2023-2024 STATE ENERGY EFFICIENT DESIGN BIENNIAL REPORT

Submitted to the

OREGON LEGISLATURE

by the

OREGON DEPARTMENT OF ENERGY

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EXECUTIVE SUMMARY

The State Energy Efficient Design (SEED) Program builds on decades of energy efficiency efforts in Oregon's state agencies. This journey began in 1991 with the simple goal of minimizing the use of energy resources and has been bolstered throughout the years. Most recently, the state has created an innovative program called the Building Performance Standard (BPS), set to begin compliance in 2028.[i] The Oregon Department of Energy (ODOE) chose to harness that sentiment of evolution in this biennial update.

Traditionally, this report focused on agency-specific efforts, since state energy management has fallen on individual agencies. While many agencies experienced success under this approach, some state-owned buildings have struggled to meet energy efficiency targets. As ODOE staff recommends in this report, a new approach can significantly improve the state's ability to achieve energy efficiency improvements and reach targets.

This biennial analysis is different from previous reports in that it has been revised to include a discussion of difficulties in target attainment; as of 2023, half of the buildings in the program reached their targets, and others have faced challenges that have been experienced across various agencies. Specifically, facility operators, managers, and technicians that ODOE staff spoke to while drafting this report mentioned difficulties in attaining capital funding, which have led to some major equipment being past useful life, and understaffed departments that must be reactive instead of proactive.

As a result, ODOE is recommending a holistic enterprise-wide approach, which will mirror advancements in building science. This will ensure consistent procedures for maintenance, equipment replacement, and training across the state's portfolio with the explicit goal of strategically updating our facilities.

Defining Holistic Enterprise-Wide Energy Management

An integrated approach that commits to an enterprise-wide energy management strategy would include:

- Supporting individual agencies to identify building-specific challenges and energy savings opportunities. The Department of Administrative Services (DAS) has been tasked by legislation (House Bill 3409) with developing a searchable database for all state-owned equipment and associated greenhouse gas (GHG) emissions; agencies are then tasked with conducting equipment assessments and populating the database. This database will be central to determining equipment end-of-life and compliance with the Operations and Maintenance Plan for the new Building Performance Standards.
- With a dynamic state-wide database, projects can be prioritized based on need and a more transparent process can be implemented. Additionally, BPS requirements, such as end of life calculations and preventative maintenance, will be easier to achieve.
- After projects are identified, efficiencies can be created in the capital planning process by looking for common denominators and grouping projects together that will benefit from similar

[i] To read more on the history of the State Energy Efficient Design (SEED) Program, see Appendix A

efficiency and procurement solutions. This will leverage bulk purchasing and reduce implementation costs.

- Lastly, the state could encourage more long-term agency capital planning, going beyond traditional biennial budgeting. This could result in bundling of longer-payback projects, such as equipment replacement, with shorter payback projects to get deep energy savings and favorable returns.

A March 2020 Oregon Secretary of State Audits Division Report contains similar recommendations and can be found here.

This biennial report represents the current conditions of state buildings, the main issues our facility teams are facing, and new opportunities for our state properties.

Top Risks to Energy Management in Oregon State Buildings

1. **Business-as-usual:** Some state-owned buildings have struggled to attain energy efficiency. Without critically examining current practices, attainment will continue to be difficult.
2. **Planning to scale:** A portfolio-based approach can allow a property owner, in this case an individual agency or the state government enterprise, to pool resources, deploy these resources in a strategic manner, and potentially save money through bulk or group purchasing efforts.
3. **Siloed financial decisions:** Divisions within agencies and within the state government enterprise can operate in silos; a lack of alignment among facility teams, management, and budget-focused staff can lead to financial decisions that do not support the holistic nature of facility management.
4. **High operating costs:** Reactive preventative maintenance, as opposed to a more proactive approach, can lead to additional charges from emergency repair fees, overtime, etc.

