Identify Best Practices for Project Bundling using Semi-Structured Interviews

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Abstract

- Little research has been conducted to guide State Transportation Agencies (STAs) on the effective utilization of project bundling in a holistic approach.
- This study presents the best practices of project bundling method that helps STAs implement the method more efficiently.

Objectives

- To qualitatively investigate the strategies that different agencies have applied in project bundling using a semi-structured interview.

Data and Methodology

- Data Source: Semi-Structured Interview
- Survey Participants: 15 STA representatives and 1 Local Agency
- Research Method: Semi-structured Interview Research Method
- Data Analysis: Qualitative Data Analysis using NVivo.

Results

1. Set the Goals or Objective to Bundle
2. Decide to Bundle early during planning phase
3. Determine appropriate funding source
4. Select the projects in inventory that meets the bundling goals or objectives
5. Limit the size of the bundle (Optimum Bundle Size)
6. Location Based Approach
7. Scope Based Approach
8. Consider other factors: construction schedule, public convenience, environmental permits, utility relocation, and similarity in design
9. Arrange a peer discussion with stakeholders, including district engineers, local agency, contractors, smaller contractors, public, and so on.
10. Perform Risk Assessment
11. Select appropriate delivery methods.
12. Provide trainings and workshops to the contractors in the state about bundling

Conclusion and Contribution

- Optional-Tie projects can be an effective bundling approach to STAs. It can provide a quantitative comparison between the bundled contract and the projects in that bundle if let individually.
- STAs successfully implement the project bundling method using two general approaches: scope-based approach and location-based approach.
- Sometimes, the agencies decide to unbundle a project if issues such as design defects, utility relocation issues, railroad coordination, and so on occur in the later phase. This will prevent a construction delay and the risks of over-allocating funds to the bundle.

Future Works and Recommendation

- Case studies on the project bundling using different alternative project delivery methods should be examined in future research.
- Future research may focus more on risk management strategies for project bundling method.
- The authors would like to thank Transportation Pooled Fund Program for the financial support and Federal Highway Agency (FHWA) representatives for their intellectual support throughout the study.

Acknowledgement

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References

US Department of Transportation Federal Highway Administration (FHWA). Bundled Facilities Overview.


Figure 1. Case Study Methodology for the Study

Figure 2. Major Goals to Achieve during Bundling by STAs

Figure 3. Best Practice Flowchart for Project Bundling

Figure 4. Difference between Optional-Tie and Mandatory-Tie Project