

# INSTRUCTIONAL MEMORANDUMS

## To Local Public Agencies



To: Counties and Cities	Date: February 16, 2007
From: Office of Local Systems	I.M. No. 3.002
Subject: Federal-aid Project Scheduling	

**Contents:** This Instructional Memorandum (I.M.) includes guidelines and information to assist a Local Public Agency (LPA) in developing realistic, project-specific schedules for development of their Federal-aid projects let by the Iowa Department of Transportation (Iowa DOT).

### Introduction

There are many factors that may affect the project development schedule, including: complexity of the project design, right-of-way needs, impacts to environmental or cultural resources, use of railroad property or facilities, relocation or adjustments to utilities, and various permits, approvals, or notifications required by other State or Federal agencies.

Each project is different, so it is not possible to develop a project schedule that is appropriate for all projects. Nevertheless, this I.M. gives some assistance to LPAs by providing an estimated project schedule for four different general types of projects, which are further described on pages 5-8 of this I.M.:

- Type 1: Programmatic Categorical Exclusion, No Right-of-Way Needs
- Type 2: Programmatic or Individual Categorical Exclusion, Minor Right-of-Way Needs
- Type 3: Environmental Assessment, Moderate Right-of-Way Needs
- Type 4: Environmental Impact Statement, Significant Right-of-Way Needs

The purpose of the estimated schedules is to provide a starting point for the LPA to develop their own, project-specific schedule, based on the unique circumstances of the project.

### Description of Project Tasks and General Assumptions

For simplicity, the estimated project schedules have been broken down into several main project tasks. In reality, each of these tasks is composed of many subtasks. Each main task is identified and described below, including a discussion of the assumptions or conditions that apply to all of the general project types.

#### Consultant Selection and Negotiation

**Description:** This task begins with the decision to hire a consultant and ends with the execution of a consultant agreement. It may include, as applicable: formation of a selection committee, preparation of a Request for Proposal (RFP), solicitation of prospective consultants, evaluation of the consultants, selection of a consultant, contract negotiations, Iowa DOT reviews, and Federal Highway Administration (FHWA) Authorization. For more information, refer to [I.M. 3.305](#), Federal Participation in Consultant Costs.

#### Assumptions / Conditions:

- A consultant will be used and Federal funds will be requested for reimbursement of the consultant costs. If a consultant will be hired, but the consultant costs will not be reimbursed with Federal funds, this task may not require as much time.
- If the design will be performed in-house without Federal participation, this task can be eliminated. However, if Federal participation for in-house design work is desired, a similar amount of time should be included for the reviews required by [I.M. 3.310](#), Federal Participation in In-House Engineering Costs.
- If a complete scope of services and fees are not negotiated up-front, but instead will be accomplished using a phased approach, the project schedule should be adjusted to include additional time for negotiating supplemental agreement(s) and the necessary Iowa DOT reviews and FHWA authorizations.

#### Prepare Concept Statement

**Description:** This task begins when the LPA or consultant downloads and reviews the Concept Statement (Form 517001) and instructions and ends when the LPA or consultant submits the Concept Statement to the

Iowa DOT Administering Office. This task includes gathering all necessary information to complete the form. For more information, refer to [I.M. 3.105](#), Concept Statement Instructions.

Assumptions / Conditions:

- This task is dependant on the Consultant Selection task, because it is assumed the consultant will prepare the Concept Statement.
- If the LPA is preparing the Concept Statement themselves, this task may be adjusted accordingly, both in duration and dependency.

#### FHWA Environmental Concurrence

Description: This task includes all of the necessary environmental reviews, studies, and documentation to satisfy the requirements of the National Environmental Policy Act (NEPA) process. For more information, refer to [I.M. 3.112](#), FHWA Environmental Concurrence Process.