Top Opportunities for Energy Management in Oregon State Buildings

1. **Lead by example:** A strategic and forward-looking approach to energy efficiency capital planning can bring about robust long-term energy efficiency gains and cost savings. Implementation of such an approach could demonstrate a prioritization of energy efficiency to the public and a model for private building owners trying to adhere to upcoming Building Performance Standards.
2. **Consistency among agencies:** By approaching energy efficiency at a portfolio level - within individual agencies and across the state government enterprise – state government can ensure consistent and comprehensive information is used to drive data-based decisions. This will likely require support through funding and resources.
3. **Better financial investments:** Capital planning efforts for buildings can help integrate financial and facility teams to break down silos and make well-rounded decisions.
4. **Strategic facility management:** By taking a holistic approach and viewing the building portfolio as a harmonized system with lifespan milestones, state government can engage in proactive management that focuses on long-term sustainability.

This report is available online: https://www.oregon.gov/energy/Data-and-Reports/Pages/Reports-to-the-Legislature.aspx

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About This Report

This report opens with a *Brief Methodology* to prime the reader for the analysis that follows.

The report then mentions *Key Takeaways from the Biennial Review* as a brief summation of the most important takeaways from the 2022-2023 energy use data.

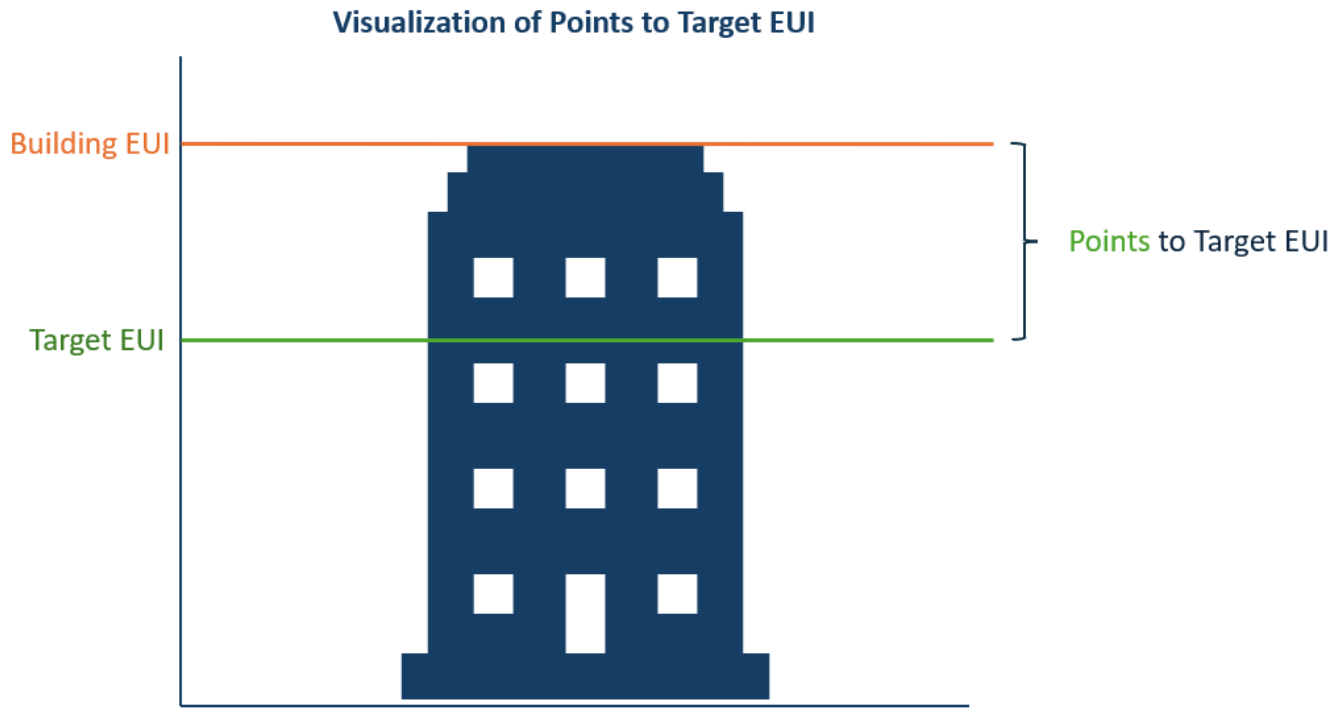
The report flows into three sections:

1. *Section 1: Energy Conservation in Existing State Buildings* highlights the numerous challenges state buildings are facing and recommendations to solve these issues.
2. *Section 2: New Construction and Remodels* covers the completed renovation and construction during the last biennium.
3. *Section 3: Agency Status Reports* includes a snapshot of the last full year's energy use intensity data for each agency by building.

SECTION 1: ENERGY CONSERVATION IN EXISTING STATE BUILDINGS

Brief Methodology

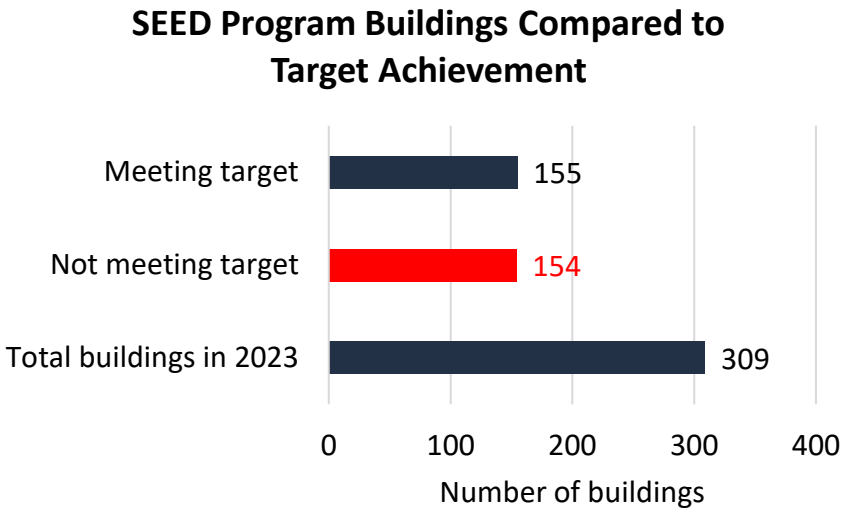
There are numerous ways to audit or assess the condition and performance of a building. The State of Oregon has chosen an industry-derived points-based energy index. The basis is annual energy usage and square footage, which can be used to calculate a building's *energy use intensity* (EUI). For each building type there is an associated EUI target – a sweet spot of energy use to size – and a building's EUI should be at or below the target. For buildings exceeding the target, we can understand the severity by evaluating the points to target, i.e., the difference between current building EUI and target EUI, as seen in the graphic below.



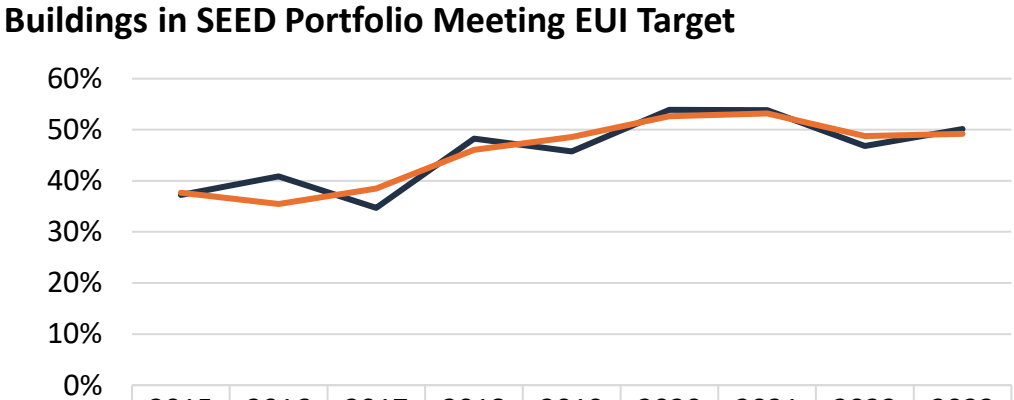
Methodology is further discussed in Appendix B.

