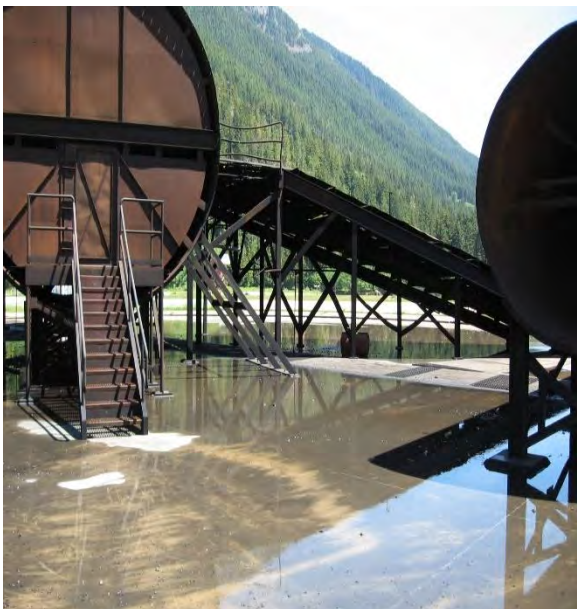


Washington State Patrol

2023-2025 Capital Budget Request



JAY INSLEE
Governor



JOHN R. BATISTE
Chief

STATE OF WASHINGTON
WASHINGTON STATE PATROL

Washington State Patrol Headquarters • PO Box 42600 • Olympia WA 98504-2600 • www.wsp.wa.gov

September 15, 2022

Mr. David Schumacher
Office of Financial Management
PO Box 43113
Olympia WA 98504-3113

Subject: Washington State Patrol 2023-2025 Capital Budget Request

We are pleased to submit the Washington State Patrol's (WSP) 2023-2025 Capital Budget Request for your information and consideration.

This request, if enacted, will provide for the WSP's essential needs in meeting its core missions.

Please contact me with any questions you may have related to this request.

Sincerely,

A handwritten signature in blue ink, appearing to read "John R. Batiste".

CHIEF JOHN R. BATISTE

JRB:trw

cc: Mr. Brian W. Bottoms, Property Management Division
Mr. Walter R. Hamilton, Budget and Fiscal Services
Assistant Chief Scott A. McCoy, Commercial Vehicle Enforcement Bureau
Captain Chris D. Old, Property Management Division



Table of Contents: 2023-2025 Capital Budget Request

Letter of Transmittal to the Office of Financial Management

Tab A:

Ten-year capital program summary (CBS 001) – CBS report

DAHP Review Letter and exempt project list

FTE summary – narrative and FTE details

Maintenance backlog reduction plan

Greenhouse gas summary

Tab B: All Preservation Projects

Capital project requests related to preservation (CBS 002) – CBS report

Capital project cost estimate (CBS 003) – projects greater than \$1 million (or \$2 million for higher education institutions)

Expected use of bond funds or certificate of participation (COP) – for bond or COP projects, if applicable, for required agencies

Tab C: All Programmatic Projects

Capital project requests related to new or expanded programs (CBS 002) – CBS report

Capital project cost estimate (CBS 003) – projects greater than \$1 million (or \$2 million for higher education institutions)

Expected use of bond funds or certificate of participation (COP) – for bond or COP projects, if applicable, for required agencies.

Tab D: Grant and Loan Programs

Capital project requests related to grant and loan programs (CBS 002) – CBS report

Project list for each grant and loan program that is not submitted as a subproject in CBS 002

TAB A

Ten-Year Capital Program Summary

**225 - Washington State Patrol
Ten Year Capital Plan by Project Class**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS001

Date Run: 9/19/2022 3:03PM

Project Class: Preservation

Agency Priority	Project by Account-EA Type	Estimated Total	Prior Expenditures	Current Expenditures	Reapprop 2023-25	New Approp 2023-25	Estimated 2025-27	Estimated 2027-29	Estimated 2029-31	Estimated 2031-33
1	4000052 Emergency Preservation & Repair (SPHA)-Statewide									
	081-1 WSP Highway Account-State	3,000,000				500,000	550,000	600,000	650,000	700,000
2	30000135 Continuing Roof Repair Projects									
	081-1 WSP Highway Account-State	3,560,000				2,360,000	300,000	300,000	300,000	300,000
3	30000109 Mission Generator Replacement									
	081-1 WSP Highway Account-State	903,000				503,000	100,000	100,000	100,000	100,000
4	30000119 Building Exterior Envelope Preservation									
	081-1 WSP Highway Account-State	1,455,000				705,000	250,000	250,000	250,000	
5	30000168 HVAC Replacement									
	081-1 WSP Highway Account-State	3,289,000				2,189,000	200,000	300,000	300,000	300,000
6	30000088 Pavement Preservation									
	081-1 WSP Highway Account-State	2,157,000				1,157,000	250,000	250,000	250,000	250,000
7	30000220 UST decommissioning - Yakima District Office									
	081-1 WSP Highway Account-State	350,000				350,000				
8	40000068 Fire Alarm Panel Replacement									
	081-1 WSP Highway Account-State	300,000				300,000				
12	40000031 FTA Minor Works and Repairs									
	057-1 State Bldg Constr-State	1,132,000		225,000		237,000	145,000	150,000	175,000	200,000
13	30000240 Vancouver Crime Lab - New Roof									
	057-1 State Bldg Constr-State	1,594,000				1,594,000				
14	40000077 Fire Training Academy Roof Replacement									

**225 - Washington State Patrol
Ten Year Capital Plan by Project Class**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS001

Date Run: 9/19/2022 3:03PM

Project Class: Preservation

Agency Priority	Project by Account-EA Type	Estimated Total	Prior Expenditures	Current Expenditures	Reapprop 2023-25	New Approp 2023-25	Estimated 2025-27	Estimated 2027-29	Estimated 2029-31	Estimated 2031-33
14	4000077 Fire Training Academy Roof Replacement									
	057-1 State Bldg Constr-State	572,000				572,000				
15	4000081 Seattle Crime Laboratory Generator Replacement									
	057-1 State Bldg Constr-State	450,000				450,000				
Total: Preservation		18,762,000		225,000		10,917,000	1,795,000	1,950,000	2,025,000	1,850,000

Project Class: Program

Agency Priority	Project by Account-EA Type	Estimated Total	Prior Expenditures	Current Expenditures	Reapprop 2023-25	New Approp 2023-25	Estimated 2025-27	Estimated 2027-29	Estimated 2029-31	Estimated 2031-33
9	3000229 District 2 Bellevue Headquarters - Improvements									
	081-1 WSP Highway Account-State	68,124,000				15,353,000	52,771,000			
10	3000271 Shelton Academy Campus Expansion									
	081-1 WSP Highway Account-State	3,200,000				200,000	1,000,000	2,000,000		
11	3000199 Armstrong Complex 4th Building									
	081-1 WSP Highway Account-State	6,075,000				75,000	1,000,000	5,000,000		
16	4000072 Crime Laboratory South I-5 Corridor Consolidated Facility									
	057-1 State Bldg Constr-State	102,800,000				8,600,000	94,200,000			
17	3000290 Crime Laboratory I-5 Corridor Consolidated Facility									
	057-1 State Bldg Constr-State	90,433,000		333,000		15,100,000	75,000,000			
18	3000169 FTA Burn Building Replacement - Phase 2									

**225 - Washington State Patrol
Ten Year Capital Plan by Project Class**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS001

Date Run: 9/19/2022 3:03PM

Project Class: Program

Agency Priority	Project by Account-EA Type	Estimated Total	Prior Expenditures	Current Expenditures	Reapprop 2023-25	New Approp 2023-25	Estimated 2025-27	Estimated 2027-29	Estimated 2029-31	Estimated 2031-33
18	30000169 FTA Burn Building Replacement - Phase 2									
	057-1 State Bldg Constr-State	11,023,000				11,023,000				
19	40000084 Crime Laboratory Operations - Cheney Build Out									
	057-1 State Bldg Constr-State	960,000				960,000				
Total: Program		282,615,000		333,000		51,311,000	223,971,000	7,000,000		

Total Account Summary

Account-Expenditure Authority Type	Estimated Total	Prior Expenditures	Current Expenditures	Reapprop 2023-25	New Approp 2023-25	Estimated 2025-27	Estimated 2027-29	Estimated 2029-31	Estimated 2031-33
057-1 State Bldg Constr-State	208,964,000		558,000		38,536,000	169,345,000	150,000	175,000	200,000
081-1 WSP Highway Account-State	92,413,000				23,692,000	56,421,000	8,800,000	1,850,000	1,650,000
Total		301,377,000		558,000	62,228,000	225,766,000	8,950,000	2,025,000	1,850,000

Ten Year Capital Plan by Project Class

*

Report Number: CBS001
Date Run: 9/19/2022 3:03PM

<u>Parameter</u>	<u>Entered As</u>	<u>Interpreted As</u>
Biennium	2023-25	2023-25
Functional Area	*	All Functional Areas
Agency	225	225
Version	03-A	03-A
Project Classification	*	All Project Classifications
Include Enacted	No	No
Sort Order	Project Class	Project Class
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

**DAHP Review
Letter and Exempt
Project List**



Allyson Brooks Ph.D., Director
State Historic Preservation Officer

September 13, 2022

Brian W. Bottoms
Acting Division Commander
Property Management Division
Washington State Patrol

In future correspondence please refer to:
Project Tracking Code: 2022-09-06047
Re: Washington State Patrol 2023-2025 Capital Budget Request

Dear Brian Bottoms:

Thank you for contacting the Washington State Department of Archaeology and Historic Preservation (DAHP). The above referenced project has been reviewed on behalf of the State Historic Preservation Officer (SHPO) under provisions of Governor's Executive Order 21-02 (21-02). Our review is based upon documentation contained in your communication.

As you know, consultation under 21-02 is required when either of the following will occur with funding from the Washington Capital Budget:

- Ground disturbing activities; and/or
- Interior and/or exterior alterations to a building or structure that is at least 45 years in age

As noted, none of the projects for which the WSP is requesting Washington Capital funding would meet these requirements. Therefore, we agree that no consultation under 21-02 is necessary. Should any scopes of work change to include either or both of the above-listed activities, we look forward to consultation under 21-02.

Thank you for the opportunity to review and comment. Please ensure that the DAHP Project Number (a.k.a. Project Tracking Code) is shared with any hired cultural resource consultants and is attached to any communications or submitted reports. If you have any questions, please feel free to contact me.

Sincerely,

Holly Borth
Preservation Design Reviewer
(360) 890-0174
Holly.Borth@dahp.wa.gov



FTE Summary – Job Description and FTE Details

FTE SUMMARY

The Washington State Patrol (WSP) has maintained a capital projects group within the Property Management Division for many years. Historically, this funding has been included in the WSP Operating Budget. NO FTE costs are associated with this Capital Budget Request.

Maintenance Backlog Reduction Plan

2023-2025 Maintenance Backlog Reduction Plan

The Washington State Patrol (WSP) is responsible for maintaining over two hundred buildings, which include:

- Crime Labs
- District Office Buildings
- Two Training Academies
- Detachments Offices
- Commercial Truck Scales & Inspection Facilities
- Radio Communications Sites
- Administrative Office Buildings
- Maintenance Facilities

Each site has unique challenges and requirements. Crime Labs have specialized HVAC systems to ensure scientist safety. District Offices include storage areas for evidence with unique ventilation requirements. Both academies have specialized facilities and equipment that experience unique conditions and stresses during training events. Truck scales incur the wear and tear of heavy loaded trucks on a routine basis. High mountain-top communication sites endure extreme weather conditions. Even administrative office buildings have special security requirements to protect both agency employees and the public. Most sites have emergency back-up power, supplied by agency-owned generating equipment. Many offices and detachments house 24 hour-a-day operations.

Strategic Plan:

Beginning in 2005, WSP began a systematic approach to performing facility assessments. This approach includes a periodic determination of the age of serviceable components at each facility. In cases of incomplete documentation, detailed inspections were performed to validate current conditions against the perceived condition. In the 2005-2007 Capital Budget Request, WSP increased the number and scope of the minor works projects and began to address the most critical issues.

In the 2007-2011 biennium, WSP presented a larger Capital Budget Request, although available State Patrol Highway Account (SPHA) funding was limited. In addition, the general fund requests have increased. Only the highest priority projects were funded.

In 2013, Master Planning was initiated at the agency's Fire Training Academy near North Bend with good results for planning infrastructure improvements and program expansions. Similar master planning efforts are in store for the WSP Academy, a law enforcement training center in Mason County. Operating and maintenance recommendations will be a key part in the creation of master plans.

All capital projects proposed for this biennium are oriented to preservation and backlog reduction. In the 2023-2025 biennium Capital Budget Request, WSP continues with minor works projects, which address aging roofs, emergency power, and HVAC systems.

Projects funded in the previous biennium are proceeding as planned and within budget.

As the current Capital Budget Request was developed, projects were identified that would have the greatest impact on the agency's goals, given the limited fund balances anticipated:

- Make Washington roadways and ferries safe for the efficient transit of people and goods;
- Reduce our citizens' vulnerability to fire, crime, terrorism, and natural hazards;
- Meet the growing need for law enforcement, forensic, investigative and other public services statewide;
- Leverage technology to enhance and sustain business processes, public safety infrastructure and statewide communications.

The WSP has prepared a Capital Budget Request, which is focused on preservation and maintenance backlog reduction. Future biennia will require more for building envelopes, paving, and energy efficiency. Those projects advanced for consideration herein were prioritized based on immediate need for facility preservation, life safety, and maintenance of continuing operations.

Maintenance Backlog:

As the accompanying list shows, the agency has identified millions of dollars in ongoing capital maintenance issues that will require expenditures over the next 10 years. The agency's facility inventory completed in the 2023-2025 biennium has enabled more WSP locations to be assessed and repaired.

The majority of current facilities and infrastructure are being minimally maintained and repairs are prioritized based on life safety and continuity of operations. It is imperative to assess serviceable components at each facility to determine lifecycle replacement estimates and to adequately build those estimates into a comprehensive maintenance reduction plan. It is important to note that deferred maintenance items impact more than just agency readiness, but also impact other rehabilitative and site improvement needs such as energy, accessibility, functionality, and safety.

As WSP continues to work with the Facility Inventory System (FIS) and sustainability reporting, preservation and recapitalization efforts will be discussed in support of future capital requests and related maintenance backlog reduction plans.

Project Priorities:

The projects identified by timing of projected failure are prioritized as follows:

1. Employee Safety
2. Mission Delivery
3. Asset Protection
4. Energy Performance

Greenhouse Gas Summary



Property Management Division

FACILITIES MANAGEMENT SECTION

Greenhouse Gas Strategic Emission Reduction Plan

WASHINGTON STATE
PATROL

8623 Armstrong Rd SW
PO Box 42626
Olympia, WA 98504-2626

Phone: 360-704-5409
Fax: 360-704-5495

Contributors:
Captain Travis Matheson Property Management Division
Mr. Brian Bottoms, Facilities Management Section
Mr. Steve Smeland, Fleet and Supply Sections
Ms. Tanyah Williams, Property Management Division

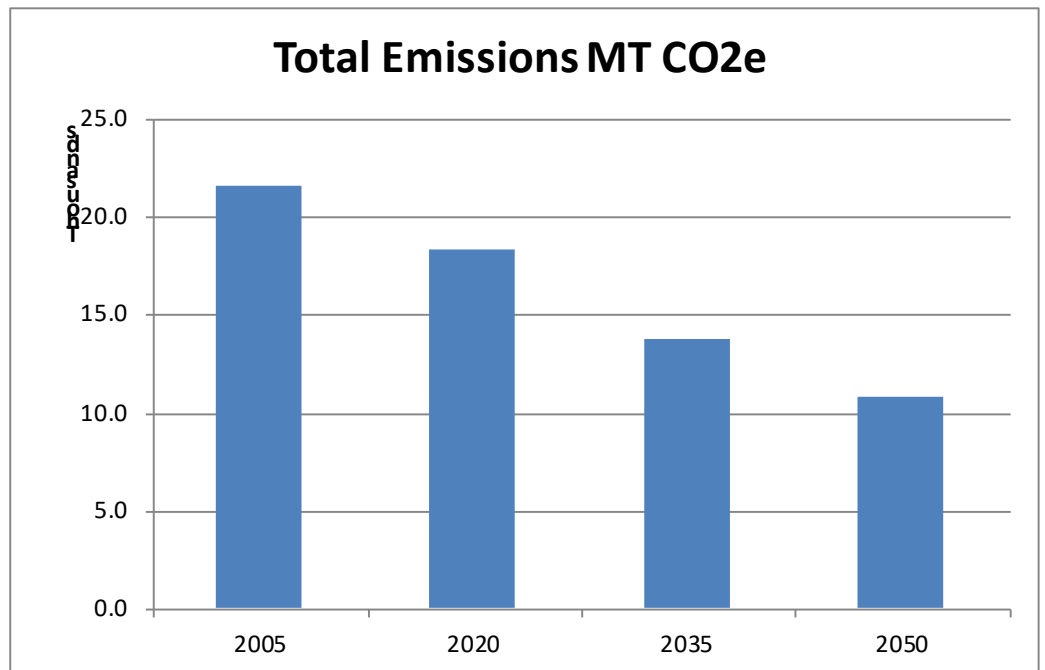


Property Management Division

FACILITIES MANAGEMENT SECTION

Future Emission Targets	Baseline		Projected Targets				
	2005 Total GHG Emissions	%	2020 Target Emissions	2020 Target Reduction	2035 Target GHG	2035 Target Reduction	2050 Target GHG
Purchased Electricity and Steam	7,572	35%	6,383	-1,189	4,787	-2,785	3,755
Stationary Combustion	901	4%	730	-171	547	-354	429
Vehicle Fleet	12,983	61%	11,125	-1,858	8,343	-4,639	6,544
Total Emissions MT CO₂e	21,456	100%	18,238	-3,218	13,678	-7,778	10,728

MT CO₂e (Metric tons carbon dioxide equivalents)





Property Management Division

FACILITIES MANAGEMENT SECTION

Strategic Reduction Plan: Future Emission Targets

There are two categories that represent approximately 91% of the agency's emissions. They are on-road light duty vehicles (81%) and purchased electricity (10%).

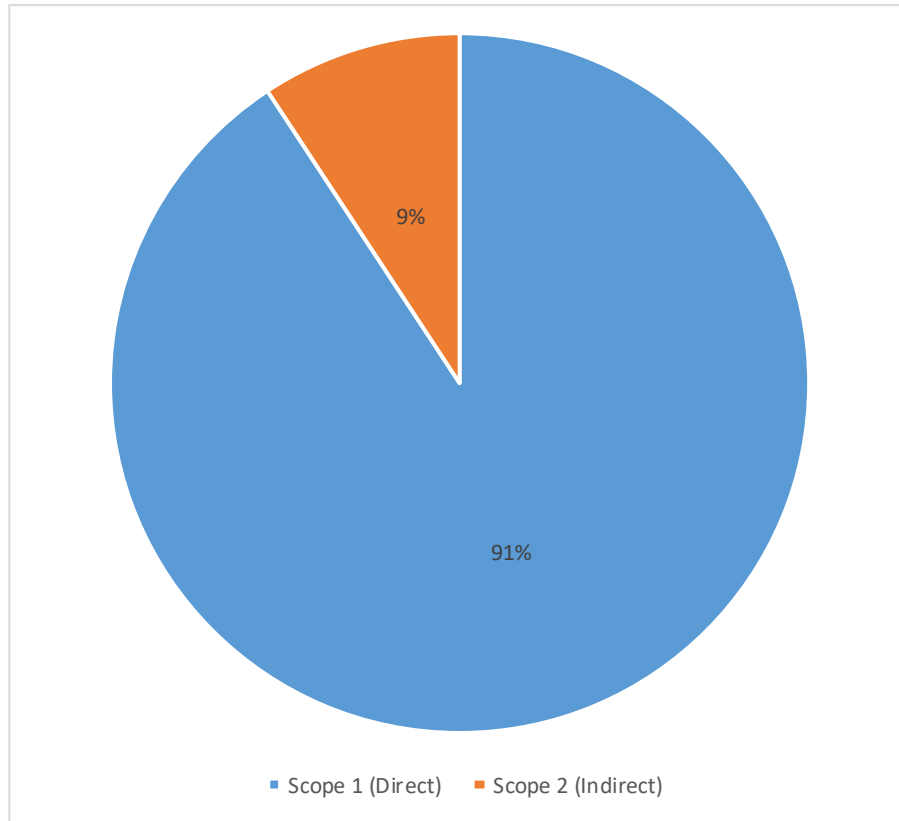
The agency's emissions are largely generated by vehicles representing 17,835 MT CO₂e. WSP has the unique function to have a significant percentage of employees utilize vehicles in the performance of their duties to complete the agency's mission. To address this, WSP has conducted studies and will continue to review opportunities to reduce emissions. These include studies on anti-idle technology, alternative fuel studies, and fuel conservation methods. Currently, WSP is purchasing hybrid vehicles for Sergeants, Lieutenants, captains, and other non-line officers.

Purchased electricity is the next largest component of WSP's emissions, which represents 2,028 MT CO₂e. All other emission sources combined represent 9% of the total MT CO₂e emissions and include stationary combustion, on-road heavy duty vehicles, and employee business travel.



Property Management Division

FACILITIES MANAGEMENT SECTION



GHG Emissions by Scope		
Scope	Total (MT CO₂e)	%
Scope 1 (Direct)	19,863	91%
Scope 2 (Indirect)	2,028	9%

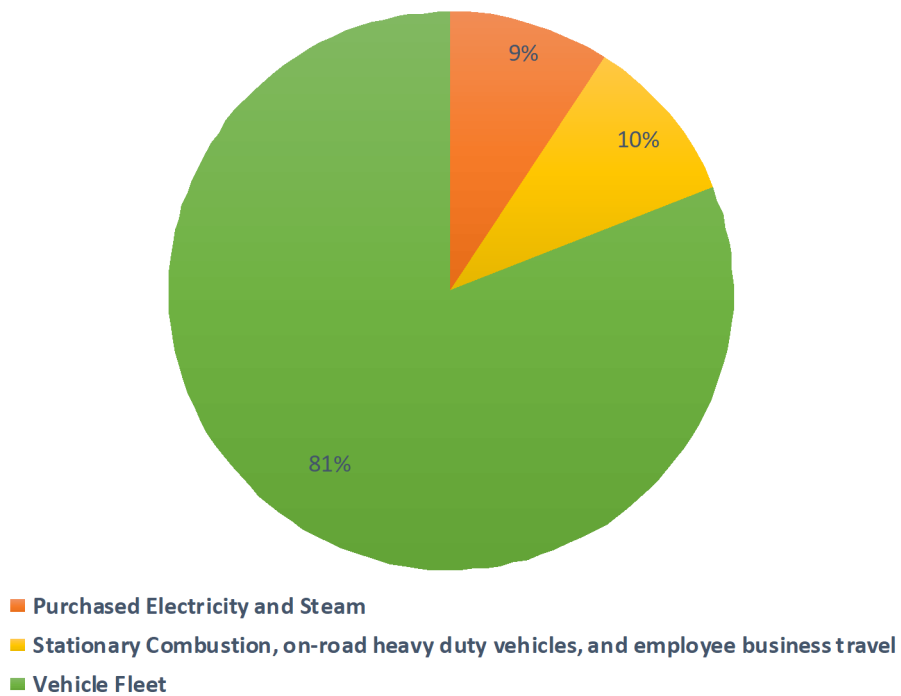


Property Management Division

FACILITIES MANAGEMENT SECTION

Strategic Reduction Plan: 2019 Greenhouse Emissions

Percentage of 2019 Greenhouse Gas Emissions



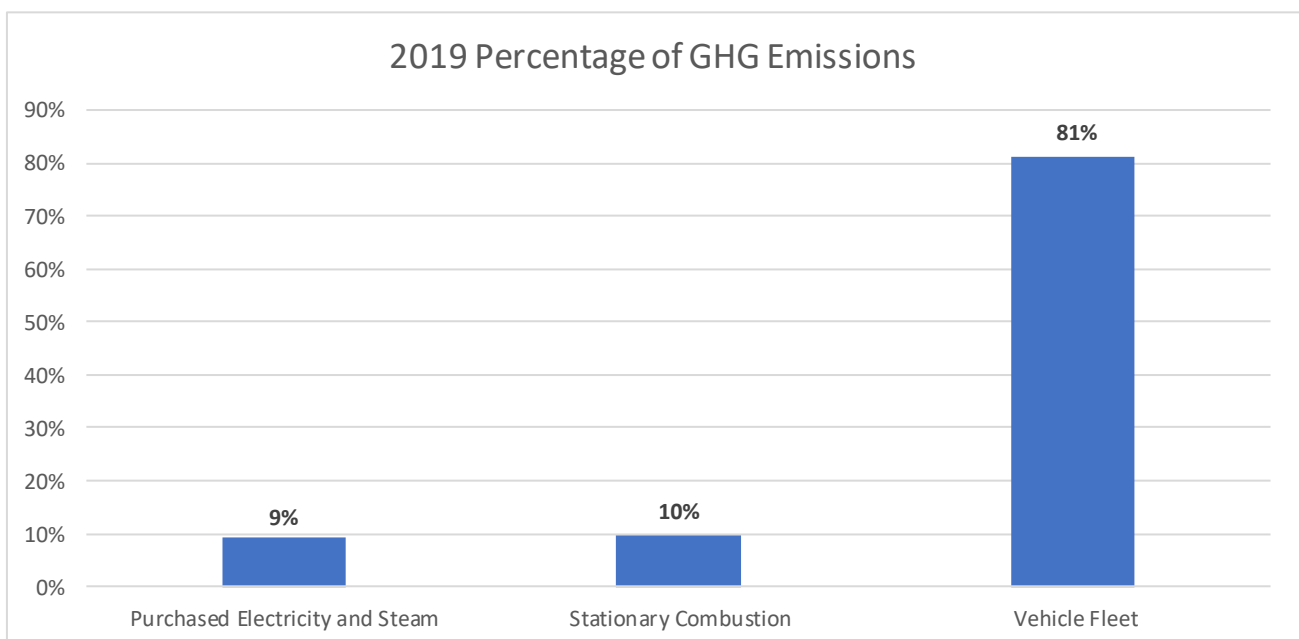


Property Management Division

FACILITIES MANAGEMENT SECTION

Strategic Reduction Plan: 2019 Greenhouse Emissions

Emission Source	2019 Total GHG Emissions	%	2020 Target GHG Emission	2020 Target Reduction**	2020 Target Reduction**
Purchased Electricity and Steam	2,028	9%	6,419	6,419	3654.8
Stationary Combustion	2,153	10%	730	730	(1,450)
Vehicle Fleet	17,835	81%	11,125	11,125	(4,086)
Total Emissions MT CO₂e	22,016	100%	18,274	18,274	(1,881)



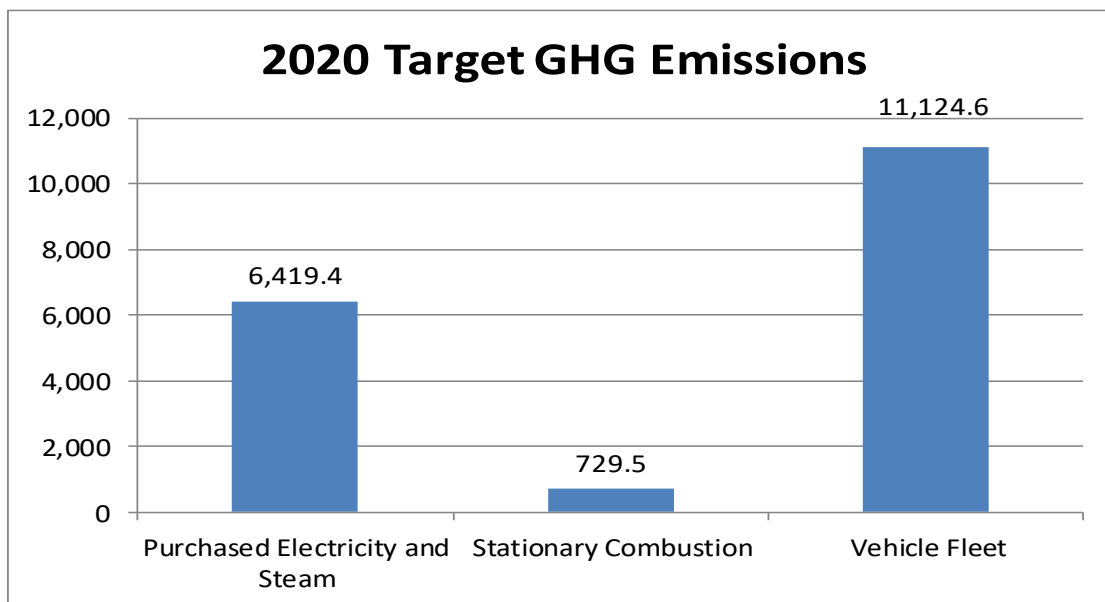


Property Management Division

FACILITIES MANAGEMENT SECTION

Strategic Reduction Plan: 2020 Emissions Target

Emission Source	2019 Total GHG Emissions	%	2020 Target GHG Emission	2020 Target Reduction**	2020 Target Reduction**
Purchased Electricity and Steam	2,028	9%	6,419	6,419	3654.8
Stationary Combustion	2,153	10%	730	730	(1,450)
Vehicle Fleet	17,835	81%	11,125	11,125	(4,086)
Total Emissions MT CO ₂ e	22,016	100%	18,274	18,274	(1,881)





Property Management Division

FACILITIES MANAGEMENT SECTION

Strategic Reduction Plan: Future Greenhouse Emissions

WSP takes sustainability seriously and is committed to monitoring and reducing greenhouse gas emissions.

The strategic reduction plan is based primarily on three emission sources: vehicle emissions (approximately 81%); purchased electricity and steam (approximately 9%); and stationary combustion (approximately 10%).

Some of the measures WSP has implemented to reduce greenhouse gas emissions include:

- Upgrade HVAC systems
- Facility lighting improvements/upgrades
- Improve building operation efficiencies
- Reduce/eliminate vehicles idling while troopers are in the offices
- The agency has acquired a Chevrolet Bolt plug-in electric vehicle which will be used for parking enforcement on the Capital Campus
- Future Sergeant, Lieutenant, Captain and non-line officers, and pursuit vehicles will be hybrid models.

Data Sources:

WSP GHG Combined 2005 rpt.xlsx
WSP GHG 2018 rpt.xlsx

TAB B

Capital Project Requests Related to Preservation

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000052

Project Title: Emergency Preservation & Repair (SPHA)-Statewide

Description

Starting Fiscal Year: 2024
 Project Class: Preservation
 Agency Priority: 1

Project Summary

Continued emergency repairs at WSP locations.

Project Description

Each year, the Washington State Patrol (WSP) experiences unanticipated repairs at its facilities due to aging infrastructures. Most of the agency's facilities operate continuously and are therefore subject to high levels of operational stress. Repairs falling under this heading are necessary to keep facilities operational for public safety. This proposal will allot \$500,000 for use on unplanned repairs at WSP facilities during the 2023-2025 biennium. These funds are utilized to make repairs on HVAC, electrical, roofing and plumbing systems. Facilities of the WSP exist in every Legislative District. The agency provides services to all citizens and enterprises in the state. Within the agency, stakeholders include operating and administrative bureaus. Other state government agencies include: the Office of Financial Management, the Department of Enterprise Services, the Washington State Department of Transportation, and the Department of Licensing. No oppositions from stakeholders is expected. Support will come from citizens and other law enforcement agencies that depend on services provided by the Washington State Patrol. Without this funding, some of the agency's facilities will suffer additional deterioration until funds for repairs are made available. Other facilities may close due to health and safety concerns if an unplanned building or equipment failure results in the need for repair. This project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

- Facility Preservation (Minor Works)
- Health, Safety and Code Requirements (Minor Works)
- Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	3,000,000				500,000
	Total	3,000,000	0	0	0	500,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 4000052

Project Title: Emergency Preservation & Repair (SPHA)-Statewide

Funding

		Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
081-1	WSP Highway Account-State	550,000	600,000	650,000	700,000
	Total	550,000	600,000	650,000	700,000

Operating Impacts

No Operating Impact

Narrative

Capital project management for selected repairs under this heading is provided by agency staff. The cost of administration is included in the operating budget for the Property Management Division.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

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Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

Description

Starting Fiscal Year: 2024
 Project Class: Preservation
 Agency Priority: 2

Project Summary

Roofs at Washington State Patrol facilities require periodic replacement due to age and condition.

Project Description

The agency owns over 230 buildings statewide. Buildings with weather-tight enclosures are needed to support general operations and our communication network. Most roofs have a 20 year service life in their particular application and as such, around six roofs per biennium need to be replaced to maintain reliability and prevent excessive maintenance cost. In compliance with budget instructions, funds are requested to support only those facilities needed to ensure uninterrupted continuation of law enforcement activities.

Periodic roof replacements reduce operating costs associated with regular facility maintenance in addition to the energy savings expected from better insulation installed with most new roofs. Individual estimates for projects in this grouping include (where applicable), consulting costs, possible asbestos abatement, labor and materials, and contingencies that are consistent with a statewide project of this nature.

Within the agency, stakeholders include the Field Operations Bureau, the Property Management Division, and Command Staff. Other state government agencies include the Office of Financial Management and the Department of Enterprise Services. No stakeholder opposition to project continuation is expected. Support will come from citizens and other law enforcement agencies who depend on services provided by the Washington State Patrol statewide.

Without this funding, some of the agency's facilities will suffer additional deterioration until funds for repair are made available. Other facilities may close due to health and safety concerns if an unplanned building or equipment failure results in the need for repair. Approved roof replacements will utilize energy efficient materials to better insulate buildings. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

There will be no impacts associated with this project.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	3,560,000				2,360,000

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

Funding

Total	3,560,000	0	0	0	2,360,000
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Future Fiscal Periods

	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State	300,000	300,000	300,000	300,000
Total	300,000	300,000	300,000	300,000

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProjects

SubProject Number: 30000280

SubProject Title: Continuing Roof Improvements Statewide

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

SubProject Number: 30000280

SubProject Title: Continuing Roof Improvements Statewide

Starting Fiscal Year: 2020

Project Class: Preservation

Agency Priority: 2

Project Summary

Roof improvements statewide

Project Description

The agency owns over 230 buildings statewide. Buildings with weather-tight enclosures are needed to support general operations and the communication network during all times of the year. Most roofs have a 20 year service life in their particular application and as such, anywhere from three to six roofs per biennium need to be replaced to maintain reliability and prevent excessive maintenance cost. Only a fraction of that figure is actually requested. In compliance with budget instructions, funds are requested to support only those facilities needed to ensure uninterrupted continuation of law enforcement activities in all weather conditions.

Periodic roof replacements reduce operating costs associated with regular facility maintenance in addition to the energy savings expected from better insulation installed with most new roofs. Individual estimates for projects in this grouping include (where applicable), consulting costs, possible asbestos abatement, labor and materials, and contingencies that are consistent with a statewide project of this nature.

Within the agency, stakeholders include the Field Operations Bureau, the Property Management Division, and Command Staff. Other state government agencies include the Office of Financial Management and the Department of Enterprise Services. No stakeholder opposition to project continuation is expected. Support will come from citizens and other law enforcement agencies who depend on services provided by the Washington State Patrol statewide.

Without this funding, some of the agency's facilities will suffer additional deterioration until funds for repair are made available. Other facilities may close due to health and safety concerns if an unplanned building or equipment failure results in the need for repair.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

There will be no impacts associated with this project.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

SubProject Number: 30000280

SubProject Title: Continuing Roof Improvements Statewide

<u>Funding</u>		<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
081-1	WSP Highway Account-State	1,200,000				
	Total	1,200,000	0	0	0	0

		<u>Future Fiscal Periods</u>			
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1	WSP Highway Account-State	300,000	300,000	300,000	300,000
	Total	300,000	300,000	300,000	300,000

Operating Impacts

No Operating Impact

Narrative

This work will not have any impacts or changes to facility operations and staffing.

SubProject Number: 40000053

SubProject Title: Yakima District Office Roof Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 2

Project Summary

Completion of the project will not change the use of the facility.

Project Description

This project requires funds for a roof replacement and related repairs to be performed at our District Three Yakima Headquarters. The roof is past its useful life and failing. It is subject to extreme weather conditions including snowfall and heat. This location is a critical hub to the agency's operations and network communications in Asotin, Benton, Columbia, Franklin, Barfield, Walla Walla, and Yakima counties. This request is to replace the aging roof, utilizing energy efficient materials for heat deflection as well as provide PVC roofing materials to minimize water intrusion to prevent additional damage and potential mold issues. WSP would start the project in spring of 2023 for fiscal year 2024. This project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Proviso

None

Location

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

Location

SubProject Number: 40000053

SubProject Title: Yakima District Office Roof Replacement

City: Union Gap

County: Yakima

Legislative District: 015

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

There will be no impacts associated with this project.

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Expenditures</u>		<u>2023-25 Fiscal Period</u>	
			<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
081-1	WSP Highway Account-State	724,000				724,000
	Total	724,000	0	0	0	724,000

		<u>Future Fiscal Periods</u>			
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1	WSP Highway Account-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000057

SubProject Title: Silverlake Detachment Office Roof Replacement

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

SubProject Number: 40000057

SubProject Title: Silverlake Detachment Office Roof Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 2

Project Summary

This request is to replace the current roof that is past its useful life. The plan is to remove the existing metal roof and replace damaged plywood.

Project Description

This project request funds for a roof replacement and related repairs to be performed at the Silverlake Detachment Office. This roof is past its useful life and contains damaged plywood underneath the existing roof. Failure to replace will create additional damage and potential mold issues. The request is to install new concealed fastener metal roofing over new insulated panels, new gutters and down spouts and install new metal wall panels. Energy efficient roofing materials will be used in this replacement project. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Everett

County: Snohomish

Legislative District: 021

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

There will be no impacts associated with this project.

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
081-1	WSP Highway Account-State	179,000				179,000
	Total	179,000	0	0	0	179,000

Future Fiscal Periods

	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

SubProject Number: 40000057

SubProject Title: Silverlake Detachment Office Roof Replacement

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000058

SubProject Title: Capitol Peak Communicaiton Site Roof Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 2

Project Summary

Replace current roof at the Capitol Peak Communication site as the roof is at the end of its useful life.

Project Description

This project is to request funds for a roof replacement and related repairs to be performed at the Capitol Peak communication site. The current membrane roof is over 30 year old and at the end of its useful life. Failure to replace this roof will create damage to the structure and potential mold issues. This request is to replace the failing roof with a new 30 year PVC roof using energy efficient materials and supplies. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Olympia

County: Thurston

Legislative District: 022

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

There will be no impacts associated with this project.

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Expenditures</u>		<u>2023-25 Fiscal Period</u>	
			<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reapprops</u>	<u>New Approps</u>
081-1	WSP Highway Account-State	226,000				226,000
	Total	226,000	0	0	0	226,000

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

SubProject Number: 40000058

SubProject Title: Capitol Peak Communicaiton Site Roof Replacement

	Future Fiscal Periods			
	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

This work will not have any impacts or changes to facility operations and staffing.

SubProject Number: 40000059

SubProject Title: Squak Mountain Communication Site Roof Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 2

Project Summary

Replace the Squak Mountain Communication site as the roof is past its useful life.

Project Description

This project request is for funds to replace the existing 30 year old roof and related repairs to be performed at the Squak Mountain Communication site. The current roof is exposed to all elements and is failing. Failure to replace this roof will create additional damage and mold. The requested funds are to replace damaged plywood and install a new 30 year energy efficient PVC roof system. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Issaquah

County: King

Legislative District: 005

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

There will be no impacts associated with this project.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

SubProject Number: 40000059

SubProject Title: Squak Mountain Communication Site Roof Replacement

<u>Funding</u>		<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Approps</u>
081-1	WSP Highway Account-State	316,000				316,000
	Total	316,000	0	0	0	316,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000006

SubProject Title: Shelton Detachment - New Roof

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 2

Project Summary

Replace current roof at Shelton Detachment Office at the end of its useful life with a new metal roof system.

Project Description

This project requests funds for a roof replacement and related repairs to be performed on our Shelton Detachment Office. The current asphalt roof is over 30 years old and has experienced numerous leaks over the past few years. Failure to replace this roof will create additional damage and potential mold issues. This work would replace a failing roof system with a new metal roof that has a 50 year projected life. WSP would like to start the project in spring of 2024.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Location

City: Shelton

County: Mason

Legislative District: 035

Project Type

Facility Preservation (Minor Works)

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

SubProject Number: 40000006

SubProject Title: Shelton Detachment - New Roof

Growth Management impacts

There will be no impacts associated with this project.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriates	New Appropriates
081-1	WSP Highway Account-State	305,000				305,000
	Total	305,000	0	0	0	305,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State	0	0	0	0	
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

This work will not have any impacts or changes to facility operations and staffing.

