

101.0 Overview

The Ohio Department of Transportation (ODOT) has developed and implemented a Project Development Process (PDP) that includes regular communication among technical disciplines, results in quality plans and minimizes cost overruns during right-of-way acquisition and project construction. Depending on project size, complexity, and/or potential impact to the environment, ODOT transportation projects are categorized as Minimal, Minor, or Major. The PDP consists of a certain number of steps depending on the project category.

Project Categories and Numbers of Steps

Project Category	Number of Steps
Minimal	5
Minor	10
Major	14

For information on how to determine if a project should be classified as a Minimal, Minor, or Major, see Section 105.0.

The PDP transportation decision-making approach provides a seamless process from planning through construction and encourages open communication for making informed decisions during all stages of project development. By involving all disciplines at the earliest stages of the process, issues affecting project type, scope, preliminary development, and cost are identified early.

The PDP has streamlined and changed the sequencing and product order in the process by:

- Encouraging communication among disciplines,
- Requiring documentation of the reasoning behind project related decisions,
- Eliminating duplicated effort among disciplines,
- Providing for early identification of potential “Red Flag” issues, and
- Insuring that work products are completed as early in the process as possible.

As a project moves through the PDP, the project manager may change as the lead discipline – planning, production, environmental, etc. - changes. This manual identifies the lead and supporting disciplines for each step. It also identifies effective ways for project managers to transition between leads.

This manual contains detailed sections on Minimal, Minor, and Major Projects, several appendices, a glossary and a list of acronyms. The manual provides guidelines to identify activities required during each step of project development. The project scope determines the amount of work performed within the steps. Although the manual identifies work tasks and potential stakeholders for each step in the process, the process requires coordination of people and tasks between steps to ensure continued review and study of the best possible options.

The PDP is a project management and decision-making process for transportation projects. The process is a guide that defines project development phases from project concept through completion. The PDP encourages a seamless transition between project development phases while providing effective and efficient project management.

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Communication and transition among disciplines are critical to a project's success. By establishing communication opportunities and responsibilities throughout the PDP, the project manager ensures that those involved in the project fulfill their project commitments. The discipline lead for each step is responsible for ensuring appropriate coordination and involvement of other disciplines.

102.0 Project Manager

To facilitate an integrated approach, the project sponsor selects and assigns the project manager. The project manager uses a number of project management tools to move the project through the PDP. Such tools include meetings, Gantt charts, and a project *Owner's Manual*.

All Major PDP projects should have a dedicated project manager. ODOT usually assigns a district staff member to this leadership role. It is recommended that local sponsors assign this role to a staff or board member. When feasible, for project continuity, the project manager should continue through the remaining PDP steps.

ODOT Central Office, Office of Urban and Corridor Planning and Office of Environmental Services will assign a staff liaison to every Major planning study. Because Major Projects must deal with varying issues and stakeholders during the planning process steps, the project manager should work closely with the central office staff liaisons to insure that the activities and products fulfill the intent of the planning PDP steps.

The first responsibility of the project manager is to verify that the project has been entered into Ellis and a Project Identification Number (PID) has been established. The project manager should work with the project sponsor to identify a project team who will be responsible to complete the work required by the PDP. The project manager is also responsible to begin and maintain a project file in which to document all project activities and products and to continue to communicate and coordinate with the designated ODOT central office liaison staff throughout the project.

As a beginning to the PDP, the ODOT project manager should hold a "kick-off" meeting involving project team members and all appropriate stakeholders (see page viii). Stakeholders may include: a variety of ODOT district and central office disciplines, representative(s) of affected local government(s) such as a city or county engineer, the local transit agency, FHWA, an MPO representative (if the project is in an urban area), and representatives from minority or low income populations, civic or business groups that may be uniquely affected by the project. Attendees should discuss the project from their perspective so that all begin the Project Development Process (PDP) with a common understanding of project issues and transportation needs and goals.

Recognizing that this level of understanding may change as more information becomes available, the meeting attendees determine the level and intensity of public involvement needed, define the general work requirements, develop an initial scope of work for the planning study and schedule or may even develop the Request For Proposal (RFP) needed to hire a study consultant. The goal for the "kick-off" meeting is to make sure all stakeholders are identified and in general agree on how to progress through the PDP.

