
Project Business Case Process and Instructions

Project and Program Delivery Manual
Chapter 2
Project Initiation
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Introduction

As part of the Iowa DOT Business Plan, the Iowa DOT initiated an objective in 2022 to develop and deliver projects more efficiently (faster, leaner, and right sized) by assessing and improving the end-to-end project delivery cycle. Success will be measured by a reduction in project delivery timelines from programming to letting, especially development of major projects in 5 years or less.

An outcome of this objective was the development of a project Business Case process to help the Department plan, program, develop and construct projects more efficiently. To initiate certain types of projects or new studies a Business Case must be submitted and approved. Business Cases must be submitted using a [standardized template](#) to facilitate further consideration for study and future programming.

Objectives

The overall goals of the Business Case process are to:

1. Provide Department staff better direction on what projects they should focus on developing.
2. Minimize work on projects with low probability of getting programmed.
3. Reduce the number of projects visible to the public that have a low probability of construction in the near term.

Business Cases will outline why the project or study is needed along with supporting data and offer potential solutions and costs. A standardized template has been developed for consistency in application of the Business Case.

Process

When is a Business Case Required?

Before initiating a study, concept, or engineering, a Business Case must be approved for any unprogrammed project proposed with the following funding:

1. Major Interstate Capacity / System Enhancement (MI) projects
2. Non-Interstate Capacity / Systems Enhancement (NR) projects
3. Interstate Stewardship (4R) projects that go beyond the minimum scope required to replace the structure using current design standards or rehab the pavement. This may include upgrading features such as interchange configuration, number of lanes, or roadway geometry.
4. Non-Interstate Bridge Modernization (BR) projects that go beyond the minimum scope required to replace the structure using current design standards. This may include upgrading features such as interchange configuration, number of lanes, or roadway geometry.
5. Any study or project where the eventual construction funding is unknown, MI or NR.

The following funding categories **do not** require a business case when the project is initiated or approved by the fund manager:

1. 4R and BR projects when the scope of work is limited to the minimum improvement required to maintain the asset.
2. Non-Interstate Pavement Modernization (3R) and Safety Specific (SR) projects that can be funded within a 5-year outlook
3. Emergency and Contingency (E&C) projects approved by staff action.
4. Requests for small repair or replacement projects (usually less than \$500k), such as pipe culvert repairs, may be submitted to the Project Scheduling Engineer (Mark Swenson) and the Program Manager (Matt Chambers) for consideration outside of the business case process.

When do Business Cases need to be submitted?

Business cases may be submitted at any time. However, for a project to be considered for inclusion in the next 5-year program, the business case must be submitted by the end of October.

Who may submit a Business Case?

Typically, these are submitted by the District Engineer or their designee. However, business cases may also be submitted by a DOT Bureau Director or their designee.

How are Business Cases reviewed and approved?

Step 1: Preliminary Review (Nov)

A preliminary review group established by the Project Management Bureau will be appointed by the Transportation Development Division (TDD) Deputy Director. This group will review submittals to ensure consistency and thoroughness and may request additional information from the submitter. This group may also offer some additional comments regarding the relative priority among the projects and other potential funding sources. This group will also prepare a summary list of Business Cases submitted for the next stage of review.

Step 2: Highway Candidate List / Approved Studies List (Dec)

The TDD Deputy Director will review the results of the preliminary Business Case review and prepare recommendations for which projects should be added to the Highway Candidate List (a list submitted annually to the Commission of projects that are candidates for inclusion in the next 5-year program) or the approved studies list maintained by the Location and Environment Bureau (for studies for unprogrammed concepts). The TDD Deputy Director will review these recommendations with the TDD Division Director and the Field Operations Division (FOD) Director. Projects approved by the TDD and FOD Division Directors will be added to the Highway Candidates List or approved studies list, as applicable. After this stage

of review is complete, an updated Business Case list will be provided to the Districts and TDD Bureau Directors for their information.

Step 3: Draft Program Recommendations (Jan-Mar)

Subject to funding availability, the TDD Deputy Director will make recommendations to the TDD and FOD Division Directors regarding which projects should be included in the draft program for consideration by the Transportation Commission. Projects selected will be identified as recommended candidates for programming.