SubProject Number: 40000004

SubProject Title: Morton Detachment Roof Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 2

Project Summary

Replace current roof at Morton Detachment Office at the end of its useful life with a new roof system.

Project Description

This project requests funds for a roof replacement and related repairs to be performed on our Morton Detachment Office. The current asphalt roof is 30 years old and has experienced numerous leaks over the past few years. Failure to replace this roof will create additional damage and potential mold issues. This work would replace a failing roof system with a new metal roof that has a 50 year projected life. WSP would like to start the project in spring of 2024.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Location

City: Morton

County: Lewis

Legislative District: 020

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

Project Type

SubProject Number: 40000004

SubProject Title: Morton Detachment Roof Replacement

Project Type

Facility Preservation (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
		<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reapprops</u>	<u>New Approps</u>
081-1	WSP Highway Account-State	169,000				169,000
	Total	169,000	0	0	0	169,000

Future Fiscal Periods

	<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1 WSP Highway Account-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000049

SubProject Title: Clemans Roof Replacement

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

SubProject Number: 40000049

SubProject Title: Clemans Roof Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 2

Project Summary

Replace current roof at Clemans communication site at the end of its useful life with a new PVC roof system.

Project Description

This project requests funds for a roof replacement and related repairs to be performed on our Clemans communication site. The current membrane roof is over 30 years old and has experienced numerous leaks over the past few years. Failure to replace this roof will create additional damage and potential mold issues. This work would replace a failing roof system with a new 30 year PVC roof system. WSP would like to start the project in spring of 2024.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Location

City: Naches

County: Yakima

Legislative District: 014

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	132,000				132,000
	Total	132,000	0	0	0	132,000
		Future Fiscal Periods				
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

This work will not have any impacts or changes to facility operations and staffing.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

SubProject Number: 40000012

SubProject Title: Grass Mt. Comm. Site - Roof Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 2

Project Summary

Replace current roof at Grass Mountain communication site at the end of its useful life with a new PVC roof system.

Project Description

This project requests funds for a roof replacement and related repairs to be performed on our Grass Mountain communication site. The current membrane roof is over 30 years old and has experienced numerous leaks over the past few years. Failure to replace this roof will create additional damage and potential mold issues. This work would replace a failing roof system with a new 30 year PVC roof system. WSP would like to start the project in spring of 2024.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Proviso

None

Location

City: Enumclaw

County: King

Legislative District: 031

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

No impact.

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
081-1	WSP Highway Account-State	309,000				309,000
	Total	309,000	0	0	0	309,000

Future Fiscal Periods

	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000135

Project Title: Continuing Roof Repair Projects

SubProjects

SubProject Number: 40000012

SubProject Title: Grass Mt. Comm. Site - Roof Replacement

Narrative

This work will not have any impacts or changes to facility operations and staffing.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000109

Project Title: Mission Generator Replacement

Description

Starting Fiscal Year: 2024
 Project Class: Preservation
 Agency Priority: 3

Project Summary

The auxiliary electric generators and uninterruptable power supplies (UPS) located at Washington State Patrol facilities around the state require periodic replacement due to age and condition. Decision factors include, ensuring continuity for emergency communications in all areas of the state, and the repair costs for these units currently exceed the replacement cost.

Project Description

The Washington State Patrol maintains 84 emergency power installations throughout the state. These generators and UPS units are needed to support 911 emergency call centers, law enforcement operations, and the communication network during times of public power interruption. All of the equipment at the proposed replacement sites are over 25 years old. Much of the hardware associated with the proposed work is no longer supported by its respective manufacturer. Both age and historical maintenance cost are factored into the replacement decision.

The facilities are situated in Legislative Districts throughout the state. Within the agency, stakeholders include; the Field Operations Bureau, the Property Management Division, and Command Staff. Other state government agencies include the Washington State Department of Transportation, the Department of Natural Resources, Fish and Wildlife, Parks, other agencies, and private sector entities which share certain aspects of the Washington State Patrol communication network. No stakeholder opposition is expected. Support will come from citizens and other law enforcement agencies who depend on services provided by the Washington State Patrol.

Without this funding, some emergency power supply equipment may fail unexpectedly, and leave sections of the state without public safety communications.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000109

Project Title: Mission Generator Replacement

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
081-1	WSP Highway Account-State	903,000				503,000
	Total	903,000	0	0	0	503,000

Acct Code	Account Title	Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
081-1	WSP Highway Account-State	100,000	100,000	100,000	100,000
	Total	100,000	100,000	100,000	100,000

Operating Impacts

No Operating Impact

Narrative

Generator replacement is managed by existing employees of the agency's Property Management Division.

SubProjects

SubProject Number: 40000048

SubProject Title: Communication Site Generator Replacement

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000109

Project Title: Mission Generator Replacement

SubProjects

SubProject Number: 40000048

SubProject Title: Communication Site Generator Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 3

Project Summary

The Washington State Patrol maintains 68 communication sites throughout the state. These generators and UPS units need to be replaced at the end of their useful life.

Project Description

The Washington State Patrol maintains 68 communication sites throughout the state. These generators and UPS units are needed for law enforcement operations and officer safety during times of public power interruption. All of the equipment at the proposed replacement sites is over 25 years old. Much of the hardware associated with the proposed work is no longer supported by its respective manufacturer. Both age and historical maintenance cost are factored into the replacement decision.

The facilities are situated in Legislative Districts throughout the state. Within the agency, stakeholders include; the Field Operations Bureau, the Property Management Division, and Command Staff. Other state government agencies include the Washington State Department of Transportation, the Department of Natural Resources, Fish and Wildlife, Parks, other agencies, and private sector entities which share certain aspects of the Washington State Patrol communication network. No stakeholder opposition is expected. Support will come from citizens and other law enforcement agencies who depend on services provided by the Washington State Patrol.

Without this funding, some emergency power supply equipment may fail unexpectedly, and leave sections of the state unavailable to law enforcement and other public safety communications.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Proviso

None

Location

City: Shelton

County: Mason

Legislative District: 035

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	400,000				
Total		400,000	0	0	0	0

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000109

Project Title: Mission Generator Replacement

SubProjects

SubProject Number: 40000048

SubProject Title: Communication Site Generator Replacement

		Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
081-1	WSP Highway Account-State	100,000	100,000	100,000	100,000
	Total	100,000	100,000	100,000	100,000

Operating Impacts

No Operating Impact

Narrative

Periodic electrical system upgrades and replacements will reduce operating costs associated with regular facility maintenance.

SubProject Number: 30000181

SubProject Title: Shelton Academy Electrical System Upgrade

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 3

Project Summary

Upgrade the electrical system at the Shelton Training Academy to meet current electrical codes.

Project Description

The WSP Shelton Academy's emergency generator provides back up power in the event of a power outage at the Shelton Academy. The generator is obsolete, overloaded and does not meet the current electrical codes. Recurring expenditures are required to keep the infrastructure safe and with sufficient capacity to support the current operations. Requested funds will be used to bring current electrical systems up to code and provide a safe electrical system for the academy's needs. Every biennial delay impacts the agency by putting equipment at risk of failure resulting in operational impacts for the Academy and programs occurring during power outages. Equipment and system failures could also result in loss of service and interrupt electrical systems. This proposed system will provide energy and emission savings over the current system, thereby decreasing the greenhouse gas emissions from this facility. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Shelton

County: Mason

Legislative District: 035

Project Type

Infrastructure Preservation (Minor Works)

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000109

Project Title: Mission Generator Replacement

SubProjects

SubProject Number: 30000181

SubProject Title: Shelton Academy Electrical System Upgrade

Growth Management impacts

No impact.

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Expenditures</u>		<u>2023-25 Fiscal Period</u>	
			<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriates</u>	<u>New Appropriates</u>
081-1	WSP Highway Account-State	383,000				383,000
	Total	383,000	0	0	0	383,000

		<u>Future Fiscal Periods</u>			
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1	WSP Highway Account-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Periodic electrical system upgrades and replacements will reduce operating costs associated with regular facility maintenance.

SubProject Number: 40000054

SubProject Title: Kalama Communicaiton Site Auxilary Power Unit

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000109

Project Title: Mission Generator Replacement

SubProjects

SubProject Number: 40000054

SubProject Title: Kalama Communicaiton Site Auxiliary Power Unit

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 3

Project Summary

The Auxiliary unit and related equipment located at the Kalama Communication tower is obsolete and needs to be replaced.

Project Description

The Kalama Communication site located in Cowlitz County. The facility is in good function condition. The site contains a back up generator to maintain constant communication by radio and data systems. The generator is obsolete, overloaded and has exceeded its operational life. Requested funds will be used install a new 15 KW backup generator system providing clean, consistent reliable power. Delaying this impacts the agency by putting radio and data system communication at risk as well as assisting and response to the public. Assurance of continuous, clean power, electricity enables the WSP to maintain services, operations and functions. This proposed system will provide energy and emission savings over the current system, thereby decreasing the greenhouse gas emissions from this facility. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Kalama

County: Cowlitz

Legislative District: 020

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	60,000				60,000
	Total	60,000	0	0	0	60,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State					
	Total	0	0	0	0	

Operating Impacts

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000109

Project Title: Mission Generator Replacement

SubProjects

SubProject Number: 40000054

SubProject Title: Kalama Communicaiton Site Auxiliary Power Unit

No Operating Impact

Narrative

Periodic electrical system upgrades and replacements will reduce operating costs associated with regular facility maintenance.

SubProject Number: 40000055

SubProject Title: Beezley Hill Communication Site Auxiliary Power Unit

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 3

Project Summary

The auxiliary unit and related equipment located at the Beezley Communication tower are obsolete and needs to be replaced.

Project Description

The Beezley Communication site located in Grant County. The facility is in good function condition. The site contains a back up generator to maintain constant communication by radio and data systems. The generator is obsolete, overloaded and has exceeded its operational life. Requested funds will be used install a new 20 KW backup generator system providing clean, consistent reliable power. Delaying this impacts the agency by putting radio and data system communication at risk as well as assisting and response to the public. Assurance of continuous, clean power, electricity enables the WSP to maintain services, operations and functions. This proposed system will provide energy and emission savings over the current system, thereby decreasing the greenhouse gas emissions from this facility. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Location

City: Ephrata

County: Grant

Legislative District: 013

Project Type

Facility Preservation (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	60,000				60,000
Total		60,000	0	0	0	60,000

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000109

Project Title: Mission Generator Replacement

SubProjects

SubProject Number: 40000055

SubProject Title: Beezley Hill Communication Site Auxiliary Power Unit

	Future Fiscal Periods			
	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Periodic electrical system upgrades and replacements will reduce operating costs associated with regular facility maintenance.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000119

Project Title: Building Exterior Envelope Preservation

Description

Starting Fiscal Year: 2024
 Project Class: Preservation
 Agency Priority: 4

Project Summary

Facility and infrastructure asset protection and preservation to include painting, Concrete Masonry Unit (CMU) joint repair, and energy efficient windows.

Project Description

Building envelopes of agency District & Detachment offices around the state, some as old as 1961, are at risk of failing without needed repairs or replacement. This work includes CMU crack and joint repairs, painting and installation of thermally efficient window and door systems. These improvements are necessary to protect the infrastructure of these facilities and to maintain a serviceable and operational environment to meet the agency goals and needs. This work will also improve the energy efficiency (Greenhouse Gas Reduction) of the project facilities.

The proposed work will make necessary structural, seam, joint, and crack repairs. Seal and protect the outer skin of the structure and install new energy efficient thermal window and door systems. Without this funding, these facilities will suffer additional deterioration until funds for repairs are made available.

Alternatives would be to continue to patch areas of joint failure until adequate funding for complete improvements is approved. This maintenance approach is rapidly reaching the point of complete failure at some of these sites, which will result in the closure of the facility due to health and safety concerns.

No other funding has been designated for this work.

The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

- Facility Preservation (Minor Works)
- Health, Safety and Code Requirements (Minor Works)
- Infrastructure Preservation (Minor Works)

Growth Management impacts

No impact.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	1,455,000				705,000

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000119

Project Title: Building Exterior Envelope Preservation

Funding

Total	1,455,000	0	0	0	705,000
	Future Fiscal Periods				
	2025-27	2027-29	2029-31	2031-33	
081-1 WSP Highway Account-State	250,000	250,000	250,000		
Total	250,000	250,000	250,000	0	

Operating Impacts

No Operating Impact

Narrative

A small positive impact on operating costs might be realized by the reduction of expenditures to replace supplies and equipment damaged by weather related water intrusions into the subject buildings. The potential for mold and mold-related complaints will decrease. An energy efficiency increase will be realized because of the application of better insulating materials during construction.

SubProjects

SubProject Number: 30000279

SubProject Title: Exterior Preservation, Window Replacement - Ongoing Improvements

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000119

Project Title: Building Exterior Envelope Preservation

SubProjects

SubProject Number: 30000279

SubProject Title: Exterior Preservation, Window Replacement - Ongoing Improvements

Starting Fiscal Year: 2023

Project Class: Preservation

Agency Priority: 4

Project Summary

Exterior preservation and window replacement at WSP locations statewide.

Project Description

Many exterior wall systems at our facilities are at the end of their useful life and have started to fail. WSP plans to request funds in future biennial to address this need. Once failures occur additional damage is created and repair costs increase. In compliance with budget instructions, funds are requested to support only those facilities needed to ensure uninterrupted continuation of law enforcement activities.

Without this funding, these facilities will suffer additional deterioration until funds for repairs are made available. Facilities of the Washington State Patrol exist in every Legislative District. The agency provides services to all community members and enterprises in the state. Within the agency, stakeholders include operating and administrative bureaus. Other state government agencies include; the Office of Financial Management, the Department of Enterprise Services, the Washington State Department of Transportation, and the Department of Licensing. No opposition from stakeholders is expected. Support will come from citizens and other law enforcement agencies that depend on services provided by the Washington State Patrol.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
081-1	WSP Highway Account-State	750,000				
	Total	750,000	0	0	0	0

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000119

Project Title: Building Exterior Envelope Preservation

SubProjects

SubProject Number: 30000279

SubProject Title: Exterior Preservation, Window Replacement - Ongoing Improvements

	Future Fiscal Periods			
	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State	250,000	250,000	250,000	
Total	250,000	250,000	250,000	0

Operating Impacts

No Operating Impact

Narrative

This work will not have any impacts or changes to facility operations or staffing.

SubProject Number: 40000056

SubProject Title: Exterior Preservation - Marysville District Office

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 4

Project Summary

Paint and repair the exterior surfaces of the district office and inspection building.

Project Description

The Marysville District Office was built in 1993. The District Office is considered a campus as it includes a Vehicle Identification Number (VIN) building. The campus includes a number of WSP staff that include: Field Operations, Civil Service, Crime Lab, and Executive Staff. Over time and due to the outside elements, the buildings on this are degrading. Tile around the main building is failing allowing water penetration to the walls. The building also has exposed wood posts, cracks, and tile surfaces that are degrading. Without funding, this Project will cause failure of the support posts and allow water to continue to penetrate in the walls causing additional damage and possible mold. This request is to remove rotted decorative wooden trellis features, remove ceramic wall tiles that are falling, clean and repair all surfaces, seal and stain wooden structures, seal all penetrations/cracks and paint all surfaces. This request will also allow to reseal all windows, door openings and wall penetrations, clean and repaint. Work will result in creating a weather tight campus protecting the infrastructures from further degradation. This project will provide significant energy efficiencies. The intent is to start the design phase in August, 2023 and complete the project by May, 2025. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Marysville

County: Snohomish

Legislative District: 038

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000119

Project Title: Building Exterior Envelope Preservation

SubProjects

Project Type

SubProject Number: 40000056

SubProject Title: Exterior Preservation - Marysville District Office

Project Type

- Facility Preservation (Minor Works)
- Health, Safety and Code Requirements (Minor Works)
- Infrastructure Preservation (Minor Works)

Growth Management impacts

No impact.

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Expenditures</u>		<u>2023-25 Fiscal Period</u>	
			<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
081-1	WSP Highway Account-State	571,000				571,000
	Total	571,000	0	0	0	571,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State	0	0	0	0	
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000060

SubProject Title: Steptoe Butte Communicaiton Site Exterior Wall Covering

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000119

Project Title: Building Exterior Envelope Preservation

SubProjects

SubProject Number: 40000060

SubProject Title: Steptoe Butte Communicaiton Site Exterior Wall Covering

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 4

Project Summary

Replace damaged exterior wall covering.

Project Description

The Steptoe Butte Communication Site is located in Whitman County, near Colfax. Communication sites allow the agency to maintain constant communication by radio and data systems within Whitman county. The exterior wall panels of this site are failing requiring replacement or the protection of the equipment housed within the site. If equipment is exposed to the elements, this could potentially cause a disruption in communication in that area. Requested funds would be used to repair and replace the exterior wall covering, install a weather barrier over the wall sections, install new metal panels over previous panel areas, reseal all door openings an any other wall panel areas, repaint all remaining surfaces. The project is consistent with the agency’s goal to “Sustain and Enhance Agency Infrastructure and Business Processes” and is supported in the Capital Project section of the Agency’s Strategic Plan.

Proviso

None

Location

City: Colfax

County: Whitman

Legislative District: 009

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

No impact.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
081-1	WSP Highway Account-State	134,000				134,000
	Total	134,000	0	0	0	134,000

Future Fiscal Periods

	Future Fiscal Periods			
	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State				
Total	0	0	0	0

Operating Impacts

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000119

Project Title: Building Exterior Envelope Preservation

SubProjects

SubProject Number: 40000060

SubProject Title: Steptoe Butte Communicaiton Site Exterior Wall Covering

No Operating Impact

Narrative

This work will not have any impacts or changes to facility operations or staffing.

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000168

Project Title: HVAC Replacement

Description

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 5

Project Summary

The HVAC units located at nearly all Washington State Patrol facilities require periodic replacement due to age, service conditions, load, and other factors.

Project Description

Periodic HVAC system upgrades and replacements will reduce operating costs associated with regular facility maintenance in addition to the energy savings expected from such projects.

The Washington State Patrol maintains over 200 HVAC units throughout the state. These systems are needed to support general operations and the communication network. They are located at district offices, detachments, laboratories, training academies, radio sites, and at other locations where critical activities are performed. HVAC systems and associated controls have a 20 year recommended useful life in this application and as such, anywhere from twenty to thirty units per biennium need to be replaced to maintain reliability and prevent excessive maintenance costs. The actual replacement rate by necessity is much lower than that.

The unit cost of replacement equipment for smaller operations and communication sites varies between \$5,000 and \$75,000, with district offices and crime laboratories requiring a much greater investment. This ongoing project recognizes that reality.

Without this funding, some agency facilities may become unusable during extreme weather conditions due to unexpected equipment failure. In addition, HVAC equipment at some facilities play an important role in keeping sensitive electronic communication equipment operating at acceptable temperatures. Without proper cooling, said equipment can and does fail, resulting in expensive replacement and loss of law enforcement and other public safety communications.

Subject facilities are situated in Legislative Districts throughout the state. Other state government agencies affected include: the Washington State Department of Transportation, the Department of Natural Resources, Fish and Wildlife, Parks, and other agencies, and private sector entities which share certain aspects of the Washington State Patrol communication network. No stakeholder opposition is expected. Support will come from citizens and other law enforcement agencies who depend on services provided by the Washington State Patrol.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000168

Project Title: HVAC Replacement

Description

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	3,289,000				2,189,000
	Total	3,289,000	0	0	0	2,189,000

Future Fiscal Periods

Acct Code	Account Title	2025-27	2027-29	2029-31	2031-33
		081-1	WSP Highway Account-State	200,000	300,000
	Total	200,000	300,000	300,000	300,000

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility; however, HVAC system upgrades and replacements will reduce operating costs associated with regular facility maintenance, in addition to the energy savings expected from such projects.

SubProjects

SubProject Number: 40000030

SubProject Title: Energy Efficiency Project Statewide

225 - Washington State Patrol
 Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000168

Project Title: HVAC Replacement

SubProjects

SubProject Number: 40000030

SubProject Title: Energy Efficiency Project Statewide

Starting Fiscal Year: 2027

Project Class: Preservation

Agency Priority: 5

Project Summary

Periodic replacement due to age, service conditions, load, and other factors.

Project Description

HVAC system upgrades and replacements will increase energy efficiency plus reduce operating costs associated with regular facility maintenance.

The Washington State Patrol maintains over 200 HVAC units throughout the state. These systems are needed to support general operations and the communication network. They are located at district offices, detachments, laboratories, training academies, radio sites, and at other locations where critical activities are performed. HVAC systems and associated controls have a 20 year recommended useful life in this application and as such, anywhere from twenty to thirty units per biennium need to be replaced to maintain reliability and prevent excessive maintenance costs. The actual replacement rate by necessity is much lower than that.

The unit cost of replacement equipment for smaller operations and communication sites varies between \$5,000 and \$75,000, with district offices and crime laboratories requiring a much greater investment. This ongoing project recognizes that reality.

Without this funding, some agency facilities may become unusable during extreme weather conditions due to unexpected equipment failure. In addition, HVAC equipment at some facilities play an important role in keeping sensitive electronic communication equipment operating at acceptable temperatures. Without proper cooling, said equipment can and does fail, resulting in expensive replacement and loss of law enforcement and other public safety communications.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000168

Project Title: HVAC Replacement

SubProjects

SubProject Number: 40000030

SubProject Title: Energy Efficiency Project Statewide

<u>Funding</u>		<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
081-1	WSP Highway Account-State	1,100,000				
	Total	1,100,000	0	0	0	0

		<u>Future Fiscal Periods</u>			
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1	WSP Highway Account-State	200,000	300,000	300,000	300,000
	Total	200,000	300,000	300,000	300,000

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility; however, HVAC system upgrades and replacements will reduce operating costs associated with regular facility maintenance, in addition to the energy savings expected from such projects.

SubProject Number: 30000191

SubProject Title: HVAC Replacement Predesign - Tacoma District Office

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 5

Project Summary

The HVAC system located at the Tacoma District Office has exceeded its operational and life expectancy.

Project Description

The HVAC units at the Tacoma District Office are over 25 years old and have performed beyond their useful life. These units are costly to maintain and unreliable. According to the contract service provider, expected repair costs exceed the value of the current unit.

This request is to provide funding to replace the current units with new energy efficient ones that will help us meet our GHG Reduction Plan as well as provide reliable conditioned air to staff. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Proviso

None

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000168

Project Title: HVAC Replacement

SubProjects

Location

SubProject Number: 30000191

SubProject Title: HVAC Replacement Predesign - Tacoma District Office

Location

City: Unincorporated

County: Pierce

Legislative District: 025

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
		<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
081-1	WSP Highway Account-State	40,000				40,000
	Total	40,000	0	0	0	40,000

Future Fiscal Periods

	<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1 WSP Highway Account-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility; however, HVAC system upgrades and replacements will reduce operating costs associated with regular facility maintenance, in addition to the energy savings expected from such projects.

SubProject Number: 40000061

SubProject Title: Tacoma VIN HVAC System Upgrade

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000168

Project Title: HVAC Replacement

SubProjects

SubProject Number: 40000061

SubProject Title: Tacoma VIN HVAC System Upgrade

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 5

Project Summary

The HVAC system located at the Tacoma Vehicle Identification Number Section has exceeded its life expectancy.

Project Description

The HVAC unit at the Tacoma Vehicle Identification Number Section is over 25 years old and is past its useful life. According to the contracted service provider, the current unit The request is to provide funding to upgrade the unit with a new energy efficient one that will help reduce our energy consumption and meet the reduction of Greenhouse Gas emissions. This project is consistent with the agency go to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Proviso

None

Location

City: Tacoma

County: Pierce

Legislative District: 029

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reapprops	New Approps
081-1	WSP Highway Account-State	270,000				270,000
	Total	270,000	0	0	0	270,000

		Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
081-1	WSP Highway Account-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000168

Project Title: HVAC Replacement

SubProjects

SubProject Number: 40000061

SubProject Title: Tacoma VIN HVAC System Upgrade

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000062

SubProject Title: Property Management Division - Fleet Section HVAC System Upgrade

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 5

Project Summary

The HVAC unit at the Property Management Division Complex - Fleet Section is past its useful life.

Project Description

The Property Management Complex consists of three buildings. The Facilities Section, The Supply Section and the Fleet Section. All three building were constructed at the same time over 25 years ago. The HVAC unit in the Facilities and Supply Sections failed last year. With the Fleet Section being the same age we anticipate the system to fail at any time. This request is to provide funding to replace the HVAC unit at the Fleet Section. This replacement unit will help improve the energy efficiency. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Proviso

None

Location

City: Tumwater

County: Thurston

Legislative District: 022

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropr
081-1	WSP Highway Account-State	68,000				68,000
	Total	68,000	0	0	0	68,000

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000168

Project Title: HVAC Replacement

SubProjects

SubProject Number: 40000062

SubProject Title: Property Management Division - Fleet Section HVAC System Upgrade

	Future Fiscal Periods			
	<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1 WSP Highway Account-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000063

SubProject Title: Shelton Academy HVAC System Improvements

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 5

Project Summary

HVAC system replacements to the Shelton Academy Administration building and classroom buildings.

Project Description

The WSP Shelton Training Academy was built in 1969. It administers training programs to WSP employees as well as provides training to other law enforcement agencies. The HVAC units within the Administration building and three classrooms are past their useful life. Routine maintenance and repairs are becoming costly. This funding request is to replace the HVAC units with more updated energy efficient units within these facilities on campus. Upgrading these units will help the agency's goals in reducing greenhouse gas emissions. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Location

City: Shelton

County: Mason

Legislative District: 035

Project Type

Facility Preservation (Minor Works)

Health, Safety and Code Requirements (Minor Works)

Infrastructure Preservation (Minor Works)

225 - Washington State Patrol
 Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000168

Project Title: HVAC Replacement

SubProjects

SubProject Number: 40000063

SubProject Title: Shelton Academy HVAC System Improvements

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriates	New Appropriates
081-1	WSP Highway Account-State	1,811,000				1,811,000
	Total	1,811,000	0	0	0	1,811,000

Future Fiscal Periods

Acct Code	Account Title	2025-27	2027-29	2029-31	2031-33
081-1	WSP Highway Account-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000088

Project Title: Pavement Preservation

Description

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 6

Project Summary

Driveways and parking areas at many Washington State Patrol facilities are in need of repair or replacement. Pavement preservation is an ongoing need for WSP facility preservation.

Project Description

WSP facility pavement and drainage repair, restoration, or revision statewide. This request is a continuation of a similar request advanced in the previous biennium and reflects proposed allotments into the future.

The facilities lie in virtually all legislative districts. Within the agency, stakeholders include the Field Operations Bureau, the Property Management Division, and Command Staff. Other state government agencies include the Office of Financial Management and the Department of Enterprise Services. No stakeholder opposition is expected. Support will come from citizens and other law enforcement agencies who depend on services provided by the Washington State Patrol.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Facility Preservation (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

No Impact

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	2,157,000				1,157,000
	Total	2,157,000	0	0	0	1,157,000
Future Fiscal Periods						
		2025-27	2027-29	2029-31	2031-33	
081-1	WSP Highway Account-State	250,000	250,000	250,000	250,000	
	Total	250,000	250,000	250,000	250,000	

Operating Impacts

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000088

Project Title: Pavement Preservation

Operating Impacts

No Operating Impact

Narrative

See subprojects.

SubProjects

SubProject Number: 30000118

SubProject Title: Statewide Pavement Preservation & Repair

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 6

Project Summary

Driveways and parking areas at many Washington State Patrol facilities are in need of repair or replacement. Often full resolution requires drainage improvements as well. Pavement preservation is an ongoing need.

Project Description

WSP facility pavement and drainage repair, restoration, or revision statewide.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Facility Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	1,000,000				
	Total	1,000,000	0	0	0	0

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000088

Project Title: Pavement Preservation

SubProjects

SubProject Number: 30000118

SubProject Title: Statewide Pavement Preservation & Repair

		Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
081-1	WSP Highway Account-State	250,000	250,000	250,000	250,000
	Total	250,000	250,000	250,000	250,000

Operating Impacts

No Operating Impact

SubProject Number: 40000064

SubProject Title: Shelton Academy Skid Pan Refresh and Seal

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 6

Project Summary

Academy Skid Pan Refresh and seal.

Project Description

The Washington State Patrol's Shelton Academy has been recognized nationally for its Emergency Vehicle Operators Training Program, which is used by law enforcement agencies throughout Washington State. This course consists of an Emergency Vehicle Operations Course (EVOC) which utilizes a 40,000 square feet concrete skid pan. The skid pan was re-constructed in 2018. At that time, the concrete was polished and a densifier was added to the surface to create a low friction-coefficient and durable wear surface. Months after re-surfacing, a chalky build-up began to develop on the surface which impacted the use of the skid pan. The skid pan was evaluated and analyzed to determine the cause of the residue build-up and possible remediation. To prevent accumulation of contaminants, it was recommended to apply a penetrating surface treatment. The funding requested is to refinish and reseal the skid pan per the EVOC Skid Pan Evaluation. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Location

City: Shelton

County: Mason

Legislative District: 035

Project Type

Facility Preservation (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

No Impact

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000088

Project Title: Pavement Preservation

SubProjects

SubProject Number: 40000064

SubProject Title: Shelton Academy Skid Pan Refresh and Seal

<u>Funding</u>		<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Approps</u>
081-1	WSP Highway Account-State	75,000				75,000
	Total	75,000	0	0	0	75,000
<u>Future Fiscal Periods</u>						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000065

SubProject Title: Marysville District Office Pavement Repairs

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 6

Project Summary

Funding to repair cracks, seal and striping.

Project Description

The Marysville District Office houses a number of divisions on its campus. They include: Command Staff, Crime Lab, Field Operations, and civil service staff. The asphalt pavement around the campus is failing. It's leaving potholes, crumbling curves and indistinguishable directional striping. Delaying this project further will result in increased pavement failure, an increase in cost to maintain, and possible vehicle damage due to road hazards. The request is for funding to repair potholes and areas where pavement is failing, demo and replace concrete curbing that is failing, apply a sealcoating over the entire paved area, restripe all parking and handicap lanes, and replace directional signage. If approved for funding, this project will improve surface conditions, traffic patterns into and out of the campus and minimize cost associated with unplanned and emergency repairs. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Location

City: Marysville

County: Snohomish

Legislative District: 038

225 - Washington State Patrol
 Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000088

Project Title: Pavement Preservation

SubProjects

Project Type

SubProject Number: 40000065

SubProject Title: Marysville District Office Pavement Repairs

Project Type

Facility Preservation (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

No Impact

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	662,000				662,000
	Total	662,000	0	0	0	662,000

Future Fiscal Periods

Acct Code	Account Title	Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
081-1	WSP Highway Account-State	0	0	0	0
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000066

SubProject Title: Yakima District Office Pavement Repairs

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000088

Project Title: Pavement Preservation

SubProjects

SubProject Number: 40000066

SubProject Title: Yakima District Office Pavement Repairs

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 6

Project Summary

Yakima District Office pavement repair to include sealing and striping.

Project Description

The Yakima District Office services the WSP's Field Operations, Command Staff and civil service staff. The facility's parking lot is failing and consists of potholes and indistinguishable striping and signage. Delaying this project further will result in increased pavement failure, an increase in cost to maintain, and possible vehicle damage due to road hazards. The request is for funding to repair potholes and areas where pavement is failing, demo and replace concrete curbing that is failing, apply a sealcoating over the entire paved area, restripe all parking and handicap lanes, and replace directional signage. If approved for funding, this project will improve surface conditions, traffic patterns into and out of the district office and minimize costs associated with unplanned and emergency repairs. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Location

City: Union Gap

County: Yakima

Legislative District: 015

Project Type

Facility Preservation (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

No Impact

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	300,000				300,000
	Total	300,000	0	0	0	300,000

		Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
081-1	WSP Highway Account-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000088

Project Title: Pavement Preservation

SubProjects

SubProject Number: 40000066

SubProject Title: Yakima District Office Pavement Repairs

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000067

SubProject Title: Okanogan Detachment Office Pavement Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 6

Project Summary

Pavement replacement including sealing and striping of the Okanogan Detachment Office.

Project Description

The Okanogan Detachment Office services the WSP's Field Operations, Command Staff and civil service staff. The facility's parking lot is failing and consists of potholes and indistinguishable striping and signage. Delaying this project further will result in increased pavement failure, an increase in cost to maintain, and possible vehicle damage due to road hazards. The request is for funding to repair potholes and areas where pavement is failing, demo and replace concrete curbing that is failing, apply a sealcoating over the entire paved area, restripe all parking and handicap lanes, and replace directional signage. If approved for funding, this project will improve surface conditions, traffic patterns into and out of the district office and minimize costs associated with unplanned and emergency repairs. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Okanogan

County: Okanogan

Legislative District: 007

Project Type

Facility Preservation (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

No Impact

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
081-1	WSP Highway Account-State	120,000				120,000
Total		120,000	0	0	0	120,000

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000088

Project Title: Pavement Preservation

SubProjects

SubProject Number: 40000067

SubProject Title: Okanogan Detachment Office Pavement Replacement

	Future Fiscal Periods			
	<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1 WSP Highway Account-State				
Total	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

Operating Impacts

No Operating Impact

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000220

Project Title: UST decommissioning - Yakima District Office

Description

Starting Fiscal Year: 2025
 Project Class: Preservation
 Agency Priority: 7

Project Summary

Decommission of gasoline fuel stations and underground storage tank (UST) at Yakima District Office.

Project Description

WSDOT plans on consolidating fueling operations at Yakima. Department of Ecology requires that all Underground Storage Tanks (UST) that are to be identified as a "Permanent Closure", notification of that status to Department of Ecology shall be completed within 30 days. A certified UST supervisor shall empty and clean tank by removing all liquids and accumulated sludge. Tank shall also be removed from the ground and filled with an inert solid material and all piping shall either be capped or removed from the ground.

This project seeks funding to remove the underground storage tank, fuel island equipment, and controls. Work includes decommissioning of fueling systems per Department of Ecology tank closure requirements.

Funding for this work would enable the agency to be in compliance with Department of Ecology underground storage tank closure requirements per **WAC 173-360-385**. Without funding the agency would be out of compliance until funding sufficient to perform the work as described is approved.

This project is consistent with the agency goal to "Improve and sustain agency infrastructure"

Location

City: Union Gap

County: Yakima

Legislative District: 015

Project Type

Health, Safety and Code Requirements (Minor Works)
 Infrastructure Preservation (Minor Works)

Growth Management impacts

There will be no impacts associated with this project.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	350,000				350,000
	Total	350,000	0	0	0	350,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State	0	0	0	0	
	Total	0	0	0	0	

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000220

Project Title: UST decommissioning - Yakima District Office

Operating Impacts

No Operating Impact

Narrative

This work will not have any impacts or changes to facility operations or staffing.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 4000068

Project Title: Fire Alarm Panel Replacement

Description

Starting Fiscal Year: 2024
 Project Class: Preservation
 Agency Priority: 8

Project Summary

Upgrade the fire alarm panel in the Wenatchee and Spokane District Offices.

Project Description

The fire alarm panels and controls have exceeded their useful life. Most are not even supported by the manufacture. Contracted alarm companies are no longer supporting their service contract commitments due to outdated equipment. As a result, they will only perform service on a time and materials basis resulting in unanticipated costs and service delays. WSP is requesting funding to upgrade fire alarm panes and associated hardware. Not upgrading these systems will result in further service delays plus an increase in material costs. The agency does not see any alternatives when it comes to replacing the panels as previously stated there's no support by their manufacturers. This request does not require the production of construction documents or additional space. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

Facility Preservation (Minor Works)
 Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
081-1	WSP Highway Account-State	300,000				300,000
	Total	300,000	0	0	0	300,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State					
	Total	0	0	0	0	

Operating Impacts

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000068

Project Title: Fire Alarm Panel Replacement

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProjects

SubProject Number: 40000071

SubProject Title: Spokane District Office Fire Alarm Panel Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 8

Project Summary

Replacement of the fire alarm panel at the Spokane District Office.

Project Description

WSP is requesting funding to upgrade fire alarm panel and associated hardware at the Spokane District Office. Not upgrading these systems will result in further service delays plus an increase in material costs. The agency does not see any alternatives when it comes to replacing the panels as previously stated there's no support by their manufacturers. This request does not require the production of construction documents or additional space. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Location

City: Spokane

County: Spokane

Legislative District: 006

Project Type

Facility Preservation (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
		<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
081-1	WSP Highway Account-State	150,000				150,000
	Total	150,000	0	0	0	150,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State	0	0	0	0	
	Total	0	0	0	0	

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000068

Project Title: Fire Alarm Panel Replacement

SubProjects

SubProject Number: 40000071

SubProject Title: Spokane District Office Fire Alarm Panel Replacement

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000070

SubProject Title: Wenatchee District Office Fire Alarm Panel Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 8

Project Summary

Funding is to replace the fire alarm panel at the Wenatchee District office.

Project Description

WSP is requesting funding to upgrade fire alarm panel and associated hardware at the Wenatchee District Office. Not upgrading these systems will result in further service delays plus an increase in material costs. The agency does not see any alternatives when it comes to replacing the panels, as previously stated, there's no support by their manufacturers. This request does not require the production of construction documents or additional space. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Location

City: Wenatchee

County: Chelan

Legislative District: 012

Project Type

Facility Preservation (Minor Works)

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropr	New Approps
081-1	WSP Highway Account-State	150,000				150,000
	Total	150,000	0	0	0	150,000

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 4000068

Project Title: Fire Alarm Panel Replacement

SubProjects

SubProject Number: 4000070

SubProject Title: Wenatchee District Office Fire Alarm Panel Replacement

	Future Fiscal Periods			
	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000031

Project Title: FTA Minor Works and Repairs

Description

Starting Fiscal Year: 2022

Project Class: Preservation

Agency Priority: 12

Project Summary

FTA Minor Repairs for continued operations.

Project Description

The current Fire Training Academy (FTA) was constructed in 1985 and is used to provide training for fire fighters in how to react to fires in many different training scenarios.

This request is to make necessary repairs to live fire training props:

- 1. Training Flame Pads Props - Based on Structural Condition Assessment
- 2. Replace damaged asphalt around Flame Pads
- 3. Demolish Old Water Collection structure per lease agreement

This project would enable the agency to provide the level of training necessary to provide competency to Fire Fighter 1 program trainees. Without these improvements the training program is severely restricted and constrained. The entire structure is at risk of being identified as unsafe and put out of service.

The facility is in the 5th Legislative District, but benefits professional and volunteer firefighters from every fire commission district in the state, and many from neighboring states, and provinces as well. Private firefighting organizations such as that operated by the Boeing Company, use the facility as well. The current burn training building has also been used by all branches of the U.S. military, plus other federal and state emergency services providers such as the Department of Natural Resources, and the State Parks Department. Within the agency, stakeholders include the Fire Protection Bureau, Field Operations Bureau, the Property Management Division, and Command Staff. No objection to the proposal is expected from stakeholder groups. The proposal is expected to find strong support, from the Washington Fire Commissioners Association, Fire Chiefs throughout the region, plus military and emergency management personnel on a local, regional, and national level.

No local or other funding is planned in the performance of this work.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Location

City: North Bend

County: King

Legislative District: 005

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Expenditures

2023-25 Fiscal Period

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000031

Project Title: FTA Minor Works and Repairs

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
057-1	State Bldg Constr-State	1,132,000		225,000		237,000
	Total	1,132,000	0	225,000	0	237,000

Future Fiscal Periods

	<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
057-1 State Bldg Constr-State	145,000	150,000	175,000	200,000
Total	145,000	150,000	175,000	200,000

Operating Impacts

No Operating Impact

Narrative

Infrastructure Repairs and Preservation

SubProjects

SubProject Number: 40000082

SubProject Title: FTA Minor Works and Repairs

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000031

Project Title: FTA Minor Works and Repairs

SubProjects

SubProject Number: 40000082

SubProject Title: FTA Minor Works and Repairs

Project Phase Title: Continuous Improvements

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 12

Project Summary

FTA minor repairs for continued operations based on annual NFPA Condition Assessment.

Project Description

The current Fire Training Academy (FTA) was constructed in 1985 and is used to provide training for fire fighters in how to react to fires in many different training scenarios.

