

Institution
Western Washington University
Project Title
Elevator Preservation Safety and ADA Upgrades
Project Location (City)
Bellingham, WA

1. Problem Statement (short description of the project – the needs and the benefits)

The functional condition of Western Washington University’s elevator inventory reflects the overall condition and age of its buildings. Our 29 oldest and most prone to breakdown are spread throughout 16 buildings, with the elevators having an average age of 40 years. Those same elevators have been modernized over the years however the average design age (year of the code to which the controls were designed) is over 28 years. Recognizing that the most opportune time to modernize or replace building elevators is in conjunction with a major renovation, Western includes elevator work in all such projects. However, with the fiscal pressures on the state capital program as well as an increasing incidence of elevator breakdowns, Western is unable to wait for major building renovations to correct currently known deficiencies. Instead, Western proposes to modernize these elevators in a single comprehensive project, bringing those elevators back up to a code compliant condition with safe, smooth, and reliable operating equipment.

2. History of the project or facility

Update: This is a multiphase project. Phase 1 was funded in the 17-19 biennium, and includes repairs to elevators in Environmental Studies, Wilson Library, Biology Building, and Chemistry Building. Funding for phase 2 is being requested in 2019-21, and includes repairs to elevators in Bond Hall, Arntzen Hall, Fine Arts Building, and Engineering Technology.

In 2015, with an increasing incidence of elevator breakdowns, Western commissioned a campus wide condition survey to inspect and analyze elevators across campus, determine current condition, compliance with code, and recommend options for elevator modernization. Overall, 29 elevators were identified as needing some level of modernization, repairs, or renewal. The survey found a mishmash of need, ranging from complete replacement of critical operating components and electronic controls to minor renovations. From the report executive summary: (Appendix B)

“It was apparent that over the last 10 to 15 years there has been some elevator upgrade activity in some of the buildings.....some upgrades were code upgrades but not complete elevator modernizations on major components. ECS typically recommends performing complete modernizations of elevators and not a piecemeal approach. Eventually the piecemeal approach will catch up to you in the form of obsolescence of equipment.”

It was recommended that the identified elevators be modernized by replacing existing equipment with more reliable control equipment, energy reducing hoist equipment, upgraded safety enhancements and improved quality of life enhancements. The advantages will be seen immediately:

1. Building & Personal Safety & Code Requirements
 - Fire safety
 - Seismic safety
 - Passenger protection

INFRASTRUCTURE

Higher Education Project Proposal

2019-21 Biennium

Elevator Preservation Safety and ADA Upgrades
Western Washington University

2. Operation & Performance
 - More efficient handling of traffic
 - Reduced maintenance to keep obsolete equipment functioning and more maintenance on the proper areas
 - Savings on electrical power
 - Longer life of retained equipment
3. Appearance and Quality of Life
 - New cab interior and fixtures
 - New elevator lobby fixtures
4. Increased Value of the Buildings
5. Reduced Owner Liability
6. Reduced Environmental Risks

3. University programs addressed or encompassed by the project

Aside from the clear code and regulatory requirements, nearly all academic programs on the Western campus are housed in buildings which have elevators targeted for modernization in this proposal. As infrastructure systems, the elevators described in this proposal are by nature tied to and benefit the following affected programs:

Administrative Services	Administrative Computing Services Business and Financial Services	Telecommunications Services Testing Center
Arntzen Hall	Anthropology Environmental Studies Institute for Energy Studies	Political Science Sociology
Biology	Biology	
Bond Hall	Business & Economics	
Chemistry Building	Chemistry	Biology
Environmental Studies	Advanced Materials Science & Engineering Environmental Health and Safety Environmental Sciences Technology Geology	Humanities and Social Sciences Huxley College Scientific Technical Services Institute of Environmental Studies Institute for Watershed Studies
Engineering Technology	Engineering & Design	Vehicle Research Institute
Fine Arts Building	Art Design	Western Gallery
Haggard Hall	Academic Technology	Western Libraries
Humanities	English	Human Resources
Old Main	Admissions Academic Affairs Business & Financial Affairs Career Services Center Counseling Center Disability Resources Enrollment & Student Services Equal Opportunity Office Financial Aid New Student Services	Office of Communications President's Office Prevention & Wellness Services Provost's Office Registrar's Office Research & Sponsored Programs Student Outreach Services University Relations University Advancement
Performing Arts	College of Fine & Performing Arts Theatre Arts	Music
Science, Math & Technology Education	All College of Science & Engineering academic departments	

