffic Calming, Streetscape, Lighting, or Transit Enhancements	▲	▲	●
New or Widened Bridge	▲	▲	●
New or Expanded TDM/Park-and-Ride Lot	▲	●	
New or Expanded Traffic Management System	▲	●	

▲ Required
● Suggested for projects categories indicated and required for more complex projects with each category

1.3.1 Project Planning Report/Preliminary Design

Projects that require further planning will result in the preparation of a Project Planning Report. Many traditional planning studies such as corridor studies, functional design reports, and location studies can serve as a project planning report if done in a fashion that is consistent with the principles of this Transportation Design Guide and completed with public participation.

A generalized outline for the basic project planning process is provided in Exhibit 1-3. It is expected that this outline will be tailored for each project. The process described is not intended to be overly prescriptive or burdensome. Rather, the project proponent is encouraged to tailor activities appropriate to the extent, complexity, and type of project to ensure that all project benefits, impacts, and costs are objectively estimated. As part of this process, the proponent should also conduct a public participation program, provide information regarding the project's consistency with state and regional policies,



and decide, based on all the information gathered in the planning process as well as public input, whether to continue the project development process and submit a Project Initiation Form (PIF) under Step III. Regular check-in meetings with the City are helpful though this process.

The detailed steps in the planning process, as outlined in Exhibit 1-3, are further described in the following pages.

Exhibit 1-3 Overview of Project Planning Tasks

Part A: Define Existing Context, Confirm Project Need(s)

Establish Goals and Objectives

- ◆ Inventory and Data Collection/Site Walk
- ◆ Definition of the Community Context
- ◆ Definition of Transportation and Land Use Functions
- ◆ Project Goals and Objectives

Part B: Initial Public Outreach

- ◆ Early Local Issues Meeting
- ◆ Environmental Agencies Coordination
- ◆ Individual Outreach Meetings

Part C: Project Definition

- ◆ Development of Alternatives (if necessary)
- ◆ Establishment of Basic Design Controls
- ◆ Define Future Conditions (if necessary)
- ◆ Screening of Alternatives
 - ❖ Project benefits
 - ❖ Project Impacts
 - ❖ Consistency with appropriate policies and plans
 - ❖ Cost

Part D: Project Review and Refinement

- ◆ Project Presentation Meeting
- ◆ Resource Agencies Coordination
- ◆ Alternative Refinement
- ◆ Concept Engineering Plans
- ◆ Evaluation Matrices

Part E: Final Recommendations

- ◆ Project Definition
 - ❖ Description of the proposed project and project alternatives considered
 - ◆ Project Benefits and Impacts
 - ◆ Project Consistency with City Policies and Plans
 - ◆ Public Participation Process
 - ❖ Documentation of planning public participation process
 - ◆ Final Recommendations
-

1.3.1.1 Part A: Define Existing Context, Confirm Project Need(s), Establish Goals and Objectives

The first step is to confirm project need through an inventory of existing conditions. Once the project need is confirmed, the proponent should clearly articulate the goals and objectives for the project. The level of alternatives analysis and detail necessary is directly related to the complex or straight forward nature of the project.

Inventory and Data Collection/Site Walk

A site visit should be the first step in project planning/preliminary design as it provides an opportunity to view the project area in more detail. If appropriate, local project constituents and technical specialists familiar with the features or concerns related to the project should be invited to provide additional perspectives. Information should be compiled or collected to provide the range of data appropriate for the project.

Key items to investigate during a site visit are described below:

- ◆ Context resources (environmental, cultural, historic, and man-made constraints) are mapped for the project area.
- ◆ Travel demands (for all modes) and crash data are necessary to identify any capacity and/or safety problems, or potential safety problems. Some or all of these data may already have been collected to complete the Project Needs Form.
- ◆ Pavement and structure sufficiency and inventory information is helpful in determining the extent of treatment necessary for these features. A pavement management system evaluation and rating is recommended, along with photo documentation of the site. Once again, some or all of these data may already have been collected to complete the Project Needs Form.
- ◆ An access audit to survey accessibility elements such as: curb ramp locations, slopes, and obstacles; location of crosswalks; audible signals; transportation signage; sidewalk width, slope, and obstacles; connectivity; and driveway/sidewalk intersections.
- ◆ Hydraulic analysis to help to determine hydraulic adequacy of the structure or the effect on the floodplain where bridges or structures are involved.
- ◆ Right-of-way information helps to identify property owners and property lines.
- ◆ Utility information is useful in determining any special needs required for utility relocation(s).

A detailed survey of the project area helps to identify the location of various features and resources potentially affected by the proposed improvement (although it is not necessary at this point in the project development process).



Definition of Community Context

It is important for the project proponent to understand the planning context, land uses, and character of the project location and surrounding community. Local knowledge or a site visit is important in understanding surrounding land uses and community character. A USGS topographic base map, GIS mapping information, and orthographic photos can be used to identify and document various aspects of the area. These guides can show surrounding land uses and land cover (open fields, forest and forest type if known, agricultural land, town, village, city, or commercial corridors); visually distinct areas such as buildings, land forms, valleys, hilltops, notches, water bodies, rivers, streams, and watercourses; prominent views and vistas along the road; public facilities or places; recreational facilities; trees; and the relationship to intersecting roads and activity centers. Some of this information may also be available from the previously completed PNF.

Definition of Transportation and Land Use Functions

It is important for the project proponent to understand the multi-modal aspects of the project location. During the site visit, the project proponent must be cognizant of bicycle and pedestrian movements, or the potential for these movements, and public transportation availability. The proponent should also be aware of the proximity of connection points for other modes of freight and passenger transportation.

Any transportation solution must conform with local and regional plans. Pertinent sections of the local and regional land use and transportation plans should be reviewed as part of this process. This includes transportation and land use, local and regional policies as they relate to the project location, the roadway involved, and the neighborhood. Designated growth areas, historic districts, designated scenic roads and areas, unique natural areas, and areas designated for future access management by official city maps should be acknowledged in the vicinity of the project location. It is important that future planned land uses be understood and the city's goals for growth, protection of natural and historic resources, and future transportation facilities be acknowledged.

