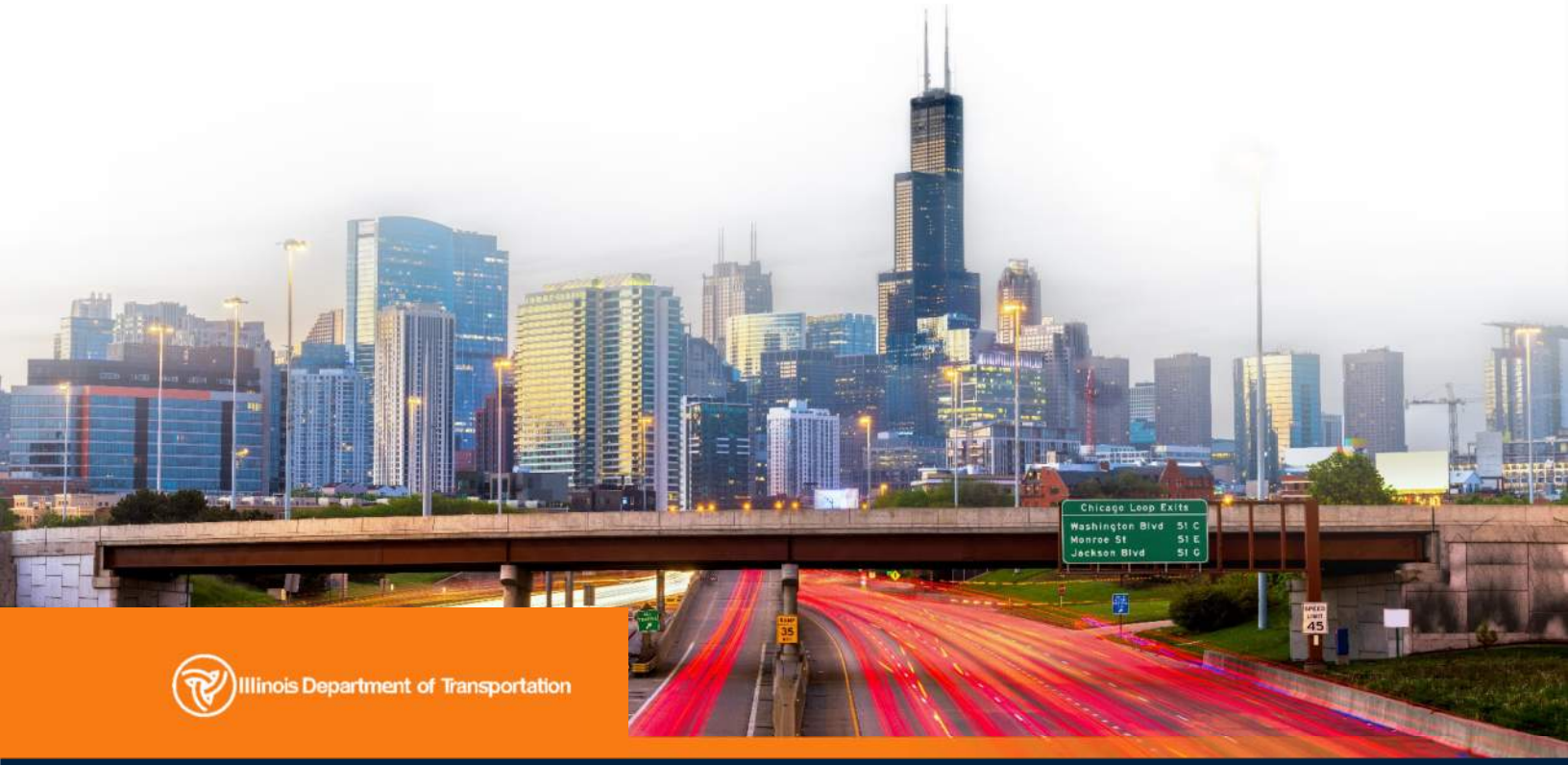

Illinois Department of Transportation

Innovative Project Delivery Manual and Guidelines

Construction Manager/General Contractor
Progressive Design-Build
Design-Build

July 2023

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1 Introduction

The Illinois Department of Transportation ("Department" or "IDOT") continually seeks innovative solutions to meet the growing transportation needs of Illinois. The Department, under the direction of the Illinois Secretary of Transportation (Secretary) and through its Bureau of Innovative Project Delivery (IPD Bureau), has developed the Construction Manager/General Contractor (CMGC), Progressive Design-Build (PDB), and Design-Build (DB) Program to deliver projects using innovative project delivery methods.

Senate Bill 2981, passed by both houses of the Illinois General Assembly on March 30, 2022 and signed by the Governor on June 15, 2022 as Public Act 102-1094, creates the Innovations for Transportation Infrastructure Act, 630 ILCS 10/1 et seq. (the Act) authorizing the Department to deliver projects utilizing CMGC, PDB, and DB project delivery methods, which are the contracting methods described in this manual.

1.1 Innovative Project Delivery Bureau

The IPD Bureau is established to identify, evaluate, and develop projects that may benefit from innovative approaches to assist the Department in developing and procuring transportation projects on a statewide basis to achieve the CMGC, PDB, and DB Program Goals and Objectives as defined in Section 1.5.

The IPD Bureau is directed by a Bureau Chief (IPD Bureau Chief) and reports directly to the Director of the Office of Planning and Programming, which coordinates with and advances the goals and objectives of the Secretary for CMGC, PDB, and DB Program Development.

The IPD Bureau will coordinate directly with the Districts on the development, procurement, and implementation of projects in the State. The goal of the IPD Bureau is to work collaboratively with the Districts to facilitate the development of projects.

1.2 Legislative Authority

Under the Act, the Department is authorized to use the following innovative project delivery methods for transportation construction projects:

- Construction Manager/General Contractor (CMGC)
- Progressive Design-Build (PDB)
- Design-Build (DB)

The Act also authorizes the Department to use Alternative Technical Concepts (ATCs) on traditional design-bid-build projects, a provision that is not administered by the IPD Bureau and not covered in this Manual.

1.3 Key Elements of Legislation

1.3.1 Limitations

The CMGC, PDB, and DB Program is subject to the constraints of the Act which includes an upper limit on the Capital Costs for any 5-year period and a limit of two CMGC projects per year.

The Capital Costs for each project, for the purposes of determining the upper limit, shall be:

- For a DB project, the Capital Costs estimated by the Department for the project at the time of awarding the DB Contract
- For a PDB project, the Capital Costs estimated by the Department for the project at the time the Department accepts the PDB Contractor's proposal for the project's Lump Sum or GMP for the construction work
- Capital Costs will be accrued against the upper limit in the year incurred regardless of whether the actual Capital Costs for a project increase or decrease during the project's procurement

1.3.2 Additional Requirements

- Prior to commencing a CMGC, PDB, or DB project delivery procurement, the Department must undertake an analysis and make a written determination that it is in the best interests of the State to use the selected delivery method for that project. The analysis must discuss the proposed delivery method's impact on the anticipated schedule, completion date, and project costs. Such an analysis will be made available to the public.
- If the Department determines it will use one of the noted project delivery methods, it must do one of the following prior to commencing such procurement:
    - Include the project in the Department's MYP as a potential IPD project
    - Issue a notice of intent (NOI) to receive qualifications, at least 28 days prior to the issuance of the RFQ, which includes a description of the proposed transportation facility and publish the notice in the Illinois Transportation Procurement Bulletin or in a Special Bulletin as designated by the Department. For single-phase procurements only, issue a NOI to receive proposals, at least 14 days before issuance of the RFP, which includes a description of the proposed procurement and transportation facility, and publish the notice in the Illinois Transportation Procurement Bulletin or in a Special Bulletin as designated by the Department.
- The Department uses its best efforts to ensure that the transportation facility is consistent with the regional plan in existence at the time of any metropolitan planning organization in which the boundaries of the transportation facility is located, or any other publicly approved plan.

- The Department must use a two-phase procurement for projects with an estimated cost over $5,000,000 unless the Secretary makes a written determination that a single-phase procurement can be used.
- Chief Procurement Officer (CPO) involvement may include but not be limited to:
  - Documents required to be published would be done by the CPO office in consultation with the Department
  - Review of all procurement forms
  - Sign off on the method of procurement (CMGC, PDB, DB)
  - Sign off on the decision on single-phase or two-phase procurement
  - Concurrence with selection of Evaluation Committee members
  - Participation in selection committee meetings in an oversight capacity as a non-voting member
  - Participation in one-on-one meetings and pre-proposal meetings
  - Participation in administrative review of proposals

1.3.3 Owner's Representatives

For projects with an estimated cost over $30,000,000 at the time the Department makes a written determination that it is in the best interests of the State to use the selected delivery method for that project, the Department shall independently procure an Owner's Representative to supplement staff directly employed by the Department to provide oversight, contract compliance services, and other services related to the project. The Department may secure an Owner's Representative through an on-call services contract for a particular project (on a project-by-project basis) or for multiple projects. Owner's Representative may be one or more of the following:

- Procurement Engineer (PCE)
  - The Department may appoint from internal transportation staff or procure an Owner's Representative to serve as the PCE
  - The PCE will provide services throughout the pre-procurement and procurement phases including items such as Phase I design, Procurement Document development and general engineering services in support of a CMGC, PDB, or DB project
- Engineer of Record (EOR)
  - The Department may appoint internal transportation staff or procure an Owner's Representative to serve as the EOR for a CMGC Project.
  - The EOR will provide design services throughout the project including Phase I design, Phase II design, and design support during construction
  - The EOR will be responsible for collaborating with the CMGC Contractor during the preconstruction phase of a CMGC project
  - The EOR is responsible for signing and sealing the plans and specifications

- Independent Cost Estimator (ICE)
  - The Department may appoint from internal transportation staff or procure an independent cost estimator to serve as the ICE
  - The ICE may be furnished by the Owner's Representative provided the ICE services are provided by staff who are independent from all other services provided by the Owner's Representative
  - Participation on any project shall disqualify the ICE and their subcontractors from bidding on the same project should the selected CMGC, PDB, or DB Proposer be unsuccessful in negotiating a CMGC, DB, or PDB Contract with the Department or the Department cancels the procurement after selection of a Proposer, and the project is then re-procured using the same or different contracting methodology

- Construction Oversight Team (COT)
  - The Department may appoint from internal transportation staff or procure a construction oversight team to serve as the COT
  - The COT will provide services throughout the final design and construction phases of a CMGC, PDB, or DB project for which it has been appointed
  - The COT will provide design reviews, construction acceptance, oversight of utility relocations, independent quality assurance surveys, independent material testing, documentation of construction, risk management, and oversight of construction activities, including construction management, maintenance of traffic, permit compliance, and other services which may include value engineering, stakeholder coordination, or public involvement management

1.3.4 References

Innovations for Transportation Infrastructure Act, 630 ILCS 10/1 et seq.

1.4 CMGC, PDB, and DB Delivery Methods

1.4.1 Benefits of Delivery Methods

The benefits of any delivery method are specific to the individual project under consideration. Table 1-1 below shows an overview of the delivery processes and the criteria generally evaluated for any given project and the expected benefits of each delivery method.

