



ATTACHMENT E INCENTIVE/DISINCENTIVE DRAFT GUIDANCE

DEVELOPED FOR *CONSTRUCTION PLANNING*
DURING THE *DESIGN PHASE*

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DISCLAIMER - The intent of this guideline is to assist Designer when creating a Contract Time Determination Study; primarily eliminating a need to create standardized coding, reporting, formatting and to assist in the general schedule set up only. This tool-kit information is provided for informational purposes and is available for use as a schedule development guideline only. This information may not reflect specific contract requirements. MassDOT does not guarantee the schedule information to be free from errors or inconsistencies, and the presence of such errors or inconsistencies does not relieve the Designer or a Contractor, from preparing schedule submittals in accordance with the specific Contract requirements and the requirements of the Engineer. MassDOT makes no representations or warranties of any kind, express or implied, about the accuracy, reliability, or completeness with respect to the guidance herein or any of the information, services, or related content contained therein for any purpose.

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MassDOT reserves the right to update, remove, or amend any of the information contained in this guideline as needed without prior notice. For updates, please refer to the MassDOT website prior to starting schedule submissions.

The following is a **draft version** of the Incentive/Disincentive Engineering Directive to be issued in 2014:

Draft Incentive Disincentive Engineering Directive

The purpose of this Engineering Directive is to provide guidance for evaluating proposed construction projects to determine if an Incentive/Disincentive (I/D) provision is appropriate and also to describe a procedure for implementing these provisions when applicable.

This Engineering Directive is applicable to all Design, Bid, Build projects with an office estimate greater than \$10 Million identified as one of the following project types in ProjectInfo (MassDOT's design phase repository): Bridge Reconstruction/Rehab, Bridge Replacement, Hwy Reconstr – Added Capacity, Hwy Reconstr – Major Widening, Hwy Reconstr – Restr/Rehab, Hwy Reconstr – No Added Capacity, Hwy Reconstr – Minor Widening, New Bridge, Painting – Structural, Reclamation, Resurfacing, Tunnels. Projects that involve Accelerated Construction Techniques shall also be subject to this Engineering Directive regardless of the amount of the office estimate.

FHWA's Technical Advisory T 5080.10, dated April 4, 2011, defines an I/D provision as follows: "...a contract provision which compensates the contractor a specified amount of money for each day identified critical work is completed ahead of schedule and assesses a deduction for each day the contractor overruns the I/D time." This Technical Advisory also indicates that I/D provisions should not be used routinely. "Generally, I/D provisions should be limited to those projects whose construction would severely disrupt highway traffic or highway services, significantly increase road user costs, have significant impact on adjacent neighborhoods or businesses, or close a gap thereby providing a major improvement in the highway system."

Upon receipt of the 25% Submittal, the Project Manager is responsible for evaluating the project utilizing Section I, Project Characteristics of the Incentive Disincentive Checklist included in this Engineering Directive. This checklist is intended to be used as a tool to evaluate the applicability of an I/D provision based on various characteristics of the project. If, as a result of performing this evaluation, it is determined that the project is likely an appropriate candidate for an I/D provision, the Project Manager is responsible for ensuring that the Construction Advertising Project Estimator (CAPE) includes an amount equal to 5% of the project office estimate under ITEM 999.785 INCENTIVE. The CAPE shall also reflect an amount of \$0.00 under ITEM 999.786 DISINCENTIVE. For federal aid projects these costs must be incorporated into the Total Federal Participating Construction Costs for purposes of programming the project on the STIP.

Upon receipt of the 75% Submittal, the Project Manager is responsible for updating Section 1, of the Incentive Disincentive Checklist and preparing Section II Project Requirements. If the project meets all the requirements of the checklist, the Project Manager is responsible for obtaining the following information from the Designer of Record:

- A proposed construction schedule that identifies specific milestones for a potential I/D Provision
- The duration of each milestone to be considered based on both a standard 8-hour work day and an extended work day
- The estimated construction costs associated with the relevant milestones

- For projects that do not require a detour, the expected increase in time necessary to pass through the work zone based on the length of the work zone and the anticipated reduction in travel speed due to a reduction in the number of lanes, reduction in the width of travel lanes, reduction in the offset to obstructions or speed reductions.
- For projects involving a detour, the route and increased time required to travel the proposed detour.

The Project Manager will then be responsible for preparing the I/D Worksheet using the information provided by the designer of record. If the project meets the requirements of the checklist and the calculated I/D Daily amount is between \$10,000 and \$20,000 per day, the Project Manager will prepare a transmittal from the Deputy Chief Engineer of Design to the Deputy Chief Engineer for Construction requesting a determination regarding the overall strategy and amount of the I/D provisions.

