



Draft Best Practices Report



Wisconsin Department of Transportation Mega Project Best Practices

November 2011

*Prepared by
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on behalf of National Constructors Group*





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Date: November 10, 2011

To: Brett Wallace
Southeast Region Deputy Director
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Subject: Wisconsin Department of Transportation
Draft Mega Project Best Practices Report

Dear Brett:

National Constructors Group, in association with Value Management Strategies, Inc., is pleased to transmit this Draft Best Practices Report. This report summarizes the documents received as part of documenting current best practices as recent as September 2011.

We enjoyed working with the Wisconsin Department of Transportation and are looking forward to continuing our efforts on future work.

If you have any questions or comments concerning this report, please contact me at (720) 308-4205 or email Greg@vms-inc.com.

Sincerely,

VALUE MANAGEMENT STRATEGIES, INC.

Gregory Brink, CVS, PMI-RMP, PMP, CCE/A
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Sample

EXECUTIVE SUMMARY

A Mega Project Best Practices documentation effort for the Wisconsin Department of Transportation (WisDOT) was initiated with several purposes in mind. WisDOT management is interested in an evaluation of the best practices that are currently in use on Mega Projects, as well as in leveraging this unique knowledge to help optimize the greater WisDOT means and methods for delivery of transportation infrastructure projects and programs. The main interest in evaluating Mega Project best practices resides in first establishing an understanding of the scope of the best practices and then documenting those best practices in order to facilitate knowledge transfer and future efficiency and productivity gains throughout WisDOT as an organization.

In a resource constrained environment it is important to find the most optimal means to capitalize on measures that offer the best value for planning, developing, managing, and constructing Wisconsin's transportation infrastructure. With an understanding of the scope of the best practices, discussions relating to associated cost implications, extent, and scalability can be engaged in with considerations for best value in terms of performance, cost, and duration. The overarching goal of engaging in the deployment of best practices is rooted in a management focus on continuous improvement and refinement of the way in which WisDOT conducts business. The goal of wanting to deliver Mega Projects more efficiently and effectively will undoubtedly influence the mindset, skillset, and organizational culture of other teams within WisDOT that are delivering more traditional projects and programs. The documenting of best practices ensures that, first and foremost, new Mega Projects have a solid foundation of information to start from in order to reduce the learning curve and its associated costs, and secondly that the entire staff of WisDOT can benefit and enhance their individual skills through utilizing information on methods offering the best value for project and program delivery. This leads to organizational-wide opportunities to improve decision-making capabilities, more efficiently allocate resources, and improve accountability for delivery of complex projects and programs.

This effort is a starting point to document the higher order management processes and techniques utilized to effectively and efficiently deliver projects of significant complexity and scale. The documentation effort was initiated by WisDOT staff and was compiled by National Constructor's Group in association with Value Management Strategies, Inc. (VMS). This Draft Best Practices Report summarizes the information received from WisDOT staff and key participants in response to the effort to document best practices within the organization initiated in August 2011. The key participants and functional teams are comprised of staff members operating in specific functional disciplines for delivery. The focus of the evaluation and discussion contained in this report is to document the best practices, or those tools and techniques that are not standard operating procedures, that have been utilized to effectively deliver both design and construction phases. This report presents results and findings from the perspective of identifying, discussing, qualifying, and documenting the unique management and project delivery practices in use on Mega Projects.

It should be noted that while other efforts for documentation of best practices has taken place within WisDOT, this document is a representation of a broad level of efforts to manage Mega Projects. The findings should be treated as the transfer of institutional knowledge from those staff operating in the various functional disciplines with Mega Project experience. In the passing of this information it should be acknowledged that some of the best practices contained within this document were the

result of specific conditions or delivery needs that may or may not be relevant to the broader delivery of Mega Projects within the state of Wisconsin. The specific scope, scale, capital costs, duration, location, and many other factors ultimately determine the nature of the manner in which the best practices are utilized.

BEST PRACTICES

Best practices are generally-accepted, informally-standardized techniques, methods or processes that have proven themselves over time to accomplish a given task. In general, best practice is considered the process of developing and following a standard and effective means of performing tasks that can be consistently repeated. Often based upon knowledge that becomes common sense, these practices are commonly used where no formal methodology is in place or the existing methodology does not sufficiently address the issue. The idea is that with proper processes, checks, and testing, a desired outcome can be delivered more effectively with fewer problems, unforeseen complications, and reduced uncertainty. In addition, a "best" practice can evolve to become better as improvements are discovered. As such, the best practices contained within this document are not rigid in nature and should be treated as management processes, tools, and techniques that can be taken and adapted to meet the needs of other projects and programs within WisDOT.

GLOBAL MEGA PROJECT BEST PRACTICES

The individual documented best practices were compiled by the functional discipline from which they emanated. In total, eight global best practices focused on higher order management processes and techniques were identified by the key participants. Another best practice is in development and will be included into this report at a future date. This additional best practice focuses on use of *DBE Outreach*. It should be noted that the detailed specific actions and activities for each of these global best practices are not documented in their entirety within this report as the evaluation is on a broader level of the relative effectiveness. The table below summarizes the individual best practices and is representative of the functional disciplines for which best practices were discussed and developed. Each best practice includes a simple synopsis of the best practice. The more detailed discussion and material for each individual best practice can be reviewed in the *Project Best Practices* section of this document.

SUMMARY OF BEST PRACTICES

Program Controls

Program Controls best practices offer a methodology for managing budget and cost, schedule, issues, and documents for multiple interrelated projects comprising a single Mega Project. Program Controls is a requirement of FHWA in the Project Management Plan (PMP) and Annual Financial Plan for all Mega Projects. The size and complexity of a Mega Project requires additional measures and efforts of coordination and communication beyond traditional project management. This best practice facilitates communication and dissemination of key information and data for decision making and ultimate management of the scope, schedule, and budget.

Design Primavera Scheduling

The Primavera software package is being utilized on Mega Projects to determine and analyze critical paths that aids in clearly defining, communicating, and managing the schedule and necessary time required to complete the independent tasks related to project delivery. The FHWA and SAFETEA-LU require a PMP and an Annual Financial Plan for all Mega Projects. Within the guidance for the PMP are provisions for a project schedule. Due to the enhanced capabilities of Primavera software, this tool is best utilized for the scheduling of the complex design work required for Mega Projects in lieu of traditional WisDOT PMP tools.

Enhanced Public Involvement / Outreach

Mega Project public outreach programs are being utilized as a means to ensure availability of timely, accurate, concise, and useful information to all public stakeholders and entities through a wide range of communication techniques. There are numerous state and federal regulations and laws that influence WisDOT's public involvement program and effectively dictate the need for a focused and directed public involvement/outreach effort. To be effective, the techniques must provide appropriate public input for the relevant project phase, be cost effective, and reach the target audience. The combination of targeted, cost effective, and timely information is imperative to ensuring the relative effectiveness of a public outreach program and is the basis of the activities currently being employed on transportation infrastructure Mega Projects in the state of Wisconsin.

Technical Expert Contracts (i.e., National Construction, Contractor, Owner's Representatives)

The use of Technical Expert Contracts best practice is predicated on the scope of services procured in past technical services contracts from the Marquette Interchange, I-94 N-S project, and the US-41 project. There is no policy requirement for this Best Practice; however it should be noted that these contracts are typically utilized to facilitate best value practices within the agency. Mega Project Management Plans are required by FHWA and these plans often incorporate unique management structures, quality control processes in design and construction, unique review processes for program budgets, design, constructability and schedules. The scope of services typically includes Unique Special Provision Development, development of a Prequalification Process, Peer Reviews of Design for cost estimates and schedules, Risk Assessments and Risk Management, Constructability Reviews, Construction Program Management Advice, Construction claims management, and introduction of Unique and Accelerated Construction Methods. Each of these specific scope items are about enhancing the performance of management of the project, controlling Mega Project budgets, and ensuring compliance with the planned schedules and milestones of delivery. This is a value based approach that ensures knowledge transfer and the gaining of unique perspective from contractors that offer subject matter experts in project delivery and infrastructure construction.

Independent and/or Enhanced Constructability and Design Reviews

Independent and/or enhanced constructability and design reviews provide periodic feedback and input for the betterment of the project design. The WisDOT and FHWA policy requirement is to provide those mechanisms or measures that will avoid construction change orders which could cost the state additional time and funds, as well as tie up resources unnecessarily. The independent review workshops or periodic reviews by outside experts not associated with the design of the project are being performed on most of the current Mega Projects at established design milestones to add value and to ensure that the projects are meeting all standards, requirements, and relevant criteria present in the Mega Project scope of work.

Consultant Corridor Management Assistance

The basis of the Consultant Corridor Management Assistance best practice is to supplement WisDOT in its efforts to effectively communicate and coordinate the activities required for the Mega Projects to be efficiently and effectively delivered at the best value for the allocated capital. Several elements of scope are involved in this effort and are presented in more detail in the discussion of the best practice. The requirement for the use of Consultant Corridor Management Assistance teams is effectively part of the Mega Project PMP required by FHWA. The use of the Corridor Assistance Management teams ensures that the proper technical expertise is applied and that the availability of resources is addressed. The general policy is to ensure that the work can be completed with the available resources and that it is managed by technical experts with sufficient skills and capabilities. The use of Consultant Corridor Management Assistance teams provides this function while not burdening WisDOT with longer term legacy overhead costs for a single Mega Project. The overarching goal of Consultant Corridor Management Assistance is to ensure that there are adequate resources available to effectively be able to move forward in the project delivery process while ensuring that the proper level of technical and management expertise is leveraged. Consultant Corridor Management Assistance contracts can also serve as a mechanism to foster development and growth in the organization through opportunities to educate, further enhance, and refine WisDOT staff member skills.

Owner Controlled Insurance Program (OCIP)

The best practice of an Owner Controlled Insurance Program (OCIP) is a plan in which WisDOT secures all appropriate insurance coverage for all contractors working on the project and controls all aspects of safety for the workers and public. Typical OCIPs include Worker's Compensation, General Liability, Excess Liability, and Builder's Risk insurance coverage. In some instances OCIPs may include environmental coverage, Railroad Protective Liability, and Professional Errors/Omissions. The purpose of OCIP's is to capitalize on a method for risk pooling of all required insurance coverage and safety controls. Use of OCIPs in the proper application (typically projects greater than \$250,000,000 in construction value, or a Mega Project) present an opportunity to introduce economies of scale into the insuring of work and safety provisions of the project's associated stakeholders. The need for the OCIPs is to centralize all insurance and safety management and controls into a single point and a source where this information can be easily accessed when needed. With increasing complexity and multiple individual projects, as is typically the case on Mega Projects, the economies of scale achieved become more pronounced.

Emergency Response Mitigation Contracts

Emergency response mitigation contracts are primarily used for freeway law enforcement, local law enforcement and fire departments. Freeway law enforcement provides dedicated emergency response in the work zone and helps to clear incidents quickly while controlling work zone speeds. Local law enforcement assists with traffic control on local roads for detour routes and local road speed management. Fire departments plan emergency response based on construction closures. All three agencies participate in project traffic meetings, review roadway closures, and crisis communication planning. This provides a means of communication and coordination with the involved agencies that ensures a clear plan of action. The purpose of using emergency responder contracts is to coordinate dedicated emergency resources available in the Mega Project construction zone and along the adjacent arterial roadway system. The need is to increase system reliability while facilitating quick clearance of a construction zone during an incident. The construction traffic management plan identifies the dedicated emergency response resources that will be utilized in the management of traffic in the construction zone. The identified and participating resources are able to focus on the project area and supply on call services to manage traffic congestion and incidents during construction in a coordinated fashion.

COMMONALITIES OF BEST PRACTICES

Common to the best practices across all functional disciplines are themes that convey the drivers behind the management processes and techniques being deployed on Mega Projects within Wisconsin. These themes represent the global best practices that will benefit the structuring and delivery of future Mega Projects. The global best practices are those elements that, at the highest level, should be the foundations of project management and delivery. Four key themes were consistently observed across the eight unique functional areas that were evaluated and explored. Those four themes are summarized as follows:

- Efficient and Effective Use of Resources: The efficient and effective use of resources is the cornerstone of being able to manage Mega Project budgets, control schedules, and ensure sufficient performance in delivery. In an era of constrained resources it is becoming increasingly important to maximize the use of all resources and to realize productivity efficiencies and gains. The combination of increased complexity and constrained resources is a challenge that is constantly being dealt with. The logic behind the best practices is to ensure that resources are being used as efficiently and effectively as possible. The streamlining of costs and capabilities in management is imperative to being able to proactively manage large and unique projects and programs. Many of the best practices noted issues associated with a need for flexibility to ensure optimal resource utilization as a result of dynamic changes in contracts and work packages. Realizing that Mega Projects are inherently more complex as a result of the many moving parts and pieces, building in layers of flexibility into the resource plan for delivery is important.
- Proper Management, Communication, and Dissemination of Key Information: The management, communication, and dissemination of key information was highlighted in many of the disciplines as a best practice technique that enabled information flow to occur in a more efficient and effective manner. Key to decision-making capabilities is the clear measures for managing, communicating, and distributing information. Techniques of centralization in management to a

single point of contact provides enhanced clarity of who needs to be engaged for specific situations. Techniques in information management and communication with all stakeholders, both internal and external, provides for an environment in which data and information is readily available to facilitate proactive, as opposed to reactive, management. Furthermore, when working on complex Mega Projects it is important to ensure that data is properly tracked, updated, stored, and easily communicated. This best practice is really a general project management best practice, but the uniqueness here is in acknowledging that for each project team there will be unique needs for certain types of information. From this perspective project managers need to be prepared to think of ways to most efficiently track, update, and maintain data for everyday uses either with WisDOT tools or by creating their own unique tools. It is important to remember that data organization and management is a fundamental building block to enabling effective management and delivery.

- Leveraging Knowledge and Expertise: The leveraging of knowledge and expertise of both internal and external resources was cited as a means to enhance the management tools and techniques being utilized to deliver Mega Projects. The use of technical experts, key resources, and outside experts provides for independent and objective views on the most efficient means and measures for project delivery. It was noted that the leveraging of knowledge and expertise continues to improve the core skills within WisDOT while enabling the realization of cost savings and schedule control throughout the design and construction of Mega Projects. The introduction of capabilities and techniques from outside the state continues to ensure that WisDOT is progressing forward in refining Mega Project capabilities while capitalizing on the knowledge of industry experts in the most beneficial manner.
- Facilitation of Continuous Organizational Improvement: The development, documentation, and transfer of best practices is important to WisDOT in being able to be a flexible and adaptive organization in relation to the manner in which it is delivering large and complex Mega Projects. The use of best practices across the organization as a means of institutional knowledge transfer engages WisDOT in a process of continuous improvement. The move towards continuous improvement by management within WisDOT is helping to not only make the most efficient use of resources in the organization, but also to enhance the skillsets and capabilities of the organization as a whole. Continuous organizational improvement requires the documentation and development of acceptable and standardized methodologies for delivering projects and programs and the evolving nature of best practices is one of the most effective measures to ensure that this occurs. The combination of the prior three mentioned best practice themes of efficient and effective use of resources, proper management and communication of key information, and leveraging of industry knowledge and expertise promote continuous improvement. As a result, the realization of the prior themes is continuing to facilitate broad-based organizational change and improvement.

RECOMMENDATIONS

First and foremost it is recommended to review the identified best practices for incorporation into other efforts within WisDOT. This document is intended to provide institutional knowledge transfer from WisDOT staff and Mega Project team members in relation to challenges that are faced and how the project management tools and techniques can be adapted in response. The documented best practices within this report are conceptual in nature such that they can be reviewed and implemented on other projects of similar complexity.

It is recognized that the composition of Mega Project Best Practices is representative of the experiences of staff within WisDOT and that other best practices for managing and delivering complex projects may arise or exist elsewhere. Other efforts to document best practices have been undertaken in various forms throughout WisDOT. This includes the documentation of specific functional discipline best practices within the agency, the documenting of the Marquette Project Construction best practices, the development of I-94 Project Design best practices, and the documentation and development of the US-41 Highway Reconstruction Design best practices.

Overall, true best practices are constantly evolving, adapting, and changing to meet the current needs of project and program delivery. While there is no single solution that can be consistently implemented in the exact same fashion and yield the exact same results, WisDOT may find it useful to evaluate other Mega Project best practices for consideration and development. It is recommended that a formal Programmatic Best Practices manual standardized into a single document, be developed for distribution across the greater WisDOT organization. This Programmatic Best Practices guide could then become a guideline and starting point for project structuring, staff development, and for Mega Project delivery within WisDOT. This will help WisDOT to continuously improve, adapt to a dynamically changing environment, and utilize methods that offer the best value for planning, managing, designing, and constructing transportation infrastructure projects and programs in the state of Wisconsin.

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INTRODUCTION

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This report summarizes the documentation of Mega Project Best Practices for WisDOT. The process of documentation focused on elicitation of those management processes, tools, and techniques that are being successfully applied for the management and delivery of the design and construction of Mega Projects. In particular, the emphasis was not on standards, practices, tools, and techniques that could be considered innovative beyond traditional WisDOT project and program management processes and procedures. This section of the report provides background information and objectives of the effort that frames the logic behind many discussions contained within the individual best practices that have been implemented and deployed on Mega Projects.

BEST PRACTICES

Best practices are generally-accepted, informally-standardized techniques, methods or processes that have proven themselves over time to accomplish given tasks. Often based upon knowledge that becomes common sense, these practices are commonly used where no specific formal methodology is in place or the existing methodology does not sufficiently address the issue. The idea is that with proper processes, checks, and testing, a desired outcome can be delivered more effectively with fewer problems and unforeseen complications. In addition, a "best" practice can evolve to become better as improvements are discovered. Best practice is considered by some as a business buzzword used to describe the process of developing and following a standard way of doing things that multiple organizations can use¹.

One could think of best practices in the case of Mega Projects as an evolution in the process of management and delivery. Project teams need adaptive and responsive capabilities to execute and deliver their projects in an efficient manner. The natural iterations and modifications of fine tuning process and management techniques in the case of managing a Mega Project results in a series of solutions that evolve to best fit the case. One could think of this set of higher order functional best practices as a set of solutions being used to maintain quality as an alternative to mandatory legislated standards and can be based on self-assessment or benchmarking². Furthermore, best practice deployment is a feature of accredited management standards such as ISO 9000 and ISO 14001³. The lessons learned that evolved into processes, management strategies, and techniques for managing multiple work packages is documented in this report in the form of a set of higher order best practices by needed functions of delivery.

¹ "[Best Practice Definition](http://www.businessdictionary.com/definition/best-practice.html)". BusinessDictionary.com. <http://www.businessdictionary.com/definition/best-practice.html>. Retrieved 2009-11-04.

² Bogan, C.E. and English, M.J., 1994: Benchmarking for best practices: winning through innovative adaptation. McGraw-Hill, New York.

³ Nash, J. and Ehrenfeld, J., 1997: Codes of environmental management practice: assessing their potential as a tool for change. Annual Review of Energy and the Environment 22, 487-535.

Documenting and charting procedures and practices can be a complicated and time-consuming process often skipped by companies and organizations, even though they may practice the proper processes consistently. It is for this reason that this document and the following best practices are being documented. WisDOT staff documented many of the unique and innovative techniques for project delivery both in the face of challenge, as well as in the light of success. Either way that the best practice originated, it is important to capture how it was devised and how it might be applied to future Mega Projects.

It is important to note that there can be significant challenges in defining what is “best” in any given context. Best management practice for complex problems is context specific and often contested against a background of imperfect knowledge. In these contexts, it is more useful to think of best management practice as an adaptive learning process rather than a fixed set of rules or guidelines. This approach to best practice focuses on fostering improvements in quality and promoting continuous learning⁴.

INFLUENCES OF DELIVERY

The manner in which a project or program is delivered largely relates to the structure of the organization and the general scope of work. The scope of work, or series of projects comprising the total Mega Project in this case, tend to dictate the level of staffing required to manage and deliver the workload. Within the staffing requirements there is the immediate need for structure to facilitate communication and coordination that best enables management to effectively guide the overall efforts. In this sense the scope of work performed by the project and the organizational structure needed to deliver the project are the controlling influences of delivery. As a result, the general projects and structures of other Mega Projects that have been delivered by WisDOT should be taken into consideration when evaluating the discussions presented within this report.

BEST PRACTICE DOCUMENTATION OBJECTIVES

It is important to document those processes, strategies, tools, and techniques that are working effectively to help in the delivery of complex projects and programs. This preserves organizational integrity while enhancing the overall skills of the organization. The delivery of complex projects and programs are, by their very nature, an exercise in management beyond the standard protocols of operation and methods of conducting business. Many of the best practices are developed in response to the challenges of added complexity and structure involved in a Mega Project. For this reason, WisDOT is exploring higher order functional management strategies and mechanisms for the delivery of Mega Projects at the best value to both WisDOT and the public stakeholders the agency represents. The main objectives in the documenting of Mega Project Best Practices are to:

- Provide a basis of understanding for the scope of the best practices in use.
- Provide a qualitative basis of understanding for the relative costs of deploying the best practices.
- Ensuring that the best practices in use are sufficiently documented for knowledge transfer purposes.

⁴ Measham, T.G., Kelly, G.J. and Smith F.P. (2007) Best Management Practice for complex problems: a case study of defining BMP for Dryland Salinity. *Geographical Research* 45 (3) pp. 262-272.

- Provide a basis of discussion for means and measures to deliver Mega Projects efficiently and effectively.
- Limit the learning curve for future Mega Projects by ensuring that new Mega Project teams have best practice information that can readily be incorporated.

Each of the evaluations provided within this document are assessments addressing the objectives presented above with results and discussion of policies and processes implemented on Mega Projects. The emphasis has been placed on the documenting of reliable and useful findings. Documentation of the best practices will help to improve information and reduce uncertainty (clarify or reinforce direction) for WisDOT management; however, it should be noted that these evaluations rely significantly on judgment and are more qualitative in nature. In summary, the main objectives of the evaluations are to improve decision making, resource allocation and accountability for WisDOT as a whole on both Mega Projects and other more traditional projects and programs.

BEST PRACTICE DOCUMENTATION PROCESS

A systematic approach was utilized in order to define the higher order functional best practices of the Mega Project delivery methods. The process focused on eliciting those best practices that are not standard operating procedures and are beyond traditional project and program management processes and procedures. Evaluations were developed using collaboration between key participants (evaluators, users, and stakeholders) to document the WisDOT Mega Project best practices. The process emphasized focus on qualification of those unique features of management and delivery that are being applied to the project beyond the standard practices for delivery within WisDOT.

In order to identify and elicit the best practices in use an evaluation form was distributed to working teams for capture of discussion, data, and information. The form distributed to the internal WisDOT working teams addressed the following categories for information capture on best practices (note the definitions for each information category below):

1. Best Practice Scope – A description of the scope of the best practice as currently being used on Mega Projects.
2. Best Practice Policy Requirement – A description of WisDOT and FHWA policy direction and/or guidance which defines the need for the best practice scope.
3. Best Practice Purpose and Need – A description of the purpose and need of the best practice.
4. Best Practice Stakeholders – A description of WisDOT external agency and external non-agency stakeholders that are involved in the implementation of the best practice.
5. Best Practice Organizational Foundation – A description where within WisDOT the ownership of the best practice should reside, as well as any discussion on responsibility for guidance on the future use of the best practice.
6. Best Practice Resourcing – A description of how the best practice is currently resourced (i.e., in-house vs. consultant).
7. Best Practice Cost – A qualitative discussion of the overall cost (annualized or lump sum) of implementation and maintenance of the best practice.

8. Best Practice Benefits – A description of the benefits derived as a result of usage of the best practice.
9. Best Practice Challenges – A discussion of any challenges with ongoing maintenance or implementation of the best practice.
10. Best Practice Risk – A discussion of the risk of not utilizing the best practice for Mega Project management.
11. Best Practice Opportunities for Cost Effectiveness – A discussion of the possible opportunities to streamline overall costs while maintaining the value and effectiveness of the best practice. This discussion includes qualitative details that may be used to forecast future costs vs. previous best practice costs incurred.
12. Best Practice Opportunities to Expand – A discussion of the opportunities that exist to expand the best practice into non-Mega Projects and Programs within WisDOT.

The individual working teams focused on providing information and discussion for consideration under each of the functional areas of project and program management. Each of the individual working teams provided their discussion with a focus on the basis of discussion identified for each functional category. The higher order management functions, strategies, and techniques discussed within the best practice discussion included the following key areas (note the context of each evaluation and discussion for each functional area below):

1. Program Controls – The basis of the discussion is to evaluate the appropriate scale of the effort on Mega Projects in relation to the total scope and to consider ideas on how to provide the desired functions at a streamlined cost.
2. Design Primavera Scheduling – The basis of the discussion is to evaluate the use of Primavera as a scheduling tool in comparison to the use of the more traditional PMP tool(s).
3. Enhanced Public Involvement/Outreach – The basis of the discussion is to evaluate the appropriate scale of the effort on Mega Projects in relation to the total scope and to consider ideas on how to provide the desired functions at a streamlined cost.
4. Technical Expert Contracts (i.e., National Construction, Contractor, Owner’s Representative) – The basis of discussion provides an evaluation of the value of the use of technical expert contracts and includes considerations for scaling usage on Mega Projects in relation to the total scope.
5. Independent and/or Enhanced Constructability and Design Reviews – The basis of discussion explores the general purpose of the best practice and the corresponding value received from deployment of the best practice.
6. Consultant Corridor Management Assistance – The basis of discussion explores the general purpose of the best practice and the corresponding value received from deployment of the best practice.
7. Owner Controlled Insurance Program (OCIP) – The basis of the discussion is to evaluate the use and applicability of leveraging an Owner Controlled Insurance Program on Mega Projects.

8. Emergency Response Mitigation Contracts – The basis of the discussion is to Identify the need and roles and responsibilities of Bureau and Mega Project Teams in the usage of Emergency Response Mitigation Contracts.

OTHER EFFORTS

The documentation of Mega Project best practices is an effort undertaken to initiate the formalization of WisDOT's Mega Project Best Practice guidelines. There have been other efforts undertaken within WisDOT to document institutional knowledge and those tools and techniques that were deployed in the management and delivery of other Mega Projects in the state of Wisconsin. As such, this document should be considered as just one component of what will be formulated into a larger compilation of Mega Project Best Practices. Within this context it is important to keep in mind that the best practices identified in this report are not common to current WisDOT guidelines and practices. In the review of the best practices it is also important to consider the context and focus of discussion, as well as the qualitative nature of the information. The basis of discussion and structure of the documented effort is intended to provide detail relating to how the best practices are utilized and applied within the management and delivery of a Mega Project, as well as how each individual best practice is relevant.

There have been limited other explorations of Mega Project Best Practices by WisDOT as the delivery of Mega Projects are not as common within the state of Wisconsin. The Marquette Project was the first WisDOT project to record Mega Project Best Practices, but only during the construction phase. Previously, the Marquette Project's construction best practices were captured in efforts to document tools and techniques utilized in bringing efficiencies in construction delivery. It is anticipated that the upcoming SE Freeway I-94 Project best practices in design will be documented. The US-41 best practices of design, as well as project and program management techniques, have also been documented. The US-41 best practices of design, I-94 Project best practices of design, the Marquette Project construction best practices, and now these broad level Mega Project best practices could formulate the basis of an evolving and developing document that can be refined as more Mega Projects in the state are delivered and best practices are further formalized and documented.

Key to interpretation of information documented in this report is that the findings from this documented effort may represent events and project conditions, constraints and requirements unique to WisDOT projects. WisDOT may find it useful to continue to evaluate other prior and future projects' best practices for consideration of Programmatic Best Practices in order to standardize the format into a single document. These guidelines, when developed, will transfer institutional knowledge, lower the learning curve, reduce management efforts for structuring of project teams, as well as offering cost and time efficiencies for future projects.

PROJECT BEST PRACTICES

PROJECT BEST PRACTICES

The WisDOT Mega Project Best Practices documentation process sought to qualify and formally clarify the unique and innovative tools, techniques, and management approaches utilized in the delivery of Mega Projects. This section of the report provides the detailed documentation developed by the participants of each working team within a functional discipline. The general structure of the form utilized to capture information and the discussion of best practices can be referenced in the *Introduction* section of this report.

BEST PRACTICES BY FUNCTIONAL DISCIPLINE

Each documented best practice consists of a summary of the best practice concept, a description of any policy requirements, the intended need and purpose, identification of associated stakeholders, the method for resourcing the activities, a listing of costs and benefits, a presentation of challenges with on-going maintenance or implementation, the risk of not implementing the best practice, a discussion of opportunities for cost effectiveness, and identification of areas in which the best practice could be expanded. All of this information is intended to provide a conceptual presentation of what constitutes the best practice itself.

In addition, the level of detail in the documentation is intended to inform readers what resource and management considerations need to be taken into account, as well as the manner in which it can be implemented in a project management platform. It is recognized that the documented best practices cannot capture all details associated to the specifics of each situation; however, the intent is to provide institutional knowledge transfer of those innovative or unique tools or techniques which may have a beneficial use on future Mega Projects in the state of Wisconsin.

The individual documented best practices were compiled by the functional discipline from which they emanated. In total, discussions of eight key higher-order best practices were developed by WisDOT staff and corresponding key participants. Another additional best practice is in development and will be included into this report at a future date. This additional best practice focuses on *DBE Outreach*. Below are the representative higher order management functional disciplines for which best practices are presented later in this section.

SUMMARY OF BEST PRACTICES

No.	Best Practice Title
1	Program Controls
2	Design Primavera Scheduling
3	Enhanced Public Involvement/Outreach
4	Technical Expert Contracts (i.e., Nation Construction, Contractor, Owner's Representatives)
5	Independent and/or Enhanced Constructability and Design Reviews
6	Consultant Corridor Management Assistance
7	Owner Controlled Insurance Program (OCIP)
8	Emergency Response Mitigation Contracts

Best Practice Title	Overview	Resourcing	Costs	Benefits	Challenges	Risks of Not Doing	Opportunities for Cost Effectiveness	Opportunities for Expansion
Program Controls	Use of methodology for managing budget and cost, schedule, issues, and documents. This best practice facilitates communication and dissemination of key information and data for decision making and management of the scope, schedule, and budget.	Utilizes internal WisDOT staff and external consultant resources.	It is possible to identify the total annual costs of the Program Controls best practice team members, but it is important to keep in mind that this is not an accurate level of the cost of the best practice itself. There is no opportunity to save that total dollar amount by simply eliminating the best practice.	<ul style="list-style-type: none"> Satisfies FHWA guidance Allows for assigning tasks to specialized team members Improves budget & cost management Improves schedule management Improves issue management Improves project & document management 	<ul style="list-style-type: none"> Determining the appropriate size and acceptable cost level for an effective and efficient Program Controls effort. Success depends on project team members understanding the impacts of Program Controls and how they can best leverage the information generated as they perform their jobs. 	<ul style="list-style-type: none"> Traditional methods of project management are not likely to deliver Mega Projects on time and on budget as a result of less effective information for decision making and less efficient communication. Traditional methods may result in increased costs due to inefficiencies and lack of sufficient data. 	<ul style="list-style-type: none"> Utilize the lessons learned, the project experience and the expertise created to leverage knowledge for delivery of future projects. Examine all tasks that need to be completed in relation to the qualifications of in-house staff versus consultant to match skills and costs. 	While the entire improvement program could benefit from expansion, the budget and resource constraints make this impractical. However, the Budget/Cost Control function would provide the most benefit from being expanded to cover the entire improvement program.
Design Primavera Scheduling	Use of the Primavera software package to determine and analyze critical paths for defining, communicating, and managing the schedule and necessary time required to complete the independent tasks related to project delivery.	WisDOT currently does not have Primavera expertise to apply to the projects. This function is currently being provided by outside consultants.	A single Primavera P6 license is \$1,200. The annual Primavera P6 license maintenance fee is 22% of the cost of the license per year. Oracle/Primavera adds a 3% inflation cost annually to each license maintenance agreement.	<ul style="list-style-type: none"> All activities are logic tied and due dates are maintained at one source. Creates a structure for accountability and responsibility. Helps to define/align budget requirements for delivery. Allows for a variety of central control functions and customization. 	<ul style="list-style-type: none"> Current Primavera version is not web-based and staff is not able to retrieve, view, and use the schedules as they can with PMP. Training may be necessary for employees to learn how to read and utilize the Primavera scheduling tool. Integration with other systems of record may present a problem. 	<ul style="list-style-type: none"> Not meeting FHWA expectations for schedule definition, management, and reporting Project team members not having critical path and comprehensive schedule tasks identified for proactive schedule management. Increased challenges for project managers. 	<ul style="list-style-type: none"> Opportunity to develop WisDOT expertise staff as cost-saving measure. Use of less expensive WisDOT Primavera trained staff in lieu of expert consultant staff when possible. 	<ul style="list-style-type: none"> Primavera may be appropriate for other large non-Mega Projects with high risks, accelerated schedules, and/or many critical path milestones or tasks. Primavera could be utilized for other programs within DTSD.
Enhanced Public Involvement/Outreach	Use of public outreach programs to ensure availability of timely, accurate, concise, and useful information to all public stakeholders and entities through a wide range of communication techniques.	Resourcing of outreach activities is a combination of WisDOT staff and consultant staff.	The costs of an enhanced outreach programs depend largely upon regional demographics, project complexity, the degree of public concern, the nature of the projected traffic impacts, available information, and the specific media markets.	The benefits of an enhanced outreach programs depend largely upon regional demographics, project complexity, the degree of public concern, the nature of the projected traffic impacts, available information, and the specific media markets.	The challenges of enhanced outreach programs depend largely upon regional demographics, project complexity, the degree of public concern, the nature of the projected traffic impacts, available information, and the specific media markets.	<ul style="list-style-type: none"> Potential loss of public goodwill and negative WisDOT public image. Potential loss in public understanding of the relationship between future project benefits and planned cost and disruption implications. 	<ul style="list-style-type: none"> Utilization of less expensive mobile platforms and electronic media. Discontinuing usage of a project hotline, media inserts, and television ads. Minimizing usage of neighborhood outreach specialists and print ads. 	<ul style="list-style-type: none"> Utilization of popular mobile platforms and electronic media. Utilization of webcasting for public meetings or high-interest topics. Allow businesses to advertise free of charge on the project web site.
Technical Expert Contracts	Use of technical expert contracts to enhance the performance of management of the project, controlling Mega Project budgets and to ensure compliance with the planned schedules and milestones of delivery.	Utilizes external consultant resources to provide technical knowledge and expert guidance.	The costs of technical expert services are variable from one project to the next due to the nuances and differences in scope, scale, location, and complexity.	<ul style="list-style-type: none"> Provides support of in-house review of the consultant design and construction plans. Ensure constructability within guidelines and requirements. Improved cost, schedule and risk management. 	<ul style="list-style-type: none"> Understanding the purpose and need for the consultant contract and providing the proper scoping. Locating the appropriate technical expert to address the specific issue at the right time and place. 	<ul style="list-style-type: none"> Traditional methods produce more cost and schedule variance as well as higher project risk. Missed opportunities to learn technical expert procedures and practices and develop in-house expertise. 	<ul style="list-style-type: none"> Proper scoping of the contracts to match the unique challenges or specific complexities of the project. Continued integration and exposure of in-house staff to technical processes and reviews will develop in-house staff expertise. 	Potential use of a statewide on-call type of contract for all projects that could be leveraged to provide enhanced value to the more normal types of projects as opposed to just WisDOT Mega Projects.
Independent and/or Enhanced Constructability and Design Reviews	Use of reviews by outside experts to provide periodic feedback and input for the betterment of the project design.	Utilizes external consultant resources to provide technical knowledge and expert guidance.	The costs of technical expert services are variable from one project to the next due to the nuances and differences in scope, scale, location, and complexity.	<ul style="list-style-type: none"> Identifies problems and rectifies them before they reach the critical construction stage and evolve into contractor delays. Provides opportunity and technical expertise to modify design, simplify construction and reduce overall project risk 	<ul style="list-style-type: none"> Ensuring that the cost of performing the reviews is commensurate with the level of measurable and tangible benefit. Verifying that the independent reviewers have the necessary expertise of the construction and design elements. Access to a wide pool of qualified reviewers. 	<ul style="list-style-type: none"> Project construction costs may increase as a result of lack of review. There is the possibility that some details design may be overlooked or opportunities for efficiencies can go unnoticed. Missed opportunities to enhance in-house expertise through technical expert exposure. 	WisDOT has the opportunity to leverage sufficient in-house knowledge and experience with dealing with Mega Projects. This allows the agency to look to the future to rely more heavily on its own expertise to make program decisions as opposed to fully relying on national experts. This will reduce the net costs incurred in the form of future consultant fees.	The development of checklists for specific review items and areas of consistent concern for both consultants and in-house staff to utilize could be developed for all projects. This helps to reinforce the review process and establish expectations of what the expected level of design scrutiny should be.