- For Type 1 and Type 2 projects, this task begins when the Concept Statement is forwarded by the Administering Office to the Office of Location and Environment and ends when the Office of Location and Environment sends a memo to the LPA stating that the project has received FHWA Environmental Concurrence.
- For Type 3 and Type 4 projects, the information required by the Concept Statement is usually not available until the necessary environmental studies have been completed. Therefore, for these types of projects, this task begins when the LPA or consultant contacts the Office of Location and Environment to discuss the probable levels of environmental documentation required and ends when the Iowa DOT and the FHWA have approved the final environmental document.

Assumptions / Conditions:

- For Type 1 and Type 2 projects, this task is dependant on the Prepare Concept Statement task.
- For Type 3 and Type 4 projects, this task is dependant on the Consultant Selection task, because it is assumed that a consultant will be hired to complete the necessary environmental studies and documentation.

#### Prepare Preliminary Plans

Description: This task begins with the preparation of the plans and ends with submittal of the plans to the Iowa DOT Administering Office. It includes all work required to produce a set of Preliminary Plans, including, as applicable: survey and mapping, preliminary design, plan and profile layouts, identification of preliminary right-of-way needs, internal reviews by the consultant, and reviews by the LPA. For guidance in preparing Preliminary Plans, refer to [I.M. 3.405](#), Preliminary Plans, and if applicable, [I.M. 3.410](#), Preliminary Bridge or Culvert Plans. Refer also to [I.M. 3.005](#), Project Development Submittal Dates and Information, for other documents and information that should be included with the Preliminary Plan submittal.

Assumptions / Conditions:

- This task is dependant on the Consultant Selection task, because it is assumed that a consultant will be hired to prepare the project plans.
- If the LPA is preparing the plans with their own staff, this task may be adjusted accordingly.
- Since this task includes the LPA's review of the plans, the LPA and consultant should discuss the amount of time that will be required and adjust the duration of this task if necessary.

#### DOT Preliminary Plan Review

Description: This task begins when the Preliminary Plans are received by the Administering Office and ends when plans are returned with comments to the LPA and / or consultant. It includes the necessary reviews by the Administering Office and other DOT offices if required, including a review of the Concept Statement. If required for a bridge or culvert project, this task also includes a hydraulic review by the Iowa DOT Office of Bridges and Structures.

Assumptions / Conditions:

- This task is dependant on the Prepare Concept Statement task, because the Iowa DOT's review of the plans is based on the design values shown on the Concept Statement.
- This task is also dependant on the Prepare Preliminary Plans task.
- If the project is on a Primary or Interstate Highway, an additional 1-2 weeks may be required for this task.

## Right-of-Way (ROW) – Descriptions and Appraisals

Description: This task begins with an assessment of the project's right-of-way needs and concludes when the LPA is ready to notify the affected property owners and begin negotiations. This task includes activities such as: preparing of right-of-way plans, plats, legal descriptions, title reports, appraisals, and review appraisals. If Federal reimbursement for right-of-way costs will be requested, this task also includes the preparation and submittal of a request for FHWA Authorization by the LPA, as well as the review and approval required by the Iowa DOT and FHWA.

### Assumptions / Conditions:

- This task is shown as being dependant on completion the Prepare Preliminary Plans task. However, some of these activities may begin prior to completion of the Preliminary Plans.
- This task may be conducted concurrently with the DOT Preliminary Plan Review task. However, changes to the Preliminary Plans in response to Iowa DOT comments may affect the project's right-of-way needs, which could lengthen the duration of this task. Therefore, the Iowa DOT recommends that this task not begin until after the DOT Preliminary Plan Review task is complete.
- This task may also be conducted concurrently with the FHWA Environmental Concurrence task. However, for projects that will require an Environmental Assessment or Environmental Impact Statement document, the final right-of-way needs cannot be completely determined until after the FHWA Environmental Concurrence task is complete. Therefore, the Iowa DOT strongly recommends that for such projects, descriptions and appraisals not begin until the FHWA Environmental Concurrence task is complete.