This request is to make necessary repairs to live fire training props:

1. Training Flame Pads Props - Based on Structural Condition Assessment
2. Replace damaged asphalt around Flame Pads
3. Demolish Old Water Collection structure per lease agreement

This project would enable the agency to provide the level of training necessary to provide competency to Fire Fighter 1 program trainees. Without these improvements the training program is severely restricted and constrained. The entire structure is at risk of being identified as unsafe and put out of service.

The facility is in the 5th Legislative District, but benefits professional and volunteer firefighters from every fire commission district in the state, and many from neighboring states, and provinces as well. Private firefighting organizations such as that operated by the Boeing Company, use the facility as well. The current burn training building has also been used by all branches of the U.S. military, plus other federal and state emergency services providers such as the Department of Natural Resources, and the State Parks Department. Within the agency, stakeholders include the Fire Protection Bureau, Field Operations Bureau, the Property Management Division, and Command Staff. No objection to the proposal is expected from stakeholder groups. The proposal is expected to find strong support, from the Washington Fire Commissioners Association, Fire Chiefs throughout the region, plus military and emergency management personnel on a local, regional, and national level.

No local or other funding is planned in the performance of this work.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Proviso

None

Location

City: North Bend

County: King

Legislative District: 005

Project Type

Infrastructure Preservation (Minor Works)

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000031

Project Title: FTA Minor Works and Repairs

SubProjects

SubProject Number: 40000082

SubProject Title: FTA Minor Works and Repairs

Growth Management impacts

None

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Expenditures</u>		<u>2023-25 Fiscal Period</u>	
			<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reapprops</u>	<u>New Approps</u>
057-1	State Bldg Constr-State	670,000				
	Total	670,000	0	0	0	0

Future Fiscal Periods

		<u>Future Fiscal Periods</u>			
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
057-1	State Bldg Constr-State	145,000	150,000	175,000	200,000
	Total	145,000	150,000	175,000	200,000

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000075

SubProject Title: FTA Minor Works and Repairs - Training Props

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 12

Project Summary

Repairs to training props per FTA's Condition Assessment

Project Description

The Fire Training Academy (FTA) commissioned a live fire training prop condition assessment in accordance with the National Fire Protection Association (NFPA) 1403 Standard on Live Fire Training Evolutions, 2018 edition. The condition assessment was applied to all training props at the FTA. This funding is to make repairs to training props that have been identified in the condition assessment. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's strategic Plan.

Proviso

None

Location

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000031

Project Title: FTA Minor Works and Repairs

SubProjects

Location

SubProject Number: 40000075

SubProject Title: FTA Minor Works and Repairs - Training Props

City: North Bend

County: King

Legislative District: 005

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
		<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
057-1	State Bldg Constr-State	141,000				141,000
	Total	141,000	0	0	0	141,000

Future Fiscal Periods

	<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Infrastructure Repairs and Preservation

SubProject Number: 40000076

SubProject Title: FTA Minor Works and Repairs - Pavement

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

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Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000031

Project Title: FTA Minor Works and Repairs

SubProjects

SubProject Number: 40000076

SubProject Title: FTA Minor Works and Repairs - Pavement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 12

Project Summary

Proposed funding to asphalt pavement around props and campus.

Project Description

The Fire Training Academy (FTA) commissioned a live fire training prop condition assessment in accordance with the National Fire Protection Association (NFPA) 1403 Standard on Live Fire Training Evolutions, 2018 edition. The condition assessment was applied to all training props at the FTA. This funding is to replace the asphalt pavement around the training props as well as the FTA campus. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's strategic Plan.

Location

City: North Bend

County: King

Legislative District: 005

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
		<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
057-1	State Bldg Constr-State	96,000				96,000
	Total	96,000	0	0	0	96,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

Infrastructure Repairs and Preservation.



WSP Fire Training Division

TRAINING PROP CONDITION ASSESSMENT

May 2022

Washington State Department of
Enterprise Services

PREPARED FOR



PREPARED BY

Reid Middleton

WSP Fire Training Academy Training Prop Condition Assessment

May 2022

Prepared for

Washington State Patrol
and
Department of Enterprise Services



Prepared by

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Executive Summary

The Washington State Patrol (WSP) required evaluations of several existing training props at the WSP Fire Training Academy, located near North Bend, Washington. The proposed evaluations were conducted in accordance with the National Fire Protection Association's (NFPA) publication 1403, *Standard on Live Fire Training Evolutions*, 2018 Edition. In addition to the NFPA documents, the props were reviewed considering the recognized standards for steel, concrete, and timber construction. Some consideration was also given to the safety of the structures, based on criteria provided in the Occupational Safety and Health Administration (OSHA) standards.

The project includes the following props:

- Ship Fire Training Prop
- Helicopter Rescue Prop
- Overturned Tanker Prop
- Flat Roof Ventilation Prop
- Pitched Roof Ventilation Prop
- Ship Fire Prop Containers
- Commercial Burn Building
- Flammable Liquids Pond
- Cars at the Curb Prop
- Flange Prop
- Portable Fire Extinguishers Prop
- LPG Pad (LPG Tank Prop and Dumpster Fire Prop)

Reid Middleton has been retained to review the condition of the training props, document the existing conditions, identify structural deficiencies, and provide recommendations for immediate repairs, supplemental repairs, and future work. Structural evaluations and calculations to analytically verify identified deficiencies or to provide determination of deficiencies in parts of the structures that may not otherwise exhibit characteristics indicating a deficiency are not included in the scope. The identification of deficiencies is limited to observable conditions at most props, with the exception of the Ship Fire Prop and the Commercial Burn Tower, which have records of concrete core analysis from the 2021 assessment.

Most props were found to be in generally good condition and are safe to occupy as is or with minor repairs. Many of the props have future work that should be considered to further evaluate potential deficiencies or provide better repair options. Some props have severe structural issues and may not be safe in their present condition. Detailed deficiency repair recommendations for each prop are discussed in Section 3.0, with expanded commentary in the appendices.

The professional services described in this report were performed based on visual observation of the structures and limited review of available record drawings. No destructive testing was performed to qualify as-built conditions or verify the quality of materials and workmanship. In conformance with NFPA 1403, the structural inspection was not required to include the removal of concrete core samples, as they have been previously taken and analyzed in conformance with NFPA 1403 within the last 5 years. No other warranty is made as to the professional advice

included in this report. This report provides an overview of likely structural deficiencies and associated recommendations to mitigate those deficiencies. The report is not based on analytical evaluations of the structures and does not address estimated costs for performing the work or programming and planning issues. This report has been prepared for the exclusive use of the Washington State Patrol and the Department of Enterprise Services and is not intended for use by other parties, as it may not contain sufficient information for purposes of other parties or their uses.

1.0 Introduction

1.1 Purpose

The Washington State Patrol (WSP) required evaluations of several existing fire training props at the WSP Fire Training Academy near North Bend, Washington. The proposed evaluations were conducted in accordance with the National Fire Protection Association's (NFPA) publication 1403, *Standard on Live Fire Training Evolutions*, 2018 Edition. The ages and conditions of the training props vary. The following fire training props require evaluation:

- Ship Fire Training Prop
- Helicopter Rescue Prop
- Overturned Tanker Prop
- Flat Roof Ventilation Prop
- Pitched Roof Ventilation Prop
- Ship Fire Prop Containers
- Commercial Burn Building
- Flammable Liquids Pond
- Cars at the Curb Prop
- Flange Prop
- Portable Fire Extinguishers Prop
- LPG Pad (LPG Tank Prop and Dumpster Fire Prop)

The purpose of the project is to document the structural condition of each prop and identify structural deficiencies that require repair. The report serves as an update to the evaluation that was previously completed in 2021.

1.2 Background

The WSP Fire Training Academy provides facilities used by multiple agencies to practice firefighting scenarios. The props simulate conditions and situations that firefighters may encounter and are designed for training activities such as removing sheathing from framed structures, operating in smoke-filled structures, and extinguishing fires. The training facility provides a controlled environment where firefighters can practice real techniques and skills without the increased risk of uncontrolled and uncertain conditions.

The structural integrity of the props is an essential factor in maintaining the safety of these controlled scenarios. Each prop is designed for a specific activity. Like any other structure, the props are subject to degradation and damage due to age, use, and environmental conditions; however, intended and accidental training and fire activities have resulted in additional damage to the structures that reduces their structural integrity. Periodic structural evaluations are required to review the condition of the props, identify deficiencies, and perform repairs to restore them to an acceptable level of performance.

1.3 Scope of Services

Reid Middleton has been retained to review the condition of the training props, document the existing conditions, identify structural deficiencies, and provide recommendations for immediate repairs, supplemental repairs, and future work. The following tasks fall within the scope of this report:

1. Perform a site visit to observe the existing conditions of the props. Identify structural deficiencies. Photo-document the props and deficiencies. Limited field measurements were performed to supplement observations and help determine deficiencies.
2. Perform review of available construction drawings. Drawings are available for only a few of the props included in the project. Review is limited to verifying information not obtainable from visual observations and as deemed necessary to identify deficiencies.
3. Prepare a report documenting observations and deficiencies identified for each prop. The report serves as an update to the evaluation completed in 2021.
4. Provide recommendations for immediate repairs, supplemental repairs, and future work to address issues that do not pose an immediate structural or safety risk.

Structural evaluations and calculations to analytically verify identified deficiencies or provide determination of deficiencies in parts of the structures that may not otherwise exhibit characteristics indicating a deficiency are not included in the scope. The identification of deficiencies is limited to observable conditions only. Where appropriate, recommendations have been provided to perform structural evaluations. Only conditions that could be visually observed were noted. Geotechnical investigation is outside the scope of this report. The scope of the report does not determine the causes of deficiencies observed in the props. The intent of the report is to provide recommendations to mitigate deficiencies in the structural systems.

2.0 Investigation Criteria

The criteria for performing the investigations are based on the requirements of NFPA 1403 *Standard on Live Fire Training Evolutions*, 2018 Edition. NFPA 1402, *Standard on Facilities for Fire Training and Associated Props*, 2019 Edition, was also reviewed for information and guidance pertinent to the training prop evaluations. By definition, unless noted otherwise, a professional engineer (PE) where stated herein shall refer to a licensed engineer with live fire training structure experience and expertise.

NFPA 1403, Sections 6.2.6 and 6.2.7, address the requirements for structural evaluations of gas-fired training structures. Section 6.2.6 requires annual inspections by the building owner or Authority-Having-Jurisdiction (AHJ), and Section 6.2.6.1 requires follow-up evaluations be conducted by a PE where damage is found. Section 6.2.7 requires structural integrity to be evaluated and documented by a PE at least every 10 years. NFPA 1403, Sections 7.2.5 and 7.2.6, include similar requirements for non-gas-fired training structures, with an evaluation by a PE at least every 5 years. NFPA 1403 also recommends that structural inspection includes removal of concrete core samples from the structures. Concrete core samples were not taken from the Ship Fire Prop and the Commercial Burn Tower as part of this assessment, as this was completed during the 2021 assessment. Similar criteria are not provided for non-fire training structures; however, these requirements form the basis of the current investigation for all props included in this project.

In addition to the NFPA documents, the props were reviewed considering the recognized standards for steel, concrete, and timber construction. Identification of deficiencies and recommendations were developed in part based on the recognized design standards of the International Building Code (IBC), American Society of Civil Engineers' (ASCE) *Minimum Design Loads for Buildings and Other Structures*, American Institute of Steel Construction's (AISC) *Steel Construction Manual*, and the American Concrete Institute's (ACI) 318 *Building Code Requirements for Structural Concrete*. While references to specific provisions of these standards are not provided in this report, they provide the basis for performing the structural investigation required by NFPA.

Some consideration was also given to the safety of the structures to prevent injury from falling or other similar risks. The presence of safety issues is generally based on the criteria provided in the Occupational Safety and Health Administration (OSHA) publication 1910, *Subpart D Walking-Working Surfaces*, which provides standards for design and construction of permanent safety and egress systems, including (but not limited to) stairs, safety railings, ladders, and safety cages. The project scope does not include identifying safety issues that are not based on structural deficiencies. In addition, the training props are not typical structures and by nature require a level of authenticity to replicate conditions that firefighters may encounter, which may require excluding safety features that may otherwise be included in a standard structure. Limited review was performed and, where appropriate, safety issues were identified and mitigation recommendations provided.

3.0 Prop Investigations

Investigations were performed to document the construction and structural deficiencies of the props. The investigations are based on field observations and documentation of the props, with limited review of record drawings. Field observations were limited to observable conditions of the props and did not include testing.

Section 3.0 includes summaries of the structural systems, deficiencies, and repair recommendations for each prop. Expanded discussion of each prop, including field observations and photo documentation, is included in the appendices where indicated. Section 3.0 provides itemized recommendations to mitigate the deficiencies identified for each prop. The recommendations are separated into three categories: immediate repair recommendations, supplemental repair recommendations, and future work recommendations. This report serves as an update to the previous evaluation completed in 2021.

The immediate repair recommendations are the highest priority work and generally address issues representing a safety or structural integrity issue; some repairs with minimal cost may also be included in these recommendations. The immediate repair recommendations should be performed prior to continued use of the associated prop where possible. Use of all or part of a prop should be limited where use cannot be suspended.

The supplemental repair recommendations represent lower-priority repairs, carrying a reduced risk to safety and structural integrity. The repairs are generally intended to mitigate further degradation of related deficiencies and prevent them from becoming high-risk issues. Supplemental repairs should be performed at the time of the immediate repairs if funding is available. If funding is not available, the repairs should be scheduled for performance as part of a maintenance budget.

The future work recommendations address items intended to improve the life span and function of the prop. The work included in these recommendations is not necessary to the short-term function of the prop, pending implementation of the immediate and supplemental recommendations. Periodic inspection, proper maintenance, and modified use of the props may eliminate the need for specific recommendations. Work included in these recommendations may address the structural integrity of the prop for extreme loading events, such as earthquakes. Depending on the projected use and life of the prop, significant to extreme damage or loss of the prop may be an acceptable alternative to the cost of performing the work.

Appendix E: Commercial Burn Building

Appendix E: Commercial Burn Building

E.1 General Description

Year Built: 1983

Number of Stories: 6 Levels

Floor Area: 17,200 SF



The commercial burn building is a six-story, reinforced concrete structure designed to simulate a commercial building and provide multiple training capabilities. The structure includes a three-story, low-rise portion and a six-story tower structure. Activities performed in the tower include live fire training with the use of Class A materials and search and rescue training. A large search and rescue maze is located on the third floor of the tower, directly above the warehouse portion of the structure.



Figure E-1. North side of structure (looking south).

E.2 Structural Investigation and Recommendations

Visual observations were performed to review and document the existing conditions of the Commercial Burn Building, with the objective of identifying structural deficiencies. The existing construction and identified deficiencies are documented for the Tower and Warehouse portions of the structure. Continued deterioration since the 2021 assessment was observed, including at locations such as the warehouse beam in the north rooms and the fourth-floor slab (third-floor ceiling) at the room between the stairs and the burn room.

E.2.1 Tower

E.2.1.1 System Description

The Tower structure consists of six-story, 8-inch, reinforced concrete exterior and interior walls. The exterior walls provide both the gravity and lateral load path for the structure to the foundation. The interior walls provide support for the floor and roof slabs. The tower includes a shaft opening for hoisting and an opening in which the concrete stairs are located. The stairs are connected to the exterior walls using doweled bars. The exterior walls are supported on continuous-spread reinforced concrete footings located several feet below grade.

Two window openings are located on the east side of the Tower at every floor except Level 1, which has no openings. Window openings are also at each level of the stairwell. A balcony is located on the north side of the tower at Level 3 and above. The balconies consist of steel grating supported by steel channels and concrete walls. The concrete walls appear to have been cast integrally with the tower walls.

The tower includes 6- and 8-inch reinforced concrete slabs. The slabs are connected to the walls using doweled bars. The 6-inch slabs are two-way slabs located at Level 5, Level 6, and the roof. The remaining floor slabs are 8-inch-thick, one-way slabs. Burn rooms at Levels 2, 3, 4, 5, and 6 have a mix of spray-applied and firebrick thermal liner systems at the floors, ceilings, and walls.

E.2.1.2 Identified Deficiencies

Multiple walls and floors show signs of deteriorated concrete and extensive cracking. The specific areas of the tower observed were the areas with concrete spalling and exposed reinforcing on the underside of the Level 4 slab (Level 3 ceiling), at the room between the stairs and the burn room. The slab also has spalling in multiple areas where electrical conduit is running in the slabs, including on Level 3 (Level 2 ceiling) at the room between the stairs and the burn room. Extensive wall cracking was observed on the exterior walls of the burn tower near the balconies. Wall cracking was observed on Level 3 at the interior on the west side of the building. Expansion, bubbling, and cracking of spray-applied wall burn liner were observed at Level 2 of the burn tower room. The concrete wall behind the spray-applied wall burn liner could not be observed. Cracking in the spray-applied wall burn liner was observed at Level 5. In addition, concrete cracking was observed around the burn room door frame on Level 2 and also the exterior door frame on Level 4. Vertical cracking above the door frame on Level 4 was observed.

The stairwell concrete walls between Levels 2 and 3 and Levels 5 and 6 showed signs of cracking and spalling. Cracking was observed on the underside of the Level 3 landing and also the stair to Level 4. There was a thin patch of concrete peeling off the wall outside the burn room on Level 3. Concrete cores previously taken at the Level 6 slab indicated significant fire damage and extensive water infiltration. Observations of the slab showed extensive cracking and spalling, most notably near the corner used for burning, where the liner is located. The area of slab below the liner could not be observed. In addition, the slab could not be observed from below due to the current installation of a spray-applied liner.

Observation of the Level 5 spray-applied liner shows that it may be near the end of its lifespan and may need to be replaced. Observed nonstructural deficiencies include steel framing at the roof hatch that is not attached to the concrete and the light fixture at the top of the burn tower stair that is not attached to the concrete and is hanging from the electrical wires. In addition, many of the steel window frames are not positively attached to the concrete structure or are missing anchors at window frame corners at the bottom or top sill. For the 2021 assessment, a WSP employee noted that the steel window frames in the Level 3 burn area were loose and in danger of falling. This has been repaired, as the window frames at the Level 3 burn room are now replaced with light sliding frames at the interior of the structure.

The Tier 1 building analysis noted that the tower portion of the building creates a geometric irregularity due to the variation in the story-to-story dimensions between Level 4 and Level 5. The geometric irregularity can lead to demand concentrations and affect the response of the structure during a seismic event. Previous reports also included calculations and documentation regarding reduced live load capacity of the slabs due to the increased dead load on the floor slabs from the liner systems.

E.2.1.3 Recommended Repairs and Evaluations

The following repairs should be performed immediately:

- The fourth-floor slab (third-floor ceiling) at the room between the stairs and the burn room should be shored until it can be replaced. See Appendix N for shoring sketch.
- All steel window frames for the burn tower should be positively attached to the reinforced concrete with Drilled-In Concrete Anchors. Drill anchors into each corner of the bottom and top sill through the concrete refractory into the reinforced concrete structure. It is recommended to avoid installing epoxy anchors, as loss of strength could occur through heating.
- Establish safe live load limits and post limits in prominent locations throughout the facility. Limit the assembly of large groups.
- Remove the light fixture at the top of the burn tower stair. Cap electrical wires if they are still live.
- Remove the conduit on the wall of the Level 2 burn tower in the area between the burn room and the stairs if not in use.
- Remove the roof hatch steel framing that is not attached to the concrete.
- Limit use of Level 6 for live fire training. Continued use of the building for live fire training may cause weakening of the building system and additional damage, including

spalling, cracking, and additional water intrusion of the concrete. Remove the existing refractory liner system below (Level 5 ceiling) for observation of the underside of the slab.

- The Level 5 spray-applied liner appears that it may be near the end of its life span and may need to be replaced. We recommend contacting a burn liner supplier for determination of remaining life span.
- Limit facility training exercises to search and rescue operations. If live-fire exercises are performed, perform a visual damage assessment on the facility prior to and after each exercise in accordance with NFPA 1403. Limit burning temperature (approximately 500 °F threshold for concrete deterioration) and burn time (six to eight evolutions in an eight-hour day), document temperatures, and verify operation of thermocouple system (trigger at 400 °F). Modify drainage to eliminate down-wall flow of water.
- Limit additional dead loads applied to the floor systems. Limitations include but are not limited to items such as using the building for storage, limiting the addition of interior walls and partition walls, and limiting the amount of permanently installed equipment. Remove the existing refractory liner system to reduce building weight.
- Remove built-up burn material from all burn areas. Material should be removed from areas after each training to limit the additional load applied to the slabs.

The following supplemental repairs are recommended to improve prop condition:

- Remove the existing refractory liner systems and inspect concrete to determine if additional deterioration exists. Perform nondestructive and destructive testing as needed. This should include the cracked second floor burn tower wall location.
- At the rooms where continued burning is necessary, replace the spray-applied fireproofing at the walls and underside of slabs with the high temperature lining (HTL) tile system or equivalent to reduce the dead load of the structure.
- Evaluate and document annually the structural integrity of the burn structure by a licensed professional engineer with live fire training structure experience and expertise. In addition to the structural evaluation, evaluate the fuel loads, heat retention, and ventilation systems.
- Perform limited repair of all structural elements where concrete deterioration is most critical to the safe use of the building.
- Monitor Tower Level 4 for additional cracking, which may indicate that heat damage has impacted the slab reinforcing.

The following future work may be required:

- Implement a seismic retrofit program to perform a comprehensive evaluation of the structure's seismic deficiencies, and design retrofits to mitigate the deficiencies.
- Perform comprehensive repair of all structural elements where concrete deterioration is evident. Re-evaluate safe working loads for the repaired structure.

E.2.2 Warehouse

E.2.2.1 System Description

The three-story warehouse portion of the building consists of concrete floor slabs, concrete walls, and fully-grouted reinforced concrete masonry unit (CMU) walls. The building has a lateral-force-resisting system (LFRS) that consists of 8- and 10-inch interior and exterior concrete shear walls. The building's structural diaphragm consists of concrete floor slabs varying in thickness between 6 and 8 inches. The concrete floor slabs are designed as one-way slabs. The slabs are connected to the walls using doweled bars. The foundations consist of continuous concrete footings beneath the concrete walls and concrete spread footings beneath the concrete columns. A large, wood-framed, search and rescue maze is located on Level 3. The CMU walls at Level 2 were not part of the original building design. Record drawings of the CMU walls were not available for review. The walls appear to be used to create a designed burn area at the center of the northwest side of the warehouse.

E.2.2.2 Identified Deficiencies

Multiple walls and floors show signs of deteriorated concrete and extensive cracking. Some columns and beams also display concrete deterioration, and deterioration was observed between beams and their connection to walls. Deterioration can compromise the strength of the system. Three specific areas were observed with extensive spalling or water damage.

At Level 2 of the warehouse, the spray-applied burn liner located in the northern portion of the warehouse appears to be deteriorating. Concrete spalling of beams at Level 2 of the warehouse in the southern and northern rooms was observed. The spalling and cracking in the beam on the northwest area of the building has expanded since the 2021 assessment. Other spalling and cracking did not appear to have expanded. Continued spalling may limit the ability of the beams to support training conditions. Floor slab cracking was observed in the main burn area and at the center of the burn room. Spalling of the ceiling slab and exposed conduit was observed in the north rooms. There was a crack in a concrete column at the end of a masonry wall adjacent to the main burn area. In the maze on Level 3, there was cracking of the roof slab at the hatch on the west side of the building. Observed nonstructural deficiencies include many of the steel window frames, which are not positively attached to the concrete structure. The steel window frames may become loose and unstable from use.

The Tier 1 building analysis indicated that the 10-inch shear walls may not have adequate capacity to resist loads during a design-level earthquake due to the minimal amount of reinforcement in the wall. In addition, the analysis indicated that the columns do not have the shear capacity to develop flexural strength. During a seismic event, columns may be displaced due to forces associated with story drift, which may cause significant bending moments and may lead to an undesirable nonductile, or sudden, failure of the column.

E.2.2.3 Recommended Repairs and Evaluations

The following repairs should be performed immediately:

- The slab supporting the small burn room on Level 2 (above the Dirty Classroom) has water damage between the fire bricks and the water drain. It is recommended that fire bricks be added to cover the concrete from the burn area and location of the current fire bricks to the drain in order to protect the concrete slab.
- All steel window frames for the warehouse should be positively attached to the reinforced concrete with Drilled-In Concrete Anchors. Drill anchors into each corner of the bottom and top sill through the concrete refractory into the reinforced concrete structure. It is recommended to avoid installing epoxy anchors, as loss of strength could occur through heating.
- Establish safe live-load limits and post limits in prominent locations throughout the facility. Limit the assembly of large groups.
- Remove built-up burn material from all burn areas. Material should be removed from areas after each training to limit the additional load applied to the slabs.
- Limit facility training exercises to search and rescue operations. If live-fire exercises are enacted, perform a visual damage assessment on the facility prior to and after each exercise in accordance with NFPA 1403. Limit burning temperatures (approximately 500 °F threshold for concrete deterioration) and burn time (six to eight evolutions in an eight-hour day), document temperatures, and verify operation of the thermocouple system (trigger at 400 °F). Modify drainage to eliminate down-wall flow of water.
- Limit additional dead loads applied to the floor systems. Limitations include but are not limited to items such as using the building for storage, limiting the addition of interior walls and partitions walls, and limiting the amount of permanently installed equipment. Remove the existing refractory liner system to reduce building weight.

The following supplemental repairs are recommended to improve prop condition:

- Evaluate and document annually the structural integrity of the structure by a licensed professional engineer with live fire training structure experience and expertise. In addition to the structural evaluation, evaluate the fuel loads, heat retention, and ventilation systems.
- Perform limited repair of all structural elements where concrete deterioration is most critical to the safe use of the building. This should include the concrete spalling of the beam at Level 2 of the warehouse in the northern rooms.
- Replace spray-applied burn liner in the northern side of the warehouse burn compartment.

The following future work may be required:

- Implement a seismic evaluation and retrofit program to perform a comprehensive evaluation of the structure's seismic deficiencies, and design retrofits to mitigate the deficiencies.
- Perform comprehensive repair of all structural elements where concrete deterioration is evident. Re-evaluate safe working loads for the repaired structure.

- Replace the steel grating adjacent to the blue trash container at the exterior of the tower at Level 1.
- Due to the age and evidence of concrete deterioration, in addition to the above recommendations, it is recommended that building use be limited to search and rescue operations. Continued use of the building for live fire training may cause weakening of the building system and additional damage, including spalling, cracking, and water intrusion of the concrete.

E.3 Photographs



Photo 1: View of north side of the building.



Photo 2: View of west side of the building.

Appendix F: Flammable Liquids Pond Prop

Appendix F: Flammable Liquids Pond Prop

F.1 General Description

Year Built: Unknown
Number of Stories: 1 Level
Floor Area: 3,850 SF



The flammable liquids pond prop is a large rectangular pond with a depth of 2'-8". The pond was drained but is typically filled with water and has a flammable liquid on top for training. The pond is encompassed on four sides with concrete containment walls. Beyond the walls is an asphalt berm.



Figure F-1. View of Flammable Liquids Pond Wall and Berm.

F.2 Structural Investigation and Recommendations

Visual observations were performed to review and document the existing conditions of the prop, with the objective of identifying structural deficiencies. The existing construction and identified deficiencies are documented for each portion or system in the prop.

F.2.1 Flammable Liquids Pond

F.2.1.1 System Description

The flammable liquids pond is contained on four sides by 8-inch-thick concrete walls. The walls appear to be reinforced; the tops of multiple vertical reinforcing bars were observed around the pond, along with some locations of exposed horizontal reinforcing. There are 2-inch standard steel pipes present throughout the top of the wall. They appear to have previously been part of a railing that is no longer present. A corner of the pond has been infilled with an elevated concrete slab.

A berm composed of asphalt is located beyond all four concrete walls. The berm ranges in height from approximately 2 feet to 1.5 feet and extends horizontally 6 feet beyond the back of the concrete walls. The berm appears to be providing resistance to the concrete walls. The bottom of the pond is a concrete slab cast integrally with the walls. There is a trench drain near the center of the pond. Piping is located in a portion of the pond to distribute liquids as needed.

F.2.1.2 Identified Deficiencies

The condition of the Flammable Liquids Pond appears generally acceptable, with minor deterioration exhibited. Concrete spalling was observed at the top of the walls around the perimeter, most likely due to cyclic exposure to heat when the pond is in use. The sides of the walls did not have indications of spalling or cracking. The berm located on the four sides of the pond helps to provide containment and support of the concrete walls. The concrete slab at the bottom of the pond, which appears to be cast integrally with the walls, does not have signs of spalling or cracking.

F.2.1.3 Recommended Repairs and Evaluations

The following repairs should be performed immediately:

- No work is recommended.

The following supplemental repairs are recommended to improve prop condition:

- Repair top of walls where concrete is spalling.

The following future work may be required:

- Provide anchorage and bracing of piping to concrete slab or walls.

SHORING BEAM
W-SECTION (ANY STANDARD
SIZE) ASTM A36 OR A992

SHORING POST
BELOW AT ENDS

SHIM SPACE ABOVE SHORING BEAM
AS REQUIRED TO ENSURE CONCRETE
SLAB IS BEARING.

SECTION

(E) CONC SLAB

PLAN

(E) CONC WALL

SHORING BEAM
W-SECTION (ANY STANDARD
SIZE) ASTM A36 OR A992

DETAIL 1

SHORING POST
AT ENDS

IF SHORING POST ANCHOR PLATE DOES NOT
REST FLATLY AGAINST CONCRETE SLAB,
THEN SECTION (ALTERNATIVE) CAN BE USED.

SECTION

DETAIL 2

SHIM SPACE ABOVE SHORING BEAM
AS REQUIRED TO ENSURE CONCRETE
SLAB IS BEARING.

SHORING BEAM
W-SECTION (ANY STANDARD
SIZE) ASTM A36 OR A992

(E) CONC SLAB

DETAIL 1

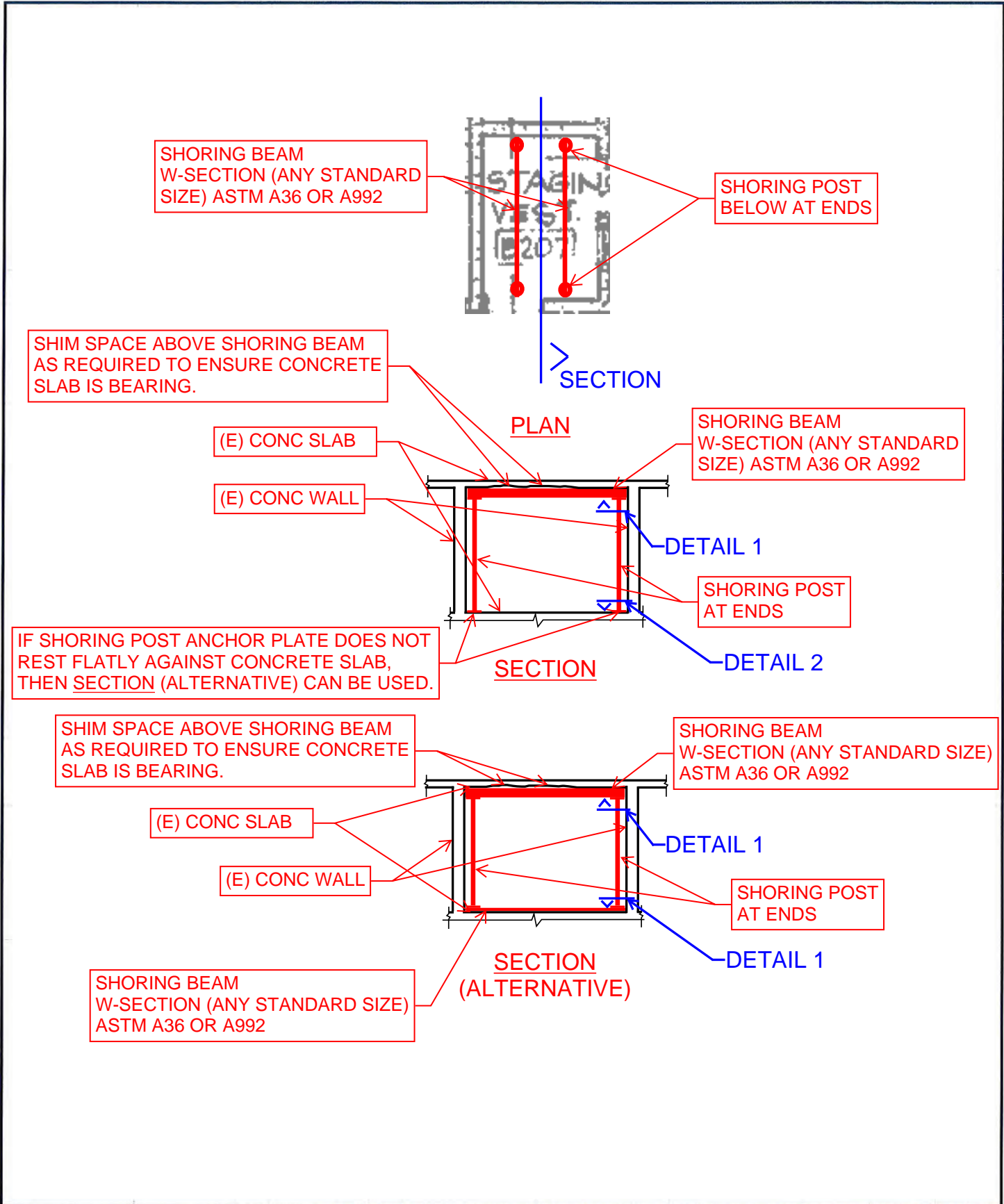
(E) CONC WALL

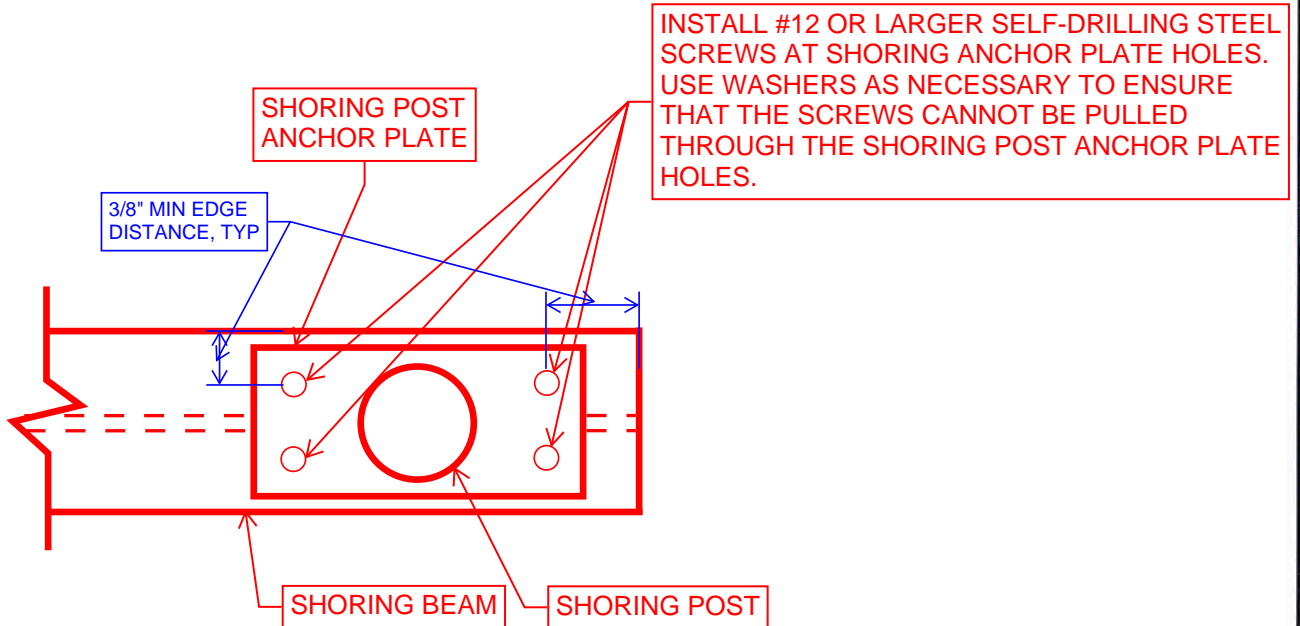
SHORING POST
AT ENDS

SHORING BEAM
W-SECTION (ANY STANDARD
SIZE) ASTM A36 OR A992

SECTION
(ALTERNATIVE)

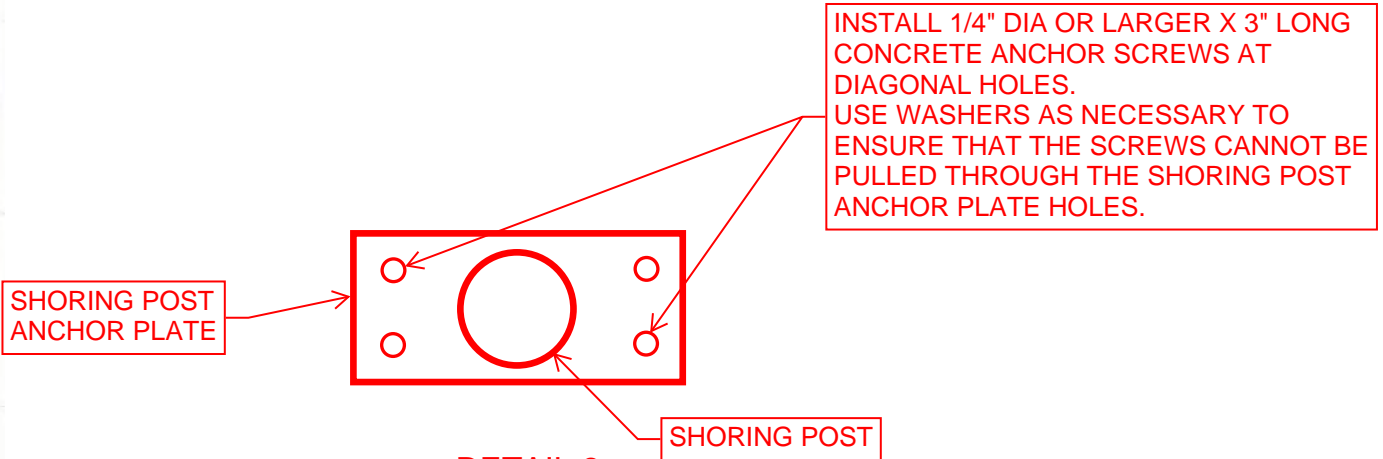
DETAIL 1





INSTALL #12 OR LARGER SELF-DRILLING STEEL SCREWS AT SHORING ANCHOR PLATE HOLES. USE WASHERS AS NECESSARY TO ENSURE THAT THE SCREWS CANNOT BE PULLED THROUGH THE SHORING POST ANCHOR PLATE HOLES.

DETAIL 1



INSTALL 1/4" DIA OR LARGER X 3" LONG CONCRETE ANCHOR SCREWS AT DIAGONAL HOLES. USE WASHERS AS NECESSARY TO ENSURE THAT THE SCREWS CANNOT BE PULLED THROUGH THE SHORING POST ANCHOR PLATE HOLES.

DETAIL 2

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000240

Project Title: Vancouver Crime Lab - New Roof

Description

Starting Fiscal Year: 2022
 Project Class: Preservation
 Agency Priority: 13

Project Summary

Vancouver Crime Lab roof replacement.

Project Description

The Vancouver Crime Lab membrane roof warranty period has expired and the roof has experiencing multiple leaks that have impacted operations and interiors. This has led to water intrusion into office and lab spaces. The risk of contamination of evidence is increasing as well as building and environmental damage to the building. Skylight enclosures over the office area and equipment penetrations throughout the roof are failing and should be upgraded. Contractors are call to search and patch the failing membrane, but the rate of failure is increasing due to the age and its condition is resulting in increased maintenance costs and the potential for major property damage and evidence loss. This request is to replace the existing membrane roofing material with new PVC membrane laid over tapered insulation board to insure water flow and provide additional thermal efficiency. Upgrade and improve penetrations that pass through the surface of the new roofing material. The new roof will be replace with energy efficient materials that will deter the elements. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Location

City: Vancouver

County: Clark

Legislative District: 049

Project Type

Facility Preservation (Minor Works)
 Infrastructure Preservation (Minor Works)

Growth Management impacts

This project will not create any new impacts.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	1,594,000				1,594,000
	Total	1,594,000	0	0	0	1,594,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State	0	0	0	0	
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 30000240

Project Title: Vancouver Crime Lab - New Roof

Operating Impacts

Narrative

This work will not have any impacts or changes to facility operations and staffing.

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000077

Project Title: Fire Training Academy Roof Replacement

Description

Starting Fiscal Year: 2024
Project Class: Preservation
Agency Priority: 14

Project Summary

Replace the roofs of the Fire Training Academy Administration Building, Classroom C and Classroom C.

