

STATE INFRASTRUCTURE BUDGETING AND FUNDING

A Report Prepared for the
Legislative Finance Committee

By
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Introduction

As presented in previous reports to the LFC during the current biennium, the State of Montana has a substantial investment in state infrastructure. This report provides an analysis on how the state budgets, and funds the construction and maintenance needs for state buildings.

Buildings deteriorate over time, requiring repairs and at times replacement. Adequate maintenance of state buildings is necessary to keep the buildings in a usable condition for as many years as possible. The state provides maintenance for buildings through two appropriation tools, the HB 2 budgets (routine maintenance) and the Long-Range Building Program budgets (capital renewal maintenance).

State building construction and maintenance has been a topic of research and debate for a number of biennia. Questions have arisen in the legislature related to project selection, deferred maintenance backlog, and the adequacy of project funding. For example in 2000, the Legislative Audit Committee undertook a limited scope performance audit assessing the facilities management of state-owned buildings. The audit focused on the state's approach to the provision of building maintenance and recommended a more comprehensive and formalized method of planning the construction and maintenance activitiesⁱ. While the Department of Administration agreed with the findings of the audit, neither the Legislature nor the Executive have changed statute, funding, or practice to implement the audit recommendations and its conclusions are still valid today. In 2006, the LFC studied the sufficiency of capital maintenance funding as provided through the Long-Range Building Program (LRBP) fund. The LFC proposed legislation to increase funding for the purpose, but it was not passed by the legislatureⁱⁱ.

In previous presentations of the state infrastructure project, the LFC has heard how individual agencies assess their needs for building construction and maintenance and subsequently request project funding to address their needs. The statutory framework guiding agency requests for capital improvement funding, and insight into how agency requests are prioritized by the executive will be explained in a report from the State Architect. This report is intended to provide an analysis of the history of the state's building construction, maintenance, and repairs budgets and discusses the industry recommendations for building maintenance budgets. The analysis will be followed by methods for improving the planning and funding of building construction and maintenance for LFC consideration.

Investment in Physical Plant

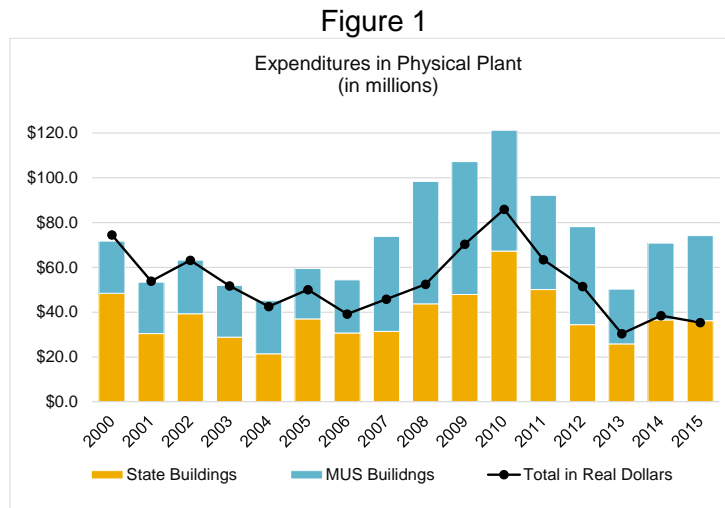
The state has a substantial investment in buildings that must be maintained. Depending upon its type of construction and purpose, a state building will typically have a functional life of 30-50 years or more. Without adequate investment in maintenance and upgrades buildings fall into disrepair and may not realize their functional life. Furthermore, the growth and changes in state provided services may require new space, be it through owned or leased space.