## Right-of-Way (ROW) – Negotiate and Acquire

Description: This task begins when the LPA initiates negotiations with the affected property owners and ends when all of the necessary property rights have been obtained, as documented by the Project Development Certification (Form 730002) (see [I.M. 3.750](#), Project Development Certification Instructions). This task may include, as applicable: the required notifications, negotiations, execution of the easement or acquisition documents, relocations, and payments to the property owners. For more information about the required right-of-way procedures, refer to [I.M. 3.605](#), Right-of-Way Acquisition.

### Assumptions / Conditions:

- This task is dependant on the FHWA Environmental Concurrence task, because right-of-way acquisition activities, including any type of discussion of property values with land owners, shall not begin until after the NEPA process is complete.
- This task is also dependant on the ROW – Descriptions and Appraisals task.
- If the project requires work on railroad right-of-way, this task should also include some time to negotiate and execute an agreement with the railroad. Coordination with the railroad may require only a few weeks, or it may require a year or more, depending on how the project affects the railroad's operations. For more information about the process, refer to [I.M. 3.670](#), Work on Railroad Right-of-Way, and [I.M. 3.680](#), Federal-aid Projects Involving Railroads. (**Note:** Coordination with the railroad can and should begin prior to the FHWA Environmental Concurrence; however, if railroad property must be acquired, such acquisitions shall not begin until after FHWA Environmental Concurrence has been received.)
- If the project requires utilities to relocate that are not required to move at their own expense (i.e., a relocation agreement will be required), this task should also include some time to negotiate and execute the necessary utility agreement(s). For more information, refer to [I.M. 3.640](#), Utility Accommodation and Coordination. (**Note:** Coordination with the utility can and should begin prior to the FHWA Environmental Concurrence; however, if utility property must be acquired, such acquisitions shall not begin until after FHWA Environmental Concurrence has been received.)

## Prepare Check Plans

Description: This task begins with review of the Iowa DOT comments on the Preliminary Plans and ends with submittal of the Check Plans to the Administering Office. It includes all work required to address the Preliminary Plan comments and produce a complete set of Check Plans, including, as applicable: final design, establishment of final right-of-way needs, calculation of bid quantities, preparation of cost estimates, Special Provisions, internal reviews by the consultant, and reviews by the LPA. For guidance in preparing Check Plans, refer to [I.M. 3.505](#), Check and Final Plans, and if applicable, I.M. [3.510](#), Check and Final Bridge or

Culvert Plans. Refer also to [I.M. 3.005](#), Project Development Submittal Dates and Information, for other documents and information that should be included with the Check Plan submittal.

Assumptions / Conditions:

- This task is dependant on the DOT Preliminary Plan Review task.
- This task is also dependant on the FHWA Environmental Concurrence task, because final design activities (which include preparation of check plans) shall not begin until after the NEPA process is complete.
- Since this task includes the LPA's review of the plans, the LPA and consultant should discuss the amount of time that will be required and adjust the duration of this task if necessary.

#### DOT Check Plan Review

Description: This task begins when the Check Plans are received by the Administering Office and ends when plans are returned with comments to the LPA and / or consultant. It includes the necessary reviews by the Administering Office and other DOT offices if required. If required for a bridge or culvert project, this task also includes a structural review by the Iowa DOT Office of Bridges and Structures.

Assumptions / Conditions:

- This task is dependant on the Prepare Check Plans task.
- The duration of this task assumes that the Check Plans are complete. Incomplete plans may require re-submittal as Check Plans.
- If the project is on a Primary or Interstate Highway, an additional 1-2 weeks may be required for this task.

#### Prepare Final Plans

Description: This task begins with review of the Iowa DOT comments on the Check Plans and ends with submittal of the Final Plans to the Administering Office. It includes all work required to address the Check Plan comments and produce a complete set of Final Plans, including submittal of the Project Development Certification (Form 730002). Refer also to [I.M. 3.005](#), Project Development Submittal Dates and Information, for other documents and information that should be included with the Final Plan submittal.

Assumptions / Conditions:

- This task is dependant on the DOT Check Plan Review task.