Project Description

The Fire Training Academy (FTA) was constructed in 1985 and is used to provide training for firefighters throughout the state. The FTA benefits professional and volunteer firefighters from every fire commission district in the state and many from neighboring states and providences. Private firefighting organizations, such as the Boeing Company, use the facility as well. The U.S. Military along with other federal and state emergency service providers, such as the Department of Natural Resources, and State Parks. Within the agency, stakeholders include the Fire Protection Bureau, Field Operations Bureau, and the Property Management Division. The administration building, classrooms C and D roofs are each past their useful life and are each in need of replacement. With each new roof will be made replaced with energy efficient materials and well as increase the insulation to meet current code requirements and to improve energy efficiency. This project is consistent with the agency goal to "sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Proviso

None

Location

City: North Bend

County: King

Legislative District: 005

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	572,000				572,000
	Total	572,000	0	0	0	572,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State	0	0	0	0	
	Total	0	0	0	0	

Operating Impacts

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 4000077

Project Title: Fire Training Academy Roof Replacement

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProjects

SubProject Number: 4000078

SubProject Title: FTA Administration Building Roof Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 14

Project Summary

Replace the roof at the Fire Training Academy Administration Building.

Project Description

The Fire Training Academy (FTA) was constructed in 1985 and is used to provide training for firefighters throughout the state. The FTA benefits professional and volunteer firefighters from every fire commission district in the state and many form neighboring states and providences. Private firefighting organizations, such as the Boeing Company, use the facility as well. The U.S. Military along with other federal and state emergency service providers, such as the Department of Natural Resources, and State Parks. Within the agency, stakeholders include the Fire Protection Bureau, Field Operations Bureau, and the Property Management Division. The administration building is a two section modular building and was constructed offsite in 1984 and set on a concrete foundation at the FTA. Conditions at the FTA include consistent wind and up to two feet of snow each winter. The roof is past its existing life. Replacement of the roof will include using energy efficient materials as well as increasing the installation of the facility to meet current code requirements. This project is consistent with the agency goal to "sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Proviso

None

Location

City: North Bend

County: King

Legislative District: 005

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

		Expenditures			2023-25 Fiscal Period	
Acct Code	Account Title	Estimated Total	Prior Biennium	Current Biennium	Reappropr	New Approps
057-1	State Bldg Constr-State	286,000				286,000
	Total	286,000	0	0	0	286,000

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000077

Project Title: Fire Training Academy Roof Replacement

SubProjects

SubProject Number: 40000078

SubProject Title: FTA Administration Building Roof Replacement

	Future Fiscal Periods			
	2025-27	2027-29	2029-31	2031-33
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000079

SubProject Title: FTA Classroom C Roof Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 14

Project Summary

Replacement of the Fire Training Academy Classroom C roof.

Project Description

The Fire Training Academy (FTA) was constructed in 1985 and is used to provide training for firefighters throughout the state. The FTA benefits professional and volunteer firefighters from every fire commission district in the state and many from neighboring states and providences. Private firefighting organizations, such as the Boeing Company, use the facility as well. The U.S. Military along with other federal and state emergency service providers, such as the Department of Natural Resources, and State Parks. Within the agency, stakeholders include the Fire Protection Bureau, Field Operations Bureau, and the Property Management Division. Classroom C of the FTA is a two section modular building and was constructed offsite in 1984 and set on a concrete foundation at the FTA. Conditions at the FTA include consistent wind and up to two feet of snow each winter. The roof is past its existing life. Replacement of the roof will include using energy efficient materials as well as increasing the installation of the facility to meet current code requirements. This project is consistent with the agency goal to "sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Proviso

None

Location

City: North Bend

County: King

Legislative District: 005

Project Type

Infrastructure Preservation (Minor Works)

225 - Washington State Patrol
 Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000077

Project Title: Fire Training Academy Roof Replacement

SubProjects

SubProject Number: 40000079

SubProject Title: FTA Classroom C Roof Replacement

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriates	New Appropriates
057-1	State Bldg Constr-State	143,000				143,000
	Total	143,000	0	0	0	143,000

Future Fiscal Periods

Acct Code	Account Title	2025-27	2027-29	2029-31	2031-33
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 40000080

SubProject Title: FTA Classroom D Roof Replacement

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000077

Project Title: Fire Training Academy Roof Replacement

SubProjects

SubProject Number: 40000080

SubProject Title: FTA Classroom D Roof Replacement

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 14

Project Summary

Replace the roof of classroom D of the Fire Training Academy.

Project Description

The Fire Training Academy (FTA) was constructed in 1985 and is used to provide training for firefighters throughout the state. The FTA benefits professional and volunteer firefighters from every fire commission district in the state and many from neighboring states and providences. Private firefighting organizations, such as the Boeing Company, use the facility as well. The U.S. Military along with other federal and state emergency service providers, such as the Department of Natural Resources, and State Parks. Within the agency, stakeholders include the Fire Protection Bureau, Field Operations Bureau, and the Property Management Division. Classroom D of the FTA is a two section modular building and was constructed offsite in 1984 and set on a concrete foundation at the FTA. Conditions at the FTA include consistent wind and up to two feet of snow each winter. The roof is past its existing life. Replacement of the roof will include using energy efficient materials as well as increasing the installation of the facility to meet current code requirements. This project is consistent with the agency goal to "sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Location

City: North Bend

County: King

Legislative District: 005

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	143,000				143,000
	Total	143,000	0	0	0	143,000

Future Fiscal Periods

	2025-27	2027-29	2029-31	2031-33
057-1 State Bldg Constr-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 4000077

Project Title: Fire Training Academy Roof Replacement

SubProjects

SubProject Number: 4000080

SubProject Title: FTA Classroom D Roof Replacement

Narrative

Completion of the project will not change the use of the facility.

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000081

Project Title: Seattle Crime Laboratory Generator Replacement

Description

Starting Fiscal Year: 2024

Project Class: Preservation

Agency Priority: 15

Project Summary

Replacement of the Auxiliary Power Unit at the Seattle Crime Lab

Project Description

The WSP's Forensic laboratory Services Bureau (FLSB) provides a wide range of forensic science and expertise to city, county, and state law enforcement offices, medical examiners and coroners, assisting agencies at crime scenes and preparing evidence for trial and providing expert testimony. The Crime Laboratory Division, under the FLSB, provides high quality science services and forensic evidence training for criminal justice partner agencies within the state of Washington. The Crime Laboratory Division (CLD) enhances public safety by providing high-quality forensic science services and forensic evidence training for all criminal justice partner agencies within the State of Washington. The CLD plays a vital role in the criminal justice process providing high quality investigative information by identifying evidence or linking evidence in major crimes to an individual or a scene. Scientific testimony is often the deciding factor in the juridical resolution of criminal cases. The CLD operates in five multi-service crime laboratories around the state. The Seattle Crime Laboratory's emergency back up generator provides backup power for the entire laboratory ensuring continuous power for critical systems and devices ensuring the integrity of the evidence and processes being performed at this facility. This unit has exceeded its useful life. Servicing, parts and maintenance are consequently expensive. Unanticipated component failure is common leading to the possibility of evidence loss. This request is for funding to replace the existing generator with a new more energy efficient unit that meets the demands and requirements and operational needs of the facility. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

none

Location

City: Seattle

County: King

Legislative District: 011

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	450,000				450,000
	Total	450,000	0	0	0	450,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:18PM

Project Number: 40000081

Project Title: Seattle Crime Laboratory Generator Replacement

Funding

		Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Periodic electrical system upgrades and replacements will reduce operating costs.

Capital Project Request

2023-25 Biennium

*

<u>Parameter</u>	<u>Entered As</u>	<u>Interpreted As</u>
Biennium	2023-25	2023-25
Agency	225	225
Version	03-A	03-A
Project Classification	*	All Project Classifications
Capital Project Number	40000052, 30000135, 30000109, 30000	40000052, 30000135, 30000109, 30000
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids

Capital Project Cost Estimate

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Washington State Patrol	
Project Name	Shelton HVAC Replacement	
OFM Project Number	40000063	

Contact Information

Name	Brian Bottoms	
Phone Number	(360) 704-5402	
Email	brian.bottoms@wsp.wa.gov	

Statistics

Gross Square Feet	13,141	MACC per Gross Square Foot	\$89
Usable Square Feet	13,141	Escalated MACC per Gross Square Foot	\$96
Alt Gross Unit of Measure			
Space Efficiency	100.0%	A/E Fee Class	B
Construction Type	Fire and police stations	A/E Fee Percentage	13.09%
Remodel	Yes	Projected Life of Asset (Years)	15

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	No
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	8.80%	Location Used for Tax Rate	Shelton
Contingency Rate	10%		
Base Month (Estimate Date)	May-23	OFM UFI# (from FPMT, if available)	
Project Administered By			

Schedule

Predesign Start	August-23	Predesign End	December-23
Design Start	December-23	Design End	April-24
Construction Start	April-24	Construction End	June-25
Construction Duration	14 Months		

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Project Cost Estimate

Total Project	\$1,689,485	Total Project Escalated	\$1,811,292
		Rounded Escalated Total	\$1,811,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
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Consultant Services			
Predesign Services	\$0		
Design Phase Services	\$116,211		
Extra Services	\$0		
Other Services	\$52,211		
Design Services Contingency	\$16,842		
Consultant Services Subtotal	\$185,263	Consultant Services Subtotal Escalated	\$194,855

Construction			
Maximum Allowable Construction Cost (MACC)	\$1,169,672	Maximum Allowable Construction Cost (MACC) Escalated	\$1,256,930
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$116,967		\$125,693
Non-Taxable Items	\$0		\$0
Sales Tax	\$113,224	Sales Tax Escalated	\$121,671
Construction Subtotal	\$1,399,863	Construction Subtotal Escalated	\$1,504,294

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	\$104,358		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$104,358	Project Administration Subtotal Escalated	\$112,143

Other Costs			
Other Costs Subtotal	\$0	Other Costs Subtotal Escalated	\$0

Project Cost Estimate

Total Project	\$1,689,485	Total Project Escalated	\$1,811,292
		Rounded Escalated Total	\$1,811,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0				\$0
Consultant Services					
Consultant Services Subtotal	\$194,855				\$194,855
Construction					
Construction Subtotal	\$1,504,294				\$1,504,294
Equipment					
Equipment Subtotal	\$0				\$0
Artwork					
Artwork Subtotal	\$0				\$0
Agency Project Administration					
Project Administration Subtotal	\$112,143				\$112,143
Other Costs					
Other Costs Subtotal	\$0				\$0
Project Cost Estimate					
Total Project	\$1,811,292	\$0	\$0	\$0	\$1,811,292
	\$1,811,000	\$0	\$0	\$0	\$1,811,000
	Percentage requested as a new appropriation		0%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

Insert Row Here

What has been completed or is underway with a previous appropriation?

Insert Row Here

What is planned with a future appropriation?

Insert Row Here

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	1.0314	\$0	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$116,211			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	\$116,211	1.0382	\$120,650	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				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.0382	\$0	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	\$52,211			31% of A/E Basic Services
HVAC Balancing				
Staffing				
Other				
Insert Row Here				
Sub TOTAL	\$52,211	1.0746	\$56,106	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	\$16,842			
Other				
Insert Row Here				
Sub TOTAL	\$16,842	1.0746	\$18,099	Escalated to Mid-Const.

CONSULTANT SERVICES TOTAL	\$185,263	\$194,855

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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	1.0450	\$0	
2) Related Project Costs				
Offsite Improvements				
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.0450	\$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	\$537,000			
D40 - Fire Protection Systems				
D50 - Electrical Systems	\$29,000			
F10 - Special Construction				
F20 - Selective Demolition	\$19,672			
General Conditions				
Other Direct Cost				
Construction Misc. Parts	\$584,000			
Sub TOTAL	\$1,169,672	1.0746	\$1,256,930	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	\$1,169,672		\$1,256,930	
	\$89		\$96 per GSF	

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7) Owner Construction Contingency

Allowance for Change Orders	\$116,967		
Other			
Insert Row Here			
Sub TOTAL	\$116,967	1.0746	\$125,693

8) Non-Taxable Items

Other			
Insert Row Here			
Sub TOTAL	\$0	1.0746	\$0

9) Sales Tax

Sub TOTAL	\$113,224		\$121,671
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CONSTRUCTION CONTRACTS TOTAL	\$1,399,863		\$1,504,294
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Cost Estimate Details

Equipment					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Equipment					
E10 - Equipment					
E20 - Furnishings					
F10 - Special Construction					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.0746	\$0	
2) Non Taxable Items					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.0746	\$0	
3) Sales Tax					
Sub TOTAL	\$0			\$0	
EQUIPMENT TOTAL					
EQUIPMENT TOTAL	\$0			\$0	

Green cells must be filled in by user

Cost Estimate Details

Artwork

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

Green cells must be filled in by user

Cost Estimate Details

Project Management

Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Agency Project Management					
Agency Project Management	\$104,358				
Additional Services					
Other					
Insert Row Here					
<i>Subtotal of Other</i>	<i>\$0</i>				
PROJECT MANAGEMENT TOTAL	\$104,358		1.0746	\$112,143	

Green cells must be filled in by user

Cost Estimate Details

Other Costs					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Mitigation Costs					
Hazardous Material Remediation/Removal					
Historic and Archeological Mitigation					
Other					
Insert Row Here					
OTHER COSTS TOTAL	\$0		1.0450	\$0	

Green cells must be filled in by user

C-100(2022)
Additional Notes

Tab A. Acquisition

Insert Row Here

Tab B. Consultant Services

Insert Row Here

Tab C. Construction Contracts

Insert Row Here

Tab D. Equipment

Insert Row Here

Tab E. Artwork

Insert Row Here

Tab F. Project Management

Insert Row Here

Tab G. Other Costs

Insert Row Here

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0				\$0
Consultant Services					
Consultant Services Subtotal	\$174,779				\$174,779
Construction					
Construction Subtotal	\$1,408,420				\$1,408,420
Equipment					
Equipment Subtotal	\$0				\$0
Artwork					
Artwork Subtotal	\$0				\$0
Agency Project Administration					
Project Administration Subtotal	\$11,162				\$11,162
Other Costs					
Other Costs Subtotal	\$0				\$0
Project Cost Estimate					
Total Project	\$1,594,361	\$0	\$0	\$0	\$1,594,361
	\$1,594,000	\$0	\$0	\$0	\$1,594,000
Percentage requested as a new appropriation			0%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

Insert Row Here

What has been completed or is underway with a previous appropriation?

Insert Row Here

What is planned with a future appropriation?

Insert Row Here

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	

Green cells must be filled in by user

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	1.0617	\$0	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$105,761			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	\$105,761	1.0702	\$113,186	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				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.0702	\$0	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	\$47,516			31% of A/E Basic Services
HVAC Balancing				
Staffing				
Other				
Insert Row Here				
Sub TOTAL	\$47,516	1.1162	\$53,038	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	\$7,664			
Other				
Insert Row Here				
Sub TOTAL	\$7,664	1.1162	\$8,555	Escalated to Mid-Const.

CONSULTANT SERVICES TOTAL	\$160,940	\$174,779

Green cells must be filled in by user

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	1.1139	\$0	
2) Related Project Costs				
Offsite Improvements				
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.1139	\$0	
3) Facility Construction				
A10 - Foundations				
A20 - Basement Construction				
B10 - Superstructure				
B20 - Exterior Closure				
B30 - Roofing	\$704,324			
C10 - Interior Construction				
C20 - Stairs	\$4,500			
C30 - Interior Finishes				
D10 - Conveying				
D20 - Plumbing Systems				
D30 - HVAC Systems	\$69,400			
D40 - Fire Protection Systems				
D50 - Electrical Systems				
F10 - Special Construction				
F20 - Selective Demolition	\$97,325			
General Conditions	\$232,020			
Other Direct Cost				
Insert Row Here				
Sub TOTAL	\$1,107,569	1.1162	\$1,236,269	
4) Maximum Allowable Construction Cost				
MACC Sub TOTAL	\$1,107,569		\$1,236,269	
	\$61		\$68 per GSF	

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7) Owner Construction Contingency

Allowance for Change Orders	\$55,378		
Other			
Insert Row Here			
Sub TOTAL	\$55,378	1.1162	\$61,814

8) Non-Taxable Items

Other			
Insert Row Here			
Sub TOTAL	\$0	1.1162	\$0

9) Sales Tax

Sub TOTAL	\$98,851		\$110,337
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CONSTRUCTION CONTRACTS TOTAL	\$1,261,798		\$1,408,420
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Green cells must be filled in by user

Cost Estimate Details

Equipment

Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Equipment					
E10 - Equipment					
E20 - Furnishings					
F10 - Special Construction					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.1162	\$0	
2) Non Taxable Items					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.1162	\$0	
3) Sales Tax					
Sub TOTAL	\$0			\$0	
EQUIPMENT TOTAL					
EQUIPMENT TOTAL	\$0			\$0	

Green cells must be filled in by user

Cost Estimate Details

Artwork

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

Green cells must be filled in by user

Cost Estimate Details

Project Management					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Agency Project Management					
Agency Project Management	\$0				
Additional Services					
DES Fees	\$10,000				
Insert Row Here					
<i>Subtotal of Other</i>	<i>\$10,000</i>				
PROJECT MANAGEMENT TOTAL	\$10,000		1.1162	\$11,162	

Green cells must be filled in by user

Cost Estimate Details

Other Costs

Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Mitigation Costs					
Hazardous Material Remediation/Removal					
Historic and Archeological Mitigation					
Other					
Insert Row Here					
OTHER COSTS TOTAL	\$0		1.1139	\$0	

Green cells must be filled in by user

C-100(2022)
Additional Notes

Tab A. Acquisition

Insert Row Here

Tab B. Consultant Services

Insert Row Here

Tab C. Construction Contracts

Insert Row Here

Tab D. Equipment

Insert Row Here

Tab E. Artwork

Insert Row Here

Tab F. Project Management

Insert Row Here

Tab G. Other Costs

Insert Row Here

C-100(2022)

Updated June 2022

Quick Start Guide

GENERAL INFORMATION

- 1) The intended use of the C-100(2022) is to enable project managers to communicate their project cost estimates to budget officers in the standard format required for capital project budget requests/submittals to OFM.
- 2) This workbook is protected so that the worksheets within it cannot be moved or deleted in the usual manner. This protection is necessary to ensure that the cost estimate details and formulas align with the estimating application in the Capital Budgeting System.
- 3) The estimating format to develop the maximum allowable construction cost (MACC) is presented in Uniformat II.
- 4) Form-calculated costs such as A/E Basic Design Service fees and Agency Project Management costs are dependent on other estimated project costs such as MACC, equipment, etc.
- 5) Project estimates generated with this tool are not sufficient for budget request submittals to OFM. Use the Capital Budgeting System to submit capital project budget requests and attach the C-100 form.
- 6) Contact your assigned OFM Capital Budget Analyst with questions.

[OFM Capital Budget Analyst](#)

INSTRUCTIONS

- 1) Only green cells are available for data entry.
- 2) Fill in all known cells in the 'Summary' tab prior to moving on to the cost entry tabs A-G.
- 3) It is recommended, but not required, to fill out cost entry tabs in the following order:
A. Acquisition, C. Construction Contracts, D. Equipment, G. Other Costs, B. Consultant Services, F. Project Management, then E. Artwork.
- 4) If additional rows are inserted to capture additional project costs, a description must be provided in the Notes column or within Tab H. Additional Notes. Be particularly detailed for additional costs estimated for contingencies and project management.

FORM-CALCULATED COSTS (FEE CALCULATIONS)

- 1) A/E Basic Design Services: $AE\ Fee\ \% \times (MACC + Contingency)$
- 2) Design Services Contingency: $Contingency\ \% \times Consultant\ Services\ Subtotal$
- 3) Construction Contingency: $Contingency\ \% \times MACC$
- 4) Artwork: $0.5\% \times Total\ Project\ Cost$
- 5) Agency Project Management (Greater than \$1million): $(AE\ Fee\ \% - 3\%) \times (Acquisition\ Total + Consultant\ Services\ Total + MACC + Construction\ Contingency + Other\ Costs)$

TAB C

**Capital Project
Request Related
to New or
Expanded
Programs**

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000229

Project Title: District 2 Bellevue Headquarters - Improvements

Description

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 9

Project Summary

The Bellevue District Office is in need of a comprehensive evaluation of future operations at the site. Much of the review will include a definition of campus electrical system requirements.

Project Description

The Washington State Patrol Bellevue District Office complex was established in 1971. The warehouse facility was expanded two years later. Since that time the population of King County has doubled, roads, buildings and other infrastructure has more than doubled and demands for services from the Patrol has expanded. The current facilities were constructed to meet the operational needs of that era and were constructed to meet the codes and requirements at that time. The operations and facilities that make up this district play a major role in the agency goals and priorities, however because of their age, the limitations and infrastructure of the Bellevue Campus, the agency is severely limited in its ability to meet those goals and priorities. In the 2019-2021 biennium a Master Plan was developed, using operational funds, to assess the WSP operations in King County. Within the existing facility, significant deficiencies that impact the effectiveness of operations were noted in the plan's findings. They include: Inadequate quantity of space, deficient conditions, and ineffective locations. This request is to enable the agency to move forward with a predesign, land acquisition, and design construction documents. The predesign will clarify and define the primary and most urgent needs as well as associated budget to meet these needs. In the 2025-2027 biennium the agency will request funding for construction. This request will enable the agency to move forward with needed improvements to enable continuous operations and service. Without this plan the agency will continue to meet the needs of the region, however that effort will become much more difficult and problematic. Per the land acquisition, alternatives will be explored to include existing vacant facilities. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Bellevue

County: King

Legislative District: 048

Project Type

New Facilities/Additions (Major Projects)

Remodel/Renovate/Modernize (Major Projects)

Growth Management impacts

The impacts will not be determined until the Master Plan has been finalized.

New Facility: No

How does this fit in master plan

This is compliance with the Master Plan.

Funding

Expenditures

2023-25 Fiscal Period

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000229

Project Title: District 2 Bellevue Headquarters - Improvements

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
081-1	WSP Highway Account-State	68,124,000				15,353,000
	Total	68,124,000	0	0	0	15,353,000

		Future Fiscal Periods			
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1	WSP Highway Account-State	52,771,000			
	Total	52,771,000	0	0	0

Operating Impacts

No Operating Impact

Narrative

This project is not expected to have any operating or staffing impacts.

SubProjects

SubProject Number: 30000226

SubProject Title: Bellevue District Office - Predesign

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000229

Project Title: District 2 Bellevue Headquarters - Improvements

SubProjects

SubProject Number: 30000226

SubProject Title: Bellevue District Office - Predesign

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 9

Project Summary

Bellevue District Office Master Plan defined the direction and priority of improvements required for District 2 operations. This Predesign study expands on the highest priority issues and develops scope, plan and budgets to accomplish them.

Project Description

The Washington State Patrol Bellevue District Office complex was established in 1971. The warehouse facility was expanded two years later. Since that time the population of King County has doubled, roads, buildings and other infrastructure has more than doubled and demands for services from the Patrol has expanded. The current facilities were constructed to meet the operational needs of that era and were constructed to meet the codes and requirements at that time. The operations and facilities that make up this district play a major role in the agency goals and priorities, however because of their age, the limitations and infrastructure of the Bellevue Campus, the agency is severely limited in its ability to meet those goals and priorities. In the 2019-2021 biennium a Master Plan was developed, using operational funds, to assess the WSP operations in King County. Within the existing facility, significant deficiencies that impact the effectiveness of operations were noted in the plan's findings. They include: inadequate quantity of space, deficient conditions, and ineffective locations. This request is to enable the agency to move forward with a predesign. The predesign will clarify and define the primary and most urgent needs as well as associated budget to meet these needs. This request will enable the agency to move forward with needed improvements to enable continuous operations and service. Without this plan the agency will continue to meet the needs of the region, however that effort will become much more difficult and problematic. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Bellevue

County: King

Legislative District: 048

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

New Facility: No

How does this fit in master plan

This work will expand on the master plan for district facilities and operations.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 3000229

Project Title: District 2 Bellevue Headquarters - Improvements

SubProjects

SubProject Number: 3000226

SubProject Title: Bellevue District Office - Predesign

<u>Funding</u>		<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
081-1	WSP Highway Account-State	5,810,000				5,810,000
	Total	5,810,000	0	0	0	5,810,000

		<u>Future Fiscal Periods</u>			
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1	WSP Highway Account-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

Operating impacts are unknown.

SubProject Number: 3000228

SubProject Title: Bellevue District Office - Design

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000229

Project Title: District 2 Bellevue Headquarters - Improvements

SubProjects

SubProject Number: 30000228

SubProject Title: Bellevue District Office - Design

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 9

Project Summary

Bellevue District Office Master Plan defined the direction and priority of improvements required within District 1 operations. The Predesign study expanded and developed design criteria and program needs and project estimate. This work continues into design, construction documents and construction estimate to complete this phase of improvements to meet the high priority issues.

Project Description

The Washington State Patrol Bellevue District Office complex was established in 1971. The warehouse facility was expanded two years later. Since that time the population of King County has doubled, roads, buildings and other infrastructure has more than doubled and demands for services from the Patrol has expanded. The current facilities were constructed to meet the operational needs of that era and were constructed to meet the codes and requirements at that time. The operations and facilities that make up this district play a major role in the agency goals and priorities, however because of their age, the limitations and infrastructure of the Bellevue Campus, the agency is severely limited in its ability to meet those goals and priorities. In the 2019-2021 biennium a Master Plan was developed, using operational funds, to assess the WSP operations in King County. Within the existing facility, significant deficiencies that impact the effectiveness of operations were noted in the plan's findings. They include: inadequate quantity of space, deficient conditions, and ineffective locations. This request is to enable the agency to move forward with a predesign, land acquisition, and design construction documents. The predesign will clarify and define the primary and most urgent needs as well as associated budget to meet these needs. In the 2025-2027 biennium the agency will request funding for construction. This request will enable the agency to move forward with needed improvements to enable continuous operations and service. Without this plan the agency will continue to meet the needs of the region, however that effort will become much more difficult and problematic. Per the land acquisition, alternatives will be explored to include existing vacant facilities. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Bellevue

County: King

Legislative District: 048

Project Type

Infrastructure Preservation (Minor Works)

Growth Management impacts

None

New Facility: No

How does this fit in master plan

This work will expand on the master plan for district facilities and operations.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000229

Project Title: District 2 Bellevue Headquarters - Improvements

SubProjects

SubProject Number: 30000228

SubProject Title: Bellevue District Office - Design

<u>Funding</u>		<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
081-1	WSP Highway Account-State	9,543,000				9,543,000
	Total	9,543,000	0	0	0	9,543,000
		<u>Future Fiscal Periods</u>				
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State					
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

Operating impacts are unknown.

SubProject Number: 30000231

SubProject Title: Bellevue District Office - Construction

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000229

Project Title: District 2 Bellevue Headquarters - Improvements

SubProjects

SubProject Number: 30000231

SubProject Title: Bellevue District Office - Construction

Starting Fiscal Year: 2026

Project Class: Program

Agency Priority: 9

Project Summary

Bellevue District Office Master Plan defined the direction and priority of improvements required within District 1 operations. The Predesign study expanded and developed design criteria and program needs and project estimate. This work continues into design, construction documents and construction estimate to complete this phase of improvements to meet the high priority issues.

Project Description

The Washington State Patrol Bellevue District Office complex was established in 1971. The warehouse facility was expanded two years later. Since that time the population of King County has doubled, roads, buildings and other infrastructure has more than doubled and demands for services from the Patrol has expanded. The current facilities were constructed to meet the operational needs of that era and were constructed to meet the codes and requirements at that time. The operations and facilities that make up this district play a major role in the agency goals and priorities, however because of their age, the limitations and infrastructure of the Bellevue Campus, the agency is severely limited in its ability to meet those goals and priorities. In the 2019-2021 biennium a Master Plan was developed, using operational funds, to assess the WSP operations in King County. Within the existing facility, significant deficiencies that impact the effectiveness of operations were noted in the plan's findings. They include: inadequate quantity of space, deficient conditions, and ineffective locations. This request is to enable the agency to move forward with a predesign, land acquisition, and design construction documents. The predesign will clarify and define the primary and most urgent needs as well as associated budget to meet these needs. In the 2025-2027 biennium the agency will request funding for construction. This request will enable the agency to move forward with needed improvements to enable continuous operations and service. Without this plan the agency will continue to meet the needs of the region, however that effort will become much more difficult and problematic. Per the land acquisition, alternatives will be explored to include existing vacant facilities. This project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Proviso

None

Location

City: Bellevue

County: King

Legislative District: 048

Project Type

New Facilities/Additions (Major Projects)

Growth Management impacts

None

New Facility: No

How does this fit in master plan

This work will expand on the master plan for district facilities and operations.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 3000229

Project Title: District 2 Bellevue Headquarters - Improvements

SubProjects

SubProject Number: 3000231

SubProject Title: Bellevue District Office - Construction

<u>Funding</u>		<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriations</u>	<u>New Appropriations</u>
081-1	WSP Highway Account-State	52,771,000				
	Total	52,771,000	0	0	0	0

		<u>Future Fiscal Periods</u>			
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>
081-1	WSP Highway Account-State	52,771,000			
	Total	52,771,000	0	0	0

Operating Impacts

No Operating Impact

Narrative

Operating impacts are unknown.



1.0 EXECUTIVE SUMMARY

Ensuring the agency, its troopers, and civilian personnel have safe and functional facilities in which to execute their duties is the fifth goal in the 2019-2022 Strategic Plan of the Washington State Patrol. One of the key objectives of this goal is to develop a comprehensive 16-year Capital Plan for the agency. The development of this Facilities Master Plan (FMP) supports that objective by providing a structure to guide the WSP in the future development of District-2 in planning for facility renovation, replacement, and growth over the next several years.

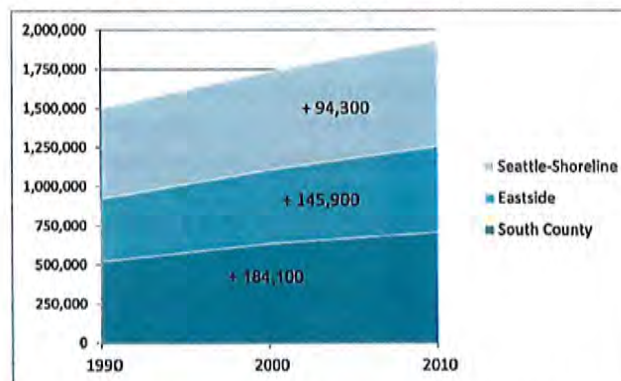
1.1 Background

District-2 covers all of King County and includes the major metropolitan areas of Seattle and Bellevue. Geographically it is the smallest Field Operations Bureau (FOB) District in the state but serves the most populated county with more than 2.1 million residents and nearly 1.8 million licensed drivers. King County is also the fastest growing county in the state with a 12 percent population increase since 2010. Interstates-5, 90, 405 and State Routes-520 and 167 are flooded every day by commuters going to and from work, students driving to and from the University of Washington, travelers flying in and out of Sea-Tac International Airport, and sports fans going to watch events at T-Mobile Park, CenturyLink Field, and Husky Stadium.

District-2 also covers major civic and corporate centers such as:

- Washington State Convention Center
- Starbucks Corporate Headquarters
- Microsoft Corporate Headquarters
- Amazon Corporate Headquarters
- Port of Seattle
- Boeing Field, King County Airport
- Washington State Ferries
- Snoqualmie Pass over I-90
- Emerald Downs
- Home of Seafair

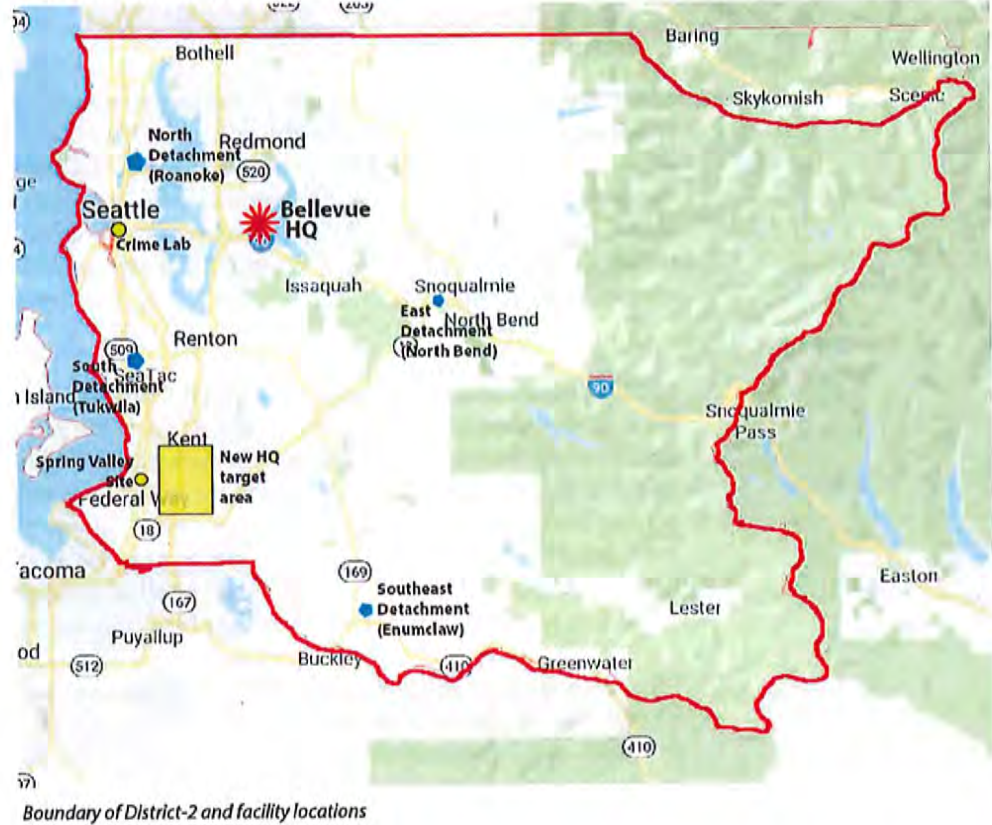
Surrounding communities host most major events in the state to include dignitary visits, major sporting venues, and cultural and political events. The Communications Center in District-2 receives up to 24,000 emergency calls per month ranging from minor collisions, to reporting major traffic crimes in progress, and other emergencies.



Nearly half of the growth in District-2 Service Area over the past 20 years has been in the south part of the County



WSP DISTRICT-2 FACILITIES MASTER PLAN



1.2 Existing Facilities

The primary facilities serving District-2 consist of the headquarters complex in Bellevue and three detachment offices; the North Detachment at Roanoke Street in Seattle, the South Detachment in Tukwila, and the East Detachment in Enumclaw. In addition to numerous communications facilities, other WSP operations within the District boundaries include the Fire Training Academy in North Bend and the Seattle Crime Lab. The Commercial Vehicle Division also operates a weigh station on northbound I-5 in Federal Way. There is a new weigh station planned for North Bend to replace the existing station that has been decommissioned to allow for a new I-90/SR-18 interchange.

1.3 Purpose

The purpose of this FMP is:

1. To define and project the future space and infrastructure needs of District-2 by providing a framework for decision-making that regards facilities needed to address existing deficiencies in physical facilities and their impact on operations in addition to accommodating change and the long-term facilities needs of the District.
2. To support the WSP's bi-annual funding request in the state capital budget process.

The state capital budget provides funding for all WSP facilities to maintain and preserve state-owned facilities, upgrade program spaces to meet the changing agency needs, and to construct new facilities to accommodate growth and operational needs. As part of the state capital budget process, WSP can submit capital requests that support their most critical



WSP DISTRICT-2 FACILITIES MASTER PLAN

needs. These requests are divided into categories such as repairs, minor improvements, replacements, renovations, and major new construction. Given the limited capital budget, funding from amongst the pool of applying agencies is highly competitive.

1.4 Planning Goals

The primary goals of the District-2 FMP are to support the WSP's Mission and Strategic Plans through the physical improvement and development of its facilities and infrastructure. Specific goals include the following:

- Provide healthy, safe, and functional space for WSP commissioned and civilian staff to work.
- WSP mission, vision, values, and goals will drive physical plant/planning decisions.
- Optimize operational and maintenance efficiencies.
- Create a tool for future growth and decision-making, a flexible framework for development of facilities.
- Establish a realistic schedule and capital budgeting plan.

1.5 Objectives

The FMP established a series of physical objectives to be achieved during the duration of this master plan. These fall into the following general areas:

- Inventory and document the condition of the existing facilities occupied by District-2.
- Identify and inventory the space use of the existing facilities and compare to state/industry standards.
- Identify, prioritize, and site new and renovation projects needed to accommodate space needs.
- Identify needed infrastructure improvements including parking and major utilities.

1.6 Methodology

To meet the goals and objectives for the FMP, the WSP Facilities Management Group formed a Planning Committee and engaged Schreiber Starling Whitehead Architects as planning consultants to facilitate the process and document the recommendations.

Successful master planning begins with the team gaining an understanding of the functions and operations performed within the District. To accomplish this task, the planning team held a series of planning workshops/meetings with representatives of each operational element and department. The purpose of these workshops was to review overall agency and planning goals, identify common perceptions of the existing physical plant and operations, gather and analyze pertinent growth and planning data and projections, review and incorporate the goals and objectives of program/operational areas, and make general observations to develop an understanding of the existing facilities.

Concurrent with the workshops, the planning team conducted on-site tours and visits to all District facilities to record existing conditions and identify conditions and factors impacting current operations and those having impact on future development.

To define the scope of growth to be incorporated into this FMP, the following strategies were implemented:



WSP DISTRICT-2 FACILITIES MASTER PLAN

- **Need Determination:** The total built area needed was determined through space needs analysis which looked at quantitative existing District facilities, their current utilization, and future growth projections. The resulting space needs program identified total square footage deficiencies.
- **Condition Analysis:** The existing District facilities and sites were assessed for condition and suitability using standards established by other state agencies. The purpose of this assessment is to provide a tool for prioritizing.
- **Site Planning and Building Development:** During the stakeholder workshops, the planning team discussed the relationships of the spaces with their associated programs and services. Appropriate locations for growth and the areas available/required at each location were determined. A series of new capital construction, replacement, and renovation projects were identified such that the projects organizationally supported the campus planning goals.

1.7 Findings

The existing facilities serving District-2 have many facility deficiencies that impact the effectiveness of operations, increase the cost of operation, and do not meet the basic structural standards for essential facilities serving the communities in their region. These include:

- **Inadequate quantity of space:** The available space does not meet the need of the district as it is currently configured and staffed. Space shortages of 12,623-gsf were calculated as follows:
 - Headquarters: *Existing 43,825-gsf | Proposed 53,723-gsf*
 - South Detachment: *Existing 6,296-gsf | Proposed 9,021-gsf*
 - North Detachment: *Existing 6,410-gsf | Proposed 6,410-gsf*
- **Deficient condition:** Significant physical deficiencies were noted at most of the current facilities. Examples of building deficiencies noted include:
 - *Seismic Weakness*
The basic design of the existing buildings create weakness in transference of seismic loads to the foundation and do not meet seismic survivability standards for essential facilities per current code. The Tukwila facility is constructed of unreinforced masonry and lacks any functional seismic resistance. The Bellevue HQ has a seismic system that was designed for significantly less loading than current code requires.
 - *Accessibility/Code Deficiencies*
The existing Tukwila facility does not comply with ADA accessibility. Other buildings lack code-compliant restroom capacity.
 - *Building Age and Design*
The Tukwila facility is 54 years old and has not had any significant improvements. The Bellevue Headquarters is 50 years old and has only had minor systems upgrades and improvements. The buildings are in poor condition and their configuration/construction is inherently inflexible.
 - *Inadequate and Obsolete Mechanical Systems*
The majority of the mechanical systems are at the end of their useful lives, consume excessive energy, and require frequent maintenance.



WSP DISTRICT-2 FACILITIES MASTER PLAN

- o *Poor Envelope and High Energy-Use*

The majority of existing buildings have minimal insulation, single-pane glazing, and roofing systems at the end of their useful life. The extremely poor building envelope configuration leads to excessive energy use to condition the interior spaces.

Using a quantitative assessment tool, the conditions at the Tukwila and Headquarters facilities were scored as needing improvement through replacement or significant renovation.

- **Ineffective locations:** In reviewing current sites/locations, several factors were identified that create negative impacts to current operations and are expected to worsen with projected population growth in the county and the demographic shift to the south. Specifically noted were:

Bellevue:

- o Location makes it difficult to recruit and retain staff. Bellevue/Seattle has high cost of living and commute to more cost-manageable communities is too difficult.
- o Location provides poor coverage for East and South King County.

