Guidance Matrix for Project Organization, Tools, Management and Reporting

The matrix beginning on the next page lists key management resources and strategies that are critical to the success of any project while highlighting how those items differ between conventional projects, high-profile projects, and federal major projects.

The matrix is comprised of 40 processes separated into 7 categories. Processes and categories may be added, deleted, or edited over time as needed.
For each process, the matrix provides a process ID and name, definition, functional areas involved, applicability for different project types, links to supporting documentation, and clarifying comments.

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Project Types			
Type	**Conventional**	**High-Profile**	**Federal Major**
Definition	• FDM 3-15-1.1.3 Conventional Projects	• FDM 3-15-1.1.2 High-Profile Projects	• FDM 3-15-1.1.1 Federal Major Projects
Cost Thresholds	• Total cost < $100 million	• $100 million < total cost < $500 million or, • Total cost < $100 million – Identified by Department management as a High-Profile project because of special interest.	• Total cost > $500 million (YOE), includes preliminary engineering, or • Total cost < $500 million (YOE) - Identified by the USDOT Secretary of Transportation as a Federal Major because of special interest.
Examples	• Other than those projects identified as High-Profile and Federal Major	• Major Highway Development Program ○ https://docs.legis.wisconsin.gov/document/statutes/84.013(3) ○ Wisconsin Department of Transportation Major Highway Development subprogram (wisconsindot.gov) • Interstate Bridge Construction • High-cost State Bridge	• Southeast Wisconsin Freeway Megaproject ○ https://docs.legis.wisconsin.gov/document/statutes/84.014(5m)(ag) • Major Highway Development Program ○ https://docs.legis.wisconsin.gov/document/statutes/84.013(3) ○ Wisconsin Department of Transportation Major Highway Development subprogram (wisconsindot.gov) • Major Interstate Bridge Construction • High-cost State Bridge
Resources and Tools	• Resources and tools as needed to plan, design and construct project in accordance with applicable federal and state manuals and policies	• Project magnitude and complexity may require additional resources (e.g., dedicated staff vs. shared staff, special expertise, etc.) and tools (e.g., proprietary software, etc.)	• Project magnitude and complexity usually requires additional resources (e.g., dedicated staff vs. shared staff, special expertise, etc.) and tools (e.g., proprietary software, etc.)

Organization Acronyms	
Divisions	**Bureaus**
DBSI - Division of Budget and Strategic Initiatives	BOB - Bureau of Budget
DTIM - Division of Transportation Investment Management	BSHP - State Highway Programs Bureau
DTSD - Division of Transportation System Development	AO - Administrator's Office
	BHM - Bureau of Highway Maintenance
	BOS – Bureau of Structures
	BPD – Bureau of Project Development
	BTO – Bureau of Traffic Operations
	BTS – Bureau of Technical Services
	OBOEC – Office of Business Opportunity and Equity Compliance

Other Acronyms Not Defined Elsewhere	
DBE – Disadvantaged Business Enterprise	TMP – Transportation Management Plan
DIN – Design Issue Notice	TPC – Transportation Projects Commission
MAPSS – Mobility, Accountability, Preservation, Safety, Service	WTBA – Wisconsin Transportation Builders Association
RFI – Request for Improvement	YOE – Year of Expenditure

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
A-01	Construction Planning and Submittal Workshops (aka Mobilization Workshops)	Preconstruction workshops (after contract award) between the prime contractor, major subcontractors, and department staff to discuss critical aspects and areas of the project.	Construction	BHM, BOS, BPD, BTO, BTS, OBOEC, Region	Typically not needed	Strongly Recommended	Required (WisDOT)	A, B and C: FDM 3-15-1, Attachment 1.15 Preconstruction Workshop Topics.docx	

A-02	Construction Safety Management System (CSMS)	A CSMS provides a single overall approach to managing Safety activities that allows for efficient, prioritized program execution with key performance measures. A CSMS is a system that: 1. Incorporates people, procedures, and work practices in a formal structure to ensure that the important Safety impacts of the organization are identified and addressed; 2. Promotes continual improvement by periodically evaluating Safety performance; 3. Involves all members of the organization and its partners, as appropriate; and 4. Actively involves Senior Management in support of the CSMS programs. An Owner Controlled Insurance Program (OCIP) is an insurance policy held by WisDOT during construction, which is typically designed to cover virtually all liability and loss arising from the construction project unless specifically excluded. It should be considered for high profile and mega projects.	Construction	BOS, BPD, BTO, BTS, Region	Consider	Strongly Recommended	Strongly Recommended	**TO BE ADDED**	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
A-03	Dispute Review Board (DRB)	Established after execution of the contract to render decisions on unresolved claims quickly and impartially during construction of the project.	Construction	BOS, BPD, BTO, BTS, Region	Consider	Recommended	Strongly Recommended	B and C: FDM 3-15-1, Attachment 1.5 Dispute Resolution	
A-04	Escrow Bid Documents	Require the lowest responsible bidder to submit the documents they used to determine the costs shown in their bid into escrow. These remain sealed unless the bidder and the department mutually agree to release the documents to aid in dispute and claim resolution.	Design, Construction	BPD, Region	Typically not needed	Consider	Consider		
A-05	Partnering	Open communications between the Department and contractor's leadership at regularly scheduled meetings where issues are discussed, and resolutions reached. Includes Consultants, Contractors, FHWA, and other stakeholders.	Design, Construction	BOS, BPD, BTO, BTS, OBOEC, Region	Consider	Recommended	Strongly Recommended	B and C: FDM 3-15-1, Attachment 1.2 Partnering	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
B-01	3D Automated Machine Guidance (AMG)	Create a 3D Automated Machine Guidance (AMG) contractor model from the design files and paper plans. The AMG model should include finish grade and subgrade surfaces. Check average end area volumes with a surface-to-surface comparison. Provide surfaces in DWG, XML, and TTM format for the contractor and construction management team.	Design, Construction	BOS, BPD, BTS, Region	Recommended	Required (WisDOT)	Required (WisDOT)		
B-02	3D Building Information Modeling (BIM)	Create a 3D Construction model (3D lines and points of elements needed for construction layout) from the design files and paper plans. Leverage the 3D Construction model to prepare a 3D Building Information Model (BIM) for Infrastructure for the contractor and construction manager utilizing 3D solid objects to represent all proposed final construction. Do not include interim staged construction. Provide surfaces in DWG, XML, and TTM format. Provide set up and construction layout data in DWG and CSV format.	Design, Construction	BOS, BPD, BTS, Region	Consider	Strongly Recommended	Strongly Recommended		

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
B-03	3D Model with Clash Detection	Create a 3D clash detection model for inter-discipline checks to enhance plan quality. Plan elements to be included are existing utilities, proposed public and private utilities, roadway paving and grading, bridges including piles and foundations, retaining walls including tiebacks and backfill zones, sign structures, storm sewer structures and pipes, lighting, traffic signals, FTMS, sanitary sewer, and water main.	Design, Construction	BOS, BPD, BTS, Region	Consider	Strongly Recommended	Strongly Recommended		
B-04	Cloud-Based CADD File Management	**TO BE ADDED**	Design, Construction	BOS, BPD, BTS, Region	Consider	Strongly Recommended	Strongly Recommended		
B-05	Utility Coordination	Proper upfront coordination and review of utility work plans, utilization of subsurface utility exploration methods, and completion of work in advance of construction to decrease delays and costs to the project.	Design, Construction	BOS, BPD, BTS, Region	Required (WisDOT)	Required* (WisDOT)	Required* (WisDOT)		* Appoint lead contact for utility coordination in both design and construction phases of the project. Leads should be dedicated to full time oversight of utility process.

B-06	Innovation	Innovative design, construction, and other functional proposals are often considered for pilot testing and implementation on Major projects. This is done in coordination with the Statewide DTSD Innovation Program, which is dedicated to identifying opportunities that generate efficiencies and improve policies, practices and procedures. Three major focal areas of the innovation program include the rapid identification and adoption of innovative best practices, modernization of IT tools and data systems, and creation of a culture of innovation that prioritizes continuous process improvement. Often policy, procedure, specifications, administrative rule, and statutory consideration are involved, and decision making can involve areas outside of the department.	Design, Construction	BOS, BPD, BTO, BTS, Region	Consider	Consider	Consider	B and C: FDM 3-15-1, Attachment 1.3 Innovation	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
B-07	Lessons Learned Process	The purpose of a lessons learned process is to develop a collaborative culture, use enhanced risk mitigation strategies, integrate innovation into program and project delivery in an effort to minimize change management values over the life a project/program. The goal is to capture lessons learned throughout the life of the project, which provide opportunities for team members to discuss successes, unintended outcomes, and recommendations. A continuous feedback process elevates issues from the project level to the program level, where the cause of the issue can be addressed for future projects and statewide manuals/specifications. After project/program completion, there should be a thorough evaluation done to ensure a comprehensive list of the most important and applicable lessons learned are documented.	Design, Construction	BHM, BOS, BPD, BTO, BTS, OBOEC, Region	Consider	Recommended	Strongly Recommended	B and C: Lessons Learned - Major Projects - Federal Highway Administration (dot.gov) B and C: REFERENCES 23 U.S.C §106(h): Major Projects 23U.S.C.106(h): Major Projects _ GPO B and C: FHWA Office of Infrastructure Major Projects Website FHWA Major Projects	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
								B and C: 2017 FHWA Project Management Plan Guidance Project Management Plan Guidance for Major Projects	
B-08	Project Design Best Practices Guide	A database of best practices for ensuring consistent and effective Special Provisions and detailed drawings for unique situations specific to Major projects.	Design	BOS, BPD, BTO, BTS, Region	Typically not needed	Recommended	Strongly Recommended	**TO BE ADDED**	
C-01	Disadvantaged Business Enterprise & Worker Programs	Mentoring programs to assist DBE firms through the certification and bidding process as well as educational opportunities for minority and female workers for entry-level work required for construction projects.	Design, Construction	OBOEC, Region	Consider	Recommended	Strongly Recommended	A, B and C: FDM 3-15-1, Attachment 1.9 DBE and Small Business Responsibilities	
C-02	Title VI	Reviews demographic data reports from public involvement efforts and relocation efforts for disparate impact analysis to mitigate risk of potential disparate impacts upon Title VI populations.	Design, Construction	OBOEC, Region	Required	Strongly Recommended	Strongly Recommended	A, B and C: FDM 3-15-1, Attachment 1.10 Title VI Demographic Data Collection and Reporting	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
C-03	Public Involvement	The goal is to streamline the public involvement process, provide a framework to use the most effective outreach tools, and reduce costs. The use of multiple and varied tactics, based on each project's required Public Involvement Plan (PIP), is used to communicate project information to stakeholders, including businesses, general public, and local officials, to obtain feedback and to provide information. Examples of outreach tools include, but not limited to, project websites for design or construction, written and e-based correspondence, news releases, in-person meetings, etc.	Design, Construction	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Required	Required	Required		**THIS SECTION IS UNDER CONSTRUCTION - BTS, RCMs and OBOEC are working to develop single source for this information**
C-04	Traffic Mitigation Strategies	A plan developed with input from business stakeholders, agencies, institutions and first responders to maximize the safe and efficient movement of traffic through construction zones. Developed as part of TMP.	Construction	BPD, BTO, OBOEC, Region	Required	Required	Required	A, B and C: FDM 11-50 Traffic Control A, B and C: Traffic Engineering, Operations and Safety Manual (TEOpS) https://wisconsindot.gov/Pages/doing-bus/local-gov/traffic-ops/manuals-and-standards/teops/default.aspx	

