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EXECUTIVE SUMMARY

INTRODUCTION

In response to the provisions of Engrossed Substitute House Bill (ESHB) 3329, enacted by the 2008 Legislature, the goal of this study is to identify and analyze options for financing higher education capital facilities and examine alternatives for reducing facility construction costs and strategies for managing costs. This work is based on interviews with over 60 stakeholders in Washington State, a review of Washington higher education institutions’ capital budget and cost data, and a comparative assessment of higher education capital funding strategies in eight other states.

OVERVIEW OF CAPITAL FUNDING STRUCTURE FOR HIGHER EDUCATION IN WASHINGTON

Washington State has a nuanced and complicated system for financing higher education capital facilities and ensuring that the State’s resources are maximized through the use of cost management and other strategies. For the most part, the existing system has supported the higher education institutions’ capital needs. But in the current environment of decreasing State bonding capacity and increasing facility needs, it is important to begin identifying other revenue sources and strategies for supporting higher education capital facilities.

Capital projects at higher education institutions in Washington are funded from a variety of revenue sources including state, local (institutional), and a very small amount of federal money. The largest portion of funding comes from the State, which has a complex system of dedicated and allocated revenue sources that flow into a set of accounts before being allocated to the institutions each year. Each institution generates building fees as a part of tuition, and many institutions also generate funding for construction through operations, research grants, and private donations. The relative shares of these revenue sources in supporting the institution’s capital program vary substantially by institution and biennium.
Higher education institutions use a variety of financing mechanisms and partnerships to address cash flow issues, total funding shortfalls, or both. These mechanisms can occur within the biennial state capital budget process to supplement state-funded projects or can occur outside the process to fund additional projects. Some of the more common partnering arrangements in Washington include certificates of participation (COPs), Energy Saving ..., and other ad hoc public-private and public-public partnerships.

OPTIONS FOR INCREASING FUNDING FOR HIGHER EDUCATION CAPITAL PROJECTS

The following table lists the potential options identified for increasing funding for higher education capital projects and describes in brief the issues associated with each. The options are discussed at length in this report and summarized below in terms of magnitude, feasibility and other impacts. A magnitude rating of “high” represents a financing strategy that could generate at least $100 million; “medium” magnitude strategy would generate between $10 and $100 million; and a “low” magnitude strategy would generate $10 million or less.
### Exhibit ES-2
Options for Increasing Funding for Capital Projects

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Magnitude</th>
<th>Action Needed</th>
<th>Feasibility of Implementation</th>
<th>State Debt Limit Impact</th>
<th>Other Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expand State Debt Limit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Include Near General Fund Accounts in General Revenues Definition | High (About $300 M) | Legislative action to remove dedication of near General Fund accounts | • Beneficiaries of accounts that will no longer be dedicated may resist  
• Political will | Expands State debt limit | • There may be other demands on State funds freed up by expanding the debt limit beyond higher education construction |
| Include Property Tax in State General Revenues Definition | High | Constitutional Amendment | • Political will | Expands State debt limit | • There may be other demands on state funds freed up by expanding the debt limit beyond higher education construction |
| **Trust Lands** | | | | | |
| Diversify Permanent Fund Investments | Low (About $10 M) | No statutory changes required | • Feasible  
• Bill enabling diversification passed in 2008 | None | • WSU would likely benefit the most |
| Diversify Trust Land Holdings (increase Agriculture and Commercial holdings) | Low (Commercial and agriculture lease revenues are currently 3% and 4% of total DNR revenues, respectively. At 10% each, revenues increase by about $1 M) | Legislative Action to encourage trust land diversification | • Political will - bill to divest DNR from commercial land introduced in 2007  
• Represents a policy shift away from timber lands and conservation | None | |
| Alternative Energy Sources, | Low | DNR to Pursue opportunities | • In progress  
• Common Schools lands are more numerous and better suited to alternative energy production | None | |
| Sale of Trust Land, | Uncertain (Difficult to compare land value versus other financial investments) | Legislative Action to allow the sale of trust lands | • Private buyers counter to existing policy  
• Fund appropriation necessary for State purchase  
• Each sale limited to 160 acres | A State purchase would require a bond issue; impacting debt capacity | • WSU would likely benefit the most  
• DNR has not estimated value of trust lands since 1994 |
### Building Fees

<table>
<thead>
<tr>
<th>Option</th>
<th>Rating</th>
<th>Description</th>
<th>Legislative Action</th>
<th>Political Will</th>
<th>Similar Bill, SB 6432, Failed Recently</th>
<th>Opposition to Potential Use of Building Fees for New Construction Rather Than Maintenance</th>
<th>None</th>
<th>UW and WSU Could Bond Against This Revenue Stream</th>
<th>Loss of State Control Over This Revenue Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eliminate Building Fee Appropriation Requirement</td>
<td>High (Enables UW and WSU to raise between $90 M and $122 M in bond revenue depending on term and rate)</td>
<td>Legislative action to eliminate requirement to deposit building fees in state treasury</td>
<td>• Political will</td>
<td></td>
<td></td>
<td>• Opposition to potential use of building fees for new construction rather than maintenance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use Building Fees for COP Lease Payments</td>
<td>High (Enables large sum for capital to be raised; does not increase actual revenues)</td>
<td>No statutory changes</td>
<td>• Policy shift from maintenance to new construction</td>
<td></td>
<td></td>
<td>• Potential resistance from universities</td>
<td>None</td>
<td></td>
<td>Operating budget implication</td>
</tr>
<tr>
<td>Increase the Proportion of Building Fees relative to Operating Fees</td>
<td>Medium (depending on increase) (A 1% larger share of tuition results in a $15M increase)</td>
<td>Legislative action to amend RCW 28B.15.069</td>
<td>• Political will</td>
<td></td>
<td></td>
<td>• Resistance from universities because of impact on operating budget</td>
<td>None</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separate Building Fees from Tuition Fees (not subject to 7% increase limit)</td>
<td>Low (depending on increase) (A 10% increase in the building fee results in $10 M in new revenue)</td>
<td>Legislative action to amend definition of tuition fees and increase limits to building fees</td>
<td>• Compared to other states, some room for tuition increase</td>
<td></td>
<td></td>
<td>• Similar bill, SB 5327, failed recently</td>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Local Funding

<table>
<thead>
<tr>
<th>Option</th>
<th>Rating</th>
<th>Description</th>
<th>Legislative Action</th>
<th>Political Will</th>
<th>Difficult to Implement</th>
<th>Need to Overcome K-12 Resistance</th>
<th>None</th>
<th>Impact to K-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use a Portion of the State’s Property Tax Capacity</td>
<td>High (Estimated upward of $85 M)</td>
<td>Constitutional Amendment to authorize higher education property tax (2/3 Legislative approval; simple majority vote)</td>
<td>• Political will</td>
<td></td>
<td></td>
<td></td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Raise Retail Sales and Use Tax and Dedicate a Portion to Capital</td>
<td>High (Estimated upward of $119 M)</td>
<td>Legislative Action (super-majority voting approval)</td>
<td>• Washington has one of the highest sales tax rates</td>
<td></td>
<td></td>
<td></td>
<td>None (if dedicated to capital)</td>
<td>Lodging rate limitation</td>
</tr>
<tr>
<td>Corporate Income Tax</td>
<td>Medium (Is $70 M in Maryland)</td>
<td>Voter approval for income tax</td>
<td>• Political will</td>
<td></td>
<td></td>
<td></td>
<td>Unlikely</td>
<td>Income tax structure for DOR</td>
</tr>
<tr>
<td>Create a Special Property Tax District</td>
<td>Uncertain (Depends on boundaries and tax rates)</td>
<td>Legislative Action (possible voter approval needed)</td>
<td>• Difficult to determine service area for four-year institutions</td>
<td></td>
<td></td>
<td>• Existing community and technical districts ease implementation</td>
<td>None</td>
<td>High administrative costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• More impact to CTCs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposal</td>
<td>Uncertainty</td>
<td>Legislative Action</td>
<td>Constitutional Amendment</td>
<td>Impact Fees</td>
<td>Tax Increment Financing, Uncertain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>------------------------------------------</td>
<td>------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raise a Selective Sales Tax (e.g. Cigarette)</td>
<td>Uncertain (Depends on which of the 18 selective sales taxes is chosen)</td>
<td>Legislative Action • Need a logical taxable item • Political will</td>
<td></td>
<td>None</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create a Retail Sales Taxing District</td>
<td>Uncertain (Depends on boundaries and retail activity)</td>
<td>Legislative Action • Difficult to determine service area for four-year institutions; easier for new campus facilities • Existing CTC districts</td>
<td></td>
<td>None</td>
<td>• High administrative cost</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact Fees</td>
<td>Uncertain</td>
<td>Legislative action (to alter RCW in more than one section) • Tenuous link • Changes policy of impact fees</td>
<td></td>
<td>None</td>
<td>• Impact fees are generally for infrastructure improvements related to new development • More applicable to CTCs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax Increment Financing, Uncertain</td>
<td>Uncertain (Depends on magnitude of effect on property values)</td>
<td>Constitutional Amendment • Not currently being used in WA • Have to prove increase in surrounding property values • Voters have rejected in the past</td>
<td></td>
<td>None</td>
<td>• More applicable to new development • Building must provide clear public benefit</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
COST MANAGEMENT STRATEGIES AND OPTIONS

ESHB 3329 identifies the following cost management strategies for inclusion in this study: expansion of online learning opportunities, space utilization and scheduling improvements, and establishment of expected cost ranges by facility type. In addition to these topics, other potential cost management strategies like construction procurement practices and methods for shortening project timelines were also examined. The following table summarizes the cost management strategies examined and briefly identifies potential impacts.

### Exhibit ES-3
Higher Education Capital Cost Management Strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Action Needed</th>
<th>Impacts and Tradeoffs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Refine Scoring System</strong></td>
<td>Continue to refine the Capital Projects Scoring System to further emphasize cost management.</td>
<td>• Favors the most cost-efficient projects</td>
</tr>
<tr>
<td></td>
<td>• Identify appropriate measures of cost efficiency and amend scoring system.</td>
<td>• May disadvantage necessary capital projects that do not meet the cost efficiency standards</td>
</tr>
<tr>
<td></td>
<td>• Incorporate the established cost per square foot ranges into the Capital Project Scoring System.</td>
<td>• Prioritizes cost efficiency over other desired educational outcomes</td>
</tr>
<tr>
<td></td>
<td>• Initiate a system to track actual project costs and update the ranges regularly.</td>
<td></td>
</tr>
<tr>
<td><strong>Project Timelines</strong></td>
<td>Explore ways to reduce project timelines through the budget process.</td>
<td>• Legislative action</td>
</tr>
<tr>
<td></td>
<td>• Incorporate the established cost per square foot ranges into the Capital Project Scoring System.</td>
<td>• Reduces escalation costs and total project costs</td>
</tr>
<tr>
<td></td>
<td>• Initiate a system to track actual project costs and update the ranges regularly.</td>
<td>• Reduces available funds for other capital projects</td>
</tr>
<tr>
<td><strong>Space Utilization</strong></td>
<td>Refine space utilization standards to better reflect current educational needs and maximize space efficiency.</td>
<td>• Develop standards that encompass administrative, office, and general purpose space to identify more efficient ways to utilize existing space</td>
</tr>
<tr>
<td></td>
<td>• Incorporate space utilization standards into the budget process.</td>
<td>• May still incur capital costs if remodeling of space is required</td>
</tr>
<tr>
<td></td>
<td>• Conduct an institution-wide inventory of all types of space (office, recreational, laboratory, classrooms, etc.) and their utilization rates at all higher education institutions</td>
<td>• May affect class scheduling practices</td>
</tr>
<tr>
<td></td>
<td>• Potential to increase space efficiency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Potential to reduce new construction needs</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cost and resources needed to understand inventory and utilization by space type</td>
<td></td>
</tr>
<tr>
<td><strong>Online Learning</strong></td>
<td>Continue to encourage and support the development of online programs.</td>
<td>• State support for collaboration amongst institutions on new course development and ensuring transferability</td>
</tr>
<tr>
<td></td>
<td>• Continued increases in online enrollment could potentially relieve pressure on capital facilities, although usually requires higher initial investment in technology</td>
<td>• May increase out of state enrollment and produce ancillary revenue</td>
</tr>
</tbody>
</table>
SUMMARY OF FINDINGS

Other States

The higher education systems in the Global Challenge States, Texas, and Wisconsin are facing similar funding constraints. For the most part State general obligation bonds and institutional sources (endowments and fees) are the primary sources of capital funding. Some states, like New Jersey, do not receive any capital funding from the state. Others, like Maryland and Texas, have the benefit of special revenue streams like corporate income taxes and oil revenues, which allow for higher levels of state support.

Tax structures, policies, and districting vary by state and have led to some unique situations, particularly with respect to community and technical colleges, which are sometimes supported through local property taxes (much like K-12 schools). The states also differ in how much of the cost burden is passed on to students in the form of tuition and fees, and on average, Washington charges its students slightly less than other states.

Revenue Sources

It is not surprising that revenue sources which could produce the highest relative yield are also fraught with the most implementation challenges, often requiring voter approval or significant changes to tax policy. Those which are more feasible, like different approaches to the financial management of the State’s trust lands or increases in building fees, lead to smaller financial gains or could produce undesirable trade-offs with respect to who is carrying the cost burden. This report identifies a number of options for policy makers to consider. The two areas with the most potential include trust lands revenues and building fees.

Trust Lands. With respect to trust lands, the State should continue to examine where and how these lands can be diversified to encompass more lands with higher revenue-earning potential. In addition, The State Investment Board should continue to evaluate strategies to diversify investments purchased with trust lands revenue. While neither of these strategies is expected to have a high yield in terms of additional monies generated for higher education capital projects, in combination they could raise an additional one to ten million dollars per biennia.

Increase Building Fees. Given that combined in-state tuition and fees for public four-year institutions is slightly less in Washington (on average) than in other states, there may be room to increase the building fee charged to students. This essentially passes the cost burden on to students at a time when the decreasing affordability of higher education is becoming more of a national issue. It would, however, provide some additional capital funding, estimated at up to $10 million per year.

Leverage Building Fees. Perhaps the most promising short term opportunity to increase funding for higher education capital projects is leverage building fee revenues. The State could do this by using the existing building fee revenues it collects to support Certificate of Participation financing of additional projects. It could also remove the appropriations requirement around building fee revenues, allowing the institutions to collect these fees directly and bond against them. Depending on financing terms and interest rates, both of these options could result in an additional $100 million or more in the short term to fund higher education capital projects.
Cost Management

**Expected Cost Ranges.** The expected construction cost ranges by facility type provide a tool to identify projects with higher than average costs and facilitate dialogue around those projects that allows the State to make informed funding choices. To remain a useful tool these cost ranges need to be continually updated with actual project cost data from Washington institutions and others where possible. Some of the other states studied, like Wisconsin, Texas, and Connecticut, have implemented similar systems.

**Exhibit ES-4**
Summary of Expected Cost Ranges by Facility Type

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Number of Data Points</th>
<th>Construction Costs / SQFT</th>
<th>Total Costs / SQFT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Std. Deviation</td>
<td>Best Fit</td>
</tr>
<tr>
<td>Classrooms</td>
<td>19</td>
<td>57.36</td>
<td>$297</td>
</tr>
<tr>
<td>Science Labs (Teaching)</td>
<td>16</td>
<td>65.59</td>
<td>$309</td>
</tr>
<tr>
<td>Research Facilities</td>
<td>12</td>
<td>61.31</td>
<td>$440</td>
</tr>
<tr>
<td>Libraries</td>
<td>6</td>
<td>59.44</td>
<td>$237</td>
</tr>
<tr>
<td>Administrative Buildings</td>
<td>9</td>
<td>36.20</td>
<td>$218</td>
</tr>
<tr>
<td>Communications Buildings</td>
<td>5</td>
<td>68.28</td>
<td>$267</td>
</tr>
<tr>
<td>Day Care Facilities</td>
<td>4</td>
<td>23.72</td>
<td>$199</td>
</tr>
</tbody>
</table>


**Distance learning,** both in Washington and in other states, has yet to conclusively reduce capital facilities costs, with the exception of online only institutions like Charter Oak State College. However, to the extent that online learning can be a direct substitute for on campus classes, it has the potential to reduce strain on capital facilities. Regardless of capital impacts, online learning certainly provides potential for increased revenues, particularly for institutions that participate in online learning consortia that can aggregate enrollments and share the costs of course development and marketing. Washington’s higher education institutions should continue to explore ways to collaborate with each other on online course development, administration, and delivery.

**Space utilization and scheduling.** The research conducted for this study suggests that an institution-wide approach to inventorying and scheduling space is an effective way to ensure that available space meets current needs. Identifying which types of spaces create scheduling bottlenecks (including office space, and other types of space in addition to classroom and labs) also aids in developing a campus wide space strategy. Focusing on both the hours per week that a space is utilized and accounting for all space on campus could identify more efficient ways to use the existing space before new space is necessary. Facilities sharing should also continue to be explored as a way to optimize space. It may also be a way to facilitate public-public or private-public partnerships related to health care or medical facilities or shared community spaces.

**Project Timelines.** In addition to the ability to indirectly affect timelines through procurement practices, the State can directly influence capital project timelines though the capital budget process. The State has explored options, such as bundling pre-design and design funding in one budget cycle to hasten project delivery and reduce construction escalation costs. For this to be most effective,
construction funding for desirable projects needs to be made available in the subsequent budget cycle. However, there is a significant policy choice here. If the desired policy outcome is the lowest possible total cost, then options to shorten project timelines should be pursued. However, this would impact the number of projects the State is able to fund in any given biennia. If the objective is to fund the maximum number of projects to serve more students, then project timelines are only one consideration.

**Partnerships** typically occur opportunistically when the mutual interests of all parties align. Partnership opportunities cannot always be planned in advance and are not equally distributed across the higher education system. Some institutions, especially those smaller in size and located in more rural areas, are at a disadvantage in attracting partnerships. To the extent that they bring private donations to the table, the State should encourage and facilitate partnerships, and the capital budget process often works against this objective. First, the biennial capital budget cycle, with its set schedule, limits a higher education institution’s ability to react quickly to partnership opportunities as they present themselves. And second, uncertainty regarding state maintenance and operation funding for buildings built through public-private partnerships and private donations was a recurring concern among higher education stakeholders interviewed. If the State wants to encourage these privately-funded capital projects, greater clarity around maintenance and operations funding should be established and communicated.
OFFICE OF FINANCIAL MANAGEMENT
HIGHER EDUCATION CAPITAL FACILITIES FINANCING STUDY

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1.0 INTRODUCTION

In response to the provisions of Engrossed Substitute House Bill (ESHB) 3329, enacted by the 2008 Legislature, the goal of this study is to identify and analyze options for financing higher education capital facilities and strategies for managing costs, including a comparative analysis of higher education capital funding strategies in other states and the development of cost benchmarks for facilities.

1.1 Background

Study Context: Constrained Resources and Competing State Financial Needs

Washington’s public higher education system is comprised of six four-year institutions and 34 community and technical colleges, which collectively comprise more than half of all state-owned and state-leased facilities. The facilities encompass more than 58 million square feet, distributed across more than 2,400 buildings and 40 campuses. As documented in the Comparative Frameworks study undertaken by the Joint Legislative Audit and Review Committee (JLARC), and now being managed and updated by the Higher Education Coordinating Board (HECB), a number of these buildings are in need of replacement and renovation.

The State’s six public four-year institutions have also identified needs for modernization of existing facilities and construction of new buildings, facilities, and infrastructure to keep pace with increasing enrollment, new educational program requirements, and to meet evolving student needs. There are also a number of projects proposed by the community and technical colleges that address growth, preservation, and replacement needs. All of these projects require significant State capital funding.

At the same time, the State currently faces significant resource constraints on its ability to fund higher education capital facilities. As stated in ESHB 3329, “the legislature further recognizes that institutions of higher education are likely to require substantial new capital investments in order to continue to provide a wide range of high quality programs to students and the community, and that the State’s ability to provide such resources is constrained by increasing capital expenditure needs within the K-12, public safety, social services, and community economic development arenas. The legislature therefore intends to identify and assess potential alternative means for increasing the capacity for public higher education institutions to meet the demands of the twenty-first century.”

In fact, the State’s capital budget overall is near its funding capacity. The State is approaching its debt capacity target under the constitutional debt limit (calculated using a working limit of 8.5% of general state revenues for a running three-year average). Since a considerable portion of the State’s capital budget is funded by bonds, the constitutional debt limit acts as an effective ceiling on capital spending.
Given this context of higher education facility preservation and construction needs, funding limits on the State's capital budget, and competing State interests, this project is being conducted at an important juncture for the State's higher education financing system.

1.2 Recent Legislative History and ESHB 3329

Gardner-Evans Bonds and Proposed New Gardner-Evans-Locke Funding Initiative

In 2002, former Governors Dan Evans and Booth Gardner worked together to develop an infusion of new money for higher education capital facilities. The four-year universities, HECB, the Council of Presidents (COP), and the State Board for Community and Technical Colleges (SBCTC) were involved in developing the “HELP” (Higher Education Leadership Project) proposal, which originally sought $1.4 billion over ten years for higher education preservation and capacity enhancement capital projects. In response to this initiative, the 2003 Legislature passed ESSB 5908, the “Building Washington’s Future Act (RCW 28B.14H.110),” which authorized $750 million in bond capacity over three biennia (2003-09) for higher education. Funding was appropriated for “urgent preservation, replacement, and maintenance needs that have been deferred,” as well as for “new instruction and research capacity.” The legislation listed 17 capital projects for specific institutions, and left room to identify other projects.

After the 2007 Legislative session, the Act’s bond authority was fully committed. During the 2008 session, higher education advocates requested a renewal or reauthorization of the funding, focusing on an additional $1 billion of new funding over the next three biennia, starting in 2009-11. This reauthorization request was referred to as the “Gardner-Evans-Locke” initiative. Given the capital budget constraints discussed above, and the absence of a concrete plan to fund the new request, the Gardner-Evans-Locke Initiative did not move forward in the 2008 Legislature. In order to continue broadly supporting higher education capital requests, the Legislature is interested in identifying new and potentially broader funding options to pay for the State’s higher education facility needs.

ESHB 3329

During its 2008 session, the Washington State Legislature approved ESHB 3329, the primary intent of which was to develop a transparent, objective, and implementable evaluation and scoring system that would provide the State’s institutions the opportunity to articulate their capital facility needs, while enabling decision-makers to identify tradeoffs and make the best strategic choices given limited State resources. The legislation emphasized the role of strategic planning in the facility scoring process, stating that the new process must feature “objective analysis, a statewide perspective, and a strategic balance among facility preservation, new construction, and innovative delivery mechanisms.”

In addition to fundamentally changing how higher education capital projects were reviewed and prioritized, ESHB 3329 also required OFM to complete this higher education capital facility financing study by December 2008. At a minimum, the legislation required the following elements to be included in this study: (1) review of funding methods in other states, (2) examination of alternatives to reduce construction of new facilities, and (3) an assessment of the strengths and weaknesses of potential new revenue sources.
With ESHB 3329, the Legislature has effectively responded to the higher education institutions’ requests for significant additional capital funding by asking the institutions to first explore new potential revenue sources and strategies for managing costs.