103.0 Initial Identification of Projects

Ohio's transportation system needs are assessed and prioritized to determine which projects will be funded. According to the ODOT *Transportation Planning Process for the Capital Improvement Program*, "Federal and State laws and appropriations provide the groundwork for the methods in which ODOT uses to collect and analyze data and finance construction projects." There are numerous documents that address and prioritize transportation problems or needs. These documents include, but are not limited to:

- ACCESS OHIO 2004 - 2030
- Long-range Transportation Plans of the various Metropolitan Planning Organizations (MPOs) in the state
- District Work Plans
- Corridor studies
- Transportation Review Advisory Council and other capital funding projects
- Legislative mandates
- Pavement Management System
- Bridge Management System
- Maintenance Quality Survey
- Safety/Congestion Program
- Transportation projects originate from a wide variety of sources and studies, such as those listed above, before Step 1. The ODOT Funds Management Committee reviews the *State of the Transportation System* report to identify priorities and determine how to allocate the available budget to different ODOT programs. If funds are available, projects are included on the Statewide Transportation Improvement Program (STIP) or the MPO Transportation Program (TIP) and advance through the PDP.

Beginning the PDP assumes the need for a transportation improvement but does NOT assume the specific facility or project to be constructed. The PDP begins with a project level planning analysis because the first PDP decision needed is to determine the right type, size, scope, phasing and location for a facility, mode, operational or management solution to solve the identified transportation problem. This determination is to be completed before time and money is expended to advance extensive environmental analysis, design or to construct a specific facility.

At the beginning of the planning process, the ODOT project manager should enter as much information as possible into ODOT's internal project tracking system, Ellis, in order to generate a Project Identification (PID) number for study, research activities, and the potential project. While still in the conceptual state, a project is entered into Ellis in *candidate* status. A candidate project can be used as a placeholder and contain committed funding estimates and even a committed award date. However, the candidate project does not yet have a completed scope of work.

Once a project is scoped and is ready for development, the project status in Ellis needs to be changed to *active*. The minimum information required for active status is a committed award date. Milestone dates and cost estimates will be added and updated as a project becomes active and proceeds through the PDP. ODOT's Ellis training manual provides additional details about tracking projects.

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104.0 Federal Oversight Determination

All Major Projects and some Minor and Minimal Projects require oversight by the Federal Highway Administration (FHWA). The PDP requires this determination occur during Step 1 and, if applicable, continue throughout the PDP. Details of this determination and involvement can be found in Section 1402.2 of the *Location and Design Manual*, Volume III. It is also documented in a Memorandum of Agreement between ODOT and the FHWA Ohio Division office.

In summary, FHWA is to be given the option to have project oversight on any Interstate project that is estimated to cost more than \$1 million or involves one or more miles of Interstate. The responsibility for determination and documentation of the need for Federal oversight rests with the District Production Administrator, after consultation with FHWA.

105.0 Project Classifications

The Project Development Process (PDP) categorizes transportation projects into Minimal, Minor, or Major. The table on page 1 - 6 presents the process steps by project classification. The graphical figures in Appendix A show additional information on the PDP steps and activities. Selection of the appropriate project classification is based on the anticipated level of project development complexity. The project classification identifies the recommended level of analysis, amount of stakeholder involvement and activities performed during each step. The PDP is designed to provide the necessary information to equitably and systematically advance the project in a logical sequence from the beginning of planning to the end of construction.

106.0 Project Definitions

106.1 Major Projects (14-Step PDP)

Major Projects are defined as transportation improvements where the anticipated result of the improvement is expected to:

- Have a significant impact to the highway's public access, level of service, traffic flow, mobility patterns, or mode shares.
- Require substantial right-of-way acquisition.
- Have a high degree of public controversy.

Additionally, this classification applies to those highway transportation improvements that will require a substantial financial investment to complete all aspects of project development. These projects typically involve one or more of these situations:

- Making significant alterations to the existing highway (e.g., lane addition).
- Relocating a major portion of a highway (e.g., significant change to horizontal and/or vertical alignment).
- Developing a new highway alignment (e.g., bypass).
- Constructing a new or significant modification to an existing interchange.