4. Significant Health, Safety, and Code Issues

While the elevators on campus did comply with the code that was in effect at the time of installation, they do not comply with the current 2010 ASME A17.1 Safety Code for Elevator and Escalators currently in effect in the State of Washington. While there are many code compliance issues with these elevators there are several that will pose **life safety issues** such as:

1. Do not comply with current code related to firefighter's service.
 - A modernization would include the latest firefighter's service features.
2. Do not comply with current code related to seismic protection.
 - Current code requires seismic over-speed valves in pits that will activate and stop the elevator if there is an oil line break between the jack and the pump unit.
 - Restraints on roller guide assemblies.
 - Detection devices on counterweights.
 - Seismic detection device located in elevator machine room.
3. Hall and car operating panels do not comply with latest codes.
 - Many hall fixtures are at code height but the car operating panel does not have the current dedicated firefighter's lockable panel. Several lobby call fixtures do not have the current communications failure indicator, or the current fire fighters Phase 1 key switch per code.
4. ADA requirements. The majority of the elevators are behind on current ADA codes and standards for elevators. Items needed are Braille on buttons and jambs, car direction lanterns located in plain view of hall stations, hall stations not at code height for wheel chair handicaps, and hands free phone inside cab at bottom of car operating panel.

5. Evidence of increased repairs and/or service interruption

The age and expected reliability of Western's elevator portfolio are driving factors behind this request. Even with proper preventative maintenance, elevator mechanical equipment can be expected to last 15-20 years. With an average age of over 40 years, it is well past time to renew and replace the aging equipment. Even considering past updates and partial modernizations, the selected elevators, on average, comply with codes that are more than 28 years old.

Over the past several years, we have averaged more than 200 elevator breakdown callouts per year, ranging from metal on metal noise, to controls not working, to people simply being stuck between floors. (Appendix E). In fact, the frequency of elevator mechanical breakdowns has increased to the point where some on campus will not enter an elevator for fear of getting stuck. It was in response to this unacceptably high number of breakdowns that WWU initiated the cited elevator study.

6. Impact on Institutional Operations without the Infrastructure Project

Elevators are a critical building system in that they ensure safe and reliable access to all floors of buildings by disabled students, faculty, and staff. Apart from the clear liability exposure for the University, continued functional inadequacy and deteriorating reliability will cause disruptions to all members of campus.

Secondly, renovating and modernizing these elevators should substantially improve facilities management operations by decreasing the frequency and severity of repair calls to our elevator service contractor. The savings can then be redirected to more productive and useful maintenance activities.

7. Reasonable Estimate

The elevator survey referenced above included cost estimates for each elevator based on recommended upgrades, improvements, and other elevator projects of similar scope. The consultant's estimates have been adjusted to account for inflation, design, and project management expenses. The attached C100 reflects those costs.

8. Engineering Study

In 2015, Western contracted with Elevator Consulting Services to complete a condition assessment of selected elevators across campus. This capital request reflects the recommendations of that study. See Appendix B.

9. Supports Facilities Plan

In order to provide the opportunity for Washington's residents to complete a post-secondary education program (Results Washington Goal 1), we must first provide a learning environment that is attractive to prospective students and parents, conducive to learning once those students are on campus, and always provide a sense of personal well-being and safety (Results Washington Goal 4) to everyone on campus. See Appendix C.

Western's institutional master planning, while focused on long range development zoning and relationships with surrounding neighbors, also contains six guiding principles for that development (<http://www.wvu.edu/fm/CampusStandards/PlanningPrinciples/index.shtml>). This project is fully aligned with Principle #3 – "Provide convenient and safe access to and through the campus for the University's guests, faculty, staff and students." See Appendix D.

As stated earlier, nearly all academic and research programs on the Western campus operate out of and depend upon the buildings in which these elevators are located. As stewards of state resources Western is expected and required to provide a safe learning and working environment where building systems are reliable and code compliant.