1.3 Study Approach and Methodology

The following tasks were conducted in this study:

**Interviews.** Working with OFM and legislative staff, a list of key stakeholders representing a variety of viewpoints was identified for interviews. Approximately 60 interviews were conducted with State Legislators, Legislative Staff, the Treasury Department, JLARC, HECB, COP, SBCTC, Department of Natural Resources (DNR), Department of Revenues (DOR), Department of General Administration, Department of Information Services, Washington State Investment Board (WSIB), four-year institutions, and community colleges (see Appendix A for a complete list of stakeholders interviewed). Separate interview questions were developed for each group, and interviews were conducted in-person or by telephone. Information obtained from the interviews included: perspectives on the background and intent behind ESHB 3329, overviews of four-year institutions’ and community colleges’ capital funding structure and trends, and perspectives on the challenges and opportunities around higher education capital facilities financing.

**Document Review.** To gain a complete understanding of the prior four-year institutions’ and current community colleges’ capital scoring and prioritization systems and processes, documents provided by the stakeholder agencies mentioned above were reviewed. Internal documents from higher education institutions such as budgets, capital project construction cost data, and financial statements were examined. A number of publicly available reports relating to higher education capital facilities financing were also reviewed. For a list of relevant documents reviewed, please see Appendix B.

**Comparative Assessment of Practices in Other States.** To identify potential alternatives for higher education capital facilities financing that could be used by Washington’s public institutions, interviews were conducted with representatives from eight states (California, Colorado, Connecticut, Maryland, Massachusetts, New Jersey, Texas, and Wisconsin). Interviews covered a wide range of topics from revenue sources to facility construction cost benchmarks, a state by state summary and the interview protocol document (developed with input from OFM and legislative staff) can be found in Appendix C.

**Quantitative Analysis.** Each of the four-year institutions and the State Board of Community and Technical Colleges provided documentation on State capital allocations, internal capital revenues, construction costs, historical tuition and building fee data, and other information. OFM provided historical state capital budget allocations by fund and information on revenue sources supporting the funds. DNR, DOR, and the Treasury Department also provided information relating to potential revenue streams and their relation to the State’s capital budget. These data served as the basis for the quantitative analysis in this report.

**Assessment of Options for Funding Higher Education Capital Projects.** Several strategies for increasing funding for capital projects were developed using information gathered from stakeholder interviews, research, and data analysis. These options were evaluated using several criteria, including: potential magnitude, implementation feasibility, State debt limit impact, and other issues.
Evaluation of Cost Management Strategies. As a counterpart to revenue expansion, capital cost management strategies identified by ESHB 3329 were also evaluated. The Report builds on strategies already in place at many of the institutions of higher education and introduces expected dollars per square foot cost ranges for seven facility types.

1.4 Overview of this Report

The Report describes the current system of higher education capital financing in Washington State and identifies and analyzes potential future options for capital financing. The Report examines the revenue and cost components of the capital projects financing system, as seen in Exhibit 1.

Exhibit 1
Report Framework

<table>
<thead>
<tr>
<th>Current System</th>
<th>Future System Options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Identifies and describes:</strong></td>
<td><strong>Evaluates potential ways to generate more revenue or decrease costs through:</strong></td>
</tr>
<tr>
<td><strong>Revenues</strong></td>
<td><strong>Costs</strong></td>
</tr>
<tr>
<td>• Existing revenue sources and related State accounts</td>
<td>• Existing cost management strategies employed in Washington and other states</td>
</tr>
<tr>
<td>• Existing financing mechanisms and partnerships that affect revenue streams and/or increase revenue</td>
<td></td>
</tr>
<tr>
<td>• Identifying new revenue streams</td>
<td></td>
</tr>
<tr>
<td>• Increasing or modifying the use of existing cost management strategies</td>
<td></td>
</tr>
<tr>
<td>• Identifying expected dollars per square foot construction cost ranges by facility type</td>
<td></td>
</tr>
</tbody>
</table>

Employing this framework, the Report is comprised of the following five chapters:

- **Chapter 2.0** provides an overview of the capital funding structure for higher education in Washington. Revenue streams are identified by source and account, and their levels are examined over time. Common financing mechanisms and types of partnerships are also described.
- **Chapter 3.0** evaluates existing and new revenue sources by the criteria of the feasibility of implementation and magnitude of revenue generation.
- **Chapter 4.0** examines the potential for facilitating capital project completion through expanded use of financing mechanisms, partnerships, and sales tax exemption.
- **Chapter 5.0** presents an overview of cost management strategies employed by Washington’s public higher education institutions. Options to improve capital cost management for higher education facilities in Washington are also discussed.
- **Chapter 6.0** synthesizes the key findings from the previous sections and identifies a menu of revenue and cost management options for the higher education capital system going forward.
2.0 OVERVIEW OF CAPITAL FUNDING STRUCTURE FOR HIGHER EDUCATION IN WASHINGTON

Capital projects at higher education institutions in Washington are funded from a variety of revenue sources including State, local (institutional), and a very small amount of federal money. The largest portion of funding comes from the State, which has a complex system of dedicated and allocated revenue sources that flow into a set of accounts before being allocated to the institutions each year. Each institution generates building fees as a part of tuition, and many institutions also generate funding for construction through operations, research grants, and private donations. The various sources of funding for capital projects and the associated regulations will be described in this section.

Higher education institutions use a variety of financing mechanisms and partnerships to address cash flow issues, total funding shortfalls, or both. These mechanisms can occur within the biennial state capital budget process to supplement State-funded projects or can occur outside the process to fund additional projects. This section will identify common financing mechanisms and describe several tested partnership models.

Auxiliary buildings, which house student services as opposed to academic and administrative services, are supported exclusively through auxiliary building operating income and student fees. These revenue sources are distinct from those that can be used for non-auxiliary buildings. Funding for auxiliary buildings is outside the scope of this report, and revenues and accounts associated with auxiliary buildings are excluded from this analysis.

2.1 Overview of System Revenues and Accounts for Higher Education Capital Projects

All federal, State, and locally-generated capital revenues are deposited into funds or accounts before being allocated to a particular institution or capital project. In some cases, a fund is fed by a single revenue stream, and in other cases by multiple revenue streams. Exhibit 2 depicts the high-level flow of state and institution-generated revenue through accounts to fund capital projects. This schematic does not include federal revenues, which are very small, or revenue sources for auxiliary buildings. Appendix D provides a more detailed list of accounts and associated revenue sources used for the construction of academic buildings.
Historical Revenue Sources at All Higher Education Institutions

Exhibit 3 illustrates the aggregate amount of federal, State, and institution-generated revenues available for non-auxiliary capital projects across all higher education institutions in Washington since 1999. It must be noted that the figure for 2007-09 local revenue does not include private donations or internal revenues from the CTCs. The number depicted in Exhibit 3 for that category is likely to be significantly less than the actual amount, given that in 2005-07 the CTCs contributed an estimated $103 million in local funds.

Exhibit 3 shows that total state revenues for capital have increased steadily, while institutional revenues have decreased from their peak in 2001-03. When adjusted for 2008 dollars, the trend still applies, although the state revenues have increased less dramatically.

General Obligation (G.O.) Bond proceeds comprise nearly three-quarters of the State allocation. The State has allocated an average of $465 million in G.O. Bond proceeds through the Construction Account for the past five biennia and an average of $241 million in dedicated G.O. Bond proceeds through Gardner-Evans Bonds since 2003. However, the amount of all G.O. Bonds allocated to each...
university varies considerably from year to year. Lottery revenues averaged $76 million per biennium, but fluctuated each biennium. Trust land revenues have remained a steady source of state revenue over all five biennia, similar in quantity to lottery revenues.

Private donations and internal revenues make up well over half of institutional revenue sources, although it must be noted that donations for capital are only being collected at UW, WSU, and some of the CTCs. The second highest institutional revenue source comes from tuition building fees, which have gone up steadily each biennium, but averaged around $71 million per biennium total. These revenue sources are shown in greater detail in the sections that follow.

### Exhibit 3
Aggregate Revenues for Capital Projects for all Higher Education Institutions (in $ millions)

![Bar chart showing aggregate revenues for capital projects from 1999-01 to 2007-09.](chart)


### 2.2 State Revenue Sources

The primary sources for higher education capital project funding are the following:

- State G.O. Bonds
- Building Accounts (trust land revenue and building fee portion of tuition)
- Education Construction Account (lottery revenue)
- Other
General Obligation Bonds (Appropriated)

G.O. Bonds are the primary source of State funds for capital projects. The interest for these limited obligation bonds is paid for by the General Fund. G.O. Bonds represent the lowest cost method of financing capital projects: they have the lowest interest cost and lowest cost of issuance as compared to other financing mechanisms available to the State. A bond bill is generally necessary to issue G.O. Bonds, which states the purpose of the bonds, authorizes the State Finance Committee to issue bonds, and pledges the full faith and credit of the State.

Bonds are generally rated by one of three agencies: Fitch Ratings, Moody’s Investors Service, and Standard & Poors. The ratings take into consideration past and present state financial performance and trends, the position of Washington’s economy, debt ratios and structure, and state financial management practices, among other indicators. For instance, in July 2008, Washington State earned an “AA” rating from Fitch Ratings and an “AA+” rating from Standard & Poor’s, which were among the highest that the two firms give for bonds.

There are a number of state funds that include proceeds from G.O. Bonds that have been used to provide funding to higher education institutions:

• **State Building Construction Account** (appropriated)

• **State Taxable Building Construction Account** (appropriated): receipts from taxable bond issues. Fund 355 with authority granted by RCW 43.99Q.020

• **Gardner-Evans Higher Education Construction Fund** (appropriated): Fund 357 with authority granted by RCW 28B.14H.110

• **State Higher Education Construction Account** (appropriated): Fund 056 with authority granted by RCW 28B.10.851

• **Higher Education Construction Account** (appropriated): Fund 01L with authority granted by RCW 28B.14D.040. This account also holds grants, donations, transferred funds, and all other monies which the state finance committee or the board of regents or board of trustees of any of the State institutions of higher education may direct the State Treasurer to deposit.

State Debt Limit

The State issues G.O. Bonds on an as needed basis, as construction projects are completed over about a four- to six-year period. The amount of State bonds is limited by constitutional and statutory restrictions, which differ in the limit percentage. The State cannot issue any bonds that would cause the debt service on the new plus existing bonds to exceed 9% of the three-year average of general state revenues under the constitution and 7% under the statutory limit. Exhibit 4 below provides more details on constitutional and statutory debt limits: general definitions, debt subject to the limits, debt exempted from the limits, revenues used in calculation of the three-year average, and exceptions to these revenues.

When writing capital budgets, the Legislature considers debt capacity to ensure the debt limit will not be exceeded when implementing capital budgets. Bonds are issued over the four or more years it typically takes to design and construct a major project, so the Legislature must plan for bond capacity for several years into the future.
## Exhibit 4
### Constitutional and Statutory Debt Limit

<table>
<thead>
<tr>
<th></th>
<th>Constitutional</th>
<th>Statutory</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debt Limit</strong></td>
<td>• Principal and interest payments in any year may not exceed <strong>9%</strong> of average of prior three years general State revenues</td>
<td>• Principal and interest payments in any year may not exceed <strong>7%</strong> of average of prior three years general state revenues</td>
</tr>
<tr>
<td><strong>Authority</strong></td>
<td>• Article VIII, Section 1 of Constitution</td>
<td>• RCW 39.42.060</td>
</tr>
<tr>
<td><strong>Debt Subject to Limit</strong></td>
<td>• Borrowed money represented by bonds, notes, or other evidence of indebtedness which are secured by the full faith and credit of the State or are required to be repaid directly or indirectly from general State revenues, which are incurred by the State.</td>
<td></td>
</tr>
<tr>
<td><strong>Debt outside the Limit</strong></td>
<td>• Debt paid from motor vehicle fuel taxes</td>
<td>• Certificates of Participation (COPs)</td>
</tr>
<tr>
<td></td>
<td>• Debt payable from investment revenue of the permanent Common School Fund</td>
<td>• Reimbursement bonds</td>
</tr>
<tr>
<td></td>
<td>• Debt issued to meet temporary deficiency in the State Treasury</td>
<td>• Stadium bonds (voter-approved)</td>
</tr>
<tr>
<td></td>
<td>• Debt issued in form of bond anticipation notes</td>
<td>• Debt issued to finance improvements to State Capitol East Plaza Garage</td>
</tr>
<tr>
<td></td>
<td>• Debt payable solely from revenues of particular public improvements (Revenue debt)</td>
<td>• Debt issued to finance rehabilitation of Legislative Building</td>
</tr>
<tr>
<td></td>
<td>• Debt which has been refunded</td>
<td>• Debt issued to finance multimodal transportation projects</td>
</tr>
<tr>
<td></td>
<td>• State guarantee of voter-approved G.O. debt of School districts</td>
<td></td>
</tr>
<tr>
<td><strong>Allowed Revenues</strong></td>
<td>• General State revenues</td>
<td>• Lottery revenues to Education Construction Fund</td>
</tr>
<tr>
<td>(used in calculation of three-year average)</td>
<td></td>
<td>• Property taxes levied by the State to support Common schools</td>
</tr>
<tr>
<td><strong>Exceptions to Allowed Revenues</strong></td>
<td>• Fees and revenues derived from operation of any facility</td>
<td>• Fees and revenues derived from operation of any facility</td>
</tr>
<tr>
<td>(excluded in calculation of three-year average)</td>
<td>• Money received as gifts, grants, donations, or aid</td>
<td>• Money received as gifts, grants, donations, or aid</td>
</tr>
<tr>
<td></td>
<td>• Money from retirement system funds and performance bonds</td>
<td>• Money from retirement system funds and performance bonds</td>
</tr>
<tr>
<td></td>
<td>• Money to be paid into and received from trust funds, including money received from taxes levied for special purposes</td>
<td>• Money to be paid into and received from trust funds, including money received from taxes levied for special purposes</td>
</tr>
<tr>
<td></td>
<td>• Proceeds received from sale of bonds or other indebtedness</td>
<td>• Proceeds received from sale of bonds or other indebtedness</td>
</tr>
</tbody>
</table>

Working Debt Limit. The 2003 Legislature passed HB 2242 which increased debt capacity by adding the State portion of the property tax to the statutory definition of general State revenues, effectively making the 7% statutory limit and the 9% constitutional limit the same. At the same time, the Legislature agreed to use a “working limit” of 8.5% to maintain a cushion below the 9% constitutional limit in the event of emergencies, disasters, unforeseen events, higher interest rates, or reduced revenues.

Bond Capacity. Bond capacity for a given biennium is the amount of bonds that can be issued without exceeding the debt limit in the future, given forecasted variables and a stable capital budget level in future biennia. Interest rates, revenue levels, and other factors affect bond capacity. For instance, on the revenue side, diminished General Fund revenues have the potential to restrict debt service payments, and ultimately the amount of borrowing the state can undertake.

Every biennium, the State must keep the debt service (including the new bonds) under the debt limit, and maintain a consistent bond capacity over time so it is available for future capital needs. To estimate current and future bond capacity, the State Treasurer administers a debt model. The model calculates the actual debt service on outstanding bonds and estimates the debt service for the future based on several assumptions, including revenues, interest rates, rate of debt repayment, and other factors.

In recent years, the State has gotten close to the constitutional debt limit, while demands on the capital budget have been growing. Exhibit 5 shows projected bonding capacity for capital projects for the near biennia.

<table>
<thead>
<tr>
<th></th>
<th>2007-09</th>
<th>2009-11</th>
<th>2011-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Obligation Bonds</td>
<td>1,931,779</td>
<td>1,868,510</td>
<td>1,943,250</td>
</tr>
<tr>
<td>Gardner-Evans Higher Education Bonds</td>
<td>222,415</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Columbia River Basin Water Bonds</td>
<td>34,500</td>
<td>35,500</td>
<td>40,000</td>
</tr>
<tr>
<td>Chehalis River Basin Bonds</td>
<td>50,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Bond Capacity Subject to Debt Limit</strong></td>
<td><strong>2,238,694</strong></td>
<td><strong>1,904,010</strong></td>
<td><strong>1,983,250</strong></td>
</tr>
<tr>
<td>New Skills Center/K-12 Bonds *</td>
<td>16,000</td>
<td>84,000</td>
<td></td>
</tr>
<tr>
<td><strong>Total Bond Capacity</strong></td>
<td><strong>2,254,694</strong></td>
<td><strong>1,988,010</strong></td>
<td><strong>1,983,250</strong></td>
</tr>
</tbody>
</table>

* Outside Debt Limit

Source: Capital Budget Overview, prepared by Legislative Staff for Joint Task Force on School Construction Funding, August 2008; Berk & Associates, 2008.

Exhibit 5 demonstrates that appropriations from dedicated Gardner-Evans Bonds will be going away by the 2009-11 biennium. Higher education institutions will continue to share the increasingly limited capital budget allocations with the K-12, public safety, social services, and community economic development arenas.
Lottery Revenue

The Washington State Lottery was created in 1982 to generate revenues for the State General Fund. In November 2000, the voters passed Initiative 728, redirecting some revenue initially destined for the State General Fund to fund construction of education facilities.

Revenues that benefit education construction go to the Education Construction Account. The Education Construction Account is authorized under RCW 43.135.054(4) in which the statute directs that funds may be used “exclusively for common school construction or higher education construction.” Profit from all Lottery games must benefit education up to the threshold level of $102 million annually, after which any additional revenues from the Mega Millions game goes to the General Fund, while other Lottery games continue to benefit education. Payments to the Education Construction Fund could exceed $102 million in a year if the in-state Lottery products generated net revenues in excess of the threshold after all other legislatively mandated payments.

Lottery revenues have been relatively consistent over the last ten years (although declining slightly in real terms), and contributions to the Education Construction Account have been on target at $102 million per year (Exhibit 6). The rest of the revenues pay Lottery expenses (prizes, retailer commissions, cost of sales, administration), and provide contributions to the State General Fund, economic development, and payoff of stadium debt.
Exhibit 6
Total Revenue Generated by Washington Lottery and Contribution to Education Construction Account, FY 1998-07 (in $ millions)


The 2005-07 biennial capital budget appropriations to Higher Education from the Education Construction Account totaled $68 million, but mostly funded facility maintenance, not construction.

Other

Other sources of state funding include the State Toxics Control Account, which provided approximately $1 million for cleanup of Moore Hall at the University of Washington (UW) and includes funds for UW Tacoma Soils Remediation.

Trust Land Revenue

The DNR manages 2.9 million acres of trust land in the State. Of that land, approximately 300,000 acres, or 11%, is dedicated to funding higher education. Revenues from DNR-managed lands are channeled into permanent funds and current accounts for higher education institutions. Exhibit 7 below shows the path of trust land revenue into higher education institutions’ capital project accounts.
Funds and Accounts

Permanent Funds. DNR transfers revenues generated from the sale of lands, timber, and minerals to the school permanent funds for investment purposes. A portion of revenues (up to 30%) is used to pay for management of the trust lands. Timber resources are managed under the State’s “sustained yield” plan, which provides for “harvesting on a continuing basis without major prolonged curtailment or cessation of harvest.” There are four permanent funds: Normal School, Agricultural College,
Scientific School, and State University. Summary information for these funds is presented in Exhibit 8 below.

### Exhibit 8
**Higher Education Permanent Funds**

<table>
<thead>
<tr>
<th>Permanent Fund</th>
<th>Beneficiary</th>
<th>Trust Land Acreage</th>
<th>Fund Market Value as of 8/31/2008</th>
<th>5 Year Total Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural School</td>
<td>WSU</td>
<td>71,346</td>
<td>$170 M</td>
<td>5.98%</td>
</tr>
<tr>
<td>Scientific School</td>
<td>WSU</td>
<td>82,352</td>
<td>$190 M</td>
<td>4.66%</td>
</tr>
<tr>
<td>Normal School</td>
<td>EWU, CWU, WWU, TESC</td>
<td>64,166</td>
<td>$226 M</td>
<td>4.64%</td>
</tr>
<tr>
<td>State University</td>
<td>UW</td>
<td>86,700</td>
<td>$29 M</td>
<td>4.61%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>304,564</strong></td>
<td><strong>$615 M</strong></td>
<td></td>
</tr>
</tbody>
</table>


WSIB manages permanent funds by investing the money. The principal in these funds remains intact and all interest earned must be either re-invested or used exclusively for the benefit of the higher education institutions. The income from the permanent funds is appropriated by the Legislature for the construction and minor works maintenance of university facilities.

Until recently, WSIB invested permanent fund monies solely in 100% unrestricted fixed income securities (mostly bonds), resulting in relatively low returns. In 2007, the Legislature passed Resolution 4215, which was subsequently put on the ballot and approved by the voters. This legislation was initiated by Washington State University (WSU), and it added a new section to the Constitution permitting the Legislature to decide by statute what investments would be permitted for higher education permanent funds. The amendment allowed the investment of permanent funds in stocks or bonds issued by any association, company, or corporation, to the extent the Legislature authorizes such investments. WSIB is currently working with institutions to determine the optimal asset allocation for the funds.

Exhibit 9 below shows permanent fund distributions to intended beneficiaries for FY 2000 through FY 2007.
Exhibit 9
Permanent Fund Distributions to Beneficiaries, FY 2000-07
(in $ millions)


Current Accounts. Revenues generated from commercial leases on land and buildings are channeled into the following current accounts:

- Washington State University (WSU) Bond Retirement Account
- University of Washington (UW) Bond Retirement Account
- Eastern Washington University (EWU) Capital Project Account
- Central Washington University (CWU) Capital Project Account
- Western Washington University (WWU) Capital Project Account
- The Evergreen State College (TESC) Capital Project Account

For UW and WSU Bond Retirement Accounts, funds are either used to pay debt service on bonds issued, or are subsequently transferred to respective Building Accounts. The Building Accounts also include income received from student building fees, which is discussed in more detail in subsequent sections of this report.
Community and Technical College Forest Reserve Trust. In 1990, the Legislature established a land trust for Community and Technical Colleges as a dedicated source of revenue for funding capital projects. The included lands are located close to urban areas and community colleges to enable the institution to use the lands in pursuit of educational opportunities. Since 1990, DNR has been working on purchasing land for the trust. The land base now totals approximately 3,500 acres. Each biennium, DNR typically requests capital appropriations from the State to purchase additional properties. The mandate that these lands be located close to the community colleges for educational opportunities limits the type of lands to be purchased and essentially excludes lands with timber production potential. Therefore, in the long term, there is limited potential for generating revenues for the Community and Technical College system.

Trust Land Revenues over Time

Exhibit 10 below shows the breakdown of total trust land revenues distributed to current accounts and permanent funds from FY 1989 through FY 2007. Overall distributions have fluctuated over time, mainly due to fluctuations in timber sales.