Project Goals and Objectives

From information obtained during data collection and the input received from interested parties, the project proponent will define goals and objectives for the project consistent with the plans and policies of the City. The needs for the project must conclusively show that the project is justified. The language should be clear and understandable to the layperson.

1.3.1.2 Part B: Initial Public Outreach

Public outreach and input in a project should begin early in project planning and before there is a recommended course of action. This process starts with an early informational meeting and continues at strategic milestones during the planning process. Effort should be made to reach a broad spectrum of interested parties at this early project stage.

Helpful information on public outreach is provided in Section 1.9 of this chapter.

Planning for larger or more complex projects might also be well served by the establishment of an advisory Task Force or Steering Committee at the outset. The level of public outreach at this stage should be commensurable to the complexity of the project.

General public outreach guidelines and tools are described in Section 2-1.9 of this chapter.

Local Issues Meeting

A “Local Issues Meeting” should be held early in the planning process, aimed primarily at gathering local comments. This meeting is not a forum to present proposals or develop solutions. (For larger projects, more than one Local Issues Meeting may be required.) This meeting should also serve to foster a working relationship with local community members. This is accomplished by listening to issues and ideas and making every attempt to incorporate sound and cost effective suggestions into the analysis of alternatives.

Comments from the Local Issues Meeting need to be documented and made available to all who were present, or to those who request them. The minutes of the Local Issues Meeting should be included in the project report and kept at an accessible central location at the City offices. Following the Local Issues Meeting, the project proponent must evaluate the comments received and ensure that appropriate details are integrated into the project. Once the issues have been identified, one of the project proponent’s biggest challenges is to balance these issues with all of the other project issues and work to incorporate community concerns in project decision-making and design, as appropriate. It is important to give due consideration to all comments expressed through the public process.

Environmental Agencies Coordination

Regulatory agencies that have a role in protecting the City’s resources and a responsibility to issue permits for transportation projects that affect these resources, in coordination with regional, and/or state resource staff (if applicable), may provide available research information for the Local Issues Meeting. Depending on the complexity of the project and resources present in the project area, these agencies should be invited to the meeting and given an opportunity to present issues or concerns, either in writing before the meeting or in person at the meeting. The agency’s preliminary comments regarding whether resources are present in the problem area and their extent and potential significance is valuable insight at this stage of project development. The resource agencies should be given as much advance notice of the meeting as possible.

Ideally, environmental issues are identified through this process and public response to the issues is sought, as appropriate, at the meeting. However, the formal inter-agency discussion and resolution of regulatory issues occurs during later steps in the Project Development Process.



Individual Outreach Meetings

There may be key individuals, local officials, agencies, or advocacy groups that may not be at the Local Issues Meeting but who may be worth seeking out for valuable input. These individuals or groups are often identified at the local meeting by a local official or resident saying “you should really speak to so and so...” The project team should allow time to conduct informal outreach meetings to round out its understanding of project issues, opportunities, and constraints. Any significant issues that develop out of the individual meetings should be recounted to the community as the process evolves.

1.3.1.3 Part C: Project Definition

After initial public outreach, the next steps are to refine project goals and objectives, review alternatives, and define the project. These steps should reflect comments received during the public and agency outreach described above.

Development of Alternatives

Several reasonable build alternatives might need to be investigated and considered. Alternatives should be developed using the design guidance provided in this Transportation Management Guide. In some cases, only cursory review of alternatives may be required.

If one or more build scenarios are developed, they should include the following information:

- ◆ Alternative typical roadway sections addressing the needs of all users.
- ◆ Multi-modal accommodation and operational assumptions regarding allocation of right-of-way, traffic controls, and enhancements.
- ◆ Accessibility issues, especially slope or cross-slope concerns that may be difficult to resolve.
- ◆ Compatibility with adjacent land uses and its associated activity.
- ◆ Conceptual roadway or project alignment (existing and proposed), approximate limits of impact, and approximate boundaries of resources. A scale of 100 feet per inch is useful for these concepts. For smaller problem areas such as urban locations, intersections, and bridges, a smaller scale (40 or 50 feet to the inch) should be used. (Profile sheets would only be developed for the areas with proposed grade changes.)
- ◆ Critical cross-sections, defined as points where structures and resources are avoided or impacted by the typical section. Structures are defined as buildings, bridges, walls, and culverts (48 inches or larger).
- ◆ Cost estimates

The project proponent must take care to examine multi-modal needs and possibilities for improvements during the alternative development process. These possibilities are to be addressed and the feasibility and potential of each option discussed. Transportation Systems Management, Travel Demand Management, Traffic Calming, and Intelligent Transportation Systems may also be reasonable alternatives to evaluate.

Establishment of Basic Design Controls

Basic design controls serve as the foundation for establishing the physical form, safety and functionality of the facility. Some design controls are inherent characteristics of the facility (for example, its context and the existing transportation demands placed upon it). Other basic design controls are selected or determined by the designer, working with the proponent, to address a project's purpose and need (for example, the level of service provided to pedestrians, bicyclists, and drivers). Selecting appropriate values or characteristics for these basic design controls is essential to achieve a safe, effective, context sensitive design. Section 1, Chapter 2 of the TMP illustrates the basic design controls and their influence on the physical characteristics of a roadway:

- ◆ Roadway Context, including Area Type, Roadway Type, and Access Control (Section 1, Chapter 2.2)
- ◆ Roadway Users (Section 1, Chapter 2.3)
- ◆ Transportation Demand (Section 1, Chapter 2.4)
- ◆ Measures of Effectiveness (Section 1, Chapter 2.5)
- ◆ Speed (Section 1, Chapter 2.6)
- ◆ Sight Distance (Section 1, Chapter 2.7)

These basic design controls, once established, are carried forward through project design.

Define Future Conditions

Projects that are developed should serve a useful function for some time into the future. Projects that involve significant capital investment are generally assumed to have a 20-year life while projects of lesser investment are generally assumed to have a five-year or ten-year life. This assumption requires the planner to anticipate what is going to happen to transportation demands in the future with and without the project to assess the project's effectiveness at meeting needs. Section 1, Chapter 3 (Subsection 3.4), presents important considerations in forecasting transportation demand for projects.

Screening of Alternatives

If several alternatives are being considered, they should be fully described with concise and illustrative graphics or plans. To the extent that project design elements (i.e., sidewalks, bike lanes, travel lanes, bridge types, etc.) are known, they should be described.