TABLE 1-1: BENEFITS OF DELIVERY METHODS

Delivery Method	Budget (Scalability)	Achieving Project Goals	Cost Certainty	Innovation	Owner's Risk Optimization	Accelerated Schedule	Resiliency	Owner Control
CMGC		✓	✓	✓		✓	✓	✓
PDB	✓	✓	✓	✓	✓	✓	✓	✓
DB	✓	✓	✓	✓	✓	✓	✓	

1.4.2 Construction Manager/General Contractor (CMGC)

For CMGC delivery, the Department separately procures a CMGC Contractor and appoints or procures an Engineer-of-Record (EOR) to work collaboratively to deliver the project. The CMGC project delivery method requires the CMGC Contractor to provide pricing, constructability reviews, and risk analysis during design development. The CMGC Contractor negotiates a Guaranteed Maximum Price (GMP) for the construction, and after the Department accepts the GMP and the parties reach agreement on key contract terms, the CMGC Contractor manages the construction, and hires subcontractors to perform the construction work.

The CMGC Contractor must use competitive bidding for at least the minimum percentage of construction work specified by the Department in the procurement documents.

The CMGC method utilizes early contractor involvement in developing the project. During construction, the CMGC Contractor may self-perform a portion of the work while supplying construction management through its own staff or a consultant.

Appendix 2 - Construction Manager/General Contractor Guidelines contains instructions for procuring and implementing CMGC Delivery.

1.4.3 Progressive Design-Build (PDB)

In a PDB project, the Department procures both design and construction services in a single contract. The design service provider is a member of the PDB Contractor team, either as an affiliate of the PDB Contractor team or as a subcontractor. Instead of procuring a PDB Contractor based on price (as described below for a DB project), PDB relies heavily on qualifications in selection followed by a process whereby the owner then "progresses" towards a design and construction price with the PDB Contractor team.

PDB core features include the following:

- The PDB Contractor is procured by the owner early in the project development phase, after a Candidate Project has been selected for development using the PDB delivery method. Often this is before the design has been significantly advanced.
- The PDB Contractor is selected mainly on qualifications. The PDB Contractor's final project cost/price and schedule commitment, or best value selection, is included as part of the selection process in a limited manner.
- The PDB Contractor delivers the project in two distinct phases:
  - Phase One includes budget level design development, preconstruction services and the negotiation of a firm fixed contract price (either Lump Sum or GMP) for Phase Two; and
  - Phase Two includes final design, construction, and commissioning

Appendix 3 - Progressive Design-Build Guidelines contains instructions for procuring and implementing PDB Delivery.

1.4.4 Design-Build (DB)

In a DB project, the Department procures both design and construction services in a single contract. The design service provider is typically a member of the DB Contractor's team, either as an affiliate of the DB Contractor or as a subcontractor.

DB delivery has the potential to transfer significant design and construction risk to the DB Contractor. Under such an arrangement, the DB Contractor accepts most or all the risk of any increase in costs or material quantities associated with the project's design, which on a Design-Bid-Build (DBB) project is the Department's risk. Risk is identified and allocated during the contract negotiation process. Having a single party responsible for the design and construction of the project allows the DB Contractor to propose innovations in design that may result in overall capital cost savings or better value.

The DB Contract includes Lump Sum cost for the project, which is bid based on conceptual plans and technical requirements developed by the Department prior to procuring the DB Contractor. The DB Contractor then proceeds with the development and completion of the design plans, but the price is typically not subject to change unless the cost increases are due to Department directed changes, environmental compliance needs, or certain other pre-agreed circumstances.

Appendix 4 - Design-Build Guidelines contains instructions for procuring and implementing DB Delivery.

1.4.5 Contractual Arrangements by Delivery Method

Figure 1-1 below shows the differences in the contractual arrangements of the delivery methods.

- For CMGC delivery, the Department separately procures a CMGC contractor and appoints or procures an EOR to work collaboratively to deliver the project.
- For PDB and DB delivery, the Department procures a PDB team or DB team (comprised of an engineer working with a contractor) to deliver the project.
- For PDB and DB delivery, an Owner's Representative (PCE) is appointed or procured to support the procurement and oversee the project delivery in conformance with the Contract Documents. The PCE is responsible for the project's NEPA documentation, unless otherwise indicated.

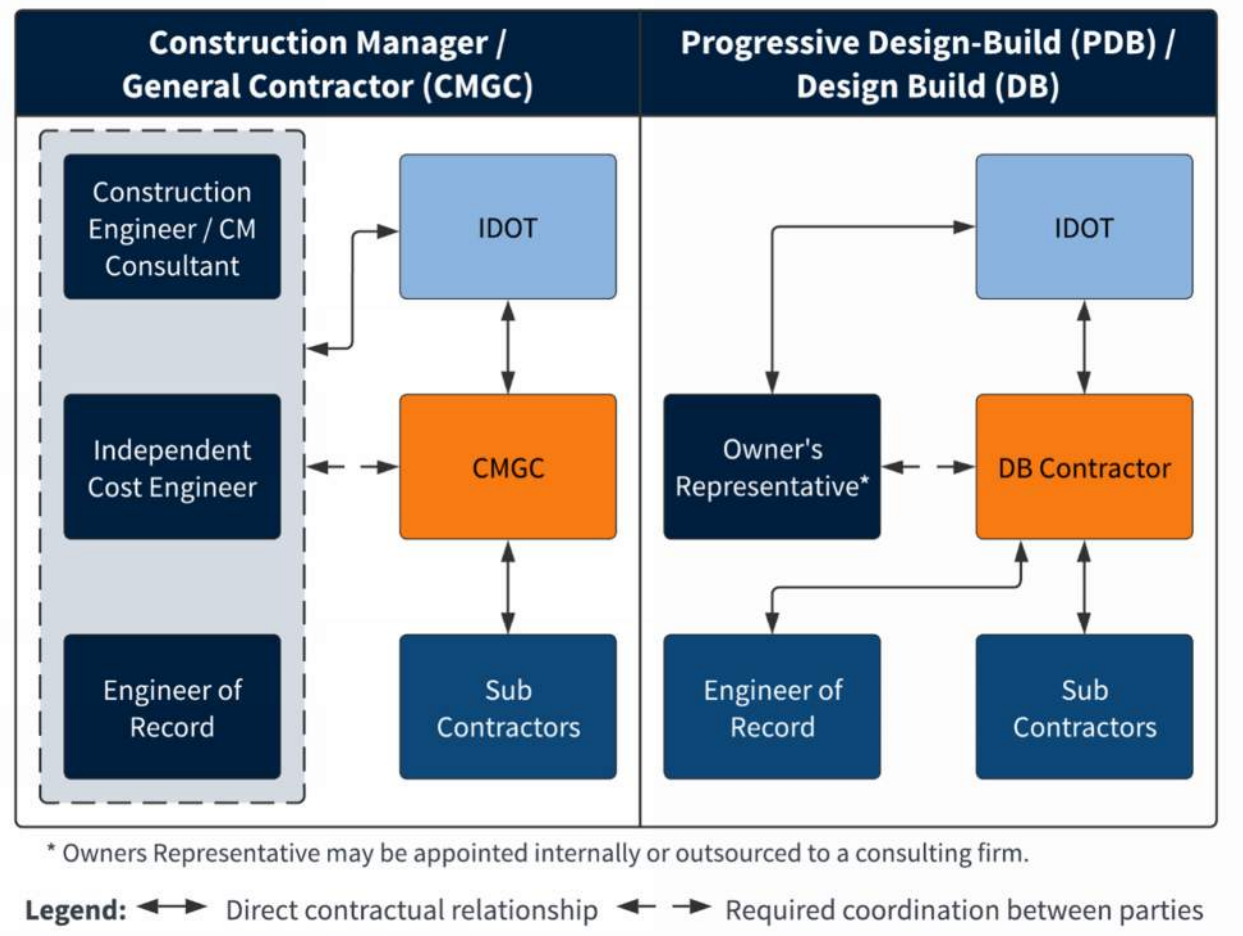

FIGURE 1-1 CONTRACTUAL ARRANGEMENTS OF THE CMGC, PDB, AND DB DELIVERY METHODS

1.4.6 Alternative Technical Concepts

An Alternative Technical Concept is a proposed deviation from the contract requirements set forth in the procurement documents for a transportation facility that offers a solution that is equal to or better than the requirements in the procurement documents.

1.5 CMGC, PDB, and DB Program Goals and Objectives

The IPD Bureau supports the Department's mission to provide safe, cost-effective transportation for Illinois in ways that enhance quality of life, promote economic prosperity, and demonstrate respect for our environment, climate initiatives and is guided by the principles of safety, integrity, responsiveness, quality, and innovation.

The IPD Bureau, through its CMGC, PDB, and DB Program, will help the Department deliver transportation infrastructure projects and services utilizing innovative methods guided by the following key objectives:

- Accelerate the delivery of transportation infrastructure options that improve mobility and communicate openly with stakeholders
- Successfully deliver projects through innovative methods to provide the best value to the State

The CMGC, PDB, and DB Program will be guided by the following goals in both its identification of projects for innovative project delivery, and in its development, procurement, and implementation of projects using CMGC, PDB, and DB delivery methods:

- Ensure that projects serve the best interests of the public
  - Addresses identified public needs
  - Providing tangible benefits
  - Includes diversity and equity considerations in decision-making
  - Balances impacts to environment and adjacent communities
  - Innovative traffic management, reducing congestion, and improving mobility
- Provide new opportunities for Disadvantaged Business Enterprise (DBE) partners through outreach and awareness
- Provide best value to the State including best use of State and Federal resources
- Provide cost certainty and reduced change orders
- Provide a fair, transparent, and competitive procurement environment
- Encourage innovation and value opportunities
- Encourage economic development while being sensitive to environmental impacts and climate change concerns
- Promote accelerated delivery opportunities with delivery benefits and efficiencies compared to traditional delivery methods
- Promote accountability and informed, timely decision making
- Achieve early identification and mitigation of project risks
- Facilitate the timely delivery of projects within the provisions of the Act, and other applicable Illinois statutes, the Department's administrative rules, and this Manual.

1.6 Purpose of Manual

The purpose of this Innovative Project Delivery Manual and Guidelines for CMGC, PDB, and DB (the "Manual") is to provide guidance on the development, procurement, implementation, and administration of transportation projects using the CMGC, PDB, and DB innovative project delivery methods.

The IPD Bureau consulted with the Chief Procurement Officer and the Secretary in developing this Manual setting out the procurement processes and procedures to ensure an open, transparent, and efficient process to accomplish the purposes of the Act.

The innovative delivery process described in this Manual is intended to streamline and standardize the overall development of a project utilizing federal and state transportation industry best practices related to CMGC, PDB, and DB delivery. The flow of activities was developed to implement those best practices and provide transparency in the processes of project identification and screening, delivery method selection, development, procurement, implementation, and administration.

This Manual is intended for IPD Bureau staff, staff across all levels of the Department's organization, and interested stakeholders to familiarize themselves with the CMGC, PDB, and DB innovative project delivery methods, processes, and procedures.