From the planning perspective, Major Projects include MPO MIS (Major Investment Study) type issues, studies and projects in which costs exceed \$1 million or project length exceeds one mile. This does not apply to resurfacing projects or other maintenance type projects exceeding one mile that otherwise fit in the Minimal Project classification. It is possible for a Major Project to require little to no new right-of-way (e.g., Interstate widening within existing right-of-way).

From the National Environmental Policy Act (NEPA) and environmental perspective, Major Projects are those involving the potential for high or significant environmental impacts. These projects typically are

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located on new alignment but could include any project type that might impact a high-quality environmental resource, require agency coordination at several decision points in the PDP, or have substantial public controversy. Context and intensity of impacts should be considered when addressing an impact on a resource. Major Projects for NEPA typically require an Environmental Impact Statement (EIS) or Environmental Assessment (EA) but also can include Categorical Exclusion (CE) projects.

From a design perspective, Major Projects are those in which new highway alignments or significant alterations to existing highway alignments will result in the examination of multiple alternatives as a necessary and systematic progression to selecting the preferred alternative.

Sometimes, a project—with only a few viable alternative solutions to be studied—can appear to be Minor based on environmental impacts. A project can be Minor in scope but it still can be controversial. In such situations, it may be advantageous to follow the Major PDP relative to the preliminary engineering components. This will allow for a graduated progression of plan development activities through several steps of the PDP rather than covering all preliminary engineering work in a single step under the Minor PDP (Step 3). This will help to avoid unnecessary plan rework.

106.2 Minor Projects (10-Step PDP)

Minor Projects are defined as transportation improvements that generally are located on an existing alignment. Small adjustments to the existing alignment to improve geometric conditions may be involved. Substantial relocations of non-interstate roadways that do not result in significant environmental impacts also can qualify as Minor Projects. Minor Projects may have environmental impacts. These impacts can be developed and approved through the Categorical Exclusion process. Refer to the *Environmental Process Manual* for more details.

Examples and thresholds for environmental impacts are included in ODOT's Office of Environmental Services *Environmental Process Manual*. Minor Projects can involve right-of-way acquisition, utility relocations, altering the highway's cross section, and raising or lowering the roadway profile. Examples of Minor Projects include:

- Bridge replacement and rehabilitation.
- Culvert replacement.
- Pavement widening.
- Rehabilitation.
- Geometric realignment.
- Intersection upgrades including the addition of turn lanes.

106.3 Minimal Projects (5-Step PDP)

Minimal Projects are defined as transportation improvements generated by the traditional maintenance and preventive maintenance program as they relate to the development of the District Work Plan. These projects:

- Do not alter the basic highway cross section or geometry.
- Require no additional right-of-way.
- Have minimal impacts on existing utilities.
- Have no impacts to environmental resources.
- Require no environmental agency coordination.
- Are considered "exempt" from National Environmental Policy Act (NEPA) studies as defined in ODOT's Office of Environmental Services *Environmental Process Manual*.
- Are likely to require only minor public involvement.

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Examples of Minimal Projects Include:

- Guardrail replacement where roadway ditches and backslopes will not be relocated.
- The replacement of traffic signals, provided that no work occurs within any historic district and there is no likelihood of encountering contaminated materials.
- Traffic signal maintenance.
- Pavement drop-off repair.
- Mowing or brush removal; trimming.
- Herbicidal spraying.
- Installation or maintenance of signs, pavement markings/raised pavement markers/sensors, or replacement fencing.
- Bridge deck overlays, superstructure, and other maintenance activities, including bridge painting projects, provided the project does not involve work within streams, rivers, scenic river corridors, or historic properties.
- General highway maintenance, including filling pot holes, crack sealing, mill and resurfacing, joint repair, shoulder reconstruction, and minimal bank stabilization.

