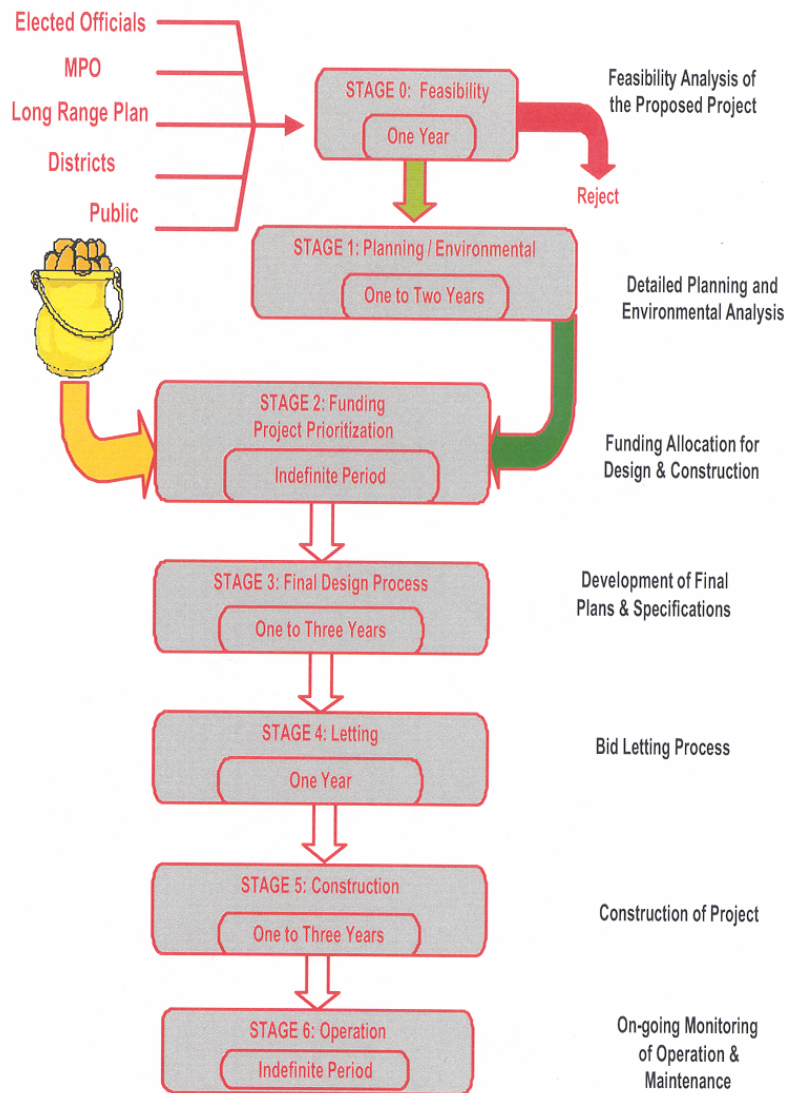


1 INTRODUCTION

The key element of the Department of Transportation and Development's (DOTD's) project delivery process is its clear definition of stages. Figure 1-1 defines the seven stages of the project delivery process. The process begins with Stage 0, Feasibility, and ends with Stage 6, Operations. This manual focuses on Stage 0, Feasibility, of DOTD's project delivery process. For more information on the project delivery process, see DOTD's Project Delivery Manual.



DOTD's Project Delivery Process
Figure 1-1

1.1 Purpose

The purpose of Stage 0 is to reach a decision regarding the project's feasibility and whether the project should continue further through the project delivery process. A base of information must be developed so that rational decisions can be made regarding the allocation of available funds among competing projects. Once projects are selected for addition to the Highway Program, the information gathered from Stage 0 provides the information necessary to proceed with Stage 1, Planning and Environmental.

The outcome of Stage 0 is a "go/no-go" decision regarding project advancement. A "go" project is deemed to be feasible and is selected through the Highway Project Selection Process to continue through the project delivery process. The "no-go" project is not selected through the process and will be retained for reconsideration in the future or will be dropped from further consideration.

1.2 Process

DOTD uses two methods to identify candidate highway projects. The first is a technical method that gathers and analyzes data regarding the physical condition, operational characteristics, safety performance, and congestion on state highways. The second method seeks input from DOTD customers—the general public, state and local elected officials, metropolitan planning organizations (MPOs), etc. Even though the majority of public involvement will occur during the Stage 1 process; it will be necessary, on occasion, to involve the public during the Stage 0 process. In some cases, funds are earmarked for specific projects by Congress or the Louisiana Legislature. In other cases, DOTD administers federal highway funds for local governments and other special programs.

