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FISCAL IMPACT REPORT

ORIGINAL DATE 02/17/09

SPONSOR Campos LAST UPDATED _____ HB _____

SHORT TITLE Resource Energy-Efficient Public Buildings SB 235

ANALYST Archuleta

ESTIMATED ADDITIONAL OPERATING BUDGET IMPACT (dollars in thousands)

	FY08	FY09	FY10	3 Year Total Cost	Recurring or Non-Rec	Fund Affected
Total			Indeterminate			

(Parenthesis () Indicate Expenditure Decreases)

SOURCES OF INFORMATION

LFC Files

Responses Received From

- Administrative Office of the Courts (AOC)
- Taxation and Revenue Department (TRD)
- Environment Department (NMED)
- General Services Department (GSD0)
- Higher Education Department (HED)
- Department of Finance and Administration (DFA)
- New Mexico Finance Authority (NMFA)
- Public Education Department (PED)
- Energy Minerals and Natural Resources Department (EMNRD)
- New Mexico Municipal League (NMML)

SUMMARY

Synopsis of Bill

Senate Bill 235 establishes energy efficiency standards for new or renovated public buildings over 3,000 square feet financed through the Severance Tax Bonding Act. The bill specifies that public buildings that are 3,000 square feet or more will achieve a minimum energy performance standard of 50 percent or less of the national average energy consumption for that building type. The bill specifies that public buildings that are more than 3,000 square feet shall be constructed using “green building practices” to the maximum extent possible. Any building financed through the Severance Tax Bonding Act that is being renovated will need to upgrade the HVAC, lighting and plumbing systems and the upgrades will use green building practices.

FISCAL IMPLICATIONS

DFA indicated that in terms of cost, there is a common assumption that green buildings are more expensive to build. However, based on a paper issued by Davis Langdon, an international construction management consulting firm, titled “Cost of Green Revisited: Reexamining the Feasibility and Cost Impact of Sustainable Design in the Light of Increased Market Adoption”, there is no significant difference in the average cost for green buildings as compared to non-green buildings.

EMNRD claims there is no direct impact to the general fund. Many green building practices can be designed and implemented with little or no additional cost. There may be situations, particularly in a renovation, where green practices increase the budget of the project. By definition of being cost-effective, however, these practices should provide savings that at least offset the increased initial cost.

Typically, construction costs may be slightly more for green standard buildings than traditional construction. While this is true, the expectation is that the energy savings will offset the upfront construction costs.

TRD indicates the effect of Senate Bill 235 on the Severance Tax Bonding Fund and the General Fund is indeterminate. If it is more or less costly to incorporate green building practices, then the Severance Tax Bonding Fund would be impacted accordingly. Assuming that it will be less costly to operate green buildings, the General Fund would be impacted accordingly. TRD does not have sufficient information regarding the relative costs of implementing green building practices or cost savings to make this determination.

SIGNIFICANT ISSUES

EMNRD indicates that the requirement to upgrade two of the three major building systems is intended to reduce the use of energy and water. In many situations, however, the building envelope, walls, windows, roofs, or floors, has a larger impact on a building's energy performance than the equipment used within. This may minimize, in some situations, the benefits of requiring replacement of the building systems. An alternative approach may be to require that renovation projects have an energy audit performed and the significant cost-effective measures be included. It might also be helpful to define “structural renovation.”

This month, the Energy, Minerals and Natural Resources Department released a new report, “New Mexico Energy Efficiency Strategy: Policy Options, ” that outlined 25 policy options for meeting the Governor’s energy efficiency goal of reducing energy use in New Mexico by 20 percent by 2020. Energy efficiency measures are a cost effective strategy to reducing greenhouse gas (GHG) emissions. The report as prepared by the Southwest Energy Efficiency Project (SWEET). SWEET estimates that implementing all 25 options will reduce annual carbon dioxide emissions in New Mexico by 8.3 million metric tons in 2020. This is a significant reduction and represents about 10 percent of emissions predicted to be produced in the state under a business-as-usual scenario. The SWEET report recommends that the state prioritize a strategy to adopt energy efficiency standards for public colleges and universities and extend the requirements to state buildings; many of the entities that would be affected by the SFC substitute for Senate Bill 235. That strategy is estimated to cut energy costs in state government by \$9 million in 2020 and reduce GHG emissions by 66,000 metric tons annually (the equivalent of taking 12,000 passenger cars off the road).

EMNRD also notes that energy efficient design and construction is critical to mitigate the rising cost of energy. Water and other finite resources should also be preserved. All buildings that are built and operated using public funds should employ accepted green building practices to assure tax dollars are being used appropriately.