#### DOT Final Plan Review

Description: This task begins when the Final Plans are received by the Administering Office and ends when plans are turned-in to the Iowa DOT Office of Contracts for letting. It includes verification by the Administering Office that the Check Plan comments have been addressed, a review of the Project Development Certification, and any final plan revisions and re-submittals that may be required.

Assumptions / Conditions:

- This task is dependant on the Prepare Final Plans task.
- The duration of this task assumes that the Final Plans are complete. Incomplete plans may require re-submittal as Final Plans.

#### Letting Process

Description: This task begins when Final Plans and associated information are submitted for letting to the Office of Contracts and ends when the bids are opened and the apparent low-bidder is announced. The Iowa DOT letting process includes the following activities, as applicable: preparation of cost estimates, establishment of contract periods, preparation of bid proposals, DBE goal setting, FHWA Authorization, distribution of addenda, advertisement, and opening of bids. This task also includes additional review of the project plans and specifications for conformance to the Iowa DOT Standard Specifications and letting process. Often, this review results in some additional minor revisions to the plans. For more information, refer to [I.M. 3.730](#), Iowa DOT Letting Process.

Assumptions / Conditions:

- This task is dependant on the DOT Final Plan Review and the Acquire Right-of-Way tasks.

- This task assumes that all of the required project clearances have been obtained, or a Public Interest Finding has been submitted by the LPA and approved by the Administering Office to allow the project to enter the letting process without all of the needed clearances. For more information, refer to [I.M. 3.760](#), Public Interest Findings.

A discussion of each general project type is included below. Each discussion includes a description of the general project type, an estimated schedule for project development, and a list of additional specific assumptions that have been made or conditions that apply, if any. For purposes of comparison, each of the estimated project schedules begins on January 1, 2007. Actual projects may begin the development process at any time.

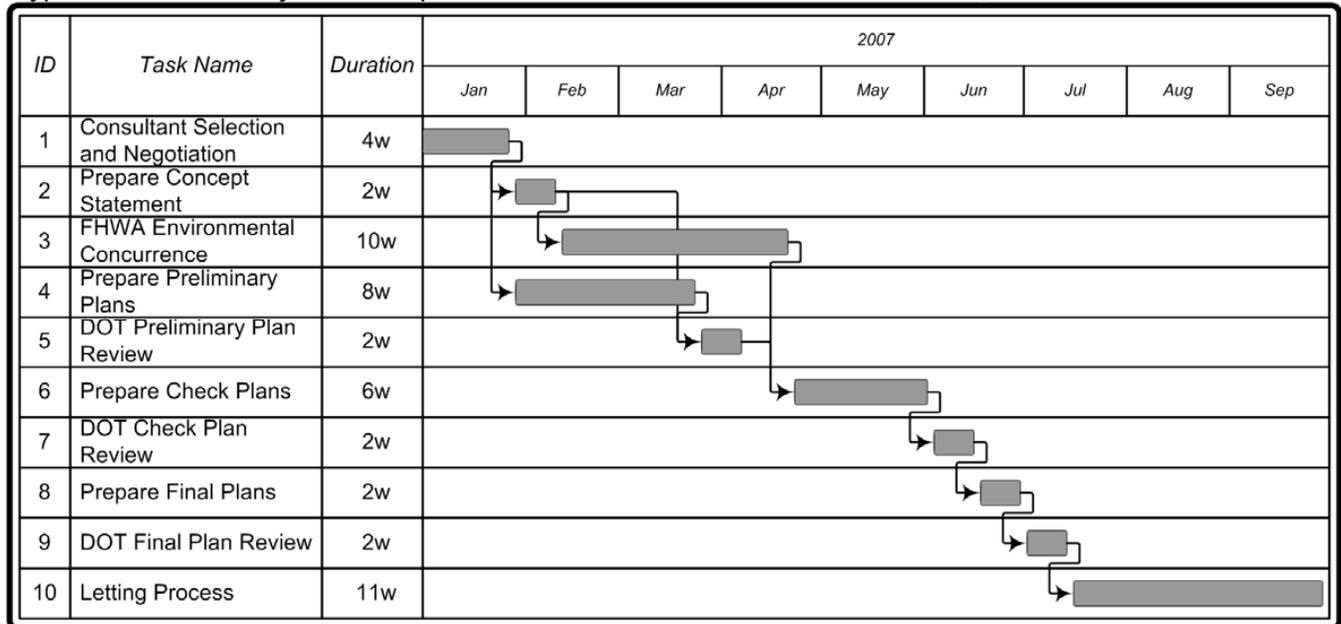
**Type 1: Programmatic Categorical Exclusion, No Right-of-Way Needs**