Tukwila:

- o Site is too small.
- o No room to expand/growth.
- o Location provides poor coverage for East and South King County.

Roanoke:

- o Site is too small.
- o No room to expand/growth.

1.8 Alternatives and Recommendations

Do Nothing

In exploring the possible development response to the findings of lack of space, lack of flexibility, significant facility deficiencies, and operational impact from poor location, the team considered the alternative of doing nothing. WSP has been proceeding under the do-nothing alternative for District-2 for past 20 years. While they do maintain the physical appearance of their facilities and some improvements have been made in upgrading some systems, the age, condition, and operations impact from poor location cannot be adequately addressed with minor repair projects. No action will continue the status quo with negative impact to field operations, staff recruiting, and poor seismic survivability.

Phased Development Plan

The FMP proposes to address the identified space shortfall through several projects that include new replacement, renovation, and expansion projects. The sequence proposed for development is generated to work within the capital project funding process established by OFM and assures a logical process that enables continuous operation of the District in existing buildings while new buildings/spaces are developed.

- **Near Term Phase**

The proposed project would relocate the District Headquarters and the existing South County Detachment (Tukwila) to a new facility in the high-growth area of the County. This project relocates the HQ functions from Bellevue and the Patrol and VIN function from Tukwila.



WSP DISTRICT-2 FACILITIES MASTER PLAN

- o New Building Area: 54,000 - gross square feet
- o Anticipated Project Cost: \$49,483,000
- o Anticipated Completion: Fall 2025

- **Mid Term Phase**

Following construction of a new South County HQ, the operation remaining in Bellevue would be a smaller Detachment. Given the smaller size need of this function, it is anticipated that either a new or leased facility will be developed, and the existing Bellevue HQ site sold.

- o New Area: 10,000- gross square feet
- o Anticipated Project Cost: \$9,273,000
- o Anticipated Completion: Winter 2026

A leased option for this detachment has an initial cost of \$2,750,000 and a 30-year cost that is slightly less than new construction/ownership. The 50-year total cost is nearly \$10M more than ownership option.

A secondary project would replace the VIN functions at the current HQ with a pre-engineered VIN Building. This option assumes a new site as it's unlikely a lease could accommodate this function.

- o New Area: 1,800- gross square feet
- o Anticipated Project Cost: \$3,452,000
- o Anticipated Completion: Summer 2026

- **Far Term Phase**

To address the increasing cost of leased space in the heart of Seattle and to realize efficiencies and effectiveness of consolidations of lab services, this project proposes development of a new Crime Lab building on the Spring Valley site, currently owned by WSP in Federal Way.

- o New Building Area: 68,500 - gross square feet
- o Anticipated Project Cost: \$70,688,000
- o Anticipated Completion: Fall 2031

1.9 Acknowledgments

The Planning Team wishes to acknowledge the following people for their cooperation, interest and participation:

FMP Core Committee

Capt. Ron Mead, District-2 Commander
Lt. Jo Buettner, D-2 Operations
Lt. Zach Elmore, D-2 North (Roanoke)
Lt. Jason Longoria, D-2 East (Bellevue)
Lt. Gabe Olson, D-2 South (Tukwila)
Sgt. Julie Fisher, D-2 Operations
Brian Bottoms, WSP Facilities, Project Manager
Anthony Ifie, DES Project Manager

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000271

Project Title: Shelton Academy Campus Expansion

Description

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 10

Project Summary

Improvements and Expansion of the State Patrol Training Academy at Shelton.

Project Description

The Washington State Patrol Academy was established in 1947, when the Patrol was given the former Navy bachelor officer quarters near Shelton to be converted to a basic training academy. The first buildings, administrative, kitchen/dining, classrooms, and dormitories, were constructed in 1969. From 1982 to 1993, buildings and site development occurred to accommodate a multipurpose training building, firing range, drive course, auto maintenance shop, radio tower and building, and in 2003 a K-9 unit training building was added to the current site. The existing buildings have undergone extensive refurbishing of restrooms, HVAC systems and ADA accessibility to maintain current training activities. The property has been fragmented with short term training building placements without regard to long term site impacts. Since the Academy construction, student training, food service, and facility maintenance demands have steadily increased. Several portable buildings have been erected for new enforcement programs, and extensive remodel projects have been performed that are fragmenting and detracting from the original site and buildings. These changes have placed additional burdens on the outdated infrastructure. In addition, site security and special needs must be addressed to ensure a safe and productive environment for students.

The Shelton Academy serves an integral part in the agency's primary mission. Providing additional training activities and additional facilities are required. The Agency has dedicated funds to develop a Master Plan to provide the necessary framework for orderly and appropriate facility additions to fully support the agency's training needs. The proposed Master Plan will identify all existing facilities, infrastructure support, and future facilities for this site, and will analyze existing structures for capacity, structural conditions, and future potential, as well as provide conclusions based upon current and future training goals.

To meet new and additional training requirements for the increasing need for public safety and security, additional training facilities are required. For maximum benefit to the training program, proposed additional facilities need to fit within an orderly and appropriate framework that furthers the agency's goals. The current training activities, including classroom training, housing and kitchen/dining service have expanded beyond current physical site and building capacities to accommodate future additional training activities, including housing for staff, cadets and students.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Proviso

None

Location

City: Shelton

County: Mason

Legislative District: 035

Project Type

New Facilities/Additions (Major Projects)

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000271

Project Title: Shelton Academy Campus Expansion

Description

Growth Management impacts

There will be no impacts associated with this project.

New Facility: No

How does this fit in master plan

This proposal will develop the Master Plan

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
081-1	WSP Highway Account-State	3,200,000				200,000
	Total	3,200,000	0	0	0	200,000

Acct Code	Account Title	Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
081-1	WSP Highway Account-State	1,000,000	2,000,000		
	Total	1,000,000	2,000,000	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProjects

SubProject Number: 40000083

SubProject Title: Shelton Academy Campus Expansion

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000271

Project Title: Shelton Academy Campus Expansion

SubProjects

SubProject Number: 40000083

SubProject Title: Shelton Academy Campus Expansion

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 10

Project Summary

Improvements and expansion, based on the Master Plan, of the State Patrol Training Academy located in Shelton.

Project Description

The Shelton Academy serves an integral part in the agency's primary mission. Providing additional training activities and additional facilities are required. The agency has requested funds to develop a Master Plan to provide the necessary framework for orderly and appropriate facility additions to fully support the agency's training needs. The proposed Master Plan will identify all existing facilities, infrastructure support, and future facilities for this site, and will analyze existing structures for capacity, structural conditions, and future potential, as well as provide conclusions based upon current and future training goals. This proposal will lead to the next phase of work planned for the 2025-2027 biennium to conduct a pre-design study to expand and explore options and recommendations for program and facility needs as defined in the master plan. This will be followed with design and construction documents and construction in the following biennium. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Proviso

None

Location

City: Shelton

County: Mason

Legislative District: 035

Project Type

New Facilities/Additions (Major Projects)

Growth Management impacts

There will be no impacts associated with this project.

New Facility: No

How does this fit in master plan

This proposal will develop the Master Plan

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	3,000,000				
Total		3,000,000	0	0	0	0

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 3000271

Project Title: Shelton Academy Campus Expansion

SubProjects

SubProject Number: 4000083

SubProject Title: Shelton Academy Campus Expansion

	Future Fiscal Periods			
	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State	1,000,000	2,000,000		
Total	1,000,000	2,000,000	0	0

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

SubProject Number: 3000281

SubProject Title: Shelton Academy Campus Expansion - Master Plan

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

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Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000271

Project Title: Shelton Academy Campus Expansion

SubProjects

SubProject Number: 30000281

SubProject Title: Shelton Academy Campus Expansion - Master Plan

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 10

Project Summary

Shelton Academy campus expansion - Master Plan

Project Description

The Washington State Patrol Academy was established in 1947, when the Patrol was given the former Navy bachelor officer quarters near Shelton to be converted to a basic training academy. The first buildings, administrative, kitchen/dining, classrooms, and dormitories, were constructed in 1969. From 1982 to 1993, buildings and site development occurred to accommodate a multipurpose training building, firing range, drive course, auto maintenance shop, radio tower and building, and in 2003 a K-9 unit training building was added to the current site. The existing buildings have undergone extensive refurbishing of restrooms, HVAC systems and ADA accessibility to maintain current training activities. The property has been fragmented with short term training building placements without regard to long term site impacts. Since the Academy construction, student training, food service, and facility maintenance demands have steadily increased. Several portable buildings have been erected for new enforcement programs, and extensive remodel projects have been performed that are fragmenting and detracting from the original site and buildings. These changes have placed additional burdens on the outdated infrastructure. In addition, site security and special needs must be addressed to ensure a safe and productive environment for students.

The Agency is requesting funds to develop a Master Plan to provide the necessary framework for orderly and appropriate facility additions to fully support the agency's training needs. The proposed Master Plan will identify all existing facilities, infrastructure support, and future facilities for this site, and will analyze existing structures for capacity, structural conditions, and future potential, as well as provide conclusions based upon current and future training goals. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Location

City: Shelton

County: Mason

Legislative District: 035

Project Type

New Facilities/Additions (Major Projects)

Growth Management impacts

There will be no impacts associated with this project.

New Facility: No

Funding

<u>Funding</u>		<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
<u>Acct Code</u>	<u>Account Title</u>	<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reapprops</u>	<u>New Approps</u>
081-1	WSP Highway Account-State	200,000				200,000
	Total	200,000	0	0	0	200,000

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000271

Project Title: Shelton Academy Campus Expansion

SubProjects

SubProject Number: 30000281

SubProject Title: Shelton Academy Campus Expansion - Master Plan

	Future Fiscal Periods			
	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State				
Total	0	0	0	0

Operating Impacts

No Operating Impact

Narrative

No anticipated operational or staffing impacts associated with this phase.

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000199

Project Title: Armstrong Complex 4th Building

Description

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 11

Project Summary

Pre-design study to design and construct a new facility to house the agency's Olympia Detachment, Latent Prints, and Special Operations functions.

Project Description

Currently the agency leases space for our Olympia Detachment Office and Latent Prints. Our Special Operations Division parks their specialized equipment and vehicles outside and are subjected to the elements.

This request is to consolidate these services into a single owned facility located on state owned property. This work will be a multi-phase project comprised of a pre-design study this biennium, development of construction documents in the 2023-2025 biennium, and construction in the 2025-2027 biennium.

This work would consolidate services and functions from several leased locations into a state owned facility providing controlled costs, managed maintenance and services into a single location. If this program is not funded, the Agency would continue with current arrangements.

The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Location

City: Tumwater

County: Thurston

Legislative District: 022

Project Type

New Facilities/Additions (Major Projects)

Growth Management impacts

This proposed expansion is incorporated into an preexisting site, prepared for this facility.

New Facility: Yes

How does this fit in master plan

This facility will meet the agency goals to consolidate local leased facilities into single owned location.

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	6,075,000				75,000
	Total	6,075,000	0	0	0	75,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000199

Project Title: Armstrong Complex 4th Building

Funding

		Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
081-1	WSP Highway Account-State	1,000,000	5,000,000		
	Total	1,000,000	5,000,000	0	0

Operating Impacts

No Operating Impact

Narrative

This work will not have any impacts or changes to facility operations or staffing.

SubProjects

SubProject Number: 30000206

SubProject Title: Armstrong Complex 4th Building - Predesign

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 11

Project Summary

Predesign Study for a new facility to house the agency Olympia detachment, Latent Prints Lab, and Special Operations functions.

Project Description

Currently the agency leases space for our Olympia Detachment office and Latent Prints Lab. Our Special Operations Division parks their specialized equipment and vehicles outside which are subjected to the elements.

This request is to perform a predesign study to define program and potential costs and alternatives for creation of a new facility to consolidate the Olympia Detachment, Latent Prints Lab and Special Operations services into a single owned facility located on state owned property. This work will be multi-phase project comprised of a predesign study this biennium, development of construction documents in the 2023-2025 biennium, and construction in the 2025-2027 biennium.

This work would consolidate services and functions from several leased spaces into a state owned facility providing controlled costs, managed maintenance, and services into a single location. If this program is not funded, the agency would continue with current arrangements. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Location

City: Tumwater

County: Thurston

Legislative District: 022

Project Type

New Facilities/Additions (Major Projects)

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000199

Project Title: Armstrong Complex 4th Building

SubProjects

SubProject Number: 30000206

SubProject Title: Armstrong Complex 4th Building - Predesign

Growth Management impacts

This proposed expansion is incorporated into an preexisting site, prepared for this facility.

New Facility: Yes

How does this fit in master plan

This facility will meet the agency goals to consolidate local leased facilities into single owned location.

Funding

<u>Acct Code</u>	<u>Account Title</u>	<u>Expenditures</u>			<u>2023-25 Fiscal Period</u>	
		<u>Estimated Total</u>	<u>Prior Biennium</u>	<u>Current Biennium</u>	<u>Reappropriates</u>	<u>New Appropriates</u>
081-1	WSP Highway Account-State	75,000				75,000
	Total	75,000	0	0	0	75,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
081-1	WSP Highway Account-State	0	0	0	0	
	Total	0	0	0	0	

Operating Impacts

No Operating Impact

Narrative

This work will not have any impacts or changes to facility operations or staffing.

SubProject Number: 30000208

SubProject Title: Armstrong Complex 4th Building - Design

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000199

Project Title: Armstrong Complex 4th Building

SubProjects

SubProject Number: 30000208

SubProject Title: Armstrong Complex 4th Building - Design

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 11

Project Summary

Design & Construction documents for a new facility to house the agency's Olympia Detachment, Latent Prints Lab and Special Operations functions.

Project Description

Currently the agency leases space for our Olympia Detachment Office and Latent Prints Lab. Our Special Operations Division parks their specialized equipment and vehicles outside which are subjected to the elements.

This request is to create design and construction documents as well as a construction estimate for construction costs of the new facility to consolidate the Olympia Detachment, the Latent Prints Lab and the Special Operations services into a single owned facility located on state owned property consistent with the Predesign study. This work will complete the second phase of the request developed in the 2023-2025 biennium and will be followed with the third phase - construction which is planned for the 2025-2027 biennium.

This work would consolidate services and functions from several leased locations into a single state owned facility providing controlled costs, managed maintenance and services into a single location. If this program is not funded, the agency would continue with current arrangements.

This project is consistent with the agency goal to "Improve and sustain agency infrastructure" and is supported in the Capital Projects section of the Agency's Strategic Plan.

Location

City: Tumwater

County: Thurston

Legislative District: 022

Project Type

New Facilities/Additions (Major Projects)

Growth Management impacts

This proposed expansion is incorporated into an preexisting site, prepared for this facility.

New Facility: Yes

How does this fit in master plan

This facility will meet the agency goals to consolidate local leased facilities into single owned location.

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
081-1	WSP Highway Account-State	6,000,000				
	Total	6,000,000	0	0	0	0

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000199

Project Title: Armstrong Complex 4th Building

SubProjects

SubProject Number: 30000208

SubProject Title: Armstrong Complex 4th Building - Design

	Future Fiscal Periods			
	2025-27	2027-29	2029-31	2031-33
081-1 WSP Highway Account-State	1,000,000	5,000,000		
Total	1,000,000	5,000,000	0	0

Operating Impacts

No Operating Impact

Narrative

Operational impacts are unknown at this time. This phase of work will have no impacts on facility operations or staffing.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 40000072

Project Title: Crime Laboratory South I-5 Corridor Consolidated Facility

Description

Starting Fiscal Year: 2024
 Project Class: Program
 Agency Priority: 16

Project Summary

Request to design and construct a consolidated Crime Lab South of Seattle.

Project Description

In the 2019-2021 biennium a master plan was construction on the WSP Forensic Laboratory Bureau's (FLSB) Crime Lab Division's (CLD) to assess the needs. Based on the current needs to process DNA, Sexual Assault Kits (SAK), materials analysis, and firearms testing, the agency wants to move forward with both a North and South of Seattle Crime Lab facilities. This is critical to expedite DNA, and SAK testing as well as other critical functions. One of the recommendations from the master plan is to construct a facility on agency owned vacant land in Federal Way, Washington. The facility will be designed as a minimum to meet Leadership in Energy and Environmental Design (LEED) Silver standards. This will include abundant use of controlled natural light, preference for locally source materials, robust well-insulated and well-sealed exterior wall and roof assemblies, and high energy efficient mechanical and lighting systems. This proposal is for pre-design and design construction documents for the 2023-2025 biennium with plans to request funding for construction in the 2025-2027 biennium. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

New Facilities/Additions (Major Projects)

Growth Management impacts

Impacts have not yet been determined.

New Facility: No

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	102,800,000				8,600,000
	Total	102,800,000	0	0	0	8,600,000
			Future Fiscal Periods			
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State	94,200,000				
	Total	94,200,000	0	0	0	

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 40000072

Project Title: Crime Laboratory South I-5 Corridor Consolidated Facility

Operating Impacts

No Operating Impact

SubProjects

SubProject Number: 40000073

SubProject Title: Crime Laboratory South I-5 Corridor Predesign

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 16

Project Summary

Predesign for the proposed South Seattle consolidated Crime Laboratory Services

Project Description

This proposal for the predesign study to determine the size, scope and requirements of a Crime Lab in providing services south of Seattle. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business processes" and is supported by the Capital Project section of the agency's Strategic Plan.

Proviso

None

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

New Facilities/Additions (Major Projects)

Growth Management impacts

Impacts have not yet been determined.

New Facility: No

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	8,600,000				8,600,000
	Total	8,600,000	0	0	0	8,600,000

Future Fiscal Periods

Acct Code	Account Title	2025-27	2027-29	2029-31	2031-33
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

225 - Washington State Patrol
 Capital Project Request

2023-25 Biennium

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Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 40000072

Project Title: Crime Laboratory South I-5 Corridor Consolidated Facility

SubProjects

SubProject Number: 40000073

SubProject Title: Crime Laboratory South I-5 Corridor Predesign

No Operating Impact

Narrative

There is no operating impact.

SubProject Number: 40000074

SubProject Title: Crime Laboratory South I-5 Corridor Construction

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 16

Project Summary

Proposed construction of a Crime Laboratory south of Seattle.

Project Description

This proposal for the construction of a Crime Lab in providing services south of Seattle. This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business processes" and is supported by the Capital Project section of the agency's Strategic Plan.

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

New Facilities/Additions (Major Projects)

Growth Management impacts

Impacts have not yet been determined.

New Facility: No

Funding

Acct Code	Account Title	Expenditures			2023-25 Fiscal Period	
		Estimated Total	Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	94,200,000				
	Total	94,200,000	0	0	0	0
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State	94,200,000				
	Total	94,200,000	0	0	0	

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

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Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 40000072

Project Title: Crime Laboratory South I-5 Corridor Consolidated Facility

SubProjects

SubProject Number: 40000074

SubProject Title: Crime Laboratory South I-5 Corridor Construction

Operating Impacts

No Operating Impact

Narrative

There is no operating impact at this time.



1.0 EXECUTIVE SUMMARY

Ensuring the agency, its troopers, and civilian personnel have safe and functional facilities in which to execute their duties is the fifth goal in the 2019-2022 Strategic Plan of the Washington State Patrol. One of the key objectives of this goal is to develop a comprehensive Facilities Plan which can ensure the Forensics Division will have the needed functional space, tools, and supportive environment to be effective and efficient in providing critical investigative and analytic services to the Patrol and its supported Agencies. The development of this Facilities Master Plan (FMP) supports that objective by providing a structure to guide the WSP in the future development of the physical plant to enable the Forensics Division to be one of the leaders in the field of forensic science in the nation.

1.1 Background

The Washington State Patrol Forensics provides quality forensic services for criminal justice agencies within the state of Washington ([RCW 43.43.670](#)).

The Crime Lab Division (CLD) quality forensic services for criminal justice agencies within the state of Washington such as:

- DNA Testing
- Combined DNA Index System (CODIS) Laboratory (felon database program)
- Convicted Offender DNA Collection
- Firearm/Toolmark Analysis
- Materials Analysis (Seized Drugs, Explosives & Ignitable Liquids, Impressions, and Trace Materials)
- Questioned Documents
- Latent Fingerprint Identification
- Crime Scene Assistance

The Toxicology Laboratory Division (TLD) performs drug and alcohol testing for coroners, medical examiners, law enforcement agencies, prosecuting attorneys and the State Liquor Cannabis Board in all 39 Washington counties.

1.2 Existing Facilities & Staffing

The CLD operates five multi-service crime laboratories in Seattle, Tacoma, Marysville, Spokane, Vancouver, and limited-service crime laboratories including Kennewick and Tumwater. In addition to the above, to address overcrowding in the Seattle Lab, the TDL is in the process of developing an interim Toxicology lab in leased space in Federal Way which will serve half of the state-wide toxicology caseload.

As of this report, the CLD has a total staffing authorization of 180 personnel and the TDL has a staffing authorization of 40. In addition to personnel directly assigned to CLD, there are 10 WSP personnel from the Technical Services Bureau that provide direct, resident support to the CLD in the Seattle Lab.



1.3 Purpose

The purpose of this FMP is:

1. To define and project the future space and infrastructure needs of Forensics Services Division by providing a framework for decision-making that regards facilities needed to address existing deficiencies in physical facilities and they impact on operations in addition to accommodating change and the long-term facilities needs of the Division.
2. To support the WSP's bi-annual funding request in the state capital budget process.

The state capital budget provides funding for all WSP Facilities to maintain and preserve state-owned facilities, upgrade program spaces to meet the changing agency needs, and to construct new facilities to accommodate growth and operational needs. As part of the state capital budget process, WSP can submit capital requests that support their most critical needs. These requests are divided into categories such as repairs, minor improvements, replacements, renovations, and major new construction. Given the limited capital budget, funding from amongst the pool of applying agencies is highly competitive.

1.4 Planning Goals

The primary goals of the WSP Facilities Department are to support the WSP's Mission and Strategic Plans through the physical improvement and development of its facilities and infrastructure. Specific goals include the following:

- Provide healthy, safe, and functional space for FSD Scientists, technicians, and staff to work.
- WSP mission, vision, values, and goals will drive physical plant/planning decisions.
- Optimize operational and maintenance efficiencies.
- Create a tool for future growth and decision-making, a flexible framework for development of a facilities
- Establish a realistic schedule and capital budgeting plan.

1.5 Objectives

The FMP established a series of physical objectives to be achieved during the duration of this master plan. These fall into the following general areas:

- Inventory and document the condition of the existing facilities occupied by the FSD.
- Identify and inventory the space use of the existing facilities and compare to state/industry standards.
- Identify, prioritize, and site new and renovation projects needed to accommodate functional and space needs.

1.6 Methodology

To meet the goals and objectives for the FMP the WSP Facilities Management Group formed a Planning Committee and engaged Schreiber Starling Whitehead Architects as planning consultants to facilitate the process and document the recommendations.

Successful master planning begins with the team gaining an understanding of the functions and operations performed by the FSD. To accomplish this task, the planning team held a series of planning workshops/meetings with key staff of the CLD and TLD. The purpose of these workshops was to review overall agency and planning goals, identify common perceptions of the existing physical plant and operations, gather and analyze pertinent growth and planning data and projections, review and incorporate the goals and objectives of program/operational areas, and make general observations to develop an understanding of the existing facilities.

Concurrent with the workshops, the planning team conducted on-site tours and visits to all Crime Lab facilities to record existing conditions and identify conditions and factors impacting current operations and those having impact on future development.

To define the scope of growth to be incorporated into this FMP the following strategies were implemented:

- **Need Determination:** The total built area needed was determined through space needs analysis which looked at existing facilities, their current utilization, comparison to national standards and recommendations, and future growth projections. The resulting space needs program identified total square footage deficiencies.
- **Condition Analysis:** The existing FSD facilities and sites were assessed for condition and suitability using standards established by the Justice Department other peer institutions. The purpose of this assessment is to provide a tool for prioritizing need and sequencing of recommended improvement.
- **Site Planning & Building Development:** During the stakeholder workshops the planning team discussed the relationships of the spaces with their associated programs and services. Appropriate locations for growth, and the areas available/required at each location, were determined. A series of new capital construction and renovations projects were identified such that the projects organizationally supported the planning goals.

1.7 Findings

The existing facilities serving the FSD have many facility deficiencies that impact the effectiveness of operations, increase the cost of operation, and do not meet the basic standards for modern forensics laboratories. These include:

- **Inadequate quantity of space:** The available space does not meet the need of the FSD has currently configured and staffed. Space shortages of slightly over 85,800-gsf were calculated as follows:
 - Cheney Lab: Existing 34,100-gsf | Projected Need 44,260-gsf . *Shortage: 10,160-gsf*
 - Marysville Lab: Existing 5,113-gsf | Projected Need 50,846-gsf *Shortage: 45,733-gsf*

- Olympia Lab: Existing 5,080-gsf | Projected Need 7,403-gsf **Shortage: 2,323-gsf**
- Seattle Lab: Existing 59,375-gsf | Projected Need 75,165-gsf ... **Shortage: 15,790-gsf**
- Tacoma Lab: Existing 7,148-gsf | Projected Need 18,994-gsf .. **Shortage: 11,796-gsf**
- Vancouver Lab: Existing 36,560-gsf | Projected Need 36,560-gsf **Shortage: 0-gsf**

- **Deficiencies:** Significant physical deficiencies were noted at most of the current facilities. Examples of building deficiencies noted include:

Seismic Weakness

With the exception of Cheney and Vancouver, the basic design of the existing buildings does not appear to meet seismic survivability standards for essential facilities per current code.

Lack of Administrative Space

The majority of the existing office areas are crammed and congested and there is no room to accommodate any program or personnel growth. This has been exacerbated by moving office support functions (library, files, storage, copiers, etc.) into the interior circulation spaces of the open offices.

Insufficient Personnel Support Space

With staffing greater than originally planned, there is limited space provided for non-work personnel support.

Insufficient Laboratory Bench Space/Hood Access

With staffing greater than originally planned, there is a shortage of lab benching and access to fume hoods. Sharing or having to schedule bench space for their caseloads increases risk of cross-contamination and reduces the amount of time available for staff to utilize lab space.

Insufficient Lab Equipment Space

With the exception of the Vancouver Lab, the instrument rooms supporting MA and DNA labs are cramped and overcrowded. They have limited capability for increasing equipment in support of staffing/caseload growth.

Contamination Control

At many of the labs (Olympia, Tacoma, Marysville) there are no vestibules at entrances to lab spaces.

Inefficient Customer Service / Caseload Back-up

Because not every lab does all the same testing, some counties must submit different items to different labs. This creates inefficiencies in the time to process cases and increases the risk of contamination/evidence control.

Inadequate Storage

Insufficient storage space is a critical deficiency noted at most of the labs. This includes storage for casefiles as well as evidence and equipment. Most of the storage spaces observed in the labs are either filled to capacity, or nearly so.

- **Location Issues**

In reviewing current sites/locations several factors were identified that create



negative impacts to current operations and are expected to worsen in the future. Specifically noted were:

Marysville:

- o Area allotted is too small
- o No room to expand/growth

Olympia:

- o Building is too small
- o No room to expand/growth
- o Lease allows early termination for sale of building. Risk that new landlord could terminate lease leaving personnel and equipment without operational space.

Seattle:

- o Location makes it difficult to recruit and retain staff. Bellevue/Seattle has high cost of living and commute to more cost-manageable communities is too difficult

Tacoma:

- o Area allotted is too small
- o No room to expand/growth

1.8 Alternatives & Recommendations

Do Nothing

In exploring the possible development response to the findings of lack of space, lack of flexibility, significant facility deficiencies, and operational impact from poor location, the team considered the alternative of doing nothing. No action will continue the status quo with negative impact to lab operations, staff recruiting and retention, poor customer service. It would also impact effective customer service based on the inability to increase capacity. Status-Quo would still require inter-lab transfer of evidence increasing the risk of contamination or loss of evidence. It is not recommended.

Phased Development Plan

The FMP proposes to address the identified space shortfall through several projects that include new replacement, renovation, and expansion projects. The sequence proposed for development is generated to work within the capital project funding process established by OFM and assures a logical process that enables continuous operation of the crime labs in existing locations while new buildings/spaces are developed.

Near Term Phase

The proposed project will replace the existing lab that is co-located with the WSP District-7 Headquarters with a new lab that will be designed to include all the forensic services provided by the WSP with the remaining Toxicology Lab in Seattle relocating to the new facility. The location would ideally be an acquired site located along the I-5 corridor between North King County and Skagit County.

The summary of the project is:

New Area:	50,846-gsf
Acquisition/Predesign Cost:	\$2,000,000



Funding Source:	2022 Supplemental Budget
Anticipated Project Cost:	\$66,889,000
Funding Source:	2023-2025 Capital Budget
Anticipated Completion:	Spring 2026

When completed it will provide Materials Analysis, DNA, Toxicology, Firearms, Latent Prints, Questioned Documents, and Crime Scene Response functions. The existing space in the District HQ would be repurposed for field operations.

Mid Term Phase

In the mid-term phase, space deficiencies at the Cheney lab would be addressed by a renovation/expansion project. This will include renovating the remaining shelled-space and changing the training labs into an operations space supporting the MA lab function. An addition of approximately 3,000-gsf will be provided either by expanding to the southwest or by infilling the existing courtyard between the office wings.

The summary of the project is:

Renovated Area:	2,000-gsf
Expansion Area:	3,000-gsf
Anticipated Project Cost:	\$5,000,000
Funding Source:	2027-2029 Capital Budget
Anticipated Completion:	Spring 2029

Far Term Phase

The proposed project will replace the existing Olympia, Tacoma, and Seattle labs with a new lab that will be expanded to include all the forensic services provided by the WSP. As identified in the Space Allocation portion of Section 4 for Seattle, Olympia, and Tacoma, the new lab is proposed to total 95,000-GSF. It is planned to be located on vacant land that the WSP currently owns in the Spring Valley area of Federal Way.

The summary of the project is:

New Area:	95,000-gsf
Predesign Cost:	\$750,000
Funding Source:	2028 Supplemental Budget
Anticipated Project Cost:	\$123,150,000
Funding Source:	2029-2031 Capital Budget
Anticipated Completion:	Spring 2032

When completed it will provide Materials Analysis, DNA, Toxicology, Firearms, Latent Prints, Questioned Documents, and Crime Scene Response functions. The existing space in the Tacoma facility would be repurposed for field operations. Leased space at Olympia and Seattle would be vacated and the leases not renewed.

1.9 Acknowledgments

The Planning Team wishes to acknowledge the following people for their cooperation, interest, and participation:

FMP Core Committee

Gene Lawrence, Crime Laboratory Division Commander
Fiona Couper, State Toxicologist
Brian Bottoms, WSP Facilities, Project Manager
Yelena Semenova, DES Project Manager

Lab Managers

Brett Bishop, Cheney Lab Manager
Trevor Allen, CSRT Manager
Beverly Himick, Seattle Lab Manager
Jason, Dunn, Vancouver Lab Manager
David Northrop, Marysville Lab Manager
Kim Hefton, Tacoma Lab Manager
Randy Watson, Olympia Lab Manager
Jodi Sass, CODIS Lab Manager

Planning Team

Keith Schreiber, AIA Principal, Schreiber Starling Whitehead: Lead Planner
Stephen Starling, AIA Principal, Schreiber Starling Whitehead: Planner
Juliet Anderson, Architect, Schreiber Starling Whitehead
Connor Davidge, Schreiber Starling Whitehead



5.0 PROPOSED DEVELOPMENT

5.1 General

Several of the existing facilities supporting the WSP Forensics Division have considerable deficiencies in available functional space to support its current mission and caseload. Over the next 25 years, it is expected to experience continued growth in casework and demand for its services from supported agencies. It is crucial to the achievement of the WSP's mission that a comprehensive and logical plan for addressing noted deficiencies and accommodating this growth be developed and adopted. The recommended plan in this document has been generated to respond to the space and functional needs of the existing functional needs as well as projected caseload expansion.

The recommended plan herein should not be considered "cast-in-stone" rather it should be viewed as a framework for decision making. As the needs of the WSP and the Forensics Services Division change or if planned funding sequences change, this plan should and must be re-evaluated and modified to respond to the fluid realities of program needs, changing science, funding opportunities, and the State's extended process for capital development.

This Facilities Plan proposes to address the identified space shortfall through a number of projects including new, renovation, and expansion projects. The sequence proposed for development is generated to work within the OFM capital project funding process and assures a logical process enabling continuous operation of FSD in existing facilities while new buildings/spaces are developed.

Note, all budget estimate figures are given in 2021 funds and been escalated to the anticipated completion dates. Project cost estimates are based on historical cost average per unit or area, i.e. \$/GSF. It is anticipated that each project will incorporate utility/infrastructure improvements/extensions needs to support the specific project.

5.2 Near Term Development

Near-term development is defined as projects which will be requested, planned, designed, and constructed within the next 6-10 years. The proposed project include:

North Sound Crime Lab (New)

The proposed project will replace the existing lab that is co-located with the WSP District-7 Headquarters with a new lab that will be designed to include all the forensic services provided by the WSP.

As identified in the Space Allocation portion of Section 4 (page 4-25) the new lab is proposed to total 50,846-GSF. It is assumed to be located on a newly acquired site of approx. 2.5-acres located along the I-5 corridor between Everett and Burlington.



The total project cost is estimated to be \$67,226,000. (See appendix A)

It is proposed that the Site Acquisition and Predesign be funded in the 2022 supplemental budget. Using Progressive Design-Build project delivery, design and construction funding is proposed in the 2023 -2025 Biennium with construction complete in spring of 2026.

Following completion of the new lab, the existing lab space in the Division-8 Headquarters will be repurposed to support Field Operations.

The summary of the project is:

New Area:	50,846-gsf
Acquisition/Predesign Cost:	\$2,000,000
Funding Source:	2022 Supplemental Budget
Anticipated Project Cost:	\$66,889,000
Funding Source:	2023-2025 Capital Budget
Anticipated Completion:	Spring 2026

5.3 Mid Term Plan

Mid-term development is defined as projects which will be requested, planned, designed, and constructed within the next 8-10 years. The anticipated projects include:

Cheney Expansion (Renovation)

In the mid-term phase, space deficiencies at the Cheney lab would be addressed by a renovation/expansion project. This will include renovating the remaining shelled-space and changing the training labs into an operations space supporting the MA lab function. An addition of approximately 3,000-gsf will be provided either by expanding to the southwest or by infilling the existing courtyard between the office wings.

It is proposed that the Predesign be funded in the 2026 supplemental budget. Using Progressive Design-Build project delivery, design and construction funding is proposed in the 2027 -2029 Biennium with construction complete in spring of 2029.

The summary of the project is:

Renovated Area:	2,000-gsf
Expansion Area:	3,000-gsf
Anticipated Project Cost:	\$5,000,000
Funding Source:	2027-2029 Capital Budget
Anticipated Completion:	Spring 2029



5.5 Far-Term Plan

Far-term development is defined as projects which will be requested, planned, designed, and constructed within the next 10+ years. The anticipated project is:

South Sound Crime Lab (New)

The proposed project will replace the existing Olympia, Tacoma, and Seattle labs with a new lab that will be expanded to include all the forensic services provided by the WSP. As identified in the Space Allocation portion of Section 4 for Seattle, Olympia, and Tacoma, the new lab is proposed to total 95,000-GSF. It is planned to be located on vacant land that the WSP currently owns in the Spring Valley area of Federal Way.

The total project cost is estimated to be \$123,900,000. (See appendix A)

It is proposed that the Predesign be funded in the 2028 supplemental budget. Using Progressive Design-Build project delivery, design and construction funding is proposed in the 2029 -2031 Biennium with construction complete in spring of 2032.

Following completion of the new lab, the existing lab space in Tacoma will be repurposed to support Field Operations and the leased space in Seattle and Olympia will be vacated.

The summary of the project is:

New Area:	95,000-gsf
Predesign Cost:	\$750,000
Funding Source:	2028 Supplemental Budget
Anticipated Project Cost:	\$123,150,000
Funding Source:	2029-2031 Capital Budget
Anticipated Completion:	Spring 2032

6.0 – DEVELOPMENT GUIDELINES

It is assumed that the local jurisdiction will have development standards that any new project will be subject to. All planned development is subject to review and approval by the local code/permitting authorities for compliance with codes.

Future projects at for the WSP Forensics Division must meet a high level of quality and respond to context, built form, structure, and regulatory requirements. In general, the standards developed by the Department of Justice NIST Report "Handbook for Forensic Laboratory Facility, Planning, Design, Construction" should form the basis of standards for new Crime Lab facilities. Following are some general guideline highlights that should be considered for new projects.

6.1 Site Design

It is recommended that any site considered to house a new forensics laboratory contain at least 2.5 acres of relatively flat developable area,

Recommendations

1. **Access:** Provide access from at least two directions to ensure access to the site despite traffic conditions, street maintenance work, acts of sabotage, or other unforeseen site disruptions
2. **Utilities:** Ensure adequate access to utilities including water, sewer, power, data/communications, stormwater control capability.
3. **Lighting:** The site lighting should be designed to enhance security and discourage vandalism and unauthorized entry. Lighting comparable to that of a college campus offering night classes might serve as a guideline.
4. **Parking:** Provide 3 levels of parking security:
 - Level 1: Provide a small visitor parking located near the entrance to the building allowing entry and departure without security barriers.
 - Level 2: Fenced area for use by persons having business at the facility. For example, shipping and receiving, biological and toxic waste pickup, dumpster replacement, and evidence delivery. The area should be gated, and the gate may be left open during business hours and locked after hours. Access might be through the level 1 parking area.
 - Level 3: Special parking area for CSR vehicles secured 24 h, surrounded by a security fence, and accessible by use of a proximity or card key device.

6.2 Landscape

Landscaping should be designed to enhance site security by preventing potential vandals, burglars, and saboteurs from hiding in the landscaping until after dark.

Recommendations

1. Create interest using a varied palette of native, drought-tolerant plant materials.
2. Respond to major site circulation for current and future conditions.
3. Provide a low-maintenance landscape that reduces water use.

6.3 Architecture

One of the main architectural challenges of designing a forensics lab building is to develop a building that reflects the importance of the program and the agency it serves, creating openness and daylight spaces for the occupants while while maintaining the security and functional needs.

Recommendations

1. Structural: The International Building Code defines an essential facility as “buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow or earthquakes”. The crime lab should be designed as an Occupancy Class IV – Essential Facility.
2. Exterior Walls: Exterior wall materials should be a high-performance exterior wall system such as masonry, concrete, glass curtain wall, and metal panels systems. The exterior wall should have continuous insulation or similar systems to provide high resistance to thermal transfer. They shall be durable, long-lasting, and suitable for an important public facility.
3. Roofing: A new low-slope membrane and insulation system should be provided. To the maximum extent possible, low-slope photovoltaic panels should be located above the membrane.
4. Interior Walls: Interior non-bearing walls will typically be metal stud with gypsum wallboard. Wall at the FA Range should also be bullet-resistant and
5. Interior Openings: Frames for doors and relights will be hollow metal. Doors will be either hollow metal or solid core wood depending on location.
6. Interior Finishes:
 - a. Laboratory floors: Chemical-resistant sheet vinyl or vinyl tiles with welded seams.
 - b. Laboratory walls: Epoxy in all spaces considered highly biologically or chemically hazardous, such as examination rooms, bulk drug analysis, and bulk chemical storage. Semi-gloss latex enamel in all other spaces.
 - c. Laboratory ceilings: Epoxy in all spaces considered highly biologically or chemically hazardous, such as examination rooms, bulk drug analysis, and bulk chemical storage. Suspended acoustical in all other spaces.
 - d. Nonlaboratory spaces.
 - e. Acceptable interior finish standards for offices and nonlaboratory support
7. Laboratory casework:
 - a. Standard laboratory casework with utility access space behind base cabinets.
 - b. Steel or wood is preferred, plastic laminate is acceptable.
 - c. Maximize use of flexible laboratory casework systems.
 - d. Epoxy countertops in labs, chemical-resistant plastic laminate or composite resin at other spaces.
8. Acoustics:
 - a. Assembly spaces, conference rooms, offices, and toilet rooms will be sound insulated to a minimum STC = 45.