10. Resource Efficiency and Sustainability

Fully modernized elevators will reduce energy consumption in academic buildings. Reductions in call-outs and breakdowns will free up human resources to more efficiently address needs throughout campus.

Elevator Preservation Safety and ADA Upgrades

Appendix Contents

- A. Office of Financial Management Reports (CBS002)
Project Cost Summary/C100
- B. Elevator Modernization Executive Summary and Costs prepared by
Elevator Consulting Services
- C. Results Washington Goals
- D. WWU Comprehensive Master Plan/Guiding Principles
- E. Elevator Call-Out Log

Appendix A

STATE OF WASHINGTON

AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Western Washington University	
Project Name	Elevator Preservation & ADA Upgrades	
OFM Project Number		

Contact Information

Name	Rick Benner, FAIA	
Phone Number	(360) 650-3550	
Email	rick.benner@wwu.edu	

Statistics

Gross Square Feet		MACC per Square Foot	
Usable Square Feet		Escalated MACC per Square Foot	
Space Efficiency		A/E Fee Class	B
Construction Type	Other Sch. B Projects	A/E Fee Percentage	11.81%
Remodel	Yes	Projected Life of Asset (Years)	50

Additional Project Details

Alternative Public Works Project	No	Art Requirement Applies	No
Inflation Rate	3.12%	Higher Ed Institution	No
Sales Tax Rate %	8.70%	Location Used for Tax Rate	Bellingham
Contingency Rate	10%		
Base Month	June-18		
Project Administered By	Agency		

Schedule

Predesign Start		Predesign End	
Design Start	February-18	Design End	April-20
Construction Start	July-19	Construction End	November-20
Construction Duration	16 Months		

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Project Cost Estimate

Total Project	\$6,364,081	Total Project Escalated	\$6,700,181
		Rounded Escalated Total	\$6,700,000

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Western Washington University	
Project Name	Elevator Preservation & ADA Upgrades	
OFM Project Number		

Cost Estimate Summary

Acquisition			
Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0

Consultant Services			
Predesign Services	\$0		
A/E Basic Design Services	\$397,544		
Extra Services	\$45,000		
Other Services	\$201,607		
Design Services Contingency	\$64,415		
Consultant Services Subtotal	\$708,566	Consultant Services Subtotal Escalated	\$733,634

Construction			
Construction Contingencies	\$443,500	Construction Contingencies Escalated	\$468,026
Maximum Allowable Construction Cost (MACC)	\$4,435,000	Maximum Allowable Construction Cost (MACC) Escalated	\$4,680,256
Sales Tax	\$424,430	Sales Tax Escalated	\$447,901
Construction Subtotal	\$5,302,930	Construction Subtotal Escalated	\$5,596,183

Equipment			
Equipment	\$0		
Sales Tax	\$0		
Non-Taxable Items	\$0		
Equipment Subtotal	\$0	Equipment Subtotal Escalated	\$0

Artwork			
Artwork Subtotal	\$0	Artwork Subtotal Escalated	\$0

Agency Project Administration			
Agency Project Administration Subtotal	\$272,586		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$272,586	Project Administration Subtotal Escalated	\$287,660

Other Costs			
Other Costs Subtotal	\$80,000	Other Costs Subtotal Escalated	\$82,704

Project Cost Estimate			
Total Project	\$6,364,081	Total Project Escalated	\$6,700,181
		Rounded Escalated Total	\$6,700,000

Cost Estimate Details

Acquisition Costs					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Purchase/Lease					
Appraisal and Closing					
Right of Way					
Demolition					
Pre-Site Development					
Other					
Insert Row Here					
ACQUISITION TOTAL	\$0		NA	\$0	

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Cost Estimate Details

Consultant Services				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Pre-Schematic Design Services				
Programming/Site Analysis				
Environmental Analysis				
Predesign Study				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.0000	\$0	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$397,544			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	\$397,544	1.0234	\$406,847	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)				
Geotechnical Investigation				
Commissioning				
Site Survey				
Testing				
LEED Services				
Voice/Data Consultant				
Value Engineering				
Constructability Review				
Environmental Mitigation (EIS)				
Landscape Consultant				
Advertising	\$5,000			
Document Reproduction	\$10,000			
Controls	\$30,000			
Insert Row Here				
Sub TOTAL	\$45,000	1.0234	\$46,053	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	\$178,607			31% of A/E Basic Services
HVAC Balancing				
Staffing				
On-Site Reps.	\$23,000			
Insert Row Here				
Sub TOTAL	\$201,607	1.0553	\$212,756	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	\$64,415			
Other				
Insert Row Here				
Sub TOTAL	\$64,415	1.0553	\$67,978	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL	\$708,566		\$733,634	