The Manual is intended to be a dynamic document administered in accordance with the Act. The Department retains the right and flexibility to modify any of the processes and procedures described in this Manual as needed to address updates to the enabling legislation, industry-recognized best practices, and to accommodate the specific needs of a particular project.

1.7 Manual Organization

The main body of the Manual includes five Chapters: an Introduction, a description of the first two phases of the project delivery process which are common to the CMGC, PDB, and DB delivery methods, performance metrics and reporting requirements, and guidance on compliance with Federal requirements including State and Federal DBE Program requirements. Appendix 1 contains a list of terms and acronyms used throughout, and Appendices 2-4 contain the delivery process guidelines for each of the three delivery methods, as shown below:

Chapter 1: Introduction

Chapter 2: Project Identification & Screening

Chapter 3: Project Delivery Method Selection

Chapter 4: Performance Metrics and Agency Reporting

Chapter 5: Federal Requirements

Chapter 6: DBE Program

Appendix 1: Definitions and Acronyms

Appendix 2: Construction Manager / General Contractor Guidelines

Appendix 3: Progressive Design-Build Guidelines

Appendix 4: Design-Build Guidelines

Figure 1-2 below shows how the phases of the project development process are organized in the Manual.

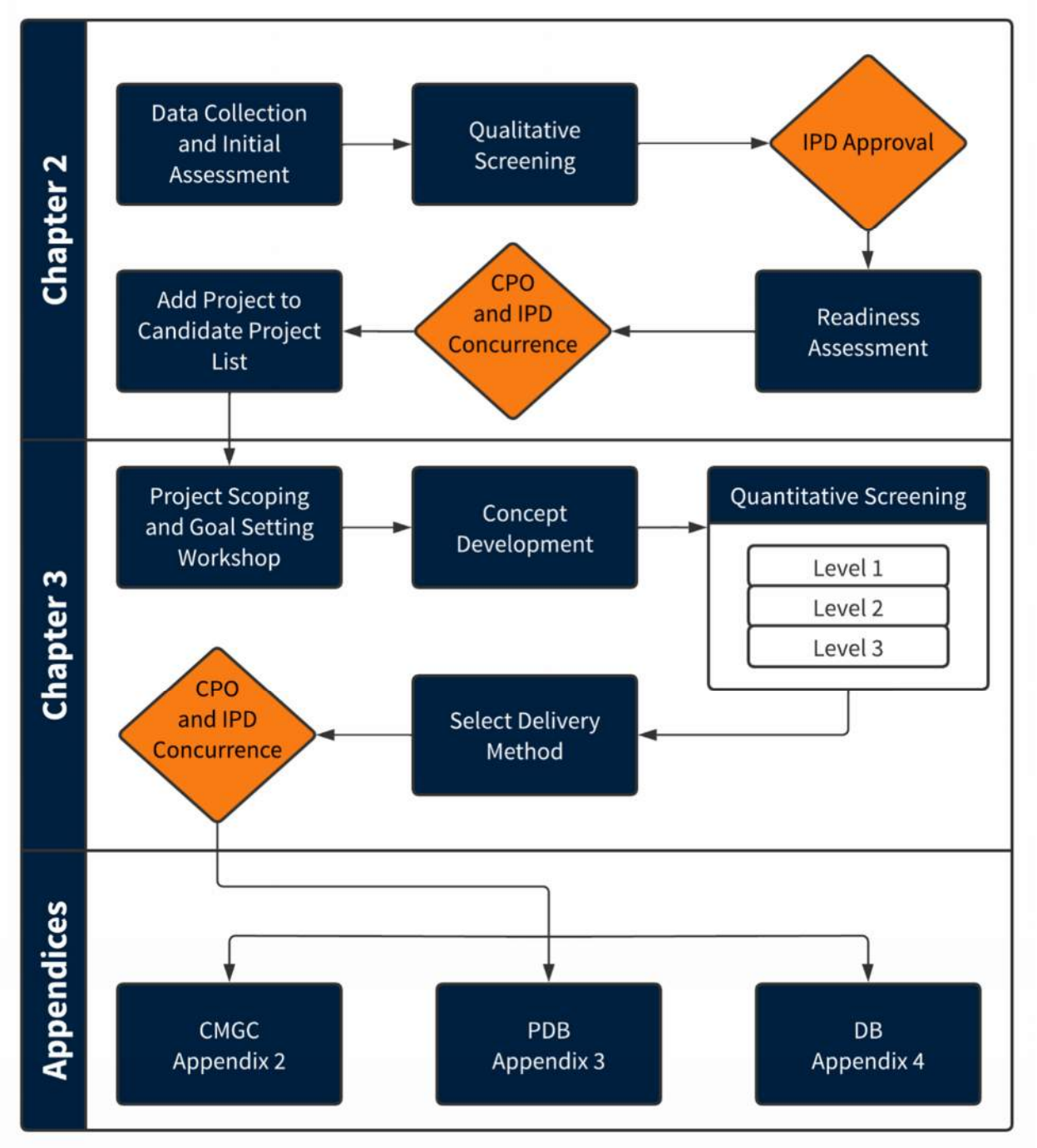

FIGURE 1-2: MANUAL ORGANIZATION FOR PROJECT DEVELOPMENT PROCESS PHASES

1.8 Transparency and Accountability

The policies in this Manual promote transparency and accountability in the Department's development of innovative projects accomplished through:

- Public posting of notices, including the Candidate Projects List for innovative project delivery and project delivery method selection on the Department's website
- Holding public meetings throughout project development
- Engaging in the environmental review process
- Posting of procurement notices and project reference information
- Conducting industry outreach events
- Requiring all IDOT staff and consultants who participate in the procurement to execute non-disclosure agreements prior to reviewing any project-related documents

The Manual also describes the levels of approval through which an innovative project must progress before the project is ready for delivery.

2 Project Identification & Screening

This chapter discusses the identification and screening of transportation projects to assess whether a project is a suitable Candidate Project for CMGC, PDB, or DB project.

The Identification and Screening process consists of the following 2 steps as shown in Figure 2-1 below:

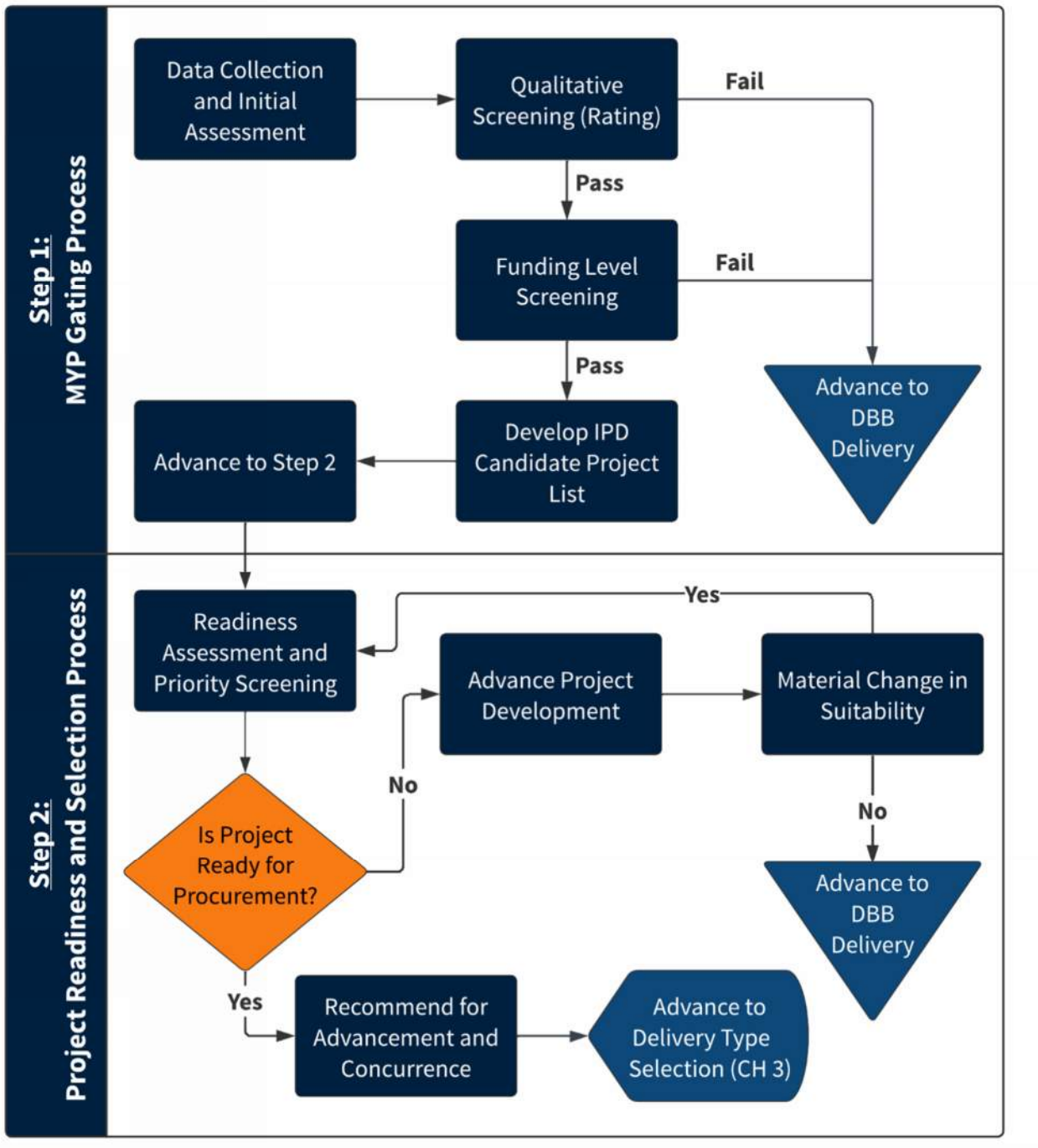

FIGURE 2-1: KEY STEPS DURING THE IDENTIFICATION AND SCREENING PHASE

2.1 Step 1: MYP Gating Process

For a project to be considered for CMGC, PDB, or DB delivery, it should be included in the MYP. A subset of projects will be selected from the MYP through a collaborative process with the Districts to evaluate each for potential benefits of innovative project delivery through CMGC, PDB, or DB. Projects selected for evaluation are primarily at the discretion of the Districts based on the goals and objectives of the CMGC, PDB, and DB Program.

Candidate Projects could be identified in various stages of project development from a preliminary concept to a more fully developed project. Candidate Projects may be a single project or multiple projects bundled for delivery under a single solicitation. This is a high-level analysis to identify projects with characteristics that are consistent with the types of projects that typically benefit from CMGC, PDB, or DB delivery.

2.1.1 Data Collection and Initial Assessment

This first step is for the Districts to narrow the list of potential projects to a subset of projects prior to investing resources to perform an in-depth evaluation of any given project. To facilitate this, Attachment 2-1 and Attachment 2-2 are utilized to collect basic project data and make an initial assessment.

Basic project information is documented using Attachment 2-1. Key characteristics of interest defined in Attachment 2-1 include:

- Project goals and objectives
- Estimated project cost
- Funding
- Status
- Basic configuration and definition of major scope elements
- Identification of major milestones
- Identification of any project concerns, challenges, and obstacles
- Identification of known risks

The initial assessment utilizes the “Initial Assessment Y/N” column of the Qualitative Screening Form in Attachment 2-2 to provide a high-level view of the project characteristics. This initial assessment informs the decision as to whether to further assess the project by performing a qualitative screening.