The value and usable life of a building can be preserved and extended through the ongoing investment in maintenance. In Montana building maintenance is budgeted in two ways:

- Routine maintenance – Everyday repairs to address normal usage or that improve or maintain the comfort and convenience of the environment. These types of repairs include fixes to doors, lights, drywall, paint, ceiling tiles, leaking water faucets, or other similar repairs that pose no urgent risk to the occupant. As used in this report, routine maintenance is typically budgeted as a part of an agency's operational budget in the general appropriations act, HB 2
- Capital renewal – Major repairs that preserve the usable condition or extend the life of a building. This category includes repairs and/or replacement of HVAC systems, electrical systems, roofing, foundation, fire alarm systems, parking lots, water and sewer systems, and other building

systems and major components. In this analysis, capital renewal includes the provision of new space. Often, capital renewal projects are funded through a capital projects fund, such as the LRBP fund, where the state accounting rules facilitate the capitalization of expenditures. In state government the term is synonymous with major or deferred maintenanceⁱⁱⁱ. Capital renewal projects are generally budgeted in the LRBP bills, most frequently HB 5 and in the case of a bonded construction program, HB 14.

Figure 1 shows the annual state expenditures on physical plant, for state government and state supported university buildings. The data includes both routine and capital renewal maintenance. The data provides a high level overview of physical plant expenditures from all sources of authority and funding. University system data has been disaggregated to exclude the construction and maintenance of student fee and research supported facilities and will be referred to as the state supported university facilities in this report. The data includes investment in new space.



In Figure 1, an average of 22% of the expenditures are for routine maintenance. In 2015, total routine maintenance for all agencies and all sources of funding were \$22.4 million. The state’s routine maintenance has grown by an annual average of 3.8% over the period. An average of 42% of the total expenditures were at the state supported buildings in the university system.

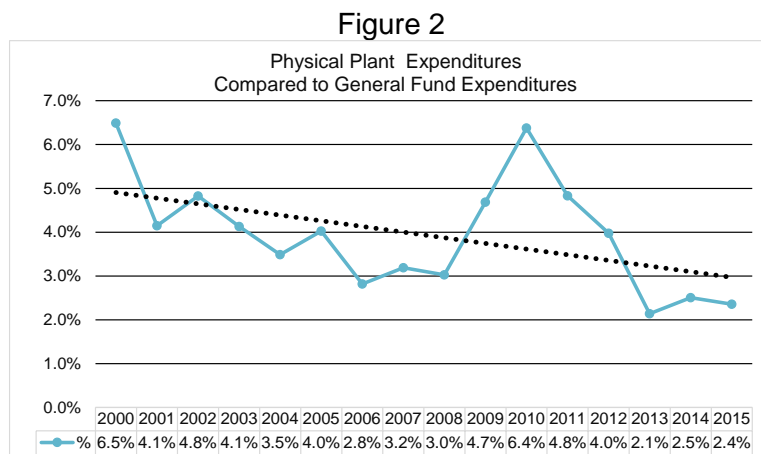
On average, 78% of the total are capital renewal expenditures. In 2015, total capital renewal expenditures for all agencies and all sources of funding were \$51.8 million. The data included in this analysis has the following attributes:

- MUS capital renewal expenditures average 49.3% of the total and an average of 50% of the work/funding is administered by the university system and 50% is administered by the LRBP
- Most capital renewal expenditures are made through the LRBP
- LRBP capital renewal expenditures (excluding MUS) average 30.7% of the total and are from all sources of authority and funding
- The Department of Military Affairs accounts for an average of 13.9% of expenditures and are primarily federally funded

In nominal dollars, expenditures in 2015 is \$11.0 million greater than 2002. When viewed in inflation adjusted real (2002) dollars^{iv} in a point to point comparison the state’s expenditures on physical plant has declined by \$28 million or 44%. While the state does not have a formalized method for quantifying the deferred maintenance backlog, the overall decline in expenditures on capital renewal suggests that the state backlog is not making progress on decreasing deferred maintenance.

Figure 1 provides visual evidence of occasional spikes in the state's spending in physical plant that has helped, at least temporarily, to address the deferred maintenance backlog. The funding spikes exhibited in the data highlight the times when the state chose to make significant additional expenditures in physical plant (2008 through 2012) versus when the state relied on the usual sources of funding. In other words, the state has increased spending in physical plant when there are available funds that can be directed to that purpose. During the period, the increased investment came through increased capital renewal expenditures, as opposed to increases in agency operational budgets. What is uncertain is whether the periods of increased spending by the state has served to reduce the state's overall deferred maintenance backlog.