Processes			Functional Areas Involved	Organizational Areas Involved	Project Types			Links	Comments
ID	Name	Definition	(WisDOT)	(WisDOT)	A. Conventional	B. High-Profile	C. Federal Major		
D-01	Reports **This section to be revised to indicate to whom the reports are prepared for, submitted to, and/or approved by**	Executive Summary	Design, Construction, Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Typically not needed	Strongly Recommended	Required		Monthly
		Change Management Report	Design, Construction, Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Required	Required	Required		Monthly
		PS&E/Let Schedule	Design, Construction, Financial, Controls	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Required	Required	Required		Federal Major – Monthly High-Profile – Quarterly Conventional – Quarterly
		Project Construction Schedule	Construction, Controls	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Typically not needed	Strongly Recommended	Required		Federal Major – Baseline and Monthly High-Profile – Baseline and Monthly

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
		DBE/Labor Compliance Reporting	Construction, Financial, Controls	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Typically not needed	Strongly Recommended	Required		Federal Major – Monthly High-Profile – Monthly
D-01	Reports **This section to be revised to indicate to whom the reports are prepared for, submitted to, and/or approved by**	Unprogrammed Cost Reporting	Financial, Controls	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Recommended	Strongly Recommended	Required		Monthly
		Project Maps	Construction, Controls	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Recommended	Required	Required		Yearly, or as needed for programming changes.
		Expenditure / Encumbrance (Design/Construction)	Design, Construction, Financial, Controls	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Recommended	Strongly Recommended	Required		Monthly
		Design Project Risk Reporting	Design, Controls	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Recommended	Strongly Recommended	Required		Federal Major – Monthly High-Profile – Monthly Conventional – Quarterly

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
		Finals Tracking	Construction, Controls	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Required	Required	Required		Monthly
		Issues/RFI/DIN Logs	Design, Construction, Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Recommended	Required	Required		Monthly
		R/W Progress Reports	Design, Financial, Change Mgmt	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Typically not needed	Recommended	Required		Monthly
D-01	Reports **This section to be revised to indicate to whom the reports are**	Risk Register	Design, Construction, Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Required	Required	Required		Monthly

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
	prepared for, submitted to, and/or approved by	Contract Administration	Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Typically not needed	Recommended	Required		Monthly
		Statewide Mega/Major FHWA Dashboard	Design	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Typically not needed	Required	Required	B and C: https://wisdot.box.com/s/qiig9jf3jxaap6445optdwnu8auyig03	Quarterly
		TPC Report	Financial	AO, BOB, BSHP, Region	Typically not needed	Most Likely Required	Required		The TPC report is for projects that are in either the Majors or SE Mega program. Projects in other programs are not included in this report.
E-01	Material Quality Assurance	Steps taken to validate quality control, documentation and verification of materials and placement methods.	Design, Construction, Controls	BOS, BPD, BTS, Region	Required	Required	Required		
F-01	Project Field Office	Project office needs are dictated by the magnitude and complexity of the project or program, number of staff involved on a daily basis, and conference/meeting room space needs.	Design, Construction	BPD, Region	Required	Required	Required		

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
F-02	Estimating Team Process	A Validation Team including a cross section of Transportation estimating experts: WisDOT, Consultant, design/construction/ economists, Industry, and FHWA to perform estimate reviews at 60%, 90% and just prior to letting.	Design, Financial	BOB, BOS, BPD, BSHP, BTO, BTS, Region	Typically not needed	Recommended	Recommended	B and C: Majors projects estimating tool (https://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/estimating/est-tools.aspx)	
F-03	Road Safety Audits (RSA)	A Road Safety Audit (RSA) is the formal safety performance examination of an existing or future road or intersection by an independent, multidisciplinary team. It qualitatively estimates and reports on potential road safety issues and identifies opportunities for improvements in safety for all road users. Some projects have included an RSA with the Value Engineering (VE) study.	Design	BOS, BPD, BTO, BTS, Region	Typically not needed	Recommended	Strongly Recommended		

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
F-04	Value Engineering	Value Engineering (VE) is a systematic process for creatively enhancing the value of a project. The Federal Highway Administration (FHWA) requires VE on all highway projects over $50 million and all bridge projects over $40 million, with additional study requirements for major highway and bridge projects. VE is the application of a step-by-step, systematic job plan based on specific industry-wide standards.	Design	BOS, BPD, BTO, BTS, Region	Consider	Required (WisDOT; FHWA - based on specific dollar threshold)	Required (WisDOT; FHWA - based on specific dollar threshold)	B and C: FDM 3-15-15 Value Engineering	
G-01	Program/Project Management Plan	*The preparation of the project management plan (PMP) helps to ensure successful project delivery and the maintenance of public trust, support, and confidence throughout the life of the project. The purpose of the PMP is to clearly define the roles and responsibilities of the agency leadership and management team; to document the procedures and processes that are in effect (such as identifying project requirements and establishing communication protocols) to provide timely information to the project decision makers to effectively manage the scope, quality, schedule, cost, resources, and risks; and to document the Federal requirements applicable to the delivery of*	Design, Construction, Financial	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Required	Required	Required	A – FDM 2-15-5: Project Management Plans A, B and C: FDM 2-20-1 Scope Management B and C: FDM 2-20-30 Resource Management B and C: FDM 3-15-5 Project Management Plans C: FDM 3-15-1, Attachment 1.6 Federal Level Management and Reporting C: FDM 3-15-1, Attachment 1.11 FHWA Major Projects Requirements Timeline	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
		the project.						C: FDM 3-15-1, Attachment 1.14 FHWA Division PMP Flowchart	
G-02	Project Design Document	Includes project-specific design requirements and guidance if different or unique to the project.	Design, Controls	BOS, BPD, Region	Required (FHWA and WisDOT)	Required (FHWA and WisDOT)	Required (WisDOT)		
G-03	Change Management	Define and adopt strategies, structures, procedures and technologies to deal with changes and determine how they impact the project's scope, schedule and cost. With the goal of cost and schedule maintenance, the process allows for issue identification, assessment/evaluation, resolution, and mitigation.	Design, Construction, Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BTS, Region	Required if more than 4% (WisDOT)	Required (FHWA and WisDOT)	Required (FHWA and WisDOT)	A, B and C: FDM 2-20-45 Change Management	Documented in PMP
G-04	Document and Decision Control	A framework or system to provide and track the collection, storage, and distribution of information for timely and effective decision-making throughout the project.	Design, Construction, Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Required (though less formalized process)	Required	Required	A, B and C: FDM 2-20-10 Communication Management	
G-05	Financial Plan	Initial Financial Plan (IFP): This initial document helps to ensure that necessary financial resources are identified, available	Financial			Required (WisDOT; FHWA -	Required (WisDOT; FHWA -	A: FDM 2-15-10: Project Financial Plans	Complete to FHWA standards. Current FHWA guidance cutoff