2.1.2 Qualitative Screening (Rating)

Once a project has advanced through the data collection and initial assessment, the IPD Bureau collaborates with the District to collect and review additional relevant supporting information and documentation to perform the qualitative screening rating utilizing the “Rating” column on Attachment 2-2.

The IPD Bureau coordinates with the District to collect the types of information and level of detail needed to perform the qualitative screening rating. The District supports the process by furnishing information needed for the qualitative screening rating process.

Key screening considerations for assessing whether the project is a suitable Candidate Project for innovation project delivery include:

- Expedites or "fast tracks" construction for accelerated delivery
- Uses of innovative design and construction techniques
- Is of sufficient size and complexity to effectively leverage private-sector innovation and expertise. Rating can apply to single project or bundled projects.
- Accelerates delivery by expediting utility relocations allowing flexibility to design for utility avoidance during construction
- Expedites contract award
- Exploits market conditions and increase competition from potential bidders

The qualitative screening rating process generates information for decision-makers to further assess and prioritize projects on the Candidate Projects List based on the extent to which the project would benefit from CMGC, PDB, or DB delivery.

The results of the qualitative screening rating process inform decision-makers whether to consider a project as a Candidate Project.

The IPD Bureau's roles and responsibilities during the qualitative screening rating process include:

- Continually seek feedback from the District related to the evaluation criteria on the Qualitative Screening Form used to prioritize projects
- Coordinate closely with project stakeholders to identify high-level risks that could materially impact the feasibility of the Candidate Project
- Collaborate with the District to assess the suitability, feasibility, and desirability of delivering projects through this process
- Provide additional information as needed to allow Candidate Projects to advance through the qualitative screening process

2.1.3 Funding Level Screening

After performing the qualitative screening, the IPD Bureau assesses the funding commitments for each project to sequence the projects for delivery. Projects with committed funding will be placed ahead of otherwise well-qualified projects without committed funding. Well-qualified projects without committed funding will be placed on a reserve list to be reconsidered in future years to allow further development to proceed while funding commitments are secured.

2.1.4 Candidate Projects List

Projects deemed suitable for CMGC, PDB, or DB delivery and approved by the IPD Bureau Chief and the CPO are added to the IPD Candidate Projects List.

Projects are typically assessed for addition to the Candidate Projects List annually during the MYP cycle but may be added between MYP cycles. Qualitative screening scores are used to rank projects with priority given to projects with higher scores. Projects that have developed further since their initial placement in the CMGC, PDB, and DB Program may be reassessed to update the project's qualitative score and potentially advance to a higher priority on the Candidate Projects List.

2.2 Step 2: Project Readiness and Selection Process

2.2.1 Readiness Assessment and Priority Screening

Projects that are selected for the Candidate Projects List are evaluated for project readiness.

The project readiness assessment is intended to serve as a process to gather, review, and assess project information to help prioritize projects that are further advanced in readiness for CMGC, PDB, or DB procurement.

Key considerations in assessing whether a project is ready for procurement include:

- Cost certainty – Cost aligns with allocated funding
- Schedule predictability – Project development activities meet intended schedule targets for procurement
- Quality of project reference information – Preliminary engineering information is ready, accurate and consistent with intended scope
- Risks have been identified and assessed regarding their impacts on the Candidate Project

As part of the readiness assessment, the IPD Bureau works with the District to examine the project scoping information, priorities, project characteristics, and status of project development activities to help prioritize Candidate Projects for CMGC, PDB, or DB delivery.

2.2.2 Project Development Activities

The IPD Bureau, in collaboration with the District, leads the activities required to prepare the project for CMGC, PDB, or DB procurement.

2.2.2.1 Project Scoping and Refinement

Once a project is selected and added to the Candidate Projects List, the IPD Bureau must coordinate with the District to further refine the scope for projects on the Candidate Projects List. It is necessary to have a more fully developed scope before moving forward in the process.

2.2.2.2 Key Milestone Schedule

The IPD Bureau and District must develop a key milestone schedule for each selected project to identify key milestone dates and make sure the project is meeting established targets through delivery of the project. Target dates are based on funding availability, stakeholder commitments and public commitments. The schedule is intended to help facilitate the readiness assessment and help determine the preferred delivery method.

The key milestone schedule is developed by the District assuming a traditional DBB delivery and shows anticipated timescales for standard IDOT project delivery steps (Phase I, Phase II and Phase III). The District and the IPD Bureau coordinate the development of a schedule with all the project development activities integrated with anticipated timescales for pre-procurement, procurement, and delivery of the project. Key components of the development schedule can be found in the Appendices under each delivery method.

The key milestone schedule is a foundational tool that can be expanded to track progress through procurement and delivery of the project, assess time considerations for starting the project, receive dedicated funding, and assess project completion importance.

2.2.2.3 Environmental Process

The IPD Bureau, in coordination with the District, must target completion of an environmental review process for a project in accordance with the National Environmental Policy Act (NEPA) prior to the issuance of the final RFP for a design-build procurement.

With respect to CMGC and PDB procurements, the NEPA process may continue into the preconstruction phase but must be complete prior to initiating the construction phase.

Initiating the environmental review early in the project development process affords the IPD Bureau and the Department with opportunities to engage stakeholders and promote the principles of accountability and transparency.

Throughout the environmental review process, the District in coordination with the IPD Bureau, establishes the purpose and need for the project, analyzes the alternative design concepts and scopes, and identifies important operational features. Ultimately, a preferred alternative is selected, and a determination is issued by the appropriate lead federal agency.

2.2.2.4 Cost Estimate and Construction Duration Schedule

As the project concept is refined during the project development phase, project cost estimates and construction duration schedules are developed and updated. This effort begins with and builds upon the cost estimate and project schedule developed by the District during programming the project for inclusion in the MYP.

Developing and updating the cost estimates requires integration of the conceptual project schedule, risk analysis information, and scope of the Candidate Project. The cost estimation and schedule-risk analysis processes will involve:

- Reviewing the conceptual scope, schedule, and cost assumptions
- Identifying contingency and separating it from baseline cost estimates
- Assessing historical price fluctuations for key project components
- Developing price forecasts for key project components
- Identifying and quantifying uncertainty in baseline cost estimates for soft costs and Department costs over the project duration through final acceptance by the Department
- Identifying and quantifying uncertainty in the conceptual baseline schedule

Additionally, escalation factors may be developed using the latest economic trends considering local conditions.

Cost elements reviewed and developed as a part of the cost-estimating process include, but are not limited to:

- Quantities for construction materials
- Right of way acquisition costs
- Direct and indirect costs
- General administrative costs, including Department and private-sector oversight costs

2.2.3 Risk Analysis

A risk analysis is conducted as part of the project readiness assessment. Available project information, including any environmental and planning documents, will be used to evaluate the risk in delivering the Candidate Project using a CMGC, PDB, or DB method.

The level and amount of project information available for use during the risk analysis can vary from project to project. For instance, some Candidate Projects may have already completed the environmental and planning process, while others may not have started or may be in the early stages of these development activities.

2.2.3.1 Risk Workshop

The IPD Bureau, in coordination with the District, may hold an initial risk workshop to identify and evaluate project risks and make preliminarily risk allocation assignments. In addition, the risk workshop helps assess priority and determine if more work is required to mitigate risk prior to procuring the Candidate Project.

2.2.3.2 Risk Report and Risk Assessment Worksheet

The IPD Bureau generates a Risk Assessment Worksheet to document the findings of the workshop. The Risk Assessment Worksheet in Attachment 2-3 is a spreadsheet that is updated and refined as the project advances through subsequent phases of development.

The Risk Assessment Worksheet provides a description of the risk and documents the risk's probability, consequence (cost and schedule impacts) using an adjectival rating of high, medium, and low. Initial risk allocation is identified, as well as mitigation activities that could be implemented to reduce the probability or impact of the risk. A narrative can be provided to document risk discussions.

2.2.3.3 Collaboration and Coordination

An advantage to conducting a risk assessment during the Identification and Screening Phase is to bring together multiple stakeholders to discuss the Candidate Project's objectives and consider and document the challenges likely to be encountered with an innovative delivery method.

The risks identified as part of the readiness process are used to inform decision-makers of potential risk impact(s) to a Candidate Project and to discuss strategies to mitigate the risks prior to beginning project procurement activities.

2.2.4 Pre-Procurement Checklist

The IPD Bureau utilizes a project pre-procurement checklist of activities to document the status of activities to inform the readiness decision. The checklist is in Attachment 2-4.

Key project development activities that are tracked in the status checklist and considered in the readiness assessment and priority screening include:

- Project Scoping and Refinement
- Project Development Schedule
- Environmental Status
- Cost Estimate
- ROW Status
- Utility Status
- Geotechnical Investigations
- Third-Party Stakeholder approvals and commitments
- Railroad Coordination
- Permitting
- Risk Assessment
- Public Outreach Status

2.2.5 Management Responsibilities

The IPD Bureau Project Manager (IPD Bureau PM), in coordination with the IPD Bureau Chief, will be responsible for maintaining all necessary coordination with the Districts, the Department, other agencies, project stakeholders throughout project development and readiness assessment processes. This coordination includes providing to the IPD Bureau Chief, as appropriate, project information such as budget, scope, and schedule.

2.3 Advancement Decision

After performing the readiness assessment, the IPD Bureau makes a recommendation for the District's concurrence on which projects should be prioritized and should advance to the Project Delivery Method Selection (Chapter 3). Projects that are not recommended continue to be developed by the District and at least annually the IPD Bureau coordinates with the District to reassess projects to determine whether any project is a suitable Candidate Project, or if there is a material change in suitability and the project should be advanced for traditional design-bid-build delivery.

2.4 Advance to Project Delivery Method Selection

The IPD Bureau uses the results of the Identification and Screening Phase and considers input from the District and from stakeholders, to recommend which projects should be selected to advance to the Project Delivery Method Selection phase as described in Chapter 3.

The IPD Bureau, with concurrence from the District, may recommend that a Candidate Project be given priority status at any time during the Identification and Screening Phase for advancement to Project Delivery Method Selection.

The IPD Bureau must receive concurrence from the District prior to advancing a project to the Project Delivery Method Selection Phase.

3 Project Delivery Method Selection

Chapter 3 describes the project delivery method selection process for projects that have advanced to the IPD Bureau's portfolio of projects as priority projects. The information from the project readiness assessment is used to determine which delivery method is the preferred procurement method for the Candidate Project.

3.1 Project Delivery Method Selection Tool

The IPD Bureau utilizes an excel-based Project Delivery Method Selection Tool (Tool), based on the FHWA CASE Webtool (https://case.fhwa.dot.gov/account/login), to perform the evaluation.

The Tool is used to perform the evaluation and help determine what is the most appropriate delivery method for a Candidate Project.

The delivery methods evaluated are:

- Construction Manager / General Contractor
- Progressive Design-Build
- Design-Build

The design-bid-build delivery method is also evaluated as the reference case for comparison purposes only.