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Cost Estimate Details

Construction Contracts				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Site Work				
G10 - Site Preparation				
G20 - Site Improvements				
G30 - Site Mechanical Utilities				
G40 - Site Electrical Utilities				
G60 - Other Site Construction				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.0338	\$0	
2) Related Project Costs				
Offsite Improvements				
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.0338	\$0	
3) Facility Construction				
A10 - Foundations				
A20 - Basement Construction				
B10 - Superstructure				
B20 - Exterior Closure				
B30 - Roofing				
C10 - Interior Construction				
C20 - Stairs				
C30 - Interior Finishes				
D10 - Conveying				
D20 - Plumbing Systems				
D30 - HVAC Systems				
D40 - Fire Protection Systems				
D50 - Electrical Systems				
F10 - Special Construction				
F20 - Selective Demolition				
General Conditions				
Overall	\$4,435,000			
Insert Row Here				
Sub TOTAL	\$4,435,000	1.0553	\$4,680,256	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	\$4,435,000		\$4,680,256	

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7) Construction Contingency

Allowance for Change Orders	\$443,500		
Other			
Insert Row Here			
Sub TOTAL	\$443,500	1.0553	\$468,026

8) Non-Taxable Items

Other			
Insert Row Here			
Sub TOTAL	\$0	1.0553	\$0

Sales Tax

Sub TOTAL	\$424,430		\$447,901
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CONSTRUCTION CONTRACTS TOTAL	\$5,302,930		\$5,596,183
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Cost Estimate Details

Equipment					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
E10 - Equipment					
E20 - Furnishings					
F10 - Special Construction					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.0553	\$0	
1) Non Taxable Items					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.0553	\$0	
Sales Tax					
Sub TOTAL	\$0			\$0	
EQUIPMENT TOTAL					
EQUIPMENT TOTAL	\$0			\$0	

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Cost Estimate Details

Artwork					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Project Artwork	\$0				0.5% of Escalated MACC for new construction
Higher Ed Artwork	\$0				0.5% of Escalated MACC for new and renewal construction
Other					
Insert Row Here					
ARTWORK TOTAL	\$0		NA	\$0	

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Cost Estimate Details

Project Management					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Agency Project Management	\$272,586				
Additional Services					
Other					
Insert Row Here					
PROJECT MANAGEMENT TOTAL	\$272,586		1.0553	\$287,660	

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Cost Estimate Details

Other Costs					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Mitigation Costs					
Hazardous Material Remediation/Removal					
Historic and Archeological Mitigation					
M & O Assist	\$50,000				
Plan Review/Permits	\$30,000				
OTHER COSTS TOTAL	\$80,000		1.0338	\$82,704	

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**380 - Western Washington University
Capital Project Request**2019-21 Biennium
Version:** SV 2019-21 Capital Budget Request**Report Number:** CBS002**Date Run:** 7/31/2018 2:25PM**Project Number:** 30000772**Project Title:** Elevator Preservation Safety and ADA Upgrades**Project Class:** Preservation**Description*Starting Fiscal Year:** 2020**Agency Priority:** 9**Project Summary**

Western is experiencing increasing incidences of elevator breakdowns, and is unable to wait for major building renovations to address currently known deficiencies for 29 of the oldest and most prone to breakdown elevators. This project will modernize these elevators in a single comprehensive project, bringing those elevators back up to a code compliant condition with safe, smooth, and reliable operating equipment. The requested funding will address Phase 2 of this project. The first phase was funded in the 2017-19 biennium.

Project Description

This project will modernize 29 of the oldest and most decrepit elevators on campus. In a single comprehensive project we will bring those elevators back up to a code compliant condition with safe, smooth, and reliable operating equipment. The requested funding will address Phase 2 of this project.