Best Practice Title	Overview	Resourcing	Costs	Benefits	Challenges	Risks of Not Doing	Opportunities for Cost Effectiveness	Opportunities for Expansion
Consultant Corridor Management Assistance	Use of Consultant Corridor Management Assistance to communicate and coordinate the activities required for the Mega Projects to be efficiently and effectively delivered at the best value for the allocated capital.	The Consultant Corridor Management Assistance teams are consultant resourced in order to fulfill staff needs and requirements to deliver Mega Projects.	The costs of this best practice are highly variable and are largely dependent on the Mega Project scope, scale, and location.	<ul style="list-style-type: none"> Allows for the assignment of appropriate staff to specific services with the flexibility to bring staff in and out as needed to accomplish tasks. Authorship and ownership of a Corridor Design Manual provides a consistent design direction to in-house and paid consultant team members. Provides leadership in developing corridor specifications and details to improve consistency along the corridor. Enhances communication between Region design management, construction teams, consultant design teams, and Central Office reviewers and technical staff. Provides effective tracking and monitoring of all project elements. 	The major challenge is in establishing communication and levels of trust at the outset of the corridor management contract with department and outside consultant staff who are not familiar with the concept.	<ul style="list-style-type: none"> Traditional methods typically lead to inconsistent deliverables. Designs are not delivered on schedule in terms of meeting critical project milestones. Inconsistent quality can cause an increase in change order occurrence with associated cost increases. Higher incidence of change orders create additional traffic delays during construction and the higher likelihood of traffic incidents, which may result in increased user delay cost. 	<ul style="list-style-type: none"> Utilization of the processes and procedures developed on other Mega Projects. Utilization of experienced corridor staff and building off of established relationships to provide consistent and effective project and program management efforts. Development of in-house staff and PMs to facilitate management of tasks and increase internal capabilities. 	The processes, procedures, and approaches of this best practice can be adapted as appropriate to the needs of WisDOT department sections, projects, and work groups.
Owner Controlled Insurance Program (OCIP)	The Owner Controlled Insurance Program (OCIP) is a plan in which WisDOT secures all appropriate insurance coverage for all contractors working on the project and controls all aspects of safety for the workers and public. Typical OCIPs include Worker's Compensation, General Liability, Excess Liability, and Builder's Risk insurance coverage. In some instances OCIPs may include environmental coverage, Railroad Protective Liability, Professional Errors/Omission.	This best practice is currently resourced in-house utilizing WisDOT staff. The individual project team members making decisions for the usage and execution of OCIPs are in-house. The WisDOT oversight team is also comprised of internal WisDOT staff. The staff members taking ownership for oversight and management of the OCIPs are also internal to the department.	The overall cost of the best practice is very dependent on the specific project it is being utilized on. The nature of the complexity, duration, number of employees and contractors covered, and total construction value of the Mega Project will dictate the total cost of implementation.	<ul style="list-style-type: none"> Centralized insurance program with a direct point of contact. Allows for a single insurance carrier that will respond to all claims with a consistent approach. Provides economies of scale when exposures dictate higher than standard liability limits. Ensures consistent application of safety provisions, including policies surrounding a drug free work environment and employee safety between contractors. Allows for the enhancement of usage of DBE contractors, thereby by increasing the effectiveness of DBE goals. Provides a competitive leveling amongst multiple contractors bidding on projects. 	<ul style="list-style-type: none"> First, there must be a project with significant scalability and complexity that meets the specific criteria to make the use of an OCIP economically feasible. Second, if the criteria make sense, it must also be reviewed by an insurance broker to determine the feasibility. Obtaining a reasonable and feasible approach can be challenging in that it is not always possible to include all projects into a total OCIP. As a result, there may be the possibility to obtain an OCIP for a majority of the projects, but due to complexities and scope of work on certain individual projects an individual policy may need to be obtained. 	<ul style="list-style-type: none"> Results in the possibility of additional coordination and communication efforts. May be further efforts required in the processing and management of individual policies and claims. There is the risk that costs incurred for insurance coverage do not take advantage of potential economies of scale that may have allowed WisDOT to reduce overall coverage costs. Inconsistent work safety provisions across multiple projects. Have to deal with multiple insurance carriers. 	The concept of utilizing an OCIP by its very nature is rooted in cost effectiveness. The use of an OCIP offers cost effectiveness in net coverage costs for a Mega Project, as well as streamlined overhead and management related costs associated with actively manage insurance coverage and safety provisions. In order to ensure that an OCIP should be considered for usage, consideration of a general set of criteria that should be met in order to generate realistic economies of scale should be adhered to as indicated in the best practice discussion.	<ul style="list-style-type: none"> Consider applying the OCIP approach to a series of individual projects on either a corridor or regional basis. Single projects in a region for a planned work period could be covered under a uniform policy and safety provision. Likewise, a series of individual interrelated corridor projects could be bundled into an OCIP if the planned work could all be completed within a six year horizon. Consider bundling similar construction projects across the state into a uniform OCIP; however, this may not offer the most optimal situation as conditions and construction means and methods vary from region to region.

Best Practice Title	Overview	Resourcing	Costs	Benefits	Challenges	Risks of Not Doing	Opportunities for Cost Effectiveness	Opportunities for Expansion
Emergency Response Mitigation Contracts	Emergency response mitigation contracts are primarily used for freeway law enforcement, local law enforcement and fire departments. Freeway law enforcement provides dedicated emergency response in the work zone and helps to clear incidents quickly while controlling work zone speeds. Local law enforcement assists with traffic control on local roads for detour routes and local road speed management. Fire departments plan emergency response based on construction closures. All three agencies participate in project traffic meetings, review roadway closures, and crisis communication planning. This provides a means of communication and coordination with the involved agencies that ensures a clear plan of action.	The resourcing of this best practice is both in-house and consultant; however, it should be noted that it is primarily in-house WisDOT staff performing much of the effort. WisDOT is the responsible party tasked with developing and executing emergency response mitigation contracts. Much of the coordination and communication should be performed by WisDOT staff with supplementary administrative support by consultants being utilized on an as-need basis.	The cost of utilizing emergency response mitigation contracts is dependent on many factors. This best practice varies greatly depending on the length and duration of the construction. It is also influenced by the staging complexities for each individual project and their associated impacts with respect to the total Mega Project. When considering usage of this best practice, costs of WisDOT staff time and consultant resources should be taken into consideration. The time for WisDOT staff includes developing, executing, and managing contracts. WisDOT contract specialists are also utilized to process invoices and should also be accounted for. The time expended by consultant support and supplemental staff should also be taken into consideration with respect to consideration of total implementation costs.	<ul style="list-style-type: none"> • Promotes a safe work zone for the public, contractors and construction staff • Enhances public safety • Improves system reliability • Facilitates quick clearance of work zone incidents • Provides dedicated emergency response personnel intimately familiar with the project • Maintains critical capacity during planned freeway closures • Enables faster response to and clearance of work zone incidents • Minimizes additional impacts on roadways that are not under construction 	<ul style="list-style-type: none"> • The gaining of trust of stakeholders while helping them to understand the benefits of project participation is challenging. • There is a challenge of defining the scope of emergency response mitigation contracts and the definition of project related efforts. • There is the internal challenge of managing contracts and completing invoices in a timely manner. 	<ul style="list-style-type: none"> • There is the risk of not ensuring proper public safety, accessibility and reliability during construction. Ensuring that public safety is a high priority is part of a WisDOT strategic goal vested in maintaining an effective and efficient transportation infrastructure for the state and its public users. • Emergency responders may not be consistently informed with the most current information. • Lack of emergency responders being dedicated to the specific project needs results in the associated stakeholders not being specifically in agreement to be “on call” to the associated WisDOT Mega Project team. • Without emergency access coordination between specific jurisdictions the risk of inconsistent implementation and traffic management may arise. • May result in reduced system reliability as a result of not providing a mechanism to facilitate quick clearance of construction zones during any incidents. 	<ul style="list-style-type: none"> • There is an opportunity to reduce cost by standardizing the application of specific strategies based on construction staging, traffic volumes, and other traffic characteristics based on a repeatable protocol to follow. • There is the option to work to standardize the rates used for WisDOT mitigation efforts. The rates currently vary based on the jurisdiction of the specific locations and the applicable definition of straight time vs. overtime for these contracts. 	<ul style="list-style-type: none"> • The best practice is currently used to some extent on other more traditional projects. The best practice is typically utilized on Freeway/Expressway projects. In some cases, the best practice may benefit arterial related projects with high traffic volumes and significant construction impacts or constraints to the capacity of the facility with respect to traffic volumes and travel times. • Standardizing the procedures for implementation and management could consolidate the best practice efforts across WisDOT while facilitating a documented approach to implementation on non-Mega Projects within the state of Wisconsin.

Sample

1. Program Controls

BEST PRACTICE TITLE: Program Controls for Mega Projects

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Best Practice Scope:

Mega Project Program Controls consists of proactive project management and begins managing the Mega Project corridor program in early design. The effort continues through construction, including finals. Program Controls performs functions in the following four categories:

- Budget & Cost Management
 - Establish project budgets
 - Track and update estimate updates and project spending
 - Balance and report on project budgets and all financial data
 - Project programming, including project ID structure, FIIPs updating
 - Manage program to committed program levels and coordination of program with OPBF and BSHP
 - Create and manage change management process
- Schedule Management
 - Create detailed project schedules
 - Track and update schedules with updates from coordination meetings and project team members
 - Analyze and report on project schedules, including critical path
- Issue Management
 - Document issues identified by project team members and/or in issue meetings
 - Track and update issues reporting and ball-in-court issues responsibilities
- Project & Document Management
 - Create document management protocol and organization plan
 - Process and management documents and requests
 - Record and distribute meeting minutes

Program controls performs tasks that may exist in all WisDOT projects, but at a level of greater attention and detail, as well as additional tasks that become necessary either by requirement or simply by the size and complexity of Mega Projects. Program Controls provides tools and information to enable project management to make informed decisions. The deliverables of the Program Controls function are often key components and data sources of other best practices used by Mega Projects.

Program Controls teams provide WisDOT management with project information that is current, easily accessible, and displayed in a consistent manner across all projects and function areas to assist with making good decisions on management of project scope, schedule, and cost. It facilitates improved forecasting capabilities, proactive problem resolution, and improved communication, and integrates schedule management, contract management, cost management,

BEST PRACTICE TITLE: Program Controls for Mega Projects

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

earned value management, and electronic content management to better support management and delivery of mega projects.

Best Practice Policy Requirement:

The FHWA and SAFETEA-LU require a PMP and an Annual Financial Plan for all mega projects (defined as estimated cost of greater than \$500 million). Within the guidance for the Project Management Plan are provisions for a Project Controls team that provides the functions listed above. As stated in the guidance:

A project controls functional team will normally help manage the scope, total cost and overall master schedule for the project, in order for the entire project delivery team to meet the stated objectives of the project being completed on time and within budget. The project controls functional team will also produce project reports, including quantifying schedule delays and cost increases, and initiatives being analyzed to recover.

The Program Controls best practice meets this requirement, and helps generate, maintain, and update the required Project Management Plan and the Annual Financial Plan. The following is the definition for program controls (referred to as project management controls) by FHWA:

FHWA refers to PROJECT MANAGEMENT CONTROLS (Scope, Cost, Schedule, Claims, etc.) A project controls functional team will normally help manage the scope, total cost and overall master schedule for the project, in order for the entire project delivery team to meet the stated objectives of the project being completed on time and within budget. The project controls functional team will also produce project reports, including quantifying schedule delays and cost increases, and initiatives being analyzed to recover. This section includes project management controls that should be used on most major projects.

- A. Risk Management Plan
- B. Scope Management Plan
- C. Scheduling Software
- D. Cost Tracking Software

Best Practice Purpose and Need:

The purpose of Mega Project Program Controls is to provide managers making program/project decisions with the valuable accurate and current data and information required for making effective management decisions regarding the direction of the program. The programs for Mega Projects can involve hundreds of project IDs involving specific design, real estate, utilities, traffic mitigation, public information, and construction that add up to hundreds of millions of dollars. In addition, the programs span several years yet must come in within a specified budget and timeline accounting for inflation and cost escalation, risks and issues, identified and not yet identified at the beginning. FHWA, WisDOT's partner in financing the Mega Project, requires strict oversight over budget as well as the ensuring of public confidence. Program Controls provides

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everything in one place, one dashboard; something not provided by any other WisDOT system in place.

The purpose for the Program Controls best practice is to provide dedicated resources, defined processes, and appropriate tools to deal with the size, duration, and complexity of mega projects. By performing the roles and tasks in the four categories specified above, Program Controls can help project management meet the goals of delivering the project on time and on budget. The best practice also fulfills the recommendation in the FHWA guidance referenced above.

In addition to the need of being part of the FHWA guidance, the program controls functions address the needs created by the size, complexity, and duration of a mega project. Budget and cost management meets the needs of helping management keep the project on budget despite being of significant cost and scale (ex: over \$1.5 billion dollars in project costs across several years). Program Controls is able to provide reports that answer questions on the project costs. The detailed budget also enables management to actively manage the Mega Project programming and adjust the program to best leverage available funding. The project schedule is necessary because of how many projects, how many years, and the dependencies and critical path of the overall project. By being able to coordinate and manage complex information on multiple individual projects across a total program, project managers are better able to help deliver the Mega Project on time and within budget. Tracking and managing the issues by Program Controls addresses the need to maintain accountability and timely resolution for issues. Providing document controls addresses the need to have the very large volumes of documentation organized so that information can be found when needed.

Best Practice Stakeholders:

There are several stakeholders, both internal and external, for agency and non-agency roles that are affected by Program Controls. The data produced and information reporting capabilities are far reaching. The stakeholders affected or influenced by the best practice of Program Controls include:

1. WisDOT
 - a. Mega Project Supervisors and Management
 - b. Mega Project team members
 - c. WisDOT supporting region team members
 - d. WisDOT supporting bureau team members
 - e. WisDOT senior management
2. External
 - a. Consultant team members
 - b. FHWA
 - c. Municipalities within the Mega Project
 - d. State of Wisconsin

BEST PRACTICE TITLE: Program Controls for Mega Projects

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- e. Taxpayers
- 3. Stakeholders that are involved in the implementation of the best practice
 - a. All Mega Project team members, WisDOT, and consultant
 - b. WisDOT supporting region and bureau team members
- 4. Program Controls stakeholders
 - a. Mega Project Finance/Program Controls Team—both WisDOT and consultant
 - b. The Mega Project Section(s)
 - c. Region management
 - d. Region ad hocs
 - e. Division management
 - f. The Bureau of State Highway Programs
 - g. The Office of Policy, Budget, and Finance
 - h. The Bureau of Project Development
 - i. FHWA

Best Practice Organizational Foundation:

Currently, WisDOT ownership of the Program Controls best practice resides with Mega Project management. Each Mega Project implements the Program Controls best practice, following the FHWA guidance as well as previous WisDOT Mega Project examples. Going forward, there are options to consider where in WisDOT ownership of this best practice should reside. Potential owners of the best practice include BSHP, OPBF, or BPD at WisDOT headquarters. It is also possible to continue for the best practice to be owned by the individual Mega Project management. Based on the functions of Program Controls, and alignment with existing Bureau responsibilities, BSHP is recommended as a likely owner to help maintain consistent application of the best practice across all Mega Projects.

Best Practice Resourcing:

The resourcing of Project Program Controls is done both using internal WisDOT staff and external consultant resources. There are a couple of examples from other Mega Projects included in the following discussion to help illustrate the current state of resourcing for Project Program Controls.

The US 41 Project Program Controls team has an organizational chart of 23 positions, one of which is vacant. Of the 22 filled positions, 2 of the staff are internal WisDOT. WisDOT staff includes the financial supervisor and a cost tracker engineer. The remaining other 20 staff are external consultants. Of the 22 positions, 3 staff members work on the design side of the project, 12 staff members work on the construction side, and the remaining 7 work across both design and construction. Breaking the team down by roles, 9 work on document controls, 5 work on financials, 5 have administrative roles, and 3 are schedulers. When the US 41 project team expands to cover the Tri-County 441/10 project, there will be two additional staff added to

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perform document control and administrative tasks, with the scheduling and majority of the finance tasks for the Tri-County handled by the existing team.

SER currently has an organizational chart team of a financial supervisor and 10 staff, but only 4 of the staff positions are filled. A consultant team of 7 assists the WisDOT team on the I-94 North-South Corridor Reconstruction Mega Project and a consultant team of 3 are assisting with the start-up of the Zoo Interchange Reconstruction Mega Project Program Controls. That consultant team could grow to 7 depending upon the need and positions filled in the future on the WisDOT team.

Best Practice Cost:

It is possible to identify the total annual costs of the Program Controls best practice team members, but it is important to keep in mind that this is not an accurate level of the cost of the best practice itself. There is no opportunity to save that total dollar amount by simply eliminating the best practice. First, several of the tasks done by Program Controls are required by FHWA Mega Project guidance. Second, many of the tasks are actually either consolidated or expanded level tasks that occur today on all WisDOT projects. While it is possible to capture the costs incurred by the team performing those centralized tasks, there is no way to measure the cost savings and efficiencies captured by other project team members as a result of having those tasks removed from their workload. Finally, there are cost savings and efficiencies associated with components of the Program Controls best practice in terms of managing projects to budgets; however, these savings are also difficult to capture the direct absolute dollar savings.

The budgeted cost for the I-94 North-South Mega Project is \$25.9 million for consultant services, plus 4 WisDOT positions. The budgeted cost for the US 41 Mega Project is \$22.5 million for both consultant and WisDOT positions. It should be noted that because the Mega Project Program Controls teams perform many duties that are otherwise performed by region staff, it is challenging to differentiate and identify direct staff costs particular to Program Controls.

Best Practice Benefits:

There are many benefits to engaging in the best practice of project management through Program Controls. First, the best practice satisfies the guidance of the FHWA for the items within program controls scope. Secondly, Program Controls allows for assigning tasks to specialized team members. Due to the Mega Project size, complexity, and duration, these tasks would otherwise be too overwhelming to be done by the traditional PDS project staffing model, as well as be a potential inefficient use of resources. There are also benefits associated with each of the four core controls functions:

- Budget & Cost Management
 - Allows for managing individual projects and the Mega Project cost total to a set budget
 - Improves tracking and control of project spending and costs

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- Allows for the managing of the budget to a program or appropriation allocation level
- Schedule Management
 - Improves coordination of tasks along the critical path to reduce project delays and event risks that may otherwise induce delays
 - Improves resource allocation for project and supporting teams by providing schedules that can forecast workloads
 - Improves communication between units and team members through the use of the detailed schedule
- Issue Management
 - Improves accountability and tracking of resolution of issues
 - Reduces risk of costs or delays having impact due to issues that the uncertainties that projects may encounter
- Project & Document Management
 - Improves organization and retrieval of project documentation, which in turn improves decision making and consistency on the project
 - Provides the means for better implementation of lessons learned during the project because of improved record keeping

The biggest benefit of Mega Project Program Controls is that it offers a one-stop, all-encompassing tool that provides a complete and unified planning, budget, schedule, and records management structure to ensure accurate tracking of issues and risks, costs and schedule, documents/records, and public information. It effectively serves as a dashboard in which information pertaining to the Mega Project direction, historical information, current status, and future trajectory can easily be obtained. The use of Program Controls is a forecasting tool that can incorporate capabilities to identify possible risks and changes across all project coordination functions.

No other system currently used by WisDOT encompasses all of the major points for managing the many complex facets of a total program. Program Controls functions ensure timely responses to FHWA and other requests and audits. It guarantees complete and indexed records management for quick and effective open records requests as well as storage and retrieval. It brings the information/data from a multitude of WisDOT systems into a single and centralized place.

Best Practice Challenges:

The success of the Program Controls best practice depends on all project team members understanding how Program Controls impacts them and how they can best leverage the information generated as they perform their jobs. This requires some training to help project team members understand in interfacing with Program Controls staff, as well as understanding how Program Controls can help make their jobs easier, more efficient, and productive. This is further by having buy-in and support throughout the management structure from the top down.

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One of the challenges faced is making sure this is done early in the project, and reinforced throughout the project, so that Program Controls effectiveness does not slip.

There are some detail level challenges that are faced with a best practice with a scope and staff as large as Program Controls, from details such as best software tools and processes to implement, to decisions on size and make-up of controls team staff.

The greatest challenge is in finding the appropriate size and acceptable cost level for an effective and efficient Program Controls effort, as well as the best make-up of staff for the effort (consultant or WisDOT). Considerations of how costly the desired technical staff with the appropriate skill level and support tools required should be made.

Best Practice Risk:

There are many risks in not engaging in the Mega Project Program Controls best practice. First, there is the risk of FHWA not being satisfied with how their guidance for Mega Project management is being followed. Second, there are the risks associated with the costs that will result from the benefits, efficiencies, and cost savings described earlier. As size, scope, complexity, and duration increase, the manner in which projects are managed needs to adapt rather than just scaling up in accordance with traditional practices, and Program Controls is one of these changes that can reduce risks and costs. Without some level of the tasks within the Program Controls best practice scope, it is highly unlikely that traditional methods of project management would deliver a Mega Project on time and on budget as a result of less effective information for decision making and less efficient communication. As a result of potential inefficiencies and lack of data for decision making, it is also very likely it would result in delivery of Mega Projects at an increased cost.

The lack of information and control over the project is also a major threat to overall Mega Project delivery success. There is the risk of losing control of or never truly having control of the relatively large, intricate, and integrated budgets and schedules of the largest public works projects ever undertaken by Wisconsin. There are multiple examples of Mega Projects that have lost control in terms of total budget management due to lack of information and accurate tracking of data. The impacts can be detrimental with costs far exceeding the original estimates.

It should also be noted that FHWA asks for Program Management Plans for projects over \$500 million. Program Controls (Program Management) is one of the pillars of those plans. The public has entrusted WisDOT with billions of dollars for highway infrastructure construction. The potential cost cutting savings measures of eliminating the cost of Program Controls is far outweighed by the benefits of receiving timely, prudent, and effective delivery of large-scale Mega Projects on time and on budget. It should be noted that experience provides value to sound Program Management practices.

BEST PRACTICE TITLE: Program Controls for Mega Projects

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Best Practice Opportunities for Cost Effectiveness:

There are several approaches that could be examined for improving the cost effectiveness of the Program Controls best practice. The first step is in taking the lessons learned and the project experience and expertise created and leveraging this knowledge gained to deliver future projects. With effective knowledge transfer this may potentially enable the tasks to be accomplished with fewer staff members. An example of such possible efficiencies is the US 41 team taking on the Tri-County Project. This resulted in the US-41 Program Controls staff taking on a new project representing a 33% increase in total budget under management, with only a 10% increase in staff. A more challenging approach would be to examine all of the tasks and qualifications of staff, as well as looking at consultant versus in-house staff, and better matching skills and costs to the tasks that need to be done. This has potential to further reduce costs and create skill-adapted efficiencies. The most extreme level of this, with the greatest potential for savings, would be a staffing model that allows for hiring in-house staff whose employment is only for the duration of the project. The most challenging approach to increase cost effectiveness in delivery can result in the potential to actually increase Program Controls costs, but may transfer even greater savings to the project overall by looking at even more tasks done by more relatively expensive WisDOT and consultant staff. This may offer the option to look for more ways to consolidate tasks into a specialized Program Controls team where broader departmental savings can be achieved and with broad-based reduction of project uncertainties and risks.

With the multitude of lessons learned and evolution and improvements in software, the labor costs for managing the Mega Project programs should be going down considerably. With the improved reporting capabilities now built into Primavera by WisDOT Mega Project teams and the use of better, more efficient data mining through the use of Business Objects, the cost for Program Controls in the future as a percentage of the program will be less than it has been as a considerable portion of the base investment in development of the knowledge and skills of effective deployment of Program Controls has already been realized. Another cost reduction would be in consolidating multiple, similar task positions into fewer; for example, having project-level document control done more at the program level, reducing the number of employees needed for document control and centralizing the function of document management. Other examples include possible administration cost cuts by reducing consultant administrator time charged against the Mega Project from full-time to part-time while filling currently vacant DOT positions to replace more costly consultant staff. The combination of many of the suggestions for the realization of potential efficiencies offers the option to reduce overall costs of the Program Controls best practice.

BEST PRACTICE TITLE: Program Controls for Mega Projects

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Best Practice Opportunities to Expand:

The success of the American Recovery and Reinvestment Act (ARRA) program in managing individual projects to a set budget serves as an example of how financial best practices from Mega Projects can expand. Such an expansion must be very carefully researched and implemented, for not all components of the Program Controls best practice will realize benefits from being expanded.

By their individual definitions, many of the components of the best practice are tasks currently being done in some fashion, but need to be expanded or consolidated because of the increased size, complexity, and duration of a Mega Project. Without the increased size to accommodate scale of the Mega Project, many of the components simply would not be needed, and current practices may be the most efficient; however, as the budget example shows from ARRA, there are opportunities to expand some of the concepts. By exploring current project outcomes and measures, there is the opportunity to look for the greatest opportunities where there is a need to improve. This allows for consideration of where the greatest costs are, those steps that could be examined with the goal of exploring whether a Program Controls best practice feature would be helpful, and whether it could be scaled to fit without being too costly to implement.

While the entire improvement program could benefit from expanding this best practice, budget and resource constraints likely make this impractical. Of the four major functions covered within the best practice (Budget/Cost Control, Schedule Control, Issue Management, and Document Control) it is believed that the function with the most benefit from being expanded to cover the entire improvement program is the Budget/Cost Control Function.

Organizationally WisDOT has some experience with this concept, having utilized it in managing delivery of the AARA program projects. Similarly, this best practice could be expanded to the entire improvement program by requiring each project to submit a monthly project financial report to track project expenditures. Items that could be reported and tracked include:

1. Actual expenditures vs. budget
2. Percent of current budget expended
3. Anticipated cost-to-complete
4. Value of pending Contract Modifications (construction)
5. Reserve balances

BEST PRACTICE TITLE: Program Controls for Mega Projects

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

It is important to consider that on a statewide basis such a reporting mechanism would create a very considerable amount of data that could be difficult for decision makers to draw any relevant conclusions from. A further refinement would need to be incorporated to construct a Design/Construction Project Management Dashboard report which would provide decision makers with an “at-a-glance” view on the status of projects that are performing outside of pre-established performance levels or boundaries, as well as the status of the overall program. Individual project performance level metrics might include:

1. Cost-to-complete estimates exceeding base budgets by 10%
2. Project reserve budgets falling below 5%

The report would only list projects falling outside of the established performance levels. In addition, it would provide a rollup of the total cost-to-complete estimates for all projects in the program as compared to the total budget amount. The report would provide managers with critical information on projects potentially in trouble, thereby giving the ability to provide assistance or take corrective actions and allow program adjustments to the statewide program throughout the delivery process in a more dynamic and adapted fashion.

2. Design Primavera Scheduling

BEST PRACTICE TITLE: Design Primavera Scheduling

Basis of Discussion: Evaluate the scheduling tool versus the use of the WisDOT PMP tool

Best Practice Scope:

US-41 Design Primavera Scheduling software is currently being used by all aspects on the Mega Projects. The goal of the Primavera software package is to determine critical paths that will aid in clearly defining the schedule and the necessary time required to complete the independent tasks related to project delivery. For this reason, Primavera software is best utilized for scheduling of the complex design work required for Mega Projects.

The software identifies the key milestones and critical tasks in the project schedule and helps to integrate them into the master schedule to ensure that all delivery dates are met for each project. The dates and tasks typically integrated include items for real estate, structure, railroad, ITS, lighting, landscaping, and the general delivery of project tasks from 30% to Let dates. The PMP schedule is comprised of a minimum of 13 tasks for any project and up to 35 tasks based on scope specifics. Not all tasks are required in the schedule, as some tasks are informational only and/or are only representative of project attributes or conditions.

Typically, the designated scheduler begins the process by meeting with Project Managers using the template (see Appendix at the end of this Best Practice) and builds in the details such as the individual tasks, task durations, and task dependencies (see Appendix at the end of this Best Practice). The scheduler must tailor the schedule with specific information of interest to the Project Managers. Each task is linked in a manner that creates a pathway that defines the ultimate critical path. The scheduler can then use the analysis of “what if” scenarios in terms of managing the projects and tasks and ensuring that milestone dates align and can be met.

To be effective, the scheduler must maintain and provide to all stakeholders a master schedule. The scheduler is required to meet with Project Managers in regular intervals (weekly) to communicate updates, revisions, and/or completion of tasks within the schedule. The master schedule can then be continually updated and refined as the project evolves and proceeds toward completion.

In comparison, the PMP application also allows for scheduling of design project key milestones and critical tasks. The PMP application schedule is derived from project scope items identified as contributing to the project. The scope module includes all tasks listed in the Functional Design Manual (FDM). While both Primavera and the PMP web application include key milestones, the PMP application schedule is not critical path based. Primavera meets the FHWA requirements of a master program schedule with critical path criteria.

Currently, WisDOT does not have Primavera scheduling expertise to apply to projects. The Primavera scheduling software learning curve is steep. There are many benefits of using Primavera. Mega Projects are more complex and therefore require multiple projects being coordinated to meet the needs of each individual project team, FHWA expectations, and Division program goals. The software supports reporting functions to be customized by discipline to ensure the relevant information is communicated in a consistent fashion.

BEST PRACTICE TITLE: Design Primavera Scheduling

Basis of Discussion: Evaluate the scheduling tool versus the use of the WisDOT PMP tool

Primavera allows for designers/managers to focus on important tasks rather than spending many hours on schedule functions.

SER Mega Projects are using Primavera P6 for design scheduling focused on design milestones. SER Mega Projects do not currently incorporate other business areas to the extent of US-41. In comparison, the PMP application also allows for scheduling of design project key milestones and critical tasks. The PMP application schedule is derived from project scope items identified as contributing to the project. The scope module includes all tasks listed in the FDM.

Best Practice Policy Requirement:

The FHWA and SAFETEA-LU require a PMP and an Annual Financial Plan for all Mega Projects (defined as estimated cost of greater than \$500 million). Within the guidance for the PMP are provisions for a project schedule.

FHWA has strongly advised that a master program schedule be integrated (i.e., the individual contract milestones tied to each other) such that any delays occurring in one activity will be reflected throughout the entire program schedule, with a realistic completion date being reported.

It has been determined that Design Primavera scheduling meets the above FHWA objective as well as the following schedule management objectives:

- Create detailed project schedules
- Track and update schedules with updates from coordination meetings and project team members
- Analyze and report on project schedules, including critical path

These objectives meet the stated requirements to generate, maintain, and update the required PMP and the Annual Financial Plan. It is important to note that WisDOT does not have a policy dictating the type of scheduling software for Mega Projects; however, FHWA guidance from the 2009 FHWA Project Management Plan Guidance on scheduling software is as follows:

The Project Management Plan should include the scheduling software to be used for the project. Consideration should be given to requiring the same software package for all schedules to be generated by the project controls functional team, the design consultants, and the contractors, in order to ensure uniformity and compatibility for the overall master schedule. The frequency and the detailed process of reviewing and validating schedules should be also included.

BEST PRACTICE TITLE: Design Primavera Scheduling

Basis of Discussion: Evaluate the scheduling tool versus the use of the WisDOT PMP tool

Best Practice Purpose and Need:

The purpose of Design Primavera Scheduling is to manage a multitude of inter-related projects to meet Mega Project program delivery expectations of the FHWA, the Division, and the public. The need of Design Primavera Scheduling is that the task of scheduling must use the critical path for managing the complex relationship of multiple project tasks.

Additionally, P6 can work cooperatively with the Contract Manager, connecting schedule and financial information such as cost loading. MS Project also uses critical path for scheduling, but the concern with MS Project is whether it is robust enough to handle the larger volume of tasks and relationships that epitomize WisDOT Mega Projects. Additionally, MS Project is not capable of cost loading tasks. The PMP application does not use critical path methodology for scheduling.

Best Practice Stakeholders:

The following table describes the key Best Practice stakeholders, their roles, required outputs, and expectations, as well as a measure of their influence and classification as it pertains to the project:

Position	Role	Requirements	Expectations	Influence	Classification
Division Administrator	Accountable for improvement program delivery	Program Commitments achieved	Programs delivered on time, within budget and at agreed standard of quality	High	Internal
SWB Operations Director	Consulted for improvement program delivery	Deliver programs within Division policies and guidelines for project management	Programs delivered on time, within budget and at agreed standard of quality	High	Internal
Regions Operations Director	Consulted for improvement program delivery	Deliver programs within Division policies and guidelines for project management	Programs delivered on time, within budget and at agreed standard of quality	High	Internal
SWB Directors, managers and supervisors	Consulted for improvement program delivery	Deliver programs within Division policies and guidelines for project management	Programs delivered on time, within budget and at agreed standard of quality	High	Internal
Bureau of Structures	Accountable for structure plan delivery (consultants can have responsibility for delivering structure plans for review)	Project management best practices are applied for efficient project delivery	Projects delivered according to project management plan	High	Internal

BEST PRACTICE TITLE: Design Primavera Scheduling

Basis of Discussion: Evaluate the scheduling tool versus the use of the WisDOT PMP tool

Position	Role	Requirements	Expectations	Influence	Classification
Project Management Unit	Consulted for project management policy, procedures, and best practices	Project management best practices are applied for efficient project delivery	Projects delivered according to project management plan	High	Internal
Regions Director, managers and supervisors	Consulted for improvement program delivery	Deliver programs as scheduled and budgeted with expected standard of quality	Programs delivered on time, within budget and at agreed standard of quality	High	Internal
Project Manager	Accountable for project delivery	Deliver project scope, schedule, and budget within agreed project management plan	Projects delivered on time, within budget and at agreed standard of quality	High	Internal
Project team members	Responsible for project delivery	Deliver project scope, schedule, and budget within agreed project management plan	Projects delivered on time, within budget and at agreed standard of quality	Medium	Internal
Program Controls	Consulted for project delivery issues, risks and quality	Projects controlled to meet delivery commitments	Projects tracked for on-time, within budget, and at agreed standard of quality	Medium	Internal
FHWA	Informed of program – approval required on Federal Oversight projects	Federal Oversight projects identified and managed to meet requirements	Federal Oversight projects delivered meet requirements	High	External
DNR and Army Core of Engineers	Consulted	Environment protection incorporated in improvement project plans	Environmental concerns addressed and appropriate action taken and documented	High	External
Public	Consulted and Informed	The right projects are selected and completed timely and efficiently – lowest cost for expected quality	Projects solve transportation safety and/or efficiency problems	Medium	External

Best Practice Organizational Foundation:

The Division's Project Management office should be the entity responsible for maintaining and supporting the scheduling tool. As owner, this office would be responsible for establishing future guidance with regard to project management policies, procedures, best practices, and ongoing tool support.

BEST PRACTICE TITLE: Design Primavera Scheduling

Basis of Discussion: Evaluate the scheduling tool versus the use of the WisDOT PMP tool

Best Practice Resourcing:

WisDOT currently does not have Primavera expertise to apply to the projects. This function is currently being provided by outside consultants for utilization in the Mega Projects.

The Project Management Unit currently procures a license and management services for the Mega Project team scheduler. The Project Management Unit, along with the BITS, coordinates software upgrades.

Best Practice Cost:

The cost of a Primavera P6 license is \$1,200.