Exhibit 10
Revenues from Trust Lands
(in $ millions)

Trust Land Revenue Sources

There are several revenue-generating activities on trust lands, with timber sales being the bulk of revenues:

- **Sales:** timber sales, transferred timber cutting rights, and land sales
- **Leases:** agriculture, rights-of-way, commercial real estate, communication sites, mineral, and other
- **Other revenues:** interest income, non-trust revenues, permits, fees, and other miscellaneous

Exhibit 11 below shows FY 2007 revenue sources for permanent funds. All revenue sources indicated in Exhibit 11 totaled approximately $23 million in FY 2007, of which approximately $2 million (10%) was transferred to current accounts, $14.5 million (63%) to permanent funds, and $5.5 million (24%) to the Resource Management Cost Account (RMCA), which supports management of trust lands.

### Exhibit 11
Major Revenue Sources for the State’s Higher Education Institutions’ Trust Lands, FY 2007 (in $ millions)

<table>
<thead>
<tr>
<th>Source Type</th>
<th>State University</th>
<th>Normal School</th>
<th>Scientific School</th>
<th>Agricultural School</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Other Revenue</strong></td>
<td>$85</td>
<td>$161</td>
<td>$170</td>
<td>$39</td>
</tr>
<tr>
<td><strong>Leases</strong></td>
<td>$314</td>
<td>$187</td>
<td>$1,188</td>
<td>$366</td>
</tr>
<tr>
<td><strong>Sales</strong></td>
<td>$4,369</td>
<td>$2,473</td>
<td>$9,450</td>
<td>$4,127</td>
</tr>
</tbody>
</table>


**Sales.** Approximately 240,000 acres or 80% of higher education institutions’ trust lands are managed for timber use, and timber sales and related activities accounted for more than $20 million (90%) in revenue on trust lands in FY 2007. Exhibit 12 illustrates timber income from the Trust Lands for the past eight years. The total amount of timber sales varies among permanent funds, due to the amount of acreage, variation in habitat restrictions, presence of riparian areas or steep slopes that cannot be harvested, soil quality and growing conditions, age of the trees, and when they were last harvested.
From statehood until the early 1990s, DNR primarily harvested old growth trees, but since then has been transitioning to more sustainable forestry approaches. The new practices will likely play a role in stabilizing revenue levels. Factors in the State economy will also likely affect demand for building materials, and thus timber prices. Timber revenues are also dependent on the world market demand for wood products, and export and import prices.

**Exhibit 12**

*Timber Income from the State’s Higher Education Institutions’ Trust Lands, FY 2000-07 (in $ millions)*

In addition to timber sales, land sales represent a potential revenue source, although there were no revenues reported from land sales for higher education permanent funds in FY 2007. Lands from all of the trusts are sold or exchanged occasionally in order to improve the revenue potential for the trust or to improve management efficiencies. These transactions are made through the Land Bank Program, which uses auctions to sell State trust lands to private buyers. Proceeds of land sales are held in the Resource Management Cost Account (RMCA) until they can be used to purchase replacement trust lands. This revenue from trust property sales should equal or exceed the cost of trust property purchases.

It is important to note that Washington’s current policy of depositing the revenues derived from land sales into the Land Bank fund means that permanent funds are not likely to see substantial growth from new land sales deposits in the near future.

Leases. A smaller proportion of trust lands is used to generate lease revenue, which totaled approximately $2 million, or 9% of total revenues for FY 2007. Revenue sources include leases on agricultural land, commercial real estate, mineral lands, rights-of-way, communication sites, and others. Since 2000, lease income from higher education trust lands has increased by 107%, from $1.1 million in FY 2000 to $2.3 million in FY 2007, which represents an 11% annual average growth rate (Exhibit 13).

Exhibit 13
Lease Income from Higher Education Institutions’ Trust Lands, FY 2000-07
(in $ millions)


Exhibit 14 below shows the breakdown of lease revenues for each permanent fund for FY 2007.
Exhibit 14
Revenue from Leases for Higher Education Institutions’ Trust Lands, FY 2007
(in $ thousands)

State University (UW)  Scientific School (WSU)  Agricultural School (WSU)  EWU, CWU, WWU, TESC Capital Project Funds

<table>
<thead>
<tr>
<th>Lease Revenue Source</th>
<th>State University (UW)</th>
<th>Scientific School (WSU)</th>
<th>Agricultural School (WSU)</th>
<th>EWU, CWU, WWU, TESC Capital Project Funds</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>$179</td>
<td>$471</td>
<td>$197</td>
<td>$85</td>
<td>$932</td>
</tr>
<tr>
<td>Communication sites</td>
<td>$0</td>
<td>$475</td>
<td>$141</td>
<td>$0</td>
<td>$617</td>
</tr>
<tr>
<td>Mineral and hydrocarbon</td>
<td>$11</td>
<td>$129</td>
<td>$19</td>
<td>$72</td>
<td>$230</td>
</tr>
<tr>
<td>Commercial real estate</td>
<td>$103</td>
<td>$0</td>
<td>$5</td>
<td>$0</td>
<td>$109</td>
</tr>
<tr>
<td>Rights-of-way</td>
<td>$8</td>
<td>$15</td>
<td>$2</td>
<td>$7</td>
<td>$32</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$13</td>
<td>$98</td>
<td>$2</td>
<td>$23</td>
<td>$136</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$314</strong></td>
<td><strong>$1,188</strong></td>
<td><strong>$366</strong></td>
<td><strong>$187</strong></td>
<td><strong>$2,055</strong></td>
</tr>
</tbody>
</table>


- **Agriculture.** Trust lands are leased for agriculture and grazing by private farmers and ranchers, orchardists, grape growers, and others. DNR offers trust land leases at public auction to the highest bidder. At $930,000 in FY 2007, agriculture leases represent the largest leased revenue source to the higher education permanent funds.

- **Communication sites.** The program leases sites for new communication facilities, and for co-locating within DNR-managed facilities. At $620,000 in FY 2007, communication site leases represent the second largest leased revenue source to the higher education permanent funds.
• **Mineral and Hydrocarbon.** DNR periodically holds auctions to lease state trust lands for oil and gas exploration. Leases from mineral lands totaled about $230,000 in FY 2007.

• **Commercial Real Estate.** DNR manages approximately $100 million of assets across all funds categorized as commercial real estate through the Commercial Lands Program (CLP). The primary objective of the CLP program is to diversify property investments to reduce the risk of the variability of income. Only the State University and the Agricultural School received revenues from CLP in FY 2007, totaling about $110,000.

• **Rights-of-way.** Most rights-of-way granted across trust lands are for roads and utilities. The rights-of-way leases totaled about $30,000 in FY 2007.

• **Miscellaneous.** Miscellaneous leases include special use and special forest products, and totaled about $136,000 in FY 2007.

### 2.3 Overview of Institutional Revenue Sources

In addition to receiving significant funds for capital projects from the State, the universities and CTCs generate some money for capital on their own. This section identifies capital revenue sources generated by the institutions. It also explains the statutes relating to the expenditure of each identified revenue stream, as well as historical trends in tuition building fees.

**Tuition Building Fees**

Building and operating fees comprise the “tuition fee” at all public higher education institutions in Washington. Building fees make up between 3% and 5% of “tuition fees” for resident undergraduates at the four-year institutions, and 11% for residents at the CTCs. Tuition building fees are the most reliable institution-generated revenue source for capital and have been increasing steadily at all institutions for the past five years.

**Building Fee Use and Regulation**

**Use by Institution.** The building fees fund capital projects, although the rules pertaining to expenditure of these fees differs slightly by institution.

- For UW, RCW 28B.15.210 stipulates that half or more of the building fee collected be directed to the bond retirement fund, and that the remaining funds be allocated to the UW Building Account for the exclusive use of “erecting, altering, maintaining, equipping, or furnishing buildings.”

- For WSU, RCW 28B.15.310 stipulates that half or more of the building fee collected be allocated to the bond retirement fund and that the remainder be deposited in the WSU Building Account, “which can be expended by the Board of Regents for buildings, equipment, or maintenance on the campus of WSU, as is deemed most advisable and for the best interests of the University.”

- At the regional universities and The Evergreen State College, the building fees “shall be used exclusively to pay and secure the payment of the principal of and interest on the building bonds issued by” the institution (RCW 28B.35.370).
At CTCs, building fees are used to pay the principal and interest on bonds that fund acquisition, construction, maintenance, and renovation of college buildings (RCW 28B.50.370).

**Flow of Money.** Each institution collects the building fees from students as part of the basic quarterly tuition payment. Upon collecting the fee, the institutions transfer it to the State Treasury and then requests the amount needed for capital projects through the capital budget process. This results in a delay between collection of the building fees and their availability for use. In 2008, SB 6432 attempted to enable WSU to expend the collected building fees without having to wait for the Legislature to appropriate them. This bill did not pass.

**Tuition Increases.** As tuition changes, building fees must continue to make up the same percentage of “tuition fees” as they did in the 1994-95 academic year (RCW 28B.15.069). At that time, building fees made up 5% of tuition at UW and 4% of tuition at WWU. Overall “tuition fees” for resident undergraduate students at all higher education institutions are limited to a 7% annual increase (RCW 28B.15.068). The Legislature is authorized to change full-time resident undergraduate tuition annually to achieve at least the 60th percentile of total per-student funding at similar public institutions in the Global Challenge States.

The governing boards of each institution are granted the authority to determine tuition for non-resident and graduate students until the 2009-10 academic year and no limitations are stipulated in current law (RCW 28B.15.067).

**Current Tuition and Fee Levels**

**Makeup and Quantity of Tuition and Fees.** Each institution collects tuition building and operating fees, as well as a variety of additional fees determined by the institution. Exhibit 15 depicts the total 2008-09 tuition and fees for resident undergraduate students at each institution, organized by fee type. The Exhibit shows that UW has the highest baseline tuition at $6,250, while WSU has the highest overall cost at $7,565, due to high auxiliary building and services & activities (S&A) fees. Among the four-year universities, EWU has the lowest tuition and total cost at $4,068 and $4,591, respectively. The tuition operating fee is clearly the highest fee at every institution. The second highest fee varies between auxiliary building fees and S&A fees. The tuition building fee is the third highest fee at UW, CWU, and the CTCs.
Exhibit 15

2008-09 Tuition and Fees (for Resident Undergraduates)


**Building Fees Relative to Overall Tuition.** Exhibit 16 depicts building fees as a percent of total “tuition fees” for resident and non-resident undergraduates at each institution. The non-tuition fees were excluded from this analysis because they are the same for residents and non-residents. Exhibit 16 illustrates that building fees represent a similar proportion of overall tuition for resident and non-resident students. At UW and WSU, building fees make up a 0.5% larger proportion of tuition fees for residents than non-residents. At the CTCs, the difference is more substantial, with building fees making up 2.3% more of residents’ tuition. At the other institutions, the difference is less than 0.5%.
Historical Tuition and Fee Levels

Changes in Amount and Distribution of Tuition and Fees. Tuition for both residents and non-residents has been increasing at all higher education institutions in Washington over the past several decades. In addition, tuition and fees are being increasingly stratified by program, with students in professional programs such as medicine, law, and veterinary programs bearing an increasingly larger burden. Exhibit 17 illustrates this trend at UW, WSU, and WWU. Detailed historical building fee information was not provided for the other institutions.

While the absolute dollar value of tuition has clearly increased sharply in recent years, statistics show that tuition has increased at a higher rate than inflation as well. According to HECB’s 2007 Key Facts about Higher Education in Washington, tuition at UW increased 81% between 1997 and 2007, while per capita income in the state increased 49%, and the cost of consumer goods increased 21%. This suggests that tuition is making up a greater share of students’ families’ expenditures than in the past.
Tuition has more than tripled for all programs at the three schools illustrated in this exhibit. The data also demonstrate that non-residents bear a greater tuition burden than residents, regardless of program. Resident medicine, law, and veterinary tuition have seen the sharpest increases in recent years. Resident students in those programs now pay nearly as much as non-resident graduate and undergraduate students. The graphs directly above show that building fees generally reflect tuition trends.
Rate of Increase by Fee Type. While building fees, operating fees, and additional fees have each gone up at all institutions, the rate of increase of each type of fee differs significantly when examined over an extended period of time. It is important to note that in 1995, the Legislature mandated that building fees must continue to make up the same percentage of overall "tuition fees" as they did in 1994. Exhibit 18 illustrates the increase in tuition building fees, tuition operating fees, and other fees over time for resident undergraduates at UW, WWU, and the CTCs. At all three schools, tuition building fees increased at the slowest rate when compared to other types of fees.

Exhibit 18
 Increases by Fee Type for Resident Undergraduates

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuition Building Fee</td>
<td>$0</td>
<td>$1,000</td>
<td>$2,000</td>
<td>$3,000</td>
<td>$4,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Tuition Operating Fee</td>
<td>$0</td>
<td>$1,000</td>
<td>$2,000</td>
<td>$3,000</td>
<td>$4,000</td>
<td>$5,000</td>
</tr>
<tr>
<td>Other Mandatory Fees</td>
<td>$0</td>
<td>$1,000</td>
<td>$2,000</td>
<td>$3,000</td>
<td>$4,000</td>
<td>$5,000</td>
</tr>
</tbody>
</table>


For UW between 1981 and 2008, tuition building fees had an average annual growth rate (AAGR) of 4%, while operating fees grew at 8%, and other fees grew by 5%. In recent years, the growth rates of building and operating fees have become more aligned. The AAGR between 1998 and 2008 was 7% for both fees.
At WWU between 1987 and 2008, tuition building fees grew on average by 4%, while operating fees grew by 7%, and other fees grew by 7%. The growth of these fees has also flattened out in recent years, with the 1998-2006 AAGR at 6% for both building and operating fees.

At the CTCs, data is only available for the ten-year period between 1998 and 2007. In that time, the AAGR for tuition building fees was 6%, for operating fees was 7%, and for S&A fees was 6%.

Other Revenue Sources for Academic and Administrative Buildings

Private Donations

All four-year universities and many CTCs receive individual and corporate donations through their affiliated foundations. At the regional universities, private donations have not been used to fund capital projects. At UW and the CTCs, private donations or funders typically make up the largest share of institution-generated money for capital projects. However, this revenue source is unpredictable and can spike dramatically in a given year if a donor dedicates a major gift toward a capital project.

Through the UW and WSU foundations, donors can select where to direct their money from a range of funding opportunities, including capital project funds. Capital project funds are created as needed and donations made to them are available to be used for the specific project the fund is dedicated to support.

Research-Related Revenue

In 2002, the Legislature granted the two research universities, UW and WSU, the authority to independently enter into financing arrangements that leverage a wide variety of available resources (RCW 28B.140.005). Using this authority, UW and WSU have either spent directly, or bonded against, (indirect cost recovery bonding) the following research-related revenue streams to support capital projects:

- **Federal Research Grants.** These generally include “indirect cost” or “facilities and administration” (F&A) money dedicated to supporting overhead costs including construction, maintenance, and operation of the facility where the research will take place. Universities use a formula provided by the federal government to calculate the F&A costs to use in grant applications.

- **Rental Income.** Research facilities can be rented out to non-university research entities to generate steady rental income.

At WSU, the F&A revenues for all research grants are pooled together and then spent on eligible expenses across the university based on need.

Other Local Non-Appropriated Funds

In 2007, the Legislature granted UW and WSU the authority to bond against local non-appropriated funds such as tuition, fees, grants and contracts, sales and services, and investment income for any university purpose (RCW 28B.142.005). In the past, this authority was only granted for the construction of auxiliary and research facilities. While the research universities have not yet identified
many new stable, non-appropriated revenue streams that allow them to take advantage of this expanded bonding authority, the option now exists should new revenue streams be identified. This opportunity has changed the way university administrators are thinking about funding capital projects.

The CTCs may use local non-appropriated funds including fee revenue, gifts, contracts, grants, and interest earnings for capital projects. These funds become available for capital projects only after they have been designated as such by the local board of trustees. Their expenditure is not subject to legislative approval, unless used to acquire real property (SBCTC Policy Manual). The board of trustees at each college is empowered to issue limited obligation bonds backed by local non-appropriated funds, in addition to funds appropriated by the Legislature, to fund any type of capital project (RCW 28B.50.330).

**Metropolitan Tract Net Income**

Net income from the Metropolitan Tract (Metro Tract), an 11-acre parcel of office and hotel properties in downtown Seattle, is appropriated to the UW Building Account to pay for debt service and construction of capital projects (RCW 28B.20.382). Metro Tract net income has amounted to about $16 million per biennium. Revenues from this source are expected to drop over the short run because of the declining condition of buildings and increased maintenance needs. However, when the current lease expires in 2014, it is likely to be renegotiated to be more favorable toward UW.

**Revenue Sources for Auxiliary Buildings**

While auxiliary buildings are not the focus of this study, it is important to understand which revenue sources are dedicated to these buildings, and therefore, unavailable to support academic and administrative buildings. It is also important to understand the impact of funding these buildings on the overall package of tuition and fees because students generally do not distinguish between fees for academic and non-academic buildings.

**Auxiliary Building Fees**

Auxiliary building fees, not to be confused with tuition building fees, are fees that students elect to charge themselves as means to finance the construction of facilities for non-academic purposes. Auxiliary building fees are a type of S&A fee, which exclusively supports non-academic student services. RCW 28B.15.041 limits auxiliary building fees exclusively to the financing of dorms, hospitals or infirmaries, dining halls, student activities, student services, or parking.

The portion of S&A fees that covers operating costs of various student services is not to exceed the annual percentage increase in tuition fees for resident undergraduate students (RCW 28B.15.069); however, this limitation does not apply to the portion of S&A fees committed to the repayment of bonded debt (RCW 28B.15.069). At each institution, an S&A fee committee, comprised of at least a voting majority of students, is responsible for proposing priorities and budget allocations of the operations and building fee portions of the S&A fee to the university administration and governing body (RCW 28B.15.045).
Recent years have seen the advent of several new auxiliary building fees, which will be charged to students for as long as the next 35 years to pay off bonds. Exhibit 19 illustrates the auxiliary building fees that students are currently paying to finance several non-academic buildings at the four-year campuses.

### Exhibit 19

<table>
<thead>
<tr>
<th>University</th>
<th>Fee</th>
<th>Payment Frequency</th>
<th>Project Funded</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>UW</td>
<td>$35</td>
<td>Per quarter</td>
<td>Intramural Activities Building</td>
<td>2003</td>
</tr>
<tr>
<td>WSU</td>
<td>$25</td>
<td>Per semester</td>
<td>Martin Stadium Renovations</td>
<td>2006</td>
</tr>
<tr>
<td>WSU</td>
<td>$120</td>
<td>Per semester</td>
<td>Compton Union Building</td>
<td>2008</td>
</tr>
<tr>
<td>WSU</td>
<td>$120</td>
<td>Per semester</td>
<td>Recreation Center</td>
<td>In effect</td>
</tr>
<tr>
<td>CWU</td>
<td>$95</td>
<td>Per quarter</td>
<td>Recreation Center</td>
<td>In effect</td>
</tr>
<tr>
<td>CWU</td>
<td>$64</td>
<td>Per quarter</td>
<td>Student Union</td>
<td>2006</td>
</tr>
<tr>
<td>EWU</td>
<td>$65</td>
<td>Per quarter</td>
<td>Recreation Center</td>
<td>2008</td>
</tr>
<tr>
<td>WWU</td>
<td>$89</td>
<td>Per quarter</td>
<td>Recreation Center</td>
<td>In effect</td>
</tr>
<tr>
<td>WWU</td>
<td>$35</td>
<td>Per quarter</td>
<td>Non-academic Buildings</td>
<td>In effect</td>
</tr>
</tbody>
</table>


### Operating Revenues from Auxiliary Facilities

RCW 28B.10.300 authorizes the four-year institutions to use rentals, fees, charges, or other income derived through the operation of non-academic buildings to maintain the facilities or to borrow money, typically in the form of revenue bonds, to pay for the land acquisition or construction of auxiliary facilities. All six campuses have regularly issued revenue bonds to build facilities such as dining halls, dorms, and athletic facilities.

#### 2.4 Distribution of Revenue Sources by Institution

### Relationship Between Revenue Streams and Funds

In this section, the rise and fall of revenue streams used for capital at each institution for the past five biennia are presented to the extent that data is available. While the total amount in a fund is tracked on an annual basis, each revenue stream flowing into that fund is not necessarily tracked. Therefore,
in the case of funds with multiple revenue streams, the data that illustrate changes in each revenue stream over time are often not available.

To get as clear a picture as possible of the quantity of each revenue type, the bar charts in this section represent a mix of revenue streams and new appropriations from funds with only one revenue stream. Therefore, the amounts depicted do not necessarily reflect the total amount each institution was authorized to spend during each biennium.

For example, tuition building fees and trust land revenues flow into the same account. EWU did not provide data for each individual revenue stream, so in the Exhibits below the two streams are presented as one combined amount for those schools. That amount represents the biennial allocation. At the other institutions, tuition building fees and trust land revenues are presented separately. These independent amounts represent earnings and not spending authority. All other categories presented in the Exhibits below represent biennial allocations, unless otherwise noted in the explanatory text.

Revenue sources and funds relating to the construction of auxiliary buildings are excluded from this analysis.

**University of Washington**

Exhibit 20 illustrates changes in revenues for capital over the last five biennia at UW.

The “Local: Private/Internal/ICR” category includes private donations, grants, and indirect cost recovery money from research grants; and the “Local: Transfer from Operating” includes transfers from campus operating budgets to capital budgets for non-auxiliary buildings. These monies, earned by the university, are outside the State budget process and are not included in State budget allocation documents. The numbers for these two categories came from the annual State Operating and Capital Budget Request memo prepared for the Board of Regents. There are no statutory limits on when these institutionally-generated funds can be spent.

The largest revenue source for capital has consistently been G.O. Bond proceeds from the State (including Gardener-Evans Bonds). State Lottery revenues have grown every year, even in real dollars, making up the second highest source of revenues in the past two years. State trust land revenues are smaller at UW than at any of the other higher education institutions in the state, and have decreased every year since 1999.

The category including private donations, internal revenues, and indirect cost recovery makes up the largest portion of locally-generated funds. This category has fluctuated over the years, with capital campaigns and the occasional major gift. Construction of a new law school caused a significant bump in private donations in the 2001-03 biennium. Tuition building fees have remained a stable and slightly increasing source of revenues, bringing in a biennial average of $16.4 million over the past five biennia. The Metro Tract properties have brought in a steady $16 million per biennium.
Washington State University

Exhibit 21 illustrates changes in revenues for capital over the last five biennia at WSU.

Overall revenues have remained fairly steady for the past three biennia, after increasing by nearly a third between 2001-03 and 2003-05. This jump was primarily due to a combination of increasing building fees, the introduction of the Gardner-Evans Bonds in 2003, and new revenue streams including private donations and federal contributions.

The largest consistent revenue stream for capital at WSU has been G.O. Bond proceeds from the State (including Gardner-Evans Bonds). This is followed by trust land revenue, which has remained fairly consistent over the years, and is significantly larger at WSU than at any other institution.

The 2003-05 biennium saw the highest private/internal revenue at $24.8 million. This was primarily due to a public private partnership with Battelle, the parent company of Pacific Northwest National
Laboratory, to build the Bio-products, Sciences, and Engineering Lab at the Tri-Cities Campus. Battelle provided $10 million toward the project. Other significant private contributions during that biennium came from the sale of a donated property in Fife, combined with contributions from two counties and private donors to fund the Mt. Vernon Agriculture Research and Technology Building. In March 2008, the Bill & Melinda Gates Foundation awarded WSU $25 million for a flagship building at the School for Global Animal Health. The school must raise the remaining $10 million to fund construction.