The functional condition of Western Washington University's elevator inventory reflects the overall condition and age of its buildings. Our 29 oldest and most prone to breakdown are spread throughout 16 buildings, with the elevators having an average age of 40 years. Those same elevators have been modernized over the years however the average design age (year of the code to which the controls were designed) is over 28 years. While the elevators on campus did comply with the code that was in effect at the time of installation, they do not comply with the 2010 ASME A17.1 Safety Code for Elevator and Escalators currently in effect in the State of Washington. Over the past several years, we have averaged more than 200 elevator breakdown callouts per year, ranging from metal on metal noise, to controls not working, to people simply being stuck between floors. In fact, the frequency of elevator mechanical breakdowns has increased to the point where some on campus will not enter an elevator for fear of getting stuck.

In response to this unacceptably high number of breakdowns, Western commissioned a campus-wide condition survey in 2015 to inspect and analyze elevators across campus. The survey details current conditions, compliance with code, and recommended options for elevator modernization. Overall, 29 elevators were identified as needing some level of modernization, upgrade, or renewal.

The survey recommended that the identified elevators be modernized by replacing existing equipment with more reliable control equipment, energy reducing hoist equipment, upgraded safety enhancements and improved quality of life enhancements. The advantages will be seen immediately and include:

- Meeting current Building & Personal Safety & Code Requirements for fire safety, seismic safety and passenger protection.
- Meeting current ADA requirements.
- More efficient handling of traffic.
- Reduced maintenance to keep obsolete equipment functioning.
- Savings on electrical power.
- Longer life of retained equipment.
- Improved appearance and quality.
- Increased value of the buildings.
- Reduced owner liability.
- Reduced environmental risks.

Elevators are a critical building system in that they ensure safe and reliable access to all floors of buildings by students, faculty, staff, and persons with disabilities. Apart from the clear liability exposure for the University, continued functional inadequacy and deteriorating reliability will cause disruptions to all members of campus.

In order to provide the opportunity for Washington's residents to complete a post-secondary education program (Results Washington Goal 1), we must first provide a learning environment that is attractive to prospective students and parents, conducive to learning once those students are on campus, and always provide a sense of personal well-being and safety

**380 - Western Washington University
Capital Project Request
2019-21 Biennium**

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Version: SV 2019-21 Capital Budget Request

Report Number: CBS002

Date Run: 7/31/2018 2:25PM

Project Number: 30000772

Project Title: Elevator Preservation Safety and ADA Upgrades

Project Class: Preservation

Description

(Results Washington Goal 4) to everyone on campus.

Western's institutional master planning, while focused on long range development zoning and relationships with surrounding neighbors, also contains six guiding principles for that development (<http://www.wwu.edu/fm/CampusStandards/PlanningPrinciples/index.shtml>). This project is fully aligned with Principle #3 - "Provide convenient and safe access to and through the campus for the University's guests, faculty, staff and students. This is a continuing multi-phase project, the first phase began in February 2018. Funding of \$3.188 million for the first phase was received in the 2017-19 biennium. Elevators in Environmental Studies, Wilson Library, Biology Building, and Chemistry Building are being addressed. Funding in 2019-21 will address elevators in Bond Hall, Arntzen Hall, Fine Arts Building, and Engineering Technology.

Project Schedule: February 2018 - November 2020 (See comments)

Location

City: Bellingham

County: Whatcom

Legislative District: 040

Project Type

Infrastructure (Major Projects)

Growth Management impacts

none

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2019-21 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	5,700,000		2,188,000		3,512,000
065-1	WWU Capital Projects-State	1,000,000		1,000,000		
	Total	6,700,000	0	3,188,000	0	3,512,000
Future Fiscal Periods						
		2021-23	2023-25	2025-27	2027-29	
057-1	State Bldg Constr-State					
065-1	WWU Capital Projects-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Parameter

Entered As

Interpreted As

Appendix B



ELEVATOR MODERNIZATION REPORT

**Western Washington University
Bellingham, WA**

**29 Academic Elevators
7 Residence Elevators**

November 17, 2015

Prepared for:

Prepared For Client:

Greg Hough

Assistant Director, Facilities Asset Management
Western Washington University

Prepared by:

Mike Stevens, Senior Consultant
Elevator Consulting Services, Inc.