Figure 2 shows the state's expenditures in physical plant compared in percent terms to general fund expenditures from 2000 to 2015. The comparison uses inflation adjusted dollars^v. The trend line provided in the figure eliminates the volatility in the numbers and shows that the state's expenditures in physical plant has declined from approximately 5% to 3% in relation to all expenditures from the general fund in the 15 years of this analysis.



Recommendation for Investment in Physical Plant

While reduced spending on physical plant in relative terms is evident, this assessment does not provide the context of whether the state has sufficiently funded building maintenance. Unknown to this point is whether the state has invested, or is investing, in maintenance at a level that will retain and extend the useful life of the building inventory. While outside the scope of this project, there is research that speaks to the appropriate level of maintenance expenditures.

There are nationally based recommendations of adequate funding levels for the maintenance of physical plant. In the 1990's a number of research projects quantified the recommendation for expenditures on physical plant^{vi}. In developing the recommendations, analysts quantified the life of all building systems and the costs necessary to keep those systems functioning properly. Factors that influenced the levels of routine maintenance and capital renewal expenditures included:

- Building size and complexity
- Types of finishes
- Current age and condition
- Mechanical and electrical systems technologies
- Telecommunication and security technologies
- Historic or community value
- Climatic security
- Tenancy turnover rates
- Criticality of role or function
- Ownership time horizon
- Labor prices
- Energy prices
- Material prices
- Distances between buildings in inventory

The research findings have been relatively consistent across the studies, providing a recommendation for annual maintenance spending between 2% and 4% of current building replacement value (CRV)^{vii}. Specifically, the research recommended the following for maintenance budgeting:

- Operations & maintenance (routine maintenance) = 0.5 to 1.5% CRV
- Life cycle renewal (capital renewal) = 1.5 to 2.5% CRV
- Recurring annual budget guideline = (a) + (b) = 2.0 to 4.0% CRV

This recommendation only relates to the maintenance of existing space and does not include costs to reduce an existing deferred maintenance backlog or the costs to supply new space or functional improvements due to growth or changes in the need for state provided services. The recommendation also omits the replacement costs of major building systems and the replacement cost of the building itself, once the building has outlived its useful life. Budgetary coverage of these factors would increase the proportion of CRV needed.

Regionally, the state of Utah makes use of the industry recommendation in compiling their capital renewal budget. The laws in Utah^{viii} require a minimum investment of 0.9% of the CVR and that 1.1% of the CVR of state buildings is appropriated to capital improvements before any new capital development projects (new space construction) can be funded. This percentage is in addition to agency routine maintenance funding. With this law in place, Utah prioritizes the maintenance of state buildings over the construction of new, applying the principle of taking care of what you have first. The state has established a Building Board to facilitate the planning and appropriation, as well as other rules related to the capital budgeting. The state has exceptions to the law that provides flexibility for deficits in the state's education fund budget or the general fund budget.

The formalization of the capital renewal budget process in Utah has provided the state with a consistent level of funding while prioritizing existing physical plant, helping to increase the effectiveness of the building maintenance program. This would not have been possible/functional without creating and funding a programmatic structure to facilitate the process.

