

# ***Reducing Meeting Costs in Eastern Federal Lands Highway Division's Project Delivery Process***

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**Abstract** — *Inefficiencies in the handling of meetings result in large amounts of time and money wasted every year. This project aimed at identifying strategies to improve the handling of meetings in Eastern Federal Lands Highway Division's (EFLHD) Project Delivery Process and reduce costs by \$20,000 annually through their implementation. To accomplish this, a literature review and a survey of EFLHD's functional and project managers were conducted. Making 50-minute meetings a standard, removing non-essential personnel from meetings, and recommendations applicable to specific meetings are strategies identified for improving the handling of meetings in EFLHD. Cost savings of approximately \$264,000 annually were projected through the implementation of these strategies.*

**Key Terms** — *Federal Government, Projected Savings, Recommendations, Survey Results*

## **INTRODUCTION**

Eastern Federal Lands Highway Division (EFLHD) is part of the Office of Federal Lands Highway of the Federal Highway Administration, a Federal agency under the United States Department of Transportation [1]. Its purpose is to deliver highway and bridge construction projects for partnering Federal and State government agencies. It does this by following the Project Delivery Process (PDP). Project costs are paid by the partner agency and therefore, to provide the most value, EFLHD strives to keep its costs as low as possible.

One particularity of the PDP is that it requires multiple meetings be held throughout the life of each project. Data shows that there are between 36 and 56 million meetings each day in the United States and inefficiencies in meetings are estimated

to cost \$70 to \$283 billion to the United States economy each year [2].

Improving the management and handling of meetings in the PDP offers the potential to save both time and money.

## **OBJECTIVE**

The objective of this project was to identify implementable strategies that reduce costs associated with meetings in EFLHD's PDP by \$20,000 annually.

## **METHODOLOGY**

To complete this project, a literary review was undertaken focused on typical issues that result in inefficiencies in meetings, possible solutions, and the cost of inefficiencies in meetings. The functional and project managers involved in the PDP were surveyed to identify issues and behaviors occurring in EFLHD that could result in inefficiencies in meetings and gain their recommendations on how meetings could be improved. An analysis of the information gathered was performed and recommendations developed. The amount of time saved by the implementation of the recommendations was estimated and annual cost savings were projected.

## **ANALYSIS OF THE CURRENT SITUATION**

To understand EFLHD's current situation, it was necessary to investigate how meetings were being conducted and what were the major issues occurring in them. A survey was developed to capture the perspective of functional and project managers and get their opinion on the need and handling of meetings, how to improve them, common disruptive behaviors of staff in them, and

the importance of their team’s attendance to some of them. The following subsections provide background information regarding typical meetings in the PDP and a summary of the survey findings.

**Typical Meetings in the Project Delivery Process**

There are multiple meetings that are a standard part of the PDP. This section provides a short description of these meetings along with estimates of how many are held per year (Qty), duration, and number of attendees by General Schedule (GS) grade in Table 1.

The first project meeting in the PDP is the Pre-scoping. In it, the project manager provides a general description of the project and a decision is made on which disciplines need to attend the scoping. Following the Pre-Scoping, a Scoping Meeting is held. The Scoping is a data gathering meeting with the partner agency at the project site. This meeting is divided in two main components: general project discussion and the site visit.

Following the Scoping, the Kickoff Meeting is held. The project is discussed considering the information gathered through the Scoping. Also, the functional disciplines provide the necessary activities and resources to complete the project. This information is used to develop the project schedule and budget. The Kickoff marks the start of the Plans, Specifications and Estimate (PS&E) package development process.

Comment Resolution (CR) Meetings are held to discuss the comments provided for the 30% and 95% PS&E distributions, as applicable. The Plan-in-Hand (PIH) meeting is typically held at 70% and is one in which team members meet the partner to discuss the design at the project site.

The Pre-Bid meeting is held with potential bidders to give a brief description of the project and answer their questions at the project site. This meeting is only held for complex projects.

Project Specific Issue Meetings are held to discuss and resolve issues in the project. They are typically scheduled for 30 minutes to an hour. The number of these meetings varies drastically depending on the complexity of the project.

**Table 1  
Typical Meetings Quantities, Durations, and Attendees**

Meeting	Qty	Duration (hours)	Attendees**		
			GS-12	GS-13	GS-14
Pre-scoping	44	1	3.5	10.5	0.5
Scoping	44	24*	4	2	0
Kickoff	48	1.5	4	10.5	0.5
30% CR	32	1.5	4	4.55	0
PIH	34	24*	3	2	0
95% CR	45	3	4	5	0
Pre-Bid	4	24*	0	3	0
PAM	13	3.5	2	24	7

\*Includes travel time

\*\*Decimals are used to account for partial attendance rates

The last type of meeting in the PDP is the Project Advancement Meeting (PAM). This meeting is held every 4 weeks to discuss major issues on select projects with upper management. Most functional and project managers are expected to attend this meeting in its entirety.