Section I – Executive Summary

This report was commissioned to inspect and analyze 29 academic elevators and 7 residence elevators at Western Washington University to determine their current condition, compliance with current code, safety requirements, and to identify and recommend options for an elevator modernization. During our on-site audit we inspected the elevators components and operation to determine whether they should be reused, refurbished or replaced with new equipment with much improved technology as part of an elevator modernization. We started with the Wilson Library elevators and worked our way through the campus in what we consider to be a chronological order from worst to best elevators according to their age and type. It was apparent that over the last 10 to 15 years there has been some elevator upgrade activity in some of the buildings. I did notice that some upgrades were code upgrades but not complete elevator modernizations on major components. ECS typically recommends performing complete modernizations of elevators and not a piece meal approach. Eventually the piece meal approach will catch up to you in the form of obsolescence of equipment. You will see in the information provided in the audit details, per building, the condition of the elevators and the recommendations of the work that needs to be provided to bring them back to code compliant, safe smooth, operating equipment that will restart there lifecycle. Below we have created an equipment description spread sheet to identify the equipment and the particulars for each. We have also added a column called “Profile Score” that shows how we have ranked the elevators in priority based on our audit matrix findings. The larger the number the more urgent the need for modernization.

Additional observations were also recognized on the current maintenance provider’s documentation and code required maintenance tasks, as well as testing. Although ThyssenKrupp Elevator did have a Maintenance Control Program (MCP) on site, it appeared that the record-keeping was not 100% accurate and up-to-date. If the monthly maintenance visits are being performed the MCP maintenance tasks should be filled out and sequenced through the year to show monthly visits and maintenance being performed. 100% MCP documentation of test logs, maintenance tasks, oil loss records, callbacks logs, major component replacement logs, and all other documentation affiliated with the maintenance control program is key to maintaining and documenting the equipment effectively and efficiently. This is a code compliance requirement. I was really concerned about the number of hydraulic elevators with single section jacks and no oil loss records being kept. I also noticed the quarterly fire service testing was not current on most of the equipment as well.

The Academic elevators did appear to have average to above average maintenance performed on them. The Residential elevators needed some extra attention. Hoistways were dirty and governors were clanking and clunking as they ran. Door operations was noisy and needs to be serviced and adjusted.

Elevator Safety and Code Compliance

While the elevators on campus did comply with the code that was in effect at the time of installation, the do not comply with the current 2010 ASME A17.1 Safety Code for Elevator and Escalators



currently in effect in the State of Washington. While there are many code compliance issues with these elevators there are several that may pose **life safety issues** such as:

1. Do not comply with current code related to firefighter's service.
 - A modernization would include the latest firefighter's service features.
2. Do not comply with current code related to seismic protection.
 - Current code requires seismic over-speed valves in pits that will activate and stop the elevator if there is an oil line break between the jack and the pump unit.
 - Restraints on roller guide assemblies.
 - The real detection devices on counterweights.
 - Seismic detection device located in elevator machine room.
3. Hall and car operating panels do not comply with latest codes.
 - The hall fixtures are at code height but the car operating panel does not have the current dedicated firefighter's lockable panel. The main lobby hall call fixture does not have the current communications failure indicator, or the current fire fighters Phase 1 key switch per code.
4. Machine rooms too hot. These conditions cause elevator to run sporadically and not level accurately and can cause trip hazards. Below items could be done prior to modernization and reused on new equipment later if desired.
 - Most of the machine rooms need added HVAC to keep controls and oil between 60 to 95 degrees. The lower end of the temperature requirement's the better.
5. ADA requirements.
 - The majority of the elevators are behind on current ADA codes and standards for elevators. Items needed are Braille on buttons and jambs, car direction lanterns located in plain view of hall stations, hall stations not at code height for wheel chair handicaps, and hands free phone inside cab at bottom of car operating panel.