- Oracle/Primavera adds a 3% inflation cost annually to each license maintenance agreement.
- Primavera P6 license maintenance is 22% of the cost of the license per year.

For comparison purposes, the following table displays actual cost data for US-41 as of 8/1/2011:

Company	Scheduler	Rate	Hours	Total (2 year contract)	Role
URS	McFarlane	██████	██	██████	Previous Scheduler
URS	Other	██████	██	██████	Previous Scheduler
URS	Summers	██████	██	██████	Previous Scheduler
URS	Sandri/Furos	██████	██	██████	Current Winnebago Construction Scheduler
URS	Wech	██████	██	██████	Current Design Scheduler
URS	Guider	██████	██	██████	25% of duties providing schedule spreadsheet tool
NCG	Cuthbertson	██████	██	██████	Current Brown Construction Scheduler
Total paid + encumbered so far				██████	
Annual Cost for current schedulers				██████	

BEST PRACTICE TITLE: Design Primavera Scheduling

Basis of Discussion: Evaluate the scheduling tool versus the use of the WisDOT PMP tool

Best Practice Benefits:

Design Primavera Scheduling Benefits:

- All activities are logic tied and due dates are maintained in one source to ensure that everyone is working towards the same goal.
- Centralized control of information and dissemination to a key single point of contact.
- Can be done very early in project development to provide analysis/"what if" scenarios to begin framework for project due date requirements.
- A variety of consistent and custom reports of interest by various design teams and functions can be created from the database.
- The schedule is updated almost daily with current status to maintain alignment and consistency in reporting.
- Logic tied schedule provides critical due dates for various tasks within the project.
- The schedule is created and managed based on advance-able schedules for program flexibility.
- P6 scheduler is interactive and provides analysis and feedback of pertinent items and due dates.
- Creates a structure for accountability and responsibility.
- Creates a true "team" culture.
- Internal and external milestone dates can be achieved and budgets can be better controlled.
- The reporting functions can be customized by discipline to ensure that relevant information is communicated in a consistent fashion.
- Provides level of confidence for managers in reporting consistency and delivery of the projects/program.
- Meetings can be streamlined.
- Helps to define/align budget requirements for delivery.
- P6 allows for faster development of custom reports vs. WisDOT in-house software.
- Allows for designers to focus on important tasks rather than spending many hours on schedule functions.

PMP Application in Comparison:

- Tasks scheduled and completion dates are maintained in one source available to all project team members as well as all WisDOT staff.

BEST PRACTICE TITLE: Design Primavera Scheduling

Basis of Discussion: Evaluate the scheduling tool versus the use of the WisDOT PMP tool

- PMP schedules can be built very early in the program level scoping phase. Schedules can be manipulated to recalculate proposed schedule for “what-if” scenarios.
- Schedule reports are available through the application and through report writers. Various reports include schedule information related to the business area based on the report owner’s business need.
- All schedule information can be updated by the project manager, project leader, and their delegates. Business area schedule tasks can be updated by the project business area representative and delegates.
- Tasks due dates are readily available for reviewing, updating, and reporting.
- Project schedules can and should be set to meet earliest possible PS&E dates.
- PMP schedules require engineering and business area experts review for accuracy, completeness, and credibility.
- Project team members are responsible for the delivery of their scheduled tasks.
- PMP is built for team work and promotes a team work environment.
- The budget module allows for delivery budget development and management. The delivery estimate calculator provides feedback to the project team on estimate delivery rate.
- Meetings can be efficient and effective.
- “P6 allows for faster development of custom reports vs. WisDOT in-house software”?
- Crystal Reports creates reports using PMP information. Reports are customizable and some are parameter driven (reports for business areas and programs).
- PMP schedule is quick and easy to use. Project team members must be held responsible for timely and accurate data.
- PMP application integrates scope, budget, schedule, team and contact information, and project phase development. Project-specific information from other systems is displayed in the PMP – Railroad Crossing Inventory System, Highway Structure Inventory System, and Transportation Utility Management System. No duplication of information when source of information is connected to the PMP application.

Best Practice Challenges:

There may be initial skepticism or resistance due to lack of familiarity with P6 schedules. WisDOT does not have in-house expertise in P6 scheduling and thus requires outside consultants to provide the necessary expertise for WisDOT. As the current version of Primavera employed by WisDOT is not web-based, the WisDOT staff is not able to retrieve, view, and use the schedules as they currently are with PMP. For example, BOS needs to utilize the P6 schedule to have sufficient resources available to structure plan submittals and review;

BEST PRACTICE TITLE: Design Primavera Scheduling

Basis of Discussion: Evaluate the scheduling tool versus the use of the WisDOT PMP tool

however, since P6 is not web-based, the schedule must be placed at a location they can access or sent to them periodically. Training may be necessary for certain WisDOT employees to learn how to read and utilize the Primavera scheduling tool.

Having multiple scheduling platforms is an additional concern when the primary service provided by the product is scheduling. Currently, PMP integrates scoping, budgeting, scheduling, and team and agency contact information. Migrating P6 (Planner/Scheduler) client user to Primavera's web-based P6 would cost WisDOT an estimated \$2,000 for the current licenses. Each P6 user (reader or writer) requires a license for the web-based version. A web-based Primavera scheduling tool would allow for easier support and administration. However, integration with other systems of record could still present a problem. Integration could be achieved through reporting. The user would not have one-stop location for all project information within one system, rather the user would have to rely on reports to pull all the relevant information together for review. Changes would have to be made in the system of record.

Best Practice Risk:

The risk of not utilizing Primavera or another off-the-shelf critical path method scheduling software is in not meeting FHWA expectations for schedule definition, management, and reporting, and project team members not having critical path and comprehensive schedule tasks identified for proactive schedule management.

Primavera Scheduling software provides a critical path for many design milestones which can be tied together with logic to create a schedule. The current PMP scheduling tool does not utilize critical path logic and does not allow multiple milestones to be implemented into the schedule. If Primavera is not utilized, PMP will need to be utilized, which could create issues with meeting Let date deliverables. This can create issues because it can be difficult for a project manager to manage many projects with multiple dynamic milestones within an accelerated schedule throughout all of the entities of the design. Primavera scheduling software is recommended and better suited for Mega Project program scheduling.

Best Practice Opportunities for Cost Effectiveness:

As stated previously, the cost of a Primavera P6 license is \$1,200.

There are several ways in which to capitalize on the use of Primavera Scheduling software:

- Opportunity to develop WisDOT expertise staff as cost-saving measure
- Scheduling knowledge is important for successful project management
- WisDOT expertise staff with consultant staff available during program peaks; WisDOT expert staff may be more inexpensive than consultant expert staff

BEST PRACTICE TITLE: Design Primavera Scheduling

Basis of Discussion: Evaluate the scheduling tool versus the use of the WisDOT PMP tool

Best Practice Opportunities to Expand:

The following is an excerpt from the 2007 Project Management Tool Review Team Final Report:

The 2007 PMP Tools Review Team recognized the benefits and demands of utilizing the Primavera software. The team recommends that the following matrices be used when determining which project management tools should be employed. The team also recommends that the tool selection process referenced in this report be implemented. The tool selection process will address reconstruction projects, the gray area in the matrices, which may meet the criteria for using Primavera (P5/Contract Manager) software.

Deliverables Highway Improvement Types	DESIGN PROJECTS				
	Scheduling	Document Management	Issues Management	Cost Tracking	Cost Projections
Federal Majors	P5	Contract Manager			
Reconstruction, Preservation or Reconstruction, Expansion	Refer to Tools Selection Process Most projects will utilize the tools listed in the bottom row				
All other improvement types	PMP	File/ Document Management Structure*	Existing procedure	MIIP/BOXI	MIIP/BOXI

Primavera Scheduling software (P6) is recommended for projects with high risk, accelerated schedules, and many critical path milestones or tasks. Some large non-Mega Projects may fit into these criteria. Large or long corridor projects with extensive real estate acquisition would also be suggested to manage many properties at different stages of real estate acquisition being completed by different entities (consultant, central office, and region). A dollar value threshold is not a good determination of criteria for whether P6 or PMP should be utilized, as the project could be very simple in nature with not a lot of deliverables yet causing a large dollar value; whereas a smaller compact project with many obstacles could be a very good candidate for P6 due to deliverables being dependent of each other to keep the project on schedule.

Primavera Scheduling software (P6) could be utilized for other programs within DTSD. An example of use could be utilizing it to schedule and organize research projects and inspection throughout the state. Each research project may have similar tasks all happening at different times. This would help organize staff and crews for inspection and other tasks needed to complete the project. Another program which could utilize P6 could be the proving periods of plantings, signs, and pavement markings on a statewide basis. Aerial flights for photography and survey data request could utilize P6 to determine appropriate schedules and deliverables needed to meet survey and photography requests from a statewide perspective. The WisDOT proposals section and BOS could utilize P6 to maintain a statewide program schedule for plan reviews to ensure the proper amount of staff are available for reviews to let projects.

Appendix A:

Table 1: US 41 Actual Cost Data (8/1/2011):

<u>Company</u>	<u>Scheduler</u>	<u>Rate</u>	<u>Hours</u>	<u>Total (2 year contract)</u>	<u>Role</u>
URS	McFarlane	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]	Previous Scheduler
URS	Other	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]	Previous Schedulers
URS	Summers	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]	Previous Scheduler
URS	Sandri/Furos	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]	Current Winnebago Construction Scheduler
URS	Wech	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]	Current Design Scheduler
URS	Guider	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]	25% of duties providing schedule spreadsheet tool
NCG	Cuthbertson	\$ [REDACTED]	[REDACTED]	\$ [REDACTED]	Current Brown Construction Scheduler
Total paid + encumbered so far				\$ [REDACTED]	
Annual Cost for current schedulers				\$ [REDACTED]	

Cost of P6 Licenses

One Time Charge Per

License \$ [REDACTED]

Annual Maintenance Per

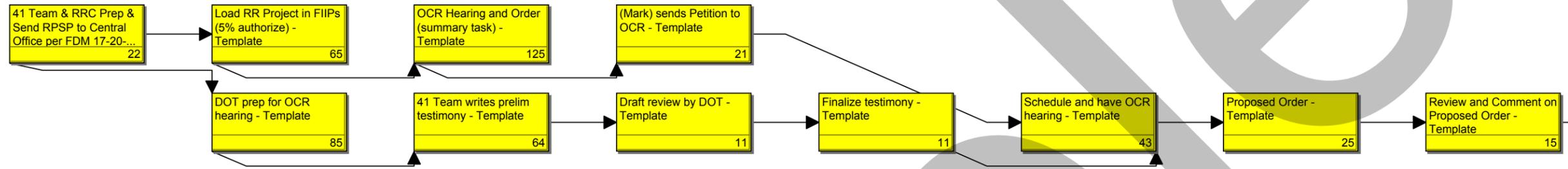
License \$ [REDACTED]

Totals for 3 licenses-2 yrs contracts

\$ [REDACTED]

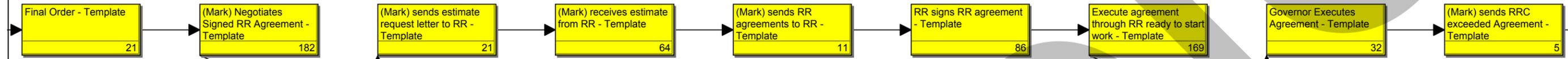
\$ [REDACTED]

No LEVEL 4 - PROJECTS



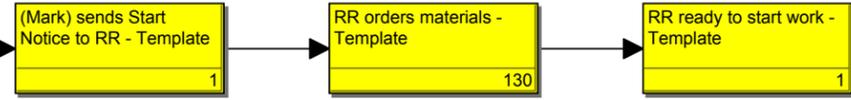
Activity Name
Original Duration

No LEVEL 4 - PROJECTS



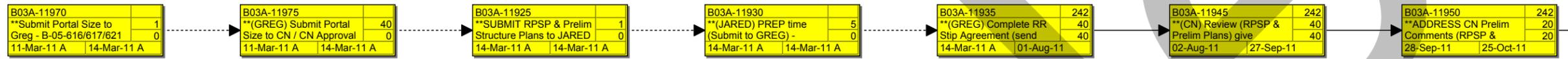
Activity Name
Original Duration

No LEVEL 4 - PROJECTS



Activity Name
Original Duration

No LEVEL 4 - PROJECTS



Activity ID	Total
Activity Name	Original
Start	Finish

No LEVEL 4 - PROJECTS



Activity ID	Total Original Duration
Start	Finish

LEVEL 4 - PROJECT ID	LEVEL 3B - CONST	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	E - LET	P - LET
Brown County										
Provide Slope Intercepts to WisDOT Plats										
11330387	C4-15-13	Provide Slope Intercepts to WisDOT Plats - US 41 Bond - Woodman Overpass	1	01-Nov-11	01-Nov-11	08-Dec-11	08-Dec-11	25	2014	7/8/14
60% Plan Complete										
92020878	C5-13-02	60% Plan Complete - Pamperin Park Trail Paving & Landscaping	0	11-Jul-11	11-Jul-11	07-Sep-11	07-Sep-11	42	2013	4/9/13
11330489	C3-13-09	60% Plan Complete - Packerland Drive - US 41 Soil Mitigation - Wick Drains	1	15-Jul-11	15-Jul-11	30-Dec-10	30-Dec-10	-139	2012	8/14/12
11330480	C4-13-11	Submit 60% Plan to DOT - Ninth St Reconstruction	1	15-Jul-11*	15-Jul-11	15-Aug-11	15-Aug-11	21	2013	5/14/13
92020888	C5-12-08	Submit 60% Plan to DOT - Shawano Ave Landscaping & Bike/Ped Trail (CTH EB-Dousman)	1	01-Aug-11	01-Aug-11	24-Aug-10	24-Aug-10	-239	2012	5/8/12
11330480	C4-13-11	60% Plan Review Mtg Complete - Ninth St Reconstruction	1	15-Aug-11	15-Aug-11	16-Aug-11	16-Aug-11	1	2013	5/14/13
92020888	C5-12-08	60% Plan Review Mtg Complete - Shawano Ave Landscaping & Bike/Ped Trail (CTH EB-Dous...)	1	30-Aug-11	30-Aug-11	23-Sep-10	23-Sep-10	-239	2012	5/8/12
11330387	C4-15-13	Submit 60% Plan to DOT - US 41 Bond - Woodman Overpass	1	01-Dec-11	01-Dec-11	03-Oct-12	03-Oct-12	216	2014	7/8/14
92020880	C5-16-05	Submit 60% Plan to DOT - Rivergrove Avenue Extension	1	01-Feb-12	01-Feb-12	10-Oct-13	10-Oct-13	431	2015	7/14/15
92020880	C5-16-05	60% Plan Review Mtg Complete - Rivergrove Avenue Extension	1	01-Mar-12	01-Mar-12	08-Nov-13	08-Nov-13	431	2015	7/14/15
11330387	C4-15-13	60% Plan Review Mtg Complete - US 41 Bond - Woodman Overpass	1	06-Nov-12	06-Nov-12	01-Nov-12	01-Nov-12	-3	2014	7/8/14
DSR Approved										
92020888	C5-12-08	Design Study Report Approved - Shawano Ave Landscaping & Bike/Ped Trail (CTH EB-Dousm...)	1	12-Aug-11	12-Aug-11	22-Sep-10	22-Sep-10	-228	2012	5/8/12
DT1078 Plan Sent To Becher Hoppe										
11330474	C5-12-06	DT1078 Plan Sent To Becher Hoppe - US 41 Fencing (Ninth St - Larsen Rd)	1	15-Jul-11*	15-Jul-11	25-Oct-10	25-Oct-10	-185	2012	5/8/12
92020878	C5-13-02	DT1078 Plan Sent To Becher Hoppe - Pamperin Park Trail Paving & Landscaping	1	15-Jul-11*	15-Jul-11	07-Sep-11	07-Sep-11	37	2013	4/9/13
92020788	C5-14-04	DT1078 Plan Sent To Becher Hoppe - WIS 29 Fencing	1	15-Jul-11*	15-Jul-11	25-Oct-10	25-Oct-10	-185	5/8/12	2/11/14
11330386	C5-15-07	DT1078 Plan Sent To Becher Hoppe - US 41 Fencing (Larsen Rd - Memorial Dr)	1	15-Jul-11*	15-Jul-11	25-Oct-10	25-Oct-10	-185	5/8/12	4/14/15
11330489	C3-13-09	DT1078 Plan Sent To Becher Hoppe - Packerland Dr - US 41 Soils Mitigation - Wick Drains	1	01-Sep-11*	01-Sep-11	14-Jan-11	14-Jan-11	-162	2012	8/14/12
11330480	C4-13-11	DT1078 Plan Sent To Becher Hoppe - Ninth St Reconstruction	1	14-Sep-11	14-Sep-11	12-Oct-11	12-Oct-11	20	2013	5/14/13
92020888	C5-12-08	DT1078 Plan Sent To Becher Hoppe - Shawano Ave Landscaping & Bike/Ped Trail (CTH EB-D...)	1	15-Sep-11	15-Sep-11	08-Oct-10	08-Oct-10	-239	2012	5/8/12
92020880	C5-16-05	DT1078 Plan Sent To Becher Hoppe - Rivergrove Avenue Extension	1	30-Mar-12	30-Mar-12	11-Dec-13	11-Dec-13	431	2015	7/14/15
11330387	C4-15-13	DT1078 Plan Sent To Becher Hoppe - US 41 Bond - Woodman Overpass	1	07-Dec-12	07-Dec-12	04-Dec-12	04-Dec-12	-3	2014	7/8/14
90% Plan Review Complete										
92020878	C5-13-02	Submit 90% Plan to DOT - Pamperin Park Trail Paving & Landscaping	1	01-Aug-11*	01-Aug-11	28-Jun-12	28-Jun-12	234	2013	4/9/13
11330489	C3-13-09	Submit 90% Plan to DOT - Packerland Drive - US 41 Soil Mitigation - Wick Drains	1	09-Aug-11	09-Aug-11	06-Jan-12	06-Jan-12	105	2012	8/14/12
92020873	C3-12-05	** may not have 90% Plan Review Mtg Complete - Pamperin Park Access Rd Obliteration, Sha...	1	16-Aug-11*	16-Aug-11	16-Aug-11	16-Aug-11	0	2012	4/10/12
92020878	C5-13-02	** may not have 90% Plan Review Mtg Complete - Pamperin Park Trail Paving & Landscaping	1	29-Aug-11	29-Aug-11	17-Jul-12	17-Jul-12	226	2013	4/9/13
11330371	C4-12-12	Submit 90% Plan to DOT - Larsen Rd - Memorial Dr Mainline	1	14-Sep-11*	14-Sep-11	15-Sep-11	15-Sep-11	1	2012	7/10/12
11330381	C4-12-12	Submit 90% Plan to DOT - Collector-Distributor Roadways (Mason St to WIS 29)	1	14-Sep-11*	14-Sep-11	15-Sep-11	15-Sep-11	1	2012	7/10/12
11330373	C4-13-02	Submit 90% Plan to DOT - WIS 29 System Interchange (Packerland Dr to US 41)	1	14-Sep-11*	14-Sep-11	15-Sep-11	15-Sep-11	1	5/8/12	1/8/13
11330375	C4-13-02	Submit 90% Plan to DOT - WIS 29 System Flyover Steel	1	14-Sep-11*	14-Sep-11	15-Sep-11	15-Sep-11	1	5/8/12	1/8/13
11330472	C4-13-02	Submit 90% Plan to DOT - US41 / WIS 29 Stormwater Ponds	1	14-Sep-11*	14-Sep-11	15-Sep-11	15-Sep-11	1	5/8/12	1/8/13
92020771	C4-13-02	Submit 90% Plan to DOT - WIS 29 Mainline (Duck Creek - Packerland Dr/CTH EB)	1	14-Sep-11*	14-Sep-11	15-Sep-11	15-Sep-11	1	5/8/12	1/8/13
11330480	C4-13-11	Submit 90% Plan to DOT - Ninth St Reconstruction	1	14-Sep-11	14-Sep-11	15-Sep-11	15-Sep-11	1	2013	5/14/13
92020876	C4-15-09	Submit 90% Plan to DOT - S Memorial Sr Access to Parkside Ct	1	14-Sep-11*	14-Sep-11	15-Sep-11	15-Sep-11	1	5/8/12	2/10/15
11330473	C5-15-09	Submit 90% Plan to DOT - WIS 29 System Interchange Landscaping	1	14-Sep-11*	14-Sep-11	15-Sep-11	15-Sep-11	1	5/8/12	3/10/15
92020877	C5-16-03	Submit 90% Plan to DOT - Shawano Ave Landscaping & Bike/Pedestrian Trail (Taylor St - Duc...	1	14-Sep-11*	14-Sep-11	15-Sep-11	15-Sep-11	1	5/8/12	2/9/16

Sort By: Activity Type, PM, Finish, Contract #

Central Segment Look Ahead

Data Date 11-Jul-11

Run Date: 02-Aug-11

LEVEL 4 - PROJECT ID	LEVEL 3B - CONST	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	E - LET	P - LET
92020888	C5-12-08	Submit 90% Plan to DOT - Shawano Ave Landscaping & Bike/Ped Trail (CTH EB-Dousman)	1	22-Sep-11	22-Sep-11	30-Sep-11	30-Sep-11	6	2012	5/8/12
11330371	C4-12-12	90% Plan Review Mtg Complete - Larsen Rd - Memorial Dr Mainline	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	2012	7/10/12
11330381	C4-12-12	90% Plan Review Mtg Complete - Collector-Distributor Roadways (Mason St to WIS 29)	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	2012	7/10/12
11330373	C4-13-02	90% Plan Review Mtg Complete - WIS 29 System Interchange (Packerland Dr to US 41)	1	14-Oct-11*	14-Oct-11*	14-Oct-11	14-Oct-11	0	5/8/12	1/8/13
11330375	C4-13-02	90% Plan Review Mtg Complete - WIS 29 System Flyover Steel	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	5/8/12	1/8/13
11330472	C4-13-02	90% Plan Review Mtg Complete - US41 / WIS 29 Stormwater Ponds	1	14-Oct-11*	14-Oct-11*	14-Oct-11	14-Oct-11	0	5/8/12	1/8/13
92020771	C4-13-02	90% Plan Review Mtg Complete -WIS 29 Mainline (Duck Creek - Packerland Dr/CTH EB)	1	14-Oct-11*	14-Oct-11*	14-Oct-11	14-Oct-11	0	5/8/12	1/8/13
11330480	C4-13-11	90% Plan Review Mtg Complete - Ninth St Reconstruction	1	14-Oct-11*	14-Oct-11*	14-Oct-11	14-Oct-11	0	2013	5/14/13
11330471	C4-14-04	90% Plan Review Mtg Complete -WIS 29 System Interchange Lighting	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	5/8/12	2/11/14
92020882	C4-14-06	90% Plan Review Mtg Complete -WIS 29/Packerland Dr (CTH EB) Intchg Lighting	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	5/8/12	2/11/14
92020787	C4-15-07	90% Plan Review Mtg Complete -US 41/Shawano Ave (WIS 29) Intchg Lighting	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	5/8/12	2/10/15
92020876	C4-15-09	90% Plan Review Mtg Complete - S Memorial Sr Access to Parkside Ct	1	14-Oct-11*	14-Oct-11*	14-Oct-11	14-Oct-11	0	5/8/12	2/10/15
11330474	C5-12-06	90% Plan Review Mtg Complete -US 41 Fencing (Ninth St - Larsen Rd)	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	2012	5/8/12
92020788	C5-14-04	90% Plan Review Mtg Complete -WIS 29 Fencing	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	5/8/12	2/11/14
11330386	C5-15-07	90% Plan Review Mtg Complete -US 41 Fencing (Larsen Rd - Memorial Dr)	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	5/8/12	4/14/15
11330473	C5-15-09	90% Plan Review Mtg Complete - WIS 29 System Interchange Landscaping	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	5/8/12	3/10/15
92020877	C5-16-03	90% Plan Review Mtg Complete - Shawano Ave Landscaping & Bike/Pedestrian Trail (Taylor S...	1	14-Oct-11*	14-Oct-11	14-Oct-11	14-Oct-11	0	5/8/12	2/9/16
92020888	C5-12-08	90% Plan Review Mtg Complete - Shawano Ave Landscaping & Bike/Ped Trail (CTH EB-Dous...	1	21-Oct-11	21-Oct-11	31-Oct-11	31-Oct-11	6	2012	5/8/12
11330489	C3-13-09	90% Plan Review Mtg Complete - Packerland Drive - US 41Soil Mitigation - Wick Drains	1	26-Jan-12	26-Jan-12	06-Feb-12	06-Feb-12	7	2012	8/14/12
92020880	C5-16-05	Submit 90% Plan to DOT - Rivergrove Avenue Extension	1	13-Apr-12	13-Apr-12	25-Sep-14	25-Sep-14	622	2015	7/14/15
92020880	C5-16-05	90% Plan Review Mtg Complete - Rivergrove Avenue Extension	1	19-Jun-12	19-Jun-12	13-Oct-14	13-Oct-14	588	2015	7/14/15
11330387	C4-15-13	Submit 90% Plan to DOT - US 41 Bond - Woodman Overpass	1	21-Dec-12	21-Dec-12	16-Sep-13	16-Sep-13	186	2014	7/8/14
11330387	C4-15-13	90% Plan Review Mtg Complete - US 41 Bond - Woodman Overpass	1	23-Jan-13	23-Jan-13	15-Oct-13	15-Oct-13	186	2014	7/8/14
Central Office Draft PS&E Review										
92020773	C3-12-03	Central Office PS&E Review - CTH EB Ramps, US41 SB Offramp, New Shaw Ave, WIS 29/CT...	45	27-May-11 A	01-Aug-11*	11-Jul-11	01-Aug-11	0	2011	12/13/11
92020875	C3-12-03	Central Office PS&E Review - CTH RK (South Frontage Rd) Park & Ride	45	27-May-11 A	01-Aug-11*	11-Jul-11	01-Aug-11	0	2011	12/13/11
92020884	C3-12-03	Central Office PS&E Review - Duck Creek B-05-650 & 651	45	27-May-11 A	01-Aug-11*	11-Jul-11	01-Aug-11	0	2011	12/13/11
92020873	C3-12-05	Central Office PS&E Review - Pamperin Park Access Rd Obliteration, Shawano Ave Elmhurst ...	45	30-Aug-11	01-Nov-11*	30-Aug-11	01-Nov-11	0	2012	4/10/12
92020878	C5-13-02	Central Office PS&E Review - Pamperin Park Trail Paving & Landscaping	45	17-Oct-11	20-Dec-11*	30-Aug-12	01-Nov-12	224	2013	4/9/13
92020888	C5-12-08	Central Office PS&E Review - Shawano Ave Landscaping & Bike/Ped Trail (CTH EB-Dousman)	45	21-Nov-11	24-Jan-12*	01-Dec-11	01-Feb-12	6	2012	5/8/12
11330371	C4-12-12	Central Office PS&E Review - Larsen Rd - Memorial Dr Mainline	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	2012	7/10/12
11330381	C4-12-12	Central Office PS&E Review - Collector-Distributor Roadways (Mason St to WIS 29)	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	2012	7/10/12
11330373	C4-13-02	Central Office PS&E Review - WIS 29 System Interchange (Packerland Dr to US 41)	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	1/8/13
11330375	C4-13-02	Central Office PS&E Review - WIS 29 System Flyover Steel	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	1/8/13
11330472	C4-13-02	Central Office PS&E Review - US41 / WIS 29 Stormwater Ponds	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	1/8/13
92020771	C4-13-02	Central Office PS&E Review - WIS 29 Mainline (Duck Creek - Packerland Dr/CTH EB)	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	1/8/13
11330480	C4-13-11	Central Office PS&E Review - Ninth St Reconstruction	45	01-Dec-11	01-Feb-12*	23-Mar-12	24-May-12	81	2013	5/14/13
11330471	C4-14-04	Central Office PS&E Review - WIS 29 System Interchange Lighting	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	2/11/14
92020882	C4-14-06	Central Office PS&E Review - WIS 29/Packerland Dr (CTH EB) Intchg Lighting	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	2/11/14
92020787	C4-15-07	Central Office PS&E Review - US 41/Shawano Ave (WIS 29) Intchg Lighting	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	2/10/15
92020876	C4-15-09	Central Office PS&E Review - S Memorial Sr Access to Parkside Ct	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	2/10/15
11330474	C5-12-06	Central Office PS&E Review - US 41 Fencing (Ninth St - Larsen Rd)	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	2012	5/8/12

Sort By: Activity Type, PM, Finish, Contract #

Central Segment Look Ahead

Data Date 11-Jul-11

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LEVEL 4 - PROJECT ID	LEVEL 3B - CONST	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	E - LET	P - LET
92020788	C5-14-04	Central Office PS&E Review - WIS 29 Fencing	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	2/11/14
11330386	C5-15-07	Central Office PS&E Review - US 41 Fencing (Larsen Rd - Memorial Dr)	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	4/14/15
11330473	C5-15-09	Central Office PS&E Review - WIS 29 System Interchange Landscaping	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	3/10/15
92020877	C5-16-03	Central Office PS&E Review - Shawano Ave Landscaping & Bike/Pedestrian Trail (Taylor St - ...	45	01-Dec-11	01-Feb-12*	01-Dec-11	01-Feb-12	0	5/8/12	2/9/16
11330489	C3-13-09	Central Office PS&E Review - Packerland Drive - US 41Soil Mitigation - Wick Drains	45	20-Feb-12	20-Apr-12*	29-Feb-12	01-May-12	7	2012	8/14/12
92020872	C4-13-03	Central Office PS&E Review - Dousman Street Obliteration	45	30-May-12	01-Aug-12*	30-May-12	01-Aug-12	0	2013	2/12/13
92020880	C5-16-05	Central Office PS&E Review - Rivergrove Avenue Extension	45	03-Aug-12	05-Oct-12*	26-Nov-14	02-Feb-15	588	2015	7/14/15
11330387	C4-15-13	Central Office PS&E Review - US 41 Bond - Woodman Overpass	45	07-Mar-13	08-May-13*	29-Nov-13	03-Feb-14	186	2014	7/8/14
Submit Metadata to DOT										
92020879	C2-11-13	Submit Meta Data to DOT - CTH EB / CN Railroad - Grading & Culverts	10	11-Jul-11 A	22-Jul-11*	01-Jun-11	14-Jun-11	-27	2011	6/14/11
92020773	C3-12-03	Submit Meta Data to DOT - CTH EB Ramps, US41 SB Offramp, New Shaw Ave, WIS 29/CTH ...	10	02-Aug-11	15-Aug-11*	30-Nov-11	13-Dec-11	83	2011	12/13/11
92020875	C3-12-03	Submit Meta Data to DOT - CTH RK (South Frontage Rd) Park & Ride	10	02-Aug-11	15-Aug-11*	30-Nov-11	13-Dec-11	83	2011	12/13/11
92020884	C3-12-03	Submit Meta Data to DOT - Duck Creek B-05-650 & 651	10	02-Aug-11	15-Aug-11*	30-Nov-11	13-Dec-11	83	2011	12/13/11
92020873	C3-12-05	Submit Meta Data to DOT - Pamperin Park Access Rd Obliteration, Shawano Ave Elmhurst Av...	10	02-Nov-11	15-Nov-11*	28-Mar-12	10-Apr-12	103	2012	4/10/12
92020878	C5-13-02	Submit Meta Data to DOT - Pamperin Park Trail Paving & Landscaping	10	21-Dec-11	03-Jan-12*	27-Mar-13	09-Apr-13	323	2013	4/9/13
92020888	C5-12-08	Submit Meta Data to DOT - Shawano Ave Landscaping & Bike/Ped Trail (CTH EB-Dousman)	10	25-Jan-12	07-Feb-12*	25-Apr-12	08-May-12	65	2012	5/8/12
11330371	C4-12-12	Submit Meta Data to DOT - Larsen Rd - Memorial Dr Mainline	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	2012	7/10/12
11330381	C4-12-12	Submit Meta Data to DOT - Collector-Distributor Roadways (Mason St to WIS 29)	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	2012	7/10/12
11330373	C4-13-02	Submit Meta Data to DOT - WIS 29 System Interchange (Packerland Dr to US 41)	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	1/8/13
11330375	C4-13-02	Submit Meta Data to DOT - WIS 29 System Flyover Steel	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	1/8/13
11330472	C4-13-02	Submit Meta Data to DOT - US41 / WIS 29 Stormwater Ponds	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	1/8/13
92020771	C4-13-02	Submit Meta Data to DOT - WIS 29 Mainline (Duck Creek - Packerland Dr/CTH EB)	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	1/8/13
11330480	C4-13-11	Submit Meta Data to DOT - Ninth St Reconstruction	10	02-Feb-12	15-Feb-12*	25-May-12	08-Jun-12	81	2013	5/14/13
11330471	C4-14-04	Submit Meta Data to DOT - WIS 29 System Interchange Lighting	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	2/11/14
92020882	C4-14-06	Submit Meta Data to DOT - WIS 29/Packerland Dr (CTH EB) Intchg Lighting	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	2/11/14
92020787	C4-15-07	Submit Meta Data to DOT - US 41/Shawano Ave (WIS 29) Intchg Lighting	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	2/10/15
92020876	C4-15-09	Submit Meta Data to DOT - S Memorial Sr Access to Parkside Ct	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	2/10/15
11330474	C5-12-06	Submit Meta Data to DOT - US 41 Fencing (Ninth St - Larsen Rd)	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	2012	5/8/12
92020788	C5-14-04	Submit Meta Data to DOT - WIS 29 Fencing	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	2/11/14
11330386	C5-15-07	Submit Meta Data to DOT - US 41 Fencing (Larsen Rd - Memorial Dr)	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	4/14/15
11330473	C5-15-09	Submit Meta Data to DOT - WIS 29 System Interchange Landscaping	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	3/10/15
92020877	C5-16-03	Submit Meta Data to DOT - Shawano Ave Landscaping & Bike/Pedestrian Trail (Taylor St - Du...	10	02-Feb-12	15-Feb-12*	25-Apr-12	08-May-12	59	5/8/12	2/9/16
11330489	C3-13-09	Submit Meta Data to DOT - Packerland Drive - US 41Soil Mitigation - Wick Drains	10	23-Apr-12	04-May-12*	01-Aug-12	14-Aug-12	70	2012	8/14/12
92020872	C4-13-03	Submit Meta Data to DOT - Dousman Street Obliteration	10	02-Aug-12	15-Aug-12*	30-Jan-13	12-Feb-13	124	2013	2/12/13
92020880	C5-16-05	Submit Meta Data to DOT - Rivergrove Avenue Extension	10	08-Oct-12	19-Oct-12*	01-Jul-15	14-Jul-15	693	2015	7/14/15
11330387	C4-15-13	Submit Meta Data to DOT - US 41 Bond - Woodman Overpass	10	09-May-13	22-May-13*	24-Jun-14	08-Jul-14	285	2014	7/8/14

