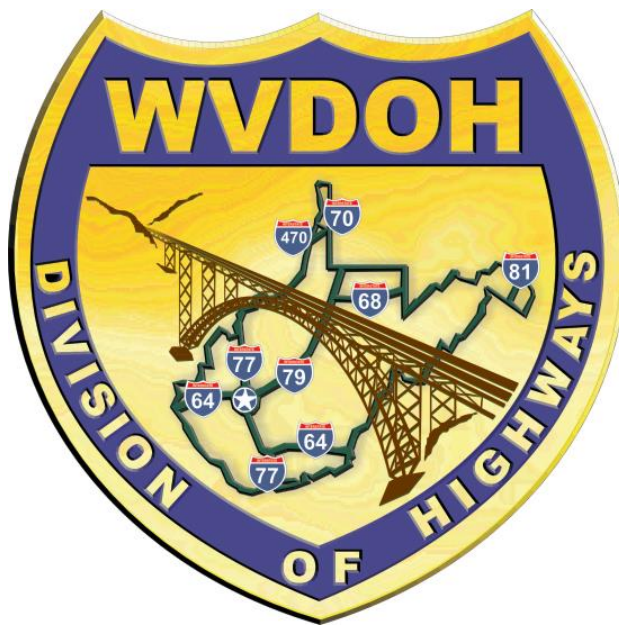


West Virginia Division of Highways Design-Build Program Experience



Report to the Joint Committee on Government and Finance

January 6, 2023



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

Division of Highways

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D. Alan Reed, P.E.
State Highway Engineer

Jimmy Wriston, P. E.
Secretary of Transportation
Commissioner of Highways

January 6, 2023

The Honorable Craig Blair
West Virginia Senate President
1900 Kanawha Boulevard, East
Building One, Room 229M
Charleston, West Virginia 25305

The Honorable Roger Hanshaw
West Virginia Speaker
1900 Kanawha Boulevard, East
Building One, Room 228M
Charleston, West Virginia 25305

Joint Committee on Government and Finance
1900 Kanawha Boulevard, East
Building One, Room 214W
Charleston, West Virginia 25305

Dear Senator President Blair, Speaker Hanshaw, and Committee Members:

Please find enclosed a report on the Division of Highways' Design-Build Program in 2022.

I appreciate your continued support and interest in highway matters. Should you require additional information, please do not hesitate to contact my office.

Sincerely,

A handwritten signature in blue ink that reads "Jimmy D. Wriston, P.E.".

Jimmy D. Wriston, P.E.
Secretary of Transportation/
Commissioner of Highways

JDW:DLBb

Enclosure

**Report to the Joint Committee on Government and Finance
Division of Highways Experience on Design-Build Projects
January 6, 2023**

This report has been prepared in accordance with West Virginia Code Chapter 17, Article 2D, Highway Design-Build Pilot Program (See Appendix A).

As per the legislation, “the Commissioner of the West Virginia Division of Highways may expedite the construction of projects by combining the design and construction elements of a highway or bridge project into a single contract as provided in this article. On or before January 15, 2014, and annually thereafter the commissioner shall prepare and submit to the Joint Committee on Government and Finance a written report evaluating the experience of the Division of Highways with each project, including whether the division realized any cost or time savings, the number and cost of change orders, the quality of work performed, the number of bids received and other issues the commissioner considers appropriate.”

WVDOH Design-Build Program – 2022

During 2022, the West Virginia Division of Highways (WVDOH) has used the Design-Build method of project procurement to award 20 projects. Seventeen of the projects were from our traditional State and Federal program while the other three projects were awarded under the bond program.

The design-build project procurement method allows for the design phase and construction phase of a project to be completed by a team, usually a contractor paired with an engineering firm, which typically allows the project to be completed on an accelerated schedule because design and construction can occur concurrently. WVDOH has observed that although the project is under contract sooner, the ultimate completion of the facility is not necessarily accelerated, especially on large, complicated design build projects.

With the contractor owning the design from the beginning, they can steer the final design to fit their company's individual strengths applying innovative solutions while providing a final product that meets the requirements of the original contract. The WVDOH has observed great success with certain contracts like the ADA ramp contracts and bridge projects.

The quality of work performed has been comparable to the projects awarded through the traditional design-bid-build process. The number of contractors that bid on the design-build projects for the WVDOH has increased since the first design-build projects were awarded. The increased competition for projects has led to more competitive bids and a larger number of bids in general.