Key Takeaways from the Biennial Review

Performance: There were 309 buildings participating in the most recent year of program reporting. Of those 309, **half, 154 buildings, did not achieve their respective EUI targets**. One reason is the wide variance in building types, ranging from offices to hospitals to barracks. Another complexity is older buildings, with the average state-owned property approaching 50 years in vintage. This diversity makes it difficult to reach high achievement in aggregate.



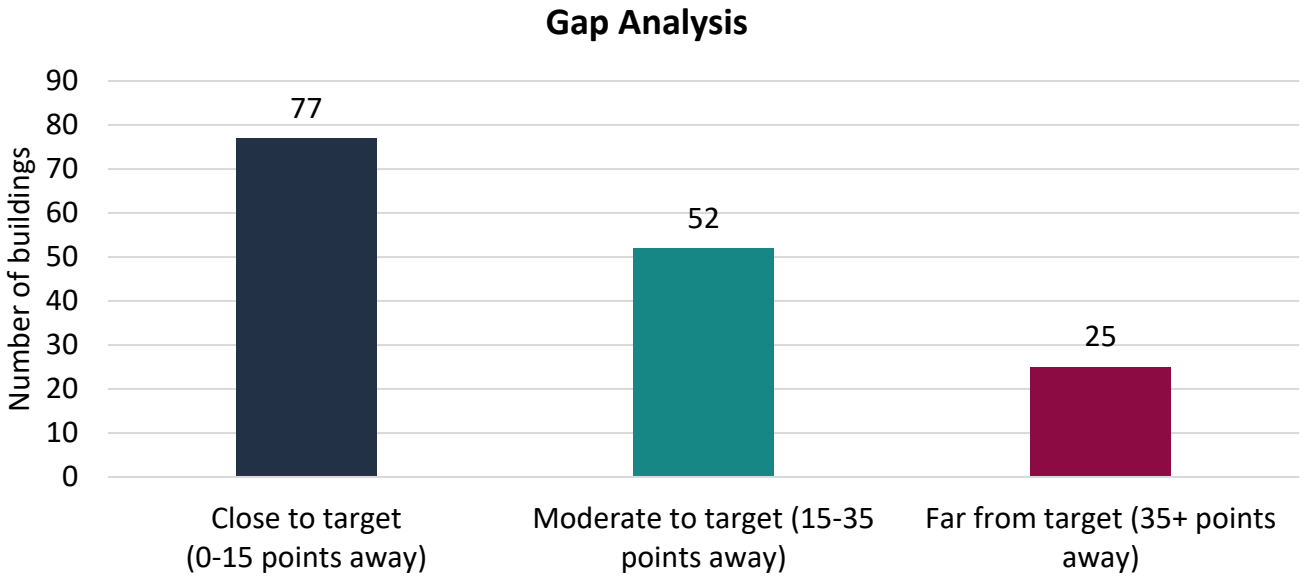
Trend: While, from a historical perspective, some of Oregon's state buildings have struggled to gain energy efficiency, roughly **13 percent more buildings reach target today than in 2015**. The chart below depicts this trendline but also the effect of weather. The SEED program utilizes non-weather normalizations, a basic energy use/sq footage. However, the upcoming Building Performance Standard program will be weather normalized,[ii] which means it is adjusted to the number of heating and cooling days, removing some outside influences. The orange line, which represents **the weather-normalized SEED portfolio, illustrates steady growth year-over-year in target achievement, nearly 4 percent.** As deeper retrofits are needed, this growth will likely plateau, and more funding and resources will be required to maintain momentum.