**Summary of Survey Results**

This section summarizes relevant findings of the survey. At least one manager from each department involved in the PDP responded to the survey and there were 24 survey respondents in total. Percentages for the responses received for each question were calculated and are referenced in the notes below.

There were multiple questions regarding the number of meetings in the PDP. Interestingly, 61% of the respondents did not think that the process itself had too many meetings but instead associated the abundance of meetings with how many projects each person was handling. This makes sense, since currently 228 projects are being run in EFLHD with 11 project managers. However, many respondents (63%) did indicate that there were unnecessary meetings in the process. One meeting highlighted as unnecessary was the Pre-scoping. Others indicated that it was not necessary for their team to attend some of the meetings, such as the Pre-scoping and Kickoff. Most of the respondents (74%) agreed that other means of communication,

such as emails and phone calls, would be better suited to address items in some of the meetings.

The survey questioned multiple aspects of the Project Advancement Meeting, since it is a long meeting with many high-level attendees. Most of the respondents (90%) indicated that the PAM is essential to the PDP; 63% thought that it provides value by increasing accountability and 71% thought it was effective in solving project issues. Respondents were divided in their opinion regarding the duration of this meeting; however, 62% thought the meeting could be shortened and almost all (95%) thought there would be no value in lengthening it. Different ways to organize this meeting were proposed by respondents to allow some participants to leave the meeting earlier.

Another set of meetings that the survey inquired about was the Comment Resolution Meeting. Most of the respondents (82%) thought these meetings could be made shorter with better preparation by the host. Moreover, the respondents indicated that some project managers were trying to go over all the comments received during the meeting and most disagreed with this practice (82%). Respondents recommended only focusing on the comments provided by the partner and on internal comments that may impact the PS&E greatly. Furthermore, 64% of the respondents indicated that they thought they shouldn't have to attend this meeting if there were no substantive comments for their discipline. Nevertheless, they wanted to be invited as optional attendees.

The survey also asked about the Plan-in-Hand meeting, since it involves travel making it one of the most expensive meetings in the process. Most of the respondents (91%) considered the Plan-in-Hand meeting to be of value to the PDP. However, 55% thought that the Highway Design and Bridge Design departments could manage the meetings by themselves and they could collect information needed for other teams, depending on the project. An important finding was that 45% of the respondents indicated that the project manager was not essential to the meeting and that in fact some project managers did not attend this meeting.

The survey provided a list of disruptive behaviors and asked the respondents to indicate which were common in EFLHD's meetings. At least half of the respondents believed it was common for people to do their own thing during meetings (75%), come unprepared (71%), and arrive late (67%). Also, half the respondents indicated that inviting too many people to meetings was common. It is important to highlight that 33% of the respondents indicated that meetings were ending late, that it was common that the wrong people were invited to meetings, and that people were leaving before meetings ended.

A critical part of the survey was asking the respondents if their discipline was essential to the success of the different types of project-specific meetings. The findings from this section of the survey were used to develop the recommendation to remove non-essential personnel from meetings.

## **RECOMMENDATIONS AND PROJECTIONS**

This section provides the recommendations developed through this project and the projected savings associated with their implementation.

Several assumptions were made to calculate the projected savings. Burdened hourly rates were used for the computations. They were determined based on the General Schedule (GS) level of the attendees. Attendees for the meetings range from GS-12 to GS-14 level with burdened hourly rates as follows: GS-12 = \$123.51, GS-13 = \$146.86, and GS-14 = \$173.55. The number of each type of meeting in EFLHD was calculated by averaging meeting data for 2017 and 2018 with projections for 2019 and 2020. The typical number and type of attendee to the meetings was estimated based on the disciplines required for each. The number of meetings and attendees used for the computations were provided in the "Typical Meetings in the Project Delivery Process" section.

Equation (1) was used to estimate the annual savings related to the recommended improvements. It is a variation of the methodology used in reference [2] to calculate the cost of inefficiencies

in meetings. It totals the average hourly rate per the grade level of the employees (AHR) by the number of employees with that grade attending the meeting (NEA) and then, multiplies the result by the estimated time saved per meeting (ETS) in hours, and the number of meetings per year (NMY).

$$PAS = [\sum(AHR * NEA)] * ETS * NMY \quad (1)$$

The following subsections describe this project's proposed improvements to the PDP.