The Design-Build tool continues to be a valuable tool that the WVDOH has at its disposal for expediting work and maintaining quality in design and construction. WVDOH has evaluated the overall outcome since the Legislature approved the use of design-build project delivery and is finalizing a Design Build manual for continuation of the program. The WVDOH intends to focus the use of Design Build on projects that have characteristics that result in an overall benefit to the traveling public. As can be seen from the attached list of projects, this tool remains an integral method in the delivery of the Roads to Prosperity Program.

Since July 1, 2019, the WVDOH has been required to track contractual obligations of the design-build program instead of contract expenditures. This section of the code was changed to mirror the tracking procedures of federal funds.

Project List

| PROJECT NAME | STATE PROJECT NUMBER | LETTING | LOW BID | # OF BIDS REC'D | # OF CHANGE ORDERS | CHANGE ORDER COST |
|---------------------------------|----------------------|------------|-----------------|-----------------|--------------------|-------------------|
| BOND PROJECTS | | | | | | |
| Big Creek Arch | S324-16-9.45 00 | 1/11/2022 | \$1,612,978.90 | 5 | 0 | \$0 |
| WV 72 I/C - Parsons | X342-H-40.21 05 | 5/26/2022 | \$49,488,494.00 | 4 | 2 | \$7,986,774.00 |
| Northern Connector + 1 | U333-522-11.92 04 | 12/13/2022 | \$34,955,943.00 | 3 | 0 | \$0 |
| REGULAR PROGRAM PROJECTS | | | | | | |
| Bolivar - Harpers Ferry +2 | U319-340-0.39 00 | 6/14/2022 | \$897,900.00 | 3 | 0 | \$0 |
| Hundred +1 | S352-250-3.44 00 | 6/14/2022 | \$92,699.00 | 3 | 0 | \$0 |
| Gorrells Run Rd +2 | S348-34-0.00 00 | 6/14/2022 | \$110,600.00 | 3 | 0 | \$0 |
| Tucker - Pendleton ADA Ramps | U336-33-0.01 00 | 6/14/2022 | \$313,900.00 | 3 | 0 | \$0 |
| Holland Ave +1 | S331-100-0.00 00 | 8/9/2022 | \$556,500.00 | 3 | 0 | \$0 |
| Cameron +8 | S326-23-7.16 | 8/9/2022 | \$280,000.00 | 3 | 0 | \$0 |
| Kimball - Maybeury Rd +19 | U324-52-27.24 00 | 8/9/2022 | \$903,407.00 | 3 | 0 | \$0 |
| West Main St | S346-119-0.00 00 | 9/13/2022 | \$181,073.00 | 2 | 0 | \$0 |
| Cost Ave +2 | S317-58-2.51 00 | 9/13/2022 | \$523,280.00 | 5 | 0 | \$0 |
| North Street Car Way +2 | S317-25-3.46 00 | 9/13/2022 | \$181,073.00 | 2 | 0 | \$0 |
| I-70 Mining Panel 21 and 22 | S335-70-11.43 00 | 10/18/2022 | \$8,222,620.00 | 1 | 0 | \$0 |
| Sylvester - Whitesville +4 | S303-3-38.12 | 11/15/2022 | \$594,735.00 | 2 | 0 | \$0 |
| Martingsburg ADA Ramps +5 | U302-10-0.00 00 | 11/15/2022 | \$664,405.00 | 2 | 0 | \$0 |
| Buffalo Rd | S340-62-19.43 | 11/15/2022 | \$218,463.00 | 2 | 0 | \$0 |
| Peyton St. +2 | S306-31/1-0.00 00 | 11/15/2022 | \$258,232.00 | 2 | 0 | \$0 |
| Madison Ave +2 | S306-160/29-0.00 00 | 11/15/2022 | \$873,764.00 | 2 | 0 | \$0 |
| Williamson ADA | S330-52-20.55 00 21 | 11/18/2022 | \$564,471.00 | 2 | 0 | \$0 |

***Projects listed with no change orders are not at the point to finalize the project which would reflect the final administrative change order. Zero dollar change orders are used to change the item of payment from Lump Sum to Dollars/Unit.**

**** It should be noted that all contracts, whether design-bid-build or design-build, will have at least one administrative change order to finalize and close out the project because of the software used to manage the schedule and funds for the projects.**

Appendix A

West Virginia Code §17-2D

Highway Design-Build Pilot Program

<https://code.wvlegislature.gov/17-2D/>