	2015	2016	2017	2018	2019	2020	2021	2022	2023
NON-WEATHER NORMALIZED	37%	41%	35%	48%	46%	54%	54%	47%	50%
WEATHER NORMALIZED	38%	35%	38%	46%	49%	53%	53%	49%	49%

[ii] Weather-normalized data provided by EPA Energy Star Portfolio Manager software.

Magnitude: While the portfolio approach identifies overall energy efficiency trends, it does not fully reflect individual building conditions. To evaluate the severity of inefficiency, we analyze the "points to target," or how far buildings are from their energy use intensity (EUI) targets**. Of the 154 buildings not meeting the target, half (77 buildings) are within 0-15 points of achieving compliance**, indicating that most buildings are close to the desired efficiency range. The remaining buildings fall further behind, with 52 buildings between 15-35 points and 25 buildings more than 35 points away, as illustrated in the graphic below.[iii]



Challenges and Recommendations for State Facility Management

The State of Oregon's building portfolio presents numerous challenges, including many aging buildings, millions of square feet, which stretches state facility and staff resources. The Oregon Department of Energy spent months discussing the portfolio with facility operators, managers, and technicians to gain understanding of the challenges our facility teams are facing. Agency facility managers expressed their support for additional capacity to more holistically and proactively support energy management. ODOE recommends that there be an agency-wide or state-building-wide portfolio approach to facility management. This will ensure comprehensive and consistent data.

Agencies, as part of the statewide facility planning process, report the maintenance and capital renewal needs of their facilities to DAS using a five-level priority system, with priority 1-3 needs representing necessary deferred maintenance and capital renewal. **Based on agency reporting in 2018, there is more than $460 million in deferred maintenance and capital renewal needs across agencies.** The Department of Corrections makes up more than 40 percent of this total at over $208 million. The Military Department and DAS have the second and third highest need at $79 million and $48 million, respectively. DAS estimates that, without additional investment, statewide needs will grow to over $1 billion by 2026. In response to ORS 276.277 and HB 3409, DAS is renewing an enterprise facility

[iii] The methodology for our gap analysis was based on EUI reductions from past projects and internal expertise.

condition assessment contract in the 2025-2027 biennium that will be available for agencies. This will allow agencies to conduct updated facility condition assessments and asses the greenhouse gas emissions associated with their equipment.

The table below provides a synopsis of the challenges and recommendations for state facility management to guide where resources and funding should be allocated.

Issue	Description	Status	Recommendation
Reactive equipment replacement	Facility standards and asset lifecycle analyses determine the optimal time to replace equipment. However, the state is prolonging replacement until failure due to capital and staffing constraints.	50%+ of equipment is past end-of-life[iv]	Budget for lifecycle cost of buildings and equipment (inclusive of both preventative maintenance and eventual replacements). Ideally, set up a fund that extends beyond biennial budgets for building maintenance and operations and have the annual allocation cover the anticipated **average** cost over the life of the facility (i.e., this will reflect that costs vary year-over-year and are much lower in early years, increasing for future years)
Insufficient preventative maintenance (PM)	Maintenance proactively performed on an asset to reduce failure and downtime	Facility teams are doing their best to keep up with PMs but limited staff impacts ratio of preventative to unplanned tasks	Assess the ratio of staff hours used for planned versus deferred maintenance on an agency-to-agency level. According to the International Facility Management Association[v], planned maintenance should comprise 65-85% of all maintenance activity.
Limited facility and asset tracking	Understanding the systems, equipment (measure life, age,	There is work underway, but it is limited in scope	Fund portfolio-wide facilities condition assessments for each building in the State's

