

Preliminary Performance Review

West Virginia Design-Build Board

**Creation of the Design-Build Board Allows the
State to Use a Cost-Effective and Time Efficient
Method of Construction**



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John Sylvia
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May 4, 2003

The Honorable Edwin J. Bowman
State Senate
129 West Circle Drive
Weirton, West Virginia 26062

The Honorable J. D. Beane
House of Delegates
Building 1, Room E-213
1900 Kanawha Boulevard, East
Charleston, West Virginia 25305-0470

Dear Chairs:

Pursuant to the West Virginia Sunset Law, we are transmitting a *Preliminary Performance Review of the West Virginia Design-Build Board*, which will be presented to the Joint Committee on Government Operations on Sunday, May 4, 2003. The issue covered herein is "Creation of the Design-Build Board Allows the State to Use a Cost-Effective and Time Efficient Method of Construction."

We transmitted a draft copy of the report to the Design-Build Board on April 17, 2003. The Board opted not to have an exit conference. We received the agency response on April 29, 2003.

Sincerely,

Handwritten signature of John Sylvia in cursive script.
John Sylvia

JS/wsc

Joint Committee on Government and Finance

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Executive Summary

Issue 1 The Design-Build Method Of Construction Provides A Cost And Time Efficient Method Of Construction To The Public.

The Design-Build Board was created in 1999 to allow for the use of an advantageous method of construction known as design-build. The Board's single duty is to approve or reject proposed projects that are constructed and owned, potentially owned, or ultimately owned by a state, county, or city government agency where the design-build method of construction is to be used. Since the Board's inception, it has reviewed eleven proposals and has approved nine of them for use of the design-build method of construction. The Board's cost to the State is minimal.

Design-build can be a beneficial method of construction for approved projects for both the customer and the builder. Design-build places single responsibility on the design and construction of a project within one entity, as opposed to design-bid-build which separates them. This can translate into cost savings, as well as time savings for a project completed using design-build. Design-build has many advantages as well as disadvantages when compared with the traditional design-bid-build method. However, if not properly executed, design-build can have many problems, hence the need for the Board to assure projects meet the State's mandated requirements before being approved for design-build.

By statute members of the Board are not entitled to compensation for services performed (WVC §5-22A-4). However, there is no language in the code that allows Board members to be reimbursed for expenses incurred such as mileage, food, and hotel expenses.

Recommendations

- 1. The Legislative Auditor recommends that the Design-Build Board be continued.*
- 2. The Legislative Auditor recommends the Legislature should consider adding language to §5-22A-4 of the Code to allow Board members to be reimbursed for expenses incurred in carrying out their duty.*

Review Objective, Scope, and Methodology

The following preliminary performance review of the West Virginia Design-Build Board is required by West Virginia Sunset Law, Chapter 4, Article 10, Section 5. The Design-Build Board is mandated to review all proposals for design-build projects. The Board may either approve or reject the proposals.

Objective

The objective of this review is to determine if the Design-Build Board is performing its duty as mandated by West Virginia Code, and to determine if the Board should be continued.

Scope

The scope of this review is from the period of 1999 through 2002.

Methodology

The methodology of this review includes information from the West Virginia Code §5-22A-1 et al, Legislative Rule §148-11-1 et al, Design-Build Board meeting minutes, descriptions of all projects submitted to the Board, as well as other information from the Design-Build Board, and from the Design-Build Institute of America. Every aspect of this review complied with Generally Accepted Government Auditing Standards (GAGAS).

The Creation of the Design-Build Board Allows the State to Use a Cost-Effective and Time Efficient Method of Construction.

The Board is responsible for approving or disapproving construction projects that do not meet statutory criteria that will ensure the cost and time savings that are associated with design-build.

After the completion of two government *design-build* projects in West Virginia prior to 1999, the Attorney General issued an opinion saying the design-build method of construction was not mentioned in statute and explained that because the code was silent on its use, the method could not be used. Thus, the Design-Build Procurement Act was passed by the Legislature in 1999. The Act created the Design-Build Board to review all state and local government construction projects that intend to use the design-build method. The Board is responsible for approving or disapproving construction projects that do not meet statutory criteria that will ensure the cost and time savings that are associated with design-build. **The Legislative Auditor concludes that the creation of the Design-Build Board allows the State to use a cost effective method of construction, and therefore, the benefits of the Board far exceed its minimum costs.**

Benefits of Design-Build

By utilizing design-build, it places the responsibility of both the design and construction of a project with one entity. This can translate into cost savings, as well as time savings for completing the project in the following way:

• **Single Responsibility** - With both design and construction in the hands of a single entity, there is a single point of responsibility for quality, cost, and schedule adherence. The owner is able to focus on scope/needs definition and timely decision-making, rather than coordinate between designer and builder.

• **Cost Savings** - Design and construction personnel, working and communicating as a team, evaluate alternative materials and methods efficiently and accurately can lead to cost savings in a project. For example, Fairmont State College saved approximately \$2 million on the construction of a parking garage using design-build.

National statistics show on average projects are completed 35% sooner using the design-build method.

ï ***Time Savings*** - Because design and construction overlapped, and because bidding periods and redesign are eliminated, total design and construction time can be significantly reduced. National statistics show on average projects are completed 35% sooner using the design-build method. The resulting time savings translates into earlier utilization of the completed facility. For example, Marshall University's new parking garage was completed three months ahead of schedule using design-build.