Sort By: Activity Type, PM, Finish, Contract #

Central Segment Look Ahead

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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET
Phase 1 - Mainline US 41 South		144	15-Jul-09 A	25-Mar-10 A						
S1-10-03		140	15-Jul-09 A	28-Oct-09 A						
S1-10-04		142	05-Aug-09 A	25-Mar-10 A						
Phase 2 - Mainline US 41 South		439	06-May-09 A	01-Jun-11 A						
S2-10-01		143	06-May-09 A	08-Mar-10 A						
S2-11-02		232	13-Jul-09 A	01-Nov-10 A						
S2-11-03		438	14-May-09 A	01-Jun-11 A						
11330677 CTH F/Mid Valley Drive Realignment		438	14-May-09 A	01-Jun-11 A						
11330681 CTH G / Mid Valley Drive Re-Alignment		392	26-Feb-10 A	01-Jun-11 A						
C03E-4105	Provide Slope Intercepts to WisDOT Plats - CTH G / Mid Valley Dr Re-Alignment	1	26-Feb-10 A	07-Apr-10 A				PETERS	2011	6/14/11
C03E-3980	DT1078 Plan Sent To Becher Hoppe - CTH G / Mid Valley Dr Re-Alignment	1	24-Mar-10 A	07-Apr-10 A				PETERS	2011	6/14/11
C03E-4080	60% Plan Complete - CTH G / Mid Valley Dr Re-Alignment	1	31-Mar-10 A	31-Mar-10 A				PETERS	2011	6/14/11
C03E-4175	Design Study Report Approved - CTH G / Mid Valley Dr Re-Alignment	1	07-Jun-10 A	07-Jun-10 A				PETERS	2011	6/14/11
C03E-3430375	Submit 90% Plan to DOT - CTH G / Mid Valley Rd Re-Alignment	1	14-Sep-10 A	14-Sep-10 A				PETERS	2011	6/14/11
C03E-25220	90% Plan Review Mtg Complete - CTH G / Mid Valley Rd Re-Alignment	1	06-Oct-10 A	06-Oct-10 A				PETERS	2011	6/14/11
C03E-25235	Central Office PS&E Review - CTH G / Mid Valley Rd Re-Alignment	45	01-Dec-10 A	01-Feb-11 A				PETERS	2011	6/14/11
C03E-3440635	Submit Meta Data to DOT - CTH G / Mid Valley Rd Re-Alignment	10	01-Jun-11 A	01-Jun-11 A				PETERS	2011	6/14/11
Phase 3 - Mainline US 41 South		391	04-Feb-10 A	12-Aug-11	26-Jul-11	08-Aug-11	-4			
S3-11-01		283	06-Apr-10 A	11-May-11 A						
11330379 Morris Ave to 9th Street TMP (Shelf 11-1-10)		272	06-Apr-10 A	11-May-11 A						
11330483 Ninth St - Larsen Rd TMP		271	23-Apr-10 A	11-May-11 A						
11330682 Orange Ln to Glory Rd TMP		283	06-Apr-10 A	11-May-11 A						
11330977 Glory Rd to Morris Ave TMP (Shelf 11-1-10)		283	06-Apr-10 A	11-May-11 A						
S3-11-03		311	16-Mar-10 A	30-May-11 A						
11330972 Glory Rd Bridge B-05-615		311	16-Mar-10 A	30-May-11 A						
S3-11-04		333	04-Feb-10 A	22-Jul-11 A						
11330670 Hemlock Creek Box Culvert		333	04-Feb-10 A	22-Jul-11 A						
11330975 Dutchman's Creek Box Culvert		333	04-Feb-10 A	22-Jul-11 A						
S3-12-05		269	27-Jul-10 A	12-Aug-11	26-Jul-11	08-Aug-11	-4			
11330478 Orange Ln - Ninth St & Larsen Rd - Memorial Dr Clearing & Grubbing		269	27-Jul-10 A	12-Aug-11	26-Jul-11	08-Aug-11	-4			
C03E-3439350	90% Plan Review Mtg Complete - Orange Ln - Ninth St & Larsen Rd - Memorial R...	1	27-Jul-10 A	27-Jul-10 A				PETERS	2011	8/9/11
C03E-3439365	previously submitted PS&E final 11/1/10..Central Office PS&E Review - Orange L...	45	01-Mar-11 A	18-May-11 A				PETERS	2011	8/9/11
C03E-3440840	Submit Meta Data to DOT - Orange Ln - Memorial Rd Clearing & Grubbing	10	01-Aug-11	12-Aug-11*	26-Jul-11	08-Aug-11	-4	PETERS	2011	8/9/11
Phase 4 - Mainline US 41 South		767	04-Aug-09 A	15-Feb-13	01-Jul-11	09-Jul-13	100			
S4-12-06		403	04-Aug-09 A	13-Sep-11	01-Jul-11	10-Jan-12	83			
11330671 Orange Ln - Glory Rd Mainline		403	04-Aug-09 A	13-Sep-11	01-Jul-11	10-Jan-12	83			
B92C-6730	60% Plan Complete - Orange Lane - Glory Rd ML	1	04-Aug-09 A	30-Jul-10 A				PETERS	2012	1/10/12
B06B-1850	Design Study Report Approved - Orange Lane - Glory Rd ML	1	10-Sep-09 A	10-Sep-09 A				PETERS	2012	1/10/12
B92C-0860	Provide Slope Intercepts to WisDOT Plats - Orange Lane - Glory Rd ML	1	05-Jul-10 A	05-Jul-10 A				PETERS	2012	1/10/12
B92C-3800	DT1078 Plan Sent To Becher Hoppe - Orange Lane - Glory Rd ML	1	13-Aug-10 A	13-Aug-10 A				PETERS	2012	1/10/12
C03E-3429945	Submit 90% Plan to DOT - Orange Lane - Glory Rd ML	1	08-Mar-11 A	08-Mar-11 A				PETERS	2012	1/10/12
C03E-25080	90% Plan Review Mtg Complete - Orange Lane - Glory Rd ML	1	19-Apr-11 A	19-Apr-11 A				PETERS	2012	1/10/12

Sort By: Phase, Contract #, Project # , S, F

Engineering by Phase/Contract/Project #

Data Date 01-Aug-11

Run Date: 03-Aug-11

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET
C03E-25095	Central Office PS&E Review - Orange Lane - Glory Rd ML	45	27-May-11 A	29-Aug-11*	01-Jul-11	01-Aug-11	-20	PETERS	2012	1/10/12
C03E-3440640	Submit Meta Data to DOT - Orange Lane - Glory Rd ML	10	30-Aug-11	13-Sep-11*	28-Dec-11	10-Jan-12	83	PETERS	2012	1/10/12
11330675 Ashland Ave B-05-119 & 120 Painting		133	08-Mar-11 A	13-Sep-11	01-Jul-11	10-Jan-12	83			
C03E-3429970	Submit 90% Plan to DOT - Ashland Ave B-05-119 & 120 Painting	1	08-Mar-11 A	08-Mar-11 A				PETERS	2012	1/10/12
C03E-25120	90% Plan Review Mtg Complete - Ashland Ave B-05-119 & 120 Painting	1	19-Apr-11 A	19-Apr-11 A				PETERS	2012	1/10/12
C03E-25135	Central Office PS&E Review - Ashland Ave B-05-119 & 120 Painting	45	27-May-11 A	29-Aug-11*	01-Jul-11	01-Aug-11	-20	PETERS	2012	1/10/12
C03E-3440645	Submit Meta Data to DOT - Ashland Ave B-05-119 & 120 Painting	10	30-Aug-11	13-Sep-11*	28-Dec-11	10-Jan-12	83	PETERS	2012	1/10/12
11330680 Main Ave / CTH G Interchange		306	10-Sep-09 A	13-Sep-11	01-Jul-11	10-Jan-12	83			
C03E-3860	60% Plan Complete - Main Ave / CTH G Interchange	1	10-Sep-09 A	30-Jul-10 A				PETERS	2012	1/10/12
C03E-3955	Design Study Report Approved - Main Ave / CTH G Interchange	1	10-Sep-09 A	10-Sep-09 A				PETERS	2012	1/10/12
C03E-3885	Provide Slope Intercepts to WisDOT Plats - Main Ave / CTH G Interchange	1	05-Jul-10 A	05-Jul-10 A				PETERS	2012	1/10/12
C03E-3760	DT1078 Plan Sent To Becher Hoppe - Main Ave / CTH G Interchange	1	13-Aug-10 A	13-Aug-10 A				PETERS	2012	1/10/12
C03E-3429955	Submit 90% Plan to DOT - Main Ave / CTH G Interchange	1	08-Mar-11 A	08-Mar-11 A				PETERS	2012	1/10/12
C03E-25200	90% Plan Review Mtg Complete - Main Ave / CTH G Interchange	1	19-Apr-11 A	19-Apr-11 A				PETERS	2012	1/10/12
C03E-25215	Central Office PS&E Review - Main Ave / CTH G Interchange	45	27-May-11 A	29-Aug-11*	01-Jul-11	01-Aug-11	-20	PETERS	2012	1/10/12
C03E-3440650	Submit Meta Data to DOT - Main Ave / CTH G Interchange	10	30-Aug-11	13-Sep-11*	28-Dec-11	10-Jan-12	83	PETERS	2012	1/10/12
11330684 Main Ave Intchg Stormwater Pond		350	04-Aug-09 A	13-Sep-11	01-Jul-11	10-Jan-12	83			
C03E-11085	60% Plan Complete - Main Ave Intchg Stormwater Pond	1	04-Aug-09 A	04-Aug-09 A				PETERS	2012	1/10/12
C03E-10985	DT1078 Plan Sent To Becher Hoppe - Main Ave Intchg Stormwater Pond	1	03-May-10 A	03-May-10 A				PETERS	2012	1/10/12
C03E-11180	Design Study Report Approved - Main Ave Intchg Stormwater Pond	1	03-May-10 A	07-Jun-10 A				PETERS	2012	1/10/12
C03E-3429960	Submit 90% Plan to DOT - Main Ave Intchg Stormwater Pond	1	08-Mar-11 A	08-Mar-11 A				PETERS	2012	1/10/12
C03E-25300	90% Plan Review Mtg Complete - Main Ave Intchg Stormwater Pond	1	19-Apr-11 A	19-Apr-11 A				PETERS	2012	1/10/12
C03E-25315	Central Office PS&E Review - Main Ave Intchg Stormwater Pond	45	27-May-11 A	29-Aug-11*	01-Jul-11	01-Aug-11	-20	PETERS	2012	1/10/12
C03E-3440655	Submit Meta Data to DOT - Main Ave Intchg Stormwater Pond	10	30-Aug-11	13-Sep-11*	28-Dec-11	10-Jan-12	83	PETERS	2012	1/10/12
11330686 Main Ave Park & Ride		277	10-Sep-09 A	13-Sep-11	01-Jul-11	10-Jan-12	83			
C03E-3432055	60% Plan Complete - Main Ave Park & Ride	1	10-Sep-09 A	30-Jul-10 A				PETERS	2012	1/10/12
C03E-3432145	Design Study Report Approved - Main Ave Park & Ride	1	10-Sep-09 A	10-Sep-09 A				PETERS	2012	1/10/12
C03E-3431980	DT1078 Plan Sent To Becher Hoppe - Main Ave Park & Ride	1	13-Aug-10 A	13-Aug-10 A				PETERS	2012	1/10/12
C03E-3432185	Submit 90% Plan to DOT - Main Ave Park & Ride	1	08-Mar-11 A	08-Mar-11 A				PETERS	2012	1/10/12
C03E-3432165	90% Plan Review Mtg Complete - Main Ave Park & Ride	1	19-Apr-11 A	19-Apr-11 A				PETERS	2012	1/10/12
C03E-3432180	Central Office PS&E Review - Main Ave Park & Ride	45	27-May-11 A	29-Aug-11*	01-Jul-11	01-Aug-11	-20	PETERS	2012	1/10/12
C03E-3440660	Submit Meta Data to DOT - Main Ave Park & Ride	10	30-Aug-11	13-Sep-11*	28-Dec-11	10-Jan-12	83	PETERS	2012	1/10/12
11330689 Calaway Stormwater Pond		355	04-Aug-09 A	13-Sep-11	01-Jul-11	10-Jan-12	83			
C03E-27930	60% Plan Complete - Calaway Stormwater Pond	1	04-Aug-09 A	04-Aug-09 A				PETERS	2012	1/10/12
C03E-27865	DT1078 Plan Sent To Becher Hoppe - Calaway Stormwater Pond	1	03-May-10 A	03-May-10 A				PETERS	2012	1/10/12
C03E-28005	Design Study Report Approved - Calaway Stormwater Pond	1	03-May-10 A	07-Jun-10 A				PETERS	2012	1/10/12
C03E-3430020	Submit 90% Plan to DOT - Calaway Stormwater Pond	1	08-Mar-11 A	08-Mar-11 A				PETERS	2012	1/10/12
C03E-28025	90% Plan Review Mtg Complete - Calaway Stormwater Pond	1	19-Apr-11 A	19-Apr-11 A				PETERS	2012	1/10/12
C03E-28040	Central Office PS&E Review - Calaway Stormwater Pond	45	27-May-11 A	29-Aug-11*	01-Jul-11	01-Aug-11	-20	PETERS	2012	1/10/12
C03E-3440665	Submit Meta Data to DOT - Calaway Stormwater Pond	10	30-Aug-11	13-Sep-11*	28-Dec-11	10-Jan-12	83	PETERS	2012	1/10/12
S4-12-09		169	14-Jan-11 A	10-Jan-12	05-Aug-11	13-Mar-12	45			
11330378 Lombardi Ave / CTH VK Interchange		169	14-Jan-11 A	10-Jan-12	05-Aug-11	13-Mar-12	45			
C03E-4615	Design Study Report Approved - Lombardi Ave / CTH VK Interchange	1	14-Jan-11 A	14-Jan-11 A				PETERS	2012	3/13/12
C03E-3439400	Submit 60% Plan to DOT - Lombardi Ave / CTH VK Interchange	1	10-May-11 A	10-May-11 A				PETERS	2012	3/13/12
C03E-4520	60% Plan Review Mtg Complete - Lombardi Ave / CTH VK Interchange	1	09-Jun-11 A	09-Jun-11 A				PETERS	2012	3/13/12
C03E-3447335	DT1078 Plan Sent To Becher Hoppe - Lombardi Ave Intchg TMP	1	01-Jul-11 A	01-Jul-11 A				PETERS	2012	3/13/12

Sort By: Phase, Contract #, Project # , S, F

Engineering by Phase/Contract/Project #

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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET
C03E-3429980	Submit 90% Plan to DOT - Lombardi Ave / CTH VK Interchange	1	01-Sep-11*	01-Sep-11	05-Aug-11	05-Aug-11	-19	PETERS	2012	3/13/12
C03E-24425	90% Plan Review Mtg Complete - Lombardi Ave / CTH VK Interchange	1	14-Oct-11*	14-Oct-11	06-Sep-11	06-Sep-11	-28	PETERS	2012	3/13/12
C03E-24440	Central Office PS&E Review - Lombardi Ave / CTH VK Interchange	45	24-Oct-11	27-Dec-11*	14-Sep-11	15-Nov-11	-28	PETERS	2012	3/13/12
C03E-3440675	Submit Meta Data to DOT - Lombardi Ave / CTH VK Interchange	10	28-Dec-11	10-Jan-12*	29-Feb-12	13-Mar-12	45	PETERS	2012	3/13/12
S4-13-05		257	10-Sep-09 A	15-Aug-11	01-Aug-11	10-Jan-12	103			
11330683 Main Avenue Interchange Lighting		257	10-Sep-09 A	15-Aug-11	01-Aug-11	10-Jan-12	103			
C03E-3435510	60% Plan Complete - Main Ave Interchange Lighting	1	10-Sep-09 A	30-Jul-10 A				PETERS	1/10/12	5/8/12
C03E-3435585	Design Study Report Approved - Main Ave Interchange Lighting	1	10-Sep-09 A	10-Sep-09 A				PETERS	1/10/12	5/8/12
C03E-3435450	DT1078 Plan Sent To Becher Hoppe - Main Ave Interchange Lighting	1	13-Aug-10 A	13-Aug-10 A				PETERS	1/10/12	5/8/12
C03E-3435640	Submit 90% Plan to DOT - Main Ave Interchange Lighting	1	08-Mar-11 A	08-Mar-11 A				PETERS	1/10/12	5/8/12
C03E-3435605	90% Plan Review Mtg Complete - Main Ave Interchange Lighting	1	19-Apr-11 A	19-Apr-11 A				PETERS	1/10/12	5/8/12
C03E-3435620	Central Office PS&E Review - Main Ave Interchange Lighting may get rid of early let	45	27-May-11 A	01-Aug-11*	01-Aug-11	01-Aug-11	0	PETERS	1/10/12	5/8/12
C03E-3440755	Submit Meta Data to DOT - Main Ave Interchange Lighting	10	02-Aug-11	15-Aug-11*	28-Dec-11	10-Jan-12	103	PETERS	1/10/12	5/8/12
S4-14-02		690	07-Jun-10 A	15-Feb-13	30-Sep-11	14-May-13	62			
11330377 Morris Ave - 9th St Mainline		651	15-Jul-10 A	15-Feb-13	12-Oct-11	14-May-13	62			
B92C-0820	Provide Slope Intercepts to WisDOT Plats - Morris Avenue to Ninth Street ML	1	15-Jul-10 A	06-Dec-10 A				PETERS	5/14/13	7/9/13
B06B-1820	Design Study Report Approved - Morris Avenue to Ninth Street ML	1	14-Jan-11 A	14-Jan-11 A				PETERS	5/14/13	7/9/13
B92C-8615	Submit 60% Plan to DOT - Morris Avenue to Ninth Street ML	1	10-May-11 A	10-May-11 A				PETERS	5/14/13	7/9/13
C03E-3450530	Constructability Meeting #1 - Morris Avenue to Ninth Street ML	1	09-Jun-11 A	09-Jun-11 A				PETERS	5/14/13	7/9/13
B92C-6550	?60% Plan Review Mtg Complete - Morris Avenue to Ninth Street ML	1	09-Jun-11 A	09-Jun-11 A				PETERS	5/14/13	7/9/13
C03E-3450535	Constructability Meeting #2 (DT1078's) - Morris Avenue to Ninth Street ML	1	19-Jul-11 A	19-Jul-11 A				PETERS	5/14/13	7/9/13
B92C-3750	DT1078 Plan Sent To Becher Hoppe - Morris Avenue to Ninth Street ML	1	19-Aug-11*	19-Aug-11	12-Oct-11	12-Oct-11	37	PETERS	5/14/13	7/9/13
C03E-3450540	Constructability Meeting #3 - Morris Avenue to Ninth Street ML	1	18-Apr-12*	18-Apr-12	12-Oct-12	12-Oct-12	124	PETERS	5/14/13	7/9/13
C03E-3429975	Submit 90% Plan to DOT - Morris Avenue to Ninth Street ML	1	06-Sep-12*	06-Sep-12	12-Oct-12	12-Oct-12	26	PETERS	5/14/13	7/9/13
C03E-24355	90% Plan Review Mtg Complete - Morris Avenue to Ninth Street ML	1	04-Oct-12	04-Oct-12	09-Nov-12	09-Nov-12	26	PETERS	5/14/13	7/9/13
C03E-24370	Central Office PS&E Review - Morris Avenue to Ninth Street ML	45	29-Nov-12	01-Feb-13*	29-Nov-12	01-Feb-13	0	PETERS	5/14/13	7/9/13
C03E-3440690	Submit Meta Data to DOT - Morris Avenue to Ninth Street ML	10	04-Feb-13	15-Feb-13*	01-May-13	14-May-13	62	PETERS	5/14/13	7/9/13
11330481 Morris Ave - Ninth St Noisewalls		438	14-Jan-11 A	15-Feb-13	12-Oct-11	14-May-13	62			
C04E-19560	Design Study Report Approved - Morris Ave - Ninth St Noisewalls	1	14-Jan-11 A	14-Jan-11 A				PETERS	5/14/13	7/9/13
C04E-30350	Submit 60% Plan to DOT - Morris Ave - Ninth St Noisewalls	1	10-May-11 A	10-May-11 A				PETERS	5/14/13	7/9/13
C03E-3450545	Constructability Meeting #1 - Morris Avenue to Ninth Street ML	1	09-Jun-11 A	09-Jun-11 A				PETERS	5/14/13	7/9/13
C04E-19465	?60% Plan Review Mtg Complete - Morris Ave - Ninth St Noisewalls	1	09-Jun-11 A	09-Jun-11 A				PETERS	5/14/13	7/9/13
C03E-3450550	Constructability Meeting #2 (DT1078's) - Morris Avenue to Ninth Street ML	1	19-Jul-11 A	19-Jul-11 A				PETERS	5/14/13	7/9/13
C04E-19365	DT1078 Plan Sent To Becher Hoppe - Morris Ave - Ninth St Noisewalls	1	19-Aug-11*	19-Aug-11	12-Oct-11	12-Oct-11	37	PETERS	5/14/13	7/9/13
C03E-3450555	Constructability Meeting #3 - Morris Avenue to Ninth Street ML	1	18-Apr-12*	18-Apr-12	12-Oct-12	12-Oct-12	124	PETERS	5/14/13	7/9/13
C03E-3429990	Submit 90% Plan to DOT - Morris Ave - Ninth St Noisewalls	1	06-Sep-12	06-Sep-12	12-Oct-12	12-Oct-12	26	PETERS	5/14/13	7/9/13
C04E-19675	90% Plan Review Mtg Complete - Morris Ave - Ninth St Noisewalls	1	04-Oct-12	04-Oct-12	09-Nov-12	09-Nov-12	26	PETERS	5/14/13	7/9/13
C04E-19690	Central Office PS&E Review - Morris Ave - Ninth St Noisewalls	45	29-Nov-12	01-Feb-13*	29-Nov-12	01-Feb-13	0	PETERS	5/14/13	7/9/13
C04E-30355	Submit Meta Data to DOT - Morris Ave - Ninth St Noisewalls	10	04-Feb-13	15-Feb-13*	01-May-13	14-May-13	62	PETERS	5/14/13	7/9/13
11330482 Ninth St - Mason St Noisewalls		690	07-Jun-10 A	15-Feb-13	12-Oct-12	14-May-13	62			
C03E-420560	Design Study Report Approved - Ninth St - Mason Noisewalls ** 1/14/11**	0	07-Jun-10 A	07-Jun-10 A				PETERS	5/14/13	7/9/13
C03E-420465	60% Plan Complete - Ninth St - Mason Noisewalls	1	05-Jul-10 A	05-Jul-10 A				PETERS	5/14/13	7/9/13
C03E-420365	DT1078 Plan Sent To Becher Hoppe - Ninth St - Mason Noisewalls	1	08-Jul-10 A	08-Jul-10 A				PETERS	5/14/13	7/9/13
C03E-3450560	Constructability Meeting #1 - Morris Avenue to Ninth Street ML	1	09-Jun-11 A	09-Jun-11 A				PETERS	5/14/13	7/9/13
C03E-3450565	Constructability Meeting #2 (DT1078's) - Morris Avenue to Ninth Street ML	1	19-Jul-11 A	19-Jul-11 A				PETERS	5/14/13	7/9/13

Sort By: Phase, Contract #, Project #, S, F

Engineering by Phase/Contract/Project #4

Data Date 01-Aug-11

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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET
C03E-3450570	Constructability Meeting #3 - Morris Avenue to Ninth Street ML	1	18-Apr-12*	18-Apr-12	12-Oct-12	12-Oct-12	124	PETERS	5/14/13	7/9/13
C03E-3430190	Submit 90% Plan to DOT - Ninth St - Mason Noisewalls	1	06-Sep-12	06-Sep-12	12-Oct-12	12-Oct-12	26	PETERS	5/14/13	7/9/13
C03E-422675	90% Plan Review Mtg Complete - Ninth St - Mason Noisewalls	1	04-Oct-12	04-Oct-12	09-Nov-12	09-Nov-12	26	PETERS	5/14/13	7/9/13
C03E-422690	Central Office PS&E Review - Ninth St - Mason Noisewalls	45	29-Nov-12	01-Feb-13*	29-Nov-12	01-Feb-13	0	PETERS	5/14/13	7/9/13
C03E-3440695	Submit Meta Data to DOT - Ninth St - Mason Noisewalls	10	04-Feb-13	15-Feb-13*	01-May-13	14-May-13	62	PETERS	5/14/13	7/9/13
11330971	Glory Rd - Morris Ave Mainline	651	30-Jul-10 A	15-Feb-13	30-Sep-11	14-May-13	62			
B92C-0920	Provide Slope Intercepts to WisDOT Plats - Glory Rd to Morris Ave ML	1	30-Jul-10 A	30-Jul-10 A				PETERS	5/14/13	7/9/13
B92C-8620	Submit 60% Plan to DOT - Glory Rd to Morris Ave ML	1	02-May-11 A	02-May-11 A				PETERS	5/14/13	7/9/13
B92C-7270	60% Plan Review Mtg Complete - Glory Rd to Morris Ave ML	1	12-May-11 A	12-May-11 A				PETERS	5/14/13	7/9/13
C03E-3450575	Constructability Meeting #1 - Morris Avenue to Ninth Street ML	1	09-Jun-11 A	09-Jun-11 A				PETERS	5/14/13	7/9/13
C03E-3450580	Constructability Meeting #2 (DT1078's) - Morris Avenue to Ninth Street ML	1	19-Jul-11 A	19-Jul-11 A				PETERS	5/14/13	7/9/13
B06B-1940	Design Study Report Approved - Glory Rd to Morris Ave ML	1	02-Aug-11	02-Aug-11	30-Sep-11	30-Sep-11	42	PETERS	5/14/13	7/9/13
B92C-3890	DT1078 Plan Sent To Becher Hoppe - Glory Rd to Morris Ave ML	1	19-Aug-11*	19-Aug-11	12-Oct-11	12-Oct-11	37	PETERS	5/14/13	7/9/13
C03E-3450585	Constructability Meeting #3 - Morris Avenue to Ninth Street ML	1	18-Apr-12*	18-Apr-12	12-Oct-12	12-Oct-12	124	PETERS	5/14/13	7/9/13
C03E-3429995	Submit 90% Plan to DOT - Glory Rd to Morris Ave ML	1	06-Sep-12*	06-Sep-12	06-Sep-12	06-Sep-12	0	PETERS	5/14/13	7/9/13
C03E-25340	90% Plan Review Mtg Complete - Glory Rd to Morris Ave ML	1	04-Oct-12*	04-Oct-12	04-Oct-12	04-Oct-12	0	PETERS	5/14/13	7/9/13
C03E-25355	Central Office PS&E Review - Glory Rd to Morris Ave ML	45	29-Nov-12	01-Feb-13*	29-Nov-12	01-Feb-13	0	PETERS	5/14/13	7/9/13
C03E-3440700	Submit Meta Data to DOT - Glory Rd to Morris Ave ML	10	04-Feb-13	15-Feb-13*	01-May-13	14-May-13	62	PETERS	5/14/13	7/9/13
11330974	Hansen Rd B-05-611	606	04-Oct-10 A	15-Feb-13	06-Sep-12	14-May-13	62			
C03E-3430315	Provide Slope Intercepts to WisDOT Plats -Hansen RD B-05-611	1	04-Oct-10 A	04-Oct-10 A				PETERS	5/14/13	7/9/13
C03E-23925	DT1078 Plan Sent To Becher Hoppe - Hansen Rd B-05-611	1	15-Oct-10 A	15-Oct-10 A				PETERS	5/14/13	7/9/13
C03E-3450590	Constructability Meeting #1 - Morris Avenue to Ninth Street ML	1	09-Jun-11 A	09-Jun-11 A				PETERS	5/14/13	7/9/13
C03E-3450595	Constructability Meeting #2 (DT1078's) - Morris Avenue to Ninth Street ML	1	19-Jul-11 A	19-Jul-11 A				PETERS	5/14/13	7/9/13
C03E-3450600	Constructability Meeting #3 - Morris Avenue to Ninth Street ML	1	18-Apr-12*	18-Apr-12	12-Oct-12	12-Oct-12	124	PETERS	5/14/13	7/9/13
C03E-3430310	Submit 90% Plan to DOT - Hansen Rd B-05-611	1	06-Sep-12*	06-Sep-12	06-Sep-12	06-Sep-12	0	PETERS	5/14/13	7/9/13
C03E-25380	90% Plan Review Mtg Complete - Hansen Rd B-05-611	1	04-Oct-12*	04-Oct-12	04-Oct-12	04-Oct-12	0	PETERS	5/14/13	7/9/13
C03E-25395	Central Office PS&E Review - Hansen Rd B-05-611	45	29-Nov-12	01-Feb-13*	29-Nov-12	01-Feb-13	0	PETERS	5/14/13	7/9/13
C03E-3440685	Submit Meta Data to DOT - Hansen Rd B-05-611	10	04-Feb-13	15-Feb-13*	01-May-13	14-May-13	62	PETERS	5/14/13	7/9/13
11330976	Oneida Street (CTH AAA) Interchange	543	05-Jan-11 A	15-Feb-13	30-Sep-11	14-May-13	62			
C03E-4325	Provide Slope Intercepts to WisDOT Plats - Oneida Street (CTH AAA) Interchange	1	05-Jan-11 A	05-Jan-11 A				PETERS	5/14/13	7/9/13
C03E-3439410	Submit 60% Plan to DOT - Oneida Street (CTH AAA) Interchange	1	02-May-11 A	02-May-11 A				PETERS	5/14/13	7/9/13
C03E-4300	60% Plan Review Mtg Complete - Oneida Street (CTH AAA) Interchange	1	12-May-11 A	12-May-11 A				PETERS	5/14/13	7/9/13
C03E-3450605	Constructability Meeting #1 - Morris Avenue to Ninth Street ML	1	09-Jun-11 A	09-Jun-11 A				PETERS	5/14/13	7/9/13
C03E-3450610	Constructability Meeting #2 (DT1078's) - Morris Avenue to Ninth Street ML	1	19-Jul-11 A	19-Jul-11 A				PETERS	5/14/13	7/9/13
C03E-4395	Design Study Report Approved - Oneida Street (CTH AAA) Interchange	1	12-Aug-11	12-Aug-11	30-Sep-11	30-Sep-11	34	PETERS	5/14/13	7/9/13
C03E-4200	DT1078 Plan Sent To Becher Hoppe - Oneida Street (CTH AAA) Interchange	1	19-Aug-11*	19-Aug-11	12-Oct-11	12-Oct-11	37	PETERS	5/14/13	7/9/13
C03E-3450615	Constructability Meeting #3 - Morris Avenue to Ninth Street ML	1	18-Apr-12*	18-Apr-12	12-Oct-12	12-Oct-12	124	PETERS	5/14/13	7/9/13
C03E-3430000	Submit 90% Plan to DOT - Oneida Street (CTH AAA) Interchange	1	06-Sep-12*	06-Sep-12	06-Sep-12	06-Sep-12	0	PETERS	5/14/13	7/9/13
C03E-25420	90% Plan Review Mtg Complete - Oneida Street (CTH AAA) Interchange	1	04-Oct-12*	04-Oct-12	04-Oct-12	04-Oct-12	0	PETERS	5/14/13	7/9/13
C03E-25435	Central Office PS&E Review - Oneida Street (CTH AAA) Interchange	45	29-Nov-12	01-Feb-13*	29-Nov-12	01-Feb-13	0	PETERS	5/14/13	7/9/13
C03E-3440705	Submit Meta Data to DOT - Oneida Street (CTH AAA) Interchange	10	04-Feb-13	15-Feb-13*	01-May-13	14-May-13	62	PETERS	5/14/13	7/9/13
11330984	WIS 172 - Morris Ave Noisewalls	453	14-Jan-11 A	15-Feb-13	12-Oct-11	14-May-13	62			
C04E-19560-1	Design Study Report Approved - WIS 172 - Morris Ave Noisewalls	1	14-Jan-11 A	14-Jan-11 A				PETERS	5/14/13	7/9/13
C04E-19465-6	Submit 60% Plan to DOT - WIS 172 - Morris Ave Noisewalls	1	09-May-11 A	09-May-11 A				PETERS	5/14/13	7/9/13
C04E-19465-1	60% Plan Review Mtg Complete - WIS 172 - Morris Ave Noisewalls	1	12-May-11 A	12-May-11 A				PETERS	5/14/13	7/9/13
C03E-3450620	Constructability Meeting #1 - Morris Avenue to Ninth Street ML	1	09-Jun-11 A	09-Jun-11 A				PETERS	5/14/13	7/9/13

Sort By: Phase, Contract #, Project #, S, F

Engineering by Phase/Contract/Project #7

Data Date 01-Aug-11

Run Date: 03-Aug-11

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET
C03E-3450625	Constructability Meeting #2 (DT1078's) - Morris Avenue to Ninth Street ML	1	19-Jul-11 A	19-Jul-11 A				PETERS	5/14/13	7/9/13
C04E-19365-1	DT1078 Plan Sent To Becher Hoppe - WIS 172 - Morris Ave Noisewalls	1	19-Aug-11*	19-Aug-11	12-Oct-11	12-Oct-11	37	PETERS	5/14/13	7/9/13
C03E-3450630	Constructability Meeting #3 - Morris Avenue to Ninth Street ML	1	18-Apr-12*	18-Apr-12	12-Oct-12	12-Oct-12	124	PETERS	5/14/13	7/9/13
C03E-3430010	Submit 90% Plan to DOT - WIS 172 - Morris Ave Noisewalls	1	06-Sep-12*	06-Sep-12	06-Sep-12	06-Sep-12	0	PETERS	5/14/13	7/9/13
C04E-19675-1	90% Plan Review Mtg Complete - WIS 172 - Morris Ave Noisewalls	1	04-Oct-12	04-Oct-12	04-Oct-12	04-Oct-12	0	PETERS	5/14/13	7/9/13
C04E-19690-1	Central Office PS&E Review - WIS 172 - Morris Ave Noisewalls	45	29-Nov-12	01-Feb-13*	29-Nov-12	01-Feb-13	0	PETERS	5/14/13	7/9/13
C04E-19690-6	Submit Meta Data to DOT - WIS 172 - Morris Ave Noisewalls	10	04-Feb-13	15-Feb-13*	01-May-13	14-May-13	62	PETERS	5/14/13	7/9/13
S4-14-08		203	24-Jun-11 A	17-Apr-12	14-Oct-11	09-Jul-13	311			
11330370 Salt Storage Facility		203	24-Jun-11 A	17-Apr-12	14-Oct-11	09-Jul-13	311			
C03E-3440970	30% Review Meeting with County - Salt Storage Facility	1	24-Jun-11 A	24-Jun-11 A				PETERS	2013	7/9/13
C03E-3439425	Submit 60% Plan to DOT - Salt Storage Facility	1	02-Aug-11*	02-Aug-11	14-Oct-11	14-Oct-11	52	PETERS	2013	7/9/13
C03E-3431080	60% Plan Review Mtg Complete - Salt Storage Facility	1	10-Aug-11	10-Aug-11	17-Oct-11	17-Oct-11	47	PETERS	2013	7/9/13
C03E-3431005	DT1078 Plan Sent To Becher Hoppe - Salt Storage Facility	1	30-Sep-11	30-Sep-11	08-Dec-11	08-Dec-11	47	PETERS	2013	7/9/13
C03E-3431210	Submit 90% Plan to DOT - Salt Storage Facility	1	17-Oct-11	17-Oct-11	14-Sep-12	14-Sep-12	234	PETERS	2013	7/9/13
C03E-3431190	90% Plan Review Mtg Complete - Salt Storage Facility	1	15-Nov-11	15-Nov-11	15-Oct-12	15-Oct-12	234	PETERS	2013	7/9/13
C03E-3431205	Central Office PS&E Review - Salt Storage Facility	45	01-Feb-12	03-Apr-12*	29-Nov-12	01-Feb-13	211	PETERS	2013	7/9/13
C03E-3440715	Submit Meta Data to DOT - Salt Storage Facility	10	04-Apr-12	17-Apr-12*	25-Jun-13	09-Jul-13	311	PETERS	2013	7/9/13
Phase 5 - Mainline US 41 South		714	10-Sep-09 A	01-May-13	08-Oct-10	08-Jul-14	300			
S5-13-03		553	25-Jun-10 A	12-Sep-12	15-Jun-12	09-Apr-13	145			
11330688 Grant Street Reconstruction		553	25-Jun-10 A	12-Sep-12	15-Jun-12	09-Apr-13	145			
C03E-29555	Design Study Report Approved - Grant St Reconstruction	1	25-Jun-10 A	25-Jun-10 A				PETERS	2013	4/9/13
C03E-29365	DT1078 Plan Sent To Becher Hoppe - Grant St Reconstruction	1	13-Aug-10 A	13-Aug-10 A				PETERS	2013	4/9/13
C03E-29465	60% Plan Complete - Grant St Reconstruction	1	30-Aug-10 A	30-Aug-10 A				PETERS	2013	4/9/13
C03E-3429965	Submit 90% Plan to DOT - Grant St Reconstruction	1	02-Apr-12*	02-Apr-12	15-Jun-12	15-Jun-12	53	PETERS	2013	4/9/13
C03E-29575	90% Plan Review Mtg Complete - Grant St Reconstruction	1	10-May-12	10-May-12	17-Jul-12	17-Jul-12	46	PETERS	2013	4/9/13
C03E-29590	Central Office PS&E Review - Grant St Reconstruction	45	26-Jun-12	28-Aug-12*	30-Aug-12	01-Nov-12	46	PETERS	2013	4/9/13
C03E-3440720	Submit Meta Data to DOT - Grant St Reconstruction	10	29-Aug-12	12-Sep-12*	27-Mar-13	09-Apr-13	145	PETERS	2013	4/9/13
S5-13-07		257	10-Sep-09 A	15-Aug-11	01-Aug-11	10-Jan-12	103			
11330687 US 41 Fencing (Orange Ln - Glory Rd)		257	10-Sep-09 A	15-Aug-11	01-Aug-11	10-Jan-12	103			
C03E-3436190	60% Plan Complete - US 41 Fencing (Orange Ln - Glory Rd)	1	10-Sep-09 A	30-Jul-10 A				PETERS	1/10/12	4/9/13
C03E-3436250	Design Study Report Approved - US 41 Fencing (Orange Ln - Glory Rd)	1	10-Sep-09 A	10-Sep-09 A				PETERS	1/10/12	4/9/13
C03E-3436140	DT1078 Plan Sent To Becher Hoppe - US 41 Fencing (Orange Ln - Glory Rd)	1	13-Aug-10 A	13-Aug-10 A				PETERS	1/10/12	4/9/13
C03E-3436290	Submit 90% Plan to DOT - US 41 Fencing (Orange Ln - Glory Rd)	1	08-Mar-11 A	08-Mar-11 A				PETERS	1/10/12	4/9/13
C03E-3436270	90% Plan Review Mtg Complete - US 41 Fencing (Orange Ln - Glory Rd)	1	19-Apr-11 A	19-Apr-11 A				PETERS	1/10/12	4/9/13
C03E-3436285	Central Office PS&E Review - US 41 Fencing (Orange Ln - Glory Rd)	45	27-May-11 A	01-Aug-11*	01-Aug-11	01-Aug-11	0	PETERS	1/10/12	4/9/13
C03E-3440725	Submit Meta Data to DOT - US 41 Fencing (Orange Ln - Glory Rd)	10	02-Aug-11	15-Aug-11*	28-Dec-11	10-Jan-12	103	PETERS	1/10/12	4/9/13
S5-14-08		169	14-Jan-11 A	27-Jan-12	08-Oct-10	08-May-12	72			
11330479 US 41 Fencing (Morris Ave - 9th Street)		169	14-Jan-11 A	27-Jan-12	08-Oct-10	08-May-12	72			
C03E-3436425	Design Study Report Approved - US 41 Fencing (Morris Ave - Ninth St)	1	14-Jan-11 A	14-Jan-11 A				PETERS	5/8/12	4/8/14
C03E-3439430	Submit 60% Plan to DOT - US 41 Fencing (Morris Ave - Ninth St)	1	10-May-11 A	10-Jun-11 A				PETERS	5/8/12	4/8/14
C03E-3436360	60% Plan Review Mtg Complete - US 41 Fencing (Morris Ave - Ninth St)	1	09-Jun-11 A	09-Jun-11 A				PETERS	5/8/12	4/8/14
C03E-3436310	DT1078 Plan Sent To Becher Hoppe - US 41 Fencing (Morris Ave - Ninth St)	1	19-Aug-11*	19-Aug-11	08-Oct-10	08-Oct-10	-221	PETERS	5/8/12	4/8/14
C03E-3436465	Submit 90% Plan to DOT - US 41 Fencing (Morris Ave - Ninth St)	1	22-Aug-11	22-Aug-11	14-Oct-11	14-Oct-11	38	PETERS	5/8/12	4/8/14
C03E-3436445	90% Plan Review Mtg Complete - US 41 Fencing (Morris Ave - Ninth St)	1	25-Oct-11	25-Oct-11	11-Nov-11	11-Nov-11	13	PETERS	5/8/12	4/8/14
C03E-3436460	Central Office PS&E Review - US 41 Fencing (Morris Ave - Ninth St)	45	10-Nov-11	13-Jan-12*	01-Dec-11	01-Feb-12	13	PETERS	5/8/12	4/8/14