Project Classifications and Corresponding Processing

Project Classification		
Minimal	Minor	Major
Step 1 – Determine Scope, Schedule, and Budget	Step 1 – Develop Purpose and Need	Step 1 – Work with Stakeholders to Understand Problems, Needs, and Goals
	Step 2 – Determine Scope, Schedule, and Budget	Step 2 – Conduct Research and Technical Studies
		Step 3 – Identify and Evaluate Conceptual Alternative Solutions
		Step 4 – Develop Strategic Plan
Step 3 – Perform Environmental Analysis and Preliminary Engineering	Step 5 – Develop Conceptual Alternatives	
	Step 6 – Develop Feasible Alternatives	
	Step 7 – Develop Preferred Alternative	
Step 2 – Develop Stage 3 Design	Step 4 – Prepare Environmental Clearance and Develop Stage 1 Design	Step 8 – Prepare Environmental Clearance and Develop Stage 1 Design
	Step 5 – Develop Stage 2 Design	Step 9 – Develop Stage 2 Design
	Step 6 – Complete Right-of-Way Plan and Begin Acquisition	Step 10 – Complete Right-of-Way Plan and Begin Acquisition
	Step 7 – Develop Stage 3 Design	Step 11 – Develop Stage 3 Design
Step 3 – Prepare Final Plan Package	Step 8 – Prepare Final Plan Package	Step 12 – Prepare Final Plan Package
Step 4 – Award Contract	Step 9 – Award Contract	Step 13 – Award Contract
Step 5 - Construct Project	Step 10 - Construct Project	Step 14 – Construct Project

107.0 Stakeholder / Public Involvement

Stakeholder involvement is essential for every step in the Major PDP. Stakeholders provide information and offer a unique perspective in identifying the problem and what changes or improvements are needed to have a successful project. Stakeholder involvement is also required by FHWA during the planning and environmental processes. ODOT's *Public Involvement Guide* and *Guidance for Best Practices for Incorporating Environmental Justice into Ohio Transportation and Environmental Processes* manuals should be consulted and followed for details on how to identify and involve stakeholders and how to conduct successful public involvement for a Major PDP.

Stakeholders are individuals and groups who are or may be impacted by or have an interest in the project. In some cases, federal regulations define who are stakeholders. Typically stakeholders include professional and technical staff from ODOT and affected local governments and agencies, elected and appointed officials, the general public, people and businesses and environmental justice populations in the project area. Stakeholders for environmental justice include low-income and minority populations within the study area. Demographic analysis conducted in Step 2 should be used to identify environmental justice populations. The text box on this page highlights typical stakeholders.

108.0 Public Involvement Plan

Every Major Project must have a documented public involvement plan (PIP). The project manager is responsible for developing and implementing the PIP. Often, on Major Projects, a separate ODOT staff person or consulting firm may be designated and responsible for developing, managing and implementing the PDP related communication and PIP activities.

The PIP outlines the strategy and responsibilities for informing and involving stakeholders during the planning phase and all the steps of the PDP. Detailed discussion of how to develop and implement a PIP is presented in ODOT's *Public Involvement Guide*.

PIP development should begin during the "kick-off" meeting and should evolve as the stakeholders have an opportunity to comment and contribute ideas to it. Technically, the PIP continues through construction and may need to be revised to address changing public and stakeholder concerns and needs.

The PIP can include a mix of informational meetings, newsletters, web pages, special events, educational handouts and booths at a local event, or more formal meetings. The magnitude of the project should be the guide to the extensiveness of the PIP. In general, the PIP should:

- Define and describe public involvement actions, activities, and publications to be conducted in each step in the PDP.
- Define the strategy to engage and solicit information, ideas, and opinions from stakeholders (for example, the stakeholders' definition of the problem and idea of an acceptable solution).
- Explain how stakeholders' ideas and opinions will be incorporated into the PDP decision-making process.
- Identify the actions and approaches to inform stakeholders about the problem being studied, planning process, potential project alternatives under evaluation, justification for eliminating alternatives, and recommendations.
- Identify responsibilities for managing and implementing the actions, responses, the timing and funding for the public involvement activities.
- Clarify how, where and who will implement and document the activities, actions and materials used during the process.