Visual depictions of project alternatives are useful to convey the full extent of the project.



Alternatives should be developed to comparable levels and the project's effects should be described to the maximum extent known at this point in the process. The analysis that is compiled and summarized should characterize:

- ◆ Benefits
- ◆ Impacts
- ◆ Consistency with city plans and policies
- ◆ Costs

The cost of a project is a significant portion of the transportation-related decision making process and should be justified by improvements in safety, public need and/or asset management, balanced with environmental and other contextual constraints. Therefore, the cost estimate procedure must be unbiased and comprehensive (to include all engineering and permitting, right-of-way, utility relocation costs, mitigation costs, and construction costs). It must place all reasonable alternatives on the same level for fairness in the selection process. An alternative with too high of an estimate might be eliminated, while an alternative with a low estimate could be selected due to misrepresentation.

At this stage, it is also appropriate to start thinking about project funding. This includes an exploration of funding sources, their requirements and restrictions, obligations for local share of project costs, other partnering opportunities, etc.

1.3.1.4 Part D: Project Review and Refinement

Once alternatives have been considered and the project better defined, the proponent needs to ensure continued public and agency involvement in the project review and refinement process, as outlined below.

Project Presentation Meeting

The project proponent should hold a public meeting and invite the constituents as previously defined to overview the alternatives considered, the proposed project, and to solicit input.

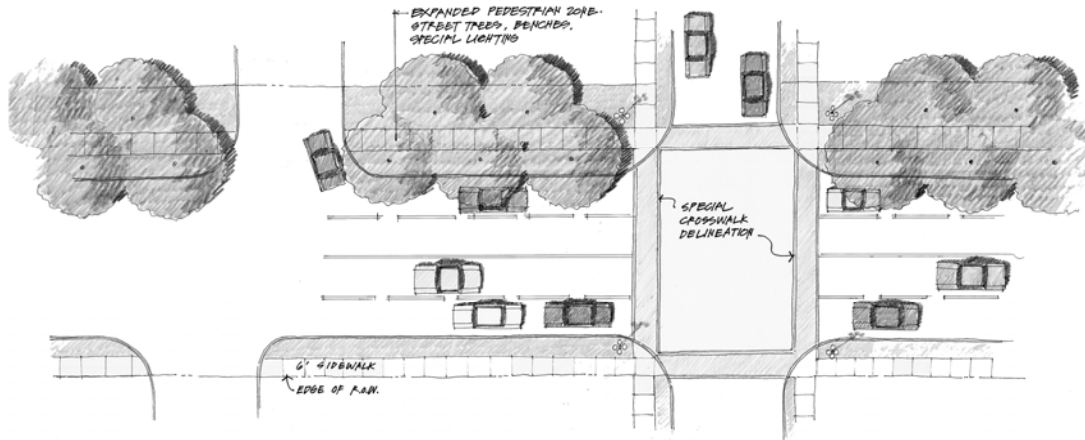
If the project as defined is unacceptable, the project proponent should attempt to resolve any conflicts. Failing this, the project proponent should develop new alternatives, and schedule a new Project Presentation Meeting. This process should continue until a preferred alternative is determined.

During these meetings, it is helpful to provide handout materials that present the project and its alternatives so that the participants have a reference to review. A visual depiction of each build alternative is beneficial. The visual representation should be prepared so that a layperson can understand the alternative being presented. An

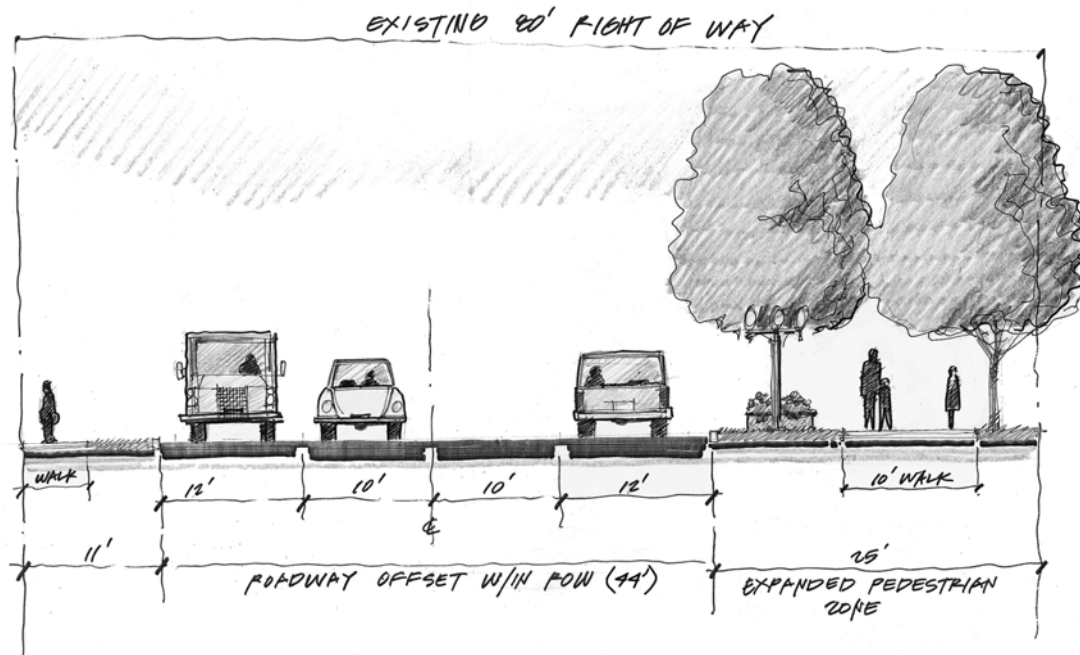
example of how a project might be presented is provided in Exhibit 1-5. The project proponent should facilitate a discussion of how each alternative addresses the needs of the project as well as its drawbacks.

Exhibit 1-5 Example of Visual Representation of a Project Alternative

Plan View



Cross-sectional View



Source: King Street Corridor Study, Northampton, MA 2003

Minutes of the Project Presentation Meeting need to be documented and made available. These minutes are important to document public comments that may be valuable input



to the design process and to ensure that there are no misunderstandings concerning overall public consensus on the project as defined. The minutes should be sent to all attendees, city officials, and other agencies that have project jurisdiction or special expertise, and made available to the public at an accessible municipal location. The recipients of the minutes should have a set time period from the postmarked date to contest them and add clarifications.

