

**2017 Senate Bill 85 Testimony**  
Senate Committee on Transportation and Veterans Affairs  
March 16, 2017

Chairman Petrowski and committee members, thank you for having a hearing today on Senate Bill 85. SB 85 resulted from findings in Audit Report 17-2 released in January 2017 on the State Highway Program, and was introduced by the Joint Legislative Audit Committee. As Co-chair of the Joint Legislative Audit Committee, I work with the other audit committee members on the frontlines of ensuring that our state programs are being run efficiently. In the case of the State Highway Program, historically, it has not been run efficiently.

I'd like to start today by thanking the State Auditor Joe Chrisman and the Legislative Audit Bureau (LAB) for their diligent and thorough work on this audit. The audit identified 23 recommendations that will help the Department of Transportation (DOT) administer the State Highway Program more effectively and efficiently. Applying these 23 recommendations are not the purpose of Senate Bill 85. In addition to providing recommendations to the department, the Legislative Audit Bureau may also provide potential statutory changes for consideration by the Legislature. To be clear, today's discussion on Senate Bill 85 is not a discussion about transportation funding or road conditions, but about maintaining accountability and transparency within the State Highway Program.

Senate Bill 85 is comprised of the 5 items included in Audit Report 17-2 for legislative consideration. The lion's share of this legislation is focused on providing better information to the Legislature regarding the ongoing costs of highway projects, and ensuring that full cost of projects are being provided to the Legislature and the public.

In this audit, LAB reviewed 35 ongoing and completed major highway projects. For the 19 completed projects reviewed, expenditures exceeded original estimates by nearly 111% or \$772.5m. Amongst the 16 ongoing projects reviewed, estimated costs exceeded original estimates by \$3.1 billion. In both circumstances, this is more than double original estimates provided to the Legislature at the time of enumeration. Unacceptable. Wisconsin's taxpayers deserve accurate and complete estimates for their transportation projects.

The audit, on pages 44 and 45, found that statutes don't specify how DOT must determine the cost estimates of potential major highway projects that are provided to the Governor and the Legislature, nor do statutes require DOT to report ongoing project costs to the Legislature. Under SB 85, when DOT would provide a full project cost estimate under this requirement, the estimate must include all costs associated with the project, including all costs before enumeration, design and construction engineering costs, the costs of environmental studies, and costs of the project that are paid by another program of the department. A Full Project Cost Estimate must also include the expected date of completion, an estimate of the effects of construction cost inflation and unexpected expenditures on the cost of the project.

Furthermore, SB 85 would create an opportunity for the legislature to be regularly updated on ongoing project costs. Annually, the Joint Finance Committee, the Joint Legislative Audit Committee and the standing transportation committees will receive the following information from DOT:

1. The full project cost estimate of the project as of the date of enumeration.
2. The year in which the department expects to complete the project as of the date of enumeration.
3. The costs incurred as of the date of preparation of the report.
4. The full project cost estimate as of the date of preparation of the report.
5. The year in which the department expects to complete the project as of the date of preparation of the report.
6. An explanation of any difference between the full project cost estimates under items 1. and 4.
7. The opinion of the department as to whether the project will be completed as originally scheduled without the allocation of additional funds.

In addition to the Legislature receiving this information, LAB also highlighted that statutes don't require the semiannual report to the Transportation Projects Commission (TPC) to include the cost estimates that were provided at the time of enumeration of the project. Including this information in those reports would make tracking the extent to which project costs have changed after enumeration much easier. SB 85 requires the Department to provide any studies and cost estimates made on a project to be made available to the Commission that are necessary to consider the project. Also, under the bill, DOT is required to include the "Full Project Cost Estimate" (as previously explained) in its report to the Commission.

The bill also requires that the department consider and document the results of cost-benefit analysis before the determination of whether to undertake the proposed project.

Additionally, included in the audit, LAB put forward a consideration to allow DOT to use a Construction Manager-General Contractor method to complete a limited number of projects. Under this method, DOT would be authorized, for no more than three highway improvement projects, to enter into contracts using a construction manager-general contractor process. Under this process, the department contracts with a provider of construction services to supervise the design work for the project and, subject to an acceptable proposal, contracts with the provider of construction services for construction of the project. This bill authorizes DOT to enter into no more than three design contracts utilizing the construction manager-general contractor process no later than July 1, 2021.

Thank you again for hearing me on this legislation. I would be happy to take any questions on the bill.