The private/internal category also includes the small percentage of grant-based F&A revenues available for capital projects and individual donations through the WSU Foundation. In 2007, the Foundation reported receiving $3.1 million in private donations for facilities.

The federal revenue category includes, among others, a contribution recently received from USDA Agriculture Research Services for the construction of a plant biosciences research facility that will house WSU and USDA-funded researchers.

Exhibit 21
Washington State University Capital Revenue Sources
(in $ millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Institution: Private/Internal</th>
<th>Institution: Building Fees</th>
<th>State: Trust Land Revenue</th>
<th>State: Lottery</th>
<th>State: G.O. Bonds</th>
<th>Federal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-01</td>
<td>0.0</td>
<td>6.3</td>
<td>37.0</td>
<td>3.6</td>
<td>108.5</td>
<td>0.0</td>
</tr>
<tr>
<td>2001-03</td>
<td>0.0</td>
<td>7.6</td>
<td>37.7</td>
<td>8.2</td>
<td>71.3</td>
<td>0.0</td>
</tr>
<tr>
<td>2003-05</td>
<td>24.8</td>
<td>9.2</td>
<td>30.5</td>
<td>7.9</td>
<td>112.7</td>
<td>6.9</td>
</tr>
<tr>
<td>2005-07</td>
<td>18.4</td>
<td>10.8</td>
<td>33.9</td>
<td>10.1</td>
<td>93.9</td>
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<td>2007-09</td>
<td>4.8</td>
<td>12.7</td>
<td>33.1</td>
<td>10.1</td>
<td>129.1</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Central Washington University

Exhibit 22 illustrates changes in revenues for capital over the last five biennia at CWU. It must be noted that trust land and building fee revenues were not available for the 1999-01 biennium.

State G.O. Bonds have consistently made up the largest portion of revenues at CWU, except in 2001-03, when CWU received an unusually large amount of lottery revenues.

Timber revenues and tuition building fees have been the most consistent revenue streams, although they make up a fairly small part of overall revenues. Other revenue sources have fluctuated over the years.

CWU receives no federal monies for capital because it is not a research institution. The University has not used private donations for capital.

Exhibit 22
Central Washington University Capital Revenue Sources
(in $ millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Institution: Building Fees</th>
<th>State: Trust Land</th>
<th>State: Lottery</th>
<th>State: G.O. Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-01</td>
<td>1.6</td>
<td>6.3</td>
<td>.0</td>
<td>11.7</td>
</tr>
<tr>
<td>2001-03</td>
<td>2.1</td>
<td>5.3</td>
<td>22.3</td>
<td>10.6</td>
</tr>
<tr>
<td>2003-05</td>
<td>2.6</td>
<td>4.8</td>
<td>1.9</td>
<td>29.8</td>
</tr>
<tr>
<td>2005-07</td>
<td>3.0</td>
<td>5.3</td>
<td>2.4</td>
<td>10.7</td>
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<tr>
<td>2007-09</td>
<td></td>
<td></td>
<td>2.4</td>
<td>43.8</td>
</tr>
</tbody>
</table>

Eastern Washington University

Exhibit 23 represents capital revenues over the past five biennia for EWU.

G.O. Bond revenues make up the largest portion of EWU’s revenue sources and they have been fairly consistent except for the 2003-05 biennium. Combined, trust land revenues and building fees have consistently grown every year.

Exhibit 23
Eastern Washington University Capital Revenue Sources (in $ millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State &amp; Institution: Trust Land, Building Fees</td>
<td>6.7</td>
<td>6.2</td>
<td>6.3</td>
<td>9.0</td>
<td>10.5</td>
</tr>
<tr>
<td>State: Lottery</td>
<td>.0</td>
<td>7.5</td>
<td>1.7</td>
<td>2.2</td>
<td>6.2</td>
</tr>
<tr>
<td>State: G.O. Bonds</td>
<td>22.4</td>
<td>19.0</td>
<td>39.3</td>
<td>27.7</td>
<td>21.3</td>
</tr>
</tbody>
</table>

Western Washington University

Exhibit 24 presents capital revenues over the past five biennia for WWU.

WWU has typically received the highest level of State funds for capital of the four regional universities. G.O. Bond revenues make up the largest portion of WWU revenue stream for capital, although it is quite inconsistent from one biennium to the next. The combination of tuition building fees and trust land revenues has been the most consistent revenue stream over time.

Exhibit 24
Western Washington University Capital Revenue Sources
(in $ millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Institution: Building Fees</td>
<td>2.3</td>
<td>2.7</td>
<td>3.2</td>
<td>3.7</td>
<td>4.3</td>
</tr>
<tr>
<td>State: Trust Land</td>
<td>5.4</td>
<td>4.8</td>
<td>4.9</td>
<td>5.2</td>
<td>3.9</td>
</tr>
<tr>
<td>State: Lottery</td>
<td>.0</td>
<td>8.0</td>
<td>2.8</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>State: G.O. Bonds</td>
<td>25.4</td>
<td>46.1</td>
<td>21.6</td>
<td>60.9</td>
<td>35.8</td>
</tr>
</tbody>
</table>

The Evergreen State College

Exhibit 25 represents capital revenues over the past five biennia for TESC.

Overall revenues jumped significantly between 1999-01 and 2001-03, going from $23.5 million to $49.0 million. Since 2003, they have been falling steadily. Tuition building fees had gone up steadily until 2007-09. Because the tuition building fee rate increased in both 2007 and 2008, this suggests a drop in enrollment.

Exhibit 25
The Evergreen State College Capital Revenue Sources
(in $ millions)

Community and Technical Colleges

Exhibit 26 represents capital revenues over the past five biennia for CTCs. Unlike the situation at the four-year institutions, the building fee revenues represent the amount the CTCs were authorized to spend. The total revenues earned through private donations/internal sources in the 2007-09 biennium was not available.

Revenues have steadily increased in all categories except for the lottery. In total quantities, the CTCs as a group receive, by far, the highest revenues for capital projects of all the State higher education institutions.

Exhibit 26
Community and Technical College Revenue Sources
(in $ millions)

<table>
<thead>
<tr>
<th>Year</th>
<th>Institution: Private/Internal</th>
<th>Institution: Building Fees</th>
<th>State: Lottery</th>
<th>State: G.O. Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1999-01</td>
<td>41.2</td>
<td>40.0</td>
<td>2.3</td>
<td>191.3</td>
</tr>
<tr>
<td>2001-03</td>
<td>44.5</td>
<td>3.6</td>
<td>81.3</td>
<td>200.2</td>
</tr>
<tr>
<td>2003-05</td>
<td>64.8</td>
<td>45.5</td>
<td>17.8</td>
<td>364.7</td>
</tr>
<tr>
<td>2005-07</td>
<td>102.9</td>
<td>49.0</td>
<td>22.8</td>
<td>389.4</td>
</tr>
<tr>
<td>2007-09</td>
<td></td>
<td>59.3</td>
<td>26.8</td>
<td>432.3</td>
</tr>
</tbody>
</table>


2.5 Financing Mechanisms and Partnerships

Higher education institutions engage in a variety of partnerships with other public and private entities to finance capital projects. These arrangements typically address total funding shortfalls, cash flow problems, or both. They can occur within the biennial State capital budget process to supplement State-funded projects or can occur outside the process to fund additional projects. This section identifies common financing mechanisms and describes examples of partnership models used by the four-year institutions and community and technical colleges in the State.
Common Financing Mechanisms in Use Today

**Certificates of Participation (COPs).** A Certificate of Participation is a financing lease, authorized by the State Legislature, for capital projects between a public agency and a nonprofit corporation. The public agency issues the bonds to finance the project, and either owns or acquires the property, which it leases to the nonprofit corporation. The agency then leases the facility back from the nonprofit. These lease payments provide funds to pay for project costs. RCW 39.94 grants the State Finance Committee authority to approve financing contracts, such as COPs.

The Proposed 2007-2017 Capital Plan, released by the Governor’s Office in December 2006, identifies 11 capital projects that employ COPs, 6 of which finance higher education capital projects. Exhibit 27 identifies the higher education projects using COPs. These examples demonstrate a range of project types and costs. Typically, COPs are used on projects that generate revenue streams through enterprise or fee activities to support the lease payments. Land acquisition and equipment purchases are also common with COPs.

**Exhibit 27**
Higher Education COP Projects, as of December 2006

<table>
<thead>
<tr>
<th>Higher Education Institution</th>
<th>Project</th>
<th>2007-2009 Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Evergreen State College</td>
<td>College Activities Building</td>
<td>$16 million</td>
</tr>
<tr>
<td>Walla Walla Community College</td>
<td>Land acquisition</td>
<td>$1 million</td>
</tr>
<tr>
<td>Columbia Basin College</td>
<td>Academic Support and Achievement Center</td>
<td>$300,000</td>
</tr>
<tr>
<td>Green River Community College</td>
<td>Kent Station Satellite Building</td>
<td>$20 million</td>
</tr>
<tr>
<td>Tacoma Community College</td>
<td>Early Childhood Education and Childcare Center</td>
<td>$3.6 million</td>
</tr>
</tbody>
</table>


**63-20s.** A 63-20 is a less commonly used financing mechanism in which a nonprofit corporation issues tax-exempt bonds on behalf of a public agency. “63-20” is a reference to the Internal Revenue Code section that authorizes this financing tool. In Washington State, RCWs 47.29.050 and 47.29.060 identify 63-20 as an eligible financing mechanism for transportation and other capital projects. The nonprofit’s bond proceeds are deposited into a project account used to finance the capital project that is leased to the public agency. The nonprofit agency is usually responsible for the design, construction, operations, and maintenance of the project. The public agency has the right to buy the asset, and is required to obtain the asset title at the time of debt retirement.

Like COPs, the capital projects that employ 63-20s usually generate revenue sufficient to pay the lease payments used to retire the debt. Between January 2000 and January 2006, there have been eight 63-20 projects used by Washington State agencies, according to the Office of the State Treasurer. Three of those projects were undertaken by the University of Washington: two rental
Comparing COPs and 63-20s

The central similarities and differences between COPs and 63-20s are presented in Exhibit 28. An important similarity is that both financing mechanisms are exempt from the State debt limit. A 1991 State Supreme Court ruling decided that the financing contracts permitted under RCW 39.94, which include COPs, do not constitute State debt. The Office of the Attorney General opined that the limited obligation resulting in 63-20 financing is similar to that of COPs, and thus, also does not constitute state debt.

The differences between COPs and 63-20s result from the public versus private nature of the bond-issuing entity. The potential difference in costs associated with the public versus private entity is explored further in Chapter 5.0.

Exhibit 28
Comparison of COPs and 63-20s

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempt from the state debt limit</td>
<td>Control of financing:</td>
</tr>
<tr>
<td></td>
<td>• COP: Public agency</td>
</tr>
<tr>
<td></td>
<td>• 63-20: Private entity</td>
</tr>
<tr>
<td>Debt issued is tax-exempt</td>
<td>Procurement process:</td>
</tr>
<tr>
<td></td>
<td>• COP: Adhere to state public works standards</td>
</tr>
<tr>
<td></td>
<td>• 63-20: Primarily exempt from state public works standards</td>
</tr>
<tr>
<td>Public ownership results at the end of the lease period</td>
<td>Ownership during the lease:</td>
</tr>
<tr>
<td></td>
<td>• COP: Public agency</td>
</tr>
<tr>
<td></td>
<td>• 63-20: Private entity</td>
</tr>
</tbody>
</table>


Energy Savings Performance Contracts (ESPCs). Energy Savings Performance Contracting is an agreement between a public agency and an Energy Savings Company (ESCO) to undertake energy-saving capital improvements. Using an ESPC, the ESCO assumes much of the upfront capital costs, while the public agency uses a portion of the annual energy-related cost savings to repay the ESCO for its investment over time. In addition, the ESCO guarantees the performance of the equipment for the term of the ESPCs.

ESPCs are employed specifically to finance energy-savings infrastructure-related projects. For example, since 2000, CWU has completed significant energy infrastructure upgrades to improve the reliability and energy efficiency of its steam, chilled, and building energy systems through ESPCs. Washington State’s Department of General Administration (GA) has a program that provides contract
management, financing assistance, and energy-savings expertise for State agencies, higher education institutions, counties, cities, and special districts that undertake an ESPC project. According to the GA website, upcoming ESCO projects by State agencies number in the hundreds; community and technical colleges projects alone total over 170 between 2007 and 2009.

**Partnering with Private and Public Entities**

All higher education institutions in Washington State engage in partnerships with private entities and individuals and other public agencies to finance capital projects. These partnerships take a variety of forms, usually designed on a specific project-by-project basis. These projects are based on common goals and the mutual interest of both parties. What follows are examples of public-private and public-public partnerships identified through interviews with higher education institutions.

**Matching Fund Projects.** All higher education institutions engage in partnerships in which a private partner or partners agree to “match” a certain percentage of capital project costs. The roles these projects play in the State’s capital budget process, however, differ between four-year institutions and the community and technical college system.

Matching fund projects are a specific category of capital project for the community and technical college system. Matching fund projects receive the highest priority in the SBCTC’s capital budget list submitted to the Legislature. The notion behind this top prioritization is that colleges should be encouraged to seek out private donors, such as businesses, individuals, and philanthropic groups to leverage State dollars. In addition, this private funding demonstrates community support for the project. Matching fund projects’ State support can range between $500,000 and $2 million; private donations match or can exceed the State contribution.

Matching fund projects are also undertaken by four-year institutions, but do not comprise a unique category in their capital budget requests. In contrast, the four-year institutions do not have a matching projects category in their capital budget request. Sometimes, private gifts for capital projects are matched by the institutions through raising additional fundraising or grants. For example, WSU recently received a $25 million gift from the Gates Foundation to build a facility; WSU is planning to raise an additional $10 million to fund the project through additional private donations.

**Ongoing Partners: Higher Education Institution Foundations**

Most higher education institutions have 501(c) 3 foundations. In particular, all six four-year institutions and most CTCs have them. The role foundations play with regard to capital project fundraising, however, varies substantially.

Among four-year institutions, UW and WSU’s foundation activities contribute to capital projects. According to its 2007 Annual Report, the WSU Foundation collected gifts and grants designated to facilities in the amount of approximately $3 million dollars, or 4.8% of total funds raised. In the case of the UW, each department raises money toward their own specific capital projects through the UW Foundation. A similar departmental giving structure is available through the WSU Foundation. The majority, if not all, of fundraising efforts of the foundations at of the regional universities go toward non-capital projects, such as scholarships, enrichment funds, libraries, and academic programs, among others.
Among CTCs, most foundations focus on student financial aid and scholarship fundraising, but some foundations do engage in capital fundraising campaigns. For example, the Centralia Community College Foundation is undertaking a $3 million campaign for the three capital projects described below. In all three cases, community donations raised through the foundation augment state-supported capital projects.

- **Health and Wellness Center (HWC) Remodeling.** Through the capital budget process, Centralia Community College originally received State money for repairs of its 1936 HWC building. College officials decided to leverage the State’s money into a larger renovation project with $1 million in private community donations raised through its Foundation. The motivation behind this decision was two-fold: (1) the State’s investment in repairs was already substantial, and further renovation was seen as a logical next step; and (2) the facility, once a high school gymnasium, had important historic and heritage value to the college and community. Remodeling is scheduled to be completed in December 2008.

- **Science Center Equipment.** Centralia’s Foundation is raising money to cover equipment purchases for a State-supported Science Center capital project, slated to be complete in Spring 2009. The equipment purchases, originally included in the capital budget allocation from the State, could not be made because of construction cost inflation during the design and construction process.

- **College Commons Dining Facility.** This is a replacement project, scheduled to break ground in July 2013. Centralia has been appropriated State money to fund a 300-seat banquet style dining area, but, with community support (to equal an additional $1 million), the facility will be expanded to a 500-seat dining area.

**Public-Private Partnerships**

Public-private partnerships take a variety of forms. These arrangements generally entail a private industry partner collaborating with a public government body. Frequently, private partners provide financial resources and/or management expertise in exchange for monetary benefits. The government can benefit by increased infrastructure investment without immediately adding to its debt, transferring some risk to the private sector, and in some cases by generating revenues. Public-private partnerships often entail the government body specifying a project, and the private partner participating in design, construction, financing, and subsequently, operation of the project. This arrangement often takes the form of an operating lease, with or without obligation to transfer the asset ownership back to the government at some point.

The State’s research universities (UW and WSU) cited the use of public-private partnerships most often during stakeholder interviews. Opportunities for public-private partnerships appear to be less frequent for the State’s regional universities. For example, EWU cited only one example of a public-private partnership, in which EWU is involved in a 30-year lease for a residence hall built by a private contractor. The community and technical college system also employs public-private partnerships, but the extent appears to vary by college.

Two examples of public-private partnerships are described below.
South Seattle Community College and the Allied Trades. South Seattle Community College (SSCC) and the International Union of Painters and Allied Trades District Council #5 (the Allied Trades) formed a partnership to build a $9 million building on SSCC’s Georgetown campus. Before the project, SSCC and the Allied Trades had an existing partnership for a student apprenticeship program. The capital project partnership was motivated by mutual interest: SSCC was planning on replacing a building on campus, and the Allied Trades, which already had a program and offices on SSCC’s campus, was looking to build a new facility. Although the Allied Trades initially had examined building a new facility off campus, the college worked with the Allied Trades to develop a mutually beneficial location and program on-campus that allowed both to expand training opportunities on the Duwamish site. The Allied Trades built the new building on SSCC’s campus to house its offices, program, and program staff for $9 million; $7 million came from its own trust and $2 million came from the State Legislature. SSCC is leasing the property to the Allied Trades on a 75-year lease, and leases back classroom space in the building.

WSU and Pacific Northwest National Laboratory (PNNL). The partnership between WSU and PNNL to build a $24.8 million Bioproducts, Sciences, and Engineering Laboratory (BSEL) on WSU’s Tri-Cities campus is an example of converging national, state, and university interests, as well as a complex and creative partnership structure. BSEL’s research focus is on alternative fuels, specifically developing conversion technology and more efficient biofuels to address national and international issues of energy use and climate change. The 57,000 square-foot facility houses teaching laboratories, classrooms, offices, and advanced biological, chemical, and engineering research and development laboratories. The financing and ownership agreement is particularly complex given the public-private nature of PNNL. The Department of Energy manages PNNL, but PNNL is operated by the private science and technology 501(c) 3, Battelle. WSU constructed and owns the building. The construction of BSEL was financed by $15 million of Washington State G.O. Bond proceeds, provided by the Legislature, and $10 million paid to WSU in the form of prepaid rent for leasing approximately half of the building to Battelle for 20 years. Battelle issued its own bonds to pay WSU the $10 million in prepaid rent. Battelle needed to obtain the funding in this manner because of federal limits with regard to long-term leasing. Each month, PNNL pays WSU for its pro rata share of the maintenance and operations costs of operating BSEL.
Public-Public Partnerships

Higher education institutions also partner with other public entities, such as state agencies, cities, counties, ports, or each other, to finance capital projects. Like public-private partnerships, these agreements occur when opportunities of shared benefit arise and involve distributing the costs of constructing and maintaining the facility over time between the partners. This section highlights a recent public-public leasing arrangement and describes the practice of facility co-location between public entities.

Public-Public Partnership: Western Washington University and the Port of Bellingham. An example of a recently formed public-public partnership is between WWU and the Port of Bellingham. WWU and the Port of Bellingham have partnered to create the Viking Development Entity, an intermediary development authority, which will enable WWU to develop new facilities on the Port’s 220-acre waterfront property. This project is part of a larger effort to redevelop the Port’s waterfront. Both WWU’s Board of Trustees and the Port Commissioners approved the formation of the Viking Development Entity in August 2008. The entity is directed by a board consisting of a Port Commissioner, a WWU Trustee, the Port Executive Director, the President of WWU, and a fifth member selected by the aforementioned representatives.

The Viking Development Entity will buy or lease a 10-16 acre portion of the downtown waterfront property from the Port, using money from the WWU Foundation and State and federal grants. Viking Development would then select and negotiate an agreement with a developer to finance and build the University facilities and additional commercial facilities according to WWU’s specifications. This stage of development will likely involve a public-private partnership. WWU would then lease the property from Viking Development for 30 years with a right to own. The site has been targeted for the Huxley College of the Environment as well as several other smaller programs.

Co-location: University Centers and Skill Centers. In addition to leasing arrangements with a variety of public agencies and jurisdictions, four-year universities and community and technical colleges also partner with each other and the K-12 system to build and operate shared facilities. Brief descriptions of these public-public partnerships are described below. The co-location of these higher education facilities also have effects on space utilization, which is further explored in Chapter 3.0. These public-public partnerships, however, tend to focus on shared building maintenance and operations, as well as academic curriculum and missions.

University Centers, also known as Higher Education or Learning Centers, are partnerships between four-year institutions and community and technical colleges. University Centers bring select baccalaureate and master’s degree programs from Washington’s four-year institutions to community
college campuses and other local facilities via classroom instruction, online courses, and interactive video instruction.

Exhibit 29 identifies partnerships between four-year institutions and community and technical colleges. For example, CWU operates eight University Centers in conjunction with community colleges. In addition to the University Center partnerships listed below, the University Center of North Puget Sound, managed by Everett Community College, offers online and in-class courses from all six four-year institutions.

**Exhibit 29**
**Higher Education Centers**

<table>
<thead>
<tr>
<th>Four-Year Institution</th>
<th>Community and Technical College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Washington University</td>
<td>Big Bend Community College, Edmonds Community College, Everett Community College, Green River Community College, Highline Community College, Pierce College, Skagit Valley College, Wenatchee Valley College, Yakima Valley Community College</td>
</tr>
<tr>
<td>Eastern Washington University</td>
<td>Bellevue Community College, North Seattle Community College</td>
</tr>
<tr>
<td>Washington State University</td>
<td>Community College of Spokane—Institute for Extended Learning, Grays Harbor College, Lower Columbia College, Skagit Valley College, Walla Walla Community College, Wenatchee Valley College, Yakima Valley Community College</td>
</tr>
<tr>
<td>University of Washington</td>
<td>Cascadia Community College</td>
</tr>
<tr>
<td>Western Washington University</td>
<td>Peninsula College, Olympic College, North Seattle Community College</td>
</tr>
</tbody>
</table>


Skill Centers are regional secondary schools, which are part of the K-12 system, and work in close collaboration with community and technical colleges and four-year universities to provide students with job preparation, training, apprenticeship, and college class opportunities. The ten Skill Centers across Washington State are cooperatively owned by the school districts that each serves. Skagit Valley College and Lake Washington Technical College are working with their local school districts to construct K-12 Skill Centers on their main campuses. These collocated programs will enhance the use of shared space and provide great opportunities for professional technical education and seamless transitions into college level programs for high school students.
Summary Conclusions: Benefits, Costs, and Trade-Offs

This Chapter has described a number of financing and partnership mechanisms that enable the financing of higher education capital projects. What follows is a description of some of the benefits, costs, and trade-offs of these arrangements.