Resource Agencies Coordination

For projects with anticipated impacts to sensitive natural and manmade resources, this is an appropriate time in the process to assess future requirements for project development with affected regulatory agencies.

The proponent should solicit comments from resource agencies regarding their views on the various alternatives under consideration, the required environmental permits, and the process moving forward.

Alternative Refinement

Input received from the public or the affected environmental resource agencies may require refinement to the preferred alternative(s). These refinements may involve minor changes to previously developed concepts or the development of a conceptual engineering plan for the preferred action in greater detail. (It is imperative that the agencies be informed of any project changes that take place during the “Project Planning” and “Project Design” phases of the development process.)

The information developed during this task should be as accurate as possible at this stage of project development as it may be the basis for early environmental documentation or as part of an application for project funding.

1.3.1.5 Part E: Final Recommendations

In this last component, the proponent documents the process, public outreach, and decisions made, as described below.

Draft Report

Following public, local, and environmental agency review of the alternatives and proposed project, the planning report can be completed and made ready for review. The planning report documents the need for the project, existing and future conditions, alternatives considered, public outreach outcome, and the solution recommended. It is important that, at a minimum, the report summarize the:

- ◆ Project Definition:
 - ❖ Description of the proposed project and project alternatives considered
- ◆ Project Benefits and Impacts
- ◆ Project Consistency with City Policies and Plans

- ◆ Public Outreach Process:
 - ❖ Documentation of public outreach during planning process
- ◆ Final Recommendations

The project proponent may, at their own discretion, distribute the draft report to the appropriate local officials, staff, or key project constituents for review.

The project proponent may also elect to have final public review of the planning recommendations by holding an additional public meeting or by notifying past project participants of the availability of the draft planning report at an accessible municipal location for review.

Final Planning Report

Upon receipt of comments and public input (if sought on the draft report), the project proponent will finalize the report.

1.3.2 Detailed Alternatives Analysis

A more complex set of needs may warrant a more detailed planning and conceptual engineering review of alternatives, their impacts and benefits, and implementation issues. This is particularly true when it is unclear what actions are “feasible” to address the identified needs. In this case, the proponent should develop base information, document resources, and complete transportation planning analysis and conceptual engineering of the alternatives in more depth to verify “project feasibility” and the preferred action.

This level of alternatives analysis is appropriate for all new facilities and for improvement or expansion projects where the feasibility of achieving the desired enhancements with acceptable impacts and reasonable investment is unclear at the outset. The key objectives of this effort are to assess alternatives to determine their engineering feasibility, environmental impacts and permitability, economic viability, and public acceptance.

1.3.3 Review of Planning Efforts

Upon completion of the project planning/preliminary design effort, the project proponent has essentially two options based on its outcome: delay or drop the project from consideration, or submit it with a Project Initiation Form and Priority Worksheet to a designated DPW Staff Plan Review Team (or similar body developed for this process) for review, as discussed in the next section. The intent of this process is to allow the proponent to present a project for review and preliminary funding consideration.



Through this review, the DPW Staff Plan Review Team can provide insight on project design considerations in addition to likely steps needed for project approvals. With this approach, valuable guidance can be provided prior to the proponent investing significant time and resources in project design.

Ideally, at this stage, the project will be well documented, locally reviewed and endorsed, and proceed to Step III: Project Initiation, as outlined in the following section.

Step II Outcomes

The decisions that are expected at this point in the project development process are:

- ◆ Consensus on project definition (or projects, where multiple projects result from the planning process) and decision to submit a Project Initiation Form to enable it to move forward into environmental documentation and/or design; or
- ◆ A recommendation that the project be dismissed from further consideration or delayed. (This would reflect a case where the interest in the project may have waned through the Project Planning Report review if, in the sponsor's analysis, the issues identified counterbalance the expected benefits, thus reducing the project's likelihood for a favorable outcome in the subsequent review and programming phase.)

1.4 Step III: Project Initiation, Prioritization, and Programming

If a project is to be constructed with City funds, the project needs to be approved, prioritized, and programmed by City Staff and the DPW Staff Plan Review Team. The third step in the process formally begins the review, evaluation, prioritization, and programming of the project. This step is illustrated in Exhibit 1-6.

The programming of transportation improvements can be a complex and sometimes lengthy process involving local, state, and federal agency approvals, depending on the scope of the project. Public support for the project is critical and can significantly alter the implementation process and schedule.

1.4.1 Project Initiation Form

The Project Need Form or Project Planning Report detail the final recommendations for the project resulting from early project planning. The next step in the project development process involves summarizing the findings and direction defined in a Project Initiation Form (PIF) used by City Staff and the DPW Staff Plan Review Team for project review, evaluation, and potentially prioritization and programming. The PIF will