Sort By: Phase, Contract #, Project # , S, F

Engineering by Phase/Contract/Project #

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Run Date: 03-Aug-11

Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET
C03E-3440730	Submit Meta Data to DOT - US 41 Fencing (Morris Ave - Ninth St)	10	16-Jan-12	27-Jan-12*	25-Apr-12	08-May-12	72	PETERS	5/8/12	4/8/14
S5-15-02		389	01-Aug-11	07-Feb-13	08-May-12	14-Jan-14	236			
11330980 WIS 172 Interchange Landscaping		389	01-Aug-11	07-Feb-13	08-May-12	14-Jan-14	236			
C03E-3439435	Submit 60% Plan to DOT - WIS 172 Interchange Landscaping	1	01-Aug-11*	01-Aug-11	08-May-12	08-May-12	198	PETERS	1/14/14	1/13/15
C03E-15005	760% Plan Review Mtg Complete - WIS 172 Interchange Landscaping	1	02-Aug-11	02-Aug-11	09-May-12	09-May-12	198	PETERS	1/14/14	1/13/15
C03E-23975	DT1078 Plan Sent To Becher Hoppe - WIS 172 Interchange Landscaping	1	31-Aug-11	31-Aug-11	08-Jun-12	08-Jun-12	198	PETERS	1/14/14	1/13/15
C03E-3430385	Submit 90% Plan to DOT - WIS 172 Interchange Landscaping	1	06-Sep-12	06-Sep-12	18-Mar-13	18-Mar-13	133	PETERS	1/14/14	1/13/15
C03E-25500	90% Plan Review Mtg Complete - WIS 172 Interchange Landscaping	1	04-Oct-12	04-Oct-12	15-Apr-13	15-Apr-13	133	PETERS	1/14/14	1/13/15
C03E-25515	Central Office PS&E Review - WIS 172 Interchange Landscaping	45	19-Nov-12	24-Jan-13*	30-May-13	01-Aug-13	133	PETERS	1/14/14	1/13/15
C03E-3440735	Submit Meta Data to DOT - WIS 172 Interchange Landscaping	10	25-Jan-13	07-Feb-13*	31-Dec-13	14-Jan-14	236	PETERS	1/14/14	1/13/15
S5-15-04		385	01-Aug-11	01-Feb-13	21-Sep-11	01-Feb-13	0			
11330979 US 41 Fencing (Glory Rd - Morris Ave)		385	01-Aug-11	01-Feb-13	21-Sep-11	01-Feb-13	0			
C03E-3439440	Submit 60% Plan to DOT - US 41 Fencing (Glory Rd - Morris Ave)	1	01-Aug-11*	01-Aug-11	21-Sep-11	21-Sep-11	36	PETERS	5/14/13	4/14/15
C03E-3436590	Design Study Report Approved - US 41 Fencing (Glory Rd - Morris Ave)	1	12-Aug-11*	12-Aug-11	11-Oct-11	11-Oct-11	41	PETERS	5/14/13	4/14/15
C03E-3436530	60% Plan Review Mtg Complete - US 41 Fencing (Glory Rd - Morris Ave)	1	16-Aug-11	16-Aug-11	11-Oct-11	11-Oct-11	39	PETERS	5/14/13	4/14/15
C03E-3436480	DT1078 Plan Sent To Becher Hoppe - US 41 Fencing (Glory Rd - Morris Ave)	1	22-Aug-11*	22-Aug-11	12-Oct-11	12-Oct-11	36	PETERS	5/14/13	4/14/15
C03E-3436630	Submit 90% Plan to DOT - US 41 Fencing (Glory Rd - Morris Ave)	1	06-Sep-12*	06-Sep-12	06-Sep-12	06-Sep-12	0	PETERS	5/14/13	4/14/15
C03E-3436595	90% Plan Review Mtg Complete - US 41 Fencing (Glory Rd - Morris Ave)	1	04-Oct-12*	04-Oct-12	04-Oct-12	04-Oct-12	0	PETERS	5/14/13	4/14/15
C03E-3436610	Central Office PS&E Review - US 41 Fencing (Glory Rd - Morris Ave)	45	13-Nov-12	18-Jan-13*	13-Nov-12	18-Jan-13	0	PETERS	5/14/13	4/14/15
C03E-3440740	Submit Meta Data to DOT - US 41 Fencing (Glory Rd - Morris Ave)	10	21-Jan-13	01-Feb-13*	21-Jan-13	01-Feb-13	0	PETERS	5/14/13	4/14/15
S5-15-09		368	22-Nov-11	01-May-13	08-Dec-11	08-Jul-14	300			
11330679 Preserve Trail Overpass		368	22-Nov-11	01-May-13	08-Dec-11	08-Jul-14	300			
C03E-3441380	Provide Slope Intercepts to WisDOT Plats - Preserve Trail Overpass	1	22-Nov-11	22-Nov-11	08-Dec-11	08-Dec-11	10	PETERS	2014	7/8/14
C03E-3441365	Submit 60% Plan to DOT - Preserve Trail Overpass	1	22-Dec-11	22-Dec-11	03-Oct-12	03-Oct-12	201	PETERS	2014	7/8/14
C03E-3441475	Design Study Report Approved - Preserve Trail Overpass	1	15-Oct-12	15-Oct-12	31-Oct-12	31-Oct-12	12	PETERS	2014	7/8/14
C03E-3441480	60% Plan Review Mtg Complete - Preserve Trail Overpass	1	16-Oct-12	16-Oct-12	01-Nov-12	01-Nov-12	12	PETERS	2014	7/8/14
C03E-3441505	DT1078 Plan Sent To Becher Hoppe - Preserve Trail Overpass	1	14-Nov-12	14-Nov-12	04-Dec-12	04-Dec-12	12	PETERS	2014	7/8/14
C03E-3441490	Submit 90% Plan to DOT - Preserve Trail Overpass	1	30-Nov-12	30-Nov-12	16-Sep-13	16-Sep-13	201	PETERS	2014	7/8/14
C03E-3441515	90% Plan Review Mtg Complete - Preserve Trail Overpass	1	02-Jan-13	02-Jan-13	15-Oct-13	15-Oct-13	201	PETERS	2014	7/8/14
C03E-3441545	Central Office PS&E Review - Preserve Trail Overpass	45	14-Feb-13	17-Apr-13*	29-Nov-13	03-Feb-14	201	PETERS	2014	7/8/14
C03E-3442065	Submit Meta Data to DOT - Preserve Trail Overpass	10	18-Apr-13	01-May-13*	24-Jun-14	08-Jul-14	300	PETERS	2014	7/8/14
S5-15-10		368	22-Nov-11	01-May-13	08-Dec-11	08-Jul-14	300			
11330982 WIS 172 Pioneer - North Overpass		368	22-Nov-11	01-May-13	08-Dec-11	08-Jul-14	300			
C03E-3441700	Provide Slope Intercepts to WisDOT Plats - WIS 172 Pioneer - North Overpass	1	22-Nov-11	22-Nov-11	08-Dec-11	08-Dec-11	10	PETERS	2014	7/8/14
C03E-3441815	Submit 60% Plan to DOT - WIS 172 Pioneer - North Overpass	1	22-Nov-11	22-Nov-11	03-Oct-12	03-Oct-12	221	PETERS	2014	7/8/14
C03E-3441765	Design Study Report Approved - WIS 172 Pioneer - North Overpass	1	15-Oct-12	15-Oct-12	31-Oct-12	31-Oct-12	12	PETERS	2014	7/8/14
C03E-3441690	60% Plan Review Mtg Complete - WIS 172 Pioneer - North Overpass	1	16-Oct-12	16-Oct-12	01-Nov-12	01-Nov-12	12	PETERS	2014	7/8/14
C03E-3441600	DT1078 Plan Sent To Becher Hoppe - WIS 172 Pioneer - North Overpass	1	14-Nov-12	14-Nov-12	04-Dec-12	04-Dec-12	12	PETERS	2014	7/8/14
C03E-3441805	Submit 90% Plan to DOT - WIS 172 Pioneer - North Overpass	1	30-Nov-12	30-Nov-12	16-Sep-13	16-Sep-13	201	PETERS	2014	7/8/14
C03E-3441785	90% Plan Review Mtg Complete - WIS 172 Pioneer - North Overpass	1	02-Jan-13	02-Jan-13	15-Oct-13	15-Oct-13	201	PETERS	2014	7/8/14
C03E-3441800	Central Office PS&E Review - WIS 172 Pioneer - North Overpass	45	14-Feb-13	17-Apr-13*	29-Nov-13	03-Feb-14	201	PETERS	2014	7/8/14
C03E-3442070	Submit Meta Data to DOT - WIS 172 Pioneer - North Overpass	10	18-Apr-13	01-May-13*	24-Jun-14	08-Jul-14	300	PETERS	2014	7/8/14
S Shed		221	09-Sep-11	19-Jul-12	12-Jun-12	08-Apr-14	436			

Sort By: Phase, Contract #, Project #, S, F

Engineering by Phase/Contract/Project #

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Activity ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET
11201070	Salt Storage Shed	221	09-Sep-11	19-Jul-12	12-Jun-12	08-Apr-14	436			
C03E-3440975	30% Review with County - Salt Storage Facility	1	09-Sep-11*	09-Sep-11	11-Jul-12	11-Jul-12	214	PETERS	2014	4/8/14
C03E-3439445	Submit 60% Plan to DOT - Salt Storage Facility	1	08-Nov-11*	08-Nov-11	12-Jun-12	12-Jun-12	152	PETERS	2014	4/8/14
C03E-3433555	60% Plan Review Mtg Complete - Salt Storage Facility	1	09-Dec-11	09-Dec-11	12-Jul-12	12-Jul-12	152	PETERS	2014	4/8/14
C03E-3433455	DT1078 Plan Sent To Becher Hoppe - Salt Storage Facility	1	30-Jan-12	30-Jan-12	31-Aug-12	31-Aug-12	152	PETERS	2014	4/8/14
C03E-3439385	Submit 90% Plan to DOT - Salt Storage Facility	1	20-Feb-12	20-Feb-12	18-Jun-13	18-Jun-13	338	PETERS	2014	4/8/14
C03E-3433665	90% Plan Review Mtg Complete - Salt Storage Facility	1	20-Mar-12	20-Mar-12	18-Jul-13	18-Jul-13	338	PETERS	2014	4/8/14
C03E-3433680	Central Office PS&E Review - Salt Storage Facility	45	02-May-12	05-Jul-12*	30-Aug-13	01-Nov-13	338	PETERS	2014	4/8/14
C03E-3440745	Submit Meta Data to DOT - Salt Storage Facility	10	06-Jul-12	19-Jul-12*	26-Mar-14	08-Apr-14	436	PETERS	2014	4/8/14

Sort By: Phase, Contract #, Project # , S, F

Engineering by Phase/Contract/Project #

Data Date 01-Aug-11

Run Date: 03-Aug-11

Activity ID	LEVEL 9B PLAT ID #	LEVEL 9C TAX ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET	LEVEL 9G PROPERTY OWNER	LEVEL 9I NEGOTI...
Tri-County Freeway Project - US 10 / STH 441				547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-07-71	US 10 Mainline (Coldspring Rd - US 41)			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-07-72	US 41 Interchange Phase 1			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-07-73	US 41 Interchange Phase 2			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-07-74	US 41 Mainline Phase 1			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-07-75	US 41 Mainline Phase 2			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-07-76	Little Lake Butte des Morts Structure Phase 1			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-07-77	Little Lake Butte des Morts Structure Phase 2			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-07-78	US 10/STH 441 Mainline (LLBDM - Tayco St) Phase 1			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
Develop Preliminary Plat				100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3					
			Develop Preliminary Plat - US 10/STH 441 (LLBDM - Tayco St) Phase 1	100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3	EBEL	5/13/14	7/8/14		
RW Plat to RE				1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3					
			RW Plat To RE - US 10/STH 441 (LLBDM - Tayco St) Phase 1	1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3	EBEL	5/13/14	7/8/14		
Appraisal				65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3					
	0083221		Appraisal (Hired/Completed/Reviewed) - 1005 Lakeshore Dr	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Viotto, James	
	0083222		Appraisal (Hired/Completed/Reviewed) - 1015 Lakeshore Dr	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Odell, Joan	
	008321501		Appraisal (Hired/Completed/Reviewed) - 932 Tayco Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Wadzinski, Michael	
	0083215		Appraisal (Hired/Completed/Reviewed) - 930 Tayco Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Osterberg, Stephen	
			Complete Appraisal of All Parcels & Easements - US 10/STH 441 (LLBDM - Tayco St) Ph...	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14		
Negotiation				200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3					
	0083221		Negotiation - 1005 Lakeshore Dr	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Viotto, James	
	0083222		Negotiation - 1015 Lakeshore Dr	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Odell, Joan	
	008321501		Negotiation - 932 Tayco Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Wadzinski, Michael	
	0083215		Negotiation - 930 Tayco Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Osterberg, Stephen	
			Negotiate Acquisition of All Parcels & Easements - US 10/STH 441 (LLBDM - Tayco St) P...	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14		
Acquisition				65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3					
	0083221		Acquisition - 1005 Lakeshore Dr	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Viotto, James	
	0083222		Acquisition - 1015 Lakeshore Dr	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Odell, Joan	
	008321501		Acquisition - 932 Tayco Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Wadzinski, Michael	
	0083215		Acquisition - 930 Tayco Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Osterberg, Stephen	
			Acquire Parcels & Easements - US 10/STH 441 (LLBDM - Tayco St) Phase 1	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14		
Right-of-Way Clear (Certification #1/#2)				10	15-Jan-14	28-Jan-14	20-Jan-14	31-Jan-14	3					
			Right-of-Way Clear (Certification #1/#2) - US 10/STH 441 (LLBDM - Tayco St) Phase 1	10	15-Jan-14	28-Jan-14*	20-Jan-14	31-Jan-14	3	EBEL	5/13/14	7/8/14		
1517-07-79	US 10/STH 441 Mainline (LLBDM - Tayco St) Phase 2			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-07-80	US 41 Interchange Early Steel Fabrication			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-07-81	Little Lake Butte des Morts Early Steel Fabrication			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-75-71	US 10/STH 441 Mainline (Tayco St - Racine Rd)			547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
Develop Preliminary Plat				100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3					
			Develop Preliminary Plat - US 10/STH 441 Mainline (Tayco St - Racine Rd)	100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3	EBEL	5/13/14	7/12/16		
RW Plat to RE				1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3					
			RW Plat To RE - US 10/STH 441 Mainline (Tayco St - Racine Rd)	1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3	EBEL	5/13/14	7/12/16		
Appraisal				65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3					
	720080200		Appraisal (Hired/Completed/Reviewed) - 1051 Tayco St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Hartzheim, Richard J	
	720080300		Appraisal (Hired/Completed/Reviewed) - 1057 Tayco St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Kearn, Richard M.	
	0080308		Appraisal (Hired/Completed/Reviewed) - c/o Robert & Cleona Pomerenska	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Peterson, Rhonda J	
	720080100		Appraisal (Hired/Completed/Reviewed) - 1041 Tayco St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Weber, Robert T.	
			Complete Appraisal of All Parcels & Easements - US 10/STH 441 Mainline (Tayco St - Ra...	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16		
Negotiation				200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3					
	720080200		Negotiation - 1051 Tayco St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Hartzheim, Richard J	
	720080300		Negotiation - 1057 Tayco St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Kearn, Richard M.	
	0080308		Negotiation - c/o Robert & Cleona Pomerenska	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Peterson, Rhonda J	

Sort By: Contract #, Project, Start, Finish

PLATS & RE

Data Date 11-Jul-11

Run Date: 01-Aug-11

Activity ID	LEVEL 9B PLAT ID #	LEVEL 9C TAX ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET	LEVEL 9G PROPERTY OWNER	LEVEL 9I NEGOTI...
		720080100	Negotiation - 1041 Tayco St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Weber, Robert T.	
			Negotiate Acquisition of All Parcels & Easements - US 10/STH 441 Mainline (Tayco St - R...	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16		
Acquisition				65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3					
		720080200	Acquisition - 1051 Tayco St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Hartzheim, Richard J	
		720080300	Acquisition - 1057 Tayco St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Kearn, Richard M.	
		0080308	Acquisition - c/o Robert & Cleona Pomerenska	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Peterson, Rhonda J	
		720080100	Acquisition - 1041 Tayco St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Weber, Robert T.	
			Acquire Parcels & Easements - US 10/STH 441 Mainline (Tayco St - Racine Rd)	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16		
Right-of-Way Clear (Certification #1/#2)				10	15-Jan-14	28-Jan-14	20-Jan-14	31-Jan-14	3					
			Right-of-Way Clear (Certification #1/#2) - US 10/STH 441 Mainline (Tayco St - Racine Rd)	10	15-Jan-14	28-Jan-14*	20-Jan-14	31-Jan-14	3	EBEL	5/13/14	7/12/16		
1517-75-72 US 10/STH 441 Mainline (Racine Rd - Appleton Rd)				547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
Develop Preliminary Plat				100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3					
			Develop Preliminary Plat - US 10/STH 441 Mainline (Racine Rd - Appleton Rd)	100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3	EBEL	5/13/14	7/8/14		
RW Plat to RE				1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3					
			RW Plat To RE - US 10/STH 441 Mainline (Racine Rd - Appleton Rd)	1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3	EBEL	5/13/14	7/8/14		
Appraisal				65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3					
		0080348	Appraisal (Hired/Completed/Reviewed) - 1351 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Houlihan, Sara	
		0081636	Appraisal (Hired/Completed/Reviewed) - 615 Richard Drive	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Samp, John	
		740081100	Appraisal (Hired/Completed/Reviewed) - 685 Midway Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Winn Co Hwy Com	
		740076400	Appraisal (Hired/Completed/Reviewed) - 700 Midway Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	DS Commercial Inc.	
		740076800	Appraisal (Hired/Completed/Reviewed) - 830 Midway Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	George Banta Co Inc.	
			Complete Appraisal of All Parcels & Easements - US 10/STH 441 Mainline (Racine Rd - A...	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14		
Negotiation				200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3					
		0080348	Negotiation - 1351 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Houlihan, Sara	
		0081636	Negotiation - 615 Richard Drive	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Samp, John	
		740081100	Negotiation - 685 Midway Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Winn Co Hwy Com	
		740076400	Negotiation - 700 Midway Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	DS Commercial Inc.	
		740076800	Negotiation - 830 Midway Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	George Banta Co Inc.	
			Negotiate Acquisition of All Parcels & Easements - US 10/STH 441 Mainline (Racine Rd - ...	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14		
Acquisition				65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3					
		0080348	Acquisition - 1351 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Houlihan, Sara	
		0081636	Acquisition - 615 Richard Drive	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Samp, John	
		740081100	Acquisition - 685 Midway Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Winn Co Hwy Com	
		740076400	Acquisition - 700 Midway Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	DS Commercial Inc.	
		740076800	Acquisition - 830 Midway Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	George Banta Co Inc.	
			Acquire Parcels & Easements - US 10/STH 441 Mainline (Racine Rd - Appleton Rd)	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14		
Right-of-Way Clear (Certification #1/#2)				10	15-Jan-14	28-Jan-14	20-Jan-14	31-Jan-14	3					
			Right-of-Way Clear (Certification #1/#2) - US 10/STH 441 Mainline (Racine Rd - Appleton ...	10	15-Jan-14	28-Jan-14*	20-Jan-14	31-Jan-14	3	EBEL	5/13/14	7/8/14		
1517-75-73 US 10/STH 441 Mainline (Appleton Rd - Oneida St)				547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-75-74 STH 441 Mainline (Oneida St - Project Limits)				547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
1517-75-75 Racine Rd (CTH P) Interchange				547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
Develop Preliminary Plat				100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3					
			Develop Preliminary Plat - Racine Rd (CTH P) Interchange	100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3	EBEL	5/13/14	7/12/16		
RW Plat to RE				1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3					
			RW Plat To RE - Racine Rd (CTH P) Interchange	1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3	EBEL	5/13/14	7/12/16		
Appraisal				65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3					
		0080308	Appraisal (Hired/Completed/Reviewed) - c/o Robert & Cleona Pomerenska	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Peterson, Rhonda J	
			Complete Appraisal of All Parcels & Easements - Racine Rd (CTH P) Interchange	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16		
Negotiation				200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3					
		0080308	Negotiation - c/o Robert & Cleona Pomerenska	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Peterson, Rhonda J	
			Negotiate Acquisition of All Parcels & Easements - Racine Rd (CTH P) Interchange	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16		
Acquisition				65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3					
		0080308	Acquisition - c/o Robert & Cleona Pomerenska	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Peterson, Rhonda J	

Sort By: Contract #, Project, Start, Finish

PLATS & RE7

Data Date 11-Jul-11

Run Date: 01-Aug-11

Activity ID	LEVEL 9B PLAT ID #	LEVEL 9C TAX ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET	LEVEL 9G PROPERTY OWNER	LEVEL 9I NEGOTI...
			Acquire Parcels & Easements - Racine Rd (CTH P) Interchange	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16		
			Right-of-Way Clear (Certification #1/#2)	10	15-Jan-14	28-Jan-14	20-Jan-14	31-Jan-14	3					
			Right-of-Way Clear (Certification #1/#2) - Racine Rd (CTH P) Interchange	10	15-Jan-14	28-Jan-14*	20-Jan-14	31-Jan-14	3	EBEL	5/13/14	7/12/16		
			1517-75-76 Racine Rd Reconstruction	547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
			Develop Preliminary Plat	100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3					
			Develop Preliminary Plat - Racine Rd Reconstruction	100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3	EBEL	5/13/14	7/12/16		
			RW Plat to RE	1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3					
			RW Plat To RE - Racine Rd Reconstruction	1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3	EBEL	5/13/14	7/12/16		
			Appraisal	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3					
	710066200		Appraisal (Hired/Completed/Reviewed) - 838 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Scheibe, Adam	
	710062700		Appraisal (Hired/Completed/Reviewed) - 833 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Luethge, Annette	
	710067100		Appraisal (Hired/Completed/Reviewed) - 431 Ninth St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Bongean, Nick	
	710067100		Appraisal (Hired/Completed/Reviewed) - 431 Ninth St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Bongean, Nick	
	0080331		Appraisal (Hired/Completed/Reviewed) - 975 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	AV Food Mart	
	8032801		Appraisal (Hired/Completed/Reviewed) - 961 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	AV Food Mart	
	8035407		Appraisal (Hired/Completed/Reviewed) - 1121 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Hanson, Barbara	
	803541201		Appraisal (Hired/Completed/Reviewed) - 1744 Lakeshore Drive	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Hanson, Barbara	
	710067000		Appraisal (Hired/Completed/Reviewed) - 435 Ninth St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Hesterberg, Brian	
	8035409		Appraisal (Hired/Completed/Reviewed) - 1133 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Baker, Caryn	
	8035411		Appraisal (Hired/Completed/Reviewed) - 1133 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Baker, Caryn	
	8035414		Appraisal (Hired/Completed/Reviewed) - 1089 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Cinda Corporation	
	8032902		Appraisal (Hired/Completed/Reviewed) - 493 Green Acres Dr	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Collins, Clark	
	710063600		Appraisal (Hired/Completed/Reviewed) - 521 Ninth St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Winckler, Clifford	
	80329		Appraisal (Hired/Completed/Reviewed) - 994 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Croskeys Investors	
	80332		Appraisal (Hired/Completed/Reviewed) - 994 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Croskeys Investors	
	8032903		Appraisal (Hired/Completed/Reviewed) - 994 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Croskeys Investors	
	710066600		Appraisal (Hired/Completed/Reviewed) - 846 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Coopman, Dorothy	
	710078200		Appraisal (Hired/Completed/Reviewed) - 914 Racine Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Benner, Gary	
	8035406		Appraisal (Hired/Completed/Reviewed) - 377 Cleveland St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Van Harpen, Gary	
	710063800		Appraisal (Hired/Completed/Reviewed) - 513 Ninth St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Wheeler, Greg	
	710064000		Appraisal (Hired/Completed/Reviewed) - 851 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Early, James	
	710067300		Appraisal (Hired/Completed/Reviewed) - 853 Martin St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Sokolowski, John	
	710066300		Appraisal (Hired/Completed/Reviewed) - 842 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Pfrang, Judith	
	8033404		Appraisal (Hired/Completed/Reviewed) - 526 Giesen St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Vogel, Ken	
	710063000		Appraisal (Hired/Completed/Reviewed) - 839 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	LMC Property Mgmt	
	710063400		Appraisal (Hired/Completed/Reviewed) - 845 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	LMC Property Mgmt	
	80327		Appraisal (Hired/Completed/Reviewed) - 931 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Gamerding, Matthew	
	80321		Appraisal (Hired/Completed/Reviewed) - 903 Paradise Ln	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Meadows Development	
	740100100		Appraisal (Hired/Completed/Reviewed) - 1744 Lakeshore Dr	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Hanson, Lyle	
	740100200		Appraisal (Hired/Completed/Reviewed) - 1744 Lakeshore Dr	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Hanson, Lyle	
	710063700		Appraisal (Hired/Completed/Reviewed) - 517 Ninth St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Isaac, Mitchell	
	710078300		Appraisal (Hired/Completed/Reviewed) - 520 Ninth St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Collar, Pauline	
	710063900		Appraisal (Hired/Completed/Reviewed) - 509 Ninth St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Bougie, Nicholas	
	80324		Appraisal (Hired/Completed/Reviewed) - 512 Ninth St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Smith, Robert	
	80325		Appraisal (Hired/Completed/Reviewed) - 500 Ninth St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Smith, Robert	
	710066800		Appraisal (Hired/Completed/Reviewed) - 848 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Schmidt, Timothy	
	80326		Appraisal (Hired/Completed/Reviewed) - 952 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Vanzeeland Oil Co/In	
	8032901		Appraisal (Hired/Completed/Reviewed) - 952 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Vanzeeland Oil Co/In	
	710065900		Appraisal (Hired/Completed/Reviewed) - 834 Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Heiman, William	
	80297		Appraisal (Hired/Completed/Reviewed) - Racine St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	St. Mary's Congregat	
			Complete Appraisal of All Parcels & Easements - Racine Rd Reconstruction	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16		
			Negotiation	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3					
	710066200		Negotiation - 838 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Scheibe, Adam	
	710062700		Negotiation - 833 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Luethge, Annette	

Sort By: Contract #, Project, Start, Finish

PLATS & RE

Data Date 11-Jul-11

Activity ID	LEVEL 9B PLAT ID #	LEVEL 9C TAX ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET	LEVEL 9G PROPERTY OWNER	LEVEL 9I NEGOTI...
		710067100	Negotiation - 431 Ninth St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Bongean, Nick	
		710067100	Negotiation - 431 Ninth St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Bongean, Nick	
		0080331	Negotiation - 975 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	AV Food Mart	
		8032801	Negotiation - 961 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	AV Food Mart	
		8035407	Negotiation - 1121 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Hanson, Barbara	
		803541201	Negotiation - 1744 Lakeshore Drive	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Hanson, Barbara	
		710067000	Negotiation - 435 Ninth St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Hesterberg, Brian	
		8035409	Negotiation - 1133 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Baker, Caryn	
		8035411	Negotiation - 1133 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Baker, Caryn	
		8035414	Negotiation - 1089 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Cinda Corporation	
		8032902	Negotiation - 493 Green Acres Dr	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Collins, Clark	
		710063600	Negotiation - 521 Ninth St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Winckler, Clifford	
		80329	Negotiation - 994 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Crosskeys Investors	
		80332	Negotiation - 994 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Crosskeys Investors	
		8032903	Negotiation - 994 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Crosskeys Investors	
		710066600	Negotiation - 846 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Coopman, Dorothy	
		710078200	Negotiation - 914 Racine Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Benner, Gary	
		8035406	Negotiation - 377 Cleveland St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Van Harpen, Gary	
		710063800	Negotiation - 513 Ninth St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Wheeler, Greg	
		710064000	Negotiation - 851 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Early, James	
		710067300	Negotiation - 853 Martin St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Sokolowski, John	
		710066300	Negotiation - 842 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Pfrang, Judith	
		8033404	Negotiation - 526 Giesen St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Vogel, Ken	
		710063000	Negotiation - 839 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	LMC Property Mgmt	
		710063400	Negotiation - 845 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	LMC Property Mgmt	
		80327	Negotiation - 931 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Gamerding, Matthew	
		80321	Negotiation - 903 Paradise Ln	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Meadows Development	
		740100100	Negotiation - 1744 Lakeshore Dr	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Hanson, Lyle	
		740100200	Negotiation - 1744 Lakeshore Dr	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Hanson, Lyle	
		710063700	Negotiation - 517 Ninth St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Isaac, Mitchell	
		710078300	Negotiation - 520 Ninth St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Collar, Pauline	
		710063900	Negotiation - 509 Ninth St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Bougie, Nicholas	
		80324	Negotiation - 512 Ninth St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Smith, Robert	
		80325	Negotiation - 500 Ninth St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Smith, Robert	
		710066800	Negotiation - 848 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Schmidt, Timothy	
		80326	Negotiation - 952 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Vanzeeland Oil Co/In	
		8032901	Negotiation - 952 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Vanzeeland Oil Co/In	
		710065900	Negotiation - 834 Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Heiman, William	
		80297	Negotiation - Racine St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	St. Mary's Congregat	
			Negotiate Acquisition of All Parcels & Easements - Racine Rd Reconstruction	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16		
Acquisition				65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3					
		710066200	Acquisition - 838 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Scheibe, Adam	
		710062700	Acquisition - 833 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Luethge, Annette	
		710067100	Acquisition - 431 Ninth St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Bongean, Nick	
		710067100	Acquisition - 431 Ninth St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Bongean, Nick	
		0080331	Acquisition - 975 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	AV Food Mart	
		8032801	Acquisition - 961 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	AV Food Mart	
		8035407	Acquisition - 1121 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Hanson, Barbara	
		803541201	Acquisition - 1744 Lakeshore Drive	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Hanson, Barbara	
		710067000	Acquisition - 435 Ninth St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Hesterberg, Brian	
		8035409	Acquisition - 1133 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Baker, Caryn	
		8035411	Acquisition - 1133 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Baker, Caryn	
		8035414	Acquisition - 1089 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Cinda Corporation	
		8032902	Acquisition - 493 Green Acres Dr	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Collins, Clark	