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
		and managed throughout the life of the project. The IFP includes scope, cost estimate, schedule, funding, and reasonable assurance that there are adequate resources to complete the project. The IFP is required before authorization of federal funds for construction. Financial Plan Annual Update (FPAU): This annual document helps to ensure that the necessary financial resources are identified, available, and managed through life of project. Similar to the IFP, the FPAU includes scope, cost estimate, schedule, funding and reasonable assurance that there are adequate resources to complete the project. The FPAU is required before additional authorization of federal funds for construction can be made. ***Delays in FPAU approvals could put further project authorizations at risk.***		AO, BOB, BPD, BSHP, OBOEC, Region	Required (though less formalized process)	based on specific dollar threshold)	based on specific dollar threshold)	B and C: FDM 2-15-10: Project Financial Plans B and C: FDM 2-20-15 Budget Management C: FDM 3-15-1, Attachment 1.6 Federal Level Management and Reporting C: FDM 3-15-1, Attachment 1.11 FHWA Major Projects Requirements Timeline C: FDM 3-15-1, Attachment 1.13 FHWA Division Financial Plan Flowchart B and C: PMM 03-01-07	point is $500M. Projects with a total cost greater than $500 million require a full financial plan. FHWA requires a shortened plan for projects between $100 and $500 million. These projects are documented in the WisDOT Single Financial Plan.
G-06	Cost and Schedule Risk Assessment (CSRA)	The development of a build out budget cost in year of expenditure values for a project or program. Includes risk & uncertainty identification. Conducted during NEPA phase and just prior to construction during	Design	BOB, BOS, BPD, BSHP, BTO, BTS, Region	Typically not needed	WisDOT may request a CSRA review for any high interest projects in the	Required for projects $500M or	C: FDM 3-15-1, Attachment 1.11 FHWA Major Projects Requirements Timeline	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
		final design.				majors program	greater (FHWA)	C: FDM 3-15-1, Attachment 1.12 FHWA Division CSRA Flowchart	
G-07	Issue Management	Creation of an issues report (also referred to as an issue log), actively managing and updating the report throughout the project. Report should include name of issue, definition, status, impact, action required, target completion date to resolve and ball-in-court. Issues are items of concern that are being managed by the project team with specific sequential actions required to mitigate the least impactful resolution. Issues may become Risks and should be tracked through that process.	Design, Construction, Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Consider	Recommended	Strongly Recommended	A, B and C: FDM 2-20-5 Stakeholder Management	
								A, B and C: FDM 2-20-10 Communication Management	
								A, B and C: FDM 2-20-20 Risk Management	
								A, B and C: FDM 2-20-30 Resource Management	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
G-08	Risk Management	Creation of a risks report, actively managing and updating the report throughout the project. Report should include name of risk, definition, status, impact, action required, target completion date to resolve and ball-in-court. Complex projects may require additional resources to actively manage risks. Risks are uncertain events or conditions that if they occur have a positive or negative effect on a project's objective. Risk items of concern that are outside the direct control of the project team that are being monitored to mitigate the impact wherever possible.	Design, Construction, Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BSHP, BTS, OBOEC, Region	Consider	Recommended	Strongly Recommended	A, B and C: FDM 2-15-1 Project Integration Management A, B and C: FDM 2-20-20 Risk Management	
G-09	Risk Workshop	Working meeting involving project team and wide array of functional experts (i.e., structures, geotech, construction, design, traffic control, etc.) to identify project risks and develop well-written description of risks. Risk workshops shall be held approximately 2 months before each	Design	AO, BOB, BOS, BPD, BSHP, BTO, BTS, OBOEC, Region	Typically not needed	Recommended	Strongly Recommended	C: FDM 3-15-1, Attachment 1.11 FHWA Major Projects Requirements Timeline	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
		respective CSRA.						C: FDM 3-15-1, Attachment 1.12 FHWA Division CSRA Flowchart	
G-10	Program Controls	Documentation, tracking and reporting related to the overall program's schedule, quality, scope, material, and cost issues. Program Controls are generally in-house or a part of prime consultant's contract. Plan reviews should be completed by an independent entity. See Budget Estimation and Management	Design, Construction, Financial	AO, BOS, BPD, BTO, BTS, OBOEC, Region	Recommended	Required	Required	A, B and C: FDM 2-20-1 Scope Management	
								A, B and C: FDM 2-20-15 Budget Management	
								A, B and C: FDM 2-20-25 Schedule Management	
								A, B and C: FDM 2-20-35 Quality Management	
G-11	Program Management	Monitoring and oversight of program controls, document controls, financial controls, schedule controls and contract			Recommended	Required	Required	A, B and C: FDM 2-20-1 Scope Management	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
		management.	Design, Construction, Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BTS, OBOEC, Region				A, B and C: FDM 2-20-15 Budget Management	
								A, B and C: FDM 2-20-25 Schedule Management	
								A, B and C: FDM 2-20-35 Quality Management	
G-12	Project Controls	Documentation, tracking, and reporting related to cost, schedule, quality, scope, and material issues of a specific project within the overall program. RFI's, DIN's, etc. Includes utilization of proven cost control systems and software to track program delivery during planning and design, as well as to ensure the contractor is in control of the performance of the work within the contract completion deadlines, production rates, and the critical path of activities.	Design, Construction, Financial, Controls, Change Mgmt	AO, BOB, BOS, BPD, BSHP, BTO, BTS, OBOEC, Region	Required (WisDOT)	Required (FHWA and WisDOT)	Required (FHWA and WisDOT)	A, B and C: FDM 2-20-1 Scope Management	Regions may utilize processes for balancing contract modifications and equalizing contract modifications. As part of the cost controls system, there should be regularly updated project cost to complete estimates considering budgeted cost of work performed, budgeted cost of work scheduled, over/underrun
								A, B and C: FDM 2-20-15 Budget Management	

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
		Also includes utilization of proven schedule control systems and software to track program and project delivery during planning, design, and construction to ensure the contractor is in control of the performance of the work within the contract completion deadlines, production rates, and the critical path of activities.						A, B and C: FDM 2-20-25 Schedule Management A, B and C: FDM 2-20-35 Quality Management	quantities, design fees including public outreach, approved and anticipated contract modifications, real estate, utilities, construction delivery, and non-Let projects.

G-13	Quality Management	An enhanced plan review process that includes identification of key design elements, such as earthwork/cross sections, staging, geometrics, temporary drainage etc., and review of these elements by small teams of subject experts for each of those topic areas. Same group of experts to review all in-house and consultant plans at major design milestones such as preliminary scope complete, final scope complete and 90% complete. Process involves key stakeholders and subject matter experts early and throughout the project development process which creates a feedback loop with experienced construction oversight and other subject levels experts to identify issues, develop solutions and ensures early availability of the plan set to the construction industry for review prior to bid. For projects with highly complicated staging or potential conflict with contractors means/methods also consider reaching out to industry (WTBA/Contractors) when these conflicts are identified to discuss the issues and determine resolutions during design.	Design, Construction	BOS, BPD, BTO, BTS, Region	Required*	Required*	Required*	A, B and C: FDM 2-20-35 Quality Management	* Quality Management is required for all project types. Enhanced PS&E Review is strongly recommended for Project Types B and C. Less formalized review process is recommended for Project Type A.
G-14	Accountability Matrix	Identifies who is involved in various tasks needing FHWA action, including who is	Design,		Recommended	Strongly	Required	A, B and C: FDM 2-20-5 Stakeholder Management	

Processes			Functional Areas Involved	Organizational Areas Involved	Project Types			Links	Comments
ID	Name	Definition	(WisDOT)	(WisDOT)	A. Conventional	B. High-Profile	C. Federal Major		
		responsible, accountable, consulted, and informed for each task. See PMPs, see MAPSS-CORE Goal, see Exhibit 1.1 FHWA-Oversight and Stewardship Agreement. Also referred to as Roles and Responsibilities Matrix.	Construction, Financial, Controls, Change Mgmt	AO, BOS, BPD, BTO, BTS, OBOEC, Region		Recommended	(WisDOT)	A, B and C: FDM 2-20-20 Risk Management	
								A, B and C: FDM 2-20-30 Resource Management	
								A, B and C: FDM 2-20-45 Change Management	
								C: FDM 3-15-1, Attachment 1.4 Accountability (Matrix)	

Processes			Functional Areas Involved	Organizational Areas Involved	Project Types			Links	Comments
ID	Name	Definition	(WisDOT)	(WisDOT)	A. Conventional	B. High-Profile	C. Federal Major		
G-15	Staffing	If project or program resource load increases beyond Region staff capacity, additional dedicated staff may be needed. Projects may need to supplement the department's (owner's) expertise by hiring additional outside guidance. Areas in which additional expertise is typically needed include Structures, Traffic Mitigation, Constructability Reviews, Scheduling, Utility Coordination, etc. This effort may also include the evaluation of work by others to ensure that technical processes being applied or developed meet the department's needs, meet the standards of professional practice, and/or meet federal, state or local planning requirements.	Design, Construction, Financial, Controls, Change Mgmt	BOS, BPD, BTO, BTS, Region	Required	Required	Required	A, B and C: FDM 2-20-30 Resource Management	Documented in PMP

Processes			Functional Areas Involved (WisDOT)	Organizational Areas Involved (WisDOT)	Project Types			Links	Comments
ID	Name	Definition			A. Conventional	B. High-Profile	C. Federal Major		
G-16	Bureau Liaisons	One or more dedicated liaisons to act as single points of contact to facilitate clear communication between the project team and the Bureaus, and to serve as an engineering resource and advisor to the project team. Help to mitigate project costs, quality issues, and schedules by providing real time assistance to allow timely decision making by the project team.	Design, Construction	AO, BOB, BOS, BPD, BSHP, BTO, BTS, OBOEC, Region	Typically not needed	Required (FHWA and WisDOT)	Required (FHWA and WisDOT)		
G-17	Design Liaison/ Transparency Contract	Contract with the design consultant to • answer plan questions during construction • provide design expertise through construction continuity provide plan revisions	Design, Construction	BOS, BPD, BTO, BTS, Region	Typically not needed	Strongly Recommended	Required (WisDOT)		

Partnering

Partnering is a crucial early step in managing project expectations. Partnering offers a framework for conflict resolution and improved communications. Adopting a partnering approach, all parties agree from the beginning, in a formal structure to focus on creative cooperation and teamwork in order to avoid adversarial confrontation. Working relationships are carefully and deliberately built, based on mutual respect, trust and integrity.

- Partnering can provide the basis for participants to re-orient themselves towards a “win-win” approach to problem solving and can foster synergistic teamwork
- Partnering represents a proven approach to project management and project control.

Project Teams can address partnering informally or formally. For Federal Major Projects formal and facilitated partnering meetings shall be utilized in the design and construction phases of projects.

Federal Major Projects Partnering should include:

I. Normal/Traditional partnering efforts
II. Bi-weekly partnering meetings between WisDOT managers, FHWA, design consultants and contractors.
III. Meeting agenda should include:
    a. Design update from design consultant
        i. Issues and/or problems with design, schedule, budgets, etc.
        ii. Decisions the design team needs from WisDOT, FHWA, contractors or others
        iii. Potential design change orders or disputes
        iv. Issues to be considered for change management log
        v. Any items that can be considered as “value engineering” or “cost reduction” initiatives
    b. Construction update from contractor
        i. Issues and/or problems with construction, schedule, budgets, etc.
        ii. Decisions the contractor needs from WisDOT, FHWA, design team or others
        iii. Potential construction change-orders or disputes
        iv. Issues to be considered for change management log
        v. Any items that can be considered as “value engineering” or “cost reduction” initiatives

Innovation

The project manager is responsible for ensuring collaboration and communication occurs at the innovation inception between the project team, the region and the statewide bureaus. It is important this communication happens early to raise awareness, provide guidance, get buy-in and potentially change policy and standards.

Accountability

Working in accordance with partnering and dispute resolution processes, the project team and team members are responsible for seeing decisions are made. In simplest terms they are accountable for the successful delivery of the project.