The work required for these projects is usually minor in scope and duration. These projects do not require any work outside of the existing right-of-way. Typical projects include any of the following:

- non-construction work, such as research or planning studies;
- routine maintenance work, such as crack sealing or patching;
- resurfacing, restoration, rehabilitation or reconstruction of roadways, structures, or trails;
- traffic signalization, signing or lighting projects;
- landscaping or seeding; and
- Emergency Relief (ER) funded projects.

Type 1 Estimated Project Development Schedule

Typical Development Time: 9 months



Target Letting Date ◆

Additional Assumptions / Conditions

1. No additional right-of-way or property rights of any kind are required.
2. No railroad crossings are present within or adjacent to the project work area.
3. Task 1: The abbreviated consultant selection process is used and pre-audit is not required.
4. Task 3: FHWA Environmental Concurrence is obtained as a Programmatic CE. To qualify, the project must be non-controversial and not have any impacts to environmental or cultural resources, including potentially historic properties, archeological sites, recreational areas, or wildlife refuges.
5. Tasks 5 and 7: If a bridge or culvert project, a hydraulic or structural review is not required.

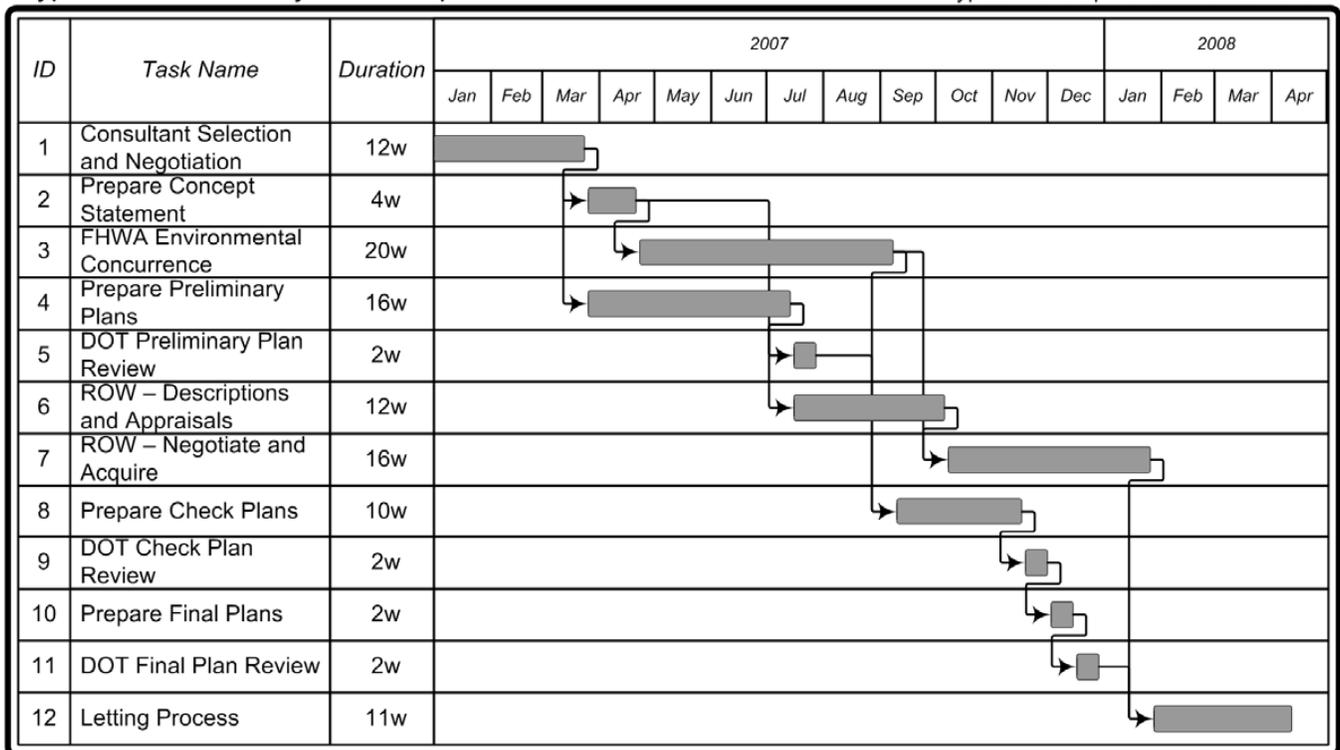
**Type 2: Programmatic or Individual Categorical Exclusion, Minor Right-of-Way Needs**