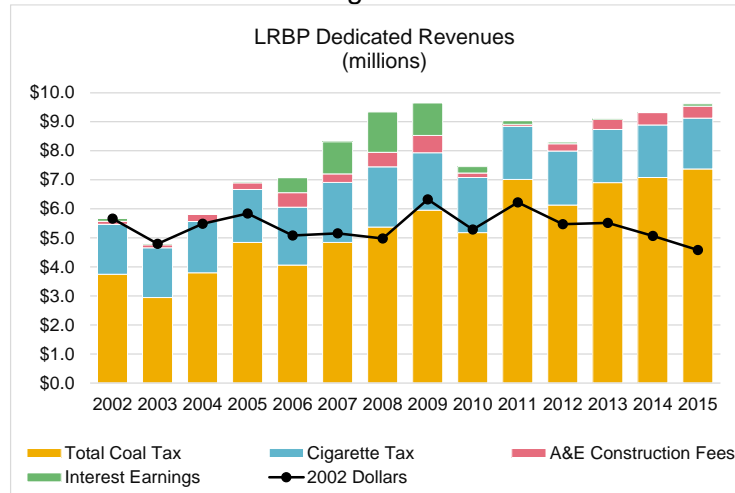
Capital Renewal - LRBP

In Montana statute, major construction and maintenance, or capital renewal, projects with costs equal to or greater than \$150,000 require legislative consent. The responsibility of the state government capital construction and maintenance, or capital renewal, program falls to the LRBP. Historically, the LRBP capital projects fund has been responsible for the costs of most of the major/deferred maintenance needs (referred to as the cash program), while new space construction and higher cost maintenance projects have been funded with the proceeds of bond issues and transfers from the general fund. The LRBP fund normally funds projects for agencies that are substantially supported with general fund revenues. Agencies funded primarily with state and federal special revenues use those sources of revenue for their construction and major maintenance projects. Funding for the LRBP cash program is derived from several sources including:

- 2.6% of the cigarette tax
- 12.0% distribution of the coal severance tax
- Supervisory fees paid to the A&E
- Interest earnings on LRBP fund balances

The dedicated revenues of the LRBP are typically made available for major repair and maintenance projects and are not sufficient for the construction of new facilities. Between FY 2002 and FY 2015, there were no changes in the distributions of the cigarette and coal severance taxes to the fund. As seen in Figure 3, the nominal revenues have increased over the period by 69.8%, but when adjusted for construction inflation, funding has declined by 19.1%. In other words, while the funding has increased the dedicated revenues now support fewer improvements.

Figure 3



While LRBP funds have historically been used for the capital renewal maintenance needs of state buildings, the fund has also supported debt service on a limited number of general obligation (GO) bonds issued for capital renewal projects. In 1997, the legislature reduced the cigarette taxes flowing into the fund, diverting the change^{ix} to the general fund in support of the debt service on state construction projects. Additionally, in 1995 the legislature directed the coal severance tax into the LRBP fund with the intent that the funds would be used pay the debt service on construction and maintenance bonds. Since, the debt service supported by the LRBP fund has averaged approximately \$3.8 million per biennium. Over time, the debt service paid through the LRBP fund has declined and is now nearing term. An early projection for the debt service costs for the LRBP fund is \$1.9 million for the 2019 biennium and the final payment on the bonds is scheduled for FY 2020. Consequently, the LRBP will have additional project funding capacity after those bonds are retired.

Like in Utah, the ongoing dedicated funding coming through the LRBP fund tends to be directed towards capital renewal of existing physical plant. However, in Montana there is no statutory framework to ensure the amount of funding provided is in agreement with the industry recommendations or is sufficient to address reductions in the deferred maintenance backlog. While Montana lacks this direct information, the state has relied on the difference between project requests and actual project funding as evidence of a funding shortfall in the LRBP and the possible growth of the deferred maintenance backlog.