**Wisconsin Senate Hearing on SB 85**

**By Glen R. Schwalbach, P.E.**

**March 15, 2017**

My name is Glen R. Schwalbach. I reside at 1090 Moonriver Drive in the Town of Rockland in Brown County. I am a Professional Engineer (P.E.) registered in Wisconsin.

I support SB 85 in general with some suggestions.

In the provision for pre-enumeration project cost estimates, it appears some DOT operating costs and overhead components would have to be assigned to the overall project costs. The DOT should answer whether this is true and, if so, determine how to avoid duplication of DOT expenditures between operating budgets and project budgets.

In the provision for annual reports to the legislative committees, you might want to add an eighth piece of information. If the completion date changes from the original date, it would be helpful to have an explanation of the reasons for the change.

For the "pilot" using a construction manager/general contractor process, the bill authorizes the DOT to contract with a provider of construction services to supervise the design work. The words "supervise" is inappropriate and risky. DOT's Professional Engineers or their P.E. designates need to supervise the design work. The P.E.'s have the expertise and the legal responsibility for public health and safety. The audit report describes the process correctly on page 90. The DOT would hire a construction manager to review the design and offer suggestions as to constructability, price impacts and construction risks. DOT P.E.'s would then decide whether the suggestions should be incorporated into the final design.

The bill should also state that the selection of the construction manager shall be based upon qualifications. The construction phase would still be handled as stated in the bill.

The construction manager/general contractor process has to be carefully designed and managed. It can result in a few winners and many losers among contractors which can reduce competition.

Here are a few final comments since this bill focuses on some of the audit recommendations to get better estimates and reduce costs.

The audit report cited the number of projects which had only one bidder. This fact should prompt a study of the market as to whether the construction contractors have set the stage for these situations inadvertently or otherwise.

Also, it would be interesting to study the fact that a few contractors have bought a large number of sand/stone quarries in Wisconsin. This may have disadvantaged contractors without quarries and resulted in fewer bids and higher bids.

Senator Cowles pointed out that statutes do not specify components of cost estimates. This is why SB 85 is so important. As an outsider, the question is why wasn't this required decades ago when the reasons for past project cost overruns were explained as inflation and allocation of certain costs. I also

understand that in some years the Transportation Projects Commission (TPC) had not met. The guru of process improvement analysis, Dr. Deming, pointed out that, in general, poor quality of products and services were 90% caused by management, not those working in the processes. In the state highway program, the management includes the DOT Secretary and DOT managers, the governor, the TPC, and the state legislature. It is management who are to provide objectives/standards/measures (OSM), training, tools, understanding of process outputs, effective communication and funding.

Of all these management deliverables, it appears that the DOT Secretary and managers were making good progress with changes to the cost estimate process in 2011, the establishment of improved OSM's, and improvements in efficiency of DOT processes. But the other members of this management team who should understand process outputs and authorize funding were not doing their job. For example, understanding process output in the state highway program includes understanding the cost estimates components. In many sectors, project cost estimates can justifiably ignore inflation, sunk costs such as preliminary engineering, overheads that will occur with or without the project, etc. But, everyone needs to understand the criteria used. That said, SB 85 goes a long way to setting a standard for cost estimates which will improve understanding and communication. Also, for highway projects which have such long duration of spending, it is important to include inflation for legislative funding purposes as SB 85 proposes.

I would also like to comment on the suggestions in the audit report that performance goals and measures were often not met or used for improvement. Goals and performance measures are useful to communicate objectives so that people in the processes understand their roles and focus. But only in stable processes can it be expected that the goals and measures would be met. An example of a stable process is a manufacturing process in which the inputs, i.e. raw materials, are of consistent quality, machine tools are in good shape, operators are well-trained and processes are measured. But construction projects in an outdoor environment are never stable processes. Soil conditions, weather, underground obstacles, environmentally-sensitive areas, changes in Federal requirements, proximity of vehicle traffic and accommodations of citizens near the job sites, etc. mean that planning and construction processes must be flexible. It also means that, if efforts focus on meeting the goals and measures under those unstable conditions, then costs most likely would increase, not decrease.

That said, goals and measures are still important. They should be more achievable in certain planning and design processes but still must be flexible with follow-up explanations for deviations.

One last note: I tried to determine whether other agencies use inflation in cost estimates. I checked the budgeting process for state buildings. I could not tell for sure. The state has a life-cycle costing method and computer program for all agencies to use internally to evaluate the multiple alternatives for projects. The discount rate used in those calculations includes time value of money (interest rates) and an inflation adjustment. But that does not necessarily translate into a budget number with inflation included. The Audit Committee or the Joint Finance Committee may wish to investigate.

Thank you for consideration.

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