These projects are more complex than the Type 1 projects. They typically require several different design disciplines and / or types of construction. They usually involve new construction, complete reconstruction, or widening of roads, bridges, or trails. These projects may include a limited amount of right-of-way acquisition, but do not have substantial impacts on surrounding properties or the environment. Typical projects include any of the following:

- highway, street, or bridge construction or reconstruction;
- bridge construction on new alignment;
- rehabilitation or replacement of historical bridges;
- major urban street reconstruction; and
- construction of new recreational trails outside of the existing right-of-way.

**Type 2 Estimated Project Development Schedule**

Typical Development Time: 16 months



Target Letting Date ◆

**Additional Assumptions / Conditions**

1. Task 1: The full consultant selection process is used and / or a pre-audit is required.
2. Task 3: FHWA Environmental Concurrence is obtained either as Programmatic or Individual CE. To qualify, the project must be non-controversial and have no significant impacts to environmental or cultural resources, including potentially historic properties, archeological sites, recreational areas, or wildlife refuges.
3. Tasks 6 and 7:
  - Minor amounts additional right-of-way or property rights (about 1-5 parcels) may be required and all acquisitions are relatively simple. Most can be valued using the Appraisal Waiver process, as described in Chapter 3 of the Office of Right of Way's [LPA Manual](#).
  - No complete acquisitions or relocations of residential or business properties are required.
  - No condemnations are required.
  - Some utility relocations may be required, but most utilities are located within the existing right-of-way and are required to move at their own expense.
  - If a railroad crossing is present within or adjacent to the project work area, acquisitions of railroad property or adjustments to railroad facilities are not required.
4. Tasks 5 and 9: If a bridge or culvert project, a hydraulic or structural review is required.