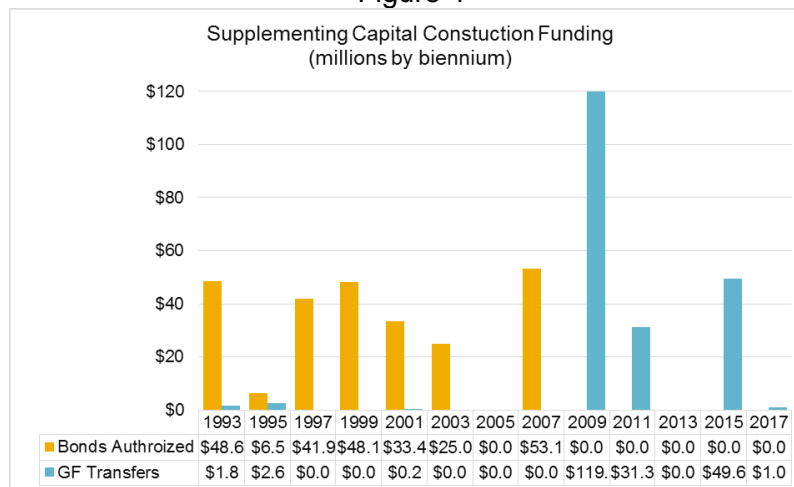
In every budget cycle, requests for LRBP project funding exceed the LRBP revenues. In the 2017 biennium budget cycle, the LRBP received \$203.9 million of statewide agency project requests from which \$160.3 million would be considered deferred maintenance projects^x. The LRBP funding and the budget process provided appropriations of \$16.9 million^{xi}, indicating an unmet deferred maintenance need of \$143.4 million. This method of determining the deferred maintenance backlog is thought to underestimate the actual backlog, since it is unlikely that agencies request more than the top few facility needs knowing that available funding is limited. Likewise, agencies relying on state and federal special funding are reluctant to request LRBP funds (or general fund transfers) for major repairs and maintenance needs. Given the constraints in funding, the LRBP generally prioritizes health/life safety projects and projects to address failed/failing building systems, resulting in a program that provides a more reactive approach to project prioritization. These funding constraints create pressures for supplemental dollars, either through bonding or general fund transfers, to fund major repairs and maintenance projects.

Supplementing Capital Construction Funding

Funding for the LRBP cash program is typically not sufficient to pay for the construction of new state buildings, additions, significant renovations, and other large projects. Instead, the funding for those types of projects are typically supplemented in one of two ways, through bond proceeds or general fund transfers. As shown in the Figure 4, the use of bond proceeds was constant through the 1990's and early 2000's. However, over the past decade the Montana legislature has opted to use general fund infusions, when available, to support new construction and additional major construction and maintenance projects.

Between the 1998 and the 2017 biennia, the average supplement of funding, through either bond proceeds or general fund transfers for major construction and maintenance projects has averaged \$35.6 million per biennium. The provision of supplemental dollars through general fund transfers (2009 biennium through 2017 biennium) has been greater than the period when bonding was prevalent (1993 biennium through 2007 biennium), averaging \$40.3 million compared to \$32.1 million.

Figure 4



The supplemental funding has provided the capacity for the state to build new space for the needs of state government services. The funding has also been directed to improvements in state buildings and state supported buildings at the university system. While these bond or cash infusions have frequently funded the construction of new space, the funding is also provided for the construction of major renovations and buildings that replace existing facilities and therefore do reduce the deferred maintenance backlog of the state.

Process Improvements

This report has provided an overview of the budgeting process as well as an analysis of historic funding for the construction and maintenance of state buildings. There are areas where additional information would be helpful for the Legislature to reach a more informed conclusion about the state's maintenance of buildings. The following provides a list of process improvements that the LFC may want to consider to improve future assessments on the needs of state buildings. The process improvements listed below do not differ significantly from the findings of the Legislative audit mentioned earlier in this report. These improvements do have costs that would have to be considered, but could provide stronger evidence about the state's maintenance activities and aid future legislatures in addressing building maintenance.

- 1) Statewide Facility Condition Assessment (FCA) - The university system maintains a facility condition assessment tool. The use of a FCA allows the university system to track the condition of all buildings, quantify deferred maintenance backlog, and plan for needed improvements. Some state agencies independently make use of this type of tool, but the

