

COMMITTEE ON LEGISLATIVE RESEARCH  
OVERSIGHT DIVISION

**FISCAL NOTE**

L.R. No.: 4953-01  
Bill No.: SB 952  
Subject: Administration, Office of; Construction Building Codes; Energy; Environmental Protection  
Type: Original  
Date: March 2, 2010

Bill Summary: Establishes requirements for environmentally sustainable construction for certain state funded buildings.

**FISCAL SUMMARY**

<b>ESTIMATED NET EFFECT ON GENERAL REVENUE FUND</b>			
FUND AFFECTED	FY 2011	FY 2012	FY 2013
General Revenue	\$0 or (Unknown)	\$0 or (Unknown exceeding \$1,000,000)	\$0 or (Unknown exceeding \$1,000,000)
<b>Total Estimated Net Effect on General Revenue Fund</b>	<b>\$0 or (Unknown)</b>	<b>\$0 or (Unknown exceeding \$1,000,000)</b>	<b>\$0 or (Unknown exceeding \$1,000,000)</b>

<b>ESTIMATED NET EFFECT ON OTHER STATE FUNDS</b>			
FUND AFFECTED	FY 2011	FY 2012	FY 2013
Road	(Unknown exceeding \$100,000)	(Unknown exceeding \$100,000)	(Unknown exceeding \$100,000)
Conservation Commission	(Unknown)	(Unknown)	(Unknown)
<b>Total Estimated Net Effect on <u>Other</u> State Funds</b>	<b>(Unknown exceeding \$100,000)</b>	<b>(Unknown exceeding \$100,000)</b>	<b>(Unknown exceeding \$100,000)</b>

Numbers within parentheses: ( ) indicate costs or losses.  
This fiscal note contains 8 pages.

<b>ESTIMATED NET EFFECT ON FEDERAL FUNDS</b>			
<b>FUND AFFECTED</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<b>Total Estimated Net Effect on <u>All</u> Federal Funds</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

<b>ESTIMATED NET EFFECT ON FULL TIME EQUIVALENT (FTE)</b>			
<b>FUND AFFECTED</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<b>Total Estimated Net Effect on FTE</b>	<b>0</b>	<b>0</b>	<b>0</b>

- Estimated Total Net Effect on All funds expected to exceed \$100,000 savings or (cost).
- Estimated Net Effect on General Revenue Fund expected to exceed \$100,000 (cost).

<b>ESTIMATED NET EFFECT ON LOCAL FUNDS</b>			
<b>FUND AFFECTED</b>	<b>FY 2011</b>	<b>FY 2012</b>	<b>FY 2013</b>
<b>Local Government</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

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## FISCAL ANALYSIS

### ASSUMPTION

Officials from the **Department of Corrections, Department of Higher Education, Department of Natural Resources, and Linn State Technical College** assume the proposal will have no fiscal impact on their organizations.

Officials from the **Missouri Department of Transportation (DOT)** state the silver level LEED certification portion of the proposal will impact the DOT significantly with building construction and major renovations due to increased costs of construction. The cost is unknown but expected to be greater than \$100,000 annually.

Officials from the **Missouri Department of Conservation (MDC)** state the proposed legislation would have a fiscal impact on MDC funds due to additional construction and the certification process for LEED. The exact amount of the impact is unknown.

Officials from the **Office of Administration (COA) - Division of Budget and Planning (BAP)** state the proposal may have an impact on general revenue. The COA's Division of Facilities Management, Design, and Construction should provide the estimate of possible increased costs and other fiscal impacts to the state as a result of this proposal.