Step 4: Final Results and Feedback (Apr)

After the draft program project lists are finalized and presented to the Commission, projects included in the draft program may begin development. Unless otherwise indicated, projects that were not included in the draft program are not approved for development.

However, a limited number of Business Cases for projects that were not included in the draft program may be approved for further development. The TDD Deputy Director will make recommendations for such projects to the TDD and FOD Division Directors. If approved by TDD and FOD Division Directors, these projects may proceed with development up through the completion of a project concept, or further if designated as such in the final Business Case List.

The TDD Deputy Director will provide a final Business Case List to the Districts and TDD Bureau Directors for their information. The final list will indicate the disposition of each Business Case and include comments as applicable. The TDD Deputy Director will review and discuss the final list with the Field Operations Leadership Team to answer questions and discuss potential improvements to the Business Case process for the next 5-year program development cycle.

Unsuccessful Business Cases will not automatically carry-over to future program development cycles. If the submitter would like an unsuccessful Business Case to be considered for future program development cycles, the Business Case shall be resubmitted with updated current cost estimates and should address previous comments as much as possible.

How will Business Cases be monitored and tracked?

The Project Management Bureau will monitor and track Business Cases and use Masterworks to track those projects that are approved to move forward. Projects will only be entered into Masterworks if they are accompanied by an approved Business Case or are in a category that doesn't require a Business Case. Projects that are not approved for continued development will be marked as inactive.

Business Case Form

The Business Case Template is available on [SharePoint here](#). The following is a listing and brief explanation of the main components required to build a Project Business Case:

Project Title

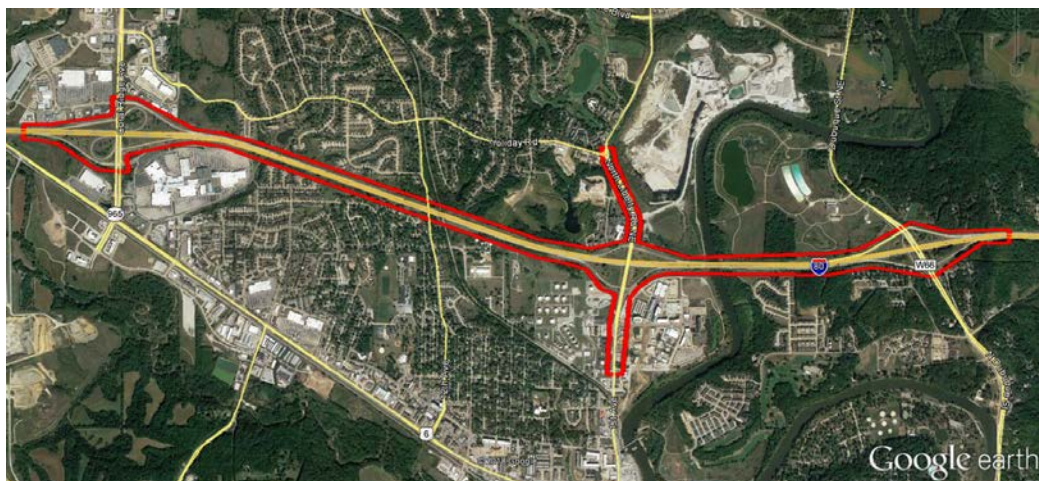
The project title should give a general description of the proposed project. An example may look like: *Interchange at US 30/F Ave at Meskwaki Casino*

Project Location

The project location should provide general information regarding the location of the project and include the following:

County, Route, and a Map. A separate tab is provided on the Excel template for inclusion of a map. Example wording may look like: *Tama County – US 30 and F Ave*

Figure 4-1 Example Project Location Map



Project Description

The project description should cover what the desired project outcome will be.

Examples:

Construction of a new diamond interchange at US 30 and F Ave

Addition of new lanes for additional capacity along Interstate 80

Reason for Project

The reason for the project should describe the issues or problems that exist that the project will address. The template provides examples such as Pavement Condition, Bridge condition, Traffic Operations, etc.

A column is provided to include a narrative to help define the problems being addressed.

A column is provided to include supporting data that helps to illustrate the problems being addressed, such as PCI, IRI, Scoping Tool Score, etc.