[iv] Based on a 2024 ODOE survey of agencies
[v] https://ifmacap.starchapter.com/images/downloads/benchmarking_for_facility_professionals_ifma_foundation_whitepaper_small.pdf

	condition and location) and structure of each building in a portfolio		stock that will describe the measure-life of all equipment in accordance with ORS 276.200 and HB 3409. This will make capital planning more robust.
Piece-meal project execution	Agencies are deploying many standalone projects that do not have a holistic perspective at the building or portfolio level	Many agencies have limited resources to assess and prioritize portfolio-wide opportunities.	A building and its components, and building portfolios, work in harmony. Planning with this holistic, symbiotic nature in mind will lead to more effective capital planning and cost reductions.
Approval process	Any state agency must go through comprehensive budgeting process	Many agencies and other divisions within state government have a disconnect between finance and facility teams, leading to financial decisions that don't consider facility issues or abandonment of projects during the process.	Leverage resources to help facility and agency staff to utilize statutory directives and build strong business cases for projects, such as equipment replacement, that may require large capital outlay and are harder to gain approval. Emphasize cross-agency and cross division coordination in developing budget priorities.
Building Performance Standard (BPS)	Legislative mandate that will require many large commercial buildings to enhance energy management practices and implement efficiency measures to meet energy use targets, otherwise fines will be levied.	Facility managers are aware of the requirements under BPS will require additional funding to adequately plan for and implement requirements.	Coordinated, comprehensive portfolio-wide preparation and adequate budget and resourcing will allow agencies to proactively address requirements to lead by example.
Dramatically changing real estate market	Building occupancy levels are changing as the state is seeing more remote and hybrid work.	Occupancy levels have dramatically changed from agency-to-agency	Obtain occupancy levels at the agency-level to determine the best use of resources and opportunities for EE

SECTION 2: NEW CONSTRUCTION AND REMODELS

Results

Completed SEED Construction Projects:

- **196** state building projects completed over the course of the program
- **Zero** SEED new construction and **1** SEED renovation projects completed construction in 2023-2024

State of Oregon SEED Program Investment Since 2003:

- **$30.3 million** invested in SEED energy conservation improvements
- **$5.75 million** in estimated annual energy savings
- **$77.4 million** in program lifetime savings

2023-2024 SEED Program Completed Construction Projects:

- **$26 million** total construction cost for one completed project in 2022-2023
- **162,600** total square footage of facility
- **$12,000** estimated incremental cost of SEED energy conservation
- **$48,000** annual estimated energy savings

Process

The SEED process calls for state agencies to work with ODOE in the initial design of their building projects so that cost-effective energy conservation measures are planned for and incorporated into building designs. If a state agency is planning a new construction or renovation project, they are responsible for ensuring compliance with SEED requirements. Here are the initial steps:

1. Determine if the project is subject to SEED requirements. New construction or renovation projects that add to, alter, or repair energy systems accounting for 50 percent or more of the facility's total energy use are subject to SEED requirements.
2. Determine if the project is a Class 1 or Class 2 building. In general, buildings 10,000 square feet or more are Class 1, and buildings smaller than 10,000 square feet are usually Class 2. See the full program guidelines for more information.
3. Notify the Oregon Department of Energy.

Once ODOE staff are notified, they guide the state agency through the initial project planning process, facilitating meetings, analyzing potential energy conservation measures, and working with the project management team. Once the project is complete, ODOE works with the project team to implement and evaluate their verification plan, confirming energy savings are achieved in the facility.

Cost-Effective Investment

There are a variety of energy conservation measures (ECMs) that may be implemented in buildings.