The complexity of the project will determine the extent of documentation required. For example, those projects requiring right-of-way or having obvious major environmental impacts will require more information than comparatively simple routine projects. For some types of projects, an initial screening may be necessary before proceeding with Stage 0 in order to reduce the number of candidate projects to a manageable level for the resources available. The overall flow of project requests through Stage 0 and their ultimate disposition is illustrated in Figure 1-2. For details of specific project types, see chapters 2 through 6 of this manual.

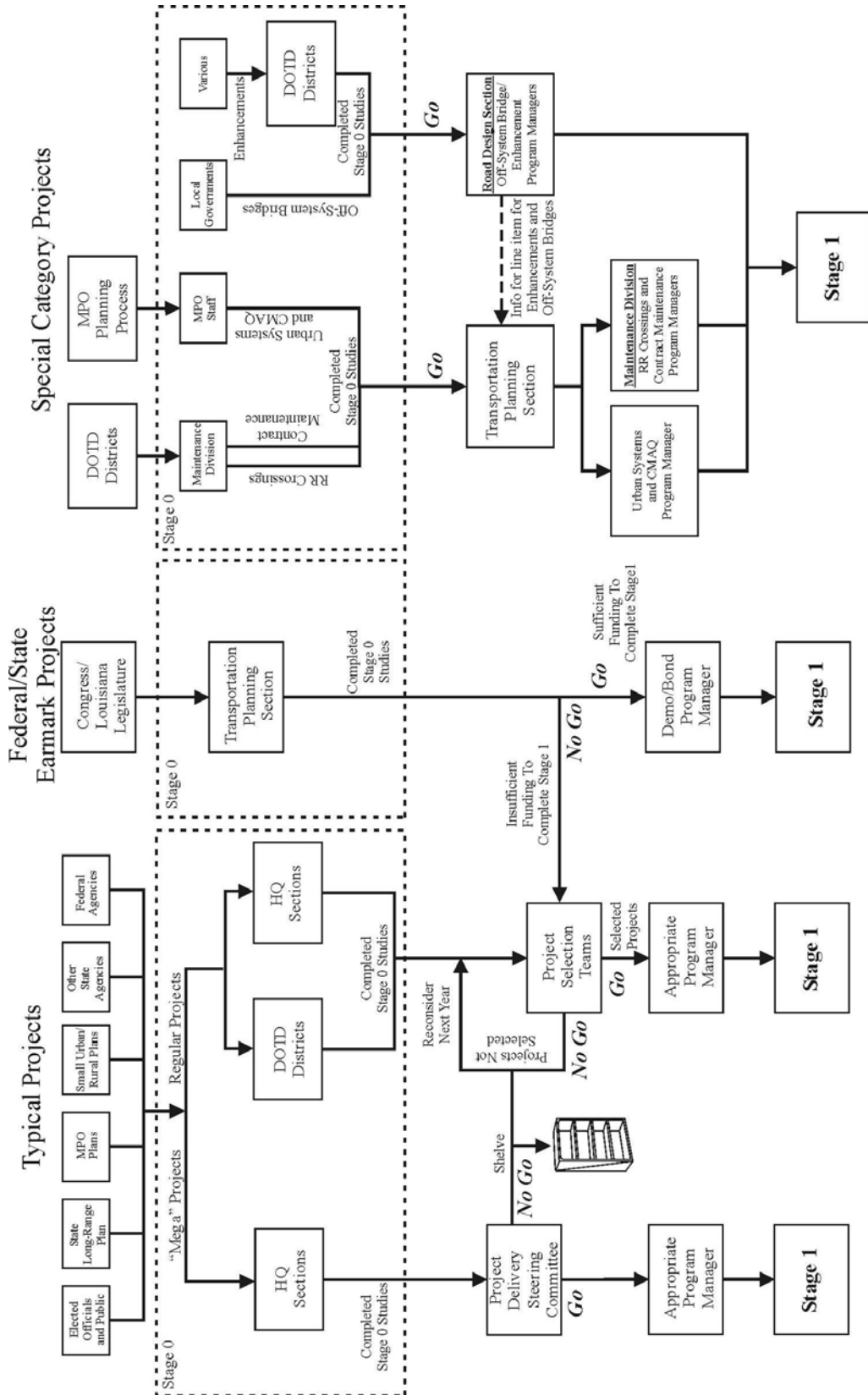


Figure 1-2

1.3 Project Types

Typical Projects: Typical projects must be separated by the magnitude of their costs. Those classified as “mega” projects will require dedicated funding since they cannot reasonably be funded entirely under the annual Highway Priority Program. In instances when resource constraints necessitate an initial screening of typical projects, the Project Delivery Steering Committee will decide which “mega” projects proceed through Stage 0. At the conclusion of the Stage 0 study for each “mega” project, the Project Delivery Steering Committee will decide whether to proceed with Stage 1 or place the project on hold until more information is available about potential funding sources.

Regular projects are those that can reasonably be funded under the annual Highway Priority Program, subject to competition with other projects within the same category. Each year, all candidate projects for which Stage 0 studies have been completed will be submitted to the appropriate project selection teams. The teams will then decide which projects proceed to Stage 1 within the respective budget constraints for each project category. Projects not selected can be shelved or retained for reconsideration the following year. For further information on the project selection teams and the project selection procedures, refer to the “DOTD Highway Project Selection Process” manual.

Federal/ State Earmark Projects: The U.S. Congress designates funding for specific transportation projects in various legislative acts in a practice referred to as “earmarking.” The projects are often called “high priority” or “demonstration” projects. Similarly, the Louisiana Legislature earmarks funding for specific projects through the State Capital Outlay Bond Program. Stage 0 studies will be undertaken for each of these Federal and State earmarked projects. If sufficient earmarked funds remain following the completion of the Stage 0 study, the project will proceed to Stage 1. If the remaining funding is not sufficient to complete Stage 1, the Stage 0 study will either be retained for reconsideration in the future or forwarded to the appropriate project selection team for consideration subject to competition with other projects within the same category (i.e., preservation, operations, safety, additional capacity).