As a result, it is our recommendation that these elevators be modernized according to ranking and profile under Section II – Existing Equipment Description “Profile Score Column”. Equipment will be replaced with more reliable control equipment, energy reducing hoist equipment, upgraded safety enhancements and improved quality of life enhancements. Although a modernization of the elevator systems is a large expenditure, the advantages are many, including:

1. Building & Personal Safety & Code Requirements
 - Fire safety
 - Seismic safety
 - Passenger protection
2. Operation & Performance
 - More efficient handling of traffic
 - Reduced maintenance to keep obsolete equipment functioning and more maintenance on the proper areas

- Savings on electrical power
 - Longer life of retained equipment
3. Appearance and Quality of Life
 - New cab interior and fixtures
 - New elevator lobby fixtures
 4. Increased Value of the Buildings
 5. Reduced Owner Liability
 6. Reduced Environmental Risks

Appendix C



Policy Brief
September 2013

By setting clear goals and continually tracking results, the state will be better equipped to engage its employees, partners and the public in building a healthier, better-educated and more prosperous Washington.



World-Class Education



Prosperous Economy



Sustainable Energy and a Clean Environment



Healthy and Safe Communities



Efficient, Effective and Accountable Government

www.results.wa.gov

Results Washington: A more efficient, effective and transparent state government

Any organization functions better — and gets better results — when its decisions and actions are guided by solid data. Washington has seen this firsthand. Over the past decade, for example, our data-driven “Target Zero” traffic safety program has helped reduce the state’s fatality accident rate to record lows. Intensive data-gathering has helped us speed up our response to reports of child abuse and streamline delivery of government services, from water permit approvals to vehicle registration renewals. Now we’re taking it to a new level.

Governor Inslee believes we can do more to ensure a faster, smarter and more accountable state government — a government focused on key goals that will help strengthen our economy, improve our schools and make Washington an ideal place to live and do business. By setting clear goals and continually tracking results, the state will be better equipped to engage its employees, partners and the public in building a healthier, better-educated and more prosperous Washington. Indeed, the Governor is delivering on his inaugural address promise that “We will provide efficiency, effectiveness and transparency.”



Washington has long been a national leader in adapting proven private-sector methods and tools to measure and improve state government performance. For the past eight years, tools such as the Government Management Accountability and Performance (GMAP) program and Lean process improvement tools and techniques have been used to improve individual state agency performance.

The state is now poised to launch Results Washington, a new system combining the best aspects of GMAP with a significantly expanded Lean initiative that involves all state agencies. Results Washington will use the latest technology to routinely gather, review and display performance data which will make it easier for citizens to see for themselves how well state government and its many partners — such as school districts, local governments and community organizations — are delivering services and meeting key performance goals.

An innovative and data-driven approach to governing

Governor Inslee started this effort by identifying the vision, mission and top goal areas of his administration:

- » [World-Class Education](#)
- » [Prosperous Economy](#)
- » [Sustainable Energy and a Clean Environment](#)
- » [Healthy and Safe Communities](#)
- » [Efficient, Effective and Accountable Government](#)

These goals tie into his “Building a Working Washington” agenda and encompass everything from transportation and education to health care and a clean environment. Goal councils, composed of agency directors, representatives from the Governor’s budget and policy offices and the Results Washington team, were established for each goal area. The Results Washington team will work with agencies to gather and review performance data. This will provide valuable real-time information to help state managers spot trends and make data-driven decisions that will improve quality, speed up service delivery and support meeting improvement goals.

Access to an unprecedented array of performance data

Governor Inslee’s goal councils identified key outcome measures and leading indicators for each of his five goal areas. These indicators require agencies to work together in developing strategic plans to meet the established goals. Results Washington will provide unprecedented transparency and access to information about how well we’re making progress toward the goals. The goal councils, Results Washington team and Lean fellows will meet monthly to review performance data with the Governor, covering one goal area per month on a rotating basis. The data will be displayed and updated — with charts, graphs and context — on the Results Washington web portal.

Expanding state government’s Lean initiative

Washington’s businesses and health care industries have discovered the value of Lean as a way of doing business and achieved tremendous results. Lean is a system of proven principles, methods and tools that encourages employee creativity and problem solving. Lean is applied at all levels of an organization to review policies and procedures from a customer’s point of view and consider what adds value and what can be eliminated. As part of Results Washington, we are creating a new Lean fellowship program, led by a Lean expert, to work side-by-side with agencies on performance improvement plans. Lean efforts will help state agencies more efficiently serve the people and businesses of Washington.