- state does not maintain a comprehensive FCA program under one agency for planning and prioritizing statewide maintenance needs.
- 2) Enhanced Building Inventory – The Risk Management and Tort Division of the Department of Administration has provided data for the LFC state infrastructure project. However, the division notes that the data compiled is for insurance purposes and is not intended as an inventory of state buildings. The data is self-reported online to the division by state and university contacts and its accuracy can be independently verified only when building appraisals are conducted by the division's appraisal consultants. Since appraisals are not conducted on smaller, lower value structures the division must rely on building industry estimates of replacement cost projections by occupancy type and agency/university estimates of square footage and replacement cost value which are subject to change year over year. The state could develop a more systematic method for collecting data and then providing the data in a way that would be useful for both the insurance purposes and to provide square footage and replacement value for the use in judging the state's existing physical plant expenditures, or targeting future appropriation levels.
 - 3) Measure of the Deferred Maintenance Backlog – A statewide FCA would provide the ability to quantify the state's deferred maintenance backlog and whether progress is being made. By tracking changes in the statewide totals of backlog over time the legislature would have a better understanding if current levels of maintenance expenditures are decreasing, holding stable, or increasing the state's overall backlog. Appropriations could be adjusted as the legislature deems appropriate to meet its facility goals. As long as the state lacks a comprehensive facility condition assessment program and a centralized repository for information there will be continued uncertainty about the size of the deferred maintenance backlog.
 - 4) Advanced Planning of Growth and Facility Needs – When planning the budgets for new space needs, whether through built or leased space, the needs and requests are typically in reaction to what is occurring in the agency at that point in time (reactive instead of proactive). The development of a statewide multi-year growth forecast would help legislatures know what the future needs for new space are and how the current accommodations could be adjusted and adapted to fit into a long-term plan. This planning could include evaluation of reallocation of existing space, proposed leases, proposed new construction, and the consolidation of fractured agencies in larger new or leased spaces large enough to require legislative authorization. The Capital Complex master plan did a survey of agencies to determine new space needs based on future growth expectations, but for such a tool to be effective and efficient, the plans would need to be updated on a regular basis.
 - 5) Comprehensive Facility Maintenance Program/Appropriation – Like the state of Utah, the development of a more comprehensive method for planning the maintenance of physical plant would be useful in assuring that the state's expenditures in physical plant are made efficiently. Using the industry recommendations for the level of funding state building maintenance assures that the state takes care of existing facilities first. Work would be required in 1) determining how much the state currently spends on maintenance as it relates to the current replacement value, 2) determining what level of funding should be expended to adequately maintain the state buildings and reduce the deferred maintenance backlog, and 3) amending law to guide the appropriations for existing physical plant major repairs and maintenance. (Note: In this report, staff has mentioned just a small part of what the state of Utah has put in place to insure the proper amount of maintenance is made to their buildings. Other states may have similar processes in play. The LFC could request a review of other state's building maintenance laws to gain a better understanding of state infrastructure programs.)
 - 6) Reporting Requirements/Quarterly Interim Updates – The legislative adoption of reporting requirements could resolve some the more recent concerns raised and allow agencies the ability to inform the legislature of growing pressures for additional space or major capital improvements. Whether reporting to a board, such as used in Utah, the LFC, or a different

legislative interim committee, obtaining interim information on agency space needs and plans for new space, be it through lease or build, could provide a heightened awareness of upcoming session requests and actions.

Conclusion

In real terms, the state's expenditures in physical plant has declined by 44% between FY 2002 and FY 2015. That reduction parallels in the 19.1% reduction of expenditures from the LRBP fund. While the nominal funding has increased, the project funding has not kept up with the pace of construction inflation. Although real funding has declined, construction and maintenance projects have been supplemented by either bond proceeds or transfers from the general fund. Through the analysis conducted for this report, a number of deficiencies in state building information were found. The state could benefit by implementing improvements for tracking the status and upkeep of state buildings.

This concludes the scope of the Interim Work Plan for State Infrastructure, unless additional information is requested by LFC. Potential actions available to the committee include:

- Request for additional or follow-up information or materials
- Request to draft legislation to implement any of all of the 6 Process Improvements identified in the previous section of this report
 - Statewide Facility Condition Assessment (FCA)
 - Enhanced Building Inventory
 - Measure of the Deferred Maintenance Backlog
 - Advance Planning of Growth and Facility Needs
 - Comprehensive Facility Maintenance Program/Appropriation
 - Reporting Requirements/Quarterly Interim Updates
- Any other request from the committee

End Notes

ⁱ Legislative Audit Division. Facilities Management of State-Owned Buildings. November, 2000. leg.mt.gov/content/Publications/Audit/Report/00p-18.pdf

“Recommendation #1. We recommend the Department of Administration, in conjunction with agency facilities managers and maintenance personnel, develop policy that addresses guidelines and minimum standards for maintenance of state-owned facilities.