Examples of Stakeholders

- ODOT
- Federal Highway Administration
- Federal Transit Agency
- Local Transit Agency
- Metropolitan Planning Organization
- Local Public Agency
- Civic and Community Associations
- General Public
- Environmental Justice Populations
- Resource Agencies
- Special Interest Groups

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The PIP should be flexible. It should be dynamic enough to adjust to concerns and interests of stakeholders, yet detailed enough to provide stakeholders with communication details such as how, when and where to expect to hear project status reports and be involved. The PIP likely will be made up of a variety of public involvement approaches, activities, and forms. No single approach or activity will work to involve all stakeholders, nor will any single action neutralize all sources of opposition. Mixing and matching approaches is recommended. For more information on developing a PIP, see ODOT's *Planning Process Manual* and ODOT's *Public Involvement Guide*.

As identified in Appendix B, ODOT Office of Urban and Corridor Planning and the Office of Environmental Services have, prior to publication and distribution, review and approval authority for the Public Involvement Plan for Major Projects.

109.0 Project Meetings

Project meetings should occur at critical times throughout a project's development. Each project should have an initial "kick-off" meeting.

- For Minimal Projects, the District Work Plan can serve as the project "kick-off."
- For Minor Projects, the initial meeting might include a discussion of several projects in one setting for ease of gathering key players.
- Major Projects usually require project specific meetings.

The "kick-off" meeting would define key personnel and the lead person responsible for each discipline at each step of the PDP. In addition, a transition meeting is required at the end of some steps to facilitate a smooth transfer of responsibility as a new discipline takes over project responsibility.

110.0 Objectivity

Federal law (23 USC 112g) requires the state to assess the objectivity of the environmental process in instances where a consultant has been selected to provide both environmental evaluations and design services. ODOT commonly follows this practice based on the integrated process of the PDP.

ODOT has integrated this objectivity assessment into the PDP. Every step of the PDP and concurrence point is thoroughly reviewed by ODOT and resource agencies as appropriate, and subjected to public scrutiny. ODOT's PDP carries this point a step farther by ensuring that decisions are not made in a vacuum or without taking into consideration other viewpoints. With PDP, ODOT looks at discipline specifics prior to decisions being recommended. This is done regardless of whether ODOT staff or consultants performs the work.

Even though consultants are performing preliminary engineering work and environmental assessment activities, consultants are working under the close direction of an ODOT project manager. Work progress and products come under ODOT scrutiny and approval regularly.

ODOT's review on any environmental/design product is multi-discipline. In fact, many of ODOT's products in the PDP are jointly reviewed by all disciplines. This process carries on to the agencies with which ODOT coordinates, since many of ODOT's reviews are completed jointly with resource/regulatory agencies.

- For these reasons, ODOT and the FHWA Ohio Division Office have determined that when a project follows the Project Development Process, an individual objectivity review is not required.

111.0 Gantt Charts

Gantt charts enable project managers to monitor project development, allowing early identification of potential problems and facilitating the timely delivery of the project. Gantt charts identify:

- Each step and its associated tasks.
- Duration of the time necessary to accomplish each task.
- Predecessor and successor tasks.

A Gantt chart is a critical communication and coordination tool that keeps each discipline abreast of the project status and the input requirements.

112.0 Owner's Manual

The project manager is responsible for establishing a project *Owner's Manual* for all Major Projects; this manual identifies commitments to be made during the PDP. The *Owner's Manual* serves as a road map for information located in the project file and documents responsibilities for carrying out any commitments made during the process. The Major Project section of this manual suggests content for the *Owner's Manual*. If the project manager changes during the life of the project, the *Owner's Manual* is transferred to the new project manager as documentation of the project's history.

113.0 Related Manuals

In addition to the *PDP Manual*, ODOT has related guidelines and manuals to provide technical detail on specific processes and the expectations for particular studies, analyses, and efforts. These technical manuals provide detailed guidance on specific project-related issues. Refer to the Design Reference Center Resource Website, www.dot.state.oh.us/drrc, or Appendix D, for a listing of ODOT Manuals.