Financing Mechanisms

COPs and 63-20s. The shared characteristics between COPs and 63-20s, as presented earlier in Exhibit 28, yield common benefits. First, like all financing mechanisms, both COPs and 63-20s spread a project’s capital costs over several years. This alleviates upfront cash flow issues and enables a capital project to be undertaken that may not have been feasible if upfront appropriations were required. Second, because both involve a partnership between a public agency and a nonprofit entity, risk is shared with the private sector instead of resting solely on the public sector. Third, both are tax-exempt, which results in lower interest costs than conventional financing. Fourth, COPs and 63-20s are exempt from the state debt limit, and thus, their use will not be constricted by state debt capacity in the future.

Because 63-20s and COPs are not backed by the “full faith and credit” of the State, both result in higher costs than would be the case with G.O. Bonds. However, these higher costs are not equal and depend on the bonding entity, as described below.

- **With COPs, a public agency issues a bond.** COPs use standardized State documents to issue bonds. The Office of the Treasurer estimates that issuance costs for COPs equal approximately $13.65 per bond compared to a G.O. Bond issuance cost of $7.33 per bond. These bonds are limited obligation bonds, which have higher financing costs than G.O. Bonds and given the higher risk, require a debt service fund (typically equaling around 10% of the total principal borrowed).

- **With 63-20s, a private entity issues a bond.** Issuing 63-20 bonds requires project-specific customized documents, which according to cost estimates by the Office of the Treasurer total between $19.38 and $54.34 per bond—higher than both G.O. Bonds and COPs. The issuance of a bond by a private entity versus a public agency usually results in higher borrowing rates because of perceived credit quality. In January 2004, the Office of the Treasurer estimated the difference between 63-20 and COP financing to equal around 30 basis points. Interest during construction and required reserves are often bonded with the initial offering, leading to higher debt service. 63-20 financing agreements, unlike G.O Bonds and COPs, include payment of ongoing asset management fees to the private corporation in the lease payment.

63-20 financing faces higher costs than COPs and G.O. Bonds as a result of the private nature of the bonding entity. In addition, savings in construction accrues to the third party private owner, and do not benefit the public agency.

However, private ownership of the asset during the lease comes with additional benefits, as well. Additional private resources are being employed to fund public capital projects. 63-20 financing offers greater flexibility in timing because legislative approval is not required to issue the project bonds. 63-20 financing is primarily exempt from State public works procurement processes. This can result in
expedited project schedules. Total project costs are an area of dispute. Proponents cite reduced project costs as a benefit of 63-20 financings.

In January of 2006, the Office of the Treasurer released the Report on 63-20 Capital Projects Financing. The State Treasurer was critical of the mechanism, noting that it should only be used as “the financing mechanism of last resort.” Among other issues, the report found that there is “insufficient information” to prove the 63-20 mechanism reduces total project costs, and these reductions, if they exist, are likely the result of the expedited project completion. Furthermore, the private control of the procurement process may come with a loss of transparency, which could result in a higher risk for legal issues.

The comparison between the benefits and costs of COPs and 63-20 financings is nuanced and complex. COPs are employed with much greater frequency in the State, however, the debate regarding 63-20s and their merits continues. Exhibit 30 presents a summary of the benefits and costs of each mechanism.

### Exhibit 30
**COPs and 63-20s**

<table>
<thead>
<tr>
<th>Benefits</th>
<th>COPs</th>
<th>63-20s</th>
<th>Benefits</th>
<th>COPs</th>
<th>63-20s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spread cost over time</td>
<td>Spread cost over time</td>
<td>Higher issuance cost than G.O Bonds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax exempt</td>
<td>Tax exempt</td>
<td>Higher financing costs than G.O. Bonds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State debt limit exempt</td>
<td>State debt limit exempt</td>
<td>Require a debt service fund</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared risk with private sector</td>
<td>Shared risk with private sector</td>
<td>Ongoing payments of asset management fees</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Greater timing flexibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


**Energy Savings Performance Contracts (ESPC).** ESPCs, like COPs and 63-20 financing, spread a project’s capital costs over several years, which alleviates upfront cash flow issues and enables an energy efficiency capital project to be undertaken that may not have been feasible if upfront appropriations were required. Delays in ESPC projects can, in particular, result in higher ongoing maintenance and operation costs, due to energy inefficiencies. Critics, however, argue that the direct, upfront purchase of energy efficiency systems by the public agency may cost less in the long run, due to potential higher financing costs associated with private ESCOs.

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Partnerships

In interviews with higher education institutions, the following benefits and costs of partnerships were identified.

Benefits. Higher education institutions’ partnerships with private entities, other public agencies and jurisdictions, and each other can increase revenue, spread the cost burden, and/or address cash flow issues associated with capital projects. The benefits cited by stakeholders are: (1) partnerships enable capital projects to be built that otherwise would not have been built in the near future, if it all; and (2) partnerships can support and enhance state-supported projects, so that these projects better meet the needs and wants of the higher education institution and its community.

Drawbacks/Costs. The loss of some authority or control over the capital project process was cited as a drawback of partnerships. In addition, partnerships can become increasingly complex. The number and type of actors (e.g. federal, State, local, and private) involved can make financing decisions and logistical details of the capital and operations processes time-consuming and complicated.

Washington’s higher education institutions employ a number of financing mechanisms and partnerships to undertake capital projects. These arrangements widely vary with regard to the actors involved, how they work, and trade-offs made. Chapter 3 will discuss the use of these mechanisms for future capital projects.

3.0 INCREASING REVENUES FOR HIGHER EDUCATION CAPITAL FUNDING

This chapter examines existing revenue sources and potential new revenue sources in terms of magnitude, feasibility, and other issues in an attempt to identify where the State or institutions could pursue additional resources for funding higher education capital facilities.

3.1 Increasing Existing Revenue Sources

Expanding the State Debt Limit

As mentioned in Chapter 2 of this report, in 2003 the Legislature passed HB 2242, which increased statutory debt capacity by adding the state portion of the property tax to the statutory definition of general State revenues. Since constitutional debt limit is the current constraint, the State could potentially expand constitutional debt limitation by including revenues currently exempted from calculations.

Near General Fund accounts. “Near General Fund” accounts provide funding for specific programs and services that are similar to traditional General Fund activities, for example: education or health care. Those related or “near General Fund” accounts are the Health Services Account, the Violence Reduction and Drug Enforcement Account, the Public Safety and Education Account, the Water Quality Account, the Student Achievement Account, and Education Legacy Trust Account:
Health Services Account provides funding for the Basic Health Plan and State match for Medicaid eligible children. Revenue sources are primarily tobacco and alcohol taxes.

Violence Reduction and Drug Enforcement Account funds a variety of criminal justice activities, including incarceration, drug and alcohol treatment, drug task forces, and rehabilitation programs. Revenue sources include a variety of tobacco and alcohol taxes.

Public Safety and Education Account funds a variety of public safety activities by judicial and executive branch agencies. Revenue sources include fees, fines, forfeitures, penalties, reimbursements, or assessments by the courts.

Water Quality Account provides funding for water pollution control activities and facilities. Revenue sources include mainly tobacco taxes and a General Fund state transfer.

Student Achievement Fund (SAF) was created by Initiative 728 in 2000, and provides funding to school districts for class size reduction, extended learning, professional development, early learning, and certain building improvements. Revenue sources are primarily property, tobacco, and estate taxes.

Education Legacy Trust Account supports a portion of the SAF per student distributions and a variety of other K-12 and higher education activities. Revenue sources include estate and tobacco taxes.

Legislative Staff for the Joint Task Force on School Construction Funding estimated total potential capacity to expand the debt limit through near General Fund accounts to be approximately $374 million in the 2009-11 biennium. However, it is uncertain how much funding could be made available to higher education, as funds raised through the expanded debt limit would likely be shared among multiple capital budget needs.

There may be opposition from the account beneficiaries if these accounts were to be rolled into the General Fund and no longer dedicated to specific activities. More research is needed to examine the account constituencies and the impact this action could produce.

Property taxes. Property taxes that are levied by the state to support schools were added to the statutory definition of general State revenues, thereby increasing the statutory debt capacity. However, property taxes are currently outside the revenue base for calculating constitutional debt limit. Including property taxes would require a constitutional amendment. More research is needed to estimate the magnitude of potential impact on debt limit capacity, however, it would be larger than including the near term accounts.

School Bond Guarantee Program

Washington State School District Credit Enhancement Program. In 1999 the Legislature passed Senate Joint Resolution 8206, which created the Washington State School District Credit Enhancement Program. An amendment in the State Constitution authorizes the Program in Article VIII, Section 1 (e), and the statutory requirements are enumerated in RCW 39.98. The Program is intended to assist school districts in improving interest rates on their bond issues by pledging the State’s “full faith, credit, and taxing power” (Article VIII, Section 1 (e)) to guarantee a school district’s debt, which enables the district to use the State’s bond rating. If a district does not have sufficient
funds to repay the debt, the State will pay the bonding agent and the district will then be responsible for paying the State. The State does not assume the debt for a school district (RCW 39.98.010), but sufficient funds to pay back the bonds must be appropriated by the State Treasurer (RCW 39.98.070). Therefore, while the Program does not have an impact on the State’s debt limit, it could affect the State’s capital obligations.

In order for a district to be eligible for the Program, the State Treasurer must determine that the district is fiscally solvent and that no previous bonds guaranteed under the program are still outstanding or have been paid by the State.

A similar program could benefit higher education institutions, helping them receive better rates on their bond issues, and ultimately reducing the cost of financing capital projects.

A constitutional amendment would be required to extend the Program to higher education institutions. Both Article VIII, Section 1 (e) and RCW 39.98 specify school districts as the only eligible entities for the Program. However, nowhere in the legislation are K-12 districts specified, so potentially other school districts with taxing authority, such as potential community college districts, would be eligible.

**Trust Lands**

The following are potential ways to increase revenues from trust lands and permanent funds:

**Diversifying Investments in Permanent Funds**

As mentioned in Chapter 2 of this report, until recently, WSIB invested permanent fund monies solely in 100% unrestricted fixed income securities (mostly bonds), resulting in safe but relatively low returns. In 2007, a constitutional amendment allowed the investment of permanent funds in stocks or bonds issued by any association, company, or corporation, to the extent the Legislature authorizes such investments.

It is a widely recognized financial principle that diversifying investments will not only increase revenues, but will also decrease overall portfolio risk. According to the WSIB 2007 Annual Report, these asset classes produced the following ten-year returns:

- U.S. Equity: 7.85%
- International Equity: 8.32%
- Fixed Income: 6.51%
- Private Equity: 15.76%
- Real Estate: 15.87%

WSIB is currently working with institutions to determine the optimal asset allocation for the funds. Considering the current situation in the financial markets and uncertain economic outlook, WSIB will proceed with caution; however, diversification principles are now even more relevant.
The magnitude of change would likely be relatively low – potentially under $10 million for all permanent funds.

Sale of Trust Land

Some higher education institutions have been advocating for the sale of trust lands, with proceeds going to respective permanent funds. Institutions argue that return on investment for trust lands is relatively low, and more money can be generated for capital projects by increasing the value of permanent funds and investing these monies in various financial instruments.

There are several issues connected to this idea:

- **It is unclear how much revenue could be generated by the sale of trust lands.** The last valuation of state trust lands was done in 1994. Since that time, DNR has attempted to develop trust land valuations and actually did a small pilot test; however, the project is temporarily on hold until more funds are available to continue the pilot. One of the recommendations from the 2003 DNR Report to the Legislature Options for Increasing Revenues to the Trusts: Comparison of Returns from Investing in Real Property and in Permanent Funds, focused on making the funds available to determine the current value of all trust assets managed by DNR.

- **Is it better to sell these lands to the State or to private bidders?** The State would have to raise a substantial amount of money, likely in G.O. Bonds, in order to purchase the lands. This bond issue would be subject to the State debt limit (see Chapter 2), and would likely only be able to happen gradually, over several biennia. Private buyers may be able to mobilize financing for land purchases, but may also take purchased lands out of timber production and convert them into other uses. The political feasibility of this option is also questionable: most trust land dispositions happened prior to 1930, and since then the State has had a policy of retaining its trust land base.

- **The limit on the size of land sales would significantly lengthen the sale process.** DNR is restricted on the size of the parcel that can be sold to a maximum of 160 acres. It would take DNR a lengthy period of time to sell nearly 300,000 acres in 160-acre pieces.

Diversifying Trust Land Holdings

As mentioned earlier in this report, most of the income from trust lands comes from timber revenues, with the balance coming from various lease sources, including agriculture, rights-of-way, commercial real estate, communication sites, and others.

In 1984, DNR was given authority to invest in non-timber types of income-producing properties and required not to deplete either the publicly-owned land base or the publicly-owned forest land base. This added flexibility allowed DNR to sell some underperforming assets and reinvest the money into properties with higher potential.

The introduction of the non-timber portfolios in the late 1980s (including commercial leases, agriculture leases, and others – deemed “alternative investments”) was meant to diversify DNR’s property investments to reduce the risk of income variability. Since 2000, lease income from DNR-managed trust lands has increased by 84% from $19 million in FY 2000 to $35 million in FY 2007, which represents a 9% annual average growth rate. In contrast, for the same time period, timber sale
revenues have declined by 10% from $140 million to $125 million, with an annual average growth rate of -1.5%.

However, according to the 2006 Report to the Legislature by Pension Consulting Alliance, *A Review of the Department of Natural Resources’ Commercial Lands Program* (2006 Report), despite the income earning potential of alternative investment programs, the investment in these programs has been inconsistent and relatively modest. This is due to several factors, including: (1) availability of underperforming land holdings that can be sold with proceeds to fund other programs; (2) limited capacity of the Land Bank to hold underperforming assets (1,500 acre limit); (3) limit on size of land sales to maximum of 160 acres; (4) limited legislative appropriations to acquire new property holdings; and (5) the requirement that State-owned land only be sold through public auctions.

The 2006 Report further states the following: “While it is difficult to quantify precisely, it is likely that, under less stringent constraints, the size and scale of the Commercial Land Program (CLP) and/or other alternative investment programs would be materially larger. This difference would have meant a higher level of diversification and an increase of the DNR trust beneficiaries’ income stream, particularly over the last 22-year horizon.”

Another study, the 2003 DNR Report to the Legislature *Options for Increasing Revenues to the Trusts: Comparison of Returns from Investing in Real Property and in Permanent Funds*, provides the following real returns for real property purchases for FY 1989 – FY 2002 period:

- Forestry: 6.0% (4.5% after management fee)
- Agriculture: 10.5% (7.8% after management fee)
- Commercial: 10.1% (5.3% after management fee and reducing by the 3.1% loss in purchasing power due to inflation during the study period)

**Commercial Land Program.** According to the 2006 Report, DNR managed approximately $100 million of assets categorized as commercial real estate as of June 30, 2006. In FY 2007, approximately $9.7 million of revenues were generated from CLP for all DNR-managed trusts, of which only State University and Agricultural School trusts received revenues, totaling about $110,000. Revenues are generated through either leasing land and buildings to commercial businesses, or leasing solely land through the ground lease.

The 2006 Report estimated the CLP portfolio’s annual internal rate of return to be 11.1% since 1999, the inception point of reliable DNR data. The report further mentions that the sporadic funding of the CLP over the last 20 years has resulted in a program that is providing only marginal benefits to the DNR and its beneficiaries.

The 2006 Report stated that both the agriculture and CLP components should be larger in scale to have a meaningful, diversifying impact on total DNR revenues. Having CLP and agriculture leases account for 10% each of total program revenues would be an appropriate minimum level, where each program would begin to play a significant role in the production of DNR revenue. Considering that CLP accounted for about 2.8% of total DNR revenues in FY 2007, increasing the CLP portfolio to 10% could bring in approximately $30 million in revenue, and perhaps $300,000 to $500,000 for higher education trusts.
It is also important to note that contrary to the 2006 Report recommendations of increasing alternative investments, SB 6088 was introduced in the 2007 legislative session prohibiting DNR from acquiring additional commercial properties. In addition, the bill directed DNR, in cooperation with the WSIB, to develop a plan to transition its commercial properties to the WSIB, or to dispose of the commercial properties and reinvest the proceeds in working natural resource lands that are at high risk of being converted out of timber land status.

WSIB managed approximately $7 billion in real estate investments in 2007. It could be conceivable that if the higher education trust portfolio were to be diversified into more commercial real estate, WSIB may be better suited to be the investment manager.

**Agriculture Leases.** Since 2000, lease income from all DNR-managed agriculture lands has increased by 77%, from $6.6 million in FY 2000 to $11.8 million in FY 2007, which represents an 8.5% annual average growth rate. In FY 2007, the revenues from agricultural leases were approximately 4% of total revenues generated from operations. The income from agriculture leases generated approximately $930,000 for higher education trust beneficiaries in FY 2007. Combined, higher education trust beneficiaries own about 28,000 acres of agriculture land.

According to DNR, the most high-producing leases are for orchards, vineyards, and irrigated uses. DNR generally leases orchard and vineyard properties on a percent of the value of the harvest, although crops do not typically reach full production for three to five years.

Land leases for growing biofuels (for example, corn for ethanol) are also becoming more common.

Overall, having CLP and agriculture leases account for 10% each of total program revenues would likely bring in about $1 million in annual revenues for higher education beneficiaries.

**Alternative Energy Sources**

Starting in 2003, the DNR and power companies have been collaborating on a program to lease selected State trust lands for wind-power generation. According to a February 2008 DNR press-release, there are 12 wind power leases signed and another 10 in development, and State lands could soon be the home of over 150 wind towers producing over 200 megawatts of electricity. Most of the sites are concentrated in the Columbia River Gorge.

Initiative 937, passed in 2006, mandates that 15% of all energy produced in Washington has to be renewable by 2020, thereby increasing opportunities for DNR to lease land for wind power generation. However, according to DNR, there is limited potential to increase wind lease revenues from the higher education trust lands, as the areas most suited to wind generation are generally on Common School Trust lands.

In the future, State trust lands in Eastern Washington could see significant development of solar energy facilities. DNR is also exploring opportunities for utilizing forest biomass for heat and power production, as well as for conversion to cellulose-based ethanol.
Building Fees

Tuition building fees are a stable dedicated revenue stream for non-auxiliary capital projects at all higher education institutions. However, building fees are subject to several statutory constraints that make them difficult to increase in a significant way. As described in Chapter 2, building fees are a component of the “tuition fee,” which is limited to an annual increase of no more than 7% at all institutions for resident undergraduates. Tuition for all other student types is determined by the institution and is not subject to annual increase limits. Building fees are also required by law to make up between 3% and 5% of total tuition at the four-year institutions, and 11% at the CTCs. This means that if tuition is increased by the full 7%, both building and operating fees will increase proportionally.

The analysis in Chapter 2 demonstrated that over the past 20 years, operating fees have increased at a faster rate than building fees, suggesting that building fees may need to be increased at a faster rate than operating fees to catch up with recent growth.

It is difficult to compare building fees in Washington to a national average because money for capital projects is collected and allocated differently in each state. Because building fees in Washington are a component of tuition, the comparison of tuition with that of other states serves to illustrate potential room for growth of tuition building fees in Washington.

In-state tuition and fees in Washington for public four-year and two-year institutions are comparable to the national average. According to the Chronicle of Higher Education, the national average tuition and fees for the 2006-07 school year was $5,685 for a public four-year institution, and $2,017 for a two-year school. This is compared with Washington’s slightly lower $5,636 average for four-year institutions, and slightly higher $2,671 average for two-year institutions.
Exhibit 31
Public Institution In-state Tuition and Fees

<table>
<thead>
<tr>
<th>State</th>
<th>Public 2-year</th>
<th>Public 4-year</th>
<th>US 2-year average</th>
<th>US 4-year average</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>$4,452</td>
<td>$4,634</td>
<td>$4,715</td>
<td>$5,102</td>
</tr>
<tr>
<td>Colorado</td>
<td>$2,037</td>
<td>$2,152</td>
<td>$2,243</td>
<td>$2,500</td>
</tr>
<tr>
<td>Connecticut</td>
<td>$7,151</td>
<td>$7,106</td>
<td>$7,050</td>
<td>$7,500</td>
</tr>
<tr>
<td>Maryland</td>
<td>$7,629</td>
<td>$7,672</td>
<td>$7,650</td>
<td>$8,000</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>$9,333</td>
<td>$9,370</td>
<td>$9,350</td>
<td>$9,700</td>
</tr>
<tr>
<td>New Jersey</td>
<td>$5,114</td>
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<td>Texas</td>
<td>$3,163</td>
<td>$3,200</td>
<td>$3,150</td>
<td>$3,500</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>$6,048</td>
<td>$6,106</td>
<td>$6,050</td>
<td>$6,500</td>
</tr>
<tr>
<td>Washington</td>
<td>$5,636</td>
<td>$5,672</td>
<td>$5,650</td>
<td>$6,100</td>
</tr>
</tbody>
</table>


Exhibit 31 illustrates how the average 2006-07 in-state tuition in Washington compares with that of the other states surveyed for this report and the national average. Of the nine states, Washington has the sixth highest two-year and four-year tuition and fees.

Although these statistics compare all institutions without stratifying them by size, research capability, or ranking, the comparison of general averages suggest that there is still room for growth in tuition.

**Eliminate the Building Fee Appropriation Requirement**

**Proposal.** Building Fees are currently collected and deposited into the State Treasury, then appropriated back to each institution with specific use designations. If the appropriation requirement were eliminated, universities could have greater discretion in how and when to use the building fees. With their expanded bonding authority per RCW 28B.142.005, the research universities could bond against these fees to fund larger projects.

**Magnitude of Impact.** This proposal would give the institutions flexibility to bond against building fees. In particular, the Legislature recently granted UW and WSU the authority to bond against local non-appropriated funds such as tuition, fees, grants and contracts, sales and services, and investment income for any university purpose (RCW 28B.142.005).
Combined, UW and WSU collected approximately $17 million in FY 2008 (UW collected about 60% of that amount, while WSU collected 40%). Assuming that 50% of this amount will be used for paying debt service on a revenue bond, and considering that the bond amount will depend on term and interest rate, the two institutions could issue bonds for between $90 and $122 million. Exhibit 32 below shows potential bond amounts at varying interest rates and bond terms.

**Exhibit 32**

Possible Revenue Bond Amount, based on 50% of Annual Building Fee Collections, for UW and WSU Combined

<table>
<thead>
<tr>
<th>Bond Term (Years)</th>
<th>Bond Interest Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4.5%</td>
</tr>
<tr>
<td>15</td>
<td>$90,570,000</td>
</tr>
<tr>
<td>25</td>
<td>$125,050,000</td>
</tr>
<tr>
<td>30</td>
<td>$137,360,000</td>
</tr>
</tbody>
</table>


The amounts in the table would roughly double under the assumption that UW and WSU would bond against all collected fees. It is reasonable, however, to assume that the institutions would prefer to bond only against a portion of this revenue stream, thereby preserving the remaining funds for other capital needs.

**Feasibility.** In 2008, Senator Marr introduced SB 6432, which attempted to eliminate the building fee appropriation requirement for WSU. This bill did not get out of committee, indicating limited support. One potential reason for the lack of support is the concern that the building fees, which are currently used primarily for minor building repairs, would begin to be used for new construction, resulting in low levels of maintenance and further degradation of existing buildings. This option would take building fees out of the State budget process and give the institutions full authority over their expenditure.