3.1.1 Objectives

The Tool provides a formal approach for selecting the delivery method for Candidate Projects. The primary objectives of this Tool are:

- Present a structured approach to assist in making project delivery decisions
- Provide a means to conduct an objective evaluation of project delivery method choices
- Assist in determining if there is a dominant or optimal choice of a delivery method
- Provide documentation of the selection decision

3.1.2 Background

The data parameters, inputs and processes used in the Tool are based on the model developed for the FHWA CASE Webtool. The FHWA CASE webtool was developed after a review of all 50 state agencies' processes, select case studies, subject matter workshops, and pilot workshops with seven state DOTs.

During these efforts, researchers explored the CMGC, PDB, and DB contracting methods currently in use and developed the Tool to incorporate feedback on how the decision is made to use one of the methods over another and parameters for deciding which method to use.

One of the lessons learned from the FHWA research is that the project delivery method selection decision should be made as early as practical in the project development and delivery process. Therefore, it is recommended that as soon as a project is selected by the IPD Bureau

and the District(s) as a Candidate Project, the IPD Bureau should use the Tool to assess the preferred delivery method.

3.2 Project Delivery Method Selection Process

There are three levels in the selection process:

- Level 1 is a qualitative evaluation as described in 3.2.1
- Level 2 is a quantitative evaluation as described in 3.2.2
- Level 3 is a risk assessment described in 3.2.3

Figure 3-1 below graphically shows the three levels of the selection process used by the Tool to determine the preferred delivery method.

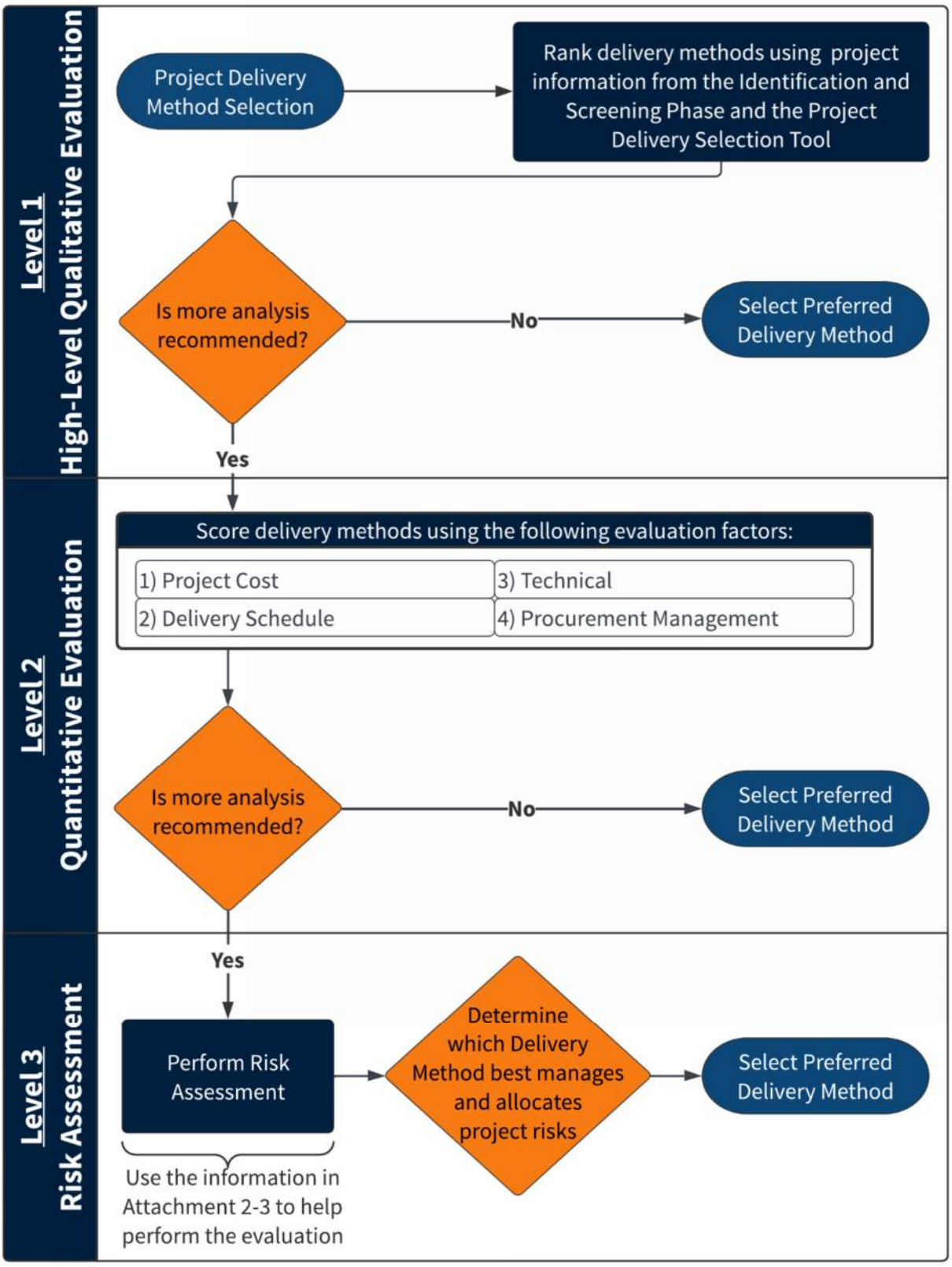

FIGURE 3-1 PROJECT DELIVERY METHOD SELECTION TOOL OVERVIEW

3.2.1 Level 1 – Qualitative Evaluation

Qualitative evaluation of each project delivery method is performed considering the following:

- **Project Costs** – comparison of project costs accounting for the potential cost savings realized through ATCs and early contractor involvement against DBB low-bid costs of a fully developed project after Phase II design completion
- **Delivery Schedule** – comparison of the overall project delivery schedules accounting for procuring a CMGC, PDB, or DB Contractor during Phase I or Phase II design stages and time savings realized through CMGC, PDB, or DB Contractor innovations against DBB project sequential timescales with traditional quantity-based construction duration schedules
- **Technical** – comparison of potential technical solutions accounting for contractor input or ATCs during the design phase against internal agency solutions based on internal practices and value engineering efforts
- **Procurement Management** – comparison of potential benefits of a best value selection relying heavily on qualifications against low-bid selection based on constructing a fully designed, fixed-scope project

The following steps should be followed to perform the qualitative evaluation:

- Enter information collected from the project readiness assessment process described in Chapter 2, including project characteristics, attributes, status of project development activities, priority factors, and constraints. Each project should be carefully scoped, project goals defined, and project constraints considered before beginning the project delivery method selection process.
- Perform a "high-level" qualitative evaluation of the project to compare the benefits of one delivery method to another using the Tool
    - The evaluation is performed by ranking each of the delivery methods (CMGC, PDB, and DB) using the evaluation factors and the delivery method characteristics listed in the Tool
    - The ranking is based on a comparison of the delivery methods and which delivery method is considered to provide the most project benefits/advantages
    - The Tool includes a description of the benefits provided by each the three delivery methods for each of the evaluation factors (Project Cost, Delivery Schedule, Technical, and Procurement Management)
    - The delivery method that ranks the highest for the most evaluation factors is the preferred delivery method result using the IDOT IPD Project Delivery Selection Tool

The IPD Bureau may use other factors, in addition to the Tool, to decide on a preferred delivery for the Level 1 evaluation. The IPD Bureau may choose to seek input from the District related to expected benefits, rationale for/benefit of an innovative delivery implementation relative to a conventional project delivery approach, and any additional information that may result in a decision.

The IPD Bureau documents the results of the evaluation, and any supporting documentation for the decision, in a Project Delivery Selection Report. The Project Delivery Selection Report is in Attachment 2-5.

If no decision is made and further analysis is recommended to determine the preferred delivery method, then a Level 2 quantitative evaluation may be performed, as described below in Section 3.2.2.

3.2.2 Level 2 – Quantitative Evaluation

If further consideration is warranted on a preferred delivery method after the Level 1 Qualitative Evaluation, then a "quantitative" evaluation is performed.

Quantitative evaluation considers the following questions for any given project:

Cost

- How difficult will it be to develop a reliable cost estimate for the project?
- Does the project include construction materials with volatile pricing?
- Have sufficient funding sources for construction been identified?

Schedule

- Is the schedule critical (i.e., achieving substantial completion faster) to meet project or agency objectives?
- Is schedule certainty critical to meet project or agency objectives?
- Can construction begin before the design phase is complete?
- Would the agency consider assigning utility coordination responsibilities to the CMGC, PDB, or DB Contractor?

Technical

- Has the project's design advanced beyond conceptual design/preliminary engineering (i.e., ~10%-30% design)?
- Could the project involve the implementation of new technology?
- How open is the agency to design solutions it has never used?
- Does the anticipated project scope and complexity require significant allocation of time and resources managing risk?
- Will integrated design and engineering services add benefits (i.e., better allocation of risk, result in innovation, better pricing)?
- Will the project require design exceptions from FHWA?
- Is reducing design liability risk a key consideration for selecting the delivery method? Does the Department want to minimize the owner's design liability risk?
- What is the likelihood of design changes after the construction contract price is established?

Procurement Delivery

- Is a single contract for design and construction the preferred delivery method for the project?
- Will the Department be forced to limit the engagement of agency resources due to staffing experience and availability?
- Does the Department want to limit the level of agency oversight and control involvement during design and construction?
- Does the Department desire to retain control over the design process?
- Does the Department want to put an emphasis on encouraging competition and contractor experience in the selection process?
- Can the project be bundled with comparable projects to increase scale/scope and to enhance market interest while still meeting agency goals?
- Does the agency seek to involve a private sector design and/or construction team to support addressing public opposition?
- Is there an impact on landowners within/abutting project limits?
- Is the number of involved third parties (railroads, utilities, environmental, etc.) higher than normal?
- Will the project have complex stakeholder or third-party issues (coordination with railroads, property owners, etc.)
- Will any third parties require a complete set of construction documents to execute an agreement?
- Will the status of NEPA impact bidders' ability to offer alternative technical solutions and/or start construction before the design is finalized?
- What is the level of effort to obtain necessary permits?

The following steps should be followed to perform the quantitative evaluation:

- Provide responses to each of the questions in the Tool for each of the evaluation factors based on an assessment of the benefits/advantages to the project provided in the Tool
    - The Tool uses the responses to the questions to score each of the delivery methods
    - As each question is answered, the scores and graph are dynamically recalculated and displayed
    - The delivery method with the highest score indicates the recommended method

The IPD Bureau provides the results of the evaluation, and any supporting documentation for the decision, in a Project Delivery Selection Report.

If further analysis is recommended to determine the most appropriate method for the project, then a Level 3 Risk Assessment may be performed, as described below in Section 3.2.3.

3.2.3 Level 3 – Risk Assessment

If the evaluation scores are within a competitive range after conducting the Level 2 Quantitative Evaluation, or if significant risk factors need to be addressed on the Candidate Project, then a risk assessment may be performed to evaluate which of the delivery methods can best manage and allocate the project risks. The risk analysis is used to help decide the preferred delivery method.

The risk assessment is performed to ensure the selected delivery method can properly address the project risks. A more detailed level of risk assessment should be performed during the procurement to ensure that project risks are properly allocated and managed.