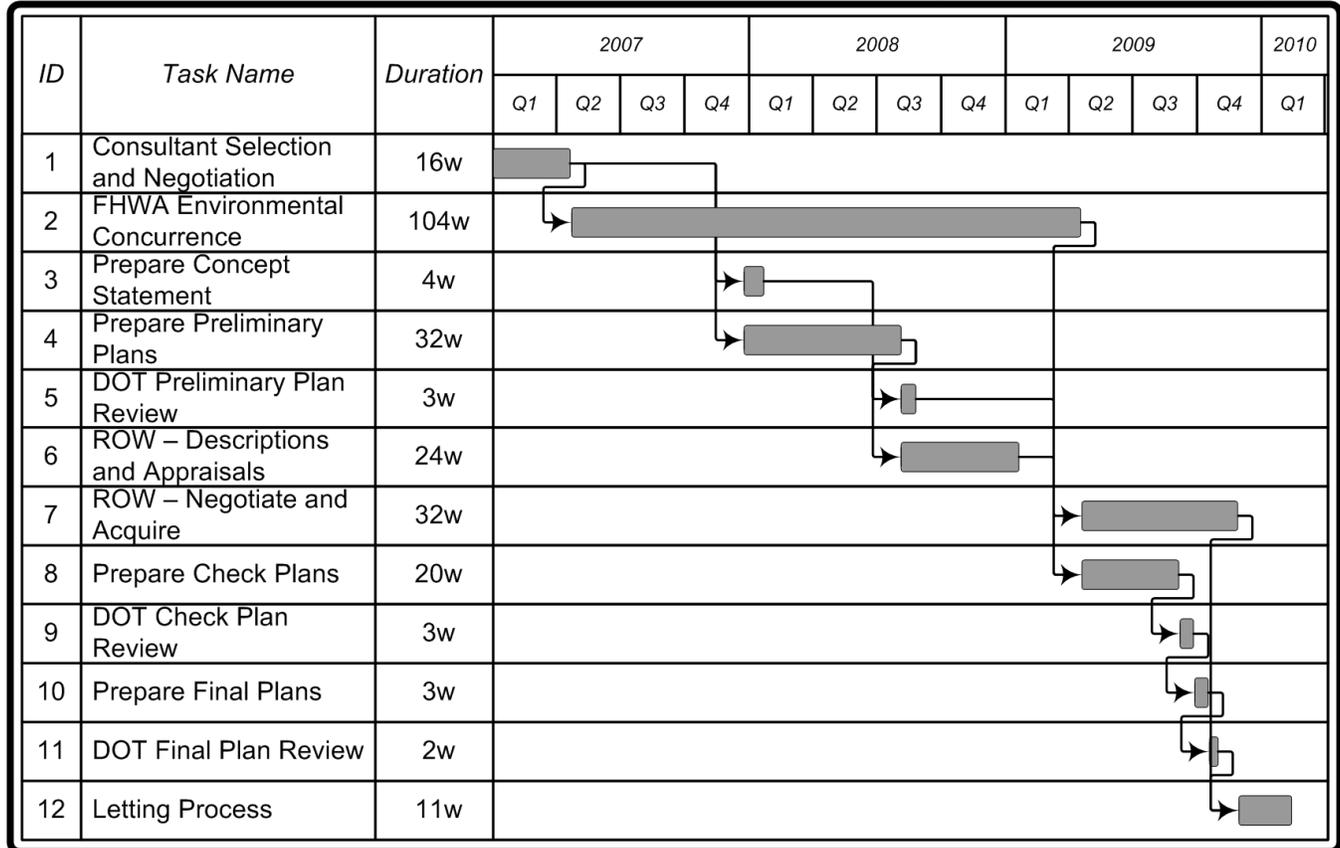
### Type 3: Environmental Assessment, Moderate Right-of-Way Needs

These projects are similar to Type 2 projects, except that the level of environmental or social impacts may be more significant, requiring additional environmental review. Typical projects include any of the following:

- highway, street, or bridge construction or reconstruction;
- bridge construction on new alignment;
- rehabilitation or replacement of historical bridges; and
- major urban street construction or reconstruction.

#### Type 3 Estimated Project Development Schedule

Typical Development Time: 3 years



Target Letting Date

#### Additional Assumptions / Conditions

1. Task 1: The full consultant selection process is used and a pre-audit is required.
2. Task 2: FHWA Environmental Concurrence requires preparation of an Environmental Assessment (EA) document.
3. Tasks 6 and 7:
  - Moderate amounts of additional right-of-way or property rights (about 5-10 parcels) are required. Some property valuations may require the Value Finding Appraisal Report, as described in the Office of Right of Way's [Appraisal Operational Manual](#).
  - No complete acquisitions or relocations of residential or business properties are required.
  - A few parcels (about 1-5) must be condemned.
  - If a railroad crossing is present within the project work area, minor acquisitions of railroad property or adjustments to railroad facilities are required.
4. Tasks 5 and 9: If a bridge or culvert project, a hydraulic or structural review is required.