**Use Building Fees for COP Lease Payments**

**Proposal.** Using building fee revenue to cover COP lease payments is another option that would enable it to be used to finance larger projects, but keep the revenue stream within the state budget process. COPs are currently used to finance buildings that generate a revenue stream through enterprise to support the lease payments. Building fees could be used as a substitute for an enterprise revenue stream for academic buildings that do not generate revenue.

**Magnitude.** This proposal would be able to generate a revenue stream, but also comes with some additional costs. COPs have higher issuance and financing costs than G.O. Bonds and require a 10% reserve of the principal.

**Feasibility.** Implementing this option would require an administrative shift as opposed to a statutory change. Building fee revenue can currently be used to pay off COPs, but the State’s current practice is to allocate the money back to the institutions’ building accounts, where it is primarily used for building maintenance. Similar to the previous option, shifting building fee revenue from funding minor repairs...
to funding new construction represents a policy shift and raises concerns about funding sources for maintenance.

**Increase the Proportion of Building Fees Relative to Operating Fees**

**Proposal.** An option for increasing building fees is to amend RCW 28B.15.069 to allow building fees to make up a larger portion of tuition than the current percentages. This shift would not place a greater cost burden on students, because it would not initiate a tuition increase. However, it would take potential revenue away from the operating budget, as operating fees would have to become a smaller portion of tuition.

**Magnitude of Impact.** Assuming that existing building fees were increased to make up 1% more of total tuition fees, with current enrollment and current tuition rates, that change would amount to roughly an additional $15 million in aggregate building fee revenue for all two- and four-year institutions combined. It would also take that same amount away from the operating budget. Assuming that overall tuition increased by 7%, this shift in the ratio between building and operating fees would amount to approximately $16 million in additional building fee revenue.

**Feasibility.** The primary barrier to the implementation of this option is the negative effect it could have on operating fees. The institutions might not see an advantage to this option as it does not result in a net increase in revenues, just a shift from operating to capital. The Legislature, on the other hand, might be drawn to this option because it does not raise the tuition burden on students. The proposal could become more appealing to the institutions if they were permitted to determine the proportion of building to operating fees within the basic constraints of a 7% maximum annual tuition increase.

**Separate Building Fees from Tuition Fees**

**Proposal.** Building fees could also be separated from operating fees and given a higher annual increase cap. This would allow the institutions to increase building fees independently from operating fees and outside the constraints on tuition increases, as the need arises. This option would require legislative action to amend RCW 28B.15.020, which defines “tuition fees,” and RCW 28B.15.069, which stipulates the percentage limit.

**Magnitude of Impact.** If existing building fees were to go up by 10%, it would result in approximately $10 million in new revenues for capital. Each resident undergraduate would pay between $16 and $31 more per year, and each nonresident undergraduate would pay between $50 and $102 more per year.

**Feasibility.** The largest obstacle to this option is additional cost burden to students, as both building fees and operating fees would likely increase to their respective maximum limits. Although tuition in Washington is currently just under the national average, suggesting room for further increase, tuition in the State has outpaced inflation in the past ten years, making even greater increases less palatable to students and parents. Further, students are now saddled with a large number of auxiliary building fees as outlined in Chapter 2 and they are unlikely to distinguish between the two types of building fees. This situation will make it more difficult for students to accept newly introduced increases in tuition building fees.
In 2007, Senator Jacobsen introduced SB 5327, aimed at allowing UW to establish its own building fee. The bill would have freed building fees from the current tuition-related constraints and given the University the authority to change it at will. The bill failed, most likely because of concern about unpredictability and affordability for students. Given that this bill was recently introduced and that the universities are looking for a way to expand building fees, there may be enough political will in the Legislature to reintroduce a revised bill.

3.2 Potential New Revenue Sources for Higher Education Capital Projects

Given the constrained funding environment for higher education capital projects, this section describes the following revenue sources employed by other public entities across Washington State and other states: property tax, retail sales and use tax, impact fees, tax-increment financing, and the corporate income tax. Each revenue source is evaluated for its potential use in higher education capital financing by examining potential implementation, feasibility, magnitude, and other issues and impacts.

Property Tax

Statutory Limits and Requirements. Property taxes are levied by the State, counties, cities, and special districts (such as fire and library districts). Property tax rates are expressed in terms of dollars per $1,000 assessed value. There are several statutory limitations and requirements regarding the total tax rate levied by an entity, the allowable increases in tax levels, the aggregate tax burden for a property, and tax uniformity throughout the system. The limits and regulations are described below.

- **Uniformity.** Article VII, section 1 of the Washington State Constitution requires that properties of the same value must be taxed at the same rate. This means that a taxing district’s levy rate must apply uniformly within district boundaries.

- **1% constitutional tax levy limit on an individual parcel of property.** Article VII, section 2 of the Washington State Constitution limits the amount of property tax that can be imposed on a parcel of property to 1% (or $10 per $1,000) of its “true and fair” market value. Port district and public utility districts are not included under the 1% limit, but rather, have a separate statutory limit equal to $0.45 per $1,000 of assessed value.

- **Maximum tax rate levied by a public entity.** The statutory limit on the maximum rate that can be imposed varies by the public entity levying the property tax. The State’s statutory levy limit equals $3.60 per $1,000 of market value.

For counties, this maximum rate equals $1.80 per $1,000 of assessed property value. For cities and towns, the maximum rate equals $3.375 per $1,000 of assessed property value. The total of county, city/town, and all junior taxing districts (such as fire, library, and hospital districts) cannot exceed the aggregate limit of $5.90. The interplay between city and junior taxing districts can be complicated given the services a city does or does not provide. For example, if a city does not offer fire and library services, its limit equals $1.90, and the related local fire and library districts have a limit of $2.00. When the $5.90 aggregate limit of county, city, and junior taxing districts is exceeded, junior districts are pro-rated according to statutory priorities or other agreements made with county or local taxing entities to reach an aggregate total within the $5.90 limit.
Total property taxes levied by the State, county, city/town, and junior districts are limited to a maximum rate of $9.50.

There are a number of other levies that are outside the $9.50 limit, but are subject to the 1% ($10) limit. These include levies for affordable housing, conservation future, emergency medical services, protected Metro park, protected fire district, county criminal justice, and county ferry district. Like junior districts, the individual maximum levy limit for each taxing district may, when aggregated, exceed the combined total 1% limit, in which case these other levies are reduced until the combined tax rates are within the 1% limit.

Exhibit 33 summarizes these maximum levy limits and how they relate to each other.

**Exhibit 33**

**Property Tax Levy Maximum Limits by Taxing District**


- **101% limit on property tax revenue growth.** RCW 84.55.010 states that revenues of taxing districts are restricted to a percentage of the district’s highest levy of the three preceding years. With the passage of Initiative 747 (I-747) and its subsequent reenactment by the Legislature, the limit factor is equal to the lesser of 101% or 100% plus the percentage change in the implicit price deflator (inflation). The limit factor is modified in two cases, according to RCW 84.55.005. First, the limit factor always equals 101% for a taxing district with a population equal to or less than 10,000. Second, other than the State, a taxing district may use a limit factor of up to 101% if the implicit price deflator is less than 1%. The 101% limit does not apply to revenue resulting from changes in State-assessed property values or new constructions or improvements made during the past year.
This 1% limit on annual increases can be “lifted” by a simple majority of “yes” votes, as authorized by WAC 458-19-045. Levy lid lifts enable taxing districts to levy up to their maximum rates. Lid lifts can be temporary or permanent. According to RCW 84.55.050, effective April 1, 2008, single and multiple year levy lid lifts are temporary unless the ballot proposition approved by voters makes them permanent. Unless the ballot proposition states otherwise, after the lid lifts end, subsequent levies will be computed as if the lid lift had never occurred and the district had levied the maximum rates allowed.

| Regular vs. Excess/Special Levies. The term “regular” applies to levies that fall under statutory limitations. This includes the 1% constitutional levy limit on an individual parcel; the State, county, city, and town statutory limitations; the port district and public utility district statutory limit of $0.45 per $1,000 of assessed value; and the 1% growth limit. The term “excess” or “special” applies to levies that exceed maximum levy rates and require voter approval. Special levies require that 60% of voters vote “yes,” and these “yes” votes total at least 24% of the number of votes cast in the general election. Capital levies, however, require the total number of voters to equal at least 40% of the number of votes cast in the last general election. These levies are approved in terms of a total dollar amount. They generally are approved for one year, but can range between 2 and 6 years for fire and school districts, and up to 30 years in the case of bond retirement levies. |

Implementation: Estimates of Potential Magnitude, Feasibility, and Other Impacts. There are two ways in which a property tax for higher education could be levied: (1) through the State’s portion of property tax capacity, or (2) by creating a new higher education taxing district.

The 1% tax levy constitutional limit would apply to both options, creating an upper bound on the potential magnitude of revenue generated. Both options would not impact the state debt limit because, as proposed here, they create revenue streams dedicated specifically to higher education capital projects.

**Option #1: The State levies a higher education property tax**

Article IX, Section 2 of the State Constitution requires all money from the state property tax to go toward common schools. Therefore, a constitutional amendment would be required in order to authorize a higher education property tax levied by the State. Amending the Constitution requires a two-thirds approval by the Legislature and approval by a simple majority of the voters in a general election. An amendment may be difficult to implement, and it is uncertain that there would be political will to do so. In addition, because the common schools currently receive all state property tax revenues, there may be resistance from the K-12 system.

There is, however, capacity between the State’s actual property tax rate and its maximum limit of $3.60. The State property tax levy varies by county because all taxes on real estate must be uniform within a taxing district. In 2005, according to the Department of Revenue, the State’s property tax rate equaled $2.55, and the average equalized rate equaled $2.78.

Exhibit 34 presents the potential magnitude of property tax revenues by presenting a range of levy amounts from $0.10 to $0.50 per $1,000 assessed value. These levy rates were multiplied by the
2007 total assessed value of all property, as reported by the Department of Revenue. The potential amount of revenue generated from a higher education property tax is large, ranging from around $85 to $423 million dollars per year. Lower levy rates may be more feasible to implement than higher rates, but the potential revenue magnitude is still substantial.

### Exhibit 34

**Estimates of Potential Property Tax Revenues**

<table>
<thead>
<tr>
<th>Levy Amount</th>
<th>Estimated Property Tax Revenues *</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.10</td>
<td>$84.6 M</td>
</tr>
<tr>
<td>$0.20</td>
<td>$169.3 M</td>
</tr>
<tr>
<td>$0.30</td>
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</tr>
<tr>
<td>$0.40</td>
<td>$338.6 M</td>
</tr>
<tr>
<td>$0.50</td>
<td>$423.2 M</td>
</tr>
</tbody>
</table>


* Based on 2007 total assessed value of all property, which equaled $846,377,378 (in thousands of dollars)

### Option #2: New higher education taxing district is created

A higher education taxing district could be created through Legislative action. Currently, each specific type of district has statutory requirements listed in RCWs. Often, voter approval in addition to Legislative action is required to form a new district.

A key part of implementation is the determination of service area boundaries. The ease of determining the district varies by type of higher education institution. Generally, a taxing district’s boundary is based on the area in which services are provided. Identifying a geographic area of service for four-year institutions is challenging, given that these institutions draw from a national, State, and regional pool of students.

The State’s 34 community and technical colleges are already divided into 30 college districts, defined in RCW 28B.50.040. These boundaries generally correspond to county or common school district boundaries and define service areas. The existence of these boundaries would make implementation of a taxing district more feasible for community and technical colleges.

Using property taxes in support of community and technical colleges occurs in other states. Community college systems in California, Maryland, Texas, and Wisconsin receive local property taxes for their operations and/or capital budgets. In California and Texas, community colleges are divided into local districts, which have the authority to levy property tax.

Estimating the magnitude of potential revenues generated is difficult because they are dependent on the districts’ boundaries. Furthermore, because of the 1% constitutional levy limit, each district’s capacity to levy taxes would be dependent on the other districts within its geographic area. Thus, different districts could have different levy rates. Given these factors, magnitude is not estimated for this option.

The implementation of this option also comes with questions regarding administration and governance. There would be additional costs related to the formation and ongoing administration of the new taxing entities, and the magnitude of these costs could vary considerably. Using local property
tax revenue to build capital projects may also lead to some degree of local governance or oversight in the capital project process. The community and technical college districts already have some overall degree of local governance; each district has a board of trustees, appointed by the Governor, with representation from at least one business member and one labor member.

**Retail Sales and Use Taxes**

**Description, Authority, and Limitations.** RCW 82.04.050 defines the activities that are subject to the retail sales tax. The sales tax generally applies to goods, construction including labor, lodging for less than 30 days, telephone service, the repair of tangible personal property, and participatory recreational activities. The use tax, as described in RCW 82.12.020, applies to items not subject to the retail sales tax, such as purchases made from out-of-state, or from sellers not required to collect Washington sales tax. State law also identifies a number of transactions and goods exempt from the sales and use tax.

The State, counties, cities, public transportation benefit areas, regional transportation authorities, regional transportation investment districts, public facility districts, and public stadium authorities can levy sales and use taxes. State law currently authorizes 22 different types of local sales and use taxes. Legislative approval is required to create a new taxing district, or to receive a portion of the State’s sales and use tax revenue.

The 6.5% retail and use taxes levied by the State is the State’s largest revenue source. In FY 2006, these taxes equaled nearly $6.8 billion, or over half of all state taxes deposited into the General Fund. Approximately 99.5% of total sales and use tax receipts go to the General Fund. An additional 0.3% sales tax on new or used motor vehicles, which generated $29.9 million in FY 2006, is deposited into the multimodal transportation account. Local retail sales tax rates range from 0.5% to 2.4%, resulting in combined local and state rates between 7% and 8.9%.

Of the 22 local sales and use taxes, 15 are included in the overall rate paid by purchasers; the additional seven tax rates are credited against the state tax and do not pose an additional burden to the purchaser. RCWs stipulate basic and optional levy rate ranges for each of the 22 local sales and use taxes. For example, cities and counties can levy a basic 0.5% sales and use tax rate and an optional tax rate, which ranges between 0.1% and 0.5%.

RCW 67.28.181 and 82.14.410 define the maximum rate limit for a combined lodging tax rate at 12% or the actual rate that existed on December 1, 2000 (15.2% for Seattle). This maximum limit applies to local sales tax, State sales tax, and the State convention center tax.

The State also levies taxes imposed on the purchase of specific items. According to the Department of Revenue’s 2007 Tax Manual, the State currently imposes 18 such sales taxes on items, such as cigarettes, liquor, beer, wine, motor vehicle fuel, rental cars, and hotel/motel taxes, among others. There is no upper limit for these selective taxes.

**Implementation: Estimates of Potential Magnitude and Feasibility.** There are three ways in which a sales tax for higher education capital projects could be levied: (1) through the State’s portion of the retail sales and use tax; (2) through an existing State selective sales tax; or (3) by creating a new higher education taxing district.
All three options are affected by some of the characteristics of the sales and use tax. First, Washington State has one of the highest sales tax rates in the country; this is the case for both the State portion of the sales tax and the combined total rate. Second, sales tax, in general, is regressive because lower income households must spend a higher percentage of their income on items that are subject to the sales tax. These characteristics may lessen the feasibility of increasing the sales tax.

**Option #1: The State levies a higher education retail sales and use tax**

In order to increase the State’s retail sales and use tax, RCW 43.125 imposes a supermajority voting requirement in the Legislature. The feasibility of implementing this option is dependent on the political will of the Legislature to raise the sales tax. In 2004, Initiative 884 (I-884) proposed raising the State’s sales tax to 7.5% with the revenue going to a K-12 and higher education fund, but I-884 did not pass.

Implementation, however, even on a smaller scale could yield significant revenue for higher education capital projects. In 2007, according to the Department of Revenue, total taxable retail sales in the State equaled approximately $119 billion. Exhibit 35 presents estimates of potential revenue if a state sales tax increase (between 0.1% and 0.5%) was dedicated to higher education capital projects. The revenue magnitude for all rate increases is large. These estimates do not factor in the seven local taxes that are credited against the State tax.

<table>
<thead>
<tr>
<th>Rate Increase for Higher Education Capital</th>
<th>Total State Sales Tax</th>
<th>Revenue for Higher Education *</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1%</td>
<td>6.6%</td>
<td>$119.0 M</td>
</tr>
<tr>
<td>0.2%</td>
<td>6.7%</td>
<td>$237.9 M</td>
</tr>
<tr>
<td>0.3%</td>
<td>6.8%</td>
<td>$356.9 M</td>
</tr>
<tr>
<td>0.4%</td>
<td>6.9%</td>
<td>$475.8 M</td>
</tr>
<tr>
<td>0.5%</td>
<td>7.0%</td>
<td>$594.8 M</td>
</tr>
</tbody>
</table>


* Based on 2007 annual taxable retail sales

**Option #2: The State levies a higher selective sales tax**

Higher education capital revenue could also come from raising one of the 18 selective sales taxes the State levies. Legislative action would be required to raise a selective sales tax.

A challenge in implementing this option is a logical fit between higher education capital projects and the selective sales tax. For example, a portion of the cigarette sales tax goes toward a Health Services Account. While not all portions of selective taxes go towards a related service, a lack of connection makes the case for implementation less compelling. Thus, the political will to increase taxes for unrelated purposes may not be substantial.

The magnitude if such a tax increase were to be implemented depends on the selective tax chosen. For example, in FY 2006, total collections from the cigarette tax equaled approximately $435.8 million, and collections from the beer tax equaled approximately $30.4 million. Further increases in these
particular selective taxes are uncertain. Washington State’s cigarette tax is third highest in the nation at $2.025 per package of 20 cigarettes. Recent increases in the State and federal taxes on beer manufacturers have created concern in the industry and among consumers that the tax burden has become excessive.

This option may have a small impact on the state debt limit if the revenue from the particular selective sales tax revenue was diverted from the State General Fund.

**Option #3: New higher education taxing district is created**

The Legislature has the authority to create new retail sales and use taxing districts. Implementation considerations associated with this option are similar to those described for creating a new higher education property tax district.

Given the existing community and technical college district boundaries, implementation would be a bit more straightforward for community and technical colleges. Although the districts already exist, there would still be administrative costs associated with sales tax collection.

Determining the benefit area, and from that the appropriate district boundary, is more of a challenge for the four-year institutions. Boundary definition may, however, be easier in the case of a significant new higher education facility or branch campus because additional economic development can be more directly attributed to its new presence. A new branch campus would likely attract economic development around it, and an argument could be made that the higher education institution should partly benefit from that economic development by receiving a portion of the resulting increases in local or regional sales tax revenue. Administrative costs and the issue of local governance would again need to be worked out for the new taxing entity.

The magnitude of the revenue generated depends on the size of the district and the level of retail activity that occurs within its boundaries. Thus, there could also be considerable variation in magnitude across districts. This option may also have an impact on the state debt limit if the higher education taxing district’s tax rate is credited to the State sales tax, resulting in less revenue for the State General Fund.

**Impact Fees**

**Limits and Requirements.** RCW 82.02.050 authorizes counties, cities, and towns to impose impact fees on development activity as a portion of the financing for public facilities. According to the RCW, impact fees “shall only be imposed for system improvements reasonably related to the new development; shall not exceed a proportionate share of the costs of system improvements that are reasonably related to the new development; and shall be used for system improvements that will reasonably benefit the new development.” These fees cannot be used to fix any existing deficiency; there needs to be a nexus between the need for that facility and the new development.

The public facilities for which impact fees can be collected and spent are defined as follows in RCW 82.02.090: public streets and roads; publicly owned parks, open space, and recreation facilities; school facilities; and fire protection facilities in jurisdictions that are not part of a fire district.
Implementation: Potential Estimates of Feasibility. Employing impact fees for higher education capital projects appears unlikely given the current statute language. First, the link between new developments and higher education institutions is tenuous at best. The four-year institutions in particular draw students from an international, national, and statewide applicant pool. Community and technical colleges have a more local focus, but unlike the K-12 system, it is difficult to link increased student enrollment to new local development. Second, higher education would need to impose impact fees through counties, cities, and towns; the RCW does not authorize special entities or districts. Third, “school facilities” refers specifically to K-12 facilities, and does not include higher education facilities.

Employing impact fees for higher education capital projects would require substantial changes in the language of the RCW and the underlying policy framework that links the new development to the public facility which its impact fees support.

Tax Increment Financing

Description, Authority, and Limitations. Tax increment financing (TIF) is a financing tool that permits local governments to capture future increases in property taxes that result from public investment in infrastructure. The captured future value of such taxes is used to finance the public infrastructure. For example, if a city wants to build a park, they designate a tax increment district in the area surrounding the park, assuming that the park will lead to higher assessed values of the surrounding properties. The incremental property tax increase is designated to repay bonds that financed the public improvement. When the bonds are paid in full, the district would no longer capture the increased property tax revenues and all the taxing jurisdictions would benefit from the increased tax base.

The Washington State Constitution and tax statutes place a number of constraints on the usage of TIF, making TIF more restrictive than in other states. RCW 39.89 allows for capture of only a portion of the incremental property taxes paid within the designated increment area. Some portion of incremental property taxes are required by law to fund specific services, and RCW 39.89 states that the tax revenues that can be captured are limited to those derived from 75% of any increase in the value of the property. Another restriction is that the law limits the authority of a sponsoring jurisdiction from diverting incremental property tax dollars from another jurisdiction without the consent of that jurisdiction.

In 2006, the Legislature passed the Local Infrastructure Financing Tool (LIFT), which provides funding for local infrastructure using sales tax, property tax and selected other excise tax increases generated by an economic development project as part of a revenue development area designated by the sponsoring local government. This legislation supplements the existing TIF legislation; however, it is only available to finance a defined set of public improvements that does not include higher education facilities.

Implementation Feasibility. While TIF does take advantage of higher property taxes, there are several State Constitutional impediments to its use: the requirement that all property taxes must be uniform on the same class property within the territorial limits of the authority levying the tax; the prohibition on the lending of State credit; and the dedication of State property tax revenues to fund the common schools.
Additional reasons that make TIF difficult to use in Washington include: (1) property tax increases are capped at 1% of the prior year’s levy and a certain portion of tax revenue is already dedicated to other services, so TIF fails to produce enough revenue for most capital projects; (2) a redevelopment agency must reach agreement with local government from which taxes will be diverted, which is cumbersome and politically difficult; and (3) TIF funds can only be used to address needs identified at the time of inception. A university has the additional burden of meeting the public purpose criteria required of TIF projects.

Being able to use TIF would require a constitutional amendment, which voters already rejected in 1973, 1982, and 1985 (Municipal Research and Services Center of Washington). LIFT was the Legislature’s attempt to make a version of TIF usable in Washington. Therefore, TIF appears to be an unfeasible source of funding for higher education capital projects.

**Corporate Income Tax: Funding Source for Maryland’s Higher Education System**

Maryland has recently implemented an innovative new funding source for higher education capital projects. In 2007, the Governor increased the corporate income tax by 1%, dedicating half of the resulting new revenues to higher education and half to transportation. This created the first dedicated fund for higher education in the state and has provided $70 million in new revenues.