In a presentation made to the State Board of Finance in September 2008, Peter Morris from the David Langdon firm notes that nationwide studies using a variety of valid methods indicate that sustainable design features can be incorporated into many buildings at little or no cost. He also highlights that New Mexico is very well positioned to incorporate low cost, innovative strategies into its projects due to its climate and natural resources. These include sun, wind, relatively low humidity, and the high temperature shift between daytime and night time. More data on this paper and presentation can be found at the Board of Finance offices.

PERFORMANCE IMPLICATIONS

DFA suggests that in addition to having a positive impact on the environment and playing a leadership role in promoting sustainable building practices, the State has the potential, if done right, to save money over the life of these buildings from lower utility costs.

ADMINISTRATIVE IMPLICATIONS

The Board of Finance would need to incorporate a section in its certification form when selling a Severance Tax Bond, which would require the bond recipient to certify that it will abide by the new law regarding green building practices. Additionally, they'd probably place a condition on the disbursement of bond proceeds requiring that the recipient submit documentation proving that they complied with the act prior to getting access to their full appropriation and/or continue to certify as such with each drawdown.

According to EMNRD, although the Energy Conservation and Management Division (ECMD) is not specifically mentioned as having a direct role in administering this program, effective implementation will likely require technical assistance from ECMD staff.

CONFLICT, DUPLICATION, COMPANIONSHIP, RELATIONSHIP

EMNRD indicates that the requirements of this bill are similar to, but not exactly the same as, the requirements under Executive Order 2006-001.

TECHNICAL ISSUES

The bill defines “green building practices” as “practices that are cost-effective and increase the efficiency with which buildings use energy, water and materials, while reducing building impacts on human health and the environment through appropriate materials selection, emphasizing New Mexico materials and appropriate siting, design, construction, operation, maintenance, repair and removal techniques.” That language may not provide enough guidance to public agencies implementing SB 235. Another option is to tie “green building practices” to existing recognized standards such as LEED (Leadership in Energy and Environmental Design) certification.

GSD notes that there is no mechanism or procedure defined that will verify that a building meets the requirements set forth in the bill. The Commercial Building Energy Consumption Survey

(CBECS), conducted in 2003, is used by EPA’s ENERGY STAR to compare energy use for commercial buildings. The CBECS data is gathered from the Dept. of Energy’s – Energy Information Administration (EIA), not the office of energy efficiency published by USDOE. Other jurisdictions require making a certain score using EPA’s freely available “Target Finder” tool that uses CBECS data.

Section C, requiring that systems need to be upgraded may not have the intended environmental effect. If funding is required to repair a roof or structural element for example, the bill, as written would require upgrades of the heating, lighting and plumbing systems, even if those systems are fully functional and efficient.

OTHER SUBSTANTIVE ISSUES

Senate Bill 235 is consistent with the Board of Finance Environmental Policy, which states that the Board of Finance will take into consideration the utilization of environmentally protective technologies when approving capital expenditures and other approval requests. HED also has an initiative, called “green screen” where it evaluates and prioritizes higher education capital needs based on their utilization of these technologies.

PED notes the estimated backlog of repair and renovation costs to bring the state’s public school buildings up to the statewide adequacy standards is approximately \$4,100,000.0. This amount pertains to HVAC equipment and damaged lighting and branch circuits. There were also approximately 739 public school buildings throughout the state encompassing approximately 66 million square feet. The average age of school buildings in New Mexico is 30+ years. Most schools may need a major renovation for any type of building to be energy efficient. The Energy, Minerals, and Natural Resources Department would not want to put energy efficiency equipment on buildings that are not energy efficient.

ALTERNATIVES

The Energy Efficiency and Renewable Energy Bonding Act is another avenue for school districts to consider. Through this act, the district can apply for funds for the energy audit from the revolving Energy Efficiency Assessment Fund. Local school districts can also enter into guaranteed savings contracts with qualified providers for up to 10 years to finance, purchase and install energy efficiency measures in their buildings through the Public Building Energy Efficiency Act 6-23-1 NMSA 1978.

WHAT WILL BE THE CONSEQUENCES OF NOT ENACTING THIS BILL

State agencies would continue to design and build new buildings and major renovations under the guidelines of Governor Richardson’s various energy efficiency Executive Orders.

Schools will continue to use the normal means of energy and use standard building materials because of the high cost of implementation.

EMNRD suggests that if this bill is not enacted, New Mexico will continue to design and construct buildings that require increasing financial support to pay for utilities.