Special Category Projects: The DOTD administers federal highway funds for local governments and manages other special programs.

- For Urban Systems and CMAQ funded projects, the decisions regarding which projects will proceed to Stage 1 will be made within the MPO planning process. Normally, the MPO staff will complete the Stage 0 studies and submit them to

DOTD for review. Similarly, local governments make the decisions for off-system bridge projects. Completed Stage 0 studies are then submitted to the DOTD for review.

- For highway/railroad at-grade crossing improvement projects and system preservation projects, preparation of the Stage 0 studies and selection of projects to proceed to Stage 1 occurs almost simultaneously. This is a result of the repetitive nature of these projects and the extremely low frequency of adverse impacts to the natural or human environments.
- Enhancement projects are a unique case. A wide range of entities submit applications. The completed applications serve as the Stage 0 studies. The DOTD districts review these applications and prioritize them within each respective district. They also coordinate with the MPO for those proposed projects located within the metropolitan planning area in each district.

Regardless of the type of project, once the decision is made to proceed to Stage 1, the appropriate Program Manager is notified and provided with a copy of the Stage 0 study. It is the Program Manager's responsibility to gain approval of Stage 1 funding, to ensure that a project number is obtained by the appropriate departmental personnel, and to make the necessary contacts to initiate Stage 1. The Program Manager is responsible for sending a memorandum to the Environmental Section indicating that the project was selected and approved for further processing through Stage 1.

1.4 Process Steps for all Project Types

The steps for completing a Stage 0 study are outlined in Figure 1-3. The Stage 0 process for all of the different project types is discussed in detail throughout this manual. The first step in the process is defining and articulating the purpose and need for the project.

The results of the subsequent steps determine the “practical feasibility” of the projects and provide much of the information needed to make rational decisions regarding the allocation of available funds among competing projects. “Practical feasibility” refers to the technical, environmental, and financial aspects of the project. Can the project be implemented from a technical standpoint? Are there obvious environmental impacts that would preclude implementation? Is the project cost within the realm of possibility for current DOTD funding programs, or will special dedicated funding be required?