Sort By: Contract #, Project, Start, Finish

PLATS & RE

Data Date 11-Jul-11

Run Date: 01-Aug-11

Activity ID	LEVEL 9B PLAT ID #	LEVEL 9C TAX ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET	LEVEL 9G PROPERTY OWNER	LEVEL 9I NEGOTI...
		710063600	Acquisition - 521 Ninth St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Winckler, Clifford	
		80329	Acquisition - 994 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Crosskeys Investors	
		80332	Acquisition - 994 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Crosskeys Investors	
		8032903	Acquisition - 994 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Crosskeys Investors	
		710066600	Acquisition - 846 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Coopman, Dorothy	
		710078200	Acquisition - 914 Racine Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Benner, Gary	
		8035406	Acquisition - 377 Cleveland St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Van Harpen, Gary	
		710063800	Acquisition - 513 Ninth St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Wheeler, Greg	
		710064000	Acquisition - 851 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Early, James	
		710067300	Acquisition - 853 Martin St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Sokolowski, John	
		710066300	Acquisition - 842 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Pfrang, Judith	
		8033404	Acquisition - 526 Giesen St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Vogel, Ken	
		710063000	Acquisition - 839 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	LMC Property Mgmt	
		710063400	Acquisition - 845 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	LMC Property Mgmt	
		80327	Acquisition - 931 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Gamerdinge, Matthew	
		80321	Acquisition - 903 Paradise Ln	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Meadows Development	
		740100100	Acquisition - 1744 Lakeshore Dr	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Hanson, Lyle	
		740100200	Acquisition - 1744 Lakeshore Dr	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Hanson, Lyle	
		710063700	Acquisition - 517 Ninth St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Isaac, Mitchell	
		710078300	Acquisition - 520 Ninth St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Collar, Pauline	
		710063900	Acquisition - 509 Ninth St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Bougie, Nicholas	
		80324	Acquisition - 512 Ninth St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Smith, Robert	
		80325	Acquisition - 500 Ninth St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Smith, Robert	
		710066800	Acquisition - 848 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Schmidt, Timothy	
		80326	Acquisition - 952 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Vanzeeland Oil Co/In	
		8032901	Acquisition - 952 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Vanzeeland Oil Co/In	
		710065900	Acquisition - 834 Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Heiman, William	
		80297	Acquisition - Racine St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	St. Mary's Congregat	
			Acquire Parcels & Easements - Racine Rd Reconstruction	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16		
			Right-of-Way Clear (Certification #1/#2)	10	15-Jan-14	28-Jan-14	20-Jan-14	31-Jan-14	3					
			Right-of-Way Clear (Certification #1/#2) - Racine Rd Reconstruction	10	15-Jan-14	28-Jan-14*	20-Jan-14	31-Jan-14	3	EBEL	5/13/14	7/12/16		
			1517-75-77 Midway Rd (CTH AP) Interchange	547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
			Develop Preliminary Plat	100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3					
			Develop Preliminary Plat - Midway Rd (CTH AP) Interchange	100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3	EBEL	5/13/14	7/12/16		
			RW Plat to RE	1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3					
			RW Plat To RE - Midway Rd (CTH AP) Interchange	1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3	EBEL	5/13/14	7/12/16		
			Appraisal	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3					
		740076800	Appraisal (Hired/Completed/Reviewed) - 830 Midway Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Banta Co	
		740087600	Appraisal (Hired/Completed/Reviewed) - 1609 Hickory Hollow Ln	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Jansen, Darrell	
		740087200	Appraisal (Hired/Completed/Reviewed) - 1567 Hickory Hollow Ln	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Bongiovanni, Geno	
		740087400	Appraisal (Hired/Completed/Reviewed) - 1587 Hickory Hollow Ln	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Fahley, Joseph	
		740087300	Appraisal (Hired/Completed/Reviewed) - 1575 Hickory Hollow Ln	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Schreiner, Leanne	
		740087500	Appraisal (Hired/Completed/Reviewed) - 1601 Hickory Hollow Ln	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Jung, Mark	
		740079000	Appraisal (Hired/Completed/Reviewed) - 501 Marquette Ave S	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Soo Railroad Co	
		740087700	Appraisal (Hired/Completed/Reviewed) - 1466 Kenwood Drive	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Syring Devel. LTD	
		740087800	Appraisal (Hired/Completed/Reviewed) - 1466 Kenwood Drive	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Syring Devel. LTD	
			Complete Appraisal of All Parcels & Easements - Midway Rd (CTH AP) Interchange	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16		
			Negotiation	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3					
		740076800	Negotiation - 830 Midway Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Banta Co	
		740087600	Negotiation - 1609 Hickory Hollow Ln	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Jansen, Darrell	
		740087200	Negotiation - 1567 Hickory Hollow Ln	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Bongiovanni, Geno	
		740087400	Negotiation - 1587 Hickory Hollow Ln	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Fahley, Joseph	
		740087300	Negotiation - 1575 Hickory Hollow Ln	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Schreiner, Leanne	
		740087500	Negotiation - 1601 Hickory Hollow Ln	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Jung, Mark	

Sort By: Contract #, Project, Start, Finish

PLATS & RE

Data Date 11-Jul-11

Run Date: 01-Aug-11

Activity ID	LEVEL 9B PLAT ID #	LEVEL 9C TAX ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET	LEVEL 9G PROPERTY OWNER	LEVEL 9I NEGOTI...
		740079000	Negotiation - 501 Marquette Ave S	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Soo Railroad Co	
		740087700	Negotiation - 1466 Kenwood Drive	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Syring Devel. LTD	
		740087800	Negotiation - 1466 Kenwood Drive	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Syring Devel. LTD	
			Negotiate Acquisition of All Parcels & Easements - Midway Rd (CTH AP) Interchange	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16		
Acquisition				65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3					
		740076800	Acquisition - 830 Midway Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Banta Co	
		740087600	Acquisition - 1609 Hickory Hollow Ln	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Jansen, Darrell	
		740087200	Acquisition - 1567 Hickory Hollow Ln	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Bongiovanni, Geno	
		740087400	Acquisition - 1587 Hickory Hollow Ln	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Fahley, Joseph	
		740087300	Acquisition - 1575 Hickory Hollow Ln	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Schreiner, Leanne	
		740087500	Acquisition - 1601 Hickory Hollow Ln	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Jung, Mark	
		740079000	Acquisition - 501 Marquette Ave S	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Soo Railroad Co	
		740087700	Acquisition - 1466 Kenwood Drive	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Syring Devel. LTD	
		740087800	Acquisition - 1466 Kenwood Drive	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Syring Devel. LTD	
			Acquire Parcels & Easements - Midway Rd (CTH AP) Interchange	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16		
Right-of-Way Clear (Certification #1/#2)				10	15-Jan-14	28-Jan-14	20-Jan-14	31-Jan-14	3					
			Right-of-Way Clear (Certification #1/#2) - Midway Rd (CTH AP) Interchange	10	15-Jan-14	28-Jan-14*	20-Jan-14	31-Jan-14	3	EBEL	5/13/14	7/12/16		
1517-75-78 Appleton Rd (STH 47) Interchange				547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
Develop Preliminary Plat				100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3					
			Develop Preliminary Plat - Appleton Rd (STH 47) Interchange	100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3	EBEL	5/13/14	7/12/16		
RW Plat to RE				1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3					
			RW Plat To RE - Appleton Rd (STH 47) Interchange	1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3	EBEL	5/13/14	7/12/16		
Appraisal				65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3					
		80063	Appraisal (Hired/Completed/Reviewed) - 1195 Valley Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Schmeiser, Alan	
		80381	Appraisal (Hired/Completed/Reviewed) - 1497 Appleton Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Java Leasing LLC	
		740077500	Appraisal (Hired/Completed/Reviewed) - 3796 W Shady Ln	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Patzner, Gene	
		740077903	Appraisal (Hired/Completed/Reviewed) - 1680 Appleton Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Earl/Shirley Feiwe T	
		740077905	Appraisal (Hired/Completed/Reviewed) - 1500 Appleton Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	North Shore Bank FSB	
		740077911	Appraisal (Hired/Completed/Reviewed) - 1578 Appleton Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Shopko SPE Real Esta	
		740077912	Appraisal (Hired/Completed/Reviewed) - 1550 Appleton Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	Fazoli	
		608156100	Appraisal (Hired/Completed/Reviewed) - 1281 W Valley Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16	McDonald Corp	
			Complete Appraisal of All Parcels & Easements - Appleton Rd (STH 47) Interchange	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/12/16		
Negotiation				200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3					
		80063	Negotiation - 1195 Valley Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Schmeiser, Alan	
		80381	Negotiation - 1497 Appleton Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Java Leasing LLC	
		740077500	Negotiation - 3796 W Shady Ln	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Patzner, Gene	
		740077903	Negotiation - 1680 Appleton Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Earl/Shirley Feiwe T	
		740077905	Negotiation - 1500 Appleton Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	North Shore Bank FSB	
		740077911	Negotiation - 1578 Appleton Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Shopko SPE Real Esta	
		740077912	Negotiation - 1550 Appleton Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	Fazoli	
		608156100	Negotiation - 1281 W Valley Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16	McDonald Corp	
			Negotiate Acquisition of All Parcels & Easements - Appleton Rd (STH 47) Interchange	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/12/16		
Acquisition				65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3					
		80063	Acquisition - 1195 Valley Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Schmeiser, Alan	
		80381	Acquisition - 1497 Appleton Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Java Leasing LLC	
		740077500	Acquisition - 3796 W Shady Ln	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Patzner, Gene	
		740077903	Acquisition - 1680 Appleton Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Earl/Shirley Feiwe T	
		740077905	Acquisition - 1500 Appleton Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	North Shore Bank FSB	
		740077911	Acquisition - 1578 Appleton Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Shopko SPE Real Esta	
		740077912	Acquisition - 1550 Appleton Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	Fazoli	
		608156100	Acquisition - 1281 W Valley Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16	McDonald Corp	
			Acquire Parcels & Easements - Appleton Rd (STH 47) Interchange	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/12/16		
Right-of-Way Clear (Certification #1/#2)				10	15-Jan-14	28-Jan-14	20-Jan-14	31-Jan-14	3					
			Right-of-Way Clear (Certification #1/#2) - Appleton Rd (STH 47) Interchange	10	15-Jan-14	28-Jan-14*	20-Jan-14	31-Jan-14	3	EBEL	5/13/14	7/12/16		

Activity ID	LEVEL 9B PLAT ID #	LEVEL 9C TAX ID	Activity Name	Original Duration	Start	Finish	Late Start	Late Finish	Total Float	WISDOT PM	E - LET	P - LET	LEVEL 9G PROPERTY OWNER	LEVEL 9I NEGOTI...
1517-75-79 Oneida St (US 10) Interchange				547	06-Dec-11	28-Jan-14	09-Dec-11	31-Jan-14	3					
Develop Preliminary Plat				100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3					
			Develop Preliminary Plat - Oneida St (US 10) Interchange	100	06-Dec-11	23-Apr-12	09-Dec-11	26-Apr-12	3	EBEL	5/13/14	7/8/14		
RW Plat to RE				1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3					
			RW Plat To RE - Oneida St (US 10) Interchange	1	24-Sep-12	24-Sep-12	27-Sep-12	27-Sep-12	3	EBEL	5/13/14	7/8/14		
Appraisal				65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3					
	8003402		Appraisal (Hired/Completed/Reviewed) - 1530 Oneida St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Kangas-Kroes-Day-Sch	
	8003403		Appraisal (Hired/Completed/Reviewed) - 1548 Oneida St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Sackett, Stephan	
	8003404		Appraisal (Hired/Completed/Reviewed) - 1562 Oneida St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Weihing, Merle	
	8003405		Appraisal (Hired/Completed/Reviewed) - 1538 Oneida St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Dailey, Daniel L	
	8003406		Appraisal (Hired/Completed/Reviewed) - 1554 Oneida St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Hess, Randall	
	8003407		Appraisal (Hired/Completed/Reviewed) - 537 Superior St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	BDB Company	
	760159800		Appraisal (Hired/Completed/Reviewed) - 1818 Midway Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	John, Robert	
	760159900		Appraisal (Hired/Completed/Reviewed) - 1822 Midway Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	John, Robert	
	760160000		Appraisal (Hired/Completed/Reviewed) - 1490 Oneida St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Valley Petroleum Inc	
	760160100		Appraisal (Hired/Completed/Reviewed) - 1819 Midway Rd	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Livengood Midway Pro	
	760160200		Appraisal (Hired/Completed/Reviewed) - 1440 Oneida St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Havan Investments	
	800340701		Appraisal (Hired/Completed/Reviewed) - 1590 Oneida St	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Gamerding, Matthew	
	800340702		Appraisal (Hired/Completed/Reviewed) - 1218 W Roberts Ave	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14	Weihing, Merle	
			Complete Appraisal of All Parcels & Easements - Oneida St (US 10) Interchange	65	25-Sep-12	27-Dec-12	28-Sep-12	02-Jan-13	3	EBEL	5/13/14	7/8/14		
Negotiation				200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3					
	8003402		Negotiation - 1530 Oneida St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Kangas-Kroes-Day-Sch	
	8003403		Negotiation - 1548 Oneida St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Sackett, Stephan	
	8003404		Negotiation - 1562 Oneida St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Weihing, Merle	
	8003405		Negotiation - 1538 Oneida St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Dailey, Daniel L	
	8003406		Negotiation - 1554 Oneida St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Hess, Randall	
	8003407		Negotiation - 537 Superior St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	BDB Company	
	760159800		Negotiation - 1818 Midway Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	John, Robert	
	760159900		Negotiation - 1822 Midway Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	John, Robert	
	760160000		Negotiation - 1490 Oneida St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Valley Petroleum Inc	
	760160100		Negotiation - 1819 Midway Rd	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Livengood Midway Pro	
	760160200		Negotiation - 1440 Oneida St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Havan Investments	
	800340701		Negotiation - 1590 Oneida St	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Gamerding, Matthew	
	800340702		Negotiation - 1218 W Roberts Ave	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14	Weihing, Merle	
			Negotiate Acquisition of All Parcels & Easements - Oneida St (US 10) Interchange	200	28-Dec-12	09-Oct-13	03-Jan-13	14-Oct-13	3	EBEL	5/13/14	7/8/14		
Acquisition				65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3					
	8003402		Acquisition - 1530 Oneida St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Kangas-Kroes-Day-Sch	
	8003403		Acquisition - 1548 Oneida St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Sackett, Stephan	
	8003404		Acquisition - 1562 Oneida St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Weihing, Merle	
	8003405		Acquisition - 1538 Oneida St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Dailey, Daniel L	
	8003406		Acquisition - 1554 Oneida St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Hess, Randall	
	8003407		Acquisition - 537 Superior St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	BDB Company	
	760159800		Acquisition - 1818 Midway Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	John, Robert	
	760159900		Acquisition - 1822 Midway Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	John, Robert	
	760160000		Acquisition - 1490 Oneida St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Valley Petroleum Inc	
	760160100		Acquisition - 1819 Midway Rd	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Livengood Midway Pro	
	760160200		Acquisition - 1440 Oneida St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Havan Investments	
	800340701		Acquisition - 1590 Oneida St	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Gamerding, Matthew	
	800340702		Acquisition - 1218 W Roberts Ave	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14	Weihing, Merle	
			Acquire Parcels & Easements - Oneida St (US 10) Interchange	65	10-Oct-13	14-Jan-14	15-Oct-13	17-Jan-14	3	EBEL	5/13/14	7/8/14		
Right-of-Way Clear (Certification #1/#2)				10	15-Jan-14	28-Jan-14	20-Jan-14	31-Jan-14	3					
			Right-of-Way Clear (Certification #1/#2) - Oneida St (US 10) Interchange	10	15-Jan-14	28-Jan-14*	20-Jan-14	31-Jan-14	3	EBEL	5/13/14	7/8/14		

Sort By: Contract #, Project, Start, Finish

PLATS & RE

Data Date 11-Jul-11

Run Date: 01-Aug-11



Project ID : 9231-07-00
Title : WOODRUFF - LAC DU
 FLAMBEAU
Region : NORTH CENTRAL

Route : STH 047
Sub Title : WEST BOLTON LAKE LN -
 CTH D (SOUTH)
County : VILAS

Project Information			
Staffing	C/E		
Legislative Subprogram	303	Improvement Concept	RECOND
Primary Region	North Central	Responsible Region	North Central
Primary Supervisor	Wisner, Anna M	Responsible Supervisor	
Primary Manager	Volkman, James L	Responsible Manager	
Primary Leader		Responsible Leader	
Project Tag	PMP Required	Project Phase	PS&E

PMP Vs FIIPS			
PMP IE Estimate	\$ [REDACTED]	FIIPS IE Estimate	\$ [REDACTED]
PMP CE Estimate	\$ [REDACTED]	FIIPS CE Estimate	\$ [REDACTED]

Associated Projects					
Projects	Project Type	FIIPS Schedule Date	FIIPS Contract Amount	PMP Schedule Date	PMP Contract Amount
9231-07-21	R/E	06/25/2010	[REDACTED]	06/25/2010	\$ [REDACTED]
9231-07-70	LET	02/12/2013	[REDACTED]	02/12/2013	\$ [REDACTED]

(I) = Inactive



Project ID : 9231-07-00
Title : WOODRUFF - LAC DU FLAMBEAU
Region : NORTH CENTRAL

Route : STH 047
Sub Title : WEST BOLTON LAKE LN - CTH D (SOUTH)
County : VILAS

Base Schedule for: 9231-07-70

Percent Project Work Complete 85 %

	Calculated			Target			Actual			% Work Comp	Reported		
	Start Date	Dur- ation	End Date	Start Date	Dur- ation	End Date	Start Date	Dur- ation	End Date		Start Date	Dur- ation	End Date
Project Authorization	01/15/2007	43	02/27/2007		0		04/01/2004	221	11/08/2004	100 %	04/01/2004	221	11/08/2004
Project Management PMP	02/27/2007	1800	02/01/2012		0		11/08/2004	0		85 %	11/08/2004	2641	02/01/2012
Preliminary Design	10/09/2007	226	05/22/2008		0		12/13/2004	656	10/01/2006	100 %	12/13/2004	656	10/01/2006
Preliminary Plan Review	05/22/2008	396	06/22/2009		0		12/07/2004	1588	04/14/2009	100 %	12/07/2004	1588	04/14/2009
Environmental Documentation	05/22/2008	198	12/06/2008		0		08/01/2005	0		100 %	05/22/2008	-1025	08/01/2005
Survey Mapping	09/17/2008	259	06/03/2009		0		01/01/2002	2638	03/24/2009	100 %	01/01/2002	2638	03/24/2009
Project Notification to Utilities (1077 form)	05/22/2008	396	06/22/2009		0		05/01/2005	247	01/03/2006	100 %	05/01/2005	247	01/03/2006
CADDs Drafting	02/27/2007	449	05/22/2008		0		04/01/2003	800	06/10/2005	100 %	04/01/2003	800	06/10/2005
Haz. Mat. Investigation Phase 1 - 2.5	03/23/2008	60	05/22/2008		0		11/16/2005	200	06/05/2006	100 %	11/16/2005	200	06/05/2006
Right of Way Plat	05/22/2008	1350	02/01/2012		0		05/01/2007	0		85 %	05/01/2007	1737	02/01/2012
Section 106	05/22/2008	357	05/14/2009		0	03/15/2010	10/01/2005	0		60 %	10/01/2005	1626	03/15/2010
TMP Worksheet	02/16/2009	539	08/10/2010		0	02/09/2009	02/17/2008	879	07/16/2010	100 %	02/17/2008	879	07/16/2010
Design Study Report	09/17/2008	239	05/14/2009		0	01/12/2009	01/01/2002	2884	11/24/2009	100 %	01/01/2002	2884	11/24/2009
Final Design	05/22/2008	396	06/22/2009		0	11/16/2009	05/11/2009	73	07/23/2009	100 %	05/11/2009	73	07/23/2009
	01/14/2009	158	06/22/2009		0	10/12/2009	11/21/2007	720	11/10/2009	100 %	11/21/2007	720	11/10/2009
	06/22/2009	893	12/02/2011	10/12/2009	0		11/10/2009	0		50 %	11/10/2009	752	12/02/2011

	Calculated			Target			Actual			% Work Comp	Reported		
	Start Date	Dur- ation	End Date	Start Date	Dur- ation	End Date	Start Date	Dur- ation	End Date		Start Date	Dur- ation	End Date
Project Plans to Utilities (1078 form)	06/06/2011	150	11/03/2011		0			0		0 %	06/06/2011	150	11/03/2011
Army Corps of Engineers 404 Permit	11/14/2009	673	09/19/2011	02/22/2010	0			0		0 %	02/22/2010	573	09/19/2011
DNR 401 Water Quality Certification	11/14/2009	673	09/19/2011		0		11/21/2007	0		60 %	11/21/2007	1397	09/19/2011
Real Estate Acquisition	06/22/2009	730	06/22/2011	08/25/2010	0		11/22/2010	0		10 %	11/22/2010	211	06/22/2011
Signing Design	08/05/2011	90	11/03/2011	08/24/2009	0		01/04/2010	0		0 %	01/04/2010	667	11/03/2011
Pavement Marking Design	09/04/2011	60	11/03/2011		0			0		0 %	09/04/2011	60	11/03/2011
TMP Design	05/22/2008	1350	02/01/2012		0		05/11/2009	0		10 %	05/11/2009	996	02/01/2012
Draft PS&E	12/03/2011	60	02/01/2012		0			0		0 %	12/03/2011	60	02/01/2012
PS&E	01/31/2012	1	02/01/2012		0			0		0 %	01/31/2012	1	02/01/2012

Assignment: Evaluate mega project best practice for design scheduling

- Design Primavera Scheduling-The basis of this effort will be to evaluate the scheduling tool vs. use of more traditional PMP.

(Evaluations are analytical assessments addressing results of policies and process that emphasis reliability and usefulness of findings. Their role is to improve information and reduce uncertainty (clarify or reinforce direction); however, evaluations rely significantly on judgment.

The main objectives of evaluations are to improve decision-making, resource allocation and accountability.)

Team: Sponsor: Brett Wallace, SE region Operations Manager: (262)548-5884;(414)750-1697

Lead: Julie Millard, Project Management Unit supervisor: (715)421-8387

Members: Laura Shadewald, Structures Supervisor: (608)267-9592

Tony Barth, SE PDS Supervisor, Zoo Interchange mega project: (262)548-5922

Natasha Gwidt, NE PDS Supervisor, USH 41 mega project: (920)492-2235

John Steiner (or I 39 alternate), SW PDS Design Supervisor, I39 Mega project: (608)246-3862

Additional/Optional Team Members:

Norbert Simonis, I-94 N/S mega project: (262)521-4418

Timeline: The WisDOT Mega Project BP Evaluation Teams will **complete the specific evaluations by August 10th** and document their work according to the outline shown below. The evaluation summary will be compiled into a draft report that will be shared with the Division Management Team on August 17th.

Tasks: Interview several experts of mega project design scheduling using Primavera's Planner/Scheduler, P6

Review Project Management Tools Review, final report 2007:

<http://dotnet/tpms/docs/2007pmtoolsreviewteamfnlrpt.doc>

Check with Gary Whited, CMSC, for Mega Projects Best Practices Study findings to date

Draft report using Evaluation Outline provided

Report audience: Division Management Team

3. Enhanced Public Involvement/Outreach

BEST PRACTICE TITLE: Enhanced Public Involvement/Outreach

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Best Practice Scope:

The goal of the Mega Project public outreach program is to ensure availability of timely, accurate, concise, and useful information to all public stakeholders and entities through a wide range of communication techniques. To be effective, a technique must provide appropriate public input for the relevant project phase, be cost effective, and reach the target audience. The combination of effective, targeted, and timely information is imperative to ensuring the relative effectiveness of a public outreach program and is the basis of the activities currently being employed on transportation infrastructure Mega Projects in the state of Wisconsin.

There are really two distinct phases of public involvement necessary during infrastructure development projects. During the environmental and design phases of a large-scale infrastructure project, the particular focus is listening to public feedback, understanding concerns, and incorporating stakeholder input. The preliminary focus is to try to ensure the public that their concerns and needs are being met in an effective fashion with the public money allocated to deliver the project. As the project progresses through preliminary and into final engineering and construction phases, the emphasis shifts to sharing information and responding to questions and concerns of the public related to construction. This provides direct communication with the public of how they will be impacted and for how long. In other words, it communicates the temporary pain endured for the long-term benefits received in exchange.

It should be noted that the Public Involvement section (Chapter 6) of the FDM is being re-written with a final product due out this fall. Once that document is available, the team may need to discuss best practices related to the techniques listed in the FDM and further refine.

For this particular evaluation of best practices, it should be noted that much of the information is based on lessons learned. The team performing the evaluation focused on the public involvement techniques that are traditionally employed during the construction phase of a project; however, it should be noted that much of the public outreach, public interface meetings, and methods of consensus building are all activities that are traditionally what would be employed during the design phases.

The following table presents the scope of items discussed at the team level for enhanced public involvement/outreach that can be applied at various phases of project delivery:

BEST PRACTICE TITLE: Enhanced Public Involvement/Outreach

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Media	Technology	Print Pieces	Outreach	Visual/graphics:	Meetings	Other
<ul style="list-style-type: none"> -Paid media: -Radio, print ads, - -TV, digital banner, non-traditional -Free media: Blogs, building relationships, news releases 	<ul style="list-style-type: none"> -Project web sites -Social media -E-blasts -QR codes -Emerging technology 	<ul style="list-style-type: none"> -Newsletters -Brochures -Get around guides -Project briefs -Media inserts -Postcards -Database development for print pieces 	<ul style="list-style-type: none"> -Neighborhood meetings -Outreach specialists -School/education outreach programs -Hotline (including 24/7 access) -Festivals – ethnic, WI State Fair, faith-based -Door to door/literature drops -Business toolkits -Translated pieces into various languages -Multicultural outreach -Meeting calendar 	<ul style="list-style-type: none"> -Physical models -Drive through animations -Renderings 	<ul style="list-style-type: none"> -Project Information Meetings -Hearings -Advisory committee meetings (Technical, Citizen, CSS) -Elected official briefings 	<ul style="list-style-type: none"> -Public Involvement plans -Project Branding -Market research

BEST PRACTICE TITLE: Enhanced Public Involvement/Outreach

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Best Practice Policy Requirement:

There are numerous state and federal regulations and laws that influence WisDOT's public involvement program and effectively dictate the need for a focused and directed Public Involvement/Outreach effort. Each of these elements influences the type and manner in which information is disseminated to the public. The overarching theme of each of the regulations and laws is to ensure that the public is adequately informed of the planned improvements. The goal is to ultimately gain buy-in from the public in terms of reassuring them that their public dollars being expended are being utilized effectively while informing them of the benefits they will receive in exchange. The second piece is to ensure that the public stakeholders understand the temporary disruptions that must be endured in order to obtain the planned benefits and public improvements. The following lists summarize the various state and federal laws and regulations:

State Laws:

- Wisconsin Statutes, Title I, Chapter 1.11, regarding environmental policy.
- Wisconsin Statutes, Title XI, Chapter 84, governing the State Trunk Highway System.
- Wisconsin Statutes, Title VIII, Chapter 66, regarding urban and regional planning and coordination.

Federal Laws/Regulations:

- Federal-Aid Policy Guide, Part 771, Environmental Impact and Related Procedures.
- Federal-Aid Policy Guide, Part 712, R/W Acquisition.
- 40 CFR 1500 – 1508 - This regulation requires that all agencies make diligent efforts to involve the public in preparing and implementing their NEPA procedures.
- The Federal-Aid Highway Act of 1962, Section 134, requires a 3-C planning process (Comprehensive, Continuing, and Cooperative) in all urban areas (23 USC 134).
 - The Federal-Aid Highway Act of 1970 is most significant for public involvement in highway planning and design.
- Each state must have procedures, approved by the FHWA, to carry out a public involvement/public hearing program pursuant to Section 23 USC 128. WisDOT procedures are in this chapter.
- Section 4(f) of the Department of Transportation Act of 1966 requires considerations relating to publicly owned parks, recreation, wildlife, or historic areas.
- The National Environmental Policy Act of 1969, Section 102, requires the preparation of environmental impact statements on all major federally aided projects with significant impacts (42 USC 4321, et seq.).

BEST PRACTICE TITLE: Enhanced Public Involvement/Outreach

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

- The Demonstration Cities and Metropolitan Development Act of 1966, Title II, requires area wide reviews of federally aided capital projects in metropolitan areas.
- The Intergovernmental Cooperation Act of 1968.
- Executive Order 12898, Federal Actions to Address Justice in Minority Populations and Low-Income Populations, February 11, 1994.
- The Transportation Equity Act for the 21st Century (TEA-21).
 - TEA-21's requirements for public participation are not necessarily project-specific. In general, TEA requires that state and metropolitan planning organizations involve the various public stakeholders and entities early and throughout their long-range system planning, programming and transportation decision-making processes.

Best Practice Purpose and Need:

There are several elements defining the purpose and need of the Public Involvement and Outreach efforts deployed on transportation infrastructure Mega Projects in the state of Wisconsin. The most prominent purpose and need is to comply with state and federal regulations in keeping the public stakeholders properly informed and allowing for their input into the development process. The purpose is also to ensure the availability and dissemination of timely, accurate, and understandable information to WisDOT's customers (i.e., public users of the infrastructure) during all phases of a project. The maintaining of good relationships with the end users works towards ensuring the maintenance of public goodwill for WisDOT in both the immediate and longer term future.

The specific need of the program is ensuring that this information is available, accurate and timely. This requires the utilization of resources that are able to articulate and clarify key issues to the public in a concise and effective manner. This requires an understanding of the multiple perspectives of the various public stakeholders and entities involved. Generally speaking there is a need to provide opportunities for meaningful input into a project's planning process in order to establish trust and credibility that WisDOT is a good steward of public monies invested into the public's future. This allows for the public to understand the benefits they receive in return for their public investment and disruptions that arise as a result of major infrastructure construction efforts. At the heart of an effective program is the need to be responsive to constituent issues during all phases.

Best Practice Stakeholders:

There are multiple stakeholders involved in any public involvement and outreach effort. Stakeholders range from residents, businesses, commuters, tourists, multi-modal partners, municipalities, counties, state agencies, and elected officials all the way down to truckers, contractors, and ultimately those tasked with moving goods and people. The external agency

BEST PRACTICE TITLE: Enhanced Public Involvement/Outreach

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

stakeholders include the various multi-modal partners, municipalities, counties, state agencies, and elected officials tasked with serving the public's best interest. The external non-agency stakeholders are largely comprised of the end users of the transportation facilities. These stakeholders include residents, businesses, commuters, tourists, truckers, and ultimately the contractors who are tasked with constructing the end product.

It should be noted that a best practice is to establish a database of stakeholders during the environmental phase that can be built upon during subsequent stages. The database should include constituent name, address, and e-mail addresses. A solid database serves as a tool for disseminating project information and builds the foundation for communicating with the public in an efficient and cost-effective manner.

Best Practice Organizational Foundation:

Public involvement best practices are most effective when holistically owned at multiple levels within WisDOT. The main levels of ownership are comprised of the project level, regional director/regional operations director level, and at the administrator/executive offices level. Ownership of the public involvement and outreach efforts at these multiple levels ensures that the greater WisDOT organization is delivering effective public communication and coordination at all levels.

Ownership of public involvement and outreach efforts at the project level provides a mechanism for ensuring responsible day-to-day coordination. It is recommended to continue the use of a project communications manager-advanced (PCM) to serve as the lead of outreach activities. The PCM can recommend and coordinate strategies while making cost-conscious outreach decisions on the individual project level. This provides for the most efficient use of monies invested into public involvement as the PCM is an integrated member of the project team who serves as the point of contact between key stakeholders, media, and elected officials, as well as the WisDOT management team.

Ownership of the public involvement and outreach efforts at the regional level by a Regional Director/Regional Operations Director provides a mechanism for regional oversight and understanding of the public communication effort. The Regional Director effectively oversees the efforts of the PCM activities. This helps to keep regional management informed and to continue to communicate the same messages on a higher level. In addition, management of the public involvement and outreach efforts by the Regional Director provides insight into decision making and review processes.

Finally, at the highest levels of management within WisDOT, ownership of the public involvement and outreach efforts at the administrative and central office level by the appropriate Administrator/Executive Officer ensures that the greater WisDOT message and intent is properly communicated. The administrative level is more functioning as quality assurance that the message being delivered is in alignment with the greater WisDOT mission and vision of the organization. This also provides a mechanism for final decision makers to give

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authority to move forward with planned outreach strategies and the associated cost commitments involved.

Best Practice Resourcing:

Resourcing of outreach activities is a combination of WisDOT staff and consultant staff. It should be noted that a single PCM on a Mega Project (or multiple Mega Projects) does not provide enough resources to handle demands of the outreach programs as currently defined. There are activities that are not cost-effective or practical for WisDOT staff, for example:

- Media production (radio, digital banner ads, inserts, etc.)
 - Advertising firms have the buying power to provide the most cost-effective media plan and this is their actual business. WisDOT is not traditionally a media company and these types of activities should be outsourced. In addition, specialized software and in-house media relationships position advertising firms to be the best resource to perform this activity.
- Graphics/visual production
 - WisDOT does not have the in-house capability of creating computer-generated visualizations, virtual drive-throughs, renderings or creating physical models of Mega Projects. Outsourcing these tasks to qualified firms is the best use of funds as it eliminates much of the risk associated with the learning curve and acquisition of needed equipment and materials for production.

Best Practice Benefits, Challenges, and Cost:

The benefits, challenges, and costs of enhanced outreach programs depend largely upon regional demographics, project complexity, the degree of public concern, the nature of the projected traffic impacts, the size of stakeholder databases (or available information), and media markets. It should be noted that public involvement in the design phases are typically funded from the design pool of funds as a separate item of either corridor management or technical expert contracts. During construction, public involvement costs are typically funded through mitigation contracts.

The associated benefits, challenges, and costs of the currently acknowledged best practices for public involvement/outreach on Mega Projects in Wisconsin are examined in the table on the following page.

BEST PRACTICE TITLE: Enhanced Public Involvement/Outreach

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Task	Benefits	Challenges	Cost	Recommendation from Best Practices Team
Paid media: Radio live reads and produced spots	Wide audience reach Target specific drive times and demographics	Need an advertising firm to produce and place Limited timeframe to get message across	Ranges depending on market and length of flight. EX: Production = between \$1,000 & \$2,000 per ad EX: Placement= between \$30 & \$100 per ad/per station.	Team strongly recommends usage of radio to best saturate target audience. Use only during construction phase of project when impacts are greatest.
Paid media: Television ads	Wide audience reach Informing people before they are traveling	Can be expensive Difficult to gage impact on audience due to DVR/TiVO systems	Ranges depending on market, flight and production level. Marquette IC used TV as an integral part of the media strategy. MQ shot 5 commercials (more you produce at a time, the lesser the cost) at about \$ I-94 N-S used TV in first year of construction. Produced animated ad with no talent, no camera and royalty free artwork. Production was \$6,800 scripting and concepting \$4,800. Ran 644 spots on major TV stations at \$110 per spot.	Team recommends discontinuing use of produced TV spots. Rather, encourage exploring cable TV opportunities and working with news shows on securing regular updates.
Paid media: print ads	Able to target specific publications according to demographics Helps advertise public input opportunities	Larger papers become expensive Media consumption surveys show that average readership of hard copy newspapers continues to decline as compared with other online resources	Ranges depending on market and size of ad EX: 1/8 page ad in Milwaukee Journal Sentinel averages \$1,600 M-F, 1/8 page ad in smaller SE papers ranges from \$200-\$800.	Team advises discontinuing use of paid print ads during construction phase. During input phase, target community-specific papers and multi-cultural papers.
Paid media: digital banner ads	Encourages click-throughs to project web site with the latest information Can measure the rates of impressions and clicks	Some find online ads bothersome and disregard Click through rates (CTR) trends are decreasing as more ads appear online	Ranges depending on market and size of ad. Ex: Paid about \$8,500 for I-94 E-W banners received 464,788 impressions \$0.02 (\$0.018/impression)	Team encourages the usage of digital banners as a best practice when the demographics suit the technique.
Free media: news releases	Able to distribute directly to targeted media. Positions WisDOT to tell our message.	Information can be overwhelming and changes frequently. Long traffic impact releases rarely get picked up by media.	Staff time for weekly news release is about 2 hours a week, plus proofing and updating as necessary. Combination of WisDOT and consultant time.	Team suggests discontinuing weekly news releases. Place focus on major traffic impacts and events via traffic alerts. Continue posting closures on web site and social media tools.