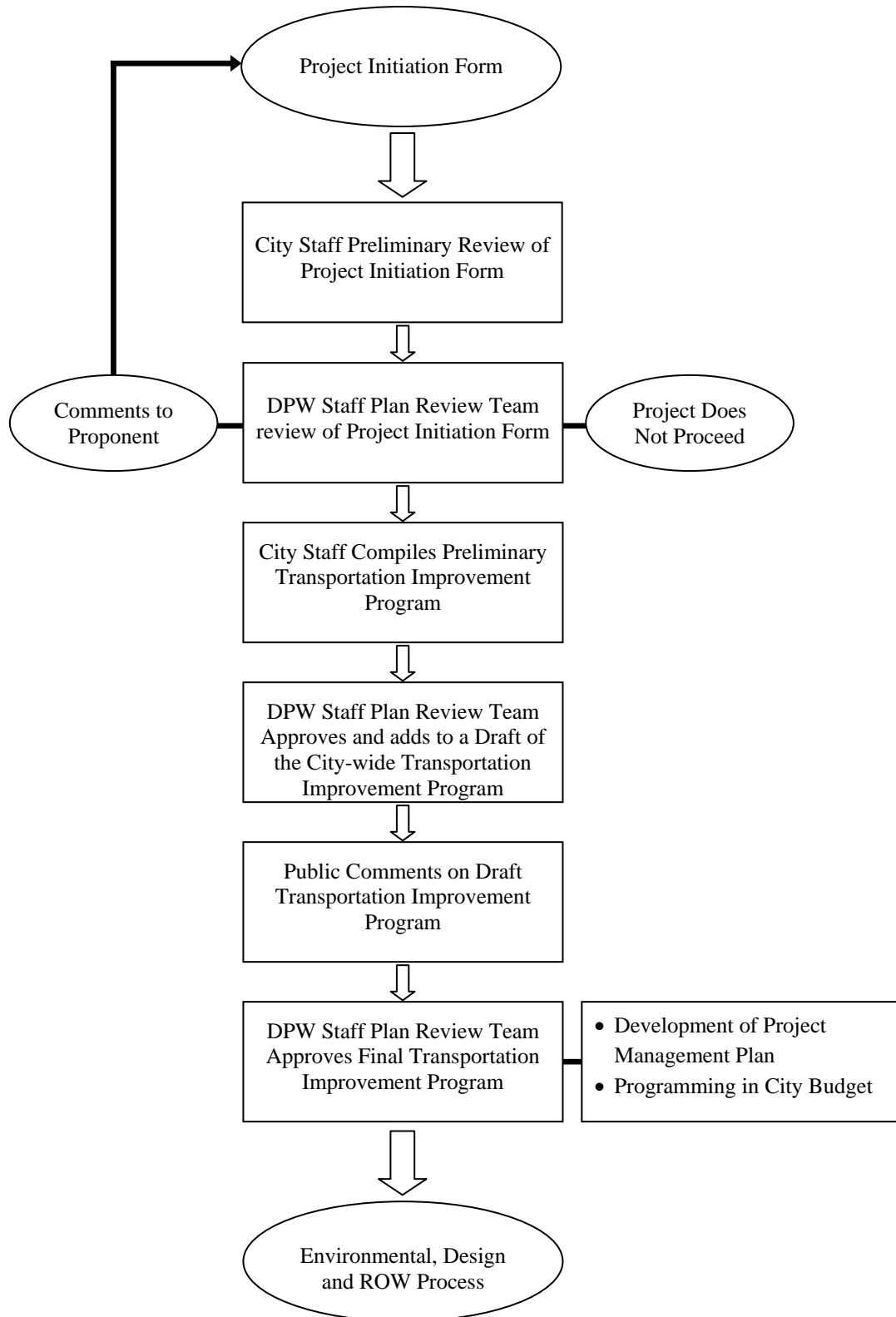
be completed by the Proponent and reviewed by City Staff and includes the following information:

- ◆ Project Type and Description, including locus map
- ◆ Evaluation of the effectiveness of the Project at addressing identified needs/issues from the Project Need Form
- ◆ Assessment of the readiness level of the Project, relating to project plan development and outreach
- ◆ Evaluation of project details, including conceptual cost estimate, air quality benefits and impacts to right-of-way, environmental resources, cultural/historical resources, and environmental justice
- ◆ Project Need Form or Project Planning Report as an attachment

The Project Initiation Form for use in this process is provided in the Appendix to this chapter.



Exhibit 1-6 Step III: Project Initiation, Prioritization, and Programming



1.4.2 Project Review and Evaluation

At this stage, the proposed project is well enough defined to be subjected to a formal review. This review facilitates comparison of the project's viability to other projects competing for limited funds. The PIF and project planning documents are reviewed by City Staff for completeness and to identify issues for consideration by the DPW Staff Review Team during their formal consideration of the project.

The DPW Staff Review Team, is comprised of staff DPW, Planning, City counselors, and Engineering and is chaired by the DPW Commissioner. The DPW Staff Review Team must approve all transportation projects to be implemented using City funding. The DPW Staff Review Team meets monthly, but only every three months or so would be asked to review Project Initiation Forms and recommendations prepared by City Staff to verify needs, the effectiveness of the proposed project approach, and to provide direction on next steps. A preliminary evaluation of the project for funding and programming within the priorities of the City is made during this step (the programming process is discussed in subsequent sections of this Step). It is anticipated that advice and guidance for the next steps in the project development process will also be offered at this stage.

At this point, the DPW Staff Review Team could reach one of three conclusions:

- ◆ Determine that additional planning is necessary before a decision can be reached regarding the future of the project;
- ◆ Determine that a project should move forward into prioritization and potential design and programming;
- ◆ Recommend that the project be dismissed from further consideration due to lack of current available funds or the project's lack of effectiveness in addressing identified needs.

A DPW Staff Review Team positive recommendation denotes that a project should be considered eligible for funding. However, it does not guarantee that the project actually has dedicated funding.

1.4.3 Project Prioritization

After approval by the DPW Staff Review Team, projects are forwarded to City Staff for review and assessment for future transportation resource allocations. City Staff also review projects that are not approved by the DPW Staff Review Team and provide additional comments to the Proponent so that future submissions can be streamlined.

City Staff maintain a list of projects that received approval by the DPW Staff Review Team during a fiscal year. Prior to the City's annual budget development process, projects are prioritized based on the total scores from the Project Initiation Form to



develop a Preliminary Transportation Improvement Program. Any projects that were on the previous fiscal year's Transportation Improvement Program that were not completed are re-prioritized on the current Draft of Transportation Improvement Program.

1.4.4 Project Programming

The Preliminary Transportation Improvement Program developed by City Staff is reviewed by the DPW Staff Review Team for project programming during its annual approval process. The DPW Staff Review Team will have reviewed the projects previously and is therefore familiar with the merits and issues associated with each. The DPW Staff Review Team votes on approving each project for inclusion in the Draft Transportation Improvement Program, which is presented to the public for review.

After public review, the DPW Staff Review Team votes on approving each project for inclusion in the Final Transportation Improvement Program which will have been amended based on public input. At this time the DPW Staff Review Team establishes a Project Management Plan to define roles and responsibilities for the subsequent final design, environmental, right-of-way and construction steps in the process. This may include the City staff advancing the design through the next steps, hiring of outside consultants to advance design efforts, and/or perhaps asking proponents to fund advancement of design elements.

Funding for a project can only be allocated once the Final Transportation Improvement Program is approved and the project is ready to move forward.