The next step in the Stage 0 process is to identify and describe a project that will address the purpose and need. This includes describing the existing facility; providing technical data such as current ADT, physical condition, etc.; describing the proposed improvements; and providing any technical analyses (i.e., safety, capacity, air quality, point-of-access, etc). The project description should include the basic design criteria and major design features. Any design exceptions for the project should be presented along with the rationale for them. For projects requiring right-of-way or when practical, an aerial photograph with the proposed improvements and approximate required right-of-way limits superimposed should be included as part of the Stage 0 study. The Real Estate and Utility Sections will conduct a detailed investigation of the right-of-way and utility relocation impacts. Any reasonable alternatives to the initial project concept should be identified and described. Lastly, the management of traffic and maintenance of access to adjacent properties during construction should be described.

The third step in the process is a preliminary review of the project with regard to the natural and human environment. This begins with defining the context of the area (adjacent land uses, community features, etc.) and then performing an initial check for potential impacts to the environment. This can generally be accomplished by conducting a windshield survey and researching a few websites. It is important to employ “context sensitive solutions” during all stages of the project delivery process. Context sensitive solution principles require designers to work with communities, resource agencies and local officials and to incorporate feedback from the communities to ensure the project meets their local needs. If the project proceeds to Stage 1, a detailed environmental review will be conducted. Thus, the purpose of the preliminary environmental review in Stage 0 is to identify known potential impacts that could affect the cost or feasibility of the project. Also, a value planning / value engineering assessment, an environmental inventory, and constructability review on selected projects should be performed. Any foreseeable construction problems will be identified with recommendations for solutions. Refer to section 1.5 for additional project considerations.

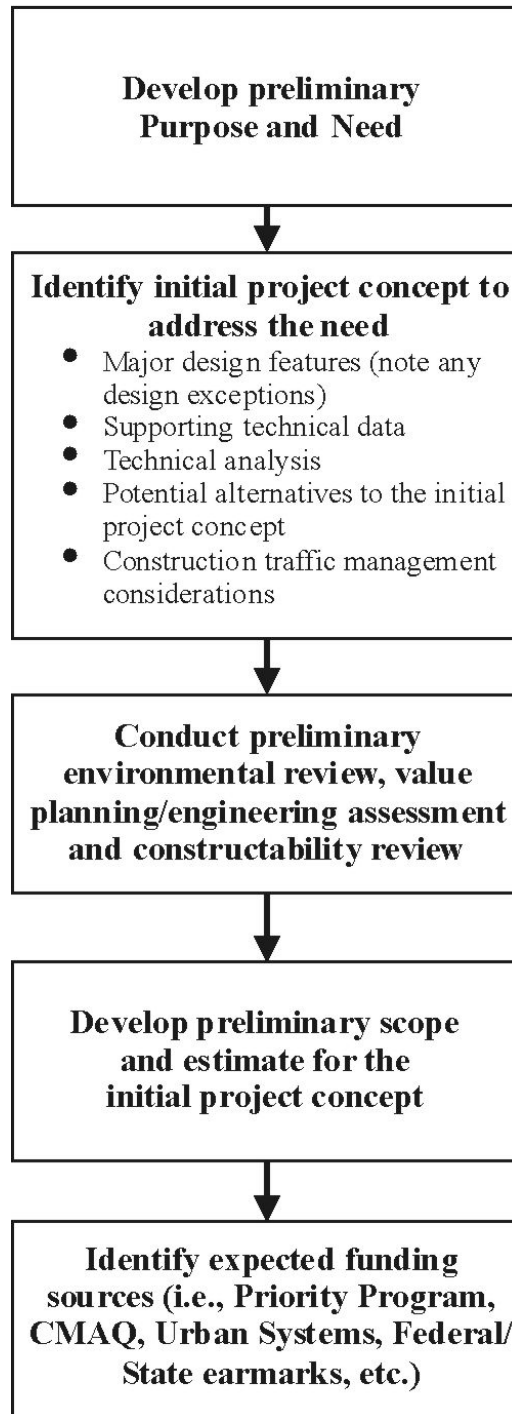
The fourth step in the process is to develop the preliminary cost estimate for the project. The project costs should include estimates for right-of-way, utility relocations, construction (including traffic management during construction), environmental studies, mitigation, and design engineering. Guidance on preparing costs estimates for each stage in the project development process, including Stage 0, has been prepared by the Project Development Division (see Appendix II: Estimating Process in the DOTD Project Delivery Manual).

Finally, the last step in the Stage 0 process is to identify expected funding sources. If the project is being submitted for consideration under the DOTD's regular construction program, then the Highway Priority Program category should be listed. However, if other funding is available to cover a portion of the cost, the source(s) and amount(s) should be listed as this can affect the priority that the project is given by the project selection teams. If the project has its own funding (i.e., Federal/State earmark, Urban Systems, CMAQ, etc.), then the source(s) and amount(s) should be listed.

