| **UTC Project Information** | |
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| Project Title | MPC-654 – Guidelines for Developing and Reviewing Baseline Schedules for Wyoming Transportation Projects |
| University | University of Wyoming |
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| Funding Source(s) and Amounts Provided (by each agency or organization) | USDOT, Office of the Assistant Secretary for Research and Technology  $45,990  University of Wyoming  $49,797 |
| Total Project Cost | $95,787 |
| Agency ID or Contract Number | 69A3551747108 |
| Start and End Dates | May 7, 2021 to July 31, 2022 |
| Brief Description of Research Project | Wyoming has a short construction season that forces many transportation projects to be completed under tight schedules. Frequently, contractors fail to develop accurate schedules that consider logical work sequencing, reasonable productivity, and weather events. Inaccurate baseline schedules are problematic in terms of progress monitoring and may cause costly schedule slippage. Thus, this project will evaluate the current practices used by Wyoming heavy civil contractors to develop baseline schedules. Additionally, the project will look at how Wyoming Department of Transportation (WYDOT) engineers review and approve baseline schedules prior to work commencement. The research team will collect baseline schedules and daily work report (DWR) data to identify challenges and root causes of schedule delays. DWR data contain actual start and finish dates for construction activities. Thus, the project team will determine the actual productivity rates and work sequencing. Afterwards, the project team will compare the actual productivity rates and work sequencing against baseline schedules to identify accurate productivity rates and logical sequencing of activities. Finally, the project team will develop a set of recommendations to improve baseline schedule development and review. These recommendations will be validated by WYDOT engineers and Wyoming contractors to ensure future and realistic implementation. |
| Describe Implementation of Research Outcomes (or why not implemented)  Place Any Photos Here | The recommendations suggested by this research study can be implemented by WYDOT to improve the quality of baseline schedule submitted by contractors. |
| Impacts/Benefits of Implementation  (actual, not anticipated) | By identifying the root causes of schedule delay, WYDOT and general contractors can work together to mitigate the impact of schedule delays and deliver project on schedule. The study presents clear recommendations on how to improve baseline schedules submitted by contractors which will facilitate tracking and controlling transportation projects. |
| Web Links   * Reports * Project Website | * MPC Research Report – [Guidelines for Developing and Reviewing Baseline Schedules for Wyoming Transportation Projects](https://www.ugpti.org/resources/reports/details.php?id=1091) |