The following steps should be performed to conduct the risk assessment:

- Review and update the risks in the Risk Assessment Worksheet in Attachment 2-3
  - Update the Risk Assessment Worksheet with any additional risks and changes to the initial risk analysis performed during the Identification and Screening Phase
  - The instructions for performing the risk assessment are provided in the Tool
  - An excel version of the Risk Assessment Worksheet is provided in the Tool
- Provide the preferred risk allocation (IPD Bureau, contractor, third-party or shared)
- Rate the ability to mitigate the risk using each of the delivery methods
  - A rating is provided for each of the delivery methods based on its ability to best manage and allocate the risks using a rating scale from 1 to 3, where 1 is the least preferred method and 3 is the most preferred method for managing the risk
  - The Tool provides a summary comparison of how project risks are managed for each of the delivery methods. The Tool should be used in conjunction with the Risk Assessment Worksheet to perform the assessment
  - The ratings are summed for each of the risks for each of the delivery methods providing a total numerical score for each delivery method

The purpose of the risk assessment ratings and scores is to supplement the scores from the quantitative assessment to facilitate the delivery method selection process.

The following is a list of project risks that should be discussed at a minimum to assess how the risks are addressed by the different delivery methods.

- Site Conditions and Investigations (latent defects, geotechnical, hazardous materials, surveys, etc.)
- Utilities
- Railroad
- Drainage/Water Quality Best Management Practices (during construction and permanent)
- Environmental
  - Meeting environmental document commitments and requirements, noise, 4(f) and historic sites, wetlands, endangered species, etc.

- Third Party Involvement
  - Timeliness and impact of third-party involvement (funding partners, adjacent municipalities, adjacent property owners, project stakeholders, FHWA, PUC)

Once the Level 1 Qualitative Evaluation, Level 2 Quantitative Evaluation (as needed), and Level 3 Risk Assessment (as needed) have been completed, the selection of the delivery method that best suits the project and is in the best interest of the state is determined. The results are then documented in Attachment 2-5 Project Delivery Selection Report.

3.3 Reporting

The Tool has tabs for each level of evaluation that should be retained on file for each individual project to document the results of the evaluation.

3.4 Training and Assistance

The IPD Bureau will provide training and assistance to inform the Department staff, internal stakeholders and leadership, the General Assembly, Industry Partners, and other stakeholders on the processes for identifying, screening, and developing projects for CMGC, PDB, and DB delivery as well as selecting the project delivery method that will best suit the project, in the best interest of the state.

4 Performance Metrics and Agency Reporting

4.1 Overview

Establishing a reporting process enables the Department to report annually to the General Assembly on progress of the CMGC, PDB, and DB procurements and to manage the CMGC, PDB, and DB Program internally. As a part of the reporting process, the IPD Bureau establishes performance metrics at the project level and program level to monitor and report on the status of the CMGC, PDB, and DB Program. Having performance metrics and consistent reporting will increase the transparency of the CMGC, PDB, and DB project delivery allowing others to evaluate the performance of the CMGC, PDB, and DB Program.

A well-defined reporting and monitoring system will enable the IPD Bureau to readily address inquiries from the General Assembly, the public, regulatory agencies, and industry. In addition, the IPD Bureau uses this information to continually assess the CMGC, PDB, and DB Program and improve the project delivery processes through lessons learned.

This chapter defines processes for establishing project level and program level reporting requirements, selecting measurable performance metrics, data collection responsibilities, and defines a core set of reports and their content.

4.2 Performance Metrics

The IPD Bureau identifies performance metrics to assess the results of individual projects and collectively the portfolio of projects within the CMGC, PDB, and DB Program. The performance metrics are developed to assess if the decisions made during the development, design, and construction of a project have led to a successful result when compared to the project level and program level goals.

4.2.1 Project Level Performance Metrics

Performance metrics vary from project to project and are established in the following categories:

- Schedule
- Cost
- Quality
- Operational
- Sustainability
- Commitments
- Diversity Goals Achieved
- Safety

Attachment 4-1 provides a comprehensive set of project level performance metrics for the IPD Bureau to use for selecting the key performance metrics for any individual project. The IPD

Bureau will identify a subset of performance metrics to assign to the project that the IPD Bureau will monitor and report on throughout the project development period.

4.2.2 Program Level Performance Metrics

At the program level, the IPD Bureau measures its performance against the broader CMGC, PDB, and DB Program goals achieved through the implementation of innovative project delivery. Program level metrics capture the cumulative performance of the CMGC, PDB, and DB Program by aggregating project level data and performance metrics across the portfolio of projects within the CMGC, PDB, and DB Program. Program level metrics are typically established in the following categories:

- Number of projects delivered / under development
- Costs of projects delivered / under development
- Cost savings compared to traditional delivery
- Schedule acceleration compared to traditional delivery
- Commitments achieved (DBE, sustainability, community benefits)

The IPD Bureau program level metrics are tailored to the portfolio of projects under development using the comprehensive list of potential metrics provided in Attachment 4-1. As the CMGC, PDB, and DB Program evolves, the IPD Bureau will periodically update its program level metrics to provide transparency and manage the effectiveness of the CMGC, PDB, and DB Program.

Additionally, during the first 5 years after the effective date of the Act, the Department shall report to the General Assembly annually on the progress of procurements and transportation facilities procured under the Act.

4.3 Agency Reporting

4.3.1 Project Level Reporting

Project level reporting primarily captures information on the progress of the project against the contract requirements and the project specific performance metrics. This includes the overall status of the project, activities undertaken, and activities planned.

- Project Status (Schedule and Budget)
- Activities Completed
- Activities In Progress
- Activities Planned
- State and Federal Reporting Requirements
- Key Issues/Risks
- Environmental Commitments
- Permitting Status

- Performance Metrics Indicators
- DBE Goal Accomplishment
- Change Orders Issued and Submitted Claims
- Sub-Consultant Usage
- Sub-Consultant Consistency from bid
- Lessons Learned

4.3.2 Program Level Reporting

Program level reporting is an aggregate report of all project metrics across the portfolio of projects in the CMGC, PDB and DB Program. The program level report should be tailored to the data points of interest to the Department but typically would include the following data for all projects within the CMGC, PDB, and DB Program.

- Project
- District(s)
- Project Development Phase
- Developer (if under contract)
- Facility Type
- Contract Type (CMGC/PDB/DB)
- Budget
- Cost to Date
- Scheduled Completion Date
- Performance Metrics Indicators
- DBE Goal Accomplishment
- Change Orders Issued
- Sub-Consultant Usage
- Sub-Consultant Consistency from bid

5 Federal Requirements

5.1 US DOT Involvement

5.1.1 Introduction

The US DOT is responsible for planning and coordinating federal transportation projects. Its mission is to deliver a transportation system that is safe, efficient, sustainable, and allows for the equitable movement of people and goods. The US DOT administers the national transportation system through various agencies.

State Departments of Transportation (State DOTs), such as IDOT, carry out the planning, design, construction, and operations and maintenance projects across all travel modes. They allocate resources from various federal-aid programs. State DOTs successfully integrate Title VI of the Civil Rights Act of 1964 into their programs and assess the benefits and adverse effects of transportation activities among different population groups. These factors are used to develop and support appropriate procedures, goals, and performance measures in all aspects of their mission.

The Department follows applicable federal laws as steward of federal funds to carry out its mission and vision to better meet Illinois' transportation needs and actively engages with the FHWA during the development of any project delivered through the CMGC, PDB, and DB Program.

FHWA provides stewardship over the engineering, construction, maintenance, and preservation of highways, bridges, and tunnels. FHWA also conducts research and provides technical assistance to state and local agencies to improve safety, mobility, and to encourage innovation.

Additional FHWA resources for innovative project delivery can be found at the following links:

- CMGC: https://www.fhwa.dot.gov/construction/contracts/acm/cmgc.cfm
- Design-Build: https://www.fhwa.dot.gov/construction/contracts/acm/db.cfm

5.1.2 Federal Highway Administration Requirements

Federal Requirements for Federal-Aid Construction Projects

Federal-aid highway funds are authorized by Congress to assist the states in providing for construction, reconstruction, and improvement of highways and bridges on eligible federal-aid highway routes and for other special purpose programs and projects.

The principal statutes establishing the federal-aid Highway Program are found in Title 23, United States Code (23 U.S.C.). Regulatory requirements are generally found in Title 23, Highways, of the Code of Federal Regulations (23 CFR).

Form FHWA-1273

The provisions of Form FHWA-1273 generally apply to all federal-aid highway construction projects, and must be physically incorporated into the construction contract, subcontracts, and lower-tier subcontracts. The provisions include non-discrimination, prevailing wage rates,

subcontracting, job-site safety, and other important requirements that must be included in every federal-aid construction project.

Federal Prevailing Wage Rate

Prevailing wage requirements of various laws applicable to government contracts are enforced by the Wage and Hour Division of the U.S. Department of Labor. The Davis-Bacon and Related Acts require payment of prevailing wages to laborers and mechanics employed on federal and federally assisted construction projects.

- Davis Bacon Act
- The McNamara-O'Hara Service Contract Act
- The Contract Work Hours and Safety Standards Act
- The Copeland "Anti-Kickback" Act
- The Walsh-Healey Public Contracts Act

Equal Employment Opportunity Special Provision

The requirements of the Equal Employment Opportunity Special Provisions, Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity (Executive Order 11246) as written for federally-assisted construction contracts, include all goals and timetables and affirmative action steps and shall also apply to all state-funded construction contracts awarded by the Department.

Compliance with Build America, Buy America (BABA Act) Requirements

The federal BABA Act generally requires iron, steel, manufactured products, and construction materials used in federal-aid highway construction to be domestically produced.

On-the-Job Training Program for Federal-Aid Highway Construction Projects

The FHWA On-the-Job Training (OJT) Program requires State DOTs to establish apprenticeship and training programs targeted to move women, minorities, and disadvantaged individuals into journey-level positions to ensure that a competent workforce is available to meet highway construction hiring needs, and to address the historical under-representation of these groups in highway construction skilled crafts. (23 CFR Part 230)

Certification Regarding Use of Contract Funds for Lobbying

Federal law prohibits recipients of federal funds, whether through grants, contracts, or cooperative agreements, from using those funds to influence or attempt to influence (lobby) a federal official in connection with obtaining, extending, or modifying any federal contract, grant, loan, or cooperative agreement. (FHWA 1273 Section XI, dated July 5, 2022)

Debarment Certification

The Debarment Certification outlines policy and guidelines for processing non procurement and procurement suspension and debarment (S/D) actions against participants who have an unsatisfactory record of integrity and business ethics in FHWA financial assistance programs and direct federal procurement by the FHWA.

5.1.3 Stewardship and Oversight Agreement

Intent and Purpose of S&O Agreement - Summary

The Federal-aid Highway Program (FAHP) is a federally assisted program of state-selected projects. The FHWA and the State DOT's have worked as partners to deliver the FAHP in accordance with federal requirements. In enacting 23 U.S.C. 106(c) Congress recognized the need to give the State DOT's more authority to carry out project responsibilities traditionally handled by FHWA. This Stewardship and Oversight (S&O) Agreement sets forth the agreement between the FHWA and the Department on the roles and responsibilities of the FHWA and the Department with respect to Title 23 project approvals and related responsibilities, and FAHP oversight activities.