All safety Stage 0 studies are protected under Title 23 U.S.C. 409. The following statement should be included in these studies: "This document is exempt from discovery or admission under Title 23 U.S.C. 409."

Any significant changes to the project scope or budget must be submitted to the Program Manager for approval. Changes to the budget may need to be brought to the Project Delivery Steering Committee, particularly if the Budget Partition is impacted.

Stage 0 Process



Stage 0 Process
Figure 1-3

1.5 Additional Project Considerations

The Stage 0 process is an opportunity to consider items which may have a negative and/or a positive impact on a project. Some of the items that should be considered when determining the feasibility of a project are listed below:

- Transit operations
- Intelligent Transportation System (ITS) applications
- Landscape design
- Lighting and other electrical considerations
- Adjacent railroads and/or railroad crossings

Transit operations should be considered during the Stage 0 process for projects in areas that have an existing transit system as well as in areas where a transit system is planned. For metropolitan areas, transit operation plans need to be coordinated through the MPO. Transit operation plans for other areas should be coordinated through the DOTD Public Transportation Section.

ITS applications should be considered throughout DOTD's project delivery process. DOTD's role in ITS planning, deployment, management, and operations is to augment the existing highway planning, construction, and maintenance practices that employ conventional traffic control devices.

Landscape design should be considered early in the project delivery process. Landscape design provides vegetation for aesthetics, safety, and erosion control purposes. It can also aid in lowering construction and maintenance costs.

Lighting and other electrical considerations should be considered during the Stage 0 process. In addition to lighting, these applications include consideration of future traffic signals, electrical facilities, and other electrical engineering needs.

Any adjacent railroads and/or railroad crossings should be noted in the Stage 0 report. Early coordination with DOTD's Systems Engineering Section is recommended.

1.6 Responsibility

The responsibility for preparing and checking the Stage 0 study for completeness and giving final approval is indicated in the following matrix. While Stage 0 activities will be conducted in various sections throughout DOTD depending on the nature of the project, the Project Scoping Unit within the Office of Planning and Programming is available to provide advice and assistance in preparing Stage 0 studies. The Stage 0 process for each of the project categories / subcategories listed in the matrix is discussed in detail in the following chapters.

Stage 0 Responsibility Matrix

Project Category/Subcategory	Prepare Stage 0 Study	Check Completeness / Approve Stage 0 Study
System Preservation		
Non-Interstate Pavement	Districts	Systems Engineering Section
Interstate Pavement	Districts / Systems Engineering Section	Systems Engineering Section
Contract Maintenance	Districts	Systems Engineering Section
Bridge (on-system)	Districts / Bridge Design Section	Bridge Design Section
Bridge (off-system)	Local Governments	Road Design Section
Operations/Motorist Services		
ITS	MPOs / ITS Section	ITS Section
MAP	N/A	N/A
Traffic Control Devices Replacement/Upgrade	Districts / Traffic Engineering Management Section	Traffic Engineering Management Section
TSM	Districts	Districts
Roadway Flooding	Districts	Hydraulics Section
Weigh Stations	Weight Enforcement Section	Weight Enforcement Section
Rest Areas	Systems Engineering Section	Systems Engineering Section
Movable Bridge P. M.	Bridge Maintenance and Facilities Maintenance Section	Bridge Maintenance and Facilities Maintenance Section
Highway Safety		
Highways	Districts / Road Design Section / Highway Safety Section / Transportation Planning Section	Highway Safety Section
RR Crossing Upgrades	Systems Engineering Section	Systems Engineering Section
Additional Capacity/ New Infrastructure		
Regular Program	Districts / Road Design Section / Transportation Planning Section	Transportation Planning Section
Corridor Upgrade	Districts / Road Design Section / Transportation Planning Section	Transportation Planning Section
TIMED	N/A	N/A
Other		
Enhancements	Project Applicant	Road Design Section
Urban Systems / CMAQ	MPO	Transportation Planning Section
Federal / State Earmarks (i.e., Demo, Bond)	MPO / Transportation Planning Section	Transportation Planning Section

Note: The Project Scoping Unit in the Transportation Planning Section is available to provide advice and assistance in preparing Stage 0 studies.