Engaging employees, partners and the public to deliver results

Previous state government performance management efforts typically measured only selected state agency outcomes. While Results Washington will continue to do that, it will also have a broader focus. Results Washington will use higher-level measures that gauge how well state government — and its public and private sectors partners — are doing. For example, one proposed outcome measure in the Prosperous Economy goal area is increasing the average wage for workers statewide. In the World-Class Education goal area, one proposed outcome measure is increasing the percentage of children enrolled in high-quality early learning programs.

Governor Inslee understands that state government alone cannot deliver success. By setting the vision and mission, and establishing clear expectations of continuous improvement against clear goals and targets to achieve, we will build a healthier, better-educated and more prosperous Washington.

“Let’s get it done.”

Appendix D

Guiding Principles (from the Draft Comprehensive Campus Master Plan, January 1997)

The following administrative principles shown below will guide future campus development:

1. The University Physical Master Plan reflects the University's strategic objectives in setting forth priorities in building and environmental projects
2. The preservation of the history and values inherent in the campus environment serves as the context for future growth and development of the University's campus
3. Provide convenient and safe access to and through the campus for the University's guests, faculty, staff and students
4. Future growth of the University occurs predominantly to the south
5. The central part of campus serves as the "academic core" of the University
6. The northern part of campus is primarily residential in nature

Appendix E

Western Washington University
Elevator Call-Out Log FY13 - FY16

Bldg	Year Built	Installed	Modified	Orig Design Code	Design Code	Elevator Age	Design Age	Number of Incidents				
								FY13	FY14	FY15	FY16	
Acad	AB		1991			1987	25	29	1	0	1	0
Acad	AC	2000	2000			1996	16	20	0	10	0	1
Acad	AH	1987							17	14	10	8
	AH North		1987	1999		1996	29	20				
	AH South		1987	1999		1996	29	20				
Acad	AI	2008							12	25	4	18
Acad	AW	2008							3	2	11	6
Acad	BH	1967							22	19	25	10
	BH Freight		1994	1994	1994	1994	22	22				
	BH North		1967	1994	1967	1994	49	22				
	BH South		1967	1994	1967	1994	49	22				
Acad	BI	1995	1993			1987	23	29	17	4	1	0
Acad	CB	1993							4	8	8	8
	CB North		1983			1978	33	38				
	CB South		1983			1978	33	38				
Acad	CF	2003							18	11	10	9
Acad	CH	1947							5	0	0	3
Acad	CS	2002							0	1	2	0
Acad	ES	1973							36	29	17	43
	ES East		1973	2002		1996	43	20				
	ES West		1973	1992		1987	43	29				
Acad	ET	1987							4	2	3	5
	ET North		1987	1986								
	ET South		1987	1986								
Acad	FA	1970	1970	2002		1996	46	20	1	4	2	1
Acad	FI		1984	2002		1996	32	20	1	1	1	0
Acad	FR	1962	2013	2013					0	0	2	1

Western Washington University
Elevator Call-Out Log FY13 - FY16

								Number of Incidents			
Bldg	Year Built	Installed	Modified	Orig Design Code	Design Code	Elevator Age	Design Age	FY13	FY14	FY15	FY16
Acad	HH	1960						2	5	8	5
	HH 1		1960	1998	1993	56	23				
	HH 2		1960	1998	1993	56	23				
	HH 3		1960	1998	1993	56	23				
Acad	HU	1962	1994		1990	22	26	3	5	4	8
Acad	MH	1943	2011		2010			33	18	6	14
Acad	OM	1895						6	10	18	16
	OM North		1970	2002	1996	46	20				
	OM South		1970	2002	1996	46	20				
Acad	PA	1950						9	10	8	7
	PA North		1950	2000	1996	66	20				
	PA South		1950	2000	1996	66	20				
Acad	PH	1982						5	26	15	17
	PH East		1981		1978	1978	35	38			
	PH West		1981		1978	1978	35	38			
Acad	SL	1996	1996		1993	20	23				
Acad	WL	1928						9	23	20	13
	WL East		1962		1957	1957	54	59			
	WL South		1971		1967	1967	45	49			
	WL West		1962		1957	1957	54	59			
						40.32	28.21	208	227	176	193
AVERAGE BREAKDOWNS PER YEAR											201