ODOE supports state agencies in determining which measures make the most sense in how the building will be used and the return on the investment. Cost-effectiveness is determined by conducting an analysis of the "benefit-to-cost ratio" (BCR) and the "net present value" (NPV) over the life of a measure. If the BCR exceeds 1.0 and NPV is greater than 0, then a project is cost-effective. Depending upon the size and complexity of the project, SEED program staff provide technical consulting services to the state agency throughout the course of a project. SEED staff work closely with state agencies and their building design teams to develop a list of energy conservation measures for consideration for each project. ECMs can be either baseline measures or analyzed measures. Baseline ECMs are those that are already known to be generally cost-effective, due to past analysis and experience with the technologies. Baseline ECMs are incorporated into the proposed system design and do not receive a detailed cost-effectiveness analysis. Analyzed ECMs are evaluated for cost-effectiveness based on a life-cycle cost analysis. An ECM package is developed for each project, resulting in a building design that will perform better than energy code levels by 20 percent or more.

Participating Buildings

The SEED program divides buildings into two classes depending upon their size. Class 1 buildings are 10,000 or more square feet and Class 2 buildings are less than 10,000 square feet. Regardless of building class, state agencies must incorporate cost-effective ECMs into building projects.

For Class 1 buildings, ODOE staff collaborate with agency design teams to develop an ECM package for each building project, provide agencies with technical advice, and monitor the Class 1 building once it is occupied. Working together, SEED program staff and agency design teams ensure all cost-effective energy conservation measures are included in each building's design, and that buildings perform better than the energy efficiency provisions of the Oregon state building code by 20 percent or more.

For Class 2 projects, or those less than 10,000 square feet, agencies are responsible for administering their own review and implementation of energy conservation measures. ODOE SEED staff are available to provide support as needed.

This report summarizes one Class 1 building that completed construction during calendar years 2023-2024.

Program Savings to Date

Over the course of the SEED program, 196 state building projects have been completed, with one SEED project completing construction in 2023-2024. Since 2003, the total cost for completed state building construction projects exceeds $2.1 billion, with $30.3 million invested in energy conservation improvements. Energy savings from conservation investments are estimated at more than $5.75 million in annual energy costs and $77.4 million in energy savings over the program's lifetime.

Biennial Savings Summary

There are currently a variety of SEED projects in planning, development, and construction stages. One state agency completed a renovation project during the 2023-2024 biennium, as summarized in the table below. The SEED program identified an estimated annual savings of nearly $48,000 per year from this one building alone.

State Energy Efficient Design Projects completed in 2023-2024						
	Construction Budget	Project Square Feet	ECM Incremental	Annual Savings		% above code
				MMBtu	Dollars	
DAS North Valley Complex	$72,000,000	162,600	$12,000	3,537	$47,944	24.6%
	$72,000,000	**162,600**	**$12,000**	**3,537**	**$47,944**	

Values in the table above are as reported to ODOE during the SEED process

Completed Project Highlights

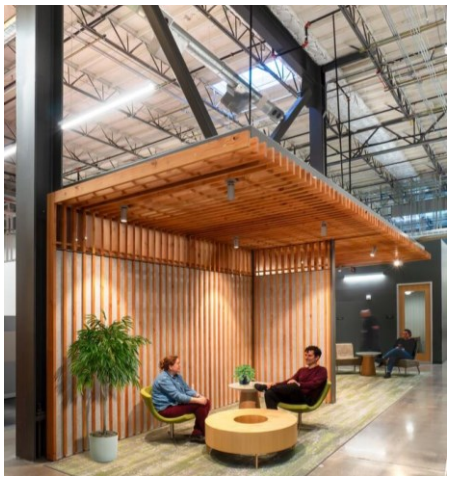
One SEED project completed construction in 2023-2024.