Links to various data sources that can be used to support the project need are as follows:

- Scoping Tool: <https://iowadotprojectpriorities.com/>
 - Includes data covering: Pavement Score, Bridge Score, Traffic Score, Safety Score, etc.
 - Note: A project must be entered in the Scoping Tool for a business case to be considered. The Business Case should include a link to the project scope or attach the project charter from the Scoping Tool.
- Pavement Condition Data (PCI/IRI): <https://iowadot.gov/performance>
- Bridge Condition Data: <https://data.iowadot.gov/datasets/lowaDOT::bridge-line/about>
- Crash Data: <https://icat.iowadot.gov/>
- Potential Crash Reduction (PCR) tool: <https://iowadot.maps.arcgis.com/apps/MapSeries/index.html?appid=6920b9b36fa54caa90c25bd6dcd0c7e>
- Traffic Data: <https://iowadot.gov/maps/>
- Traffic Operations: SLRTP - Chapter 5 - Page 184 - ICE-OPS <https://iowadot.gov/iowainmotion/files/lowa-in-Motion-2050-Ch5.pdf>
- Bottlenecks: SLRTP – Chapter 5 – Page 173 <https://iowadot.gov/iowainmotion/files/lowa-in-Motion-2050-Ch5.pdf>
- Bicycle Compatibility Rating: SLRTP - Chapter 5 - Page 159 <https://iowadot.gov/iowainmotion/files/lowa-in-Motion-2050-Ch5.pdf>
- Systemic Bicycle and Pedestrian Safety Analysis: <https://iowadot.maps.arcgis.com/apps/Cascade/index.html?appid=a47f7eacb1f04f21b4116ba1aac80b45>

ROW Requirements

Please provide an indication if ROW will be required for the project. Acquisition of ROW will impact the timeline of the project due to time needed for acquisition.

Project Duration

Please provide an estimate of project construction duration. Note if phased construction is planned.

Local Support for Project

Please indicate if local governments and communities are in support of the project. Please use the narrative column to provide a more detailed explanation where needed.

Local Plan Compliance

Please indicate if the project is in compliance with or included in local plans or documents.

Local Funding Commitment

Please indicate if local communities will commit any funding towards the project. If so, indicate the extent of the local funding participation, all known parties contributing to the project, what the funding is planned to cover (ROW, Design, Construction, etc.) and the funding source(s).

Project Risks

Please indicate any potential risks to the project. Examples of risks may include environmental, financial, design, etc. Please use the narrative column in the template to provide a more detailed description where needed.

Project Options and Costs

Please describe the potential project options and provide the estimated cost of the project. Example: *Tight diamond interchange - \$15 million.*

Note: If capacity is listed as a project need, identify whether any Transportation Systems Management and Operations (TSMO) solutions were considered, or if not, why TSMO solutions were not considered a viable strategy to address the project needs.

Applicable State Long-range Plan Elements

Please indicate consistency with needs identified in the State Long-range Transportation Plan improvements matrix. A matrix is provided in Chapter 5 of the SLRTP at the following link and beginning on page 194.

<https://iowadot.gov/iowainmotion/files/Iowa-in-Motion-2050-Ch5.pdf>

In addition, the Business Case template (also included below) includes links to a document that provides a summary of how to assess each need and risk identified in the SLRTP. Use this document as a guide for providing additional narrative and supporting data for each SLRTP element.

[SLRTP Needs and Risks Analysis Overview](#)

Applicable TSMO Solutions

Please indicate if Transportation Systems Management and Operations (TSMO) strategies were considered as potential solutions to the problem. Also, indicate which type of TSMO strategies are applicable. It is recommended you consult with the District and/or State TSMO Engineers and reference the State and/or FHWA TSMO websites.

Iowa Department of Transportation TSMO website:

<https://iowadot.gov/tsmo/>

FHWA TSMO website:

<https://ops.fhwa.dot.gov/tsmo/index.htm>

Recommended Action

Please state the recommended action or outcome of the Business Case. If the Business Case is to add a project to the 5-year program, describe the project improvements requested and include the target fiscal year for programming.

Examples:

- Build a diverging diamond interchange in FY 2029.
- Address condition needs and construct Super-2 improvements in FY 2027.

If the business case is to secure approval for a study or further development for an unprogrammed project, indicate the level of study or project development that is requested.

Examples:

- Prepare a feasibility study to examine potential safety and operational improvements.
- Prepare a project concept for several intersection alternatives.
- Develop the project up to the D5 plan submittal.