Roles, Responsibility, and Accountability should be part of every project meeting. This ensures proper ownership of project-related tasks, as well as accurate and timely execution of those tasks. The region, bureau, and division staff, leads, project managers, supervisors, and chiefs are critical to ensure roles, responsibilities, accountability, and decision responsibilities are defined and followed up on.

With current workloads associated with the many Department Federal Major Projects and other High-Profile projects, development of an Accountability Matrix may be overly resource intensive. However, the concept has value and should be considered for use in part or whole by Project Chiefs when setting up a Federal Major Project or a High-Profile Project.

An Accountability Matrix should be considered a living document. The appropriate time to begin developing this tool is during the data gathering process. Generally, the project manager would facilitate the discussion and create the matrix in accordance with what was agreed upon by the project stakeholders.

In-order to keep the document living and up to date, an annual review is recommended, as well as any time there is a significant shift in personnel.

(SAMPLE) *Public Information Outreach Accountability Matrix*

ID	Task	Region Federal Majors PDS Team	FHWA	Region
1	Overall PI Outreach Effort	A	C	PS
2	Spokesperson	A	C	PS
3	Theme Identity	A	C	PS
4	Market Research	PS	C	A
5	PI Product Development	A	C	PS
6	Sensitive Issues	PS	A	C
7	Open Records Requests	A	C	PS

A = Accountable for **PS** = Participate in/Support **C** = Communicate with

Dispute Resolution

Dispute resolution plays a crucial role in project management. A dispute resolution plan is designed to prevent opposing parties from arriving at an impasse. A dispute resolution plan, when properly implemented, helps to establish a common understanding of the process you will use to efficiently and effectively, resolve issues. Successful dispute resolution requires a win-win attitude from all parties, common-objectives, and compromise.

The process of dispute resolution starts at the lowest possible level for each organization and proceeds up through both organizations' hierarchy, until the dispute is resolved.

A dispute is only elevated to the next level when 1) an agreement cannot be reached at the current level within the agreed upon time, or 2) if more than the agreed upon time has passed without a solution, or 3) by request of one of the parties at the current level (after first informing the other party), and with concurrence of those in the next higher level. Elevating a dispute to the next level should not be considered a failure, but rather an attempt to resolve the issue expeditiously and without impacting a project's schedule or budget.

Sample Dispute Resolution Plan WisDOT Disputes

	Design/Surveys/Lab	Subs/Suppliers	
Level	**WisDOT**	**Contractor**	Time to Evaluate
I	Project Manager	Bureau staff	1 day
II	Supervisor	Bureau BPD Liaison or Supervisor	1 week
III	Chief	Bureau Chief(s)	1 week
IV	Region Director, Deputy Director	Bureau Director(s)	2 weeks
V	Deputy Administrator Regions	Deputy Administrator Bureaus	2 weeks

Note: If a dispute cannot be resolved by Deputy Administrators the Division Administrator will make a final decision.

Sample Dispute Resolution Plan for Design

	Design/Surveys/Lab	Subs/Suppliers	
Level	**WisDOT ***	**Consultant**	Time to Evaluate
I	Project Manager	Consultant staff, task leads	1 day
II	Supervisor	Project Manager	1 week
III	Chief	Project Manager	1 week
IV	Region Director, Deputy Director, Bureau Director	Principal	2 weeks
V	Deputy/Division Administrator	Principal	2 weeks

Note: Region Project Managers, Supervisors, and Chiefs shall utilize BPD Liaison and Bureau Counterparts as part of Dispute Resolution Process.

Sample Dispute Resolution Plan for Construction

	Design/Surveys/Lab	Subs/Suppliers	
Level	**WisDOT ***	**Contractor**	Time to Evaluate
I	Project Manager	Foreman/Superintendent	1 day
II	Supervisor	Project Manager	1 week
III	Chief	Area Manager	1 week
IV	Region Director, Deputy Director, Bureau Director	Operations Manager	2 weeks
V	Deputy/Division Administrator	Owner; President	2 weeks

Note: Region Project Managers, Supervisors, and Chiefs shall utilize BPD Liaison and Bureau Counterparts as part of Dispute Resolution Process.

Federal Level Management and Reporting

FHWA has developed guidance and reporting requirements for states managing a Federal Major Project. See FDM 2-1-1.3.

According to Federal Law 23 USC 106(h), projects receiving federal financial assistance that have an estimated total cost of $500,000,000 in year of expenditure (with inflation) dollars or more shall have:

- A Project Management Plan
  - A project management plan shall document the procedures and processes that manage the scope, costs, schedules, quality, and applicable federal requirements. See FDM 2-15-5.
- An Annual Financial Plan
  - A financial plan shall be based on detailed estimates of the cost to complete the project and assumptions of future increases in the cost to complete the project.
- A Cost and Schedule Risk Assessment
  - Total program cost estimate includes construction, engineering, acquisition of right-of-way, and related costs using Probabilistic Risk-Based Estimating.

A simplified federal financial plan is required for projects receiving federal financial assistance that have an estimated total cost of $100,000,000 to $500,000,000 in accordance with Federal Law USC 106(i). Annual financial plans prepared under this subsection shall be made available to FHWA for review upon request. The Wisconsin Single Financial Plan meets this reporting requirement. See FDM 2-15-10.2 and FDM 2-15-10.5.

An additional, more detailed federal guidance outline can be found at: http://www.fhwa.dot.gov/ipd/

Department Level Management and Reporting

Projects that meet the definition of a Federal Majors Project report on a pre-determined basis (currently quarterly) to the Department's Mega/Major Committee. Other High-Profile projects that utilize some of the Mega/Major Project reporting and management tools may also report out at the committee meeting.

This Department level meeting provides an opportunity for all parts of the organization that play a role in Federal Majors and identified High Profile Projects to share information on budget, schedule, best practices, lessons learned, work completed and planned, significant issues and risks, public involvement and legislative communication and coordination, and disadvantaged business enterprise and labor initiatives. These meetings provide an opportunity to discuss potential disputes, political issues, public concerns and other potentially sensitive issues. This format is a significant tool to effectively, efficiently, equitably, and consistently managing these projects.

Managing Federal Majors and other High-Profile Projects as defined, means that the modal divisions (DTSD and DTIM), DBSI Bureau of Budget, and FHWA need to work in collaboration from initial project identification through the completion of construction, and the close-out of the project's finances.

A typical agenda and monthly executive level report have been developed to assist the Oversight Team with fulfilling its mission.

The Department's Mega/Major Oversight Committee consists of:

Chairperson	Secretary
Meeting Facilitator:	Deputy Administrator – Division of Transportation Systems Development
Members:	Deputy Secretary, Executive Assistant, DTSD Administrator, DTSD Deputy Administrators, DTIM Administrator, Bureau of Budget Director, FHWA Administrator, Region Directors and Deputy Directors with Federal Majors or High-Profile projects
Typical Attendees:	Oversight Members, Federal Majors/High Profile Project Chiefs, Bureau Director DTIM BHSP
Projects Included:	Federal Majors and other High-Profile projects or programs that warrant a higher level of department level discussion
Meeting Frequency:	The meetings are currently held quarterly (March, June, September, and December) on the 1st Friday of these months from 9-11am in Madison at Hill Farms, in the Secretary's office
Typical Agenda & Reports:	Executive level reports and meeting materials are generally submitted to the Oversight Team the Friday prior to the meeting. The agenda and handouts are submitted by the Division Administrator's office or their designee (current SE Region Director).

Region, Bureau, and Team Management and Reporting

Extensive planning and organization on an ongoing basis are required to meet the needs for delivering a Federal Majors Project, Department Oversight Committee and to fulfill FHWA requirements.

A team working on a Federal Majors Project will typically have multiple daily or weekly meetings focused on immediate project needs along with issues and risks.

The project team should hold a Change Management and Progress Meeting on a bi-weekly to monthly basis**.** FHWA, DTSD Bureaus, DTIM, and Bureau of Budget should be represented at these meetings when and where appropriate. Topics covered at the meeting should cover components required in the Department's Project Management Plan.

The Project Management Plan (https://www.fhwa.dot.gov/majorprojects/pmp/guidance17.cfm) is comprised of the following topics:

Project descriptions and scope of work (See Contents of the Project Management Plan B. Project Management Plan Checklist)

1. Goals and objectives
2. Project organizational chart, roles and responsibilities
3. Project phases
4. Procurement and contract management
5. Cost budget and schedule
6. Reports
7. Internal and stakeholder communications
8. Project and program management controls – *see list below*
9. Design quality assurance/quality control
10. Construction quality assurance/quality control
11. Environmental monitoring
12. Right of way
13. Safety and security
14. Traffic management
15. Communications/public information
16. DBE Program
17. Title VI demographic data collection and reporting
18. Closeout Plan
19. Project documentation

Reports that the Project Team should utilize include:

A. Executive summary development for Oversight Committee
B. Activities and deliverables
C. Issues/action items
D. Schedule
E. Cost
F. Quality
G. Other status reports, such as DBE/minority participation and contractor safety

Project and Program Management Controls the project team should utilize include:

A. Risk management plan
B. Scope management plan
C. Scheduling software
D. Cost tracking software
E. Project metrics
F. Contracting strategies (new and innovative)
G. Value engineering, value analysis, constructability reviews
H. Contractor outreach meetings
I. Partnering
J. Change order/extra work order procedures
K. Claims management procedure
L. Other programs, such as Owner Controlled Insurance Programs (OCIP)

Many of these tools and practices are defined in more detail in the section on Federal Majors Project Best Practices and on the FHWA website.

DBE and Small Business Responsibilities, Management, and Reporting

The Department has federal and state responsibilities on all of its improvement program projects to fulfill Disadvantaged Business Enterprise (DBE) and Small Business Enterprise responsibilities.

For all types of projects, but particularly High Profile and Federal Majors projects, WisDOT staff involved are encouraged to become more aware and participate in DBE and Small Business efforts.

Selected High Profile and Federal Majors projects may have project specific activities for some, or all of these areas.