**Implementation: Potential Estimate of Feasibility.** Washington State does not currently collect an income tax from businesses or individuals, so an increase in the corporate income tax as used in Maryland is not feasible without a drastic change in the State’s tax structure.
4.0 OTHER MECHANISMS FOR FACILITATING HIGHER EDUCATION CAPITAL PROJECTS

In addition to revenue sources, there are other mechanisms and arrangements that can facilitate the completion of higher education capital projects. This section highlights key takeaways for arranging future financing mechanisms and partnerships, and then introduces and evaluates the potential for a higher education sales tax exemption.

4.1 Leveraging Existing Financing Mechanisms and Partnerships

Chapter 2 described financing mechanisms and partnerships currently employed in higher education capital financing. What follows are summary assessments of their future use.

Financing mechanisms, in general, are best suited in cases when upfront capital is needed and quick project delivery is preferred. ESPCs are designated specifically to energy efficiency related capital improvements. COPs and 63-20s can be applied more broadly, but are usually associated with facilities that generate revenue. All may be more expensive in the long run than upfront appropriations or financing through G.O. Bonds, because of the potential higher capital costs.

COPs and 63-20s share some benefits and present different trade-offs. There is an ongoing debate between the use of COPs and 63-20s. Both have characteristics, such as tax-exemption and exclusion from the State debt limit, which will continue to make them attractive alternatives in the future. 63-20 financing usually results in higher costs than COPs, but also allows for greater flexibility in the timing and design-build process. These trade-offs should be examined on a project-by-project basis.

Partnerships occur opportunistically when the mutual interests of all parties align. Partnership opportunities cannot be planned in advance and are not equally distributed across the higher education system. Some institutions, especially those smaller in size and located in more rural areas, are at a disadvantage in attracting partnerships. Partnerships already play an important role in capital financing, but given these constraints, it is unclear if partnerships can or should be employed more in the future.

There are, however, some characteristics of the existing capital budget process that may hinder the formation of partnerships. First, the biennial capital budget cycle, with its set schedule, limits a higher education institution’s ability to react quickly to partnership opportunities as they present themselves. For example, if a partner approaches an institution with a capital project which would require additional matching funds, the institution’s ability to act may be restricted by the timing in the current biennium. While the capital budget system will not fundamentally change, special provisions to facilitate an institution’s ability to react to partnership opportunities may be explored.

Second, uncertainty regarding State maintenance and operation funding for buildings built through public-private partnerships and private donations was a recurring concern among higher education stakeholders interviewed. If the State wants to encourage these privately-funded capital projects, greater clarity around maintenance and operations funding should be established and communicated.
4.2 Other Ways to Facilitate Higher Education Capital Projects: Sales Tax Exemption

Description and Authority. A State sales tax exemption on labor and construction materials used in building higher education capital facilities could reduce the cost of the project and therefore the amount of annual revenue necessary to fund higher education capital projects. State tax exemptions are similar to State expenditure programs in that they require a commitment of government resources. However, instead of spending the resources in the form of a direct appropriation, they are “spent” as a reduction in revenue. Another significant difference is that unlike direct appropriations, tax exemptions are not usually subject to an annual review process.

A sales tax exemption for higher education capital facilities could be justified because it would encourage a public service or public facilities that would not otherwise be undertaken. Precedents include the sales tax exemption on labor and services used in building streets, roads, and highways owned by the State; and the exemption on nonprofit organizations that perform services the government does not. It would also encourage economic development and allow Washington to compete on a national level. Voters may also choose to enact tax exemptions through the initiative process.

Issues and Impacts. Issues that can arise when enacting a tax exemption usually relate to fairness, the risk of setting a precedent, a significant decrease in the tax base, unnecessary complication of the tax structure, and impacts on the State debt limit. The risk in setting a precedent is that others in similar circumstances may be encouraged to seek the exemption, thus further decreasing the tax base and complicating the tax structure. It is important that the activity be unique and that the language of the bill or law be specific enough so it cannot be interpreted to benefit other activities or industries. Another important consideration is to make the exemption structure simple enough that administering the exemption does not create an unnecessary burden and reduce efficiency.

The Department of Revenue estimates that if a sales tax exemption on higher education capital facilities was implemented, the State would see revenue losses of about $37.8 million in 2010 and 2011, and $42.1 million in 2012 and 2013. However, if these amounts would have been supported as a request for a direct appropriation anyway, then the revenue impact is mostly neutralized. One difference, however, is that a reduction in revenue affects that State debt limit. Significant reductions in State revenue over time will lead to a reduced maximum level of bonds, notes, and other debts secured by the full faith and credit of the State.

Reinvesting Existing State Sales Tax into Higher Education Capital Appropriations

An alternative to a higher education sales tax exemption is dedicating a portion of the State’s existing retail sales and use tax to higher education capital projects.

The Department of Revenue could be directed by the Legislature to calculate sales taxes resulting from higher education construction activity and deposit those sales tax collections into higher education institutions’ capital accounts.

This option avoids the issues of decreasing the tax base and complication of the tax structure. However, like the sales tax exemption, new revenue is not generated, but rather, existing revenue is being diverted away from the State’s General Fund.
COST MANAGEMENT STRATEGIES AND OPTIONS

This section discusses three potential cost management strategies already in use by higher education institutions in Washington: online learning, space utilization, and project procurement practices. Each strategy is discussed broadly, with reference to other research on the topic, including interviews with other states, and more specifically with comments from the individual institutions. While all three strategies have been identified as potential ways to reduce capital facilities costs, with the exception of procurement practices, none of the institutions is currently realizing substantial savings.

It is important to note that this section focuses on potential strategies to reduce capital costs and does not address operating costs. However, since capital decisions often affect operations and management, it is recommended that a holistic life cycle approach be employed when considering cost management strategies.

Several options to help manage capital facilities costs are discussed below, many of which build on strategies that are already in place at many of the institutions of higher education. This section also discusses the introduction of expected cost ranges. As part of the Financing Study, expected cost ranges for seven facility types were developed as a way to enhance cost reasonableness discussions during the capital budgeting process.

Background

In addition to identifying potential new revenue sources, a key component of the Financing Study required by ESHB 3329 is the “examination of alternatives for reducing facility construction and maintenance expenditures per student.” Irrespective of what the State is able to do in terms of funding and financing higher education capital projects, there may be ways to reduce costs and maximize the impact of State resources. This section discusses strategies currently employed by Washington’s higher education institutions along with notable practices from the other states interviewed for this study (for a state by state summary see Appendix C). All of the states interviewed are struggling with rising costs and budget cuts, however, most pointed to cost management strategies on the operating side, such as hiring freezes, travel bans, reducing energy costs, and eliminating non-essential activities.

4.3 Online Learning

According to Online Nation: Five Years of Growth in Online Learning, a 2007 study by the Babson Survey Research Group and the Sloan Consortium, about 3.5 million higher education students (19.8%) were taking online courses conducted online with no face-to-face or on-campus instruction. Hybrid courses include both online and on-campus instruction. Web-enhanced campus-based instruction is supplemented with online resources.

Online Learning Definitions:

Online – courses are conducted online with no face-to-face or on-campus instruction.

Hybrid – courses include both online and on-campus instruction.

Web-enhanced – campus-based instruction is supplemented with online resources.

2 The study sample contained 4,491 institutions; 2,535 responses were received and 2,505 had sufficient information to be included in the analysis. The report is available at http://www.sloan-c.org/
at least one online course in the fall of 2006. Several articles published recently have reported that online enrollments were up significantly due to rising gas prices. For example, UMass Online saw a 46% increase in student enrollments in 2008 at its Dartmouth campus, and predicts that gas prices will continue to contribute to enrollment increases. Here in Washington, the CTC system saw 2008 summer enrollments increase by 30 to 216% depending on the college.

The Babson/Sloan study focused on online learning where at least 80% of the content is delivered online and found that two-year institutions accounted for over half of all online learning enrollments. Of interest to this Report, the study found that improved student access was the primary reason for offering online programs. While an increase in online enrollments would likely reduce an institution’s capital costs per student slightly, the study found online learning was not viewed as a way to reduce costs. In fact, reduced or contained costs were among the least cited objectives by respondents.

These findings are consistent with other research and comments from the institutions interviewed on this topic. A 2005 journal article that reviewed the literature related to cost efficiencies associated with online learning concluded that there was not a clear answer to the question of whether online learning can be cost efficient, since so many factors are included in the analysis. Many of the areas explored, such as faculty and staff time and salaries, affect operating and not capital costs. Indeed, an earlier article cited a Colorado Department of Education study that found that “the cost per student of a high-quality online learning program is the same as or greater than the per-student cost of physical school [i.e., traditional] education” in large part because most costs in education are for staffing.

However, a larger issue addressed in the research is the idea that because educational quality and faculty-student interaction are priorities, online education is not infinitely scalable. Since assignments need to be evaluated and faculty must be available to respond to student questions, online classes must cap enrollment. SBCTC instructors estimate that the ideal online class size is 17 to 23, and most classes are capped at 25 students. Thus, online classes are unlikely to enroll significantly more students per section than on-campus classes.

A number of indicators suggest that demand for online learning will continue to grow. A 2003 article cited two trends that are likely to produce continued demand for online learning:

- The current higher education infrastructure cannot accommodate the growing college-aged population and enrollments, making more distance education programs necessary.
- Students are shopping for courses that meet their schedules and circumstances.

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Washington Institutions: Perspectives on Online Learning

Below is a summary of responses from some of Washington’s higher education institutions on the topic of online learning:

### Online Course Offerings

<table>
<thead>
<tr>
<th>Institution</th>
<th>Offerings</th>
</tr>
</thead>
<tbody>
<tr>
<td>CWU</td>
<td>22 new courses for Fall 2008</td>
</tr>
<tr>
<td>EWU</td>
<td>Individual courses, including prerequisites for MBA, plus an MSc in Dental Hygiene and a minor in African studies</td>
</tr>
<tr>
<td>TESC</td>
<td>Gray’s Harbor College Bridge Program – a set of face-to-face and online courses leading to an AA degree relevant to Native American communities</td>
</tr>
<tr>
<td>SBCTC</td>
<td>86 different online degrees and certificate programs (16 colleges currently offer an online AA degree), 100 system owned courses, plus hundreds more college owned courses</td>
</tr>
<tr>
<td>UW</td>
<td>46 degree programs, more than 120 certificate programs, and hundreds of credit and non-credit courses</td>
</tr>
<tr>
<td>WSU</td>
<td>Nine undergraduate degrees (four in Business Administration, plus Criminal Justice, Human Development, Humanities, Social Sciences, and Women’s Studies), three undergraduate certificate programs (Early Childhood Development and Care, Organic Agriculture, and Professional Writing), a Master of Science in Agriculture, and one graduate certificate in Instructional Design</td>
</tr>
</tbody>
</table>


### Growth and Recent Trends

- While online only enrollment accounts for less than 5% of total enrollment at CWU, it is definitely growing. Some of this growth is in response to students who commute to CWU from Western Washington. CWU offers incentives to faculty members to design online courses.

- Online enrollment in the SBCTC’s eLearning has grown by around 15% annually and 11% of courses are completely online. In 2008, about 15,000 SBCTC students were completely online. Hybrid and web-enhanced courses that include classroom time are also growing. Many traditional students take online courses to work around family or job obligations.

- There is significant demand among the UW undergrad matriculated population for online courses, but because online courses are not usually covered with standard tuition, the fees can sometimes be prohibitive.
Hybrid Programs and Shared Facilities

- **EWU** has a hybrid approach to distance learning, wherein students combine online learning with time on campus in Cheney or in a shared space, such as Bellevue Community College.

- **WSU** has learning centers across the state to facilitate hybrid programs that require some site based instruction in addition to online instruction.

Online Learning Costs and Effects on Capital

- Distance learning programs at **CWU** are expensive to initiate; investments are required in cable lines, server rooms, and other equipment, such as television monitors. Thus, building costs have been exchanged for infrastructure costs, but in the long run there may be cost savings.

- In **EWU**’s experience, online learning is expensive. On a per student basis, distance learning is probably not much less expensive than standard on-campus instruction given the cost of technology.

- Without eLearning and hybrid courses, many **SBCTC** college facilities and parking lots would be overcapacity. Representatives from the eLearning program noted that expanding access for students is their primary concern, but they are also sensitive to facilities costs and scheduling.

- **SBCTC**’s Washington Online (WAOL) shared platform means that individual colleges do not have to develop and support their own online systems, which reduces costs and avoids duplication of administration and support functions.

- The WAOL cost model has been a barrier to college participation. Over the past years the collaboration among colleges has produced savings and the costs have been reduced, which should eventually lead all colleges to join WAOL.

- It is often more expensive to develop an online course than a traditional course at **UW**, so enrollment must be high enough to recoup the costs. In addition, costs to maintain the course are the same or higher than other on campus offerings because faculty or staff must update and maintain the courses and monitor the technology.

**WashingtonOnline (WAOL)** is a system-wide service provided by the SBCTC. WAOL provides a platform for colleges to share course content, open textbooks, and online course enrollments so that students enrolled in one college can take online classes offered by another. Colleges can also use the WAOL platform to support their own online, hybrid, and web-enhanced classrooms where faculty and students can read assignments, take quizzes, post grades, and collaborate through online class discussions and webinars.

WAOL provides 24/7 technical support and professional development for faculty and staff and supports the Northwest eTutoring Consortium.
• Many hybrid courses require classroom or lab space, and there are still building-associated costs and effects on space availability.

• Online learning has cost saving potential, but it depends on how broadly programs are implemented. Having 5% of courses online will not help lower costs, for example, but having 15% online may.

**University of Washington**

• UW Online Learning is part of UW Educational Outreach, which also includes UW Extension. The UW began offering online courses and programs in 1995 in addition to its continuing education classes.

• UW Extension is run on a fee based model. Multiple departments and schools participate in the program and share a central administration. Participating schools pay into a risk opportunity fund. The fund absorbs any program losses and profits are returned to the respective school.

• Online enrollment for credit and noncredit classes through UW Educational Outreach was 9,331 students for 2007-08.

• UW students pay tuition which covers 10 credits on campus and allows them to take up to 18 credits for the same cost. However, online courses are not included and have an additional cost (currently $1,145 per course).

**Notable Practices from Other States**

All of the states surveyed offer online learning courses and programs through their universities and colleges. Connecticut, Maryland, and Massachusetts all have online only colleges. All three systems are primarily focused on expanding access to improve education and employment outcomes in their state. The President of Charter Oak was interviewed and asked specifically about the impact of an online only institution on capital. Charter Oak’s comments follow the summary of the three online colleges.
<table>
<thead>
<tr>
<th>Charter Oak State College – CT</th>
<th>The University of Maryland University College</th>
<th>UMass Online</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Background</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Established in 1973 to assist adults working towards associate’s and bachelor’s degrees</td>
<td>A University System of Maryland institution dedicated to continuing education for adult learners</td>
<td>Created in 2001 as the distance learning arm of the five University of Massachusetts campuses offering online only and hybrid courses</td>
</tr>
<tr>
<td>Online courses as of 1998</td>
<td>Courses completed online or at locations throughout Maryland and the Washington D.C. area</td>
<td>Massachusetts College Online allows students to enroll in classes at any of the 15 community colleges and earn credit at their home institution</td>
</tr>
<tr>
<td><strong>Offerings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>150 video and online courses, and AA, AS, BA and BS degrees and certificate programs</td>
<td>More than 100 bachelor’s and master’s degrees and certificate programs</td>
<td>80 degrees and certificates and over 1,500 individual courses</td>
</tr>
<tr>
<td><strong>Enrollment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30,000 students per year – 40% are non-CT residents</td>
<td>32,000 U.S. students (19,581 from MD) and 38,288 students from 22 countries in 2007</td>
<td>33,800 in fiscal year 2008</td>
</tr>
<tr>
<td>UMUC enrolls close to 60,000 military personnel, family, and veterans and offers courses at 150 military institutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trends</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enrollments have grown by 20% each year without significant marketing</td>
<td>Demand from adults who need more flexibility and lower costs</td>
<td>Enrollment increased 26.2% over the previous year, while revenues increased 31.9% to $36.9 million</td>
</tr>
</tbody>
</table>

Charter Oak State College

Cost Advantages

- Charter Oak has only one administrative building.
- One of the principal space savings noted by the College was faculty offices. Since all faculty members are off site, there is no faculty office space.
- Charter Oak pays its faculty based on the number of students enrolled in a course.
- Charter Oak saves costs by using aggregating resources, such as eTutoring.org, which allows participating institutions to share tutoring resources. Institutions allocate a percentage of tutor time to the collaborative based on their students’ usage. Similarly, when institutions develop courses alone or in collaboration for use by other institutions, it allows all institutions to broaden their course offerings.

Costs and Challenges

- Charter Oak has a central database in its administrative location. The online model requires a learning management system, such as Blackboard, 24/7 technology support, and in person or online training for faculty. Charter Oak operates a help desk for its students 16 hours each day.
- Distance learning is not infinitely scalable. Charter Oak tries to limit class sizes for course with new faculty or those that are conversation intense. More experienced faculty may have classes of up to 35 students, but 25 students is more typical.

Recommendations

Distance learning, both in Washington and in other states, has yet to significantly reduce capital facilities costs, with the exception of online only institutions like Charter Oak State College. It was unclear from the literature review and interviews conducted for this study the extent to which online learning can directly reduce capital facilities costs. However, it does hold potential to increase revenues and affect operating costs, particularly for institutions that participate in online learning consortia that can aggregate enrollments and share the costs of course development and marketing.

The four-year institutions should be encouraged to explore participation in WAOL. The use of a Statewide online learning platform reduces administrative, course development, and software costs, expands the pool of potential students allowing colleges to aggregate and fill course sections as necessary, and would provide access to an online degree to students at all institutions.

While distance learning does not eliminate, and may not even reduce, the need for campus space for traditional students, it expands access to education for adult learners and provides scheduling flexibility to traditional students allowing them to supplement on-campus classes with online courses. The SBCTC system has found that hybrid and online courses have helped to alleviate demands on space. Washington’s higher education institutions should continue to explore ways to collaborate on online course development, administration, and delivery.
4.4 Space Utilization

Space standards are typically used for three purposes: strategic and capital budget planning, utilization reviews of existing space, and design programming for construction or renovation projects. Space utilization is getting more attention at many institutions due to increasing enrollments and shrinking budgets. The Society for College and University Planning held several sessions on the topic at their recent annual conference and scheduling and bottleneck software tools produced by companies such as Ad Astra Information Systems, are now available. A 2008 article in Inside Higher Ed discussed an institution-wide strategy employed by the University of British Columbia (UBC) to reduce space scheduling bottlenecks. UBC requires all courses, where possible, to adhere to standard times and days and departments to schedule no more than 70% of their courses during peak times. Courses held in underutilized spaces may be reassigned to smaller spaces and faculty cannot request space assignments based on proximity alone.

A 2008 study that examined data from 13 doctoral or research institutions ranging from 3.4 million to 12 million gross square feet found that offices and laboratories accounted for 14% and 12%, respectively, compared to 3% for classrooms. Thus, with respect to maximizing existing space, laboratories and offices may be the best starting point. A number of tensions related to space utilization, in particular related to space ownership and changing educational paradigms, were identified by this study. For example, while a particular department may want to increase space per student in a new facility, to allow for open and interactive spaces to facilitate greater student collaboration, the institution may prefer to maximize capacity. Rising gas prices have also influenced scheduling decisions, as many community colleges have cut Friday classes in an effort to reduce the costs of commuting. At the same time, other institutions are attempting to increase the number of Friday classes in an effort to more efficiently allocate classroom space.

Washington Institutions: Perspectives on Space Utilization

In Washington, the HECB has set weekly space utilization guidelines for classroom and laboratory space of 22 hours per classroom seat and 16 hours per laboratory station. These standards are primarily used for design programming, though more recently they have been incorporated into the capital budget prioritization process. Some institutions are meeting their space standards through co-location arrangements with other institutions. For example, a classroom is used by a university during the day and a community college for evening classes. Some of the community and technical colleges are also sharing facilities with the K-12 system.

Below is a summary of responses related to space utilization from some of Washington’s higher education institutions:

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Current Space Utilization

- **CWU**’s classroom space utilization is currently about 21.5 hours per week.

- The **SBCTC** averages 32 to 34 seat hours per week, which is above the HECB standard of 22 hours per week.

- Higher Education Center classrooms on **SBCTC** campuses are scheduled at 44 seat use hours per week. Classrooms have an average 110 square feet per full time student, which is far less than most K-12 facilities.

- **WSU** staff noted that the current HECB space utilization standards do not work as well for research universities because they are less classroom focused.

Scheduling

- Scheduling can be a challenge since most **CWU** students work in addition to attending school. The Academic Affairs Director is looking at the Ellensburg Campus calendar and attempting to schedule more classes in late afternoons and early evenings.

- Scheduling new programs and breakout sections can be a problem for the **SBCTC** given the demand on space during the day.

- **SBCTC** colleges maintain schedules from early in the morning to late into the evening five days a week and often schedule programs on weekends to meet demand.

- **SBCTC** colleges that have skill centers can use the space more efficiently, as the skill centers allow for daytime use by the school district and evening use by the college.

- Limited laboratory space at **WSU** can create a bottleneck in space scheduling.

Other Considerations

- Senior faculty members are reluctant to work over a 15-hour time span (e.g. 7 am to 10 pm) given the other demands on their time, such as office hours and grading. In addition, some classes lend themselves better to different times of day.

- **WSU** cited HECB studies that showed that classrooms are not the real need in terms of space at the main campus in Pullman.

- **WSU** Pullman has greater need for faculty offices, labs, and teaching and research labs; recruiting faculty is difficult without adequate office space. The newer WSU campuses have a need for all types of space, including traditional classroom spaces.

- **UW** noted that using space schedule to optimize space utilization in older buildings may be impacted by layout, construction, and materials, making it more difficult to comply with standards than for newly constructed buildings.
Notable Practices from Other States

California, Colorado, Massachusetts, Texas, and Wisconsin all have space utilization standards, though they are expressed differently. Project approval is contingent on meeting the standards in California and Wisconsin. The other states use the standard for planning purposes and do not currently tie the standards to approval or funding.

California

For a higher education project to be funded in California, it must meet the space utilization standards applicable to the system. The standards used by the California State University (CSU) and the California Community College (CCC) systems were developed in 1975, while the standards used by the University of California (UC) system were developed in the early 1990s. The CSU and CCC standards are such that it is easier to receive funding for lab space, thus many institutions build labs for use as classroom spaces.

The California Postsecondary Education Commission conducted a survey of 34 states related to higher education space utilization policies in 2002-2003. The survey found that just over half (18) of the states had space standards and most of the states had adopted or revised their guidelines in the past 15 years. Relative to other states, California’s standards were found to be among the strictest.

Colorado

Colorado has space standards guidelines for classrooms (30 hours per week) and lab space (20-30 hours per week), but these are not used in funding decisions. Each institution must include space utilization estimates in its facilities master plan, which the Commission on Higher Education uses to compare projects among institutions. However, these figures are not used to rank projects.