BEST PRACTICE TITLE: Enhanced Public Involvement/Outreach

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Task	Benefits	Challenges	Cost	Recommendation from Best Practices Team
Web: Project web sites	Venue for providing the latest traveler information. Forum for customer feedback.	Need to dedicate resources to keep web site current and respond to comments.	Significant costs for infrastructure and content management.	Team recommends continued usage of project web sites within the determined 511 template. Need adequate resources to maintain content and set up initial pages/graphics support.
Web: Social media sites (Facebook, Twitter, YouTube)	Venue for providing the latest traveler information. Directly connects to media and customers and pushes content out. Measurables exist to determine who is viewing the message.	Dedicate resources to constantly manage and update accounts. Content managers from WisDOT need to be unblocked.	Obtaining site is free. Staff time is approximately 2-3 hours per day, per project.	Team strongly recommends continued usage of social media in tandem with WisDOT's "stay connected" site. An upcoming social media peer exchange, hosted by Wisconsin, will help identify other states' best practices.
Web: E-blasts	Database of e-mail lists to send messages directly to customers who have signed up for information. Send eblast around significant milestones or traffic events.	To be successful, a good list is required.	There are some services that range from \$100-\$200 per month.	Team concurs that e-blasts are an effective best practice. Consider using Mail Chimp (or other similar products) which allows you to send 12,000 e-mails a month to a list of up to 2,000 subscribers.
Print pieces: Newsletters	In depth review of alternatives/impacts. More room to convey message	A larger piece with more information can be outdated sooner.	Ranges according to mailing list and number of stakeholders EX: Printing of 31,000 pieces for US 41 was about \$2,500. Mailing costs and production was about \$8,700.	Team recommends using newsletters during the environmental/planning phases of a project when more discussion of alternatives is needed. Limit printed newsletter usage during construction. Consider translating into other languages according to the demographics of the audience.
Print pieces: Get Around Guides/Rack Cards	Convey routing information and alternate routes/modes/access.	Limited shelf-life of material. Need commitment from contractors to maintain timeframes listed on piece.	EX: I-94 N-S GAG production costs approx. \$5,000 with multiple staff review/revisions. Latest GAG was \$0.07 per piece for 250,000	Team suggests continuing usage of Get Around Guides as a best practice. WisDOT still needs to diversify our techniques for customers to obtain information other than via a computer. Make sure to estimate print quantities accurately to limit waste. Consider translating into other languages according to the demographics of the audience.
Print pieces: Project Briefs	One page template to provide area-specific project information. Specific uses are for bridge demolition, trucking, long-term closures, and pedestrian impacts. Post brief to project web site.	Limited shelf-life of material. Distribution typically occurs via a lit drop, due to time-sensitive information.	Cost is limited to the amount of copies and staff time to create piece. More costs incurred if lit drop is needed.	Team agrees that project briefs are a positive best practice. Try to obtain e-mail addresses from homeowners to better distribute information in a timely manner.

BEST PRACTICE TITLE: Enhanced Public Involvement/Outreach

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Task	Benefits	Challenges	Cost	Recommendation from Best Practices Team
Print pieces: Media inserts	Method of distributing the Get Around Guide/Rack Cards to a wide audience at once.	Have received some criticism in the past.	Ex: Prepared an insert for Appleton Post and Green Bay Press Gazette Travel Section for about \$1,500.	Team recommends minimizing usage of media inserts. If/when they are deemed necessary; concentrate on inserting into the smaller /medium sized papers is the only cost-effective option.
Outreach: Neighborhood specialists	Establish contracts with community leaders to help encourage input and open lines of communication with neighborhoods. Helps lend credibility with the Department in areas where there is hesitancy with public trust.	Have had challenges identifying appropriate leaders. Found difficulty implementing in more rural areas.	Consultant costs range from about \$60 per hour to \$125 per hour. Typically hire outreach specialists on as subconsultants through prime.	Team recognizes that there may be some aspects of Mega Projects that are met with high public concern/resistance. This approach worked well within the Marquette IC and Mitchell IC, but not as effective on the Kenosha/Racine segments of I-94 N-S and on US 41. Recommend WisDOT work to build relationships with community leaders as a best practice.
Outreach: Project hotline	Ensures responsiveness to stakeholder questions/concerns via a personalized discussion	Staffing is challenging. A wide variety of non-project-related phone calls enter the hotline.	Staff time plus assistance from consultants that range in billing \$30-6\$0 per hour.	Team strongly suggests discontinuing hotline usage. Instead, redirect customers to utilize 511 to maximize the investment into that technology. Current hotlines were established prior to 511 initiating.
Outreach: Festivals	Able to have project staff communicate with constituents directly at events held within their community.	Events typically take place over weekends and during night hours. Need up to date displays and assistance with physical models (if applicable.)	Festival costs range from small weekend activities to participating in WI State Fair. A combination of WisDOT and consultant staff is traditionally utilized.	Team considers booths at festivals as a best practice; however, WisDOT should look at ways to provide self-service booths to minimize staff commitments. Also consider multi-cultural/ethnic festivals to ensure traditionally under-served populations are receiving project information.
Outreach: Door to door	Personally deliver project brief/print materials/meeting invites to most-affected customers. Ensures communication is getting to the correct location. Provides opportunity to discuss concerns with customers directly.	Time consuming delivery method.	Staff time plus possible assistance from consultants that range in billing \$20-\$50 per hour.	Team advises minimizing the use of door to door outreach when possible. If there is a certain neighborhood or area of particular concern, utilize lit drops if appropriate. Try to obtain as many e-mail addresses as possible when doing door to door for future correspondence.
Outreach: Business toolkits	Assemble place on WisDOT web site where businesses can utilize past best practices. In this together program and templates for communicating project information broadly.	Need to dedicate some resources to keep materials updated at least once per year.	Minimal staff time once toolkit is up and running.	Team recommends continuing business toolkits as a best practice when applicable.
Outreach : Meeting calendar	Compile a calendar of external meetings. Helps track communication with stakeholders, who was in attendance, what topics were presented, etc.	Dedicate one/two people to update calendar consistently	Staff time about an hour or so per week.	Team advises the usage of a meeting calendar as a best practice for Mega Projects.

BEST PRACTICE TITLE: Enhanced Public Involvement/Outreach

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Task	Benefits	Challenges	Cost	Recommendation from Best Practices Team
<p><i>Visual /graphics:</i> Physical models Drive through animations Renderings</p>	<p>Helps communicate technical information to consumers in an easy to understand format. Drive-throughs and renderings are easily uploaded onto project web sites, cds, PowerPoints. Utilize the same tools over and over at project meetings, festivals, etc.</p>	<p>Physical models are costly and difficult to move to various venues. Larger models require multiple staff or a moving company to move them. Work needs to be done by an outside vendor, as no in-house expertise exists at this time.</p>	<p>Physical models range in cost. Average is about \$35,000 Drive throughs/animations also range in cost depending on areas being digitized between \$5,000 and \$10,000.</p>	<p>Team acknowledges that the design and complexity of a Mega Project should drive the need for a physical model or digital renderings. Recommend utilizing technology wherever possible as opposed to creating a physical model.</p>
Branding	<p>Establishes an easily-identifiable project image. Helps shape project materials, color palette, and overall look/feel/theme. Costs are incurred upfront, but used throughout the project.</p>	<p>Creates a separate identity apart from WisDOT which could be confusing to public.</p>	<p>Work traditionally completed by advertising/marketing firms with graphic designers on staff. Costs range from \$10,000-\$15,000 for supplying a variety of choices and templates. WisDOT has the CCS unit which can also conduct some services, depending on workload.</p>	<p>Team advises adopting branding as a best practice. Helps set the stage for all project communications. Consider utilizing CSS for future branding work. Advertising/marketing firms tend to insist on conducting market research prior to creating a brand identity. Team advises coordinating with other statewide efforts for market research.</p>
Public Involvement Plans	<p>Create a yearly plan for PI activities with goals/objectives and tactics to achieve goals.</p>	<p>Can get caught in a one-size-fits-all approach. Consider carefully the audience and budget before recommending tactics.</p>	<p>Combination of WisDOT staff and consultants to work together to establish a plan.</p>	<p>Team recommends writing a yearly public involvement plan to manage expectations and evaluate effectiveness.</p>
Advisory Committees: (Technical, Citizen/Community, CSS)	<p>Assemble interest groups to obtain feedback and communicate project information.</p>	<p>Time-intensive to identify attendees, plan for meetings, execute meetings.</p>	<p>Costs range, typically requires a mix of WisDOT and consultant cost. Room fees sometimes apply.</p>	<p>Team advises utilizing Advisory Committees during the environmental/planning phases of a project, when input is critical into design. During the construction phase, communicate with these stakeholder groups via e-mail if possible.</p>

BEST PRACTICE TITLE: Enhanced Public Involvement/Outreach

Basis of Discussion: Evaluate the scope to scalability ratio of the effort on Mega Projects and explore ideas for streamlining costs

Best Practice Risk:

The risk of not doing this best practice is multi-faceted. First, it presents the almost certain loss of public goodwill in terms of WisDOT and the infrastructure improvements being derived. Second, there becomes a breakdown in understanding of not only the benefits being derived, but what the cost implications and disruption implications are. Third, it presents WisDOT as an agency that does not care about the public and does whatever it wants. This makes it quite challenging in the grand scheme to gain public support and buy-in for the funding of future projects and to be able to effectively develop infrastructure in the state of Wisconsin that will accommodate the existing and future demand. Instead of planned infrastructure improvements being cast as improvements and benefits to the public, they could potentially be viewed as burdens and unnecessary. The risks to not doing public involvement all stem from a lack of a partnered approach and elimination of efforts to educate the public on why infrastructure improvements should be important to them both as an individual and in terms of broader economic considerations.

Best Practice Opportunities for Cost Effectiveness:

There are a few opportunities to streamline costs of public involvement that largely relate to the manner in which media is consumed by the broader public. As discussed in the cost section of the best practice evaluation table, discontinuing usage of a project hotline, media inserts, and television ads will potentially save tens of thousands of dollars in future Mega Projects (though an exact figure cannot be identified as each effort varies). In addition, minimizing usage of neighborhood outreach specialists and print ads will help lower costs. The reasoning behind elimination of such types of materials is a general and broad-based shift in the way people are consuming and interacting with media in their daily lives. Project hotlines, media inserts, printed materials, specific neighborhood outreach efforts, and television ads are believed to not necessarily offer the best value in terms of the costs expended in relation to the benefits they provide. Consumers of media are largely shifting to mobile platforms and electronic media, and public involvement and outreach efforts and best practices should respond accordingly.

One item that needs more discussion is the web-based map routing tool for Mega Project web sites. While most needs will be met by the new 511 template, there may be certain Mega Projects that involve challenging traffic staging and multiple access changes. More discussion should occur related to this technology and whether it may be a logical expansion of 511 or coordinated through individual Mega Project web sites.

Best Practice Opportunities to Expand:

- From Public Relations Society of America: For a growing number of Americans, computers now rank behind smartphones when it comes to accessing the Internet. According to a new study by the Pew Internet & American Life Project, **25 percent of smartphone owners go online with their phones more than they do with a computer.**

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The research showed that, while many of the individuals who prefer smartphones have other sources of online access at home, **roughly one third of them lack a high-speed home broadband connection.** “For businesses, government agencies and nonprofits who want to engage with certain communities, they will find them in front of a four-inch screen, not in front of a big computer in their den,” Pew researcher and report author Aaron Smith said in a *Washington Post* article. The study found that **one-third of all cellphone-owning adults have smartphones.** The groups with the highest levels of smartphone adoption include Blacks and Hispanics, the financially well-off and well-educated, and those under the age of 45. Urban and suburban residents are roughly twice as likely to own a smartphone as those living in rural areas and employment status is also strongly correlated with smartphone ownership. All research leads to smartphones reaching or exceeding 50% of the market by the end of 2011.

- US-41 is piloting a program to allow highly-impacted businesses to advertise free of charge on the project web site. This web page will let customers know that businesses are still open despite the construction. If customers are worried about getting to businesses, this area of the website is one place we can help reassure them.
- The Best Practices Team recommends evaluating emerging technologies such as Quick Response (QR) codes to use on our project materials. This is a free technology, although consumers have to download an app, which is a process that is not ideally streamlined at current. Mobile barcodes are a response mechanism -- just another way for consumers to choose to engage with us. The QR barcode has become the gateway to information, data exchange and mobile commerce with the Smartphone acting as the primary device for every consumer interaction. From July to December 2011, QR code usage grew by 1,200 percent.
- The team also recommends exploring webcasting for public meetings or high-interest topics. A webcast is a media presentation distributed over the Internet using streaming media technology to distribute a singular message to listeners/viewers. A webcast may either be distributed live or on demand in a cost-effective manner. Webcasting is essentially broadcasting over the Internet.

4. Technical Expert Contracts

**BEST PRACTICE TITLE: Technical Expert Contracts on Mega Projects
(i.e., National Construction/Contractor/Owner’s Representative Contracts)**
**Basis of Discussion: Evaluate the relative value of these contracts and include scalability
discussions with relation to scope items**

Best Practice Scope:

The scope of this best practice is defined by the scope of services procured in past technical services contracts from the Marquette Interchange, I-94 North-South project, and US-41 projects. Below are some of the tasks that have been performed in previous contracts.

- a. Unique Special Provision development (i.e. Dispute Resolution boards, Partnering, Bid Escrow, Pay Plan Quantity, technical specifications, etc.)
- b. Prequalification process
- c. Peer Review of Design (Cost Estimates and Schedules)
- d. Risk Assessments
- e. Constructability Reviews
- f. Construction Program Management Advice
- g. Construction claims
- h. Unique and accelerated construction methods

The scope of services outlined above that is typically included in the best practice of technical expert contracts is focused on providing the best overall value for project delivery. Unique Special Provision Development allows for delivery of projects in a partnered approach with industry and ensures that projects can be delivered by the construction contractors tasked to build the project in the most efficient manner. The Prequalification process ensures that the contractors involved in the project delivery process can meet the required level of quality and have the necessary capabilities. Peer review of design for cost estimates and schedules ensures that the planned costs and projected schedules are sufficient and achievable. In addition, the peer review of design allows for identification of uncertainties and risks and inconsistencies that can be resolved to ensure the Mega Project has sufficient budgets and can control time for planned delivery. Risk assessments identify both the threats and opportunities that are most in need of management for the project and ensure that costs and schedules are proactively managed and controlled. Constructability reviews ensure that the designs are able to be constructed as planned and help to optimize designs to the field conditions for construction. Construction program management advice provides additional feedback and guidance from the basis of technical experience on best practices utilized not only in Wisconsin, but also in other states. Construction claims management ensures that construction claims are sufficiently reviewed for assurance that the department can control costs and not excessively compensate for issues such as contractor error versus justified claims. Unique and accelerated construction methods are capabilities that can be leveraged from technical experts and their experiences in major infrastructure construction throughout the entire United States. This helps to bring innovation to the department and ensure that the most efficient and effective construction methods are being deployed. Overall, each of these specific scope items are about enhancing the performance of management of the project, controlling Mega Project budgets, and

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ensuring compliance with the planned schedules and milestones of delivery. This is a value based approach that ensures knowledge transfer and the gaining of unique perspective from contractors that offer subject matter experts in project delivery and infrastructure construction.

Best Practice Policy Requirement:

There is no policy requirement for this best practice; however, it should be noted that these contracts are typically utilized to facilitate best value practices within the agency. Mega Project PMPs are required by FHWA. These plans often incorporate unique management structures, quality control (QC) processes in design and construction, unique review processes for program budgets, design, constructability, and schedules. These contracts support a wide range of activities and functional areas incorporated into Mega Project management. These contracts have provided an important and much needed service to WisDOT as in-house staff is either inexperienced in these specific areas or not available to perform these extensive, time sensitive tasks.

In addition, FHWA’s “Everyday Counts” initiative is geared towards accelerated schedules and the introduction of innovative means and methods to building projects. In recent years, many of the innovative ideas now commonplace within WisDOT have come from outside of the WisDOT culture and have been introduced into the project from the technical expert contracts. These ideas have added value by streamlining the design and construction delivery while often reducing costs. The opportunity for cost and schedule control, coupled with enhanced performance in delivery and management of Mega Project’s offers a good value to WisDOT as a best practice.

Best Practice Purpose and Need:

The purpose of utilizing technical expert contracts on Mega Projects is to provide unique and timely analysis to the Mega Project functions of design and construction. The experts bring a national contractor mentality with innovative feedback and insight from beyond the WisDOT purview. In this capacity, the experts supplement the knowledge level or fill in gaps that exist in the overall WisDOT experience base. Specialized feedback/review from outside WisDOT is especially important given the high complexity of the Mega Projects and the lack of resources within the department to perform this with in-house staff. All of the items identified in the Best Practice Scope section above typically require very timely feedback that usually only an outside expert specialized for the task can provide with considerations to the tasks and level of effort of other WisDOT staff.

While WisDOT has made strides in developing in-house expertise in these areas, the resources and depth of experience is not adequate to wholly rely upon in-house resources. The recent loss of WisDOT experience due to the rash of retirees has only made this more difficult to resource with WisDOT staff. Other resources that are available to WisDOT are through FHWA,

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AASHTO, and other national contacts. These technical contracts provide an additional way to locate this experience and bring it to the project when additional resources are limited or not applicable.

The very nature of Mega Projects brings very complex, unique, fast-paced challenges in design and construction that are outside the normal experience. These challenges introduce risk to cost and schedule which must be addressed adequately and in the same measure. This places particular emphasis on risk management of delivery from the technical expert perspective, as the technical experts providing this service are used to working on major infrastructure investments around the country and have a wealth of knowledge on how to mitigate threats and maximize opportunities. The nature of the work and level of complexity determines the need for technical experts from outside the department. The benefit of these experts working with WisDOT staff helps expose them to these innovative practices. Through various technical service contracts, these experts indirectly develop the skills and expertise of WisDOT personnel with which they come into contact with. This supplemental on-the-job training can then be leveraged and applied for the benefit of other projects within WisDOT. These contracts enhance the owners’ ability to understand, review, and develop the best design and contracts to administer the projects efficiently and with controlled and reduced risk. The overall purpose and need of these contracts is to deliver projects with the best value while leveraging knowledge of subject matter experts with significant experience in developing infrastructure within the United States.

Best Practice Stakeholders:

The stakeholders responsible for implementing this best practice are the Mega Project WisDOT regional team and the WisDOT Bureaus. While these stakeholders are responsible for identifying and defining the need for the level of technical expert contract to supplement the in-house review process, it is clear that other stakeholders benefit. Local contractors and local designers are also involved and learn from the utilization of this best practice. In addition, the Bureau of Project Development and the Bureau of Technical Services translate many of the practices initiated under these contracts into statewide efforts or specifications when applicable. This allows for transfer of knowledge and progression of WisDOT as a whole in terms of its practices and policies for effective and efficient delivery at best value.

Best Practice Organizational Foundation:

The Mega Project WisDOT regional team is the entity wherein the foundation for this best practice should reside. Decisions and considerations for usage of these technical expert contracts should be made by the specific Mega Project management teams. It should be noted that it is not necessarily the decision on whether or not to utilize these contracts, but rather the extent of scope required to provide the needed level of expertise. There is also a role for the Bureau of Project Development to be the clearinghouse for implementation of outputs of this

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best practice into statewide utilization in other projects or specifications. When individual Mega Projects realize efficiencies in the form of best practices, this knowledge and certain capabilities should be transferred to WisDOT across the organization. This allows for the facilitation of continuous improvement across the entire organization of WisDOT.

Best Practice Resourcing:

This best practice should be consultant resourced in order to continue to extract knowledge and guidance from technical experts outside of the department. The department has made strides in expanding in-house knowledge in Mega Project design, construction, staging, and schedule techniques with the successful completion of the Marquette Interchange and I-94 North-South and US-41 progress to date. However, these gains have been offset with staff loss from regular employee turnover and retirements, as well as the effects of the current national economy. The scope of services provide for knowledge and expertise that either does not exist in-house or is not readily available with current staffing levels. These contracts supplement WisDOT in-house review and owner responsibilities that are consistent with FHWA expectations. In addition, the use of these contracts continues to ensure the delivery of large and complex projects at the best value to the public stakeholders of Wisconsin.

Best Practice Cost:

The costs of technical expert services are variable from one project to the next due to the nuances and differences in scope, scale, location, and complexity. Many of these factors influence the relative need for additional and supplemental guidance to Mega Project delivery. The committee is currently collecting data from previous technical expert contracts utilized on the Marquette Interchange, I-94 North-South and US-41 projects. The current scope for the Zoo Interchange Mega Project is estimated to be in the range of \$750,000. What is difficult to quantify is the significant amount of savings that are typically realized by the projects in the areas of program cost, schedule, change orders, safety, and constructability. It is known that these contracts are providing direct value by optimizing cost, enhancing management and delivery performance, and controlling of schedule. Past technical expert contracts have been able to achieve significant reduced risk on projects and to realize significant gains in this area. The management of risk through technical experts can be quite influential in reinforcing a proactive management mindset and allows for those tasked with managing and delivering Mega Projects to come together in an open forum and to best provide strategies and action plans to proceed forward with. While the actual total cost savings amount is very hard to quantify, it can more than safely be stated by those that have worked closely with these contracts and subject matter experts that the cost savings, efficiencies, and productivity gains realized has significantly exceeded the cost of the contracts and has therefore produced a very considerable return on investment for WisDOT.

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Best Practice Benefits:

The benefits of this best practice are numerous. The most significant benefit is to support WisDOT in-house review of the consultant design and construction plans. The enhanced technical support provides national experience and encourages innovative practices. The reviews help to reduce the various risks associated with Mega Projects while enhancing the potential to take advantage of opportunities. The service contracts also help to ensure constructability within guidelines and requirements while maintaining or improving schedule and providing cost stability or reduction. Efforts to proactively identify, quantify, and manage risks also help to ensure effective and efficient management action. Management of risk and uncertainties also provides for direct focus on major issues and a means for management to understand where to focus their efforts. Controlling of costs and management of program budgets and schedules helps to provide actionable data for decisions to be made. Lastly, an important byproduct are the knowledge, skills, and experience that WisDOT staff are able to develop through exposure to national practices and approaches to Mega Project design, construction, and specifications brought to them by outside experts. Not only do projects realize enhanced value from streamlined costs, controlled schedules, and efficient delivery, but WisDOT staff are able to progress in their careers as a result of knowledge transfer.

Best Practice Challenges:

The challenges that exist with this best practice lie in the proper scoping of the contracts. Each Mega Project is unique in that it has its own challenges and complexities. WisDOT continues to develop and enhance its in-house expertise as more projects of this type are initiated. Technical expert contracts should not provide services that WisDOT has the expertise and capacity to provide internally, or which are available through FHWA, consultation with other states, or AASHTO. Additional challenges may be encountered with finding the appropriate technical expert to address the specific issue at the right time and place. The purpose of the contracts should be clearly understood. The contracts provide WisDOT staff in responsible charge of the project, enhanced and supplemented review capacity for the prime design consultant design and construction plans.

Best Practice Risk:

The risks associated with not employing this best practice are significant, but not always readily apparent. By not employing technical experts to supplement the WisDOT in-house staff in responsible charge of the project, the major risk lies in not reaping the cost stability or reduction benefits in the project. The project design and construction plan may overlook or not consider constructability and schedule enhancements. Risks can become uncontrolled, leading to significant cost and schedule overruns. In addition, management may not be the most focused on what the critical issues of delivery are. WisDOT staff will also miss the opportunity to learn procedures and practices that are not typical in the WisDOT culture and to further

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enhance and develop their individual skills. Further, the project as a whole could lose the opportunity to effectively reduce risk and/or decrease cost, which may be the difference between a successful, publicly accepted project and an unsuccessful project not embraced by the community or the taxpayer.

Best Practice Opportunities for Cost Effectiveness:

The opportunities to reduce the cost of this best practice lies primarily within the proper scoping of the contracts to match the unique challenges or specific complexities of the project which it is intended to serve. Once this is addressed, the project team should assess the current technical experience and capacity of in-house staff that is available to perform the necessary tasks, prior to contracting for the services. Over time it has been noted that certain areas of technical expertise have become a part of the WisDOT in-house staff culture and may be able to be resourced through in-house staff so that it may not need to be contracted for. Continued integration and exposure of WisDOT in-house staff to these technical processes or reviews will enable further potential cost reductions in the future with increased reliance on in-house staff. The bringing of innovative techniques, efficient design and construction methods, and quality techniques in risk management will always help to enforce the best value in delivery concept of this best practice.

Best Practice Opportunities to Expand:

The nature of this best practice is to address the technical deficiencies in expertise or resourcing within WisDOT with special technical expertise contracts. The contracts are tailored to answer the specific needs and complex nature of each Mega Project so that it may be reviewed satisfactorily by the owner to ensure cost, schedule, and risk reduction has been maximized. It is anticipated that as WisDOT expertise expands, the use of these contracts may decrease as some concurrent level of resourcing occurs.

In terms of individual projects within WisDOT, concepts of risk management and delivery best practices should continue to be utilized. There is the possibility for the use of a statewide on-call type of contract for all projects that could be leveraged to provide enhanced value to the more normal types of projects as opposed to just WisDOT Mega Projects.

5. Independent and/or Enhanced Constructability and Design Reviews

BEST PRACTICE TITLE: Independent and/or Enhanced Constructability and Design Reviews

Basis of Discussion: Evaluate the purpose and relative value of enhanced constructability and design reviews

Best Practice Scope:

The goal of providing independent and/or enhanced constructability and design reviews is to provide periodic feedback and input for the betterment of the project design. The independent review workshops or periodic reviews by outside consultants not associated with the design of the project are being performed on most of the current Mega Projects at established design milestones to add value and to ensure that the projects are meeting all standards, requirements, and relevant criteria present in the Mega Project scope of work.

Best Practice Policy Requirement:

The WisDOT and FHWA policy requirement is to provide those mechanisms or measures that will avoid construction change orders, which will cost the state additional time and funds as well as tie up resources unnecessarily. It is the expectation of WisDOT and FHWA that plans are checked and reviewed by persons that are knowledgeable in the subject matter area. The individuals conducting the review may be internal to the organization or outside consultants considered experts in their respective fields. To maintain an objective mindset and a fair level of impartiality, individuals not overly familiar with the design should be utilized.

Best Practice Purpose and Need:

The purpose of the independent and/or enhanced constructability and design reviews is to provide guidance and input on Mega Project design at critical design milestones. The review of plan sets from an independent perspective in relation to the scope of work and all other necessary project requirements provides much needed objective feedback to the project staff. It is expected that the Mega Project staff is conducting their own independent QA/QC reviews on the plans they submit to WisDOT; however, the intent of the independent reviews is to provide an extra layer of quality assurance. Extra efforts should be made in areas in which integration and overlap issues tend to arise. This occurs mostly with individual tasks within the project plan where different individuals are responsible for delivering separate portions of the integrated plan (e.g. bridge deck blisters and the pole that will be attached).

Best Practice Stakeholders:

The stakeholders involved with independent and/or enhanced constructability and design reviews include a wide range of individuals. Certainly WisDOT Management, contractors, project managers, project team members, and outside consultants are all affected both directly and indirectly by the utilization of independent constructability and design reviews. It is also possible to bring in outside agency and/or end user representatives where and when appropriate depending on the particular aspects of the Mega Project and where the project is with relation to its life cycle (i.e., milestone).

BEST PRACTICE TITLE: Independent and/or Enhanced Constructability and Design Reviews

Basis of Discussion: Evaluate the purpose and relative value of enhanced constructability and design reviews

Best Practice Organizational Foundation:

The ownership and ultimate implementation of this best practice should reside with the Mega Project Program Management team. Based on scope and scale of the project there may be a need for varying levels of review. The Mega Project manager should determine which individual projects have the highest degree of complexity and most relation to the critical path. These relatively “higher order” projects should then be the initial starting place for greater scrutiny via the independent and/or enhanced design and constructability reviews. It should be noted that Bureau and Region experts should be utilized to the fullest extent possible to avoid duplication of errors and to ensure conformance with design specifications and engineering best practices for that particular region of the state.

Best Practice Resourcing:

It has been the recent practice of WisDOT management to pursue contracts with outside consultants to perform independent and/or enhanced constructability and design reviews. The use of consultant outside resources helps to supplement WisDOT staff and to ensure that bottlenecks in progression of design are not significant when WisDOT staff is focused on working on other tasks. The most important aspect is that it genuinely introduces an outside perspective from an independent party. It may be possible to formulate a specific “center of excellence” type of QA/QC team within WisDOT to further focus groups of technical experts; however, the most cost effective means appears to be usage of outside consultants due to the potential agency costs that could be incurred in developing this expertise and carrying the associated labor and overhead costs.

Best Practice Cost:

There is a wide range of costs associated with performing independent and/or enhanced constructability and design reviews dependent on the particular aspects of the Mega Project and what services are being employed to enhance overall project value. Costs can therefore range from a few hundred thousand to several million dollars depending on the utilized level of scrutiny and the specific needs of the Mega Project. A less complex total scope will have lesser needs for enhanced review; this is not to say it is unnecessary on either account, but rather that it is scalable to the scope of construction. Projects that are more traditional construction (ex: mainline paving) versus more complex construction (ex: interchange construction) do not require as substantial of review due to the lesser degree of complexity and nature of the construction effort.

Best Practice Benefits:

There are several benefits to performing enhanced and/or independent design and constructability reviews. The main benefit of the independent constructability and design

BEST PRACTICE TITLE: Independent and/or Enhanced Constructability and Design Reviews

Basis of Discussion: Evaluate the purpose and relative value of enhanced constructability and design reviews

reviews is to uncover problems and rectify them before they reach the critical construction stage and evolve into contractor delays, which incur additional construction costs. In addition, the independent review process allows for outside expertise from someone not working on the project to scrutinize the design and its level of constructability in relation to the intended scope. Another benefit is that decisions driven by the design that may introduce greater risk and complexity can be reviewed and modified to simplify construction and reduce the overall project risk. Another main benefit of the use of this process is that WisDOT now has sufficient in-house knowledge and experience with dealing with Mega Projects to the extent that it can rely on internal agency expertise in the making of program decisions.

Best Practice Challenges:

There are a number of challenges to conducting independent constructability and design reviews. The most obvious challenge is ensuring that WisDOT receives a commensurate level of measurable and tangible benefit for the costs incurred to perform the reviews. Additionally, WisDOT has the burden of verifying that the independent reviewers have the necessary expert WisDOT skill set and knowledge of the construction and design elements with which they are tasked to review. Finally, for the successful implementation and maintenance of a formal periodic review process, WisDOT will need to ensure that it has ongoing access to a wide pool of reviewers. WisDOT will have to establish a program that can provide a number of available qualified reviewers in a wide range of technical areas to avoid over-working certain individuals or experiencing availability issues.

Best Practice Risk:

There are a few key risks that arise as a result of not performing enhanced and/or independent design and constructability reviews. The first and most prominent risk is that construction costs may increase as a result of lack of review. When projects receive little scrutiny and an independent review of the design there is the possibility that some details can be overlooked or opportunities for efficiencies can go unnoticed. Furthermore, in complex projects it is an opportunity to ensure that the design can be constructed as planned without the introduction of construction techniques that local contractors may not be familiar with, which can result in increased bid costs. The next risk is that the transfer of knowledge from other regions and from technical experts may not be leveraged. This leads to the likelihood that efficiencies may not be realized and that the designs may not be optimized for constructability. The final risk is that safety of staff and others may be compromised due to unintended consequences associated with increased levels of risk in construction that are introduced as a result of the design. There is also the remote possibility that the facility design does not function as intended and ultimately may impose some safety risk on end users of the roadway; however, it should be acknowledged that this risk is very low and is often resolved early in the design process.

BEST PRACTICE TITLE: Independent and/or Enhanced Constructability and Design Reviews

Basis of Discussion: Evaluate the purpose and relative value of enhanced constructability and design reviews

Best Practice Opportunities for Cost Effectiveness:

As stated before, WisDOT has the opportunity to leverage sufficient in-house knowledge and experience with dealing with Mega Projects. This allows the agency to look to the future to rely more heavily on its own expertise to make program decisions as opposed to fully relying on national experts. The use of these in-house experts should be pursued whenever possible to perform the periodic constructability and design reviews. With the aid of these experts, check lists can be developed for areas in which WisDOT experiences repeated problems and new best practices can be developed which will help to enhance efficiency and eliminate recurring issues in the future. This can reduce the net costs incurred in the form of consultant fees associated with Mega Projects; however, it should be noted that sufficient internal staff must be available to accommodate the workload and not inhibit progression of design.

Best Practice Opportunities to Expand:

In terms of opportunities to expand the best practice, it comes down to an issue of quality assurance/quality control (QA/QC). QA/QC should be expected on every project delivered. The development of checklists for specific review items and areas of consistent concern for both consultants and in-house staff to utilize could be developed for all projects. This helps to reinforce the review process and establish expectations of what the expected level of design scrutiny is. This also provides the opportunity to limit issues and/or enhance project value by optimizing the designs for their constructability and to allow for the leveraging of knowledge transfer.

6. Consultant Corridor Management Assistance

BEST PRACTICE: Consultant Corridor Management Assistance

Basis of Discussion: Evaluate the purpose and value of Consultant Corridor Management Assistance

Best Practice Scope:

There are several elements included in the scope of performing Consultant Corridor Management Assistance. In general, the basis of the Corridor Management Assistance is to supplement WisDOT in its efforts to effectively communicate and coordinate the activities required for the Mega Projects to be efficiently and effectively delivered at the best value for the allocated capital. The overarching goal of Consultant Corridor Management Assistance is to ensure that there are adequate resources available to effectively be able to move forward in the project delivery process while ensuring that the proper level of technical and management expertise is leveraged. Consultant Corridor Management Assistance contracts can also serve as a mechanism to foster development and growth through opportunities to educate and include WisDOT staff and further their individual career development. Included within the typical scope of Consultant Corridor Management Assistance activities are the following tasks:

- a. Project Schedule: Assist in coordinating and verifying the project schedule and tracking of critical path activities. In addition, develop risk response and mitigation strategies and action plans for tasks that are identified as being “at risk”.
- b. Project Estimate: Assist in developing, tracking, and validating individual project bid item quantities and cost estimates, along with the validation of the total program design and construction estimate for the Mega Project. Examples of Mega Projects where this has been done are: I-94 North-South, Zoo Interchange, US-41, and I-39/90.
- c. Corridor Consistency Reviews: Assist WisDOT in reviewing plans and reports prepared by other designers and internal WisDOT teams within the corridor in order to ensure quality and consistency in development and presentation of plans and reports.
- d. Corridor Standard Drawings and Standard Specifications: Assist in developing standard roadway and structure drawings along with specifications for corridor-wide use. This involves efforts for coordination with Central Office, Industry, and establishment/refinement of Standard Specifications.
- e. Corridor Construction Scheduling and Financial Planning: Assist in developing and refining a corridor-wide construction staging and scheduling plan. This task involves reviewing and incorporating work and information provided by the local program and STH 3R programs.
- f. Corridor Design Project Management and Support: Assist with corridor-wide design project management activities.
- g. Corridor Risk Management: Assist in identifying, evaluating, and refining a corridor-wide list of cost and schedule risks. This followed by developing and implementing corridor-wide risk response strategies and action plans to minimize threats and maximize opportunities. This provides a “one stop shop” for consultant design leads in the management of their projects with respect to uncertainty and risk.

BEST PRACTICE: Consultant Corridor Management Assistance

Basis of Discussion: Evaluate the purpose and value of Consultant Corridor Management Assistance

- h. Corridor Work Zone TMP: Assist in developing a corridor-wide Work Zone Transportation Management Plan (TMP) for multiple counties. This involves coordination with the Region ETO, RIMC, and RDOs in order to formulate an Incident Communications Plan.
- i. Corridor Utility and Real Estate Coordination: Assist in reviewing utility work plans within the corridor. This task includes working with county design leads across multiple counties to coordinate corridor-wide utility issues utilizing a consistent approach. This also involves assisting in tracking the purchase right-of-way and helping to assign and track the risk of the critical project parcels.
- j. Corridor Business and Labor Coordination: Assist in developing a corridor-wide business and labor strategy.
- k. Corridor DNR and Corps of Engineer Coordination: Assist in facilitating corridor agency coordination meetings and permitting activities.
- l. Corridor Inter-government Coordination: Assist in facilitating corridor-wide inter-government coordination meetings. Meetings are typically held with cities and multiple counties, as well as the State of Illinois, the Illinois State Tollway Authority, and various towns along the corridor.
- m. Corridor QA/QC Activities: Assist in developing and monitoring corridor-wide QA/QC processes and procedures. This includes both the design and construction phases in order to ensure consistent implementation of designs and quality construction in a consistent manner.
- n. Construction Coordination and Feedback: Facilitate feedback to design from construction by reviewing and investigating issues from construction, vetting recommendations with appropriate functional areas, and implementing recommendations through corridor manual updates.
- o. Corridor Drainage Coordination: Develop and maintain a database of “Drainage Areas of Concern”. This includes review of projects with construction staff to ensure drainage concerns have been appropriately addressed in the field.
- p. Corridor Supporting Documentation: Develop project briefs, newsletters, annual reports, and maps for WisDOT and key stakeholders in order to allow for effective communication and dissemination of information across all stakeholder groups.