Officials from the **COA - Division of Facilities Management, Design, and Construction (FMDC)** state to get an estimated cost factor, the FMDC reviewed the construction of the Lewis and Clark State Office Building, which was United States Green Building Council (USGBC) certified at the platinum level. The Lewis and Clark Building is a 120,000 square foot facility, constructed at a cost of \$18,573,497 or \$155 per sq. ft. Normal costs for a building of this size at that time would have been approximately \$125 per sq. ft. or roughly a 24% increase. Other costs of \$2,866,178 included design contract costs, commissioning agent costs, and a special \$60,000 fee for LEED certification. The total allocated/expended project funds for the Lewis and Clark

Given the proposal is seeking "silver" level and that "platinum" level was achieved, the FMDC estimates a 15% increase in initial construction costs (platinum was approximately 29% higher than normal costs). It appears the proposal requires all significant projects (new construction and renovation) to be addressed with these requirements.

A payback or life-cycle analysis should determine if the investment in the higher quality construction is justified. The impacts are determined by the scope of work of construction and renovation requirements.

ASSUMPTION (continued)

Additional FTEs will be needed to review the various aspects of the silver-level certification, monitoring costs of all buildings and to comply with the requirements of a five, ten, and fifteen year third party commissioning. Some of these FTEs may need to be LEED accredited when performing designs affected by this proposal and this will need to be addressed in the qualifications of the additional FTEs. The position(s) title should include Professional Engineer (civil, electrical, mechanical, structural engineering, or engineering management).

FTE needs have not been determined, dependent on the scope of work of the initial study, the actual project workload, the certification, the monitoring, and the evaluation for up to fifteen years after the project.

The COA-FMDC assumes an unknown fiscal impact for FY 11 since it depends on whether funding would become available and unknown costs exceeding \$1 million annually for FY 12 and FY 13.

Due to the current economic situation, **Oversight** is presenting costs as \$0 or Unknown exceeding \$1 million.

Officials from the **Metropolitan Community College** estimate the proposal will cost between \$300,000 and \$350,000 per year, on average.

Officials from **Missouri Southern State University (MSSU)** state they recently solicited architectural services for construction of an \$8 - \$10 million project. The MSSU is pursuing LEED certification for this facility. Architectural services to achieve a silver LEED Certification for this facility will cost approximately \$160,000. This project has not progressed to the point of soliciting construction bids. This will be the first certified facility on the campus; thus, MSSU does not have a reference point as to what degree certification impact facility construction costs.

Officials from **Missouri State University (MSU)** state pursuing certification adds administrative costs to projects. It is estimated that to achieve the ratings required under this proposal would add two to three percent to the overall cost of the project. In addition, the cost to have the projects commissioned in the fifth, tenth, and fifteenth year following certification would need to be budgeted. The cost for this work, and any subsequent action needed as a result of the commissioning, cannot be determined at this time.

Officials from **Lincoln University (LU)** state the proposal will have an impact on major construction projects. It will increase the cost of construction. In addition, there will be increased paperwork to certify buildings under LEED, which is expensive both on the front end with the design fees and then in construction.

ASSUMPTION (continued)

The proposal also mentions developing and implementing a process to monitor and evaluate energy and environmental benefits associated with each major project on year after occupancy and continue for fifteen years thereafter. This monitoring/evaluation work will cost as well each year because it will probably need to be done by some kind of mechanical commissioning company. LU cannot estimate the fiscal impact of the proposal at this time.

Officials from **Truman State University** state they are unable to determine a fiscal impact for the University at this time.

Officials from the **University of Missouri** state the cost for LEED Silver certification is reported to add from 2-5% to the total project cost. The University estimates mandating LEED Silver Certification will cost at least \$2 million annually.

For fiscal note purposes only, **Oversight** is including additional construction costs resulting from LEED Silver certification requirements for colleges and universities in the General Revenue Fund. **Oversight** is ranging the costs from \$0 to Unknown, depending on funding approved by the Legislature.