FHWA and IDOT Responsibilities - Summary

The scope of FHWA responsibilities, and the legal authority for the Department's assumption of FHWA responsibilities, has developed over time. The U.S. Secretary of Transportation delegated responsibility to the Administrator of the FHWA for the FAHP under Title 23 of the United States Code (U.S.C), and associated laws. (49 CFR 1.84 and 1.85) The following legislation further outlines FHWA's responsibilities:

- Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991
- Transportation Equity Act for the 21st Century (TEA-21) of 1998
- Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) of 2005
- Moving Ahead for Progress in the 21st Century Act (MAP-21) of 2012
- Infrastructure Investment and Jobs Act

The FHWA may not assign or delegate its decision-making authority to a State DOT unless authorized by law. Section 106 of Title 23, United States Code (23 U.S.C. 106), authorizes the State to assume specific project approvals. Per 23 U.S.C. 106(c)(1), for projects on the National Highway System (NHS) but not on the Interstate System that receive funding under Title 23, U.S.C., the state may assume the responsibilities of the U.S. Secretary under Title 23 for design, plans, specifications, estimates, contract awards, and inspections with respect to the projects, unless the State or U.S. Secretary determines that the assumption is not appropriate. Per 23 U.S.C. 106(c)(2), for projects not on the NHS that receive funding under Title 23, U.S.C., the State shall assume the responsibilities for design, plans, specifications, estimates, contract awards, and inspections unless the State determines that such assumption is not appropriate.

For all other project activities which do not fall within the specific project approvals listed in Section 106 or are not otherwise authorized by law, the FHWA may authorize the Department to perform work needed to reach the FHWA decision point, or to implement FHWA's decision. However, such decisions themselves are reserved to FHWA. The authority given to IDOT under Section 106(c)(1) and (2) is limited to specific project approvals listed herein. Nothing listed herein is intended to include assumption of FHWA's decision-making authority regarding Title 23, U.S.C. eligibility or Federal-aid participation determinations. The FHWA always must make the final eligibility and participation decisions for the Federal-Aid Highway Program (FAHP).

Section 106(c)(3) requires FHWA and the Department to enter into an agreement relating to the extent to which the Department assumes project responsibilities. This Stewardship and Oversight Agreement (S&O Agreement), includes information on specific project approvals and related responsibilities, and provides the requirements for FHWA oversight of the FAHP (Oversight Program), as required by 23 U.S.C. 106(g).

5.1.4 Build America Bureau

The Build America Bureau (BAB) is responsible for supporting transportation infrastructure development projects and to streamline and provide access to the credit and grant programs while also providing technical assistance and encouraging innovative best practices in project planning, financing, delivery, and monitoring.

BAB offers several programs to provide project finance assistance to state, local, and private project sponsors. These include programs that offer customizable credit instruments that reduce project costs, increase flexibility, and facilitate innovative project delivery. Utilizing the BAB programs, state and local project sponsors could accelerate delivery of needed infrastructure projects, often in partnership with private sector investors BAB credit programs include:

- Transportation Infrastructure Finance and Innovation Act (TIFIA)
- Railroad Rehabilitation & Improvement Financing (RRIF)

Other BAB programs that facilitate innovated project delivery include:

- Public-Private Partnerships (P3s)
- Private Activity Bonds (PABs)
- Infrastructure For Rebuilding America (INFRA) Grants

6 DBE Program

The CMGC, PDB, and DB Program will be implemented within the framework of IDOT's overall goals to promote a climate of compliance with prevailing civil rights laws and ensure compliance with federal funding eligibility requirements, as defined by the Office of Business and Workforce Diversity (OBWD).

6.1 Federal DBE Program

The federal DBE program was reauthorized by Congress in the Infrastructure Investment and Jobs Act, Pub. L. 117–58, November 15, 2021, 135 Stat. 429 (23 U.S.C. 101 note), also known as the Bipartisan Infrastructure Law. The Act describes Congress's findings regarding the continued need for the DBE program due to the discrimination and related barriers that pose significant obstacles for minority and women-owned businesses seeking federally assisted surface transportation work.

There are 8 stated objectives of the DBE Program Regulation:

1. To ensure nondiscrimination in the award and administration of DOT-assisted contracts in the Department's highway, transit, and airport financial assistance programs
2. To create a level playing field on which DBEs can compete fairly for DOT-assisted contracts
3. To ensure that the Department's DBE program is narrowly tailored in accordance with applicable law
4. To ensure that only firms that fully meet this part's eligibility standards are permitted to participate as DBEs
5. To help remove barriers to the participation of DBEs in DOT-assisted contracts
6. To promote the use of DBEs in all types of federally assisted contracts and procurement activities conducted by recipients
7. To assist the development of firms that can compete successfully in the marketplace outside the DBE program
8. To provide appropriate flexibility to recipients of Federal financial assistance in establishing and providing opportunities for DBEs

6.2 IDOT DBE Program

As a recipient of federal funds, IDOT has developed an overall DBE program that conforms to USDOT standards set forth in 49 CFR Part 26 and Section 2-105 of the Illinois Human Rights Act - procedures for the utilization of minority, disadvantaged, women-owned businesses, and Persons with Disabilities Act. The IDOT DBE Program is administered by the Office of Business and Workforce Development.

The Department's Office of Business and Workforce Diversity shall retain a staff member or consultant to act as a liaison for the Department on CMGC, PDB and DB project for outreach, monitoring, and compliance with the disadvantaged business enterprise (DBE) program,

consistent with all applicable state and federal laws and regulations that govern DBE requirements.

6.2.1 IDOT DBE Goal Setting

The Department submits triennial Disadvantaged Business Enterprise (DBE) Overall Goal Setting Methodology Reports to the Federal Aviation Administration, FHWA, and Federal Transit Administration for review and approval. These reports are prepared in compliance with 49 CFR § 26.45, the United States Department of Transportation's (USDOT) "Tips for Goal Setting," and other official USDOT guidance.

The regulations require that the overall goal be prepared using a two-step process. According to the USDOT Tips for Goal Setting approved by the General Counsel of the USDOT, the recipient must first determine a base figure for the relative availability of certified and non-certified minority and woman-owned business enterprises in the relevant market area, hereafter collectively referred to as DBE. Next, the recipient must examine all relevant evidence to determine what adjustment to the base figure, if any, is needed to arrive at an overall goal. The final adjusted figure is the recipient's overall goal and represents the proportion of federal transportation funding the recipient is expected to allocate to DBEs during the subsequent three federal fiscal years. Once the adjusted overall goal is determined, the process requires considering what portion of the goal will be met by race- and gender-neutral measures.

6.3 CMGC, PDB, and DB DBE Program

CMGC, PDB, and DB projects shall comply with Section 2-105 of the Illinois Human Rights Act and all applicable laws and rules that establish standards and procedures for the utilization of minority, disadvantaged, and women-owned businesses.

Each CMGC, PDB, and DB Contract shall include remedies for:

- Failure to comply with commitments made in the proposal or utilization plan
- Failure to cooperate in providing information regarding compliance or termination of any subcontractor identified in the utilization plan without the consent of IDOT.
- Such remedies may include termination, penalties, withholding of payments, liquidated damages, and/or disqualification from future bidding

6.3.1 CMGC, PDB, and DB Program DBE Goal Setting

The Department shall determine attainable DBE utilization goals for all CMGC, PDB, and DB Contracts in accordance with established Department and federal goal setting procedures for both professional and construction services. In cases of federal funding, the goals shall not exceed those established pursuant to the relevant and applicable federal statutes or regulations.

Evaluation criteria developed for RFQ and RFP procurement documents shall address a Proposer's record of past DBE utilization as well as planned future utilization of DBE consultants and contractors.

The Department shall determine attainable DBE utilization goals for professional services contracts entered into under any Owner's Representative procurement in accordance with established Department policies and procedures.

The Department shall publish an annual report regarding CMGC, PDB, and DB projects that includes utilization goals and utilization goals achieved. Aspirational goals for construction related professional services will be established separately consistent with IDOT DBB contracts.

Construction-related professional services include:

- Architecture
- Professional engineering
- Structural engineering
- Land surveying

Attachments

2-1, 2-2, 2-3, 2-4, 2-5
4-1

Attachment 2-1 "Step 1": Project Scoping Information Sheet

The IPD Bureau will work with the Districts to populate the following form to document potential Candidate Project characteristics.

Additional items can be added to the bottom of the form to facilitate the Project candidacy determination.

Attachment 2-1 Project Scoping Form
Route:
Location:
Estimated Construction Cost:
Estimated Construction Duration:
Letting Date (as shown in the MYP assuming DBB delivery):
Source(s) of Project Funding (as shown in the MYP assuming DBB delivery):
Scope of Work – pavement, bridge, sound barriers, etc.:
Major Schedule Milestones (critical path elements that affect schedule or price):

Attachment 2-1 Project Scoping Form
Major Project Stakeholders:
Major Obstacles (as applicable):
With Right of Way, Utilities, and/or Environmental Approvals:
During Construction Phase:
Main Identified Sources of Risk:
Brief Project Description:
Project Specific Goals (accelerating delivery, minimizing cost, maximizing life cycle) Goal #1 Goal #2 Goal #3

Attachment 2-2 "Step 2": Qualitative Screening Form

Candidate Projects will typically exhibit the innovative delivery characteristics identified in the table below. **For the initial screening during the MYP process, the District will populate each characteristic with a Y or N only**. If the project is considered for further development, the IPD Bureau and the District will collaboratively rate each characteristic applicable to a Candidate Project, provide a rating from 1 to 3 for how well the proposed project could benefit from any of the innovative delivery method characteristics compared to a traditional delivery method.

Rating Scale:

1 – Minimal benefits

2 – Moderate benefits

3 – Significant benefits

Provide any commentary that may be beneficial for reviewers in the comment's column.

Attachment 2-2 "Step 2": Qualitative Screening Form			
Characteristic	**Initial Assessment (Y / N)**	**Rating**	**Comments**
Expedites or "fast tracks" construction for accelerated delivery			
Uses of innovative design and construction techniques			
Is of sufficient size and complexity to effectively leverage private-sector innovation and expertise. Rating can apply to single project or bundled projects.			
Accelerates delivery by expediting utility relocations allowing flexibility to design for utility avoidance during construction			
Expedites contract award			
Exploits market conditions and increase competition from potential bidders			
Total Score			

Attachment 2-3: Risk Assessment Worksheet

Instructions:

1. Provide a number for the risk
2. Provide a name for the risk
3. Assign a risk category for the risk
4. Provide a brief description of the risk
5. Select a probability rating that the risk will occur (1 - Low, 2 - Medium, 3 - High)
6. Select a rating for the likely consequence if the risk does occur (1 - Low, 2 - Medium, 3 - High)
7. The spreadsheet will calculate an impact rating
8. Select the preferred allocation of the risk (owner, contractor, third-party or shared)
9. Provide preliminary rank of each the delivery methods from 1 to 3, where 1 is the least preferred and 3 is the most preferred method, based on the ability of each to manage the risk
10. Document how the project team intends to mitigate the risk impact
11. Add any notes from risk discussions

Attachment 2-3: Risk Assessment Worksheet											
1	2	3	4	5	6	7	8	9			10	11
Risk Number	Risk Name	Risk Category	Risk Description	Probability	Consequence	Impact	Risk Allocation	Risk Delivery Method			Response Plan	Notes
								CMGC	PDB	DB		
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
							Total	-	-	-		

Attachment 2-4: Pre-Procurement Checklist

A pre-procurement checklist is recommended for every project. The checklist below contains the typical items necessary to ensure a project is ready for procurement. A project-specific checklist should be developed to capture all items completed or in progress prior to commencing the procurement process.