The Office of Business Opportunity & Equity Compliance (OBOEC) carries out a-number-of ongoing responsibilities for the department that cover all programs. These include:

DBE Goal Setting Technique:

The DBE Program Engineer uses project estimates to analyze and estimate realistic opportunities for DBE participation. Individual contract goals may be included on a variety of projects including high profile and mega projects. The DBE Program Engineer consults with the Regions in which projects with DBE goals are being considered as applicable. Input from industry stakeholders may be sought on DBE goals to ensure balance of supply, demand, and community expectations with project needs.

DBE Firm Pre-Assessment:

The DBE office offers DBE firms the opportunity for early intervention assessment to identify potential problem areas and customize training and resources in advance of contracting opportunity and throughout the life of a project. Participation is not mandatory but recommended.

Encouraging Formalized Partnering Relationships:

This is often done through the TRANS-AC and TRANS-CAC groups but can also be done at the individual Federal Majors project level.

- **Mentoring Connections Arrangements**: 6-month informal networking relationship, participation is monitored but no DBE credit granted.
- **Mentor Protégé Agreement**: a formal document outlining the agreement between the mentor (prime contractor) and protégé (a DBE subcontractor) to develop DBE firm capacity. The agreement is submitted to Wisconsin Department of Transportation (WisDOT) for approval for predetermined DBE goal attainment. Usually 2 years in duration.
- **Joint Venture Agreements**: a formal, legally binding agreement, between firms creating a venture desiring to compete on a single project for its duration. Agreement requires an LLC designation, clarification of responsibility, liability, and staff on the advice/review of legal counsel. DBE credit is assigned based on work performed by DBE certified firm and reaffirmed before project is awarded.

Bullseye Marketing Strategy:

Bullseye Marketing strategies are utilized informally when and as the opportunities are identified.

1. Mail/email contract information to list of firms, pre-advertisement outlining when and where to find opportunity
2. Mail/email project information, resources once advertised; advise where to find plans
3. Distribute list of potential primes (plan holders list) to DBE firms for solicitation

Strategies for Supplemental DBE Contracting Opportunities

Creating Stand-Alone Projects:

a. In the absence of projects that are of a size and work type conducive to DBE priming, contract packages may be unbundled because the work areas have a significant pool of ready, willing and able firms for competition. These unbundled packages are let separately to stimulate opportunity for smaller, nontraditional businesses to compete as prime contractors. Goal is to create new, small business primes

b. Previously identified contracts: landscaping, fencing, advanced traffic control, security, raze & removal

Creating Mandatory Subcontracts:

In the absence of robust DBE subcontracting, work items in a contract may be identified as mandatory subcontract items based on the size of the contract, specialty work areas that WisDOT traditionally utilizes, and a significant pool of firms available to compete for the work. Goal is to increase WisDOT competition and firm capacity as subcontractors.

Outreach to lateral certifying agencies:

Examine other agencies that certify minority, female, or small businesses for potential WisDOT DBE Firm Certification. Review contractor lists for firms that perform WisDOT work to encourage them to apply for DBE Certification. Conduct certification workshops for interested firms.

Project related meetings include structured networking for prime and subcontractors:

This is done at various conferences and at project meetings as, where, and when appropriate (ex. Pre-Bid meetings, or consultant solicitation meetings.

- *Speed Networking:* a timed, facilitated, rotational exercise that allows DBE firms 'face time' with numerous primes in a single setting. DBE firms market themselves while primes clarify subcontracting needs. The goal is to network, educate, and personalize DBE firms (and program). Anticipated result is a follow-up meeting that leads to a subcontract or partnership.
- *Mosaic Exercise:* facilitated, small group discussion including Prime, DOT, community, DBE, and labor stakeholders to brainstorm responses to predetermined questions to generate strategies for inclusion and best practices.

DBE Contracting Update:

- Email newsletter to keep the community informed about upcoming project opportunities
- OBOEC (Office of Business Opportunity & Equity Compliance) maintains tallies of DBE participation and labor participation for review and accountability.

DBE Certification workshops and individual assistance:

Explains certification requirements and process to potential DBE firms and provides referral to DBE resources that can assist or support potential DBE firms with the application submittal.

Expedited DBE certification:

Firms who identify themselves as seeking DBE certification to compete on WisDOT Federal Majors projects will be prioritized for certification review.

Civil Rights and Compliance Tracking System (CRCS):

- OBOEC Compliance staff hosts contractor training for the Certified Electronic Payroll portion of CRCS. They learn about entering payments to first tier subcontractors and all DBE firms.
- System allows subcontractors to confirm receipt of payments to and from the prime.

- Contractors enter certified electronic payrolls into the system documenting and tracking employees' hours, wages and demographics, giving WisDOT just-in-time labor participation data.

Development & Inclusion of Contract Specifications:

- **DBE condition of award:** WisDOT requires prime contractors to submit their DBE percentage when they submit their bid. When recognized as low bid, the prime contractor has 48 hours to submit their DBE commitment before the contract is awarded.
- **Additional Special Provision (ASP) 1:** The prime contractor receives a $5.00 payment per hour for every Highway Construction & Skills Training (HCST) graduate hired for up to two years from their hiring date and for HCST graduates who become apprentices for their entire length of their apprenticeship.
- **Additional Special Provision (ASP) 3:** This provision is a required contract provision for all construction projects with DBE goals. The provision outlines DBE requirements for compliance with 49 CFR Part 26 from pre-bid through the life of a project.
- **Additional Special Provision (ASP) 4:** This provision outlines requirements related to prompt payment and retainage.
- **Additional Special Provision (ASP) 7:** This provision outlines requirements for entering payments to all first tier and DBE subcontractors.
- **Additional Special Provision (ASP) 9:** Contractors must use the Civil Rights and Compliance Tracking System (CRCS) to submit electronic certified payrolls with a LET date on or before December 2024 and AASHTOWare Project Civil Rights and Labor (AWP CRL) for projects with a LET date on or after January 2025.

Training Workshops:

- DBE Certification: Inform prospective contractors how to qualify for DBE status.
- WisDOT bidding process: Highway Construction Contract Information Site (HCCI), which helps navigate contractors and DBE firms through the project advertisement and award.
- How to bid & quote as a Subcontractor and/ Prime:
    - Contractor's perspective: describes what they look for when receiving bid or quotes.
    - WisDOT perspective: how to bid DOT projects.
- Civil Rights and Compliance Tracking System (CRCS): Describes/explains to contractors how to enter their payrolls and payments for 1st tier subcontractors and all DBE.
- Trucking guidelines (federal & state): Explains to trucking firms which laws apply for DBE trucking credit.
- DBE bonding workshops: Educates DBE firms in bonding requirements and issues.
- Certified Electronic Payroll Training: Provides instruction on requirements and use of electronic payrolls The Division continually evaluates the need for and opportunities for providing training.

Title VI Demographic Data Collection and Reporting

General Responsibilities

The Wisconsin Department of Transportation (WisDOT) has federal Title VI obligations on Federal Majors projects, major projects, and high-profile projects. To assure Title VI compliance throughout the various stages of each, individual federally funded project, WisDOT in partnership with the Federal Highway Administration (FHWA) has organized a Title VI Program with service under the following definitions:

Title VI is a touchstone for several Nondiscrimination Authorities. It is not restricted to any specific issue or any specific program. Title VI issues may emerge at any stage of a Project with potentially far-reaching consequences. Title VI assures that no person in the United States shall on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. Title VI requires the collection of demographic data (race, color, and national origin including Limited English Proficiency) of populations impacted by federally funded projects.

Limited English Proficiency (LEP) is an issue that falls under National Origin of Title VI. An LEP person is defined as a person who does not speak English as a primary language and has limited ability to read, write or understand English. Failure to provide LEP persons services or meaningful access may constitute national origin discrimination.

The Americans with Disabilities Act (ADA) provides that persons with bona fide disabilities be provided with meaningful access to program services and information, and/or be provided with reasonable accommodations that they may obtain equal benefits and privileges of those who are able.

Title VI in the Planning Process

Public involvement is required at the Planning Stage to forestall future problems. Public involvement should be performance-oriented and not process-oriented, communication must always be a two-way street. It is very important that public concerns and views are considered in decision-making. All plans must be tailored to fit local conditions and ensure involvement of the transportation disadvantaged. An effective public involvement and participation program may contain the following issues:

- Recognition of specific and prominent community issues and circumstances
- Availability of mechanisms for eliciting and soliciting minority involvement
- Availability of and accessibility to information for all impacted minority and low-income communities
- Multiple mechanisms for involving the public
- Openness and complete accessibility to process
- Coordination with Indian Tribal Governments
- Off-setting impacts across investments

Title VI and Project Development

The data-gathering process in the Project Development Phase is critical. Were the appropriate number of public hearings conducted? Were they held as open forums? Is there adequate identification of social, economic, and environmental impacts? Was consideration given to increase access to facilities and services, upgrading affected communities or creating positive change in the tax base and property values?