<u>FISCAL IMPACT - State Government</u>	FY 2011 (10 Mo.)	FY 2012	FY 2013
<b>GENERAL REVENUE</b>			
<u>Costs - COA-FMDC</u>			
Increase in personnel and construction costs	\$0 or (Unknown)	\$0 or (Unknown exceeding \$1,000,000)	\$0 or (Unknown exceeding \$1,000,000)
<u>Costs - Colleges/Universities</u>			
LEED Silver certification and increases in construction costs	(\$0 to <u>Unknown</u> )	(\$0 to <u>Unknown</u> )	(\$0 to <u>Unknown</u> )
<b>ESTIMATED NET EFFECT ON GENERAL REVENUE FUND</b>	<b><u>\$0 or (Unknown)</u></b>	<b><u>\$0 or (Unknown exceeding \$1,000,000)</u></b>	<b><u>\$0 or (Unknown exceeding \$1,000,000)</u></b>
<b>ROAD FUND</b>			
<u>Costs - DOT</u>			
Increase in construction expenses	<u>(Unknown exceeding \$100,000)</u>	<u>(Unknown exceeding \$100,000)</u>	<u>(Unknown exceeding \$100,000)</u>
<b>ESTIMATED NET EFFECT ON ROAD FUND</b>	<b><u>(Unknown exceeding \$100,000)</u></b>	<b><u>(Unknown exceeding \$100,000)</u></b>	<b><u>(Unknown exceeding \$100,000)</u></b>
<b>CONSERVATION COMMISSION FUND</b>			
<u>Costs - MDC</u>			
Increase in construction expenses	<u>(Unknown)</u>	<u>(Unknown)</u>	<u>(Unknown)</u>
<b>ESTIMATED NET EFFECT ON CONSERVATION COMMISSION FUND</b>	<b><u>(Unknown)</u></b>	<b><u>(Unknown)</u></b>	<b><u>(Unknown)</u></b>

<u>FISCAL IMPACT - Local Government</u>	FY 2011 (10 Mo.)	FY 2012	FY 2013
	<u>\$0</u>	<u>\$0</u>	<u>\$0</u>

FISCAL IMPACT - Small Business

No direct fiscal impact to small businesses would be expected as a result of this proposal.

FISCAL DESCRIPTION

State-funded buildings over 5,000 square feet constructed after August 28, 2010 must be certified, at minimum, as meeting either the 2 Globes level under the Green Globes building rating system or the Silver level under the Leadership in Energy and Environmental Design (LEED) building rating system. The act prescribes certain points that must be earned in achieving either the 2 Globes or Silver level certification. The Office of Administration may waive the points requirements for economic feasibility reasons.

State-funded building renovation and commercial interior fit-out projects must be analyzed under one of several options, including a life cycle cost analysis comparing the costs and benefits of renovating to the 2 Globes or Silver standards, normal industry standards, or a building standard in between.

The Office of Administration may petition the General Assembly to require all state-funded building construction and renovation projects to meet a different or additional high-performance building standard, provided that such building standard is at least as stringent as the Green Globes and LEED standards.

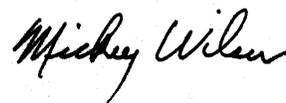
The act requires periodic inspections of buildings built to the 2 Globes or Silver standards. The inspector must report its findings to the Office of Administration and the state agency that occupies the building. For 15 years, the Office of Administration must monitor and evaluate the energy and environmental benefits associated with each building subject to the act's requirements.

The Office of Administration must submit a report to the energy committees in the House of Representatives and the Senate regarding activities and information that result from the act's provisions.

This legislation is not federally mandated, would not duplicate any other program and would not require additional capital improvements or rental space.

SOURCES OF INFORMATION

Office of Administration -  
    Division of Budget and Planning  
    Division of Facilities Management, Design and Construction  
Department of Natural Resources  
Department of Corrections  
Missouri Department of Transportation  
Missouri Department of Conservation  
Lincoln University  
Missouri State University  
Truman State University  
University of Missouri  
Missouri Southern State University  
Metropolitan Community College  
Linn State Technical College



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Director  
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