#### **Make 50-minute meetings standard**

Several issues identified in the survey were people arriving late to meetings, meetings ending late, and people leaving meetings before they ended. Shortening meetings lasting 1 hour or more by 10 minutes would likely help reduce these behaviors by allowing time for transitions between meetings [3]. Meetings would begin at the top of the hour and end 10 minutes before the start of the following meeting in that room. Implementing this concept would mitigate the effects of meeting ending late on other meetings. It would also allow time in between meetings for room setup, to move between meetings without being rushed, and for personal tasks. It is estimated that 10 minutes would be saved from 80% of the Pre-Scoping, Kickoff, and Comment Resolution meetings held, resulting in \$38,000 in yearly savings.

#### **Remove non-essential personnel from meetings**

This recommendation focuses on reducing the number of people attending meetings for which they do not provide value added. The following are changes that would have the most impact:

- Only invite Programs to Pre-Scoping and Kickoff meetings. Invite them to Comment Resolution meetings only if there are issues related to funding. Assuming one GS-13 currently attends 30 minutes of 75% of the CR meetings, and assuming this recommendation would only require Programs to attend 10% of these meetings, this would result in \$3,600 in yearly savings.

- Do not require Construction to attend Pre-Scoping and Kickoff meetings, except if their input is essential. The information in these meetings could be provided to construction via email, since they are always required to attend the Scoping meeting and their project resources could be provided outside of the kickoff meeting. Assuming Construction currently attends 70% of these meetings and that now they would only be required in 25% of them, this would save \$7,600 each year.
- Do not have the Project Manager attend the site visit of the Plan-in-Hand Meeting, unless the Highway Design Manager or Bridge Team Leader cannot attend, or in complex projects. Assuming project managers attend 40% of these meetings and that they would only be required in 25% of them, this would save \$15,700 each year.

#### **Recommendations for specific meetings**

The following are lists of recommendations for specific meetings in the PDP.

##### Project Advancement Meetings

- Run the meeting by Program instead of by fiscal year. This would allow those who work in a specific program to leave after their program is discussed. Start the meetings with programs that have the least number of projects. This would result in three GS-13 personnel leaving the meeting within the first 2 hours, resulting in \$8,600 in yearly savings.
- Afterwards, dismiss Acquisitions staff after the projects with an advertised timeframe of within 1 year are discussed. This would result in two GS-13 and one GS-14 employees leaving the meeting within the first 2.5 hours. Projected savings of \$6,000 each year.

##### Pre-Scoping Meetings

- Hold this meeting at the discretion of the Project Manager depending on the complexity of the project and stormwater management needs. Allow them to decide who needs to

attend the Scoping meeting instead. When the meeting is not necessary, the project manager would inform the functional managers of the available project information through email. A 50% estimated reduction of this type of meeting would result in saving \$45,000 a year.

#### Scoping Meetings

- Ensure functional managers complete the draft scoping report before the meetings and highlight the information that needs to be discussed with the partner. This would save time in the office portion of the meeting that could then be used in the site visit portion. No projected savings.
- Encourage teams to gather information for other teams as appropriate. The projected reduction of one GS-12 employee from 33% of the scoping trips would result in an annual savings of \$43,000.

#### Kickoff Meetings

- Ensure attendees have read the scoping report before the meeting by requiring functional managers to confirm that they do not have any comments several days prior to the meeting. This would reduce the time the project manager spends summarizing the project in the meeting. A projected 5 minutes saved per meeting would result in \$8,500 saved per year.
- Remove the resourcing portion of the meeting or make it optional. Instead provide functional managers a table with a master list of their activities and the activities for A&E services that includes a checkmark for the activities that they need for the project, a space for the necessary resources and corresponding resource hours, and the working days necessary to complete the work. Make it a requirement that the completed form is submitted at the conclusion of the project discussion. Projected savings of 30 minutes for half the attendees in each meeting (\$25,500 per year in savings).
- Preload the resource hours by activities for the teams whose resource hours do not change

regardless of the project (for example, for Programs and Acquisitions staff). A projected 30 minutes in savings for two GS-13 employees results in \$7,000 in annual savings.

#### Comment Resolution Meetings

Work through all comments internally before the meeting and provide responses to all disciplines before the meeting. During the meeting, only discuss partner provided comments, Construction Branch comments, and those comments that require team discussion or which resolution would create major changes to the PS&E. This initiative should reduce the meeting length in half for 50% the meetings. Projected savings are \$55,400 a year.

### CONCLUSION

After evaluating meetings in the Project Delivery Process, multiple recommendations were proposed that if implemented could result in \$264,000 in annual savings to the process. Therefore, the project's objective was met. However, the study is limited in the sense that it doesn't consider possible impacts of issues that could result from improper use of the recommendations. In addition, many assumptions were made to complete the projections. For more accurate estimates, precise data of employee salaries and attendance rates should be used. It is recommended that factors other than costs be considered before the implementation of the recommendations.

### REFERENCES

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