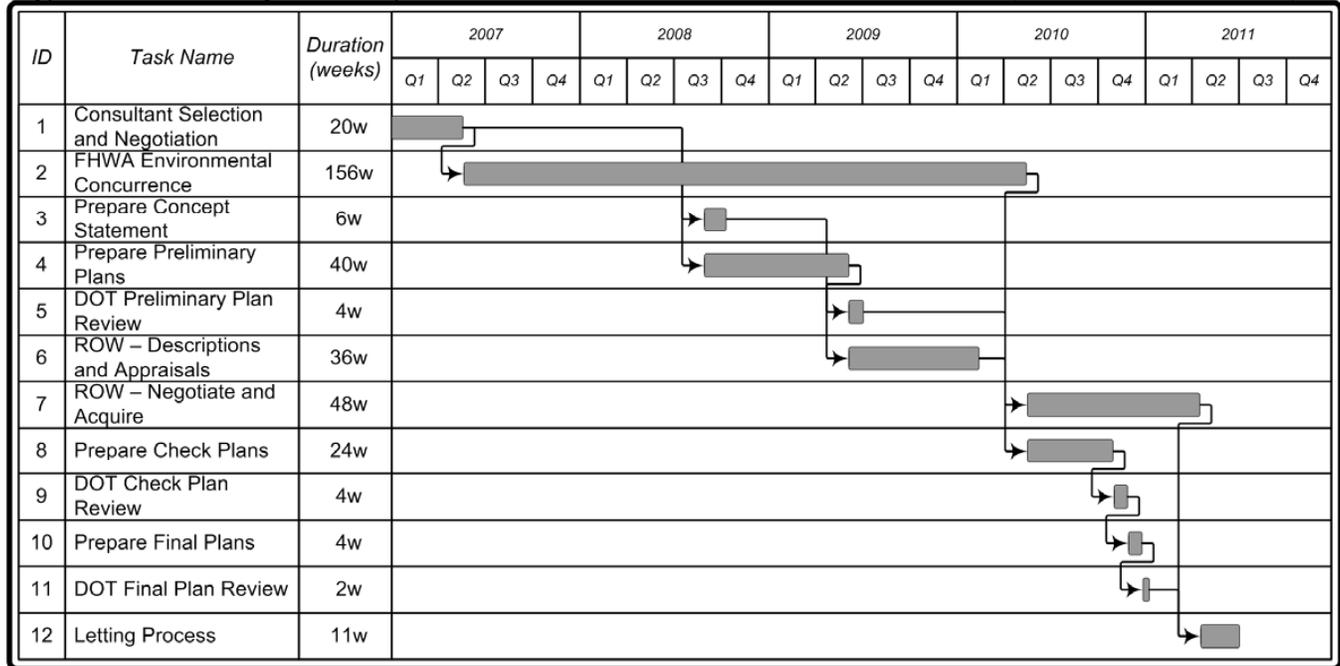
### Type 4: Environmental Impact Statement, Significant Right-of-Way Needs

These projects often usually involve all new construction on new alignment or significant expansion of the roadway or structure footprint. Typical projects include:

- widening from 2 lanes to 4 lanes or other major capacity improvements;
- construction or replacement of major river bridges;
- construction of bypasses around urban areas; and
- major roadway realignment through urban areas.

Type 4 Estimated Project Development Schedule

Typical Development Time: 4.5 years



Target Letting Date ◆

#### Additional Assumptions / Conditions

1. Task 1: The full consultant selection process is used and a pre-audit is required.
2. Task 2: FHWA Environmental Concurrence requires preparation of an Environmental Impact Statement (EIS) document.
3. Tasks 6 and 7:
  - Significant amounts of additional right-of-way or property rights (more than 10 parcels) are required. Most property valuations will require use of the Detailed Appraisal Report, as described in the Office of Right of Way's [Appraisal Operational Manual](#).
  - A few complete acquisitions or relocations of residential or business properties (about 1-5) are required.
  - Several parcels (more than 5) must be condemned.
  - If a railroad crossing is present within the project work area, significant acquisitions of railroad property or adjustments to railroad facilities are required.
4. Tasks 5 and 9: If a bridge or culvert project, a hydraulic or structural review is required.