This transmittal will include:

- ▶ The scope of work for the project
- ▶ The project characteristics that cause the project to be a candidate for I/D Provisions
- ▶ A verification that all of the project requirements from the checklist will be met
- ▶ A construction schedule identifying potential milestones based on extended (or) normal work-hours (if applicable)
- ▶ A narrative describing the increased travel time associated with the traffic management plan for each milestone
- ▶ Incentive Disincentive Daily Rate Worksheet

The Construction Section is responsible for approving the I/D Worksheet calculations. While the responsibility for preparing these documents rests with the MassDOT Project Manager, the Construction Section shall assist in the preparation of these documents with input from the designer of record, District Project Development staff and District Construction staff. If after reviewing these documents it is determined that an I/D provision cannot be recommended, the Deputy Chief Engineer for Construction will notify the Deputy Chief Engineer for Design.

The Deputy Chief Engineer for Construction is responsible for approving the use of I/D provisions on projects where it has been verified that the District Office can support any extended work hours or other staff resources that may be necessary to implement the provisions. Projects that cannot be supported by the District Office and may require District staff sharing or other measures to cover the requirements of the contract are subject to the approval of the Chief Engineer.

The final approval process for an I/D Provision varies depending on the project's funding source. In accordance with Chapter 233 of the Acts of 2008, An Act Financing an Accelerated Structurally Deficient Bridge Program (ABP), the Highway Division is required to obtain approval from the Commonwealth of Massachusetts Inspector General to use I/D provisions on ABP projects. This requirement is only applicable to ABP projects. For projects that are subject to FHWA oversight (refer to latest version of the Stewardship and Oversight Agreement), FHWA approval is required.

Once final approval is received, the Project Manager is responsible for ensuring that the designer of record, in coordination with the Construction Section, incorporates the appropriate special provisions into the 100% Submittal. The Project Manager is responsible for ensuring that all documents relating to the decision making process associated with the application of I/D provisions are stored in ProjectInfo in the General folder.

SCHEDULE INCENTIVE / DISINCENTIVE (I/D) CLAUSE DECISION-MAKER CHECKLIST

Date: _____ Project No.: _____ Project Manager: _____

Project Name: _____

I. Project Characteristics

In order for a project to be considered for the use of I/D provisions, the work must involve the reconstruction or rehabilitation of an existing facility that will cause severe disruptions to traffic and cause a significant increase in roadway user cost.

Projects that include extensive work to be performed by third parties, such as those involving complicated utility relocations, should not be considered.

Projects must have one or more of the following characteristics to be considered:

Answer **Y** or **N** to each of the ten (10) statements below.

Y **N**

1. ☐ ☐ The Peak Hour traffic volumes are equal to or greater than 1,600 passenger cars per hour per lane.
PC/H/LN = _____
2. ☐ ☐ The project pedestrian volumes greater than 60 pedestrians per hour.
P/H = _____
3. ☐ ☐ The project consists of work that will complete a gap in the highway system.
Name of the gap _____.
4. ☐ ☐ The project includes lane restrictions on a major bridge or bridges.
Name of the Bridge(s) _____.
5. ☐ ☐ The project involves a lengthy detour or detours.
Detour description _____

_____.
6. ☐ ☐ The project will cause a significant impact on adjacent neighborhoods, businesses or tourist destinations.
List impacted areas _____.
7. ☐ ☐ The project will cause a significant impact to services such as Police, Fire, Transit, EMS, School Buses.
List services impacted _____.

Schedule Incentive / Disincentive (I/D) Clause Decision-Maker Checklist

Date: _____ Project No.: _____ Project Manager: _____

Project Name: _____

II. Project Requirements

In addition to having one or more of the project characteristics noted under Section I of this checklist, a project must also satisfy **all** of the following requirements in order to be considered a good candidate for an I/D provision:

Answer **Y**es or **N**o to each of the four (4) statements below.

Y **N**

1. ☐ ☐ The right-of-way (ROW) Certificate for the project will be issued prior to the project advertisement and there will be no unresolved ROW issues.
2. ☐ ☐ The contract documents can clearly define the start and completion of the I/D phase or phases.
3. ☐ ☐ The plans and specifications will be complete and accurate at the time of project advertisement and clearly illustrate what is to be constructed as well as show and fully describe any unusual and/or special conditions, situations and/or restrictions the contractor must work under, all of which should reflect a low probability of extra work orders being required during construction. Only minor plan revisions and few RFIs (Requests for Information) are typical for this type of project.
4. ☐ ☐ The use of a schedule incentive/disincentive clause yields a favorable cost/benefit ratio where the cost is the Daily I/D Amount and the benefit is the calculated daily savings in road user and MassDOT – Highway Division costs.