Recommendation #2. We recommend:

A. The legislature mandate a standardized, statewide facilities condition assessment process.

B. The Department of Administration develop and conduct the program.”

ⁱⁱ SB 79. Change the manner of funding long-range building program. This proposed legislation was drafted as a result of a 2005-2006 interim study conducted by a subcommittee of the LFC. Proposed in the legislation was a rental surcharge and an endowment trust. As initially envisioned in the subcommittee work and outlined in *Recommendation to the Legislative Finance Committee from the Subcommittee on LRBP Cash Program Funding*, the proposal would have eliminated the 12% coal severance tax distribution to the LRBP and replaced the funding with a set of square/foot charges by building type to cover the maintenance costs on state buildings.

ⁱⁱⁱ Deferred maintenance is defined as major maintenance or capital projects that go unfunded in previous budget cycles. However, in the state’s vernacular, it has come to mean major maintenance projects.

^{iv} The total physical plant expenditures are discounted by the Turner Construction Cost index, with 2002 representing the base year.

^v Physical plant expenditures are discounted by the Turner Construction Cost index and total general fund disbursements are discounted by the CPI. In both cases, the 2002 index serves as the base year.

^{vi} Tradeline. *Recapitalization & Capital Renewal—What’s the Number*. Pp. 6. “The range of two to four percent times the replacement value of facilities for an annual maintenance and repair budget is commonly cited in the literature. (NRC, Stewardship of Federal Facilities, National Academy Press, 1998, and The Whitestone Building Maintenance and Repair Cost Reference, Whitestone Research, 1999) There’s a big difference between a two percent budget and a four percent budget — the latter being twice the amount of the former! Whitestone Research’s 1999 client survey data puts maintenance and repair expenses at the four percent level.”

^{vii} Harvey Kaiser. *Capital Renewal and Deferred Maintenance*. Pp. 11 through 12. “The empirical guidelines in the BRB’s (Building Research Board of the National Research Council of the National Academy of Sciences) Committing to the Cost of Ownership: Maintenance and Repair of Public Buildings are one source of macro-level estimating. The BRB addressed an array of costs associated with acquiring, maintaining, and replacing facilities to guide financial planning for integrating maintenance and repairs and reducing the backlog of deferred maintenance.

^{viii} Utah codes: **63A-5-101-(7)(a)** Except as provided in Subsection (7)(b) or (c), the Legislature may not fund the design or construction of any new capital development projects, except to complete the funding of projects for which partial funding has been previously provided, until the Legislature has appropriated 1.1% of the replacement cost of existing state facilities and infrastructure to capital improvements.

From the definition section of 63A-5-101:

(a) "Capital developments" means a:

(i) remodeling, site, or utility project with a total cost of \$2,500,000 or more;

(ii) new facility with a construction cost of \$500,000 or more; or

(iii) purchase of real property where an appropriation is requested to fund the purchase.

(b) "Capital improvements" means a:

(i) remodeling, alteration, replacement, or repair project with a total cost of less than \$2,500,000;

(ii) site and utility improvement with a total cost of less than \$2,500,000; or

(iii) new facility with a total construction cost of less than \$500,000.

^{ix} Changed from 20.25% of the total cigarette tax to 15.85%. The cigarette tax was reduced to the current level of 2.6%, although the dollar distributions were held constant, with a voter initiative that increased the rate of the cigarette tax.

^x Governor’s Executive Budget, Fiscal Years 2016-2017. Volume 3. Pp. 133. New projects reduced from the list include the Heritage Center project and the Montana State Hospital forensic unit project.

^{xi} The \$16.9 million of appropriations included a \$1.0 million transfer of general funds into the LRBP fund.