1.5 Step IV: Environmental, Design and ROW Process

Step IV begins the process of environmental review, project design, and right-of-way (ROW) acquisition (if necessary) so that the project can be constructed. This process involves four distinct, but tightly integrated, elements:

- ◆ Public Outreach
- ◆ Environmental Documentation and Permitting
- ◆ Project Design
- ◆ Right-of-way confirmation/acquisition

Public outreach activities and requirements are integrated within each of the technical tasks. This continual involvement will help to ensure the project's ultimate success.

Although the technical requirements for environmental, design, and ROW efforts are presented sequentially in this Plan, these activities are conducted concurrently and in a

coordinated process to ensure that the ultimate project is acceptable, constructible, permissible, and addresses the customer's needs. All these activities are keyed to the design process schedule.

1.5.1 Public Outreach Plan and Requirements for the Environmental, Design, and Right-of-Way Process

Continued public outreach in the design and environmental process is essential to maintain public support for the project and to seek meaningful input on the design elements. This public outreach is often in the form of required public hearings, but can also include less formal dialogues with those interested in and affected by a proposed project.

At this point in time, a public hearing, or opportunity for a public hearing, is required for all highway projects as part of a process that also encourages a variety of citizen involvement techniques such as informal public meetings, briefings, workshops, or charrettes. Public hearings are recognized formal meetings held at particular times during the project development and design phases. A Public Hearing is required for any project that:

- ◆ Requires additional right-of-way;
- ◆ Substantially changes the layout or functions of connecting roadways or of the facility being improved;
- ◆ Has a substantial adverse impact on abutting property; or
- ◆ Has a significant environmental, social or economic, or other effect.

An additional public hearing will be provided when there has been:

- ◆ A significant change in the proposed project (or design details);
- ◆ Identification of significant environmental, social, or economic effects not considered at earlier Public Hearings;
- ◆ Substantial unanticipated development in the project area; and,
- ◆ An unusually long time lapse (for example, more than two years) since the last public hearing.

There are many opportunities for public meetings or hearings on the project throughout the project development process as described in Section 2-1.9 of this chapter. All meetings should be held in accessible locations with materials relevant to the meeting made available in alternative formats upon request.



1.5.2 Environmental Documentation and Permitting

Early involvement by the project proponent to understand and develop a plan of action to address the anticipated environmental consequences of the project is essential. This effort can also shape a more environmentally responsive and sustainable design. This section describes some standard procedures which help to identify initial project design parameters, initiate early coordination with the community to identify issues specific to the project, and define essential information to incorporate into the Preliminary Design to initiate early environmental reviews.

1.5.2.1 Early Coordination

Early coordination with appropriate agencies by the project proponent should be conducted. Some examples include:

- ◆ Local environmental boards and commissions to review the project area and identify any specific issues or concerns.
- ◆ Local historical commission(s) by requesting their review and comment on the proposed scope of work and/or a locus plan showing project limits
- ◆ CT DOT

Before initiating design, the designer should take time to review all prior planning documents and public input received on the project.

All correspondence from the early coordination tasks should be documented, copied to key project participants, and made part of the project's permanent record.

1.5.2.2 Determine Other Applicable Federal, State and Local Environmental Laws and Requirements

The proponent, or their designated designer, will be responsible for identifying and complying with all other applicable federal, state and local environmental laws and requirements. Preparing and processing this environmental documentation should occur concurrent with the development of the Preliminary Design plans.

The project proponent should develop a checklist of the anticipated environmental documentation and permits and schedule a coordination meeting with the appropriate parties to review these assumptions and their requirements if necessary. Project delays can be minimized by early and on-going coordination with Federal, state, and local agencies with jurisdiction by law or special expertise.

1.5.2.3 Preliminary Submission Environmental Review

The City will evaluate the data collected during the Preliminary Design process and the plans submitted. They will determine whether the project can be designed to desired design criteria, or if design changes or mitigation plans will be required to resolve environmental issues and community concerns. If the proposed project is under State jurisdiction, then the proponent will follow the OSTA guidelines and process. Similarly,

if the proposed project is under FHWA jurisdiction, then the proponent will follow their process.

1.5.2.4 Define and Initiate Permit Process

Environmental clearances and permits should be secured as early on in the design process as is practicable. When used in this Plan, the term "Permit Process" refers to any process or regulatory program that involves obtaining a permit or some other type of sign-off from a federal, state, or local agency.

Identification of applicable permits is completed prior to the Preliminary Design Submission. Initial coordination, data gathering continues throughout the design process. Formal submission of applications to regulatory agencies should be done as soon as the required information is available, but no later than the Final Design Submission. The project proponent is responsible for obtaining all required permits, but may receive support from other parties.

1.5.2.5 Complete Permit Processes

During the period from Preliminary but no later than Final Design, the designer should complete and submit all necessary forms or applications to the appropriate agencies for the required permits.

1.5.3 Project Design

There are generally three major phases of design, including:

- ◆ Preliminary Design
- ◆ Final Design
- ◆ Plans, Specifications, and Estimate (PS&E)

As the project moves into design, the project defined in the Project Planning phase is developed in more detail and design documents for the project are produced. It is imperative that the designer is knowledgeable about the context of the project, about the issues raised during planning, and about the desires of the community, the City, and the regulatory agencies concerning project implementation prior to initiating the design. The design process should comply with City requirements and/or State and Federal requirements if applicable.

1.5.4 Right-of-Way

Layout plans, descriptions, and orders of taking are required to establish highway right of way for all projects which involve land acquisitions. All proposed layouts must be accurately computed.



The process for acquiring right of way or easements needs to be progressed as the design progresses.

1.5.4.1 Preliminary Right-of-Way Plans (Preliminary Design)

When land acquisition or easements are involved, the designer should identify existing and proposed layout (locations) lines, easements, property lines, corner markings, names of property owners, access points, and the dimensions and areas of estimated takings and easements as part of the Preliminary Design.

1.5.4.2 Preliminary Right-of-Way Plans (Final Design)

The designer will confirm the acquisitions in the Preliminary ROW submittal are adequate for the Final Design, or provide revised ROW Plans. ROW acquisition information should be posted on the preliminary ROW plan by the designer when the designer obtains the information.

1.5.4.3 Final Right-of-Way Plans (PS&E Design)

After the Layout or Taking documents are recorded, the preliminary ROW plan will become the final ROW plan.