114.0 Roles and Responsibilities

The District Planning and Programs Administrator, in collaboration with the Production Administrator, is responsible for classifying transportation projects as Major, Minor, or Minimal. Prior to selecting the project classification, the project manager should broadly define general project conditions, possible impacts, limiting constraints, and possible solutions in an effort to assist the Planning and Programs Administrator in making the appropriate initial project classification selection. It is important to remember that project-specific conditions and circumstances often dictate the approach taken when making the selection for each individual project.

115.0 Flexibility

Several factors need to be considered when determining whether a project is classified as Major, Minor, or Minimal at the beginning of project development. There is an important concept to understand:

After the initial classification is selected, it can be changed in subsequent steps if the information gathered up to that point identifies the need for a classification adjustment in order to reflect the necessary level of intensity to satisfy project development requirements.

It is crucial that when a project classification adjustment is identified, it should be conducted as early on in the process as possible and effectively communicated to allow all subsequent PDP activities to properly react to the adjustment.

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If a project is initially identified to follow the steps of a Major planning study (Steps 1 – 4 of the Major PDP), it does not automatically result in the environmental and preliminary engineering process (Steps 5 – 8 of the Major PDP) also following the Major process. There are situations where extensive planning studies must be performed even though the recommended conceptual alternatives lack anticipated environmental impacts that require a Major environmental study. Conversely, there could be circumstances where the level of effort to complete the planning study is best suited following the Minor PDP (Steps 1 and 2). However, the necessary level of documentation and coordination needed to clear the project through the environmental process would require it to follow the Major PDP (Steps 5 – 8).

For these reasons, it is important to understand that the PDP allows for flexibility in the level of work performed to satisfy the respective PDP requirements during each phase of the process. It is recommended that the project classification originally selected prior to Step 1 be revisited at the conclusion of planning activities (Step 4, Major Project; Step 2, Minor Project; and Step 1, Minimal Project) to determine if it is appropriate to continue using the original classification for the next phase (environmental and design) or to reclassify the project to fit anticipated development requirements. Remember that the initial project classification (Major, Minor, or Minimal) selection occasionally is based upon limited information and relies largely on previous project experience. Provided the selection of the initial project classification is based on the best available information at the time and its quality improves as the project advances such that the classification appropriately should change, this form of “scope creep” is desirable.

116.0 Transitioning Between a Major and Minor Classification

An example of a project transitioning from a Major to a Minor Project classification is a complex interchange reconstruction or modification in an urban area. For planning, this type of project could require substantial time and cost to conduct traffic studies and engage in public involvement. Yet, the recommended conceptual alternatives could result in a project that involves only reconstruction and widening of the existing facility. In this example, the project is classified as a Major Project (Steps 1 – 4 of the Major PDP) during the planning process. When it proceeds into the environmental phase, it meets the Minor Project definition and subsequently follows Steps 3 and 4 of the Minor PDP.

Transitioning from the Major or Minor process to the other should happen rarely, but may be most evident during Step 5 upon review of the AFA. This document brings conceptual alternatives to a good equal level of design and environmental identifying critical issues that may require a shift from one process to another more practical approach. A transition from a Minor Project to Major Project status could occur upon completion of Minor Process Step 2. If the project is not exempt or does not qualify for a categorical exclusion Level 1, a necessary NEPA document will be a higher-level CE, an Environmental Assessment (EA), or an Environmental Impact Statement (EIS). The decision on which of these environmental documents apply should occur upon completion of Minor Project Step 2. If the appropriate NEPA document is an EA or EIS, the project is no longer considered Minor. The Major Project process must then be followed for the remaining PDP steps.

117.0 Projects that Seem to ‘Straddle’

On occasion, there will be projects that straddle the line separating a Major and Minor Project or a Minor and Minimal Project. When these circumstances arise, it is recommended that the higher category be selected. Experience has shown that it is more effective to reduce the level of detail necessary to complete the assignment if the project moves from a higher to lower classification than it is to add detail by moving it from a lower to a higher classification. Note that the activities performed during the detailed design and construction steps of the PDP—while they might range from simple to complex in the technical expertise required—typically are not the controlling factors considered when determining a project’s classification.