When reviewing construction projects, the Design-Build Board must conclude that the proposed project meets the criteria stated in WVC B5-22A-5:

- ï The agency requires a project design and construction time line that is faster than the traditional design-bid-build process would allow;
- ï The project requires close coordination of design and construction expertise or an extreme amount of coordination; and
- ï The agency requires early cost commitments.

Projects Approved By The Board

Since the Board's inception, it has reviewed eleven proposals and has approved nine of them for use of the design-build method of construction (see Table 1).

**Table 1
Design-Build Projects Approved, 1999-2002**

Project Customer	Project Description	Date Approved
City of Parkersburg	Parking Garage	5/16/02
Fairmont State College	Parking Garage and two student housing facilities	2/20/02
West Virginia Department of Environmental Education	Office Building	2/20/02
Wheeling Victorian Outlet Center	Renovation and Restoration of downtown historic area into retail shopping	2/20/02
Marshall University	Parking garage and student housing	8/2/01
Logan County Development Authority	Office building	2/8/00
Logan County Development Authority	Shell Building	2/8/00
City of Weirton	Office Building	8/27/99
City of Huntington	Office Building	8/27/99

Design-Build Versus Design-Bid-Build

Design-build differs from the traditional design-bid-build method of construction. In design-bid-build, the owner commissions an architect or engineer to prepare drawings and specifications under a design services contract and separately contracts for construction by engaging a contractor through competitive bidding or negotiation. While design-bid-build offers the advantages of being widely applicable, well understood, and with well established and clearly defined roles for the parties involved, it also has its disadvantages. One significant disadvantage is that the final construction cost is not established until after the design is complete which may result in redesign costs if the construction bids are over budget.

The Legislative Auditor has determined that the design-build process is a valuable option for approved projects and can be beneficial to the State.

The Legislative Auditor has determined that the design-build process is a valuable option for approved projects and can be beneficial to the State. There is potential for fewer change orders since there is a financial disincentive for high cost of changes. The reason for this is the project design was completed by the same company that is doing the construction and would know the costs required to meet the design specifications up front. Design-build is best suited

to construction of low maintenance and operational complexity, such as parking garages, where project costs are known before the project proceeds. However, there is more that can go wrong with design-build projects if they are not properly planned and supervised. For example, lower construction cost can often result in poorer quality and higher operational and maintenance costs.

Board Members Should Be Paid for Expenses

The Design-Build Board is made up of nine members appointed by the Governor. The membership includes two licensed contractors, one licensed architect, one licensed professional engineer, one representative from labor, three public at large members and the Secretary of Department of Administration, ex officio. The Executive Coordinator of the Department of Administration devotes a fraction of her time providing administrative support for the Board.

By statute members of the Board are not entitled to compensation for services performed (WVC §5-22A-4). However, there is no language in the code that allows Board members to be reimbursed for expenses incurred such as mileage, food, and hotel expenses. The Legislative Auditor does not consider it to be the intent of the Legislature to have Board members serve without being reimbursed for expenses incurred in serving the State, given that the Legislature and other boards are reimbursed for their expenses. The Board hasn't requested or received any reimbursement for expenses incurred. In order to maintain an interest in serving on the Board, it would be appropriate to consider providing statutory language that would allow members of the Board to be reimbursed for expenses incurred just as members on other boards are allowed.

Conclusion

The Legislative Auditor has concluded that the Design-Build Board provides an option to the State of West Virginia. Design-build has many advantages as well as disadvantages when compared with the traditional design-bid-build method. However, if not properly executed, design-build can run into problems. Therefore, there is a need for the Board to assure projects meet the State's mandated requirements. By properly utilizing design-build, the State can save time and money. Also, the Board's cost to the State is minimal.

Recommendations

- 1. The Legislative Auditor recommends that the Design-Build Board be continued.*
- 2. The Legislative Auditor recommends the Legislature should consider adding language to §5-22A-4 of the Code to allow Board members to be reimbursed for expenses incurred in carrying out their duty.*

Appendix A: Transmittal Letter

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John Sylvia
Director

April 17, 2003

Marc Monteleone, Chairman
Design-Build Board
600 Quarrier St.
Charleston, WV 25325-1386

Dear Mr. Monteleone:

This is to transmit a draft copy of the Preliminary Performance Review of the Design-Build Board. This report is scheduled to be presented at the May interim meeting of the Joint Committee on Government Operations. We will contact you when a specific date is set. It is expected that a representative from your agency be present at the meeting to orally respond to the report and answer any questions the committee may have. If you would like to schedule an exit conference to discuss any concerns you may have with the report between April 18 to April 23, 2003, please notify us. We need your written response by noon on April 23, 2003 in order for it to be included in the final report. If your agency intends to distribute additional material to committee members at the meeting, please contact the House Government Organization staff at 340-3192 by Thursday, May 1, 2003 to make arrangements.

We request that your personnel treat the draft report as confidential and that it not be disclosed to anyone not affiliated with your agency. Thank you for your cooperation.

Sincerely,

Handwritten signature of John Sylvia in cursive script.
John Sylvia

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Joint Committee on Government and Finance