Finalize Layout Plans and Order of Taking

As soon as feasible after the Final Design project approval, Layout Plans and the Order of Taking are finalized by the designer.

1.5.5 Completion of Environmental Permitting/Design/Right-of-Way Process

The conditions under which the project design and environmental permitting are complete and approved is when all documents necessary to publish the bid documents are complete. In addition to ensuring completeness of the design and right-of-way process, the proponent needs to ensure that all necessary environmental permits and clearances are complete.

Step IV Outcomes

A designed and permitted project ready for construction.

1.6 Step V: Procurement

Once a design is complete, the project is organized within a construction contract, and an open invitation to bidders is published following applicable City, State, and Federal procurement procedures.

1.7 Step VI: Construction

After a construction contract is awarded, the proponent and the contractor will need to develop a construction management plan. The permitting agencies, local authorities, and affected members of the general public need to be informed of the plan. These entities should also be notified as changes in construction areas and activities occur throughout the project.

1.7.1 Public Participation During Construction

Before construction activities begin, the proponent and construction manager must determine the appropriate type of public notification and participation needed. Different projects result in different types of disruption to transportation and other nearby activities. For simple projects, including resurfacing, a minimal degree of public participation may be needed. For these types of projects, the proponent should, at a minimum, notify abutters of the impending construction activity.

For complex projects, the proponent may need to schedule a construction management plan meeting with abutters and other project participants (local boards, interest groups, business associations, etc.). At this meeting, the proponent can describe the types of construction activity needed, construction phasing, and durations. Issues and concerns associated with the construction period can be identified and adjustments made to the construction management program to minimize community impacts as a result.

1.7.2 Construction Management and Monitoring

Careful management and monitoring of construction activities is necessary for most projects to ensure that quality standards are maintained, environmental commitments honored, and community expectations are met.

1.8 Step VII: Project Assessment

Project Assessment can be used as a tool to further improve the project development and delivery processes. Although completion of this process will depend upon the proponent, three important pieces of information can be gathered through this brief, informal process. These include:

- ◆ Constituent input into project development process:
 - ❖ Were the proponent's expectations for guidance, review, and feedback met?
 - ❖ Was the project timeline reasonable?
 - ❖ Was the public outreach program for the project appropriate and effective?



- ❖ Were community concerns about the project addressed and community comments incorporated into the planning and design processes?
- ❖ Were appropriate design controls selected for determining the design outcome?
- ❖ Was the project construction effectively managed so that community impacts were minimized?
- ◆ Constituent review of the project design elements
 - ❖ Was the project need addressed?
 - ❖ Is the resulting project consistent with its context?
 - ❖ What specific design elements are judged to be successful and recommended for future projects?
 - ❖ What specific design elements are judged to be unsuccessful and should be reconsidered, and why?
- ◆ Follow-up of Punch List items
- ◆ Are there project elements that still need to be completed?
- ◆ Has the project resulted in any situations requiring follow-up or adjustment to meet the original or newly-created project needs?

1.8.1 Public Outreach

Public outreach is anticipated throughout the project development process to ensure that the project continues to meet its intended purpose, benefits from input and feedback from interested citizens, local and regional groups, and elected officials, and maintains strong support. Public outreach is integrated into every step of the project development process defined in this chapter. This active participation will ensure a role for the public to help shape the project that emerges from the process. It is particularly important to provide opportunities for public outreach early in project planning.

1.8.1.1 Identify Project Constituents

Early in the project development process, the proponent should consider the public support for the project and the constituency that it serves. Project constituents are groups and individuals that are involved in, have an interest in, or are affected by a proposed project. They can either be formal participants in the process, or can be represented by other participants in the process. Different types of projects involve different constituents, and different levels of planning and review. Project constituents include some or all of the following entities:

- ◆ Federal Highway Administration (FHWA)
- ◆ Connecticut Department of Transportation (CT DOT)

- ◆ Metropolitan Planning Organizations
- ◆ Regional Planning Agencies (e.g. Southwestern Regional Planning Agency – SWRPA)
- ◆ Regional Transit Authorities (e.g. Norwalk Transit District, Metro North Rail)
- ◆ Transportation Providers (e.g Merritt 7 Shuttle)
- ◆ State and Federal Regulatory Agencies
- ◆ National Park Service
- ◆ U.S. Coast Guard
- ◆ Other State Authorities
- ◆ Elected Officials, Public Works Departments, Local Boards, and Commissions, including Conservation Commission
- ◆ Facility users (commuters, residents, visitors by all modes)
- ◆ Neighbors and citizen groups
- ◆ Regional Independent Living Center(s)
- ◆ Advocacy and interest groups (such as local pedestrian or bicycling committees, trucking associations, preservation groups, etc.)
- ◆ Private area businesses
- ◆ Local emergency responders
- ◆ Utilities (including railroads)
- ◆ Regional watershed or river management councils

At a minimum, the proponent should contact the appropriate local planning and public works staff, planning commission chair, conservation commission chair, select board chair, and major local property owners in the vicinity of the project area to help determine initial concerns and issues. The proponent should confer with City officials to determine which property owners may have legitimate issues that should be addressed by the project. This effort will help identify important local groups such as neighborhood associations, business associations, historical societies, recreation and open space committees, transportation providers, and others who should be informed of the project. It is better to be as inclusive as possible early in the Project Development Process to allow the public to participate and be afforded an opportunity to contribute to the decision-making process for the project. (It should also be made clear to all those attending how comments will be treated and how any expected follow-up will be handled).

Identifying the likely parties that may have interest in the project at the beginning of the project development process helps the project proponent tailor the public outreach program appropriately. The project proponent should define a public participation plan



at the outset of each step of the project development process. Tools available for this outreach are described in Section 1.9.3.

1.8.1.2 Public Outreach Approach

The level of interest and role of the public varies widely by project type and complexity. Different types of projects are likely to elicit different levels of community, resource agency, and local board interest. These project types are grouped into system preservation projects, and system improvement or expansion projects with guidance provided on the appropriate level of public outreach, as explained further in the following paragraphs.