Adverse impact in the Project Development Phase involves diminished access to facilities and services, disruptions of community cohesion, disruptions of people, businesses, and farms. There should be at this stage budgeting for equitable mitigation. Examples of mitigation include:

- Restoration of circulation and pedestrian and pedestrian patterns
- Relocation assistance and advisory services, replacement housing and moving payments for displaced families and businesses
- Aesthetic and visual improvements

- Traffic signalization and street lighting improvements
- Employment, training, and contracting opportunities
- Noise barriers and buffer zones
- Landscaping

Title VI and Right-of-Way

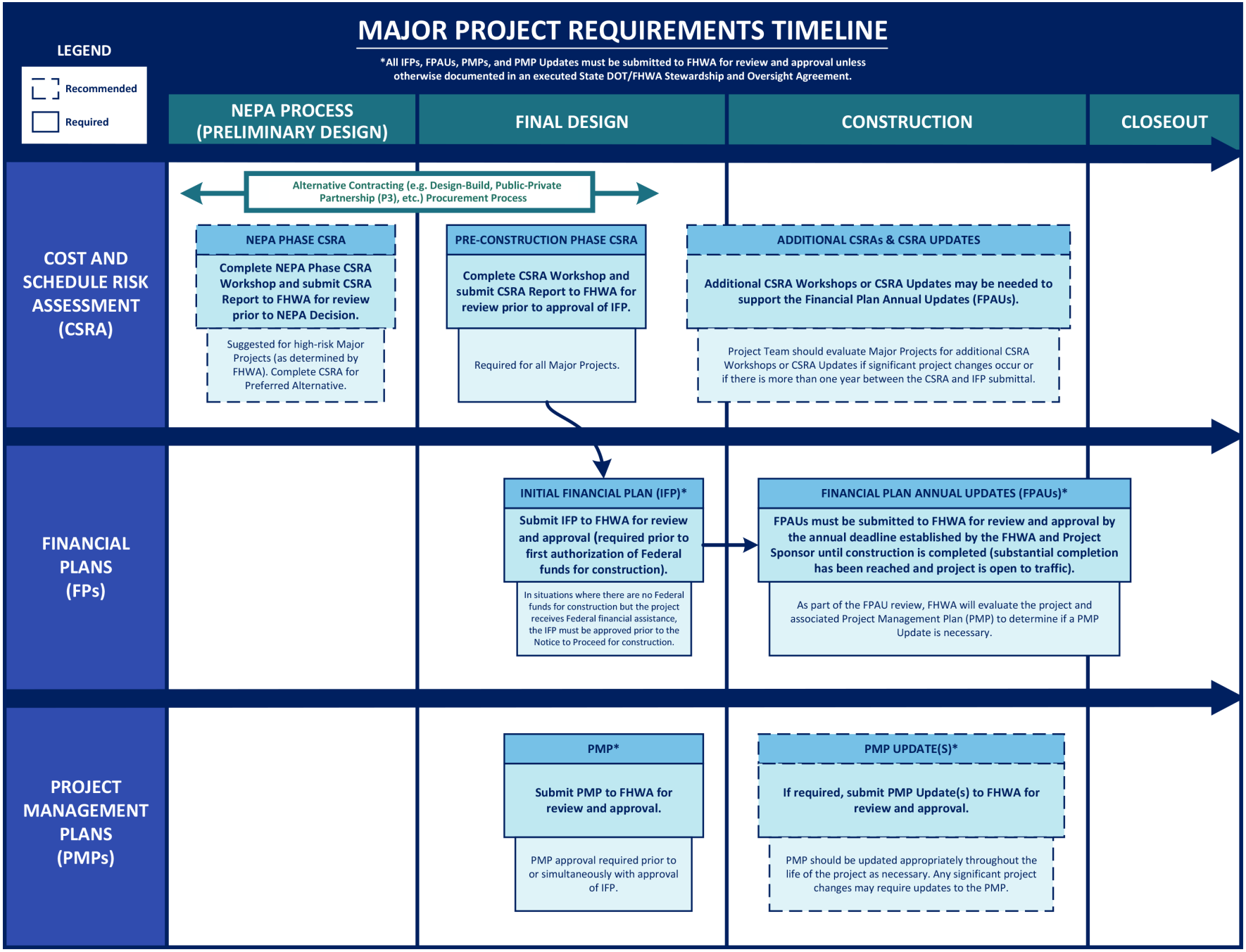
Title VI aspects of Right-of-Way involve appraisal reviews, negotiations, and acquisitions. It also involves nondiscrimination in such aspects as relocation assistance and payments and property management. Appraisals provide a basis for payment on estimates of fair market value. Negotiations may be highly sensitive and must take into consideration all fair market conditions. Acquisition of properties through fair negotiations requires agencies to make full amount offers on amounts believed to be just compensation. Coercion is strictly prohibited. Relocation and assistance payments require written agreements and notices including full disclosure of agency policies, provision of agency services, and appropriate notice timelines. Property management involves property leased or rented acquired for highway purposes and careful and judicious selection of management firms and demolition contractors. Common Title VI issues in Right-of-Way include:

- Use of Fee Appraisers
- Selection of Comparables
- Adjustments to subjects without bias
- Accelerated or advanced condemnation
- Offer of less than approved appraisal amount
- Degree of relocation services provided
- Selection of replacement housing
- Determination of rent amounts
- Maintenance of rental property

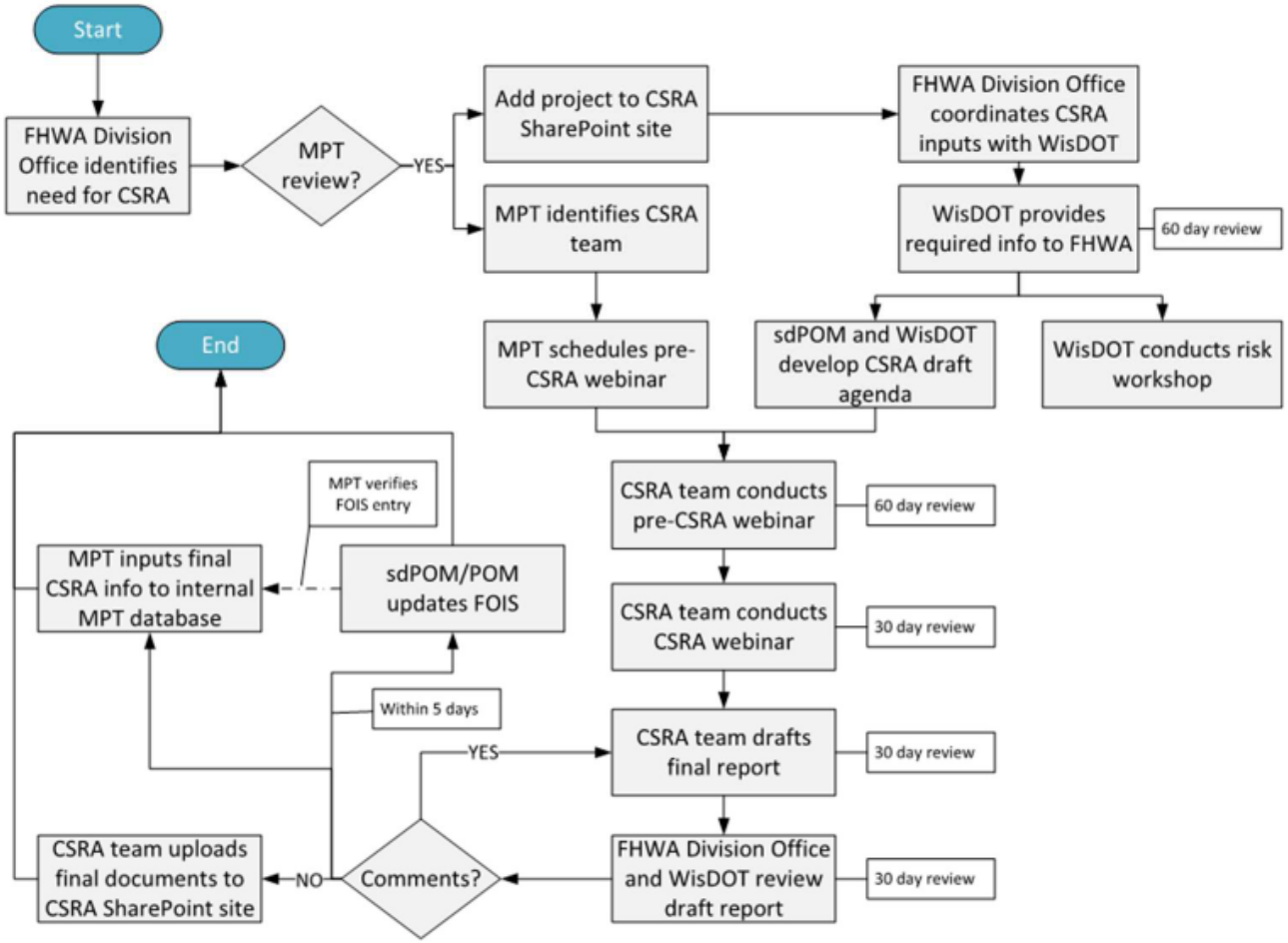
Title VI and Construction

Construction and Title VI issues cover the broad spectrum from plan preparation, specifications, and estimates to final inspection and acceptance. The agency advertises for bids and then awards contracts to the lowest bidder. After sub-contract approvals, the work begins and under Title VI, there are multiple issues that involve implementation of the DBE Program, monitoring of work, and the implementation of mitigation measures. Title VI issues in Construction include:

- Safety through construction zones
- Noise and air impacts
- Employment and contracting goals
- Prequalification, bonding, licensing requirements
- Approval of subcontracts
- Approval of plan changes and supplemental agreements
- Suspension or termination of contracts
- Withholding payments of de-certification


MAJOR PROJECT REQUIREMENTS TIMELINE
*All IFPs, FPAUs, PMPs, and PMP Updates must be submitted to FHWA for review and approval unless otherwise documented in an executed State DOT/FHWA Stewardship and Oversight Agreement.
LEGEND
Recommended
Required
NEPA PROCESS (PRELIMINARY DESIGN)
FINAL DESIGN
CONSTRUCTION
CLOSEOUT
COST AND SCHEDULE RISK ASSESSMENT (CSRA)
Alternative Contracting (e.g. Design-Build, Public-Private Partnership (P3), etc.) Procurement Process
NEPA PHASE CSRA
Complete NEPA Phase CSRA Workshop and submit CSRA Report to FHWA for review prior to NEPA Decision.
Suggested for high-risk Major Projects (as determined by FHWA). Complete CSRA for Preferred Alternative.
PRE-CONSTRUCTION PHASE CSRA
Complete CSRA Workshop and submit CSRA Report to FHWA for review prior to approval of IFP.
Required for all Major Projects.
ADDITIONAL CSRAs & CSRA UPDATES
Additional CSRA Workshops or CSRA Updates may be needed to support the Financial Plan Annual Updates (FPAUs).
Project Team should evaluate Major Projects for additional CSRA Workshops or CSRA Updates if significant project changes occur or if there is more than one year between the CSRA and IFP submittal.
FINANCIAL PLANS (FPs)
INITIAL FINANCIAL PLAN (IFP)*
Submit IFP to FHWA for review and approval (required prior to first authorization of Federal funds for construction).
In situations where there are no Federal funds for construction but the project receives Federal financial assistance, the IFP must be approved prior to the Notice to Proceed for construction.
FINANCIAL PLAN ANNUAL UPDATES (FPAUs)*
FPAUs must be submitted to FHWA for review and approval by the annual deadline established by the FHWA and Project Sponsor until construction is completed (substantial completion has been reached and project is open to traffic).
As part of the FPAU review, FHWA will evaluate the project and associated Project Management Plan (PMP) to determine if a PMP Update is necessary.
PROJECT MANAGEMENT PLANS (PMPs)
PMP*
Submit PMP to FHWA for review and approval.
PMP approval required prior to or simultaneously with approval of IFP.
PMP UPDATE(S)*
If required, submit PMP Update(s) to FHWA for review and approval.
PMP should be updated appropriately throughout the life of the project as necessary. Any significant project changes may require updates to the PMP.