- b. Primary acoustical attenuation in the building will be provided by acoustical ceilings and carpeting. Noise transmission in open areas will be mitigated through wall-mounted or overhead acoustical panels. Special attention should be made for the noise from fume hoods in the lab spaces and from the weapons range in the FA section.
9. Physical Security: Physical security of the lab is essential to maintaining proper control of evidence. Evidence lockers, safes and locking cabinets are needed throughout the lab.
10. Physical Isolation: Ensure that all lab spaces have bio-vestibules with negative air pressure and cleaning stations to prevent cross contamination. Locate between "clean" and "dirty" spaces, for example, between main circulation corridor and entrance to a laboratory section that potentially contains hazardous airborne contaminants. Provides an interlock between clean and dirty spaces with air handled through differential pressurization to prevent exfiltration of contaminated air.
11. Administrative Space: A significant amount of the forensic scientist's responsibilities include nonlaboratory tasks such as data analysis, report writing, court testimony preparation, and other administrative responsibilities. The design should provide the analyst with an administrative work area, away from the hazards of the laboratory, where these tasks can be conducted in an efficient and safe environment. Supervisors' offices, case review areas, and space for files can also be included in this environment. With the exception of the supervisors' offices, which shall be private offices, all other spaces in the administrative work area can be designed as open office systems workstations. Some analysts, such as document and latent print examiners, require additional administrative work space since a significant amount of their technical examinations can occur outside of the laboratory environment

6.4 Supporting Systems

To meet all the standards for accreditation, it is important to plan mechanical and electrical systems in the lab that can achieve the highest performance standards are required for cleanliness, temperature, humidity, and vibration controls to create an environment suitable for forensic science.

Recommendations

1. Isolate air systems: Mitochondrial DNA room(s), Firing range. PCR Amplification, Chemistry & Toxicology
2. Consider HEPA filtered exhaust
3. Provide Differential pressure of adjacent spaces and the need for positive and negative pressure in various spaces.
4. Supplemental cooling in instrument rooms and other spaces with heat-generating equipment (freezers etc.)
5. Evidence drying room exhaust may need special handling for putrid items.
6. Emergency shower and eyewashes and floor drains. In laboratory spaces.
7. Caustic (acid/alkali) waste systems, i.e., neutralization/hazardous waste systems.
8. Fume hood and biological hood plumbing utilities.

9. Water treatment systems
 - a. Recirculating deionized water.
 - b. Point-of-use type 1 water polisher.
10. Laboratory gas types: Hydrogen, nitrogen, helium, air, argon.

Consider a Manifolder instrument gas systems with central instrument gas distribution systems. Include laboratory compressed air.
11. Consider laboratory vacuum systems
12. Recommend emergency power and lighting for the following spaces:
 - a. Entire evidence section.
 - b. All refrigerators and freezers, including walk-in units.
 - c. Photography darkroom(s). Entire security section, including electronic security systems and telephones.
 - d. X-ray processing room(s)
 - e. Special lighting in addition to code-mandated emergency exit lighting
13. Central UPS systems for all computer-driven systems and equipment including, laboratory instrumentation, Automated Fingerprint Identification System (AFIS), Combined DNA Identification System (CODIS), Laboratory Information Management System (LIMS), Drugfire, Integrated Ballistic Imaging System (IBIS), and LABNET

6.5 Sustainability

Any new Crime Lab must be designed, as a minimum, to meet Leadership in Energy and Environmental Design (LEED) Silver standards. Strategies for implementation include an abundant use of controlled natural light, preference for locally sourced materials such as concrete block and brick, native and drought-tolerant plantings, robust well-insulated and well-sealed exterior wall and roof assemblies, and highly efficient mechanical and lighting systems.

In addition, the project should strive to achieve the goals of Net-Zero Energy, as a minimum being designed to be "Net Zero-Ready". WSP intends to target a low Energy Use Intensity (EUI) over the life of the building. Further, projects should be designed to meet the best practices to reduce greenhouse gas emissions.

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

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Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000290

Project Title: Crime Laboratory I-5 Corridor Consolidated Facility

Description

Starting Fiscal Year: 2024
 Project Class: Program
 Agency Priority: 17

Project Summary

Westside Consolidated Crime Laboratory Services

Project Description

In the 2019-2021 biennium a master plan was construction on the WSP Forensic Laboratory Bureau's (FLSB) Crime Lab Division's (CLD) to asses the needs. One of the areas being addressed is the CLD that co-locates with the Marysville District Office. The CLD's space within this facility is extremely limited and the current configuration does not allow for flexible reconfiguration. The lack of space minimize the functions of the sections within the CLD such as firearm testing functions, latent print labs and space for Crime Scene Response. One of the recommendations from the master plan is to replace the existing co-location and expand by creating a new Crime Lab facility north of Seattle. The facility will provide materials analysis, DNA, Toxicology, Fire Arms, Latent Prints and crime scene response functions within the new facility. The facility will be designed as a minimum to meet Leadership in Energy and Environmental Design (LEED) Silver standards. This will include abundant use of controlled natural light, preference for locally source materials, robust well-insulated and well-sealed exterior wall and roof assemblies, and high energy efficient mechanical and lighting systems. This proposal is for land acquisition and design construction documents for the 2023-2025 biennium with plans to request funding for construction in the 2025-2027 biennium. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Location

City: Statewide

County: Statewide

Legislative District: 098

Project Type

New Facilities/Additions (Major Projects)

Growth Management impacts

Impacts have not be determined yet.

New Facility: No

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	90,433,000		333,000		15,100,000
	Total	90,433,000	0	333,000	0	15,100,000
Future Fiscal Periods						
		<u>2025-27</u>	<u>2027-29</u>	<u>2029-31</u>	<u>2031-33</u>	
057-1	State Bldg Constr-State	75,000,000				
	Total	75,000,000	0	0	0	

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000290

Project Title: Crime Laboratory I-5 Corridor Consolidated Facility

Operating Impacts

No Operating Impact

Narrative

This project is not expected to have any operating or staffing impacts.

SubProjects

SubProject Number: 30000292

SubProject Title: Crime Laboratory I-5 Corridor Consolidated Facility - Predesign

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000290

Project Title: Crime Laboratory I-5 Corridor Consolidated Facility

SubProjects

SubProject Number: 30000292

SubProject Title: Crime Laboratory I-5 Corridor Consolidated Facility - Predesign

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 17

Project Summary

Westside Consolidated Crime Laboratory Services

Project Description

This proposal is commission a predesign study to determine the size, scope and requirements of a consolidated Crime Lab providing services to the west side of the state.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's Strategic Plan.

Starting Fiscal Year: 2024

Project Class: Program

Agency Priority: 17

Project Summary

Westside Consolidated Crime Laboratory Services

Project Description

This proposal is develop design and construction documents for a consolidated Crime Lab providing services to the west side of the state.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's 2014-2019 Strategic Plan.

Starting Fiscal Year: 2026

Project Class: Program

Agency Priority: 17

Project Summary

Westside Consolidated Crime Laboratory Services

Project Description

This proposal is to construct the consolidated Crime Lab providing services to the west side of the state.

This project is consistent with the agency goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Projects section of the agency's 2014-2019 Strategic Plan.

Location

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000290

Project Title: Crime Laboratory I-5 Corridor Consolidated Facility

SubProjects

Location

SubProject Number: 30000292

SubProject Title: Crime Laboratory I-5 Corridor Consolidated Facility - Predesign

City: Statewide

County: Statewide

Legislative District: 098

City: Statewide

County: Statewide

Legislative District: 098

City: Statewide

County: Statewide

Legislative District: 098

Project Type

New Facilities/Additions (Major Projects)

New Facilities/Additions (Major Projects)

New Facilities/Additions (Major Projects)

Growth Management impacts

There will be no impacts associated with this project.

New Facility: No

Growth Management impacts

Impacts will be determined in previous phase - Predesign.

New Facility: No

Growth Management impacts

Impacts will be determined in previous phase - Predesign.

New Facility: No

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reapprops	New Approps
057-1	State Bldg Constr-State	7,900,000				7,900,000
057-1	State Bldg Constr-State	7,200,000				7,200,000
057-1	State Bldg Constr-State	75,000,000				
Total		90,100,000	0	0	0	15,100,000

Future Fiscal Periods

	2025-27	2027-29	2029-31	2031-33
057-1 State Bldg Constr-State				
057-1 State Bldg Constr-State				
057-1 State Bldg Constr-State	75,000,000			
Total	75,000,000	0	0	0

Operating Impacts

225 - Washington State Patrol
Capital Project Request

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000290

Project Title: Crime Laboratory I-5 Corridor Consolidated Facility

SubProjects

SubProject Number: 30000292

SubProject Title: Crime Laboratory I-5 Corridor Consolidated Facility - Predesign

No Operating Impact

No Operating Impact

No Operating Impact

Narrative

This project is not expected to have any operating or staffing impacts.

Narrative

Staffing & Operating Impacts are unknown at this time.

Narrative

Staffing & Operating Impacts are unknown at this time.



1.0 EXECUTIVE SUMMARY

Ensuring the agency, its troopers, and civilian personnel have safe and functional facilities in which to execute their duties is the fifth goal in the 2019-2022 Strategic Plan of the Washington State Patrol. One of the key objectives of this goal is to develop a comprehensive Facilities Plan which can ensure the Forensics Division will have the needed functional space, tools, and supportive environment to be effective and efficient in providing critical investigative and analytic services to the Patrol and its supported Agencies. The development of this Facilities Master Plan (FMP) supports that objective by providing a structure to guide the WSP in the future development of the physical plant to enable the Forensics Division to be one of the leaders in the field of forensic science in the nation.

1.1 Background

The Washington State Patrol Forensics provides quality forensic services for criminal justice agencies within the state of Washington ([RCW 43.43.670](#)).

The Crime Lab Division (CLD) quality forensic services for criminal justice agencies within the state of Washington such as:

- DNA Testing
- Combined DNA Index System (CODIS) Laboratory (felon database program)
- Convicted Offender DNA Collection
- Firearm/Toolmark Analysis
- Materials Analysis (Seized Drugs, Explosives & Ignitable Liquids, Impressions, and Trace Materials)
- Questioned Documents
- Latent Fingerprint Identification
- Crime Scene Assistance

The Toxicology Laboratory Division (TLD) performs drug and alcohol testing for coroners, medical examiners, law enforcement agencies, prosecuting attorneys and the State Liquor Cannabis Board in all 39 Washington counties.

1.2 Existing Facilities & Staffing

The CLD operates five multi-service crime laboratories in Seattle, Tacoma, Marysville, Spokane, Vancouver, and limited-service crime laboratories including Kennewick and Tumwater. In addition to the above, to address overcrowding in the Seattle Lab, the TDL is in the process of developing an interim Toxicology lab in leased space in Federal Way which will serve half of the state-wide toxicology caseload.

As of this report, the CLD has a total staffing authorization of 180 personnel and the TDL has a staffing authorization of 40. In addition to personnel directly assigned to CLD, there are 10 WSP personnel from the Technical Services Bureau that provide direct, resident support to the CLD in the Seattle Lab.



1.3 Purpose

The purpose of this FMP is:

1. To define and project the future space and infrastructure needs of Forensics Services Division by providing a framework for decision-making that regards facilities needed to address existing deficiencies in physical facilities and they impact on operations in addition to accommodating change and the long-term facilities needs of the Division.
2. To support the WSP's bi-annual funding request in the state capital budget process.

The state capital budget provides funding for all WSP Facilities to maintain and preserve state-owned facilities, upgrade program spaces to meet the changing agency needs, and to construct new facilities to accommodate growth and operational needs. As part of the state capital budget process, WSP can submit capital requests that support their most critical needs. These requests are divided into categories such as repairs, minor improvements, replacements, renovations, and major new construction. Given the limited capital budget, funding from amongst the pool of applying agencies is highly competitive.

1.4 Planning Goals

The primary goals of the WSP Facilities Department are to support the WSP's Mission and Strategic Plans through the physical improvement and development of its facilities and infrastructure. Specific goals include the following:

- Provide healthy, safe, and functional space for FSD Scientists, technicians, and staff to work.
- WSP mission, vision, values, and goals will drive physical plant/planning decisions.
- Optimize operational and maintenance efficiencies.
- Create a tool for future growth and decision-making, a flexible framework for development of a facilities
- Establish a realistic schedule and capital budgeting plan.

1.5 Objectives

The FMP established a series of physical objectives to be achieved during the duration of this master plan. These fall into the following general areas:

- Inventory and document the condition of the existing facilities occupied by the FSD.
- Identify and inventory the space use of the existing facilities and compare to state/industry standards.
- Identify, prioritize, and site new and renovation projects needed to accommodate functional and space needs.

1.6 Methodology

To meet the goals and objectives for the FMP the WSP Facilities Management Group formed a Planning Committee and engaged Schreiber Starling Whitehead Architects as planning consultants to facilitate the process and document the recommendations.

Successful master planning begins with the team gaining an understanding of the functions and operations performed by the FSD. To accomplish this task, the planning team held a series of planning workshops/meetings with key staff of the CLD and TLD. The purpose of these workshops was to review overall agency and planning goals, identify common perceptions of the existing physical plant and operations, gather and analyze pertinent growth and planning data and projections, review and incorporate the goals and objectives of program/operational areas, and make general observations to develop an understanding of the existing facilities.

Concurrent with the workshops, the planning team conducted on-site tours and visits to all Crime Lab facilities to record existing conditions and identify conditions and factors impacting current operations and those having impact on future development.

To define the scope of growth to be incorporated into this FMP the following strategies were implemented:

- **Need Determination:** The total built area needed was determined through space needs analysis which looked at existing facilities, their current utilization, comparison to national standards and recommendations, and future growth projections. The resulting space needs program identified total square footage deficiencies.
- **Condition Analysis:** The existing FSD facilities and sites were assessed for condition and suitability using standards established by the Justice Department other peer institutions. The purpose of this assessment is to provide a tool for prioritizing need and sequencing of recommended improvement.
- **Site Planning & Building Development:** During the stakeholder workshops the planning team discussed the relationships of the spaces with their associated programs and services. Appropriate locations for growth, and the areas available/required at each location, were determined. A series of new capital construction and renovations projects were identified such that the projects organizationally supported the planning goals.

1.7 Findings

The existing facilities serving the FSD have many facility deficiencies that impact the effectiveness of operations, increase the cost of operation, and do not meet the basic standards for modern forensics laboratories. These include:

- **Inadequate quantity of space:** The available space does not meet the need of the FSD has currently configured and staffed. Space shortages of slightly over 85,800-gsf were calculated as follows:
 - Cheney Lab: *Existing 34,100-gsf | Projected Need 44,260-gsf . Shortage: 10,160-gsf*
 - Marysville Lab: *Existing 5,113-gsf | Projected Need 50,846-gsf Shortage: 45,733-gsf*

- o Olympia Lab: Existing 5,080-gsf | Projected Need 7,403-gsf *Shortage: 2,323-gsf*
- o Seattle Lab: Existing 59,375-gsf | Projected Need 75,165-gsf ... *Shortage: 15,790-gsf*
- o Tacoma Lab: Existing 7,148-gsf | Projected Need 18,994-gsf ..*Shortage: 11,796-gsf*
- o Vancouver Lab: Existing 36,560-gsf | Projected Need 36,560-gsf *Shortage: 0-gsf*

- **Deficiencies:** Significant physical deficiencies were noted at most of the current facilities. Examples of building deficiencies noted include:

Seismic Weakness

With the exception of Cheney and Vancouver, the basic design of the existing buildings does not appear to meet seismic survivability standards for essential facilities per current code.

Lack of Administrative Space

The majority of the existing office areas are crammed and congested and there is no room to accommodate any program or personnel growth. This has been exacerbated by moving office support functions (library, files, storage, copiers, etc.) into the interior circulation spaces of the open offices.

Insufficient Personnel Support Space

With staffing greater than originally planned, there is limited space provided for non-work personnel support.

Insufficient Laboratory Bench Space/Hood Access

With staffing greater than originally planned, there is a shortage of lab benching and access to fume hoods. Sharing or having to schedule bench space for their caseloads increases risk of cross-contamination and reduces the amount of time available for staff to utilize lab space.

Insufficient Lab Equipment Space

With the exception of the Vancouver Lab, the instrument rooms supporting MA and DNA labs are cramped and overcrowded. They have limited capability for increasing equipment in support of staffing/caseload growth.

Contamination Control

At many of the labs (Olympia, Tacoma, Marysville) there are no vestibules at entrances to lab spaces.

Inefficient Customer Service / Caseload Back-up

Because not every lab does all the same testing, some counties must submit different items to different labs. This creates inefficiencies in the time to process cases and increases the risk of contamination/evidence control.

Inadequate Storage

Insufficient storage space is a critical deficiency noted at most of the labs. This includes storage for casefiles as well as evidence and equipment. Most of the storage spaces observed in the labs are either filled to capacity, or nearly so.

- **Location Issues**

In reviewing current sites/locations several factors were identified that create

negative impacts to current operations and are expected to worsen in the future. Specifically noted were:

Marysville:

- o Area allotted is too small
- o No room to expand/growth

Olympia:

- o Building is too small
- o No room to expand/growth
- o Lease allows early termination for sale of building. Risk that new landlord could terminate lease leaving personnel and equipment without operational space.

Seattle:

- o Location makes it difficult to recruit and retain staff. Bellevue/Seattle has high cost of living and commute to more cost-manageable communities is too difficult

Tacoma:

- o Area allotted is too small
- o No room to expand/growth

1.8 Alternatives & Recommendations

Do Nothing

In exploring the possible development response to the findings of lack of space, lack of flexibility, significant facility deficiencies, and operational impact from poor location, the team considered the alternative of doing nothing. No action will continue the status quo with negative impact to lab operations, staff recruiting and retention, poor customer service. It would also impact effective customer service based on the inability to increase capacity. Status-Quo would still require inter-lab transfer of evidence increasing the risk of contamination or loss of evidence. It is not recommended.

Phased Development Plan

The FMP proposes to address the identified space shortfall through several projects that include new replacement, renovation, and expansion projects. The sequence proposed for development is generated to work within the capital project funding process established by OFM and assures a logical process that enables continuous operation of the crime labs in existing locations while new buildings/spaces are developed.

Near Term Phase

The proposed project will replace the existing lab that is co-located with the WSP District-7 Headquarters with a new lab that will be designed to include all the forensic services provided by the WSP with the remaining Toxicology Lab in Seattle relocating to the new facility. The location would ideally be an acquired site located along the I-5 corridor between North King County and Skagit County.

The summary of the project is:

New Area:	50,846-gsf
Acquisition/Predesign Cost:	\$2,000,000



Funding Source:	2022 Supplemental Budget
Anticipated Project Cost:	\$66,889,000
Funding Source:	2023-2025 Capital Budget
Anticipated Completion:	Spring 2026

When completed it will provide Materials Analysis, DNA, Toxicology, Firearms, Latent Prints, Questioned Documents, and Crime Scene Response functions. The existing space in the District HQ would be repurposed for field operations.

Mid Term Phase

In the mid-term phase, space deficiencies at the Cheney lab would be addressed by a renovation/expansion project. This will include renovating the remaining shelled-space and changing the training labs into an operations space supporting the MA lab function. An addition of approximately 3,000-gsf will be provided either by expanding to the southwest or by infilling the existing courtyard between the office wings.

The summary of the project is:

Renovated Area:	2,000-gsf
Expansion Area:	3,000-gsf
Anticipated Project Cost:	\$5,000,000
Funding Source:	2027-2029 Capital Budget
Anticipated Completion:	Spring 2029

Far Term Phase

The proposed project will replace the existing Olympia, Tacoma, and Seattle labs with a new lab that will be expanded to include all the forensic services provided by the WSP. As identified in the Space Allocation portion of Section 4 for Seattle, Olympia, and Tacoma, the new lab is proposed to total 95,000-GSF. It is planned to be located on vacant land that the WSP currently owns in the Spring Valley area of Federal Way.

The summary of the project is:

New Area:	95,000-gsf
Predesign Cost:	\$750,000
Funding Source:	2028 Supplemental Budget
Anticipated Project Cost:	\$123,150,000
Funding Source:	2029-2031 Capital Budget
Anticipated Completion:	Spring 2032

When completed it will provide Materials Analysis, DNA, Toxicology, Firearms, Latent Prints, Questioned Documents, and Crime Scene Response functions. The existing space in the Tacoma facility would be repurposed for field operations. Leased space at Olympia and Seattle would be vacated and the leases not renewed.



1.9 Acknowledgments

The Planning Team wishes to acknowledge the following people for their cooperation, interest, and participation:

FMP Core Committee

Gene Lawrence, Crime Laboratory Division Commander
Fiona Couper, State Toxicologist
Brian Bottoms, WSP Facilities, Project Manager
Yelena Semenova, DES Project Manager

Lab Managers

Brett Bishop, Cheney Lab Manager
Trevor Allen, CSRT Manager
Beverly Himick, Seattle Lab Manager
Jason, Dunn, Vancouver Lab Manager
David Northrop, Marysville Lab Manager
Kim Hefton, Tacoma Lab Manager
Randy Watson, Olympia Lab Manager
Jodi Sass, CODIS Lab Manager

Planning Team

Keith Schreiber, AIA Principal, Schreiber Starling Whitehead: Lead Planner
Stephen Starling, AIA Principal, Schreiber Starling Whitehead: Planner
Juliet Anderson, Architect, Schreiber Starling Whitehead
Connor Davidge, Schreiber Starling Whitehead

4.3 Marysville

Location

The Marysville Crime Lab is co-located with WSP District 7 Headquarters at 2700 116th St NE, Marysville WA 98271.

Site

The site area totals approximately 6-acres and is leased from the Tulalip Tribe. It is generally level with a slight slope from north to southwest. There is ample parking on-site with 19 parking spaces (2-accessible) provided in the non-secured north lot and 66 spaces (2-accessible) in the secure south lot. In addition, there are another 10-spaces for Patrol vehicles in secure parking along the east property boundary.

The only issues identified at the site relate to utilities. The existing sewer system is at its maximum capacity. Domestic water availability is also a potential issue. Until a recent change of source to the tribal water utility, water had been sourced from an on-site well. The amount of sand has caused problems with plumbing fixtures and fire protection devices in the building. This aspect does not impact laboratory functions as DI water is sourced in containers.



Marysville Site



NORTH



Building - General

The existing building was designed in 1989 and became operational in 1991. It is a single-story building totaling approximately 20,000-gsf. It is configured in a rectangular shape with a central open courtyard. The D-7 headquarters is west of the courtyard while the Communications Center and Crime Lab are to the east. Originally, the crime lab only totaled only 2,400-sf of the building. This was increased to 5,022-gsf with a 2,600-gsf addition to the southeast constructed in 1997.

Configuration

The lab area is located south of the Communication center in the southeast wing of the building.

- *Security/Zoning*

Public access is controlled by a secure vestibule at the main building entrance. This is staffed by D-7 administrative personnel. Once through the lobby, interior circulation to the lab is controlled by an interior door. This creates an interior corridor that functions as a secure vestibule/lobby to the lab area. It can be accessed from the exterior from the secure parking area. There is a transaction counter and window for evidence transfer from the lobby.

Once in the lobby, access to the lab is controlled by the property custodians. Door access and specialty security systems were noted and generally comply with recommended standards.

- *Adjacencies*

In general, the relationship of functional areas in the building has been arranged where it physically fits. The lab area is subdivided with an enclosed shared equipment lab and an enclosed post-amplification room. Other lab spaces are open with a common atmosphere. Supervisory personnel are physically separated from the open office area.

- *Flexibility*

Size and configuration of fixed casework does not allow for flexible reconfiguration should processes change or new ones require additional space. The extremely limited space allows no consideration for future flexibility.

- *Contamination Control*
There are no bio vestibules at entrances to lab spaces. Primary potential source of contamination is the need for scientists to share lab stations.
- *Collaboration/Staff Support*
There is little or no room in the lab for “in-between” functions or space for conferencing or peer-to-peer collaboration that can facilitate those working on different cases to confer and discuss ideas. Any meetings that cannot fit in the limited office or the lab itself happen in the District’s conference room, if available. There are no communal spaces for lunch or quiet areas where staff can decompress.

Architecture – Exterior Envelope

The exterior walls are faced with GWB on the interior, are insulated per code then in effect, and are faced with stucco. Ceramic tile is used as an accent. Windows are aluminum storefront and doors are hollow metal except for main entrance doors, which are storefront aluminum. Roofs are primarily single-ply thermoplastic membranes over insulated bases secured to the underlying plywood deck. Sloped roofs with standing seam metal are used at the major entrance and at the courtyard. There appears to be adequate slope to drain.

There was no observed distress on the exterior envelope systems, which appear to be in good condition and are appropriate to the intended use.

Architecture - Interior Finishes

Most interior walls are metal stud with GWB. Interior doors are hollow metal frames with wood doors. Interior finishes include vinyl tile in labs, carpet in offices, and exposed concrete in storage and support spaces. Ceilings are suspended acoustic tile in most spaces. There are two skylights in the open lab area.

There was no observed distress on the interior finish systems, which appear to be in fair condition and are appropriate to the intended use except that sheet flooring would be desired in the lab spaces.

Structure

The building foundation is traditional spread footings and slab-on-grade. The structural system is a combination of wood bearing walls and some steel columns and glue-laminated beam framing. Some interior walls have plywood sheathing which are likely providing seismic resistance. The specific level of seismic resistance was not confirmed in a review of the documents available to the planning team nor was it calculated as a part of this study.

There was no observed distress on the structural system, which appears to be in good condition and is appropriate to the intended use.

HVAC Systems

A detailed analysis of the HVAC system was beyond the scope of this study. Crime laboratory operations require the building mechanical systems to provide a level of safety, flexibility, reliability, and functional features that typical mechanical systems are

not able to meet. The mechanical systems serving the lab are separate from the general building systems. Equipment is in an adjacent mechanical room and on the roof top. These systems are more than halfway to their service life and they should be planned to be replaced in the near future.

There are only two fume hoods in the lab. This is not a sufficient number for the assigned scientists and creates a bottleneck in efficiency and possible cross-contamination.

Plumbing Systems

The utilities serving the building consist of domestic water service, natural gas medium pressure service, sanitary waste, and fire sprinkler mains. There were no observed deficiencies in these systems, which appear to be in good condition and appropriate to their intended use.

Emergency eye wash and safety showers are installed at all laboratory sections. There are no vestibules or wash sinks at entry points. There are a limited number of laboratory sinks which are inadequate in number and location.

Laboratory gases for helium, nitrogen, and instrument grade air are piped to the laboratory equipment room from localized gas cylinders. An outside-accessible storage room stocks replacement cylinders. Local vacuum pumps are provided where required.

Toilet rooms are shared with the D-7 Headquarters.

Electrical Systems

A detailed analysis of the electrical and power systems was beyond the scope of this study. Main panel and transformer rooms appear adequate and in good condition and the distribution panels serving labs are located outside the controlled environment and have good accessibility.

Distribution of power in the laboratory spaces is primarily horizontal surface-mounted aluminum raceways located on walls above backsplashes. Isolated ground outlets are identified in orange. A number of locations have had new circuits/outlets added in surface-mounted raceways and boxes.

Emergency power is provided by an exterior diesel generator set and an automatic transfer switch. The adequacy of the stand-by power systems and its connected loads was beyond the scope of this study.

Lighting Systems

In general, most of the lighting fixtures in the lab spaces are 2x4, or 1x4 fluorescent troffers with prismatic diffuser lenses, T12 lamps, and magnetic ballasts. Corridor lighting is wall-mounted compact fluorescent. Office lighting is pendant mounted fluorescent with louvered diffusers. Lighting controls consist primarily of single pole toggle switches. While this system appears to be adequate, they are not as energy efficient as new LED lighting systems and do not offer the same level of control.

Data Systems

Data connections feed from the buildings Main Data Facility room (MDF) located adjacent to the Communications center. There is no IDF room dedicated to the Lab functions. Data wiring is routed above ceilings and in conduits to the horizontal raceway systems. Where equipment has been added, a number of data drops are simply cabling dropping from the ceiling to the equipment.

Observations/Deficiencies Noted

The following operational and configuration observations/deficiencies were noted:

- *Public Access*
There is little or no public access to the lab except for served agencies and delivery services dropping off evidence parcels.
- *Evidence*
The intake is provided with a secure vestibule/corridor lobby. There is no room provided for evidence viewing. The main evidence storage area does not accommodate current need. There are two commercial-grade (food service) freezers in the evidence room and there is insufficient room to fully open the door. The room was not designed for the added heat generated by this equipment and the packaged AC unit barely provides supplemental cooling to off-set heat gain. There is a smaller bio-evidence storage room that has locked cabinets and a residential-grade side-by-side refrigerator/freezer. It is inadequate size for current needs. There is no capability for future expansion.



Evidence Receiving Lobby



Evidence Custodians do all processing in their administrative space



Evidence room – Note Freezer in way of door swing





Bio-Evidence room

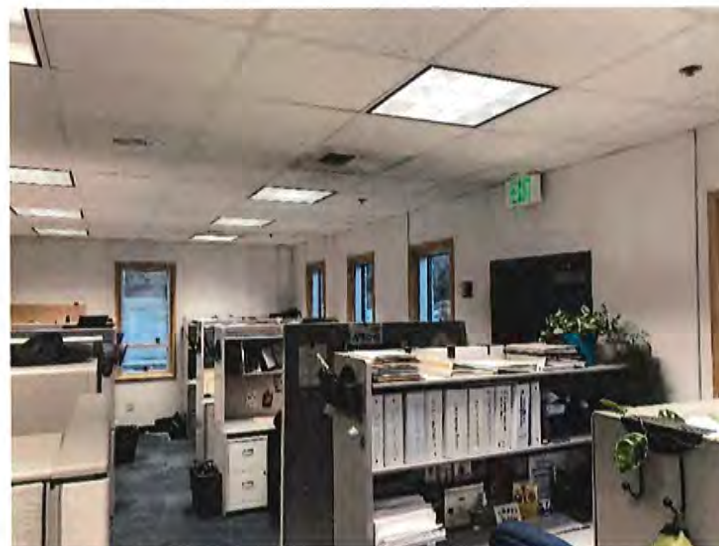
- **Administrative Space**

The lab function in the building has expanded once since original construction but the amount of space for the number of assigned scientists has never been adequate.

There are two enclosed offices, one for the Lab Manager and one shared by the DNA and MA Lab Supervisors. Both of these spaces started out as lab space and one still has a lab sink installed. There is little or no space for confidential meetings needed for HR or other secure meetings.

There is minimal space for scientists to accomplish their administrative tasks and little or no room for storage of supporting material. There are 11 workstations provided for scientists in an area initially designed to accommodate five. To accomplish this, office support functions such as files, storage, copiers, etc. have been moved to the interior circulation.

Offices are crammed and congested and there is no room to accommodate any program or personnel growth.



Open office workspaces

- *Insufficient Storage*

There is a noted lack of storage for records, case files, and material/supplies. Wherever staff can find room, they use it for storage. File cabinets are placed in corridors, boxed supplies are stored over equipment or in knee spaces in the lower cabinetry. To address this need, there is an exterior secure steel container used to store one year of case files.



Files placed in corridor



Note supplies stored over equipment and in lower casework knee space

- *Insufficient Personnel Support Space*

With staffing greater than originally planned, there is no space provided for non-work personnel support. There is no break/lunch space. The only accommodation is a small area of benchtop where a coffee pot and microwave are located. There is no provision for personnel lockers. The staff need to use the District facilities for showers and toilets.



The only accommodation for a staff break area is a microwave and toaster oven on a work counter

- *Exam Rooms*

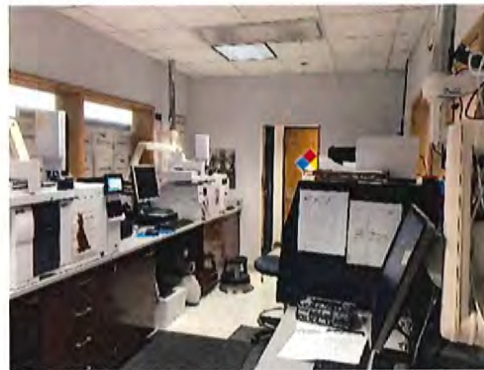
There are no dedicated exam rooms. Examination of evidence takes place on common worktables in the open lab area. This is a severe impact on efficiency of workflow as any investigation/processing has to be scheduled for a single work time as it is impossible to secure in place if the task takes longer than a single shift. This also contributes to possible cross contamination.



Shared exam tables on the open lab area.

- *Microanalysis/Trace Lab*
There is a single “U” shaped workstation in the common area lab serving four scientists. This space is inadequate for current and projected use.
- *Chemistry Lab*
Located in the center of the lab, the Chemistry section provides two lab stations with a single shared fume hood currently serving four scientists. This does not meet current need. Near term growth cannot be accommodated in the existing lab space.

The adjacent instrument room is cramped and overcrowded. It has no capability for increasing equipment in support of staffing growth.



Chemistry Lab

Instrument Lab

- *DNA Lab*

The DNA lab section includes two “U” shaped workstations and one reagent prep alcove in the lab serving seven scientists. There is a single fume hood that is shared by DNA and Trace Labs. This results in scientists needing to share/schedule bench space for their caseload. Sharing bench space and fume hoods increases risk of cross-contamination and reduces the amount of time available for staff to utilize lab space. The storage capacity for evidence each scientist has checked out to process is also impacted by shared space.

Near-term growth includes adding 7-10 more DNA scientists in this lab. To accommodate this growth and to provide adequate lab workstations for 14 scientists, additional lab stations will be needed.

The adjacent Extraction, PCR Set-Up, and Post-Amplification labs have been made to work for current use; however, there is insufficient space to fit the desired amount of instrumentation.



DNA Lab Area



PCR lab



- *Latent Prints Lab*
There is no space provided for Latent Prints.
- *Firearms Lab*
There is no space provided for Firearms Lab functions.
- *Questioned Documents Lab*
There is no space provided for Questioned Documents.
- *Crime Scene Response (CSR)*
There is no space provided for Crime Scene Response.

SPACE ALLOCATION

The following table provides the current allocation of space within the existing lab and the planned future space need. It is based on the projected increase of staffing and "right" sizing spaces that are currently below industry standards.

<i>Program/Space</i>	<i>Existing Area (16 FTE)</i>	<i>Notes</i>	<i>Current Space Need (24 FTE)</i>	<i>Future Space Need (51 FTE)</i>
Administration/Support	130		1,140	3,090
Lab Manager	130		240	240
Lab Admin Office	-		120	120
Records/Casefile Storage	-	Current in corridor...2-yrs in outside	300	300
Conference	-	Currently borrow D& conference room	240	765
Training	-	20-30 classroom		900
Kitchen/Break Room	-		160	510
Library/Quiet Room	-		80	255
Property/Evidence	471		1,170	1,790
Evidence Vestibule	-		80	80
Evidence Lobby	58		110	110
Evidence Viewing	-	Access from lobby and secure side	120	120
Evidence Office/Processing	149	Current 2 PEC /4 future	240	480
Evidence Storage	166		400	600
Narcotics/Bio Storage	98		110	200
Cold Storage		currently included in Evidence Storage	110	200
Crime Scene Response		Currently does not exist	-	860
CSR Workspace				100
CSR Exam Lab		Vehicle exam		760
Latent Prints	-	Currently does not exist	-	860
Latent Prints workspace		2 Scientists		200
Latent Prints Lab		2 Workstations		520
Photo Room				140



**FORENSICS DIVISION
FACILITIES MASTER PLAN**

1 July 2021

<i>Program/Space</i>	<i>Existing Area (16 FTE)</i>	<i>Notes</i>	<i>Current Space Need (24 FTE)</i>	<i>Future Space Need (51 FTE)</i>
Questioned Documents	-	Currently does not exist	-	-
Firearms	-	Currently does not exist	-	3,480
Firearms Lab		2 Scientists		520
NIBIN Lab				150
FA Exam Room		Does not include Caswell		200
Secure Lab Storage				60
Microscope Room				200
Weapons Storage				150
FA Workshop				200
FA Range				2,000
Materials Analysis	1,838		3,140	6,820
MA Supervisors Office	100	Currently shared with DNA Supervisor	140	140
Open Office	166	Current 4 Scientists - Near-term 5 Scientists - Future 10 Scientists	500	1,000
Lab Vestibule	-		140	280
Chemistry Lab	472	Currently 2 work areas. Future 6	520	1,560
Instrument Room	200		300	800
Chem Storage	82		100	160
MA/Trace Lab	678	Currently 1 work area and open exam area. Need 4, Future 8	1,040	2,080
Exam Room	140	Currently 1 open exam area. Need 2, Future 4	400	800
DNA	1,385		4,035	7,260
DNA Supervisor Office	100	Currently shared with MA Supervisor	140	140
DNA Managers Office		Currently shared with MA Supervisor	120	120
Open Office	343	Current 7 Scientists - Near-term 13 Scientists - Future 20 Scientists	1,300	2,000
Lab Vestibules			140	280
NA Lab	598	Current 2 Workstations - Near-term 6 Workstations - Future 12 Workstations	1,560	3,120
Extraction			200	300
PCR Set-Up Lab	124		175	200
PCR Amplification Lab	220		400	600
Instrument Room				500
Toxicology	-	Currently does not exist	-	6,380
Lab Manager				240
Supervisor				140
Open Office		10 Scientists		1,000
Evidence Receipt/Processing		1 PEC		200



**FORENSICS DIVISION
FACILITIES MASTER PLAN**

1 July 2021

<i>Program/Space</i>	<i>Existing Area (16 FTE)</i>	<i>Notes</i>	<i>Current Space Need (24 FTE)</i>	<i>Future Space Need (51 FTE)</i>
Evidence Storage				400
High Density Storage		Casefile		300
Lab Vestibules				280
Toxicology Lab		10 Workstations		2,600
Instrument Room				500
Reagent/Kit Prep				300
Drug Storage/Weigh Room				120
General Storage				300
NET ASSIGNABLE	3,824		9,485	30,540
Unassigned	1,387		5,543	19,226
Receiving				400
Chemical Storage				160
Gas Storage				100
Equip. Clean-up Laundry & Stor.				200
Lockers/Shower				765
Janitor				200
General Storage	98		400	1,000
Circulation	647		1,707	6,413
Toilets	-	Currently use Station facilities	400	1,275
Mechanical/Electrical/Systems	-	Includes HVAC/MDF/Comm	1,897	6,108
Walls and Structure	642		1,138	3,665
TOTAL GROSS	5,113		15,028	50,846

Net Assignable Area/FT Staff 239

395

599



5.0 PROPOSED DEVELOPMENT

5.1 General

Several of the existing facilities supporting the WSP Forensics Division have considerable deficiencies in available functional space to support its current mission and caseload. Over the next 25 years, it is expected to experience continued growth in casework and demand for its services from supported agencies. It is crucial to the achievement of the WSP's mission that a comprehensive and logical plan for addressing noted deficiencies and accommodating this growth be developed and adopted. The recommended plan in this document has been generated to respond to the space and functional needs of the existing functional needs as well as projected caseload expansion.

The recommended plan herein should not be considered "cast-in-stone" rather it should be viewed as a framework for decision making. As the needs of the WSP and the Forensics Services Division change or if planned funding sequences change, this plan should and must be re-evaluated and modified to respond to the fluid realities of program needs, changing science, funding opportunities, and the State's extended process for capital development.

This Facilities Plan proposes to address the identified space shortfall through a number of projects including new, renovation, and expansion projects. The sequence proposed for development is generated to work within the OFM capital project funding process and assures a logical process enabling continuous operation of FSD in existing facilities while new buildings/spaces are developed.

Note, all budget estimate figures are given in 2021 funds and been escalated to the anticipated completion dates. Project cost estimates are based on historical cost average per unit or area, i.e. \$/GSF. It is anticipated that each project will incorporate utility/infrastructure improvements/extensions needs to support the specific project.

5.2 Near Term Development

Near-term development is defined as projects which will be requested, planned, designed, and constructed within the next 6-10 years. The proposed project include:

North Sound Crime Lab (New)

The proposed project will replace the existing lab that is co-located with the WSP District-7 Headquarters with a new lab that will be designed to include all the forensic services provided by the WSP.

As identified in the Space Allocation portion of Section 4 (page 4-25) the new lab is proposed to total 50,846-GSF. It is assumed to be located on a newly acquired site of approx. 2.5-acres located along the I-5 corridor between Everett and Burlington.



The total project cost is estimated to be \$67,226,000. (See appendix A)

It is proposed that the Site Acquisition and Predesign be funded in the 2022 supplemental budget. Using Progressive Design-Build project delivery, design and construction funding is proposed in the 2023 -2025 Biennium with construction complete in spring of 2026.

Following completion of the new lab, the existing lab space in the Division-8 Headquarters will be repurposed to support Field Operations.