The project proponent should carefully consider the best-suited approach to public outreach, depending upon the complexity of the project. Some general approaches to increase awareness of a project and solicit input are described below:

- ◆ **Notification of Abutters** — Project proponents for all projects, other than routine maintenance, should, at a minimum, notify abutters of the construction program anticipated and its potential impacts to property and/or operations. This can be informally done through neighborhood flyers or posters, through newspaper notices, or more formally done by certified mail.
- ◆ **Notification of Utilities** — Project proponents should notify utilities of the construction program anticipated and its potential impacts to their services or operations. It is important to notify utilities even for routine resurfacing and rehabilitation projects to coordinate any planned utility work. This is especially true for an overlay, since pavement life is shortened considerably following a utility cut.
- ◆ **Community Notification** — As projects become more complex, disruptive, and of longer duration, notification should be made to the community as a whole using the public outreach tools discussed in the next section. This community notification helps to increase knowledge of the project and its potential construction-related impacts. Beyond simple notification, the proponent should actively involve abutters, specific local interest groups, and utilities to get a good cross-section of people to participate.
- ◆ **Early Involvement of Local Boards and Commissions** — The proponent should consider involving local boards and commissions at the outset of the project. This involvement can help the proponent identify issues the project is likely to face and can help the proponent gauge the type of additional outreach activities that may be most appropriate if the project proceeds. Outreach to local boards and commissions can also be helpful for complex maintenance and resurfacing projects. It is safer to notify all City departments/ boards of a project's scope before much design work is started to minimize later concerns or needs for project changes.
- ◆ **Early Local Issues Meeting** — An early local issues meeting is important for projects where transportation facilities are being substantially modified, expanded,

or replaced. It is recommended that this meeting be widely advertised, as discussed below. This meeting provides a forum for project constituents to make their concerns known before a course of action is determined. For straightforward projects, this early local meeting, coupled with later opportunities for public hearings during design and permitting, may be sufficient. For more complex projects, several early local issues meetings may be necessary.

- ◆ **Public Forums or Hearings at Several Stages of Planning and Design** — As project complexity continues to increase, the public participation should include several opportunities for public involvement during the planning and design phases in addition to the early local issues meeting described above. Targeted mailings can be used to generate interest and ensure that concerned parties are contacted. Key milestones where public involvement is especially important include alternatives analysis during the planning process, at key design milestones, or if the project elements change substantially due to increasing refinement of the design. Detailed meeting minutes are recommended for each session.
- ◆ **Active Communication about Project Progress** — In addition to interactive public forums, active communication about project progress is helpful for maintaining consensus and keeping project constituents informed about the project status. Several additional tools for communicating project progress are highlighted in the following section.
- ◆ **Formation of an Advisory Task Force** — An advisory task force of project constituents can be particularly helpful for maintaining involvement from a consistent group of individuals, representing a cross-section of interests in the project. This formalized type of public outreach is generally reserved for more complex projects with a wide range of alternatives, benefits and potential impacts. In almost all cases, formation of an advisory task force does not replace the need for the other public outreach approaches described above. Typically, task forces are advisory bodies that offer input to the process and suggest recommendations.

1.8.1.3 Public Outreach Tools

There are many aspects of public outreach associated with transportation projects including:

- ◆ Informing constituents of a potential project;
- ◆ Active participation of project constituents in planning and design;
- ◆ Formalized public meetings and hearings; and
- ◆ Communication about the progress of a project

Within each of these aspects, there are various outreach tools available which serve different purposes and target different audiences. These tools are applicable throughout the project development process.



The first stage in public outreach is to make people aware of a potential project. Legal notices alone are ineffective at informing the community about upcoming project meetings. The project proponent should consider additional ways to communicate the opportunity to participate in the transportation project development process, such as:

- ◆ Local newspaper articles or editorial letters
- ◆ Notices to local boards , committees, and local advocacy groups
- ◆ Posters at civic buildings or churches, or in neighborhoods
- ◆ Local cable television community event calendars
- ◆ A community website posting or community-wide mailing
- ◆ Press releases to media outlets
- ◆ A community-wide meeting notice or newsletter mailing (or email)
- ◆ Flyers to project abutters

Note that there are some public hearings, or opportunities for public hearings, that are required to be held for legal reasons. For example, the FHWA requires Public Hearings for Federal-Aid highway projects as part of a process that also encourages a variety of citizen involvement techniques such as informal public meetings, briefings, and workshops. Public hearings are legally recognized formal meetings held at particular stages of the project development process. Some environmental or resource agency permits or clearance processes also require public hearings.

All public meetings and hearings should be held in facilities that are fully accessible for people with disabilities, and notices about these meetings should use the International Symbol of Accessibility to indicate that the location is accessible. Handout materials available in alternative formats—Braille, large print, and/or audio cassette—as well as other accommodations (sign language interpreters, CART reporters, etc.) should be indicated in the meeting notices along with specifically how to request these accommodations.

Formal environmental and design hearings are sometimes ineffective in eliciting community concerns and addressing individual issues. Other ways to communicate with those interested in or affected by projects include:

- ◆ **Public Meetings** — informal gatherings of designers, officials, and local citizens to share and discuss proposed actions. These meetings provide an opportunity for informal, less structured conversations about a project, the design elements, and its potential benefits and impacts.
- ◆ **Open Houses** —mechanisms for interested parties to gather more detailed information on a project. Open houses facilitate the discussion of particular details

of interest to individuals more effectively than traditional hearings or public meetings.

- ◆ **Workshops or Charrettes** —smaller groups that facilitate problem solving around design issues for which several options are available and the best solution is unclear.
- ◆ Other Communication Tools that are effective in providing information to the public and soliciting their input include:
 - ❖ **Newsletters** — provide a forum for meeting notification and periodic updates on project status and decisions. Newsletters can either be traditionally mailed or electronically transmitted.
 - ❖ **Websites** — allow frequent updates of project status, enabling interested parties to review materials on their own schedule, and facilitate correspondence of questions and responses.
 - ❖ **Project Information Boards** —illustrate project details and provide contact information at the project site facilitating involvement in other forms of outreach.

Successful public meetings require good advance communications and coordination with community leaders, elected officials, the Regional Planning Agencies, and CT DOT beforehand in order to set the agenda and establish the framework for appropriate follow-up and continued communication. The proponent should work closely with local and regional officials on meeting logistics, including location, time, and format.