Best Practice Policy Requirement:

The requirement for the use of Consultant Corridor Management Assistance teams is effectively part of the Mega Project Management Plan required by FHWA. The use of the Corridor Assistance Management teams ensures that the proper technical expertise is applied and that the availability of resources is addressed. The general policy is to ensure that the work can be completed with the available resources and that it is managed by technical experts with sufficient skills and capabilities. The use of Consultant Corridor Management Assistance teams

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provides this function while not burdening WisDOT with longer term legacy overhead costs for a single Mega Project.

For example: The I-94 North-South Corridor Project Management Plan approved by WisDOT on 10/23/08 and accepted by FHWA on 11/14/08, outlines the organizational structure for the I-94 North-South Corridor team, which includes a Corridor Management Team. The Corridor Management Team is charged to provide corridor-wide design management support to the SE-Freeways Team, including Quality Audits and reviewing plans for consistency with corridor-wide standards.

Best Practice Purpose and Need:

The purpose of the best practice is to manage effective delivery of transportation infrastructure development within regions of Wisconsin. The need is to mitigate resource constraints and provide technical expertise to meet the required peaks on a level of effort basis of a Mega Project. An illustrative example of this is the I-94 North-South Mega Project. This program was the largest ever undertaken by the department, involving 3 counties, 35 corridor miles, coordination with multiple local governmental agencies and the adjoining state of Illinois, several state and federal agencies, several design firms, and numerous utilities. The level of resources required to staff and manage this entire Mega Project would have had a very high toll on direct overhead for WisDOT. In addition, the acquisition of quality employees takes time. Supplementing through a consultant source speeds the process and ensures technical expertise and availability of the right resources. This is the reason why WisDOT requested assistance to organize, communicate, develop, and manage multiple design teams and stakeholders for the \$1.9 billion program over a multi-year design and construction duration.

Best Practice Stakeholders:

There are several external agency and non-agency stakeholders involved directly with this particular best practice. These stakeholders either actively participate or are passively impacted by the development and delivery of large infrastructure Mega Projects. The external agency and on-agency stakeholders are as follows:

- All Regional Ad-Hoc Sections
- All CO Bureaus
- FHWA
- FAA
- WDNR
- US Army COE
- Local municipalities and counties
- Wisconsin State Patrol
- Department of Administration
- Emergency response organizations and agencies

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- Illinois DOT
- ISTHA
- Illinois State Patrol
- All design groups involved in working on the project (WisDOT staff and multiple consulting firms)
- All construction firms building the project (ex: I-94 program has over 30 different construction firms)
- WisDOT construction staff and CEC's (ex: I-94 program has over 25 different consulting firms)

Best Practice Organizational Foundation:

The WisDOT ownership of this best practice should reside at the Mega Project manager or program management level for each Mega Project. The Mega Project manager or program management team could determine the need and refine the scope to best manage the entire Mega Project delivery effectively and efficiently with consideration to resource constraints and needs for supplemental technical guidance and expertise.

Best Practice Resourcing:

The Consultant Corridor Management Assistance teams are consultant resourced in order to fulfill staff needs and requirements to deliver Mega Projects. A direct example is the I-94 North-South program, which contracted with the Milwaukee Transportation Partners (MTP) to act as an extension of the SER staff, co-located in the SER office, working directly under the supervision of the SER Design Mega Manager. With future mentoring and knowledge transfer activities there are possibilities that in-house staff could potentially fill some of the roles that are being done by consultants; however, it should be noted that this would take the WisDOT in-house staff out of the production mode. In addition, this would require the backfilling of other positions vacated by those resources, leading to a possible need for the addition of WisDOT employees.

Best Practice Cost:

The costs of this best practice are highly variable and are largely dependent on the Mega Project scope, scale, and location. In highly urban areas the needs for various services are much different than the specific needs in more rural areas. For example, in high density urban areas with considerable traffic, more extensive efforts on a Corridor TMP may be expended in comparison to rural areas.

An example, based on previous consultant contracts, estimates approximately \$4.8 million actual cost over the 3-year period from fall 2008 to August 2011. The contract had an original 1 year duration (\$1.8 million), extended 1 year as Phase 2 (total extended to \$3.5 million), and then was amended two additional times.

BEST PRACTICE: Consultant Corridor Management Assistance

Basis of Discussion: Evaluate the purpose and value of Consultant Corridor Management Assistance

Best Practice Benefits:

There are multiple benefits that are realized from use of Consultant Corridor Management Assistance contracts. They provide an added layer of resource flexibility, lower direct overhead and operating costs over the longer term to WisDOT, specific technical expertise when needed, and support and development for internal WisDOT staff. The following list identifies the major benefits derived from use of these contracts:

- Allows for the assignment of appropriate multi-talented staff to specific services with the flexibility to bring staff in and out as needed to accomplish tasks.
- Authorship and ownership of a Corridor Design Manual provides a consistent design direction to in-house and paid consultant team members.
- Provides a direct and single point of contact for corridor WisDOT management.
- Provides corridor Quality Manager to coordinate administration of Project Quality Plans and allows for the capability to conduct corridor consistency reviews.
- Provides leadership in developing corridor specifications and details to improve consistency along the corridor – these items can also be utilized on other Mega Projects and, in some cases, adopted as statewide standards.
- Enhances communication between Region design management, construction teams, consultant design teams, ad-hocs, and Central Office reviewers and technical staff.
- Handles ongoing changes to funding adjustments and design delivery and construction schedule modifications using sound engineering judgment, good engineering practices and experience (examples: ARRA funding, LET savings, small project breakouts, TIGER grants and repackaging to accommodate local and state priorities).
- Provides effective tracking and monitoring of utility and right-of-way issues – items that are typically on the critical path for project development.
- Allows for the assembly of project estimates comprised of unit pricing and tracked quantities on quarterly basis using database to identify trends in construction pricing.
- Provides tracking and management of Drainage Areas of Concern both during design and construction resulting in reduced claims by property owners along the corridor.
- Advance coordination with FAA eliminates project shutdowns.
- TMP work led by the corridor team minimizes traffic delays during heavy traffic volume periods while providing incident management procedures and alternate routes that can be used during freeway closures.
- Assists the department with outreach and coordination of DBE, local and small contractors by developing a “bulls-eye” marketing approach and using labor and business committees to communicate corridor contracting needs.

BEST PRACTICE: Consultant Corridor Management Assistance

Basis of Discussion: Evaluate the purpose and value of Consultant Corridor Management Assistance

Best Practice Challenges:

The major challenge associated with the best practice of utilizing Consultant Corridor Management Assistance contracts is in establishing communication and levels of trust at the outset of the corridor management contract with department and outside consultant staff who are not familiar with the concept.

Best Practice Risk:

There are some risks associated with not adopting the use of Consultant Corridor Management Assistance contracts. Traditional methods, which utilize multiple design teams, typically lead to inconsistent deliverables. The inconsistent quality of deliverables can cause an increase in change order occurrence with associated increases in change order costs. Change orders can create additional traffic delays during construction and the higher likelihood of traffic incidents, which may result in increased user delay cost. The final risk is that designs are not delivered on schedule in terms of meeting critical project milestones. These risks are mitigated through better coordination and strict adherence to standards and project schedules through the guidance of the Consultant Corridor Management effort.

Best Practice Opportunities for Cost Effectiveness:

There are a couple of key areas that can be leveraged to obtain more cost effectiveness in the utilization of Consultant Corridor Management Assistance. The first is to utilize the processes and procedures developed on other Mega Projects (ex: I-94 North-South or US-41). This avoids situations where other Mega Projects must “re-invent the wheel”. Second, use of experienced corridor staff to minimize the learning curve and building off of established relationships provides for more consistent and effective project and program management efforts. Third, continuing to integrate WisDOT staff and PMs to facilitate in-house management of some tasks helps to increase internal capabilities while also supporting Mega Project needs for delivery.

Best Practice Opportunities to Expand:

It is recommended to continue the corridor manager efforts for future Mega Projects through the use of Corridor Management Assistance efforts. It should be noted that the overall efforts will need to be evaluated on a Mega Project by Mega Project basis for considerations to total scope, scale, location, duration, and resource constraints internal to WisDOT. Any of the processes, procedures, and approaches listed above can be adapted as appropriate to the needs of WisDOT department sections, projects, and work groups. The resourcing of this effort is predominantly consultant based at current; however, it should be noted that over time the in-house capabilities can be developed through working with consultant staff and engaging in knowledge transfer activities.

7.Owner Controlled Insurance Program (OCIP)

BEST PRACTICE TITLE: Owner Controlled Insurance Program (OCIP)

Functional Area: Evaluate the usage and applicability of an Owner Controlled Insurance Program (OCIP)

Best Practice Scope:

The Owner Controlled Insurance Program (OCIP) is a plan in which WisDOT secures all appropriate insurance coverage for all contractors working on the project and controls all aspects of safety for the workers and public. Typical OCIPs include Worker's Compensation, General Liability, Excess Liability, and Builder's Risk insurance coverage. In some instances OCIPs may include environmental coverage, Railroad Protective Liability, Professional Errors/Omission.

Best Practice Policy Requirement:

Generally speaking, OCIPs can be placed on any project of any complexity or value; however, it is the experience of the Department that projects with values exceeding \$250,000,000 in construction costs are most likely to produce the best economies of efficiency and scale. Smaller projects tend not to receive significant cost advantage from this approach. Projects of higher complexity that are less than \$250,000,000 in construction cost may offer some advantage to using OCIPs; however, usage of OCIPs should be evaluated on a case by case basis.

OCIPs in Wisconsin are regulated by DWD in Chapter 102, WI Statutes, and DWD 80.61 Wisconsin Administrative Code. In essence these regulations require that any project administered as an OCIP must cover all work and workers included in that project.

Best Practice Purpose and Need:

The purpose of OCIPs is to capitalize on a method for risk pooling of all required insurance coverage and safety controls. Use of OCIPs in the proper application (typically projects greater than \$250,000,000 in construction value, or a Mega Project) present an opportunity to introduce economies of scale into the insuring of work and safety provisions of the project's associated stakeholders. The need for the OCIPs is to centralize all insurance and safety management and controls into a single point and a source where this information can be easily accessed when needed. With increasing complexity and multiple individual projects, as is typically the case on Mega Projects, the economies of scale achieved become more pronounced.

Best Practice Stakeholders:

There are a few stakeholders involved in the usage of OCIPs. Internally, there is the WisDOT oversight team that manages the program through review of recommendations and providing of direction. There is also the internal project team that must manage and deliver the work.

Externally stakeholders include the insurance broker that must review proposals to make a determination of feasibility of executing an OCIP. Once the review is completed, the project team and WisDOT oversight can provide direction. Externally, there are also the contractors tasked with completing the work. They must be informed and educated about how they are

BEST PRACTICE TITLE: Owner Controlled Insurance Program (OCIP)

Functional Area: Evaluate the usage and applicability of an Owner Controlled Insurance Program (OCIP)

impacted by the OCIP and how it relates to them performing their work and completing projects. Interaction with contractors performing the work is facilitated by the project team.

Best Practice Organizational Foundation:

Within WisDOT the ownership of the best practice resides within two primary layers. First, there is the project team. The project team must gather the necessary data to evaluate the feasibility of executing an OCIP for any given project. Project managers must be aware of the availability to execute an OCIP and have the capability to gather the necessary information to first, see if it is feasible and second, review if the economies of scale make sense. This places the general ownership on a project basis. Information required to analyze the feasibility of deployment of an OCIP includes the following:

- General description of the project
- Estimated project value
- Estimated capital construction cost
- Construction schedule
- Stages and length of project (including number of miles and project mileposts/boundaries)
- Estimated total man-hours to complete work
- Estimated number of involved contractors (inclusive of the anticipated number of contract lettings)
- Project risk exposures (i.e., structures, bridges, streams, rivers, lakes, utilities, etc.)
- Review for public information about the project. (i.e., checking to see if there is a website that provides general information about the project)
- Preliminary project plans

The second layer of ownership within WisDOT is the OCIP oversight team. The WisDOT oversight team is tasked with reviewing of recommendations and providing direction in terms of decisions regarding usage of OCIPs. The oversight team can provide feedback in terms of the relative scalability and effectiveness of an OCIP based on their prior project experiences.

Best Practice Resourcing:

This best practice is currently resourced in-house utilizing WisDOT staff. The individual project team members making decisions for the usage and execution of OCIPs are in-house. The WisDOT oversight team is also comprised of internal WisDOT staff. The staff members taking ownership for oversight and management of the OCIPs are also internal to the department. While this task is predominantly controlled as an internal function, there is the opportunity to utilize supplemental consultant staff for the overall processing side of the OCIP. Initial

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Functional Area: Evaluate the usage and applicability of an Owner Controlled Insurance Program (OCIP)

determinations and evaluation should be done by internal WisDOT staff. Consultants could supplement in supporting roles to ensure that the OCIP is being properly executed, provides sufficient coverage, and ensures full liability is covered by WisDOT.

Best Practice Cost:

The overall cost of the best practice is very dependent on the specific project it is being utilized on. The nature of the complexity, duration, number of employees and contractors covered, and total construction value of the Mega Project will dictate the total cost of implementation. Based on experience of WisDOT staff utilizing OCIPs, the general threshold of \$250,000,000 in capital construction cost helps to ensure that the proper level of scalability is available to generate possible beneficial gain from economies of scale.

Best Practice Benefits:

The benefits of utilizing this best practice are largely dependent on a couple of factors. First, the project must offer enough opportunity for streamlining and centralization of costs, so it must have a relatively significant size in capital construction cost. Second, the project must offer enough complexity in order to ensure that it makes sense for the OCIP to be executed and centrally owned and managed by WisDOT in lieu of contractors providing and administering their own insurance and safety provisions. Refer to the section covering the opportunities for cost effectiveness below in order to review the general criteria considerations for the use of OCIPs. When these general criteria are met, the following benefits are the result:

- Centralized insurance program with a direct point of contact for all contractors.
- Allows for a single insurance carrier that will respond to all claims with a consistent approach in lieu of potential issues when involving multiple insurance carriers.
- Provides economies of scale when exposures dictate higher than standard liability limits.
- Offers the opportunity to centrally control and manage the claims of the public.
- Provides coverage for all projects and employees constituting a Mega Project.
- Provides benefits of risk pooling that reduces total insurance costs across a series of multiple projects.
- Reduces required paperwork and oversight efforts of project team.
- Ensures consistent application of safety provisions, including policies surrounding a drug free work environment and employee safety between contractors.
- Allows for the enhancement of usage of DBE contractors, thereby by increasing the effectiveness of DBE goals.
- Provides a competitive leveling amongst multiple contractors bidding on projects.

BEST PRACTICE TITLE: Owner Controlled Insurance Program (OCIP)

Functional Area: Evaluate the usage and applicability of an Owner Controlled Insurance Program (OCIP)

Best Practice Challenges:

There are some challenges to consider when implementing the best practice of utilizing OCIPs. First and foremost, there must be a project with significant scalability and complexity that meets the criteria to make use of an OCIP economically feasible. Second, if the criteria make sense, it must also be reviewed by an insurance broker to determine the feasibility. Obtaining a reasonable and feasible approach can be challenging in that it is not always possible to include all projects into a total OCIP. As a result, there may be the possibility to obtain an OCIP for a majority of the projects, but due to complexities and scope of work on certain individual projects an individual policy may need to be obtained. This requires the technical knowledge to be able to evaluate the true feasibility and what makes the most sense in terms of WisDOT minimizing its liability and ensuring that proper coverage is obtained.

Best Practice Risk:

There are multiple risks of *not* utilizing an OCIP when it is both feasible and meets the general criteria for consideration. The risk of not doing the best practice largely results in the possibility of additional coordination and communication efforts. In addition, there may be further efforts required in the processing and management of individual policies and claims. In a large and complex project this can become more time consuming and end up costing WisDOT in terms of the level of effort required to manage many individual policies as opposed to a centralized management approach that is more inclusive to all projects comprising a single Mega Project.

In addition, there is the risk that costs incurred for insurance coverage do not take advantage of potential economies of scale that may have allowed WisDOT to reduce overall coverage costs. In consideration of the provisions for worker safety, there may also be inconsistent applications of policy that may increase potential liability risk to WisDOT across multiple projects. The risk of having to deal with different insurance carriers can also be daunting when delivering a series of closely interrelated projects. It should be noted that this could perhaps be the single biggest risk of not utilizing an OCIP as there is the increased risk of unfavorable resolution being achieved when multiple insurance carriers are trying to limit their individual exposure.

Best Practice Opportunities for Cost Effectiveness:

The concept of utilizing an OCIP by its very nature is rooted in cost effectiveness. The use of an OCIP offers cost effectiveness in net coverage costs for a Mega Project, as well as streamlined overhead and management related costs associated with actively managing insurance coverage and safety provisions. In order to determine whether an OCIP should be considered, the following offers a general set of criteria that should be met in order to generate realistic economies of scale:

- Capital construction costs exceed \$250,000,000.
- The construction duration fits within a 6 year window.

BEST PRACTICE TITLE: Owner Controlled Insurance Program (OCIP)

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- The project includes vertical work, water crossings, live traffic in work zones, high speed traffic, and environmental exposures.
- There is a need to control and manage claims of the public in a consistent manner (i.e., more urban areas versus rural areas).
- The safety of workers is of high concern due to complexity or nature of the construction work.
- There is a need for consistency in applying a drug free work place and employee safety between contractors.
- The exposures of a series of projects comprising a Mega Project dictate higher than standard liability limits.
- There are multiple contractors that may result in multiple insurance carriers with conflicting interests.
- There is a desire to enhance DBE goals or increase DBE participation.
- The bidding pool of contractors allows for opportunities in competitive leveling to realize better project bid prices.

These guidelines should be considered to be a general starting point for evaluation as to the feasibility and effectiveness of the usage of an OCIP. This is not to say that these general criteria must all be met or that they are concrete in nature, but rather this list is a guideline that can help project managers establish the general feasibility of pursuing an OCIP. Engaging in a high-level review of this criteria listing can help to avoid unnecessary efforts to compile documentation and data for review by an insurance broker when there may not necessarily be economic feasibility.

Best Practice Opportunities to Expand:

The logical use of an OCIP must first present the opportunity for a reasonable economy of scale to be achieved such that cost savings can be realized. Such situations for future expansion may be to consider applying the OCIP approach to a series of individual projects on either a corridor or regional basis. Single projects in a region for a planned work period could be covered under a uniform policy and safety provision. Likewise, a series of individual interrelated corridor projects could be bundled into an OCIP if the planned work could all be completed within a six year horizon. Another option may be to consider bundling similar construction projects across the state into a uniform OCIP; however, this may not offer the most optimal situation as conditions and construction means and methods vary from region to region. Overall, in any situation in which a series of individual projects could be bundled under a single policy for coverage there exists the possibility to reduce total coverage costs and associated oversight and management costs. Considerations for feasibility and true economies of scale and efficiencies should always drive the consideration of the use of an OCIP.

8. Use of Emergency Response Mitigation Contracts

BEST PRACTICE TITLE: Use of Emergency Response Mitigation Contracts

Basis of Discussion: Identify the need and roles and responsibilities of Bureau and Mega Project Teams

Best Practice Scope:

Maintaining an efficient and flowing transportation network is important in the execution and delivery of a Mega Project. This is accomplished through the use of well defined Transportation Management Plans (TMPs). Within these TMPs, emergency response mitigation contracts are primarily used for freeway law enforcement, local law enforcement and fire departments. Freeway law enforcement provides dedicated emergency response in the work zone and helps to clear incidents quickly while controlling work zone speeds. Local law enforcement assists with traffic control on local roads for detour routes and local road speed management. Fire departments plan emergency response based on construction closures. All three agencies participate in project traffic meetings, review roadway closures, and crisis communication planning. This provides a means of communication and coordination with the involved agencies that ensures a clear plan of action.

Best Practice Policy Requirement:

WisDOT is required by federal regulation and state policy to develop a transportation management plan (TMP) for its freeway reconstruction projects. The following is an excerpt from the *USDOT Work Zone and Safety Mobility Program Website* demonstrating the federal regulation enforcing such practices:

“The Work Zone Safety and Mobility Rule was published in the Federal Register (69 FR 54562) on September 9, 2004 with an effective date of October 12, 2007. The rule was updated to address the changing times of more traffic, more congestion, more work zones on existing roads carrying traffic, and safety issues.”

There are also internal policies within WisDOT guiding the efforts to engage in the use of emergency response mitigation contracts. The WisDOT Facilities Design Manual includes a work zone policy statement in Chapter 11, Section 50 which reads:

“The Wisconsin Department of Transportation (WisDOT) is committed to promoting safety for the traveling public and workers, minimizing congestion and adverse traffic impacts, and providing for improved public satisfaction during construction, maintenance, utility, and all other activities performed on or near the WisDOT highway network. Compliance with this policy will reduce work zone crashes, travel time, and provide benefits to all stakeholders. All regional offices and statewide bureaus are responsible for implementing the portions of this policy affecting their operations.”

A major component of the transportation management plan includes coordination with emergency responders and incident management during construction. These policies precipitate the need for dedicated emergency response resources during Mega Project construction. When considering the scope and scale of Mega Projects, the relative effectiveness in the use of emergency response mitigation contracts becomes more pronounced. With more complex scope and scalability, coordination becomes more important in the management of

BEST PRACTICE TITLE: Use of Emergency Response Mitigation Contracts

Basis of Discussion: Identify the need and roles and responsibilities of Bureau and Mega Project Teams

traffic within the work zone. Ensuring that emergency response mitigation contracts are utilized as a means of coordinating and managing traffic is a best practice for meeting both Federal and state requirements and policy.

Best Practice Purpose and Need:

The purpose of using emergency responder contracts is to coordinate dedicated emergency resources available in the Mega Project construction zone and along the adjacent arterial roadway system. The need is to increase system reliability while facilitating quick clearance of a construction zone after an incident. The construction traffic management plan identifies the dedicated emergency response resources that will be utilized for the management of traffic in the construction zone. The identified and participating resources are able to focus on the project area and supply on-call services to manage traffic congestion and incidents during construction in a coordinated fashion.

On Mega Projects construction staging required to maintain a functional roadway network and reduce impacts to motorists is becoming increasingly more complicated. Careful consideration goes into staging plans, but there must be a supporting network of responders in order to ensure these staging plans are functioning as intended. Public safety on the transportation network is of considerable importance and proper staging and traffic management is part of ensuring a safe and reliable facility. With an increased focus on ensuring public safety on Mega Projects, additional coordination and planning is required to ensure successful management of the transportation network. Utilizing dedicated emergency response resources is a major part of ensuring this success.

Best Practice Stakeholders:

There are several stakeholders involved in the implementation of the best practice of utilizing emergency response mitigation contracts. Aligning expectations and efforts of all involved stakeholders takes careful coordination and planning. It is recommended to engage in communication and coordination with stakeholders as soon as possible in order to foster relationship building and buy-in to the process. Internal WisDOT stakeholders include the Mega Project team, STOC, contract services, BPD and DSP. External agency stakeholders include the county sheriff, local police departments, and local fire departments.

In the execution of the best practice, there is a distinct hierarchy of resources that must be engaged from within WisDOT. There is the project level that may include WisDOT staff and consultants, the Region level that includes WisDOT staff, and the Bureau level that also includes WisDOT staff. The following summarizes the level in which resources are engaged and the basic function of doing so.

Project level: At the project level, the TMP team resources manage and implement project TMPs. On a Mega Project this may consist of dedicated in-house and consultant resources being primarily responsible for the TMP and its implementation. The TMP team coordinates

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Basis of Discussion: Identify the need and roles and responsibilities of Bureau and Mega Project Teams

closely with region system operations and Bureau of Transportation Operations.

Region level: At the region level, WisDOT Region system operations staff review and approve project TMPs. Engaging of WisDOT Region system operations staff provides a link to operations planning and coordination between projects. This unit is used as a technical resource to guide and implement key transportation management strategies.

Bureau level: At the bureau level WisDOT Bureau of Transportation Operations staff review and approve project TMPs. Engaging the Bureau of Transportation Operations provides a link to the STOC, as well as helps to guide statewide policy coordination. This unit is used as a technical resource to guide and implement key transportation management strategies.

When a project is large and covers several regions or geographic locales, the Mega Project team may find it useful to employ a more distributed approach to coordination of external resources. Responsibilities may be divided and managed based on specific locations. In addition, developing and maintaining an updated stakeholder distribution list should be performed. This allows project information to be distributed efficiently and keeps stakeholders informed of project schedules and resources. An example from a WisDOT Mega Project that illustrates this is the I-94 North-South Project where the deployment of emergency response mitigation contracts is divided by geographic area and includes three counties (Milwaukee, Racine, and Kenosha). Milwaukee County is one stakeholder group and Racine/Kenosha Counties are another stakeholder group. A comprehensive stakeholder distribution list for each county is maintained as a tool to facilitate communication and coordination.

Stakeholder involvement is critical to the success of Mega Projects. On Mega Projects stakeholders are involved in several ways. The following presents an outline of areas where stakeholders are engaged, as well as the specific items where they provide input and interact:

1. Project Planning Meetings (Design)
 - a. Review of construction staging plans
 - b. Planning of transportation mitigation strategies
 - c. Defining detour and alternate routes
2. Crisis Communication Planning (Pre-Construction)
 - a. Development of a communication plan that engages and includes contractors and the construction engineering team
 - b. Establishing of a forum for following the ETO process
 - c. Perform a mock incident to test communication paths
3. Traffic Meetings (Construction)
 - a. Communicating weekly construction closures
 - b. Planning resource needs for upcoming closures
 - c. Reviewing emergency access changes
 - d. Receiving stakeholder input on project issues

BEST PRACTICE TITLE: Use of Emergency Response Mitigation Contracts

Basis of Discussion: Identify the need and roles and responsibilities of Bureau and Mega Project Teams

Best Practice Organizational Foundation:

The best practice should reside organizationally within the individual Mega Project teams. The Mega Project team is responsible for managing and implementing an effective Transportation Management Plan (TMP). As a result, the Mega Project team should work closely with both WisDOT and external agency stakeholders toward accomplishing the common goal of executing an efficient and effective TMP. Ultimately, the Mega Project team is responsible for the success or failure of the project, and maintaining an efficient and well managed flow of traffic is part of delivering a successful project. When the Mega Project team works closely with WisDOT stakeholders to develop, negotiate, and manage emergency response mitigation contracts a positive outcome can be achieved.

Best Practice Resourcing:

The resourcing of this best practice is both in-house and consultant; however, it should be noted that it is primarily in-house WisDOT staff performing the effort. WisDOT is the responsible party tasked with developing and executing emergency response mitigation contracts. Much of the coordination and communication should be performed by WisDOT staff with supplementary administrative support by consultants being utilized on an as-need basis.

An example from the best practice is illustrated by the actions of WisDOT Southeast Region staff. In the Southeast Region, the WisDOT Mega Project team coordinates implementation of emergency response mitigation contracts. One exception is for Mega Projects with State Patrol needs. The DOT Mega Project team coordinates with STOC to begin the process. STOC then develops and executes the contract with input from the Mega Project team. Consultants are utilized to provide administrative support for emergency response mitigation contracts.

Best Practice Cost:

The cost of utilizing emergency response mitigation contracts is dependent on many factors. This best practice varies greatly depending on the length and duration of the construction. It is also influenced by the staging complexities for each individual project and their associated impacts with respect to the total Mega Project. In order to help provide some definition in the cost of engaging in this best practice, two examples are included. The two examples are Milwaukee County 2009-2010 Construction and Racine/Kenosha Counties 2009-2010 Construction costs for employing emergency response mitigation contracts. The tables on the following page summarize these example costs.

BEST PRACTICE TITLE: Use of Emergency Response Mitigation Contracts

Basis of Discussion: Identify the need and roles and responsibilities of Bureau and Mega Project Teams

I-94 North-South Freeway Project 2009-2010 Construction (Milwaukee County) Emergency Response Mitigation Contracts

Agency Type	Cost
Freeway Law Enforcement	████████
Freeway Service Team	████████
Local Law Enforcement	████████
Local Fire Departments	████████
Total	████████

I-94 North-South Freeway Project 2009-2010 Construction (Racine/Kenosha Counties) Emergency Response Contracts

Agency Type	Cost
Freeway Law Enforcement	████████
Freeway Service Team	████████
Local Fire Departments	████████
Total	████████

Note that the costs presented in the tables above do not include the cost of WisDOT resource time. When considering usage of this best practice, costs of WisDOT staff time and consultant resources should be taken into consideration. In relation to the example above, it is estimated that WisDOT project staff time specifically related to emergency response mitigation contracts for 2009-2010 is estimated at 400 hours. The time for WisDOT staff includes developing, executing, and managing contracts. WisDOT contract specialists are also utilized to process invoices. This time should also be accounted for. In relation to the example presented above, the amount of time utilized is estimated at 200 hours for the two year period of 2009-2010. Multiplying each of the numbers of hours above by an average WisDOT full time equivalent employee hourly rate would represent the approximate internal cost.

The time expended by consultant support and supplemental staff should also be taken into consideration. In relation to the example presented above, consultant resources for the 2009-2010 time period efforts are estimated at 400 hours. Multiplying this by an average consultant hourly rate would represent this approximate external cost. This time includes contract development and coordination, as well as other administrative support functions required on an as-needed basis.

Best Practice Benefits:

There are several benefits to utilizing emergency response mitigation contracts. The associated benefits of emergency response mitigation contracts include:

- Promoting a safe work zone for the public, contractors and construction staff
- Enhanced public safety

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- Improving system reliability
- Facilitating quick clearance of work zone incidents
- Dedicated emergency response personnel intimately familiar with the project
- Maintaining critical capacity during planned freeway closures
- Faster response to and clearance of work zone incidents
- Minimizes additional impacts on roadways that are not under construction

Best Practice Challenges:

There are multiple challenges that may be encountered when implementing the best practice of emergency response mitigation contracts. There is the challenge of gaining trust of the stakeholders while helping them to understand the benefits of project participation. There is also the challenge of defining the scope of emergency response mitigation contracts and the definition of project related efforts. Finally, there is the internal challenge of managing contracts and completing invoices in a timely manner. Each of these challenges will be discussed in more detail below.

The first challenge of gaining trust of emergency response stakeholders is one of the biggest challenges. This can be accomplished by helping the specific stakeholders understand the benefits of project participation, as well as communicating the benefits and importance of their input and feedback. Attendance and participation of emergency responders is critical to the success of Mega Projects due to the more complex nature. Along with gaining the trust of the various stakeholders is the challenge of defining specific rates for services while maintaining consistency between agencies. The establishing of an equitable rate helps to build trust with WisDOT as a partner in the management of traffic. The application of a uniform rate policy in practice may benefit WisDOT in future emergency response mitigation contracts.

Another challenge in application of the best practice of emergency response mitigation contracts is in defining the scope of emergency response contracts and the associated definition of project related efforts. Typically such contracts are utilized for dedicated freeway law enforcement, local street traffic management (specifically for project detours), traffic closure scheduling meetings, and emergency response planning efforts. This does not include resources encompassed in daily operations such as responding to traffic incidents.

The final challenge is more internal to WisDOT. The challenge mainly revolves around the WisDOT Mega Project team's management of the contracts, as well as completion of invoices in a timely manner. There are many stakeholders in the best practice process and, at times, it may become confusing to track all sources of data and information. The management procedures of the best practice of emergency response mitigation contracts are recommended to be integrated into the consultant services process. The following page includes an example process summary for the management procedures developed in 2009 by the I-94 North-South Mega Project team that was found to be effective as a best practice.

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Traffic Mitigation Contract Management Process (April 2009)

1. Identify objectives of the contract and meet with the local agency contact to discuss scope and fee.
2. Finalize the scope and fee of the contract. Return to local agency contact to obtain signatures.
3. Receive signed copies back from the local agency. Document the receipt of the signed contract and complete a DT25 and transmittal letter. Submit the signed contracts and other forms to the Major Projects Liaison.
4. Major Projects liaison gives the contract to the Project Services Section Chief for signature.
5. The signed contract is forwarded to the Proposal Management Section Chief. This section enters the signed contract into the Encumbrance and Accounts Payable System (EAPS).
6. The traffic management plan lead receives the signed contract back from the proposal management section. A Notice to Proceed (NTP) transmittal letter and one of the signed contracts are sent to the local agency.
7. Local agency invoices are to be sent to the attention of the Project Construction Technical Supervisor.
8. The traffic management plan lead reviews the invoice and recommends approval of the Project Construction Technical Supervisor.
9. The approved invoice will be given to the project cost tracker for input into Expedition and processing by the Bureau of Business Services – Fiscal Services Section.

Best Practice Risk:

There are several risks associated with not implementing the best practice of utilizing emergency response mitigation contracts on Mega Projects. First, there is the risk of not ensuring proper public safety, accessibility and reliability during construction. There is a need for public users of roadway facilities to experience a system that is safe, accessible, and reliable. Ensuring that public safety is a high priority is part of a WisDOT strategic goal vested in maintaining an effective and efficient transportation infrastructure for the state and its public users. Second, there is a need for emergency responders to be constantly and consistently informed. Note that construction may impact response routes and times in relation to plausible incidents; however, maintaining an approach of consistent and continuous updates ensures that stakeholders are informed and that expectations are in alignment. Third, there is a need for emergency responders to be dedicated to the specific project needs. This means that the associated stakeholders are in agreement to be “on call” to the associated WisDOT Mega Project team. This ensures that the necessary resources required to manage traffic and possible incidents are available when needed. Fourth, there is a need for emergency access coordination

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between specific jurisdictions. Coordinating across the multiple jurisdictions and locations ensures that the risk of inconsistent implementation and traffic management is mitigated. Fifth, the use of this best practice reduces the risk of the occurrence of reduced system reliability as a result of providing a mechanism to facilitate quick clearance of construction zones during any incidents. Overall, not implementing this best practice poses many risks of project delivery on Mega Projects due to the complex nature and scope of delivering such large-scale projects.

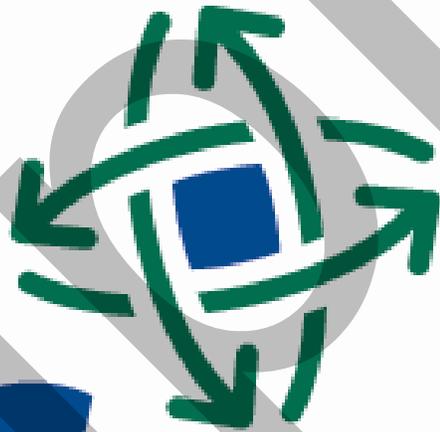
Best Practice Opportunities for Cost Effectiveness:

There are a couple of opportunities to enhance the level of cost effectiveness when deploying the best practice of emergency response mitigation contracts. The first opportunity is to reduce cost by standardizing the application of specific strategies based on construction staging, traffic volumes, and other traffic characteristics. This would help to define emergency response costs of Mega Projects up front by having a specific standard, repeatable protocol to follow. This also allows for the establishment of a consistent policy on what should be utilized and is acceptable for specific projects. Secondly, there is the option to work to standardize the rates used for WisDOT mitigation efforts. The rates currently vary based on the jurisdiction of the specific locations and the applicable definition of straight time vs. overtime for these contracts. By establishing a consistent policy in terms of acceptable rates, the application of this best practice will be more predictable in terms of the anticipated costs when utilizing it in the future. Overall, observing these potential opportunities to streamline costs may enable WisDOT to more effectively expend their capital on both Mega Projects and more traditional projects alike.

Best Practice Opportunities to Expand:

There are some opportunities to expand the use of emergency response mitigation contracts as a best practice on transportation infrastructure projects within Wisconsin. This best practice is currently used to some extent on other more traditional projects. The best practice is typically utilized on Freeway/Expressway projects. In some cases, the best practice may benefit arterial related projects with high traffic volumes and significant construction impacts or constraints to the capacity of the facility with respect to traffic volumes and travel times. Standardizing the use of emergency response mitigation contracts through an internal WisDOT policy would leverage the consideration of the best practice and allow for additional benefits to the public during construction, inclusive of enhanced safety and higher overall system reliability. Also, standardizing the procedures for implementation and management could consolidate the best practice efforts across WisDOT while facilitating a documented approach to implementation on non-Mega Projects within the state of Wisconsin.

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