The summary of the project is:

New Area:	50,846-gsf
Acquisition/Predesign Cost:	\$2,000,000
Funding Source:	2022 Supplemental Budget
Anticipated Project Cost:	\$66,889,000
Funding Source:	2023-2025 Capital Budget
Anticipated Completion:	Spring 2026

5.3 Mid Term Plan

Mid-term development is defined as projects which will be requested, planned, designed, and constructed within the next 8-10 years. The anticipated projects include:

Cheney Expansion (Renovation)

In the mid-term phase, space deficiencies at the Cheney lab would be addressed by a renovation/expansion project. This will include renovating the remaining shelled-space and changing the training labs into an operations space supporting the MA lab function. An addition of approximately 3,000-gsf will be provided either by expanding to the southwest or by infilling the existing courtyard between the office wings.

It is proposed that the Predesign be funded in the 2026 supplemental budget. Using Progressive Design-Build project delivery, design and construction funding is proposed in the 2027 -2029 Biennium with construction complete in spring of 2029.

The summary of the project is:

Renovated Area:	2,000-gsf
Expansion Area:	3,000-gsf
Anticipated Project Cost:	\$5,000,000
Funding Source:	2027-2029 Capital Budget
Anticipated Completion:	Spring 2029



5.5 Far-Term Plan

Far-term development is defined as projects which will be requested, planned, designed, and constructed within the next 10+ years. The anticipated project is:

South Sound Crime Lab (New)

The proposed project will replace the existing Olympia, Tacoma, and Seattle labs with a new lab that will be expanded to include all the forensic services provided by the WSP. As identified in the Space Allocation portion of Section 4 for Seattle, Olympia, and Tacoma, the new lab is proposed to total 95,000-GSF. It is planned to be located on vacant land that the WSP currently owns in the Spring Valley area of Federal Way.

The total project cost is estimated to be \$123,900,000. (See appendix A)

It is proposed that the Predesign be funded in the 2028 supplemental budget. Using Progressive Design-Build project delivery, design and construction funding is proposed in the 2029 -2031 Biennium with construction complete in spring of 2032.

Following completion of the new lab, the existing lab space in Tacoma will be repurposed to support Field Operations and the leased space in Seattle and Olympia will be vacated.

The summary of the project is:

New Area:	95,000-gsf
Predesign Cost:	\$750,000
Funding Source:	2028 Supplemental Budget
Anticipated Project Cost:	\$123,150,000
Funding Source:	2029-2031 Capital Budget
Anticipated Completion:	Spring 2032

6.0 – DEVELOPMENT GUIDELINES

It is assumed that the local jurisdiction will have development standards that any new project will be subject to. All planned development is subject to review and approval by the local code/permitting authorities for compliance with codes.

Future projects at for the WSP Forensics Division must meet a high level of quality and respond to context, built form, structure, and regulatory requirements. In general, the standards developed by the Department of Justice NIST Report "Handbook for Forensic Laboratory Facility, Planning, Design, Construction" should form the basis of standards for new Crime Lab facilities. Following are some general guideline highlights that should be considered for new projects.

6.1 Site Design

It is recommended that any site considered to house a new forensics laboratory contain at least 2.5 acres of relatively flat developable area,

Recommendations

1. **Access:** Provide access from at least two directions to ensure access to the site despite traffic conditions, street maintenance work, acts of sabotage, or other unforeseen site disruptions
2. **Utilities:** Ensure adequate access to utilities including water, sewer, power, data/communications, stormwater control capability.
3. **Lighting:** The site lighting should be designed to enhance security and discourage vandalism and unauthorized entry. Lighting comparable to that of a college campus offering night classes might serve as a guideline.
4. **Parking:** Provide 3 levels of parking security:
 - Level 1: Provide a small visitor parking located near the entrance to the building allowing entry and departure without security barriers.
 - Level 2: Fenced area for use by persons having business at the facility. For example, shipping and receiving, biological and toxic waste pickup, dumpster replacement, and evidence delivery. The area should be gated, and the gate may be left open during business hours and locked after hours. Access might be through the level 1 parking area.
 - Level 3: Special parking area for CSR vehicles secured 24 h, surrounded by a security fence, and accessible by use of a proximity or card key device.

6.2 Landscape

Landscaping should be designed to enhance site security by preventing potential vandals, burglars, and saboteurs from hiding in the landscaping until after dark.

Recommendations

1. Create interest using a varied palette of native, drought-tolerant plant materials.
2. Respond to major site circulation for current and future conditions.
3. Provide a low-maintenance landscape that reduces water use.

6.3 Architecture

One of the main architectural challenges of designing a forensics lab building is to develop a building that reflects the importance of the program and the agency it serves, creating openness and daylight spaces for the occupants while while maintaining the security and functional needs.

Recommendations

1. Structural: The International Building Code defines an essential facility as "buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow or earthquakes". The crime lab should be designed as an Occupancy Class IV – Essential Facility.
2. Exterior Walls: Exterior wall materials should be a high-performance exterior wall system such as masonry, concrete, glass curtain wall, and metal panels systems. The exterior wall should have continuous insulation or similar systems to provide high resistance to thermal transfer. They shall be durable, long-lasting, and suitable for an important public facility.
3. Roofing: A new low-slope membrane and insulation system should be provided. To the maximum extent possible, low-slope photovoltaic panels should be located above the membrane.
4. Interior Walls: Interior non-bearing walls will typically be metal stud with gypsum wallboard. Wall at the FA Range should also be bullet-resistant and
5. Interior Openings: Frames for doors and relights will be hollow metal. Doors will be either hollow metal or solid core wood depending on location.
6. Interior Finishes:
 - a. Laboratory floors: Chemical-resistant sheet vinyl or vinyl tiles with welded seams.
 - b. Laboratory walls: Epoxy in all spaces considered highly biologically or chemically hazardous, such as examination rooms, bulk drug analysis, and bulk chemical storage. Semi-gloss latex enamel in all other spaces.
 - c. Laboratory ceilings: Epoxy in all spaces considered highly biologically or chemically hazardous, such as examination rooms, bulk drug analysis, and bulk chemical storage. Suspended acoustical in all other spaces.
 - d. Nonlaboratory spaces.
 - e. Acceptable interior finish standards for offices and nonlaboratory support
7. Laboratory casework:
 - a. Standard laboratory casework with utility access space behind base cabinets.
 - b. Steel or wood is preferred, plastic laminate is acceptable.
 - c. Maximize use of flexible laboratory casework systems.
 - d. Epoxy countertops in labs, chemical-resistant plastic laminate or composite resin at other spaces.
8. Acoustics:
 - a. Assembly spaces, conference rooms, offices, and toilet rooms will be sound insulated to a minimum STC = 45.

- b. Primary acoustical attenuation in the building will be provided by acoustical ceilings and carpeting. Noise transmission in open areas will be mitigated through wall-mounted or overhead acoustical panels. Special attention should be made for the noise from fume hoods in the lab spaces and from the weapons range in the FA section.
9. Physical Security: Physical security of the lab is essential to maintaining proper control of evidence. Evidence lockers, safes and locking cabinets are needed throughout the lab.
10. Physical Isolation: Ensure that all lab spaces have bio-vestibules with negative air pressure and cleaning stations to prevent cross contamination. Locate between "clean" and "dirty" spaces, for example, between main circulation corridor and entrance to a laboratory section that potentially contains hazardous airborne contaminants. Provides an interlock between clean and dirty spaces with air handled through differential pressurization to prevent exfiltration of contaminated air.
11. Administrative Space: A significant amount of the forensic scientist's responsibilities include nonlaboratory tasks such as data analysis, report writing, court testimony preparation, and other administrative responsibilities. The design should provide the analyst with an administrative work area, away from the hazards of the laboratory, where these tasks can be conducted in an efficient and safe environment. Supervisors' offices, case review areas, and space for files can also be included in this environment. With the exception of the supervisors' offices, which shall be private offices, all other spaces in the administrative work area can be designed as open office systems workstations. Some analysts, such as document and latent print examiners, require additional administrative work space since a significant amount of their technical examinations can occur outside of the laboratory environment

6.4 Supporting Systems

To meet all the standards for accreditation, it is important to plan mechanical and electrical systems in the lab that can achieve the highest performance standards are required for cleanliness, temperature, humidity, and vibration controls to create an environment suitable for forensic science.

Recommendations

1. Isolate air systems: Mitochondrial DNA room(s), Firing range. PCR Amplification, Chemistry & Toxicology
2. Consider HEPA filtered exhaust
3. Provide Differential pressure of adjacent spaces and the need for positive and negative pressure in various spaces.
4. Supplemental cooling in instrument rooms and other spaces with heat-generating equipment (freezers etc.)
5. Evidence drying room exhaust may need special handling for putrid items.
6. Emergency shower and eyewashes and floor drains. In laboratory spaces.
7. Caustic (acid/alkali) waste systems, i.e., neutralization/hazardous waste systems.
8. Fume hood and biological hood plumbing utilities.

9. Water treatment systems
 - a. Recirculating deionized water.
 - b. Point-of-use type 1 water polisher.
10. Laboratory gas types: Hydrogen, nitrogen, helium, air, argon.

Consider a Manifoldd instrument gas systems with central instrument gas distribution systems. Include laboratory compressed air.
11. Consider laboratory vacuum systems
12. Recommend emergency power and lighting for the following spaces:
 - a. Entire evidence section.
 - b. All refrigerators and freezers, including walk-in units.
 - c. Photography darkroom(s). Entire security section, including electronic security systems and telephones.
 - d. X-ray processing room(s)
 - e. Special lighting in addition to code-mandated emergency exit lighting
13. Central UPS systems for all computer-driven systems and equipment including, laboratory instrumentation, Automated Fingerprint Identification System (AFIS), Combined DNA Identification System (CODIS), Laboratory Information Management System (LIMS), Drugfire, Integrated Ballistic Imaging System (IBIS), and LABNET

6.5 Sustainability

Any new Crime Lab must be designed, as a minimum, to meet Leadership in Energy and Environmental Design (LEED) Silver standards. Strategies for implementation include an abundant use of controlled natural light, preference for locally sourced materials such as concrete block and brick, native and drought-tolerant plantings, robust well-insulated and well-sealed exterior wall and roof assemblies, and highly efficient mechanical and lighting systems.

In addition, the project should strive to achieve the goals of Net-Zero Energy, as a minimum being designed to be "Net Zero-Ready". WSP intends to target a low Energy Use Intensity (EUI) over the life of the building. Further, projects should be designed to meet the best practices to reduce greenhouse gas emissions.

225 - Washington State Patrol Capital Project Request

2023-25 Biennium

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Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000169

Project Title: FTA Burn Building Replacement - Phase 2

Description

Starting Fiscal Year: 2022

Project Class: Program

Agency Priority: 18

Project Summary

This project completes the replacement of the existing burn training building at the Washington State Fire Training Academy with the second phase of a two phase construction project before it is unsafe to use for live-fire training drills.

Project Description

The WSP received authorization to fund Phase 1 construction of replacement live fire burn props for training to respond to residential and small business structures in the 2019-2021 biennium. The completion of these props will be completed in the fall of 2022 and will reduce the stress and impacts to the existing Burn Tower Training Structure constructed in 1982, that has far exceeded its capabilities to provide a safe training environment. Six of the non-training props within the structure have been condemned due to structural failure and are no longer safe. Four of those live fire training prop rooms are in the tower portion of the structure which cannot be replicated in the Phase 1 training props. The training program's Phase 2 Burn Building construction is critical to the FTA for new fire fighter cadet training as well as for outside fire district training departments to provide critical refreshers to enhance their capabilities and techniques in response to fighting fires in a safe and effective manner. Failure to replace this structure with a Phase 2 Burn Tower, will result in significant impacts on the capabilities and types of training the FTA can provide to ensure future and existing firefighters statewide are effective and safe in the performance of their efforts to protect the citizens of the state of Washington. This request is for funding the construction of the replacement asset. The new facility and associated support buildings will greatly increase the training opportunities and capabilities for training scenarios to better prepare fire-fighters for real life experiences. The new facility enables "high rise fire attack and rescue with ladder trucks" that is currently not available with current training structures. This project will also create an important training facility capable of supporting the fire services of the State of Washington for many years providing unique and essential training that is essential to ensure fire-fighters are prepared. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: North Bend

County: King

Legislative District: 005

Project Type

Remodel/Renovate/Modernize (Major Projects)

Growth Management impacts

If any, such impacts will be determined during the completion of Construction Documents now in progress.

New Facility: No

How does this fit in master plan

This project is completely supported by the Agency's strategic plan and the facility's Master Plan. The predesign study has been completed and Construction Documents are in preparation. Unnecessary repair costs or training curtailments will be incurred if the funds for Construction are not allocated.

Funding

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

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Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 30000169

Project Title: FTA Burn Building Replacement - Phase 2

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	11,023,000				11,023,000
	Total	11,023,000	0	0	0	11,023,000

		Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

No Operating Impact

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 40000084

Project Title: Crime Laboratory Operations - Cheney Build Out

Description

Starting Fiscal Year: 2024
Project Class: Program
Agency Priority: 19

Project Summary

Request is for Capital funds to build out a current space at the Cheney Crime Lab to make room for additional staff.

Project Description

The Crime Scene Response Team (CSRT) program is a statewide response team comprised of 21 responders that provide 24-hour, statewide coverage for response to major crimes. The scientists respond from various laboratories across the state based on their two major callout regions. The West-side team responds from labs across the I-5 corridor up to the Cascade Mountains. The Eastside team responds from the Spokane (Cheney)lab and covers eastern and central Washington. Due to the increasing need for CSRT support across the state, the Crime Lab Division (CLD) would like to have additional staff added to the CSRT program. This funding request is to expand the Cheney Crime Lab to house additional CSRT staff. The Agency's Operational Budget details the completed plan on the full needs of the CSRT. The project is consistent with the agency's goal to "Sustain and Enhance Agency Infrastructure and Business Processes" and is supported in the Capital Project section of the Agency's Strategic Plan.

Proviso

None

Location

City: Cheney County: Spokane Legislative District: 006

Project Type

Program (Minor Works)

Growth Management impacts

Impacts have not yet been determined.

New Facility: No

Funding

Acct Code	Account Title	Estimated Total	Expenditures		2023-25 Fiscal Period	
			Prior Biennium	Current Biennium	Reappropriations	New Appropriations
057-1	State Bldg Constr-State	960,000				960,000
	Total	960,000	0	0	0	960,000

		Future Fiscal Periods			
		2025-27	2027-29	2029-31	2031-33
057-1	State Bldg Constr-State				
	Total	0	0	0	0

Operating Impacts

**225 - Washington State Patrol
Capital Project Request**

2023-25 Biennium

*

Version: 03 Combined State Patrol Capital

Report Number: CBS002

Date Run: 9/20/2022 2:19PM

Project Number: 40000084

Project Title: Crime Laboratory Operations - Cheney Build Out

Operating Impacts

No Operating Impact

Narrative

Completion of the project will not change the use of the facility.

Capital Project Request

2023-25 Biennium

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<u>Parameter</u>	<u>Entered As</u>	<u>Interpreted As</u>
Biennium	2023-25	2023-25
Agency	225	225
Version	03-A	03-A
Project Classification	*	All Project Classifications
Capital Project Number	30000229, 30000271, 30000199, 40000	30000229, 30000271, 30000199, 40000
Sort Order	Project Priority	Priority
Include Page Numbers	Y	Yes
For Word or Excel	N	N
User Group	Agency Budget	Agency Budget
User Id	*	All User Ids



1.0 EXECUTIVE SUMMARY

Ensuring the agency, its troopers, and civilian personnel have safe and functional facilities in which to execute their duties is the fifth goal in the 2019-2022 Strategic Plan of the Washington State Patrol. One of the key objectives of this goal is to develop a comprehensive Facilities Plan which can ensure the Forensics Division will have the needed functional space, tools, and supportive environment to be effective and efficient in providing critical investigative and analytic services to the Patrol and its supported Agencies. The development of this Facilities Master Plan (FMP) supports that objective by providing a structure to guide the WSP in the future development of the physical plant to enable the Forensics Division to be one of the leaders in the field of forensic science in the nation.

1.1 Background

The Washington State Patrol Forensics provides quality forensic services for criminal justice agencies within the state of Washington ([RCW 43.43.670](#)).

The Crime Lab Division (CLD) quality forensic services for criminal justice agencies within the state of Washington such as:

- DNA Testing
- Combined DNA Index System (CODIS) Laboratory (felon database program)
- Convicted Offender DNA Collection
- Firearm/Toolmark Analysis
- Materials Analysis (Seized Drugs, Explosives & Ignitable Liquids, Impressions, and Trace Materials)
- Questioned Documents
- Latent Fingerprint Identification
- Crime Scene Assistance

The Toxicology Laboratory Division (TLD) performs drug and alcohol testing for coroners, medical examiners, law enforcement agencies, prosecuting attorneys and the State Liquor Cannabis Board in all 39 Washington counties.

1.2 Existing Facilities & Staffing

The CLD operates five multi-service crime laboratories in Seattle, Tacoma, Marysville, Spokane, Vancouver, and limited-service crime laboratories including Kennewick and Tumwater. In addition to the above, to address overcrowding in the Seattle Lab, the TDL is in the process of developing an interim Toxicology lab in leased space in Federal Way which will serve half of the state-wide toxicology caseload.

As of this report, the CLD has a total staffing authorization of 180 personnel and the TDL has a staffing authorization of 40. In addition to personnel directly assigned to CLD, there are 10 WSP personnel from the Technical Services Bureau that provide direct, resident support to the CLD in the Seattle Lab.

1.3 Purpose

The purpose of this FMP is:

1. To define and project the future space and infrastructure needs of Forensics Services Division by providing a framework for decision-making that regards facilities needed to address existing deficiencies in physical facilities and they impact on operations in addition to accommodating change and the long-term facilities needs of the Division.
2. To support the WSP's bi-annual funding request in the state capital budget process.

The state capital budget provides funding for all WSP Facilities to maintain and preserve state-owned facilities, upgrade program spaces to meet the changing agency needs, and to construct new facilities to accommodate growth and operational needs. As part of the state capital budget process, WSP can submit capital requests that support their most critical needs. These requests are divided into categories such as repairs, minor improvements, replacements, renovations, and major new construction. Given the limited capital budget, funding from amongst the pool of applying agencies is highly competitive.

1.4 Planning Goals

The primary goals of the WSP Facilities Department are to support the WSP's Mission and Strategic Plans through the physical improvement and development of its facilities and infrastructure. Specific goals include the following:

- Provide healthy, safe, and functional space for FSD Scientists, technicians, and staff to work.
- WSP mission, vision, values, and goals will drive physical plant/planning decisions.
- Optimize operational and maintenance efficiencies.
- Create a tool for future growth and decision-making, a flexible framework for development of a facilities
- Establish a realistic schedule and capital budgeting plan.

1.5 Objectives

The FMP established a series of physical objectives to be achieved during the duration of this master plan. These fall into the following general areas:

- Inventory and document the condition of the existing facilities occupied by the FSD.
- Identify and inventory the space use of the existing facilities and compare to state/industry standards.
- Identify, prioritize, and site new and renovation projects needed to accommodate functional and space needs.

1.6 Methodology

To meet the goals and objectives for the FMP the WSP Facilities Management Group formed a Planning Committee and engaged Schreiber Starling Whitehead Architects as planning consultants to facilitate the process and document the recommendations.

Successful master planning begins with the team gaining an understanding of the functions and operations performed by the FSD. To accomplish this task, the planning team held a series of planning workshops/meetings with key staff of the CLD and TLD. The purpose of these workshops was to review overall agency and planning goals, identify common perceptions of the existing physical plant and operations, gather and analyze pertinent growth and planning data and projections, review and incorporate the goals and objectives of program/operational areas, and make general observations to develop an understanding of the existing facilities.

Concurrent with the workshops, the planning team conducted on-site tours and visits to all Crime Lab facilities to record existing conditions and identify conditions and factors impacting current operations and those having impact on future development.

To define the scope of growth to be incorporated into this FMP the following strategies were implemented:

- **Need Determination:** The total built area needed was determined through space needs analysis which looked at existing facilities, their current utilization, comparison to national standards and recommendations, and future growth projections. The resulting space needs program identified total square footage deficiencies.
- **Condition Analysis:** The existing FSD facilities and sites were assessed for condition and suitability using standards established by the Justice Department other peer institutions. The purpose of this assessment is to provide a tool for prioritizing need and sequencing of recommended improvement.
- **Site Planning & Building Development:** During the stakeholder workshops the planning team discussed the relationships of the spaces with their associated programs and services. Appropriate locations for growth, and the areas available/required at each location, were determined. A series of new capital construction and renovations projects were identified such that the projects organizationally supported the planning goals.

1.7 Findings

The existing facilities serving the FSD have many facility deficiencies that impact the effectiveness of operations, increase the cost of operation, and do not meet the basic standards for modern forensics laboratories. These include:

- **Inadequate quantity of space:** The available space does not meet the need of the FSD has currently configured and staffed. Space shortages of slightly over 85,800-gsf were calculated as follows:
 - Cheney Lab: Existing 34,100-gsf | Projected Need 44,260-gsf . **Shortage: 10,160-gsf**
 - Marysville Lab: Existing 5,113-gsf | Projected Need 50,846-gsf **Shortage: 45,733-gsf**

- Olympia Lab: Existing 5,080-gsf | Projected Need 7,403-gsf **Shortage: 2,323-gsf**
 - Seattle Lab: Existing 59,375-gsf | Projected Need 75,165-gsf ... **Shortage: 15,790-gsf**
 - Tacoma Lab: Existing 7,148-gsf | Projected Need 18,994-gsf .. **Shortage: 11,796-gsf**
 - Vancouver Lab: Existing 36,560-gsf | Projected Need 36,560-gsf **Shortage: 0-gsf**
- **Deficiencies:** Significant physical deficiencies were noted at most of the current facilities. Examples of building deficiencies noted include:

Seismic Weakness

With the exception of Cheney and Vancouver, the basic design of the existing buildings does not appear to meet seismic survivability standards for essential facilities per current code.

Lack of Administrative Space

The majority of the existing office areas are crammed and congested and there is no room to accommodate any program or personnel growth. This has been exacerbated by moving office support functions (library, files, storage, copiers, etc.) into the interior circulation spaces of the open offices.

Insufficient Personnel Support Space

With staffing greater than originally planned, there is limited space provided for non-work personnel support.

Insufficient Laboratory Bench Space/Hood Access

With staffing greater than originally planned, there is a shortage of lab benching and access to fume hoods. Sharing or having to schedule bench space for their caseloads increases risk of cross-contamination and reduces the amount of time available for staff to utilize lab space.

Insufficient Lab Equipment Space

With the exception of the Vancouver Lab, the instrument rooms supporting MA and DNA labs are cramped and overcrowded. They have limited capability for increasing equipment in support of staffing/caseload growth.

Contamination Control

At many of the labs (Olympia, Tacoma, Marysville) there are no vestibules at entrances to lab spaces.

Inefficient Customer Service / Caseload Back-up

Because not every lab does all the same testing, some counties must submit different items to different labs. This creates inefficiencies in the time to process cases and increases the risk of contamination/evidence control.

Inadequate Storage

Insufficient storage space is a critical deficiency noted at most of the labs. This includes storage for casefiles as well as evidence and equipment. Most of the storage spaces observed in the labs are either filled to capacity, or nearly so.

- **Location Issues**

In reviewing current sites/locations several factors were identified that create

negative impacts to current operations and are expected to worsen in the future. Specifically noted were:

Marysville:

- o Area allotted is too small
- o No room to expand/growth

Olympia:

- o Building is too small
- o No room to expand/growth
- o Lease allows early termination for sale of building. Risk that new landlord could terminate lease leaving personnel and equipment without operational space.

Seattle:

- o Location makes it difficult to recruit and retain staff. Bellevue/Seattle has high cost of living and commute to more cost-manageable communities is too difficult

Tacoma:

- o Area allotted is too small
- o No room to expand/growth

1.8 Alternatives & Recommendations

Do Nothing

In exploring the possible development response to the findings of lack of space, lack of flexibility, significant facility deficiencies, and operational impact from poor location, the team considered the alternative of doing nothing. No action will continue the status quo with negative impact to lab operations, staff recruiting and retention, poor customer service. It would also impact effective customer service based on the inability to increase capacity. Status-Quo would still require inter-lab transfer of evidence increasing the risk of contamination or loss of evidence. It is not recommended.

Phased Development Plan

The FMP proposes to address the identified space shortfall through several projects that include new replacement, renovation, and expansion projects. The sequence proposed for development is generated to work within the capital project funding process established by OFM and assures a logical process that enables continuous operation of the crime labs in existing locations while new buildings/spaces are developed.

Near Term Phase

The proposed project will replace the existing lab that is co-located with the WSP District-7 Headquarters with a new lab that will be designed to include all the forensic services provided by the WSP with the remaining Toxicology Lab in Seattle relocating to the new facility. The location would ideally be an acquired site located along the I-5 corridor between North King County and Skagit County.

The summary of the project is:

New Area:	50,846-gsf
Acquisition/Predesign Cost:	\$2,000,000



Funding Source:	2022 Supplemental Budget
Anticipated Project Cost:	\$66,889,000
Funding Source:	2023-2025 Capital Budget
Anticipated Completion:	Spring 2026

When completed it will provide Materials Analysis, DNA, Toxicology, Firearms, Latent Prints, Questioned Documents, and Crime Scene Response functions. The existing space in the District HQ would be repurposed for field operations.

Mid Term Phase

In the mid-term phase, space deficiencies at the Cheney lab would be addressed by a renovation/expansion project. This will include renovating the remaining shelled-space and changing the training labs into an operations space supporting the MA lab function. An addition of approximately 3,000-gsf will be provided either by expanding to the southwest or by infilling the existing courtyard between the office wings.

The summary of the project is:

Renovated Area:	2,000-gsf
Expansion Area:	3,000-gsf
Anticipated Project Cost:	\$5,000,000
Funding Source:	2027-2029 Capital Budget
Anticipated Completion:	Spring 2029

Far Term Phase

The proposed project will replace the existing Olympia, Tacoma, and Seattle labs with a new lab that will be expanded to include all the forensic services provided by the WSP. As identified in the Space Allocation portion of Section 4 for Seattle, Olympia, and Tacoma, the new lab is proposed to total 95,000-GSF. It is planned to be located on vacant land that the WSP currently owns in the Spring Valley area of Federal Way.

The summary of the project is:

New Area:	95,000-gsf
Predesign Cost:	\$750,000
Funding Source:	2028 Supplemental Budget
Anticipated Project Cost:	\$123,150,000
Funding Source:	2029-2031 Capital Budget
Anticipated Completion:	Spring 2032

When completed it will provide Materials Analysis, DNA, Toxicology, Firearms, Latent Prints, Questioned Documents, and Crime Scene Response functions. The existing space in the Tacoma facility would be repurposed for field operations. Leased space at Olympia and Seattle would be vacated and the leases not renewed.



1.9 Acknowledgments

The Planning Team wishes to acknowledge the following people for their cooperation, interest, and participation:

FMP Core Committee

Gene Lawrence, Crime Laboratory Division Commander
Fiona Couper, State Toxicologist
Brian Bottoms, WSP Facilities, Project Manager
Yelena Semenova, DES Project Manager

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Beverly Himick, Seattle Lab Manager
Jason, Dunn, Vancouver Lab Manager
David Northrop, Marysville Lab Manager
Kim Hefton, Tacoma Lab Manager
Randy Watson, Olympia Lab Manager
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Juliet Anderson, Architect, Schreiber Starling Whitehead
Connor Davidge, Schreiber Starling Whitehead

4.2 Cheney

Location

The Cheney Crime Lab is located on the campus of Eastern Washington University at 570 West 7th Street, Cheney WA 99004.

Site

The site area totals approximately 4-acres and is leased from the university. It is generally level with a slight slope from south to northeast. There are 45 parking spaces (4-accessible) provided in non-secured lots. A secure parking area to the west of the building provides 10-spaces for fleet vehicles.

There were no issues noted related to the site and it appears to adequately meet the needs of the lab.



Cheney Site



NORTH

Building - General

The existing building was designed in 2003 as a new ground-up crime lab and became operational in 2005. It is a single-story building totaling approximately 34,100-gsf. It is configured in a "U" shape with two wings housing the major lab and associated administration spaces and the bottom of the U housing the general administrative, support, and evidence intake/storage functions. The center part of the U is an open courtyard while the top of the U (north) is bridged by mechanical equipment and a Caswell range trailer. There is a mechanical mezzanine above the bottom of the U.



Configuration

The general configuration of the building with two lab wings separated by a courtyard and a joining center support wing is a serviceable layout which generally accommodates the special needs of the laboratory functions.

- *Security/Zoning*
Public access is limited to one vestibule, a conference room, and an adjacent classroom and training lab. Supported agencies have a secure vestibule and lobby for evidence transfer and a controlled area for evidence viewing which is isolated from the remainder of the lab. Door access and specialty security systems were noted and generally comply with recommended standards.
- *Adjacencies*
In general, the relationship of functional areas in the building supports good evidence/workflow.
- *Flexibility*
Most of the laboratory workstations have fixed casework in a “U” shape with utility connections running horizontally within the casework. This does not allow for flexible reconfiguration should processes change or new ones require additional space. The lab does have an unfinished (shelled) area on the west wing that does allow for flexibility to add lab or administrative space if needed.
- *Contamination Control*
Bio vestibules are provided at all entrances to lab spaces. The mechanical systems appear to have been designed to provide needed environmental controls. Primary potential source of contamination is the need for scientists to share lab stations.
- *Collaboration/Staff Support*
The configuration with separate labs and administrative spaces and the lack of “in-between” space does not promote peer-to-peer collaboration. Outside the laboratory, there are very limited communal areas where staff can decompress or that can facilitate those working on different projects to discuss ideas.

Architecture – Exterior Envelope

The exterior walls are faced with GWB on the interior face, are insulated per code, and are faced with a combination of brick veneer, pre-cast concrete panels, and metal wall panels. Windows are a combination of aluminum storefront and curtainwall and doors are hollow metal except for public entrance doors, which are storefront aluminum. There are roll-up steel vehicle doors at the drive-through vehicle evidence bay. Roofs are single-ply thermoplastic membranes over insulated bases secured to the underlying metal deck. There appears to be adequate slope to drain.

There was no observed distress on the exterior envelope systems, which appear to be in good condition and are appropriate to the intended use.

Architecture - Interior Finishes

Most interior walls are metal stud with GWB. Some fire-rated walls and shear wall are concrete masonry. Interior doors are hollow metal frames with wood doors. Interior finishes include sheet vinyl in labs, carpet in offices, and vinyl tile in storage and

support spaces. Exposed concrete is used on storage and utility spaces. Ceilings are exposed structure in the corridors and suspended acoustic tile in most spaces.

There was no observed distress on the interior finish systems, which appear to be in good condition and are appropriate to the intended use.

Structure

The building foundation is traditional spread footings and slab-on-grade. The structural system is steel framing with a combination of non-bearing steel-stud and bearing concrete masonry exterior walls. CMU is also used for interior shear walls. Roofs are steel decking. The mezzanine floor is composite steel/concrete decking. The systems met codes in effect when designed and appear to meet life-safety standards of seismic performance. The structure may provide a higher level of seismic resistance, but this was not confirmed in a review of the documents available to the planning team.

There was no observed distress on the structural system, which appears to be in good condition and is appropriate to the intended use.

HVAC Systems

A detailed analysis of the HVAC system was beyond the scope of this study. Crime laboratory operations require the building mechanical systems to provide a level of safety, flexibility, reliability, and functional features that typical mechanical systems are not able to meet. The age of the systems, their general condition and configuration and the absence of persistent or reoccurring issues with the system indicate their general suitability for their current use and service in the Crime Lab.

Plumbing Systems

The utilities serving the building consist of domestic water service, natural gas medium pressure service, sanitary waste, and fire sprinkler mains. There were no observed deficiencies in these systems, which appear to be in good condition and appropriate to their intended use.

Emergency eye wash and safety showers are installed at all laboratory sections. Hand wash sinks at vestibules and laboratory sinks are suitable for use and seem adequate in number and location.

Laboratory gases for helium, nitrogen, and instrument grade air are piped to the laboratory equipment from localized gas cylinders. An outside-accessible storage room stocks replacement cylinders. Local vacuum pumps are provided where required.

The building has sufficient provisions for toilet rooms.

Electrical Systems

A detailed analysis of the electrical and power systems was beyond the scope of this study. Main panel and transformer rooms appear adequate and in good condition

and the distribution panels serving labs are located outside the controlled environment and have good accessibility.

Distribution of power in the laboratory spaces is primarily horizontal surface-mounted aluminum raceways located on walls above backsplashes. Islands have power boxes at reagent shelf standards fed from the casework below. Isolated ground outlets are identified in orange.

Emergency power is provided by an exterior diesel generator set and an automatic transfer switch. The adequacy of the stand-by power systems and its connected loads was beyond the scope of this study.

Lighting Systems

In general, most of the lighting fixtures in the lab spaces are 2x4, or 1x4 fluorescent troffers with prismatic diffuser lenses, T12 lamps, and magnetic ballasts. Corridor lighting is wall-mounted compact fluorescent. Office lighting is pendant mounted fluorescent with louvered diffusers. Lighting controls consist primarily of single pole toggle switches. While this system appears to be adequate, they are not as energy efficient as new LED lighting systems and do not offer the same level of control.

Data Systems

A central Main Data Facility room (MDF) is located near the center of the "U" in the east wing. A secondary IDF room is in the west wing. These facilities appear adequate for current use and have some capability to accommodate new equipment. Data wiring is routed in trays above ceilings or in exposed trays in the corridors.

Observations/Deficiencies Noted

The following operational and configuration observations/deficiencies were noted:

- *Public Access*
The CLD provides training to other (client) law enforcement agencies and this constitutes most public visitors. There is a classroom and training lab accessible from the lobby that serves both internal and external training. This space also serves as the primary all-staff conference space. It can accommodate 24-32 students, which generally meets the current need; however, when the 37 current occupants use it for all-staff meetings, it is inadequate. The adjacent training lab gets limited use, primarily due to its location on the non-secure side of the labs. It would be better used if it could be incorporated into the larger lab, perhaps as an expansion of the DNA Lab.
- *Evidence*
The intake is provided with a separate, secure vestibule and lobby. There is an identified evidence viewing room that can be accessed from the secure side as well as the lobby. The main evidence storage area generally accommodates current need but has little room for future expansion. Future growth anticipates adding one property evidence custodian. This will require reconfiguration to accommodate administrative space for this position. As the administrative operation reduces paper use, converting the current records room for use in evidence administration and storage could accommodate anticipated growth.

Evidence storage space in the lab areas is overcrowded and, in some cases, has been repurposed to support other uses that could not be accommodated in the lab areas. (see lab observations below)



Evidence Processing



Cold Storage Evidence

- **Administrative Space**

The building area has not been increased since it was built. The original plan provided office space for 30 FT staff. There are currently 37 FT staff assigned to the lab. To accommodate the greater number of personnel now housed within, two of the exam rooms have been repurposed for offices, a lab space in Firearms is now a supervisor's office, and some of the offices have been modified from single to double occupancy. The result of "making do" is that the offices are cramped and congested and there is no room to accommodate any program or personnel growth. This has been exacerbated by moving office support functions (library, files, storage, copiers, etc.) into the interior circulation spaces of the open offices.

Planned staffing increases will bring the total staffing level to 46 at this location. As the staff increases to over 40, an office manager position is planned to be added to the administrative space, further congesting office and support functions. The facility needs to be remodeled or expanded to increase office space by 1,800–2,000-asf.



Exam Room converted to office space



Typical open office workspaces

- *Insufficient Personnel Support Space*
With staffing greater than originally planned, the break room is undersized. To accommodate the need, the original library space has been repurposed into a quiet break room and the library functions dispersed into the open office areas. Lockers, showers, and toilets appear adequate for current and projected staffing.

- *Exam Rooms*
The original design provided seven dedicated exam rooms, three in Microanalysis, three in DNA, and one for Firearms. The lack of office/desking space has resulted in two of the exam rooms (one in Micro and one in DNA) being repurposed to provide office space for three workstations. Addressing office needs would allow the exam spaces to be returned to lab use.

The lack of a dedicated exam space for CSR has resulted in the original evidence lab being used as the one full-time Crime Scene Lab. They also use one of the Micro Labs on a part-time basis, which can impact efficiency of workflow and create possible cross contamination.

This MA Lab has a Scanning Electron Microscope (SEM) with adjacent utility and prep rooms. This equipment is planned to be replaced soon with a newer device, which will require much less space. It would be desirable to convert the SEM space into an exam room when this equipment is replaced.

- *Microanalysis/Trace Lab*
There are four "U" shaped workstations in the lab serving two scientists. Located in the southern part of the east wing, this space is adequate for current and projected use.



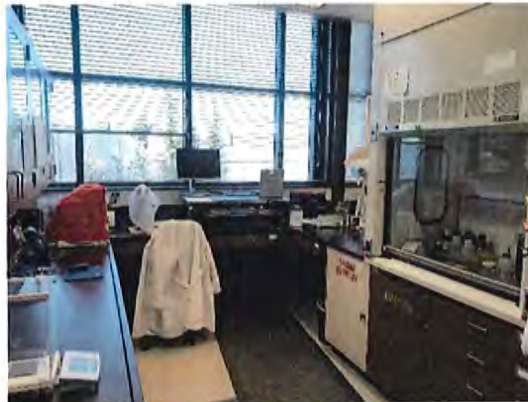
MA Lab



MA Exam Room

- *Chemistry Lab*
Located in the west wing of the lab, the Chemistry section provides 10 lab stations in this lab area currently serving five scientists, four in the MA sections and one in QD section. This meets current need. Near term plans are to add two scientists in the MA Section and another one in QD. This can be accommodated in the existing lab space.

The adjacent instrument room functions for current need but has no capability for increasing equipment in support of staffing growth.



Chemistry Lab



Instrument Lab

- *DNA Lab*

Located in the East Wing, the DNA lab section includes nine “U” shaped workstations and one reagent prep station in the lab serving 12 scientists and one lab tech. This results in scientists needing to share/schedule bench space for their caseload. Sharing bench space increases risk of cross-contamination and reduces the amount of time available for staff to utilize lab space. The storage capacity for evidence each scientist has checked out to process is also impacted by shared space.

Near-term growth includes adding two more DNA scientists in this lab. To accommodate this growth and to provide adequate lab workstations for 14 scientists, additional lab stations will be needed.

The adjacent Extraction, PCR Set-Up, and Post-Amplification labs have been adequate for current use; however, fitting the amount of instrumentation in the current benching has been difficult. In the future, it is anticipated that new instrumentation will be smaller in size and will mostly be accommodated in the current space. If adequate administrative space is provided, the spaces that were intended to be exam rooms that have been repurposed for offices could be used to support DNA sample prep and processing.



DNA Lab



Post-Amplification Lab

- *Latent Prints Lab*

This lab was constructed in 2012 in a space that was originally intended as a toxicology lab. It has two workstations and an adjacent evidence/photo room serving three scientists. Originally designed with two additional workstations, it was reduced in size due to budget constraints. To accommodate all current staff without “sharing”, one additional lab station is required. Long-term growth would require a total of four lab stations dedicated to this function.

- *Firearms Lab*

Located at the north tip of the west wing, this lab houses two workstations serving three scientists. Near term growth anticipates adding an additional FA scientist. The scientists use the lab space for both casework and administrative functions. It is crowded and needs to be expanded/modified and separate administrative space provided for each scientist.

The NIBIN lab is planned to be repurposed into a supervisor’s office. The microscope lab was designed for one scope station, but currently houses two with a third station planned. This expansion would either occur into the workshop space or be relocated into the existing exam room. The workshop and the Caswell range appear adequate for current and future growth.



Firearms Lab with office workspace on lab top



PFA Microscope Lab with 2nd scope in corridor

- *Questioned Documents Lab*

This lab occupies two of the lab stations in the Chemistry Section serving one scientist. Long-term growth anticipates one additional scientist dedicated to this function. It is anticipated that this will be accommodated in the existing dedicated space although an increase in administrative/office space would be necessary.



QD Lab

- *Crime Scene Response (CSR)*

The CDR section was not initially programmed as a housed function when the building was designed. It currently occupies three office spaces housing five scientists. What was initially designed an Evidence Lab has been repurposed to serve as a CSR Exam Lab. As the CRST has a mobile response vehicle that needs to be housed in an environmentally controlled space, the vehicle evidence bay has been used.

Long-term growth anticipates the addition of one scientist dedicated to this function. It is anticipated that this will be accommodated in the existing dedicated space, although an increase in administrative/office space would be necessary.



CSR Lab



Vehicle Evidence Bay repurposed to house CSR Vehicle

SPACE ALLOCATION

The following table provides the current allocation of space within the existing lab and the planned future space need. It is based on the projected increase of staffing and "right" sizing spaces that are currently below industry standards.