Massachusetts

The Board of Higher Education conducted a space utilization study of the state and community colleges as part of the 2007 master planning process. The intent of the study was to provide an assessment of the adequacy of general purpose and specialized instruction space at each institution. Space standards were established using four metrics: scheduling window, the span of daytime hours during which a course may be scheduled; room utilization rate, the percent of the scheduling window for which a space is scheduled; seat occupancy rate, the percent of room capacity that is occupied when the room is scheduled, and square feet per station. Institutions were measured against the benchmarks shown below for each metric.

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The study resulted in recommendations related to capital, such as new or modified space, and non-capital, such as scheduling, underutilized spaces, and room configuration. Information from the study is used to inform planning decisions; capital project funding is not currently contingent upon meeting space utilization requirements.

**Texas**

Texas uses a space utilization calculation that is expressed as hours per week per classroom or lab. The current standards are 38 hours per week per classroom and 25 hours per week per lab. Institutions are asked to meet these standards, but they are not part of the project review process and are not strictly enforced.

**Wisconsin**

Space standards are used to evaluate the budget requests of each public institution in Wisconsin. The institutions produce 6-year plans for the University of Wisconsin system, in addition to the 20-year plans they maintain on their own. The system provides each institution with estimation and assessment tools to identify space issues and solutions. The tools include modeling and programmatic needs assessments to establish the most efficient use of space. No single department or program has ownership over a specific space; consequently, spaces may be reassigned to improve efficiencies and decrease construction needs. The institutions are expected to meet a 35 hours per week space standard, but this is averaged over the entire campus to allow less efficient space to be offset by highly efficient space. Wisconsin requires additional explanation and documentation before it will approve a project that does not meet the standards.

**Recommendations**

The research conducted for this study suggests that an institution-wide approach to inventorying and scheduling space is an effective way to ensure that available space meets current needs. For example, a space inventory may identify a number of small classrooms that are rarely used due to today’s larger class sizes and could be combined into a single larger space or converted to another use. Identifying which types of spaces create scheduling bottlenecks also aids in developing a campus-wide space strategy. Focusing on both the hours per week that a space is utilized and accounting for all space on campus could identify more efficient ways to use the existing space before new space is necessary. Facilities sharing should also continue to be explored as a way to optimize space. It may also be a way
to facilitate public-public or private-public partnerships related to health care or medical facilities or shared community spaces.

4.5 Project Procurement Practices

Construction procurement practices were also explored as a potential cost saving strategy. In addition to interviews with representatives from institutions of higher education in Washington, two recent studies were reviewed: *Survey of General Contractor/Construction Management Projects in Washington State*, completed in 2005 for JLARC and *Best Management Practices for Capital Projects*, a 2008 report completed by the Office of Financial Management (OFM).

In discussions with the institutions and the review of the reports, two procurement processes were mentioned repeatedly: Design/Bid/Build (DBB) and General Contractor/Construction Manager (GC/CM). These processes are described below.

**Design/Bid/Build** separates the design and construction processes of a project. Once the designer completes the project design phase, the project is presented to general contractors who submit a bid for project construction and prepare contracts with subcontractors. The project owner accepts liability for the design in its contract with the general contractor, since all design decisions are made in advance of the bid process. The lowest responsive bid is typically selected and the contractor is obligated to deliver the project at the bid price. According to the OFM report, the separation of the design and construction processes requires significant project oversight by the owner. It can also extend the project schedule and increase costs due to design inefficiencies that went unidentified due to the separation of design and construction.

**GC/CM** is similar to DBB except that the general contractor is involved in the project planning and design phase, acting as an advisor or construction manager. The GC/CM is selected using a qualifications based request for proposals. This process allows the GC/CM to provide input into the design, subcontract project work and begin construction before the design is complete, all of which may reduce project time and costs. Once the design is complete, the GC/CM provides the project owner with a guaranteed maximum price. Advantages with the GC/CM process cited in the OFM report include lower costs, faster schedules, and fewer project-related lawsuits. Disadvantages stem from the contractual relationship among the designer, GC/CM, and the owner once construction is underway and the GC/CM role shifts from construction manager to general contractor. At this point, tensions can arise over assumptions that were made to develop the guaranteed maximum price.

The JLARC study reviewed the use of GC/CM in public works projects and assessed the benefits and costs of this method relative to the more traditional DBB process. The study examined GC/CM in eight areas: schedule performance, cost performance, contract changes, GC/CM selection process, subcontractor selection process, use of third party consultants, project claims and protests filed, and quality performance. The study reviewed 108 GC/CM projects over a period of 13 years and found that they outperformed DBB projects in Washington and the nation in terms of schedule and cost. Almost all (98%) of the projects reviewed met or exceeded quality standards. The authors noted that the results should be interpreted with caution as data was self-reported and not independently verified.
The OFM report was conducted at the request of the 2006 Legislature and was intended to provide an overview of current state practices for the procurement of capital projects, procurement practices established outside of state government, and recommendations to better manage and finance state capital construction projects. The report outlined the advantages and disadvantages of DBB, GC/CM, Design Build, and Agency Construction Management. The report was a starting point for analysis of best practices and as such did not make any recommendation related to procurement practices.

**Washington Institutions: Perspectives on Procurement Practices**

UW and WSU have both used GC/CM on numerous capital projects. WSU, in particular attributes a 10% reduction in construction costs to its use. There are advantages and disadvantages to the various procurement practices and some practices are better suited to particular project types. The current economic downturn may result in a more competitive bidding environment as contractors have fewer projects making Design-Bid-Build a more attractive practice.

**Notable Practices from Other States**

**Process improvements can help manage costs at the state level.** California has implemented several process changes, such as bundling projects for a single bond issue, and approving all funding at application rather than at each phase. In Colorado, Connecticut, Massachusetts, and Wisconsin, state agencies or offices provide oversight and/or manage higher education capital projects. In Texas, the choice of procurement practice is left to the discretion of the individual institutions.

**Public-private partnerships are an innovative financing mechanism that can accelerate project timelines, thereby reducing costs.** The University of Wisconsin system’s restrictive process has prompted many institutions to partner with private entities on capital projects. These partnerships allow institutions to complete a project in a shorter timeframe, which often saves money. The institutions’ foundations comprise the majority of partners and the resulting facilities are gifted to the schools. For example, the University of Wisconsin Madison Alumni Research Foundation used $100 million in royalties from discovery patents to build research related facilities and the University of Wisconsin Milwaukee Real Estate Foundation has helped to build several dormitories. There are also examples of partnerships with private developers, though the resulting facilities are often ultimately purchased from the developer, which requires state approval and a bond issue. The institutions are not allowed to have capital debt, so they cannot lease a facility from the developer. The partnerships generally require a great deal of legal work on behalf of the system and institution, but have been successful in providing efficient, cost-effective projects.

Many states have used partnerships to develop dormitory projects and are beginning to explore academic facility projects.

**Recommendations**

In addition to the ability to affect procurement practices, the State can influence capital project timelines. The State has explored options, such as bundling pre-design and design funding in one budget cycle to hasten project delivery and reduce construction escalation costs. For this to be effective, construction funding for desirable projects needs to be made available in the subsequent budget cycle. In the current biennium, the State is faced with a situation where there might not be
construction funding available for all projects that completed the design phase during the 2007-09 biennium. For this reason, it has moved away from bundling project phases and is consistently using a six-year cycle for construction projects.

While this might help to alleviate cash flow concerns and current capital budget pressures, it could result in more expensive projects and significant funding needs in future biennia. If the desired policy outcome is the lowest possible total cost, then options to shorten project timelines should be pursued, which could include expanded opportunities for partnerships. However, this would impact the number of projects the State is able to fund in any given biennia. If the objective is to fund the maximum number of projects to serve more students, then project timelines are only one consideration.

4.6 Expected Cost Ranges to Evaluate Cost Reasonableness

The 2008 Legislature requested a study of “expected cost ranges by facility type” to serve as one tool to evaluate the cost reasonableness of capital project proposals. Expected cost ranges for new construction were produced for the following seven facility types:

- Classroom facilities
- Science labs (teaching)
- Research facilities
- Libraries
- Administrative buildings
- Communications buildings
- Day care facilities

As each project is defined by a unique set of circumstances which could impact costs, the expected cost ranges described herein are not intended to set firm parameters for project costs. Instead, they are designed to be used as reference points and as tools to identify projects whose costs are substantially higher than the norm, resulting in further dialogue and clarification as part of the capital budgeting process.

Cost ranges were developed using data from the higher education institutions in Washington, national cost data for education-related construction projects, and cost data from the states of Connecticut, Texas, and Wisconsin.

Of the states surveyed, Connecticut, Massachusetts, Texas, and Wisconsin use cost benchmarks as part of their capital process. Most of these benchmarks are produced by the oversight agency, such as the Department of Capital Asset Management in Massachusetts or the Department of Public Works in Connecticut. Benchmarks are typically expressed in terms of cost per square foot ranges for different facility types and are primarily used to assess cost reasonableness and create a basis for dialogue around construction costs. In all cases, there is flexibility if an institution submits a justification and additional information.

A project comparison analysis was conducted to arrive at the recommended cost per square foot ranges summarized below in Exhibit 36. See Appendix E for a full discussion of the methodology and approach to expected cost ranges, as well as complete results.
Exhibit 36
Summary of Expected Cost Ranges by Facility Type

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Number of Data Points</th>
<th>Construction Costs / SQFT</th>
<th>Total Costs / SQFT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Std. Deviation</td>
<td>Best Fit</td>
</tr>
<tr>
<td>Classrooms</td>
<td>19</td>
<td>57.36</td>
<td>$297</td>
</tr>
<tr>
<td>Science Labs (Teaching)</td>
<td>16</td>
<td>65.59</td>
<td>$309</td>
</tr>
<tr>
<td>Research Facilities</td>
<td>12</td>
<td>61.31</td>
<td>$440</td>
</tr>
<tr>
<td>Libraries</td>
<td>6</td>
<td>59.44</td>
<td>$237</td>
</tr>
<tr>
<td>Administrative Buildings</td>
<td>9</td>
<td>36.20</td>
<td>$218</td>
</tr>
<tr>
<td>Communications Buildings</td>
<td>5</td>
<td>68.28</td>
<td>$267</td>
</tr>
<tr>
<td>Day Care Facilities</td>
<td>4</td>
<td>23.72</td>
<td>$199</td>
</tr>
</tbody>
</table>


Estimating Consistency and Adjustments Going Forward

The recommendations below address methods to increase the robustness of the data and facilitate a more accurate comparison of cost information across institutions. In order to accurately compare cost data across institutions, all of the components of the construction and total costs must be known and clearly defined. The following recommendations would facilitate consistent reporting and increase reliability of cost data:

- Leverage the C100 to collect comparable cost information at project submittal. Provide space for institutions to comment on any factors contributing to costs outside the expected ranges.

- Create a template similar to the C100 for institutions to report final costs for completed projects. This would allow for consistent, ongoing collection of data for use in the cost ranges. The expected cost ranges will benefit from more recent cost data from all the institutions that is truly comparable. A template will ensure that all items of interest are called out and accounted for.

- Provide guidelines to accompany the template with clear directions for how to report cost information and definitions of key terms. For example, clear direction on what is included under architectural and engineering fees.

- Reach out to select states, such as California, Oregon, and Wisconsin, and discuss the possibility of a reciprocal data sharing agreement, where higher education capital facilities cost data could be exchanged annually based on prior year completed projects. This would provide a more accurate picture of costs in other areas than can be gleaned from the national data sources.

Information collected in this manner could then be incorporated into this analysis. Several years of consistent data reporting would greatly increase the accuracy and usefulness of the expected cost ranges.
5.0 SUMMARY

Washington State has a nuanced and complicated system for financing higher education capital facilities that is designed to ensure that the State’s resources are maximized through the use of cost management and other strategies. For the most part, the existing system has supported the higher education institutions’ capital needs. Given an environment of decreasing bonding capacity and increasing facility needs, this study was undertaken as a means of identifying other revenue sources and strategies for supporting higher education capital facilities.

It is not surprising that revenue sources which could produce the highest relative yield are also fraught with the most implementation challenges, often requiring voter approval or significant changes to tax policy. Those which are more feasible, like different approaches to the financial management of the State’s trust lands or increases in building fees, lead to smaller financial gains or could produce undesirable trade-offs with respect to who is carrying the cost burden.

5.1 Options for Washington’s Higher Education Capital System

Exhibit 37 describes these tradeoffs and summarizes the financing options discussed at length in this report in terms of magnitude, feasibility and other impacts. A magnitude rating of “high” represents a financing strategy that could generate at least $100 million; “medium” magnitude strategy would generate between $10 and $100 million; and a “low” magnitude strategy would generate $10 million or less.
### Exhibit 37
Options for Increasing Funding for Capital Projects

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Magnitude</th>
<th>Action Needed</th>
<th>Feasibility of Implementation</th>
<th>State Debt Limit Impact</th>
<th>Other Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Expand State Debt Limit</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Include Near General Fund Accounts in General Revenues Definition, p. 47 | High (About $300 M) | Legislative action to remove dedication of near General Fund accounts | • Beneficiaries of accounts that will no longer be dedicated may resist  
• Political will | Expands State debt limit | • There may be other demands on State funds freed up by expanding the debt limit beyond higher education construction |
| Include Property Tax in State General Revenues Definition, p. 47 | High | Constitutional Amendment | • Political will | Expands State debt limit | • There may be other demands on state funds freed up by expanding the debt limit beyond higher education construction |
| **Trust Lands** | | | | | |
| Diversify Permanent Fund Investments, p. 49 | Low (About $10 M) | No statutory changes required | • Feasible  
• Bill enabling diversification passed in 2008 | None | • WSU would likely benefit the most |
| Diversify Trust Land Holdings (increase Agriculture and Commercial holdings), p. 50 | Low. (Commercial and agriculture lease revenues are currently 3% and 4% of total DNR revenues, respectively. At 10% each, revenues increase by about $1 M) | Legislative Action to encourage trust land diversification | • Political will - bill to divest DNR from commercial land introduced in 2007  
• Represents a policy shift away from timber lands and conservation | None | |
| Alternative Energy Sources, p. 52 | Low | DNR to Pursue opportunities | • In progress  
• Common Schools lands are more numerous and better suited to alternative energy production | None | |
| Sale of Trust Land, p. 50 | Uncertain (Difficult to compare land value versus other financial investments) | Legislative Action to allow the sale of trust lands | • Private buyers counter to existing policy  
• Fund appropriation necessary for State purchase  
• Each sale limited to 160 acres | A State purchase would require a bond issue, impacting debt capacity | • WSU would likely benefit the most  
• DNR has not estimated value of trust lands since 1994 |
<table>
<thead>
<tr>
<th><strong>Building Fees</strong></th>
</tr>
</thead>
</table>
| **Eliminate Building Fee** | High  
* (Enables UW and WSU to raise between $90 M and $122 M in bond revenue depending on term and rate) | Legislative action to eliminate requirement to deposit building fees in state treasury  
• Political will  
• Similar bill, SB 6432, failed recently  
• Opposition to potential use of building fees for new construction rather than maintenance | None  
• UW and WSU could bond against this revenue stream  
• Loss of state control over this revenue source |
| **Use Building Fees for COP Lease Payments,** p. 55 | High  
* (Enables large sum for capital to be raised; does not increase actual revenues) | No statutory changes  
• Policy shift from maintenance to new construction  
• Potential resistance from universities | None |
| **Increase the Proportion of Building Fees relative to Operating Fees,** p. 56 | Medium (depending on increase)  
* (A 1% larger share of tuition results in a $15M increase) | Legislative action to amend RCW 28B.15.069  
• Political will  
• Resistance from universities because of impact on operating budget | None  
• Operating budget implication |
| **Separate Building Fees from Tuition Fees (not subject to 7% increase limit),** p. 56 | Low (depending on increase)  
* (A 10% increase in the building fee results in $10 M in new revenue) | Legislative action to amend definition of tuition fees and increase limits to building fees  
• Compared to other states, some room for tuition increase  
• Similar bill, SB 5327, failed recently | None  
• Cost burden to students (tuition already increased faster than inflation)  
• Recent increases in auxiliary building fees |

<table>
<thead>
<tr>
<th><strong>Local Funding</strong></th>
</tr>
</thead>
</table>
| **Use a Portion of the State’s Property Tax Capacity,** p. 59 | High  
* (Estimated upward of $85 M) | Constitutional Amendment to authorize higher education property tax (2/3 Legislative approval, simple majority vote)  
• Political will  
• Difficult to implement  
• Need to overcome K-12 resistance | None  
• Impact to K-12 |
| **Raise Retail Sales and Use Tax and Dedicate a Portion to Capital,** p. 61 | High  
* (Estimated upward of $119 M) | Legislative Action (super-majority voting approval)  
• Washington has one of the highest sales tax rates  
• Political will | None (if dedicated to capital)  
• Lodging rate limitation |
| **Corporate Income Tax,** p. 65 | Medium  
* (Is $70 M in Maryland) | Voter approval for income tax  
• Unlikely | None  
• Income tax structure for DOR |
| **Create a Special Property Tax District,** p. 60 | Uncertain  
* (Depends on boundaries and tax rates) | Legislative Action (possible voter approval needed)  
• Difficult to determine service area for four-year institutions  
• Existing community and technical districts ease implementation | None  
• High administrative costs  
• More impact to CTCs |
<table>
<thead>
<tr>
<th>Financing Option</th>
<th>Uncertainty</th>
<th>Legislative Action</th>
<th>Impact/Constitutional Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raise a Selective Sales Tax (e.g. Cigarette), p. 61</td>
<td>Uncertain (Depends on which of the 18 selective sales taxes is chosen)</td>
<td>Need a logical taxable item, Political will</td>
<td>Depends on which tax</td>
</tr>
<tr>
<td>Create a Retail Sales Taxing District, p. 63</td>
<td>Uncertain (Depends on boundaries and retail activity)</td>
<td>Difficult to determine service area for four-year institutions; easier for new campus facilities, Existing CTC districts</td>
<td>Depends on whether a district’s tax is credited to the state’s portion of the sales tax. High administrative cost.</td>
</tr>
<tr>
<td>Impact Fees, p. 63</td>
<td>Uncertain</td>
<td>Tenuous link, Changes policy of impact fees</td>
<td>None</td>
</tr>
<tr>
<td>Tax Increment Financing, p. 64</td>
<td>Uncertain (Depends on magnitude of effect on property values)</td>
<td>Not currently being used in WA, Have to prove increase in surrounding property values, Voters have rejected in the past</td>
<td>None</td>
</tr>
</tbody>
</table>

- Impact fees are generally for infrastructure improvements related to new development.
- More applicable to CTCs.
5.2 Cost Management Strategies and Options

Exhibit 38 summarizes the cost management options explored in this study in terms of potential impacts and tradeoffs. Some of these strategies were identified by ESHB 3329, and some of them were identified through interviews with stakeholders and other states.

### Exhibit 38
Higher Education Capital Cost Management Strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Action Needed</th>
<th>Impacts and Tradeoffs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Refine Scoring System</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue to refine the Capital Projects Scoring System to further emphasize cost management</td>
<td>Identify appropriate measures of cost efficiency and amend scoring system</td>
<td>Favors the most cost-efficient projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>May disadvantage necessary capital projects that do not meet the cost efficiency standards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prioritizes cost efficiency over other desired educational outcomes</td>
</tr>
<tr>
<td>Implement cost per square foot ranges to identify capital projects with substantially higher than average costs</td>
<td>Incorporate the established cost per square foot ranges into the Capital Project Scoring System</td>
<td>Facilitates dialogue related to cost-reasonableness</td>
</tr>
<tr>
<td></td>
<td>Initiate a system to track actual project costs and update the ranges regularly</td>
<td>Initiates a system to track project costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cost and resources needed to implement and maintain project data</td>
</tr>
<tr>
<td><strong>Project Timelines</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explore ways to reduce project timelines through the budget process</td>
<td>Legislative action</td>
<td>Reduces escalation costs and total project costs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduces available funds for other capital projects</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Creates expectations for future construction funding</td>
</tr>
<tr>
<td><strong>Space Utilization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refine space utilization standards to better reflect current educational needs and maximize space efficiency</td>
<td>Develop standards that encompass administrative, office, and general purpose space to identify more efficient ways to utilize existing space</td>
<td>May still incur capital costs if remodeling of space is required</td>
</tr>
<tr>
<td></td>
<td>Incorporate space utilization standards into the budget process</td>
<td>May affect class scheduling practices</td>
</tr>
<tr>
<td>Identify underutilized space and the potential to modify or adapt space to current needs</td>
<td>Conduct an institution-wide inventory of all types of space (office, recreational, laboratory, classrooms, etc.) and their utilization rates at all higher education institutions</td>
<td>Potential to increase space efficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Potential to reduce new construction needs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Cost and resources needed to understand inventory and utilization by space type</td>
</tr>
<tr>
<td><strong>Online Learning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue to encourage and support the development of online programs</td>
<td>State support for collaboration amongst institutions on new course development and ensuring transferability</td>
<td>Continued increases in online enrollment could potentially relieve pressure on capital facilities, although usually requires higher initial investment in technology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>May increase out of state enrollment and produce ancillary revenue</td>
</tr>
</tbody>
</table>
5.3 Cost Management Recommendations

Irrespective of its ability to increase revenues for higher education capital facilities projects, the State has other tools at its disposal to help ensure the most effective use of limited resources.

**Capital Projects Scoring System.** The recently implemented scoring system for higher education capital projects provides the State with detailed and objective information on the proposed capital project requests of the four-year public higher education institutions. The scoring system addresses critical components such as enrollment growth, cost reasonableness, efficiency and allocation of space, other funding sources, and building condition, among other things. Depending on its current objectives and how much of a focus on cost management is desired, the scoring system can be adjusted to prioritize more cost effective projects.

**Ability to Affect Project Timelines.** The State has explored options that reduce project timelines, such as funding pre-design and design in one budget cycle and construction in the next, which also reduces escalation costs. If the desired policy outcome is the lowest possible total cost, these options should continue to be used. If the objective is to fund the maximum number of projects to serve more students, then project timelines are only one consideration.

**Policies to Encourage Partnerships.** Where they occur, partnerships often have many advantages. Higher education institutions’ partnerships with private entities, other public agencies, and jurisdictions can increase revenue, spread the cost burden, and/or address cash flow issues associated with capital projects. They can also enhance State-supported projects, so that these projects better meet the needs of the higher education institution and its community and maximize the use of space through space sharing arrangements. The State explicitly encourages partnerships and securing matching funds within the community and technical college system through the matching fund category within the capital projects scoring system. The State should continue to pursue these types of policies to encourage matching funds and focus on ways to provide more targeted support to partnership projects for the baccalaureate institutions.

**Space Utilization Standards.** Focusing on both the hours per week that a space is utilized and accounting for all types of space on campus could identify more efficient ways to use existing space before new space is necessary. A more comprehensive approach to space utilization that encompasses offices, administrative, and general purpose space could identify additional opportunities to increase campus-wide space utilization.

**Expected Cost Ranges.** Costs per square foot ranges were developed for seven facility types. These expected cost ranges should be incorporated into the higher education capital projects scoring system and used as a tool to identify projects whose costs are substantially higher than the norm, resulting in further dialogue and clarification as part of the capital budgeting process.