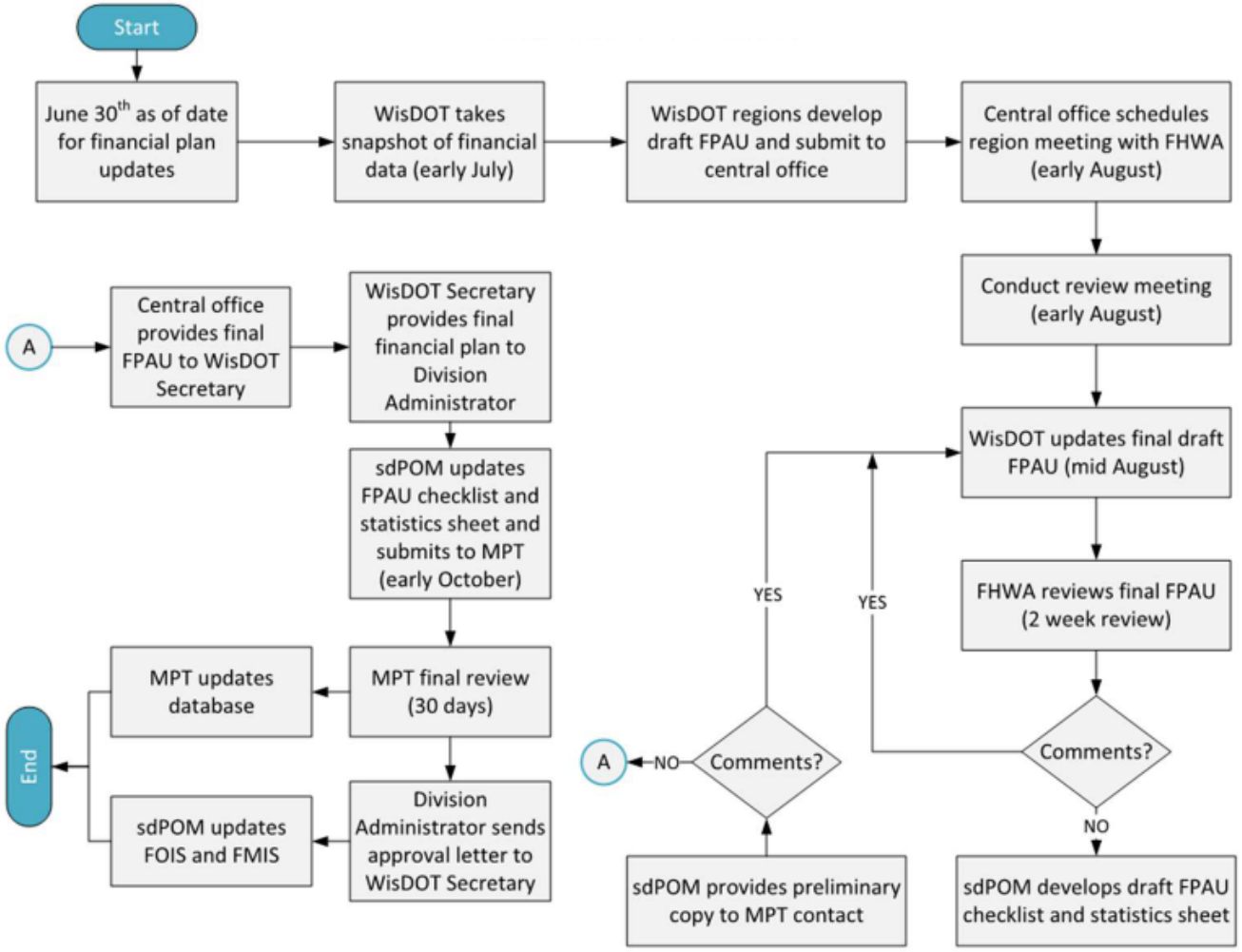
FHWA Cost and Schedule Risk Assessment Flowchart



Abbreviations

CSRA	Cost and Schedule Risk Assessment	POM	Project Oversight Manager
MPT:	FHWA Office of Infrastructure Major Projects Team	sdPOM	Specially Designated Project Oversight Manager

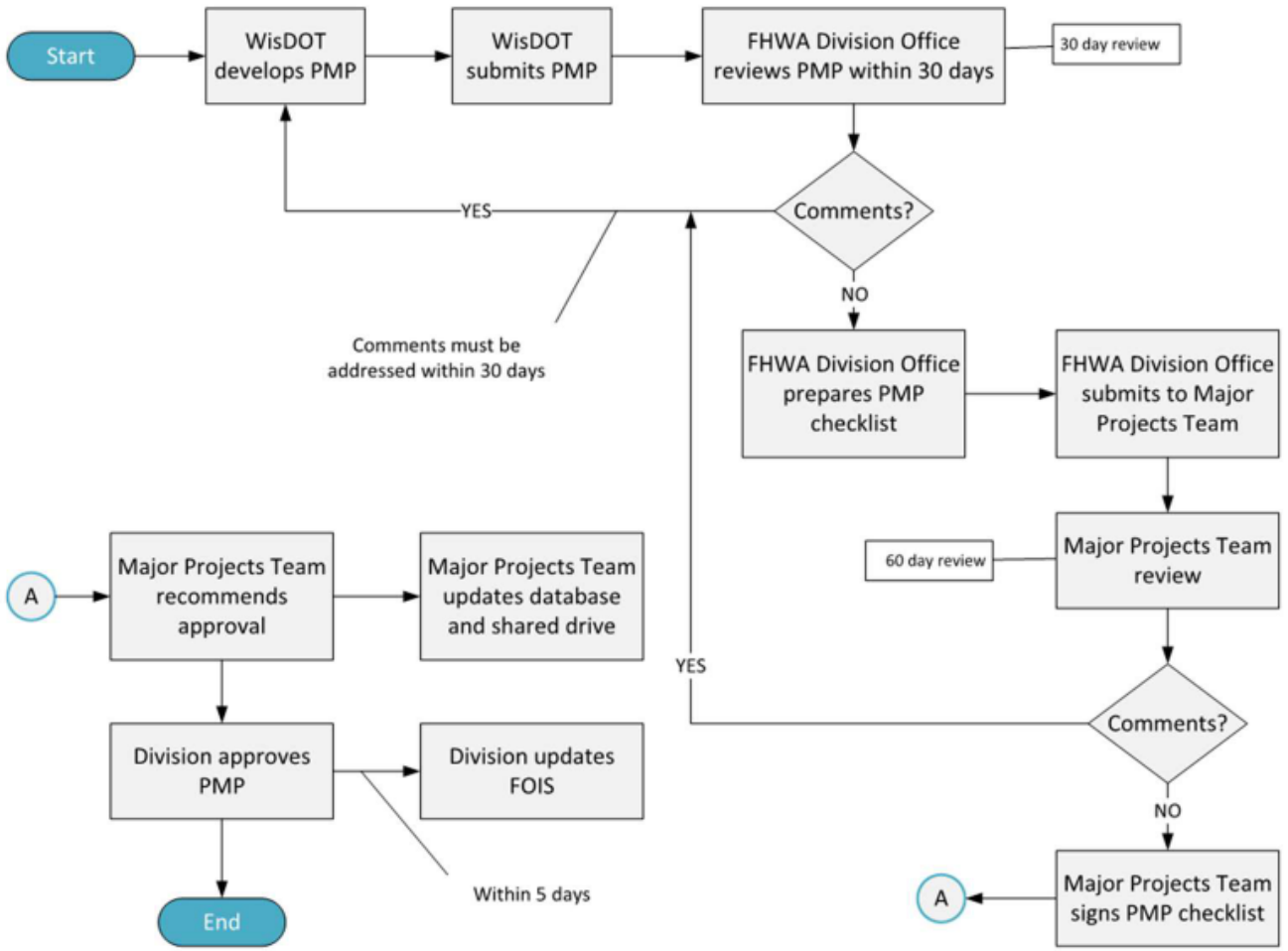
FHWA Financial Plan Flowchart



Abbreviations

FMIS	Federal Management Information System
FOIS	FHWA Organizational Information System
FPAU	Financial Plan Annual Update
MPT	FHWA Office of Infrastructure Major Projects Team
sdPOM	Specially Designated Project Oversight Manager

FHWA Project Management Plan Flowchart



Abbreviations

FOIS	FHWA Organizational Information System
PMP	Project Management Plan

Preconstruction workshop topics include, but are not limited to:

1. Project Kickoff and Initial Work Plan
2. Cost Reduction Incentives
3. Utility/Railroad Coordination
4. Submittals
5. CPM Scheduling
6. Leadership Partnering (Initial Session)
7. Work Force Opportunities
8. Incident Crisis Communications Plan
9. Notice to Proceed

Value Engineering Job Plan

Introduction

Value Engineering studies are conducted according to a standard series of steps known as the Job Plan, recognized by AASHTO and codified by FHWA in 23 CFR 627. All WisDOT VE studies shall follow the VE Job Plan. A summary is provided below for reference but is not meant to substitute the requirements of AASHTO or Federal Law. A trained and CVS-certified VE Team Leader must be experienced in the Job Plan described below.

The level of effort spent on each phase varies depending on the anticipated scope and complexity of the VE study being performed.

1. Information

Gather project information including project commitments and constraints.