<i>Program/Space</i>	<i>Existing Area (36 FTE)</i>	<i>Notes</i>	<i>Projected Area (44 FTE)</i>
Administration	2,460		2,705
Lab Manager	255		255
Lab Admin Office	513		513
Office/IT Manager	-		140
Records/Casefile Storage	185		185
Conference	232		250
Classroom	502	Connected to Training Lab	502
Training Lab	323	Connected to Classroom	-
Kitchen/Break Room	240		500
Library/Quiet Room	210		360



**FORENSICS DIVISION
FACILITIES MASTER PLAN**

1 July 2021

<i>Program/Space</i>	<i>Existing Area (36 FTE)</i>	<i>Notes</i>	<i>Projected Area (44 FTE)</i>
Property/Evidence	2,086		2,269
Evidence Vestibule	90	Secure access separate from public lobby	90
Evidence Lobby	240		240
Evidence Viewing	133	Access from lobby and secure side	133
Evidence Office/Processing	728		728
Evidence Storage	617	High-density storage shelving	800
Narcotics Storage	114		114
Cold Storage	164		164
Crime Scene Response	1,395		1,579
CSR Supervisor Office	123		140
CSR Office Space	313	3 personnel	480
CSR Exam Lab	227		227
CSR Evidence Drying Room	62		62
Vehicle & Equipment Storage	670	Drive-through Bay	670
Latent Prints	482		682
Latent Prints Lab	400		600
Photo Room	82		82
Questioned Documents	400		400
QD Lab	400		400
Firearms	1,288	<i>Does not include Caswell Range trailer</i>	1,699
Firearms Lab	456		800
NIBIN Lab	142	Convert to Supervisors office	142
FA Exam Room	124		124
Secure Lab Storage	46		46
Microscope Room	176		240
Weapons Storage	137	High-density shelving	140
FA Workshop	207	Also functions as circulation to range	207



**FORENSICS DIVISION
FACILITIES MASTER PLAN**

1 July 2021

Materials Analysis	5,788		10,066
FA/QD Supervisor Office	144		144
MA Supervisors Office	152		152
Open Office	1,510	Current 11 workstations. Future 17 workstations	3,400
Lab Vestibule	140		140
Chemistry Lab	1,055	8 work areas - Need 12	3,120
Instrument Room	752		752
Secure Lab Storage	150		150
MA/Trace Lab	778		1,101
<i>Program/Space</i>	<i>Existing Area (36 FTE)</i>	<i>Notes</i>	<i>Projected Area (44 FTE)</i>
Trace /Exam Room	323		323
Exam Room	190		190
Exam Room	158		158
MA/Trace Office	152	Repurposed Exam Room	152
SEM Room	150		150
SEM Prep	80		80
SEM Utility	54		54
DNA	6,128		10,244
DNA Supervisor Office	147		147
DNA Supervisor Office	145		145
DNA Manager Office	126		126
Open Office	1,444	Current 9 workstations. Future 14 workstations	3,640
Lab Vestibules	140	3 each. 1 to lab and 2 in/out Post Amp lab	200
Evidence Storage	265		265
Lab Prep	110		110
Lab Office	160	Repurposed Exam Room. Future exam room	160
Exam Room	240		240
Exam Room	240		240
DNA Lab	1,780	9 existing Lab stations - 14 future	3,640

Extraction	247		247
PCR-Up Lab	175		175
PCR Amplification Lab	714		714
Reagent Prep	195	Functions also as an office	195
NET ASSIGNABLE	20,027		29,644
Unassigned	14,073		14,617
General Storage	484	Includes janitor/supply, chem/biohazard	484
Circulation	3,696	Includes vestibules and lobby	4,446
Toilets	850	Includes lockers	850
Mechanical/Electrical/Systems	4,094	Includes 2,500-sf in attic but not 1,000-sf ground-mounted units at the south	4,094
Shelled Space	1,160		-
Walls and Structure	4,273		4,742
TOTAL GROSS	34,100		44,260





Existing Floor Plan/Space Assignment



5.0 PROPOSED DEVELOPMENT

5.1 General

Several of the existing facilities supporting the WSP Forensics Division have considerable deficiencies in available functional space to support its current mission and caseload. Over the next 25 years, it is expected to experience continued growth in casework and demand for its services from supported agencies. It is crucial to the achievement of the WSP's mission that a comprehensive and logical plan for addressing noted deficiencies and accommodating this growth be developed and adopted. The recommended plan in this document has been generated to respond to the space and functional needs of the existing functional needs as well as projected caseload expansion.

The recommended plan herein should not be considered "cast-in-stone" rather it should be viewed as a framework for decision making. As the needs of the WSP and the Forensics Services Division change or if planned funding sequences change, this plan should and must be re-evaluated and modified to respond to the fluid realities of program needs, changing science, funding opportunities, and the State's extended process for capital development.

This Facilities Plan proposes to address the identified space shortfall through a number of projects including new, renovation, and expansion projects. The sequence proposed for development is generated to work within the OFM capital project funding process and assures a logical process enabling continuous operation of FSD in existing facilities while new buildings/spaces are developed.

Note, all budget estimate figures are given in 2021 funds and been escalated to the anticipated completion dates. Project cost estimates are based on historical cost average per unit or area, i.e. \$/GSF. It is anticipated that each project will incorporate utility/infrastructure improvements/extensions needs to support the specific project.

5.2 Near Term Development

Near-term development is defined as projects which will be requested, planned, designed, and constructed within the next 6-10 years. The proposed project include:

North Sound Crime Lab (New)

The proposed project will replace the existing lab that is co-located with the WSP District-7 Headquarters with a new lab that will be designed to include all the forensic services provided by the WSP.

As identified in the Space Allocation portion of Section 4 (page 4-25) the new lab is proposed to total 50,846-GSF. It is assumed to be located on a newly acquired site of approx. 2.5-acres located along the I-5 corridor between Everett and Burlington.



The total project cost is estimated to be \$67,226,000. (See appendix A)

It is proposed that the Site Acquisition and Predesign be funded in the 2022 supplemental budget. Using Progressive Design-Build project delivery, design and construction funding is proposed in the 2023 -2025 Biennium with construction complete in spring of 2026.

Following completion of the new lab, the existing lab space in the Division-8 Headquarters will be repurposed to support Field Operations.

The summary of the project is:

New Area:	50,846-gsf
Acquisition/Predesign Cost:	\$2,000,000
Funding Source:	2022 Supplemental Budget
Anticipated Project Cost:	\$66,889,000
Funding Source:	2023-2025 Capital Budget
Anticipated Completion:	Spring 2026

5.3 Mid Term Plan

Mid-term development is defined as projects which will be requested, planned, designed, and constructed within the next 8-10 years. The anticipated projects include:

Cheney Expansion (Renovation)

In the mid-term phase, space deficiencies at the Cheney lab would be addressed by a renovation/expansion project. This will include renovating the remaining shelled-space and changing the training labs into an operations space supporting the MA lab function. An addition of approximately 3,000-gsf will be provided either by expanding to the southwest or by infilling the existing courtyard between the office wings.

It is proposed that the Predesign be funded in the 2026 supplemental budget. Using Progressive Design-Build project delivery, design and construction funding is proposed in the 2027 -2029 Biennium with construction complete in spring of 2029.

The summary of the project is:

Renovated Area:	2,000-gsf
Expansion Area:	3,000-gsf
Anticipated Project Cost:	\$5,000,000
Funding Source:	2027-2029 Capital Budget
Anticipated Completion:	Spring 2029



5.5 Far-Term Plan

Far-term development is defined as projects which will be requested, planned, designed, and constructed within the next 10+ years. The anticipated project is:

South Sound Crime Lab (New)

The proposed project will replace the existing Olympia, Tacoma, and Seattle labs with a new lab that will be expanded to include all the forensic services provided by the WSP. As identified in the Space Allocation portion of Section 4 for Seattle, Olympia, and Tacoma, the new lab is proposed to total 95,000-GSF. It is planned to be located on vacant land that the WSP currently owns in the Spring Valley area of Federal Way.

The total project cost is estimated to be \$123,900,000. (See appendix A)

It is proposed that the Predesign be funded in the 2028 supplemental budget. Using Progressive Design-Build project delivery, design and construction funding is proposed in the 2029 -2031 Biennium with construction complete in spring of 2032.

Following completion of the new lab, the existing lab space in Tacoma will be repurposed to support Field Operations and the leased space in Seattle and Olympia will be vacated.

The summary of the project is:

New Area:	95,000-gsf
Predesign Cost:	\$750,000
Funding Source:	2028 Supplemental Budget
Anticipated Project Cost:	\$123,150,000
Funding Source:	2029-2031 Capital Budget
Anticipated Completion:	Spring 2032

6.0 – DEVELOPMENT GUIDELINES

It is assumed that the local jurisdiction will have development standards that any new project will be subject to. All planned development is subject to review and approval by the local code/permitting authorities for compliance with codes.

Future projects at for the WSP Forensics Division must meet a high level of quality and respond to context, built form, structure, and regulatory requirements. In general, the standards developed by the Department of Justice NIST Report “Handbook for Forensic Laboratory Facility, Planning, Design, Construction” should form the basis of standards for new Crime Lab facilities. Following are some general guideline highlights that should be considered for new projects.

6.1 Site Design

It is recommended that any site considered to house a new forensics laboratory contain at least 2.5 acres of relatively flat developable area,

Recommendations

1. **Access:** Provide access from at least two directions to ensure access to the site despite traffic conditions, street maintenance work, acts of sabotage, or other unforeseen site disruptions
2. **Utilities:** Ensure adequate access to utilities including water, sewer, power, data/communications, stormwater control capability.
3. **Lighting:** The site lighting should be designed to enhance security and discourage vandalism and unauthorized entry. Lighting comparable to that of a college campus offering night classes might serve as a guideline.
4. **Parking:** Provide 3 levels of parking security:
 - Level 1: Provide a small visitor parking located near the entrance to the building allowing entry and departure without security barriers.
 - Level 2: Fenced area for use by persons having business at the facility. For example, shipping and receiving, biological and toxic waste pickup, dumpster replacement, and evidence delivery. The area should be gated, and the gate may be left open during business hours and locked after hours. Access might be through the level 1 parking area.
 - Level 3: Special parking area for CSR vehicles secured 24 h, surrounded by a security fence, and accessible by use of a proximity or card key device.

6.2 Landscape

Landscaping should be designed to enhance site security by preventing potential vandals, burglars, and saboteurs from hiding in the landscaping until after dark.

Recommendations

1. Create interest using a varied palette of native, drought-tolerant plant materials.
2. Respond to major site circulation for current and future conditions.
3. Provide a low-maintenance landscape that reduces water use.

6.3 Architecture

One of the main architectural challenges of designing a forensics lab building is to develop a building that reflects the importance of the program and the agency it serves, creating openness and daylight spaces for the occupants while while maintaining the security and functional needs.

Recommendations

1. Structural: The International Building Code defines an essential facility as “buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow or earthquakes”. The crime lab should be designed as an Occupancy Class IV – Essential Facility.
2. Exterior Walls: Exterior wall materials should be a high-performance exterior wall system such as masonry, concrete, glass curtain wall, and metal panels systems. The exterior wall should have continuous insulation or similar systems to provide high resistance to thermal transfer. They shall be durable, long-lasting, and suitable for an important public facility.
3. Roofing: A new low-slope membrane and insulation system should be provided. To the maximum extent possible, low-slope photovoltaic panels should be located above the membrane.
4. Interior Walls: Interior non-bearing walls will typically be metal stud with gypsum wallboard. Wall at the FA Range should also be bullet-resistant and
5. Interior Openings: Frames for doors and relights will be hollow metal. Doors will be either hollow metal or solid core wood depending on location.
6. Interior Finishes:
 - a. Laboratory floors: Chemical-resistant sheet vinyl or vinyl tiles with welded seams.
 - b. Laboratory walls: Epoxy in all spaces considered highly biologically or chemically hazardous, such as examination rooms, bulk drug analysis, and bulk chemical storage. Semi-gloss latex enamel in all other spaces.
 - c. Laboratory ceilings: Epoxy in all spaces considered highly biologically or chemically hazardous, such as examination rooms, bulk drug analysis, and bulk chemical storage. Suspended acoustical in all other spaces.
 - d. Nonlaboratory spaces.
 - e. Acceptable interior finish standards for offices and nonlaboratory support
7. Laboratory casework:
 - a. Standard laboratory casework with utility access space behind base cabinets.
 - b. Steel or wood is preferred, plastic laminate is acceptable.
 - c. Maximize use of flexible laboratory casework systems.
 - d. Epoxy countertops in labs, chemical-resistant plastic laminate or composite resin at other spaces.
8. Acoustics:
 - a. Assembly spaces, conference rooms, offices, and toilet rooms will be sound insulated to a minimum STC = 45.

- b. Primary acoustical attenuation in the building will be provided by acoustical ceilings and carpeting. Noise transmission in open areas will be mitigated through wall-mounted or overhead acoustical panels. Special attention should be made for the noise from fume hoods in the lab spaces and from the weapons range in the FA section.
9. Physical Security: Physical security of the lab is essential to maintaining proper control of evidence. Evidence lockers, safes and locking cabinets are needed throughout the lab.
10. Physical Isolation: Ensure that all lab spaces have bio-vestibules with negative air pressure and cleaning stations to prevent cross contamination. Locate between "clean" and "dirty" spaces, for example, between main circulation corridor and entrance to a laboratory section that potentially contains hazardous airborne contaminants. Provides an interlock between clean and dirty spaces with air handled through differential pressurization to prevent exfiltration of contaminated air.
11. Administrative Space: A significant amount of the forensic scientist's responsibilities include nonlaboratory tasks such as data analysis, report writing, court testimony preparation, and other administrative responsibilities. The design should provide the analyst with an administrative work area, away from the hazards of the laboratory, where these tasks can be conducted in an efficient and safe environment. Supervisors' offices, case review areas, and space for files can also be included in this environment. With the exception of the supervisors' offices, which shall be private offices, all other spaces in the administrative work area can be designed as open office systems workstations. Some analysts, such as document and latent print examiners, require additional administrative work space since a significant amount of their technical examinations can occur outside of the laboratory environment

6.4 Supporting Systems

To meet all the standards for accreditation, it is important to plan mechanical and electrical systems in the lab that can achieve the highest performance standards are required for cleanliness, temperature, humidity, and vibration controls to create an environment suitable for forensic science.

Recommendations

1. Isolate air systems: Mitochondrial DNA room(s), Firing range. PCR Amplification, Chemistry & Toxicology
2. Consider HEPA filtered exhaust
3. Provide Differential pressure of adjacent spaces and the need for positive and negative pressure in various spaces.
4. Supplemental cooling in instrument rooms and other spaces with heat-generating equipment (freezers etc.)
5. Evidence drying room exhaust may need special handling for putrid items.
6. Emergency shower and eyewashes and floor drains. In laboratory spaces.
7. Caustic (acid/alkali) waste systems, i.e., neutralization/hazardous waste systems.
8. Fume hood and biological hood plumbing utilities.

9. Water treatment systems
 - a. Recirculating deionized water.
 - b. Point-of-use type 1 water polisher.
10. Laboratory gas types: Hydrogen, nitrogen, helium, air, argon.

Consider a Manifoldded instrument gas systems with central instrument gas distribution systems. Include laboratory compressed air.
11. Consider laboratory vacuum systems
12. Recommend emergency power and lighting for the following spaces:
 - a. Entire evidence section.
 - b. All refrigerators and freezers, including walk-in units.
 - c. Photography darkroom(s). Entire security section, including electronic security systems and telephones.
 - d. X-ray processing room(s)
 - e. Special lighting in addition to code-mandated emergency exit lighting
13. Central UPS systems for all computer-driven systems and equipment including, laboratory instrumentation, Automated Fingerprint Identification System (AFIS), Combined DNA Identification System (CODIS), Laboratory Information Management System (LIMS), Drugfire, Integrated Ballistic Imaging System (IBIS), and LABNET

6.5 Sustainability

Any new Crime Lab must be designed, as a minimum, to meet Leadership in Energy and Environmental Design (LEED) Silver standards. Strategies for implementation include an abundant use of controlled natural light, preference for locally sourced materials such as concrete block and brick, native and drought-tolerant plantings, robust well-insulated and well-sealed exterior wall and roof assemblies, and highly efficient mechanical and lighting systems.

In addition, the project should strive to achieve the goals of Net-Zero Energy, as a minimum being designed to be "Net Zero-Ready". WSP intends to target a low Energy Use Intensity (EUI) over the life of the building. Further, projects should be designed to meet the best practices to reduce greenhouse gas emissions.

Capital Project Cost Estimate

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Washington State Patrol - Fire Training Academy (FTA)	
Project Name	New Burn Building - Phase 2	
OFM Project Number	30000169	

Contact Information

Name	Brian Bottoms	
Phone Number	(360) 704-5402	
Email	brian.bottoms@wsp.wa.gov	

Statistics

Gross Square Feet	15,880	MACC per Square Foot	\$392
Usable Square Feet	14,848	Escalated MACC per Square Foot	\$563
Space Efficiency	93.5%	A/E Fee Class	B
Construction Type	Other Sch. B Projects	A/E Fee Percentage	8.50%
Remodel	No	Projected Life of Asset (Years)	

Additional Project Details

Alternative Public Works Project		Art Requirement Applies	Yes
Inflation Rate	3.12%	Higher Ed Institution	No
Sales Tax Rate %	8.60%	Location Used for Tax Rate	
Contingency Rate	5%		
Base Month	October-11		
Project Administered By	DES		

Schedule

Predesign Start		Predesign End	
Design Start	July-18	Design End	November-21
Construction Start	December-23	Construction End	March-23
Construction Duration			

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Project Cost Estimate

Total Project	\$7,722,758	Total Project Escalated	\$11,023,085
		Rounded Escalated Total	\$11,023,000

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Washington State Patrol - Fire Training Academy (FTA)	
Project Name	New Burn Building - Phase 2	
OFM Project Number	30000169	

Cost Estimate Summary

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

Consultant Services			
Predesign Services	\$0		
A/E Basic Design Services	\$383,168		
Extra Services	\$0		
Other Services	\$172,148		
Design Services Contingency	\$27,766		
Consultant Services Subtotal	\$583,081	Consultant Services Subtotal Escalated	\$783,613

Construction			
Construction Contingencies	\$311,101	Construction Contingencies Escalated	\$447,022
Maximum Allowable Construction Cost (MACC)	\$6,222,024	Maximum Allowable Construction Cost (MACC) Escalated	\$8,940,427
Sales Tax	\$561,849	Sales Tax Escalated	\$807,321
Construction Subtotal	\$7,094,974	Construction Subtotal Escalated	\$10,194,770

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

Artwork			
Artwork Subtotal	\$44,702	Artwork Subtotal Escalated	\$44,702

Agency Project Administration			
Agency Project Administration Subtotal	\$0		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$0		
Project Administration Subtotal	\$0	Project Administration Subtotal Escalated	\$0

Other Costs			
Other Costs Subtotal	\$0	Other Costs Subtotal Escalated	\$0

Project Cost Estimate			
Total Project	\$7,722,758	Total Project Escalated	\$11,023,085
		Rounded Escalated Total	\$11,023,000

STATE OF WASHINGTON

AGENCY / INSTITUTION PROJECT COST SUMMARY

Agency	Washington State Patrol - Fire Training Academy (FTA)	
Project Name	New Burn Building - Phase 2	
OFM Project Number	30000169	

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	1.2306	\$0	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$383,168			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	\$383,168	1.2954	\$496,356	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				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.2954	\$0	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	\$172,148			31% of A/E Basic Services
HVAC Balancing				
Staffing				
Other				
Insert Row Here				
Sub TOTAL	\$172,148	1.4369	\$247,360	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	\$27,766			
Other				
Insert Row Here				
Sub TOTAL	\$27,766	1.4369	\$39,897	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL				
	\$583,081		\$783,613	

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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		1.4536	\$0	
2) Related Project Costs					
Offsite Improvements					
City Utilities Relocation					
Parking Mitigation					
Stormwater Retention/Detention					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.4536	\$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					
Pallet Storage Building	\$469,722				
Rehab/Classroom Building	\$1,204,442				
Commercial Burn Building	\$4,547,860				
Sub TOTAL	\$6,222,024		1.4369	\$8,940,427	
4) Maximum Allowable Construction Cost					
MACC Sub TOTAL	\$6,222,024			\$8,940,427	

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7) Construction Contingency

Allowance for Change Orders	\$311,101		
Other			
Insert Row Here			
Sub TOTAL	\$311,101	1.4369	\$447,022

8) Non-Taxable Items

Other			
Insert Row Here			
Sub TOTAL	\$0	1.4369	\$0

Sales Tax

Sub TOTAL	\$561,849		\$807,321
CONSTRUCTION CONTRACTS TOTAL	\$7,094,974		\$10,194,770

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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		1.4369	\$0	
1) Non Taxable Items					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.4369	\$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	\$44,702				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	\$44,702		NA	\$44,702	

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Cost Estimate Details

Project Management					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Agency Project Management	\$0				
Additional Services					
Other					
Insert Row Here					
PROJECT MANAGEMENT TOTAL	\$0		1.4369	\$0	

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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					
Other					
Insert Row Here					
OTHER COSTS TOTAL	\$0		1.4536	\$0	

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C-100(2018)
Additional Notes

Tab A. Acquisition

Insert Row Here

Tab B. Consultant Services

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Tab C. Construction Contracts

Insert Row Here

Tab D. Equipment

Insert Row Here

Tab E. Artwork

Insert Row Here

Tab F. Project Management

Insert Row Here

Tab G. Other Costs

Insert Row Here

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Washington State Patrol	
Project Name	North Sound Consolidated Crime Lab	
OFM Project Number		

Contact Information

Name	Brian Bottoms	
Phone Number	(360) 704-5402	
Email	brian.bottoms@wsp.wa.gov	

Statistics

Gross Square Feet	60,000	MACC per Gross Square Foot	\$881
Usable Square Feet	39,000	Escalated MACC per Gross Square Foot	\$1,000
Alt Gross Unit of Measure			
Space Efficiency	65.0%	A/E Fee Class	A
Construction Type	Laboratories (Research)	A/E Fee Percentage	7.07%
Remodel	No	Projected Life of Asset (Years)	50

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	Yes
Inflation Rate	4.90%	Higher Ed Institution	No
Sales Tax Rate %	9.40%	Location Used for Tax Rate	Marysville, WA
Contingency Rate	5%		
Base Month (Estimate Date)	August-22	OFM UFI# (from FPMT, if available)	
Project Administered By	DES		

Schedule

Predesign Start	June-22	Predesign End	July-23
Design Start	July-23	Design End	June-24
Construction Start	July-24	Construction End	March-26
Construction Duration	20 Months		

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Project Cost Estimate

Total Project	\$87,529,140	Total Project Escalated	\$89,595,278
		Rounded Escalated Total	\$89,595,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$7,168,750	Acquisition Subtotal Escalated	\$7,168,750
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Consultant Services			
Predesign Services	\$525,000		
Design Phase Services	\$2,706,887		
Extra Services	\$1,824,135		
Other Services	\$1,866,138		
Design Services Contingency	\$346,108		
Consultant Services Subtotal	\$7,268,267	Consultant Services Subtotal Escalated	\$7,910,889

Construction			
Maximum Allowable Construction Cost (MACC)	\$52,846,020	Maximum Allowable Construction Cost (MACC) Escalated	\$60,018,850
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$2,642,301		\$3,013,809
Non-Taxable Items	\$0		\$0
Sales Tax	\$5,855,361	Sales Tax Escalated	\$5,925,070
Construction Subtotal	\$68,146,435	Construction Subtotal Escalated	\$68,957,729

Equipment			
Equipment	\$3,510,000		
Sales Tax	\$329,940		
Non-Taxable Items	\$0		
Equipment Subtotal	\$3,839,940	Equipment Subtotal Escalated	\$4,379,836

Artwork			
Artwork Subtotal	\$445,748	Artwork Subtotal Escalated	\$445,748

Agency Project Administration			
Agency Project Administration Subtotal	\$0		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	\$200,000		
Project Administration Subtotal	\$200,000	Project Administration Subtotal Escalated	\$228,120

Other Costs			
Other Costs Subtotal	\$460,000	Other Costs Subtotal Escalated	\$504,206

Project Cost Estimate

Total Project	\$87,529,140	Total Project Escalated	\$89,595,278
		Rounded Escalated Total	\$89,595,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$7,168,750				\$7,168,750
Consultant Services					
Consultant Services Subtotal	\$7,910,889				\$7,910,889
Construction					
Construction Subtotal	\$68,957,729				\$68,957,729
Equipment					
Equipment Subtotal	\$4,379,836				\$4,379,836
Artwork					
Artwork Subtotal	\$445,748				\$445,748
Agency Project Administration					
Project Administration Subtotal	\$228,120				\$228,120
Other Costs					
Other Costs Subtotal	\$504,206				\$504,206
Project Cost Estimate					
Total Project	\$89,595,278	\$0	\$0	\$0	\$89,595,278
	\$89,595,000	\$0	\$0	\$0	\$89,595,000
	Percentage requested as a new appropriation		0%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

Insert Row Here

What has been completed or is underway with a previous appropriation?

Insert Row Here

What is planned with a future appropriation?

Insert Row Here

Cost Estimate Details

Acquisition Costs

Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Purchase/Lease	\$6,750,000				
Appraisal and Closing	\$168,750				
Right of Way					
Demolition					
Pre-Site Development	\$250,000				
Other					
Insert Row Here					
ACQUISITION TOTAL	\$7,168,750		NA	\$7,168,750	

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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	\$75,000			
Environmental Analysis	\$100,000			
Predesign Study	\$350,000			
Other				
Insert Row Here				
Sub TOTAL	\$525,000	1.0447	\$548,468	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$2,706,887			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	\$2,706,887	1.0680	\$2,890,956	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)	\$240,000			
Geotechnical Investigation	\$50,000			
Commissioning	\$180,000			
Site Survey	\$45,000			
Testing	\$200,000			
LEED Services	\$160,000			
Voice/Data Consultant	\$120,000			
Value Engineering	\$90,000			
Constructability Review	\$90,000			
Environmental Mitigation (EIS)	\$0			
Landscape Consultant	\$150,000			
Other				
Acoustic Engineer	\$50,000			
Elevator Consultant	\$45,000			
Independant Cost Estimating	\$25,000			
Interior Signage & Wayfinding	\$20,000			
FF&E Assistance/Coordination	\$44,135			
Art Coordination	\$20,000			
Parking/Transportation Consultant	\$45,000			
Laboratory Consulting	\$250,000			
Insert Row Here				
Sub TOTAL	\$1,824,135	1.0680	\$1,948,177	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	\$1,216,138			31% of A/E Basic Services
HVAC Balancing	\$200,000			
Staffing				
Other				
Extended CA Support	\$450,000			

Insert Row Here				
Sub TOTAL	\$1,866,138	1.1406	\$2,128,517	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	\$346,108			
Other				
Insert Row Here				
Sub TOTAL	\$346,108	1.1406	\$394,771	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL	\$7,268,267		\$7,910,889	

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Cost Estimate Details

Construction Contracts

Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Site Work					
G10 - Site Preparation	\$1,237,500				
G20 - Site Improvements	\$1,856,250				
G30 - Site Mechanical Utilities	\$675,000				
G40 - Site Electrical Utilities	\$675,000				
G60 - Other Site Construction	\$225,000				
Other					
Insert Row Here					
Sub TOTAL	\$4,668,750		1.0961	\$5,117,417	
2) Related Project Costs					
Offsite Improvements	\$495,000				
City Utilities Relocation					
Parking Mitigation					
Stormwater Retention/Detention	\$618,750				
Other					
Insert Row Here					
Sub TOTAL	\$1,113,750		1.0961	\$1,220,782	
3) Facility Construction					
A10 - Foundations	\$1,590,000				
A20 - Basement Construction	\$336,000				
B10 - Superstructure	\$3,600,000				
B20 - Exterior Closure	\$4,800,000				
B30 - Roofing	\$1,740,000				
C10 - Interior Construction	\$5,940,000				
C20 - Stairs	\$264,000				
C30 - Interior Finishes	\$2,580,000				
D10 - Conveying	\$300,000				
D20 - Plumbing Systems	\$2,280,000				
D30 - HVAC Systems	\$7,800,000				
D40 - Fire Protection Systems	\$480,000				
D50 - Electrical Systems	\$6,720,000				
F10 - Special Construction	\$1,140,000				
F20 - Selective Demolition	\$0				
General Conditions	\$1,200,000				
Other Direct Cost					
Built In Furnishing	\$954,000				
Add for Essential Facilities & Security	\$1,425,000				
Overhead and Profit	\$3,914,520				
Insert Row Here					

Sub TOTAL	\$47,063,520	1.1406	\$53,680,651
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4) Maximum Allowable Construction Cost

MACC Sub TOTAL	\$52,846,020	\$60,018,850
	\$881	\$1,000 per GSF

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7) Owner Construction Contingency

Allowance for Change Orders	\$2,642,301		
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Other			
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Sub TOTAL	\$2,642,301	1.1406	\$3,013,809
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8) Non-Taxable Items

Other			
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Insert Row Here			
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Sub TOTAL	\$0	1.1406	\$0
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9) Sales Tax

Sub TOTAL	\$5,855,361	\$5,925,070
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CONSTRUCTION CONTRACTS TOTAL	\$68,146,435	\$68,957,729
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Cost Estimate Details

Equipment

Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Equipment					
E10 - Equipment	\$2,340,000				
E20 - Furnishings	\$1,170,000				
F10 - Special Construction					
Other					
Insert Row Here					
Sub TOTAL	\$3,510,000		1.1406	\$4,003,506	
2) Non Taxable Items					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.1406	\$0	
3) Sales Tax					
Sub TOTAL	\$329,940			\$376,330	
EQUIPMENT TOTAL					
	\$3,839,940			\$4,379,836	

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Cost Estimate Details

Artwork					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Artwork					
Project Artwork	\$445,748				0.5% of total project cost for new construction 0.5% of total project cost for new and renewal construction
Higher Ed Artwork	\$0				
Other					
Insert Row Here					
ARTWORK TOTAL	\$445,748		NA	\$445,748	

Green cells must be filled in by user

Cost Estimate Details

Project Management					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Agency Project Management					
Agency Project Management	\$0				
Additional Services					
Other					
Agency Capital Personnel	\$200,000				
Insert Row Here					
<i>Subtotal of Other</i>	<i>\$200,000</i>				
PROJECT MANAGEMENT TOTAL	\$200,000		1.1406	\$228,120	

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Cost Estimate Details

Other Costs

Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Mitigation Costs					
Hazardous Material Remediation/Removal	\$200,000				
Historic and Archeological Mitigation	\$80,000				
Other					
Permits	\$180,000				
Insert Row Here					
OTHER COSTS TOTAL	\$460,000		1.0961	\$504,206	

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C-100(2022)
Additional Notes

Tab A. Acquisition

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Tab B. Consultant Services

<i>Insert Row Here</i>

Tab C. Construction Contracts

<i>Insert Row Here</i>

Tab D. Equipment

<i>Insert Row Here</i>

Tab E. Artwork

<i>Insert Row Here</i>

Tab F. Project Management

<i>Insert Row Here</i>

Tab G. Other Costs

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STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency	Washington State Patrol	
Project Name	South King County Headquarters	
OFM Project Number		

Contact Information

Name	Brian Bottoms, Facilities Section Manager	
Phone Number	(360) 704-5402	
Email	brian.bottoms@wsp.wa.gov	

Statistics

Gross Square Feet	54,000	MACC per Gross Square Foot	\$629
Usable Square Feet	37,050	Escalated MACC per Gross Square Foot	\$746
Alt Gross Unit of Measure			
Space Efficiency	68.6%	A/E Fee Class	B
Construction Type	Fire and police stations	A/E Fee Percentage	6.58%
Remodel	No	Projected Life of Asset (Years)	

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	
Inflation Rate	4.90%	Higher Ed Institution	
Sales Tax Rate %	10.10%	Location Used for Tax Rate	
Contingency Rate	5%		
Base Month (Estimate Date)	September-22	OFM UFI# (from FPMT, if available)	
Project Administered By	DES		

Schedule

Predesign Start	December-22	Predesign End	July-23
Design Start	July-23	Design End	July-25
Construction Start	July-25	Construction End	July-27
Construction Duration	24 Months		

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Project Cost Estimate

Total Project	\$59,206,954	Total Project Escalated	\$68,123,391
		Rounded Escalated Total	\$68,123,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$9,542,750	Acquisition Subtotal Escalated	\$9,542,750
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Consultant Services			
Pre-design Services	\$350,000		
Design Phase Services	\$1,619,422		
Extra Services	\$1,904,000		
Other Services	\$1,083,566		
Design Services Contingency	\$247,849		
Consultant Services Subtotal	\$5,204,838	Consultant Services Subtotal Escalated	\$5,809,642

Construction			
Maximum Allowable Construction Cost (MACC)	\$33,970,018	Maximum Allowable Construction Cost (MACC) Escalated	\$40,300,167
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$1,698,501		\$2,040,240
Non-Taxable Items	\$0		\$0
Sales Tax	\$3,602,520	Sales Tax Escalated	\$4,276,381
Construction Subtotal	\$39,271,039	Construction Subtotal Escalated	\$46,616,788

Equipment			
Equipment	\$3,905,000		
Sales Tax	\$394,405		
Non-Taxable Items	\$0		
Equipment Subtotal	\$4,299,405	Equipment Subtotal Escalated	\$5,164,446

Artwork			
Artwork Subtotal	\$338,922	Artwork Subtotal Escalated	\$338,922

Agency Project Administration			
Agency Project Administration Subtotal	\$0		
DES Additional Services Subtotal	\$100,000		
Other Project Admin Costs	\$275,000		
Project Administration Subtotal	\$375,000	Project Administration Subtotal Escalated	\$450,450

Other Costs			
Other Costs Subtotal	\$175,000	Other Costs Subtotal Escalated	\$200,393

Project Cost Estimate

Total Project	\$59,206,954	Total Project Escalated	\$68,123,391
		Rounded Escalated Total	\$68,123,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request		
			2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$9,542,750				\$9,542,750
Consultant Services					
Consultant Services Subtotal	\$5,809,642				\$5,809,642
Construction					
Construction Subtotal	\$46,616,788				\$46,616,788
Equipment					
Equipment Subtotal	\$5,164,446				\$5,164,446
Artwork					
Artwork Subtotal	\$338,922				\$338,922
Agency Project Administration					
Project Administration Subtotal	\$450,450				\$450,450
Other Costs					
Other Costs Subtotal	\$200,393				\$200,393
Project Cost Estimate					
Total Project	\$68,123,391	\$0	\$0	\$0	\$68,123,391
	\$68,123,000	\$0	\$0	\$0	\$68,123,000
	Percentage requested as a new appropriation		0%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

Insert Row Here

What has been completed or is underway with a previous appropriation?

Insert Row Here

What is planned with a future appropriation?

Insert Row Here

Cost Estimate Details

Acquisition Costs

Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Purchase/Lease	\$9,310,000				
Appraisal and Closing	\$232,750				
Right of Way					
Demolition					
Pre-Site Development					
Other					
Insert Row Here					
ACQUISITION TOTAL	\$9,542,750		NA	\$9,542,750	

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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	\$75,000			
Environmental Analysis	\$25,000			
Predesign Study	\$250,000			
Other				
Insert Row Here				
Sub TOTAL	\$350,000	1.0405	\$364,175	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$1,619,422			69% of A/E Basic Services
Other				
Insert Row Here				
Sub TOTAL	\$1,619,422	1.0916	\$1,767,762	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)	\$240,000			
Geotechnical Investigation	\$50,000			
Commissioning	\$162,000			
Site Survey	\$45,000			
Testing	\$200,000			
LEED Services	\$160,000			
Voice/Data Consultant	\$85,000			
Value Engineering	\$81,000			
Constructability Review	\$81,000			
Environmental Mitigation (EIS)	\$0			
Landscape Consultant	\$150,000			
Other				
Other Specialty Consultants	\$650,000			
Insert Row Here				
Sub TOTAL	\$1,904,000	1.0916	\$2,078,407	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	\$727,566			31% of A/E Basic Services
HVAC Balancing	\$81,000			
Staffing				
Other				
Additional CA	\$275,000			
Insert Row Here				
Sub TOTAL	\$1,083,566	1.2012	\$1,301,581	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	\$247,849			
Other				
Insert Row Here				

Sub TOTAL	\$247,849	1.2012	\$297,717	Escalated to Mid-Const.
CONSULTANT SERVICES TOTAL	\$5,204,838		\$5,809,642	

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Cost Estimate Details

Construction Contracts

Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Site Work				
G10 - Site Preparation	\$1,925,000			
G20 - Site Improvements	\$2,887,500			
G30 - Site Mechanical Utilities	\$1,050,000			
G40 - Site Electrical Utilities	\$1,050,000			
G60 - Other Site Construction	\$350,000			
Other				
Insert Row Here				
Sub TOTAL	\$7,262,500	1.1451	\$8,316,289	
2) Related Project Costs				
Offsite Improvements	\$770,000			
City Utilities Relocation				
Parking Mitigation				
Stormwater Retention/Detention	\$962,500			
Other				
Insert Row Here				
Sub TOTAL	\$1,732,500	1.1451	\$1,983,886	
3) Facility Construction				
A10 - Foundations	\$999,000			
A20 - Basement Construction	\$0			
B10 - Superstructure	\$3,564,000			
B20 - Exterior Closure	\$3,564,000			
B30 - Roofing	\$570,240			
C10 - Interior Construction	\$1,782,000			
C20 - Stairs	\$356,400			
C30 - Interior Finishes	\$1,069,200			
D10 - Conveying	\$165,000			
D20 - Plumbing Systems	\$1,140,480			
D30 - HVAC Systems	\$3,240,000			
D40 - Fire Protection Systems	\$432,000			
D50 - Electrical Systems	\$3,920,400			
F10 - Special Construction	\$216,000			
F20 - Selective Demolition	\$0			
General Conditions	\$1,440,000			
Other Direct Cost				
Overhead and Profit	\$2,516,298			
Insert Row Here				
Sub TOTAL	\$24,975,018	1.2012	\$29,999,992	

4) Maximum Allowable Construction Cost

MACC Sub TOTAL **\$33,970,018**
\$629

\$40,300,167
\$746 per GSF

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7) Owner Construction Contingency

Allowance for Change Orders \$1,698,501

Other

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Sub TOTAL \$1,698,501

1.2012

\$2,040,240

8) Non-Taxable Items

Other

Insert Row Here

Sub TOTAL \$0

1.2012

\$0

9) Sales Tax

Sub TOTAL \$3,602,520

\$4,276,381

CONSTRUCTION CONTRACTS TOTAL \$39,271,039

\$46,616,788

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Cost Estimate Details

Equipment

Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Equipment					
E10 - Equipment	\$740,000				
E20 - Furnishings	\$1,665,000				
F10 - Special Construction					
Other					
Radio/Telecom Mast	\$1,500,000				
Insert Row Here					
Sub TOTAL	\$3,905,000		1.2012	\$4,690,686	
2) Non Taxable Items					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.2012	\$0	
3) Sales Tax					
Sub TOTAL	\$394,405			\$473,760	
EQUIPMENT TOTAL					
	\$4,299,405			\$5,164,446	

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Cost Estimate Details

Artwork					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Artwork					
Project Artwork	\$338,922				0.5% of total project cost for new construction 0.5% of total project cost for new and renewal construction
Higher Ed Artwork	\$0				
Other					
Insert Row Here					
ARTWORK TOTAL	\$338,922		NA	\$338,922	

Green cells must be filled in by user

Cost Estimate Details

Project Management					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Agency Project Management					
Agency Project Management	\$0				
Additional Services	\$100,000				
Other					
On-Site Observer	\$275,000				
Insert Row Here					
<i>Subtotal of Other</i>	<i>\$275,000</i>				
PROJECT MANAGEMENT TOTAL	\$375,000		1.2012	\$450,450	

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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					
Other					
Permits	\$175,000				
Insert Row Here					
OTHER COSTS TOTAL	\$175,000		1.1451	\$200,393	

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C-100(2022)
Additional Notes

Tab A. Acquisition

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Tab B. Consultant Services

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Tab C. Construction Contracts

Insert Row Here

Tab D. Equipment

Insert Row Here

Tab E. Artwork

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Tab F. Project Management

Insert Row Here

Tab G. Other Costs

Insert Row Here

TAB D

Capital Project Requests Related to Grant and Loan Programs

**Project List,
including location,
for each grant loan
program as a
subproject in
CBS002**

TAB E