Attachment 2-4: Pre-Procurement Checklist		
Project: _____		
	Item	**Comments**
☐	Project Scoping and Refinement	
☐	Project Development Schedule	
☐	Environmental Status	
☐	Cost Estimate	
☐	Right-of-way Status (No. Parcels Required)	
☐	Utility Status (List Each)	
☐	Geotechnical Investigations	
☐	Third-Party stakeholders - Rail - Aviation Facilities - Affected Property Owners - Other Affected Third Parties	
☐	Required Permits (List Each)	
☐	Risk Assessment	
☐	Public Outreach Status	

Attachment 2-5: Project Delivery Selection Report

In accordance with the Act, a written determination has been made that [insert one: CMGC, PDB, or DB] is in the best interest of the State based on impact to the anticipated project schedule, project completion date, and/or project cost.

The project is described below together with the stated project goals in Attachment 2-1 below:

<insert completed Attachment 2-1 here>

The project has been evaluated through the IPD Bureau's annual MYP gating process as described in Chapter 2 Project Identification and Screening. The results of screening process are shown in Attachment 2-2 below:

<insert completed Attachment 2-2 here>

The project has been evaluated for readiness in accordance with Chapter 2.2 - Project Readiness and Selection Process and has been found to be ready for CMGC, PDB, or DB procurement. The results of the readiness evaluation are shown in Attachments 2-3 and Attachment 2.4 below:

<insert completed Attachment 2-3 here>

<insert completed Attachment 2-4 here>

The project has been evaluated to determine which delivery method is in the best interest of the state and has determined that this project will be delivered via:

☐ CMGC ☐ Progressive Design-Build ☐ Design-Build

The results of the project delivery method selection are shown below:

<insert completed Level 1 Qualitative Evaluation Worksheet here>

<insert completed Level 2 Quantitative Evaluation Worksheet here, if performed>

<insert completed Level 3 Risk Assessment here, if performed>

_____

IPD Bureau Chief

_____

Regional Engineer

_____

Chief Procurement Officer

Attachment 4-1: Performance Metrics

The table below provides a comprehensive set of project level performance metrics for the IPD Bureau to use for selecting the key performance metrics for any individual project. The IPD Bureau will identify a subset of performance metrics to assign to any given project that the IDP Bureau will monitor and report on throughout the project development period.

Program level metrics capture the cumulative performance of the CMGC, PDB, and DB Program by aggregating project level data and performance metrics across the portfolio of projects within the CMGC, PDB, and DB Program.

Attachment 4-1 Performance Metrics			
Performance Goal	**Performance Metric**	**IDOT Baseline (Traditional DBB or as Specified)**	**IPD Delivery (CMGC, PDB, or DB)**
Project Delivery Efficiency - Minimizes the project delivery duration	Is the Project delivery duration increased/decreased	No. of Days	+/- (Days)
Project Delivery - Complete the project before a specified Final Acceptance / Substantial Completion date	Is the Final Acceptance issuance date achieved per the contract	Estimated completion date for DBB	+/- (Days)
	Is the Substantial Completion issuance date achieved per the contract	Estimated completion date for DBB	+/- (Days)
Travel Impacts - Minimize inconvenience to the traveling public during construction	Are lane closures (outside of allowable contract times) increased/ decreased – through-lanes (per location)	Contractual duration of lane closures (Days)	+/- (Days per location)
	Are lane closures (outside of allowable contract times) increased/ decreased – cross-street lanes (per location)	Contractual duration of lane closures (Days)	+/- (Days per location)
	Are incident response times (per incident) increased/decreased	[15] mins	+/- 15 mins

Attachment 4-1 Performance Metrics			
Performance Goal	**Performance Metric**	**IDOT Baseline (Traditional DBB or as Specified)**	**IPD Delivery (CMGC, PDB, or DB)**
	Are detour durations increased/decreased	Approved No. of Days	+/- (Days)
	Are hazard elimination – Temporary repair (debris, pavement failure, safety barrier) – increased/ decreased	[1] day	+/- [1] day
Project Delivery – Maximize risk mitigation through development of preliminary works. (Geotechnical Exploration, Right of Way Determination, Environmental Studies, etc.)	Are critical path tasks initiated / completed that remove or mitigate schedule risks	No. of potential critical path tasks	+/- Critical path tasks completed
Cost Savings - Reduce project delivery costs (under budget)	Is amount under/over the project estimate including assumed risk costs, ATCs, and Innovations	Engineer's estimate ($)	+/- Contractual bid amount ($)
Added Value - Maximize project scope (within established budget or fixed budget contract)	Has length of additional project centerline miles been added	Original length of project centerline miles	+/- Centerline miles
	Has the number of interchanges increased	Original number of Interchanges	+/- Interchanges
	Has value added scope items been included	Original scope	No. of value-added scope items
Cost Certainty - Complete project within budget	Was total project costs under/over contractual bid amount	Engineer's Estimate ($)	+/- Contractual bid amount ($)

Attachment 4-1 Performance Metrics			
Performance Goal	**Performance Metric**	**IDOT Baseline (Traditional DBB or as Specified)**	**IPD Delivery (CMGC, PDB, or DB)**
Innovation - Utilize alternative technical concepts (ATC)	What are the cost reductions of accepted/implemented ATCs	Cost without ATCs ($)	+/- ATC Savings Amount ($)
	What are the schedule reductions of accepted/implemented ATCs	Duration without ATC (Months)	+/- ATC time savings (Months)
Market Capacity - Maximize market competition	What is the number of qualified bidders shortlisted	Minimum no. of bidders desired	+/- No. of qualified bidders
	What are the number of bidders submitting a responsive bid	No. of bidders	+/- No. of responsive bids
Change Orders - Minimize claims / dispute resolution / compensation events	What is the total number of change requests	0	Number of claims
	What is the total amount of change orders and claims approved	$ 0.00	Amount of compensation events ($)
	What is the total number of contractor-initiated change requests granted	0	Number of change requests granted
Design/Document Quality - Meet or exceed the project requirements	Are the proposal scores within an acceptable range and threshold	Threshold Proposal Score (TBD)	+/- Threshold score
Project Quality Assurance - Produce a high-quality design and construction	How many nonconformance reports and developed	Threshold no. of NCRs (TBD)	+/- NCRs

Attachment 4-1 Performance Metrics			
Performance Goal	**Performance Metric**	**IDOT Baseline (Traditional DBB or as Specified)**	**IPD Delivery (CMGC, PDB, or DB)**
that minimizes project risks	How many corrective action events are documented	Threshold no. of CAEs (TBD)	+/- CAEs
	How many schedule recovery events are documented	Threshold no. of SREs (TBD)	+/- SREs
Qualified Staffing Assurance - Stability of Key Personnel remaining on project	What is the number of Key Personnel changes	0	No. of Personal changes
Design Life Analysis - Maximize the life cycle performance / resiliency of the proposed design	Design Life – Per component	Design Life specified in Technical Requirements	+/- Specified Design Life (Years)
Congestion Mitigation - Maximize capacity and mobility improvements	What is the level of service – Through lanes (1-year, 3-years, 5-years)	LOS specified in Technical Requirements	+/- LOS
	What is the level of service – Intersections (1-year, 3-years, 5-years)	LOS specified in Technical Requirements	+/- LOS
Sustainability - Meet or exceed environmental goals (wetland, stream mitigation, etc.)	Did project meet or exceed environmental goals defined in the scope of work, permits or contract	Environmental goals defined in scope of work permits or contract	# of project elements achieving or exceeding goals
Nature-Based Solutions – Maximize the use of new, hybrid and recycled solutions	Nature-Based Solutions – Per Component	Potential no. of solutions in Technical Requirements	+/- No. of NBS

Attachment 4-1 Performance Metrics			
Performance Goal	**Performance Metric**	**IDOT Baseline (Traditional DBB or as Specified)**	**IPD Delivery (CMGC, PDB, or DB)**
Social Equity - Minimize community impacts	What are the total number of ROW acquisitions or SF of Fee Simple	Anticipated ROW acquisitions	+/- Acquisitions
	What are the total number of residential displacements	Anticipated displacements	+/- Displacements
	What are the total number of commercial displacements	Anticipated displacements	+/- Displacements
Commitments - Federal, state & local agency commitments	What are the total number of agency commitments	Baseline commitments defined in contract	+/- Commitments achieved
Commitments - NEPA Environmental commitments	What are the environmental commitments in NEPA document	Commitments defined in NEPA document	+/- Commitments achieved
Commitments – Other Third-party commitments	What are the commitments in MOUs with third parties	Commitments defined in MOU's and/or contract	+/- Commitments achieved
Utility Impacts - Utilities Delays	How many days of delay were caused by utility relocations	Proposer stated schedule for utility relocations	+/- (Days)
Diversity Requirements – Meet/exceed diversity goals	Design Diversity Goals	Contractual DBE Goal (%)	+/- DBE Participation (%)

Attachment 4-1 Performance Metrics			
Performance Goal	**Performance Metric**	**IDOT Baseline (Traditional DBB or as Specified)**	**IPD Delivery (CMGC, PDB, or DB)**
	Construction Diversity Goals	Contractual DBE Goal (%)	+/- DBE Participation (%)
	No. of requested changes requesting to decrease Diversity firms that result in not accomplishing diversity goals	0	+/- Change Requests
Diversity Requirements - Maximize DBE outreach & recruiting	How many outreach & recruiting events occurred (E.G. Meet & Greet events to encourage partnering)	Target no. of events	+/- No. of events held
	How many trainees are enrolled (HCCTP)	Target no. of trainees	+/- No. of trainees
Diversity Requirements - Workforce Diversity	Race of workforce	Target % of workers that are non-white	+/- % of workforce
	Gender of workforce	Target % of workers that are female (6.9%)	+/- % of workforce
Diversity Requirements - Raise Awareness for DBEs	How many seminars/workshops to raise awareness. e.g. DBE meetings	Target no. of industry events	+/- No. of events
		Target no. of attendees	+/- No. of attendees

Attachment 4-1 Performance Metrics			
Performance Goal	**Performance Metric**	**IDOT Baseline (Traditional DBB or as Specified)**	**IPD Delivery (CMGC, PDB, or DB)**
	Advertise in publications/share in agency newsletters/social media posts	Target no. of advertisements	+/- No. of advertisements
Safety - Maximize work zone safety	What is the number of work zone safety incidents	Goal defined in contract	+/- No. of incidents
	What is the number of motorist safety incidents	Goal defined in contract	+/- No. of incidents