Determine what needs to be known from readily available information about the project or element being studied, and what needs to be known to define or solve the potential problems.

The key questions to answer in this phase are:

- What must this project do to be successful?
- What are the problems?
- What do we know?
- What do we need to know?

This phase is meant to familiarize the team with the project and develop an understanding of the project's purpose, needs, history, circumstances, and objectives. This phase requires background information, technical reports (such as concept definition, design study, traffic, soils, hydraulics, environmental, or crash reports), design plans, alternatives considered, estimates, field data, and often a site visit. It redefines focus areas and objectives in addition to determining what are the issues, what is known, and what still needs to be known.

All available information, including stakeholder constraints and commitments, should be collected during this phase. The VE team should become thoroughly knowledgeable about the project or anticipated problem.

2. Function Analysis

Analyze the project to understand the required functions.

Identify the elements with the greatest potential for value improvement. This phase brings the three fundamental concepts of VE (function, cost, and worth) to bear on the problem.

The key questions to answer in this phase are:

- What is the element?
- What does it do? (What is the function?)
- What must it do? (Is its function basic?)
- What is it worth?
- What does it cost?

By the end of the function analysis phase, the VE team has identified the high-cost elements, functionally analyzed them, and assessed their cost/worth relationships.

3. Creative

Generate ideas about how to accomplish the required functions which improve the project's performance, enhance quality, and lower costs.

Use brainstorming and other creative techniques to develop alternatives to the proposed design. These techniques usually generate a list of potential creative solutions to the problems identified in the investigation phase, and the function/cost/worth determinations made during the analysis phase. In order for the creative phase to be successful, the team must avoid evaluating the ideas while they are being generated.

The key questions to answer in this phase are:

- What else will perform the function?
- Where else may the function be performed?
- How else may the function be performed?

4. Evaluation (Judgment)

Evaluate and select feasible ideas for development.

Determine the best alternatives by listing the advantages and disadvantages of each. The objective is to identify the best blend of performance, life-cycle cost, and schedule, while maintaining safety, quality, and environmental constraints. If the disadvantages far outweigh the advantages of an alternative, it is dropped from further consideration.

The key questions to answer in this phase are:

- How might each alternative work?
- What might be the cost?
- Will the alternative perform the basic function?

5. Development

Develop the selected alternatives into fully-supported recommendations.

Select the best alternatives and fully develop them through sketches, cost estimates, validation of test data, and other technical work to determine if the assumptions made during the study are valid. The team develops final recommendations and formulates an implementation plan.

The key questions to answer in this phase are:

- Will the recommendations meet the requirements?
- Why is the recommended change better than the original design?
- What will be the total cost?

The team develops final recommendations for long-term and interim solutions, defines how each recommendation will meet the requirements, and describes why each recommendation is advantageous to the original design. Often the team develops mutually exclusive recommendations; in this case, the team should present both alternatives, but select a preferred alternative.

The number of recommendations made is not as important as their ability to be implemented.

6. Presentation

Present the VE recommendations to the project stakeholders.

Make a brief and concise presentation of the recommendations, with ample time allocated for questions. The audience includes agency executives, managers, stakeholders, appropriate staff, and project team, who are collectively authorized and responsible for evaluating and determining whether to implement the findings. In many cases, the way the findings are presented is as important as the findings themselves.

The key questions to answer in this phase are:

- To whom should the findings be presented?
- How should the recommendations be presented?
- What were the problems?
- What are the recommendations?
- What is needed to implement the recommendations?

All recommendations should receive serious consideration by management. However, it may not be possible to implement all recommendations. Unless documented in the final VE Study Report, Management should separately document all decisions on the recommendations. If a decision on all the recommendations is not reached during the presentation, the Region project manager should set a timeline for final decisions. A written report is provided following the completion of the VE study.

7. Resolution

Evaluate, resolve, document, and implement all approved recommendations.

At the completion of every VE study, complete WisDOT Form DT1342. Submit electronic copies to the State VEPM and region VE coordinator. Form DT1342 enables statewide consistency in the documentation of VE cost savings. The State VEPM summarizes all VE results into the annual report to FHWA, as per Federal requirements.

Each VE study required per FDM 3-15-15.3.1 must complete a VE study report. Compile the VE study report as

a step-by-step record of the VE analysis, including documentation of the team's deliberations, assumptions, and rationale for recommendations. The report aids in implementing recommendations and can be referenced for future VE studies or design efforts. The VE report should describe the analysis procedures used, the changes recommended, the recommendations incorporated into the project, the estimated cost-savings or improved quality of all changes recommended, and the resources/costs incurred to perform the study. Typically, this report is developed by the VE team leader. Copies of the VE report shall be furnished to the WisDOT project manager and the State VEPM, as PDF files, and paper copies if requested.

For smaller, ad-hoc or non-mandatory VE studies, a working file should be established to support the completed WisDOT VE Summary Form DT1342.

Roles and Responsibilities

Region Project Development Chief

- Ensures that Project Manager applies VE study at appropriate time
- Evaluates and determines whether to implement VE Study recommendations
- For any VE recommendation not implemented, ensures rationale is documented

Region Project Manager

- Defines study scope and focus
- Consults with VE Team Leader, State VEPM, and Supervisor/Manager to select and approve VE team members
- Supplies all available project data and cost estimates to VE Study Team, and works with VE team as a technical advisor
- Ensures that interested Statewide Bureau representatives have an opportunity to attend relevant portions of the VE study
- Assures VE study report is accurate and completed
- Works with management to implement VE recommendations (ensures plans are updated)

VE Team Leader

- Recommends study scope and focal areas, and VE team members
- Manages all aspects of the required VE Job Plan
- Responsible for meeting all Federal VE requirements
- Presents VE recommendations and makes any resulting changes to the VE report
- Completes VE report and VE Summary forms DT1342 for each study, and sends them to region project manager and State VEPM

State VE program manager (VEPM)

- Assists Regions and central office in VE coordination efforts as needed
- Solicits and manages Master Contracts with VE consultants for statewide use; assists with selection of VE Team Leaders and VE team members
- Collects Summary forms DT1342 and Reports for all VE studies
- Develops and submits Annual FHWA VE report to FHWA; distributes report to Bureau Directors, Oversight Engineers, and other interested stakeholders
- Receives and compiles feedback on the VE program for ongoing evaluation and revisions
- Meets periodically to review practices and programs with Region VE coordinators, Central Office Project Oversight Engineers, and FHWA

Region VE Coordinator

- Assists region personnel in identifying projects requiring VE
- Assesses other projects (below the required cost thresholds) for possible VE studies
- Offers ideas and guidance for VE studies on projects
- Reviews/evaluates VE program and cost savings with Region management
- Makes recommendations for VE program improvements to State VE Coordinator

Central Office Project Oversight Engineer

- Helps identify candidate projects and coordinate VE project efforts with Region and central office staff
- Ensures that VE is performed on required projects, as a condition for DSR approval
- Reviews/evaluates VE cost savings achieved on each project for application statewide
- Makes project and program VE recommendations as needed
- Shares VE best practices with region and central office staff

FHWA VE Coordinator

- Reviews and comments on VE study reports and VE Summary results
- Evaluates projects below required thresholds for possible VE needs
- Evaluates Annual FHWA VE report and program for quality and cost effectiveness
- Recommends VE program improvements as needed
- Provides national VE perspective and information to State VEPM and individual project teams

Value Engineering on Major Projects

WisDOT Major projects are large and complex and offer numerous opportunities for the effective application of Value Engineering. Work with Central Office and FHWA to determine the specific requirements, timing, and content for each study.

Following are three examples of timing and content for VE studies on WisDOT Major projects:

Major Project Value Engineering/Value Planning Study # 1

An early study can be held for a project being considered for recommendation to the Transportation Projects Commission (TPC) to begin the EIS. The purpose of this study is to validate the scope of the project and initial estimate.

Objectives:

- Review anticipated scope
- Clearly define the measures of project success
- Validate economic and business decisions on the project need
- Identify and assess elements for inclusion/exclusion
- Review initial estimate

Major Project Value Engineering/Value Planning Study # 2

On a project that has been recommended by the TPC for environmental study, a VE Study can be performed at the Draft EIS/EA stage of the project, before any environmental commitments have been made. The study could be used to determine alternatives or to evaluate alternatives in the Draft EIS/EA, or review and analyze technical improvements to the design.

Objectives:

- Develop and review project functional needs
- Determine whether functional needs are met
- Remove extraneous project elements
- Investigate different approaches to project elements

Major Project Value Engineering/Value Planning Study # 3

This VE study can be used on a project that has completed environmental study and is being considered for recommendation to the TPC for enumeration. The study is performed primarily to validate the project estimate (design, real estate and construction) but may also review technical improvements and construction staging.

Objectives:

- Review preliminary quantities and estimate
- Review design changes within the recommended alignment
- Review construction staging and relationship of construction contracts
- Consider long-term maintenance of project

To obtain a working copy of this form go to FDM 3-15 A15.4 File 1

VE Recommendations Summary Worksheet

VE Study Recommendations [1]			*VE Study Cost Estimates*			*WisDOT Response & Updated Costs*			
Number	Description	Functional Benefit [2]	Initial Savings	Life Cycle Savings (PW)	Total Savings (PW)	Decision [3]	Proposed Savings (Revised) [4]	Approved (Implemented) Savings	Comments [5]
						TOTAL #	0	0	
						TOTAL $	$0	$0	

[1] VE Study recommendations that are mutually exclusive should be listed as one recommendation with alternatives.

[2] Choose all that apply – "Safety", "Operations", "Environment", "Construction" or "Other" (per FHWA Annual VE Summary Report).

[3] A – Accept; R – Reject; PA – Partially Accept; IV - Invalid Recommendation (Not feasible or doesn't meet project purpose and need.); DS - Design Suggestion (Minor item more consistent with a design suggestion.); DA - Dismissed Alternative (Recommendation applies to a dismissed environmental alignment / alternative).

[4] Estimated cost savings from VE report may be revised by Region project staff. DO NOT LIST PROPOSED SAVINGS for IV, DS or DA recommendations.

[5] Discuss reasons for not accepting a recommendation.