North Valley Complex
Oregon Department of Administrative Services
Wilsonville, Oregon

DAS North Valley Complex Exterior

The North Valley Complex is a former manufacturing and warehouse facility that was renovated into office, laboratory, and warehouse space for the Department of Administrative Services, the Department of Agriculture, the Occupational Safety and Health Administration, and the Oregon State Police. In addition to creating a highly energy efficient building, the building redesign meets stringent seismic safety standards. It also incorporates sustainability practices by reusing some existing equipment and furnishings, and creating interior finishes from timber salvaged from wildfire areas.[vi] The energy conservation measures reported for this project include:

- High-efficiency condensing boilers and boiler controls
- High-efficiency lighting and lighting controls
- High-efficiency chiller and cooling tower and optimized cooling system controls
- Heat pump water heater
- Enhanced laboratory fume hood controls



DAS North Valley Complex Interior showing lighting, daylighting and reclaimed timber.

Post-Occupancy Metering Results

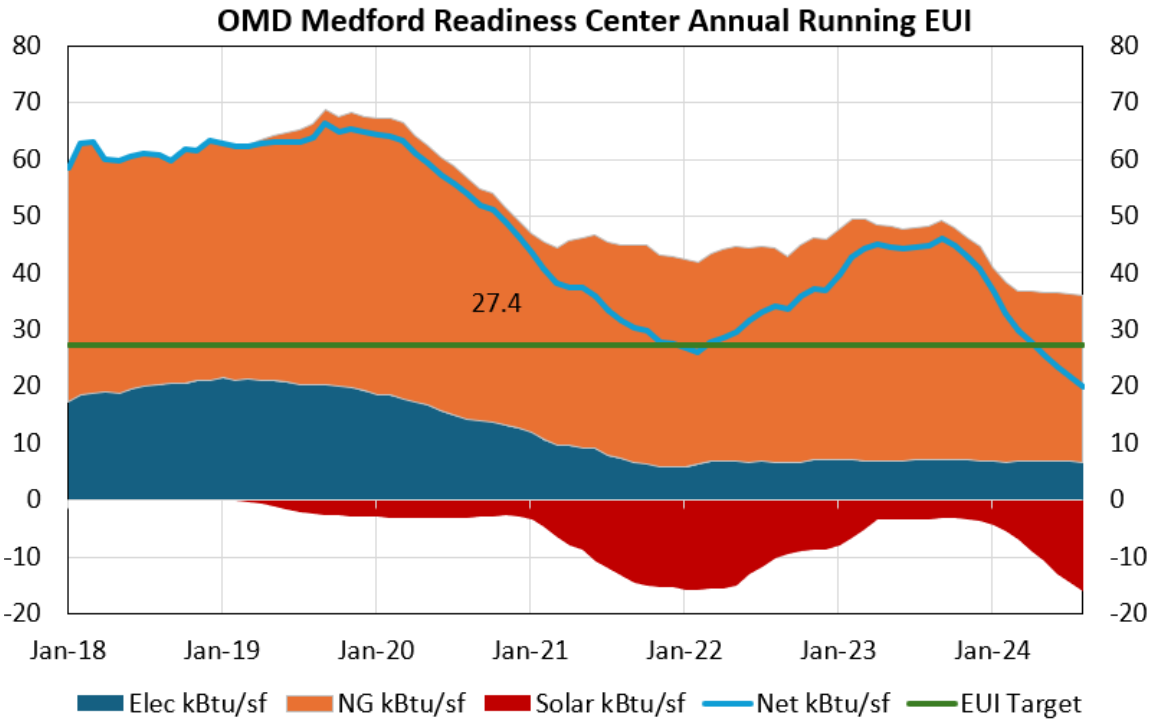
After a SEED project is completed, post-occupancy energy use is tracked through the existing buildings portion of the SEED program to help ensure the facility is meeting its energy use targets. Buildings are targeted to perform at least 20 percent better than the code baseline. Performance targets for SEED new buildings and renovations are established through comprehensive energy modeling of the building at the design stage. Energy use is commonly expressed as "Energy Use Intensity" or EUI, which is

[vi] A Seismic Transformation for the State of Oregon's North Valley Complex - Lease Crutcher Lewis, https://lewisbuilds.com/a-seismic-transformation-for-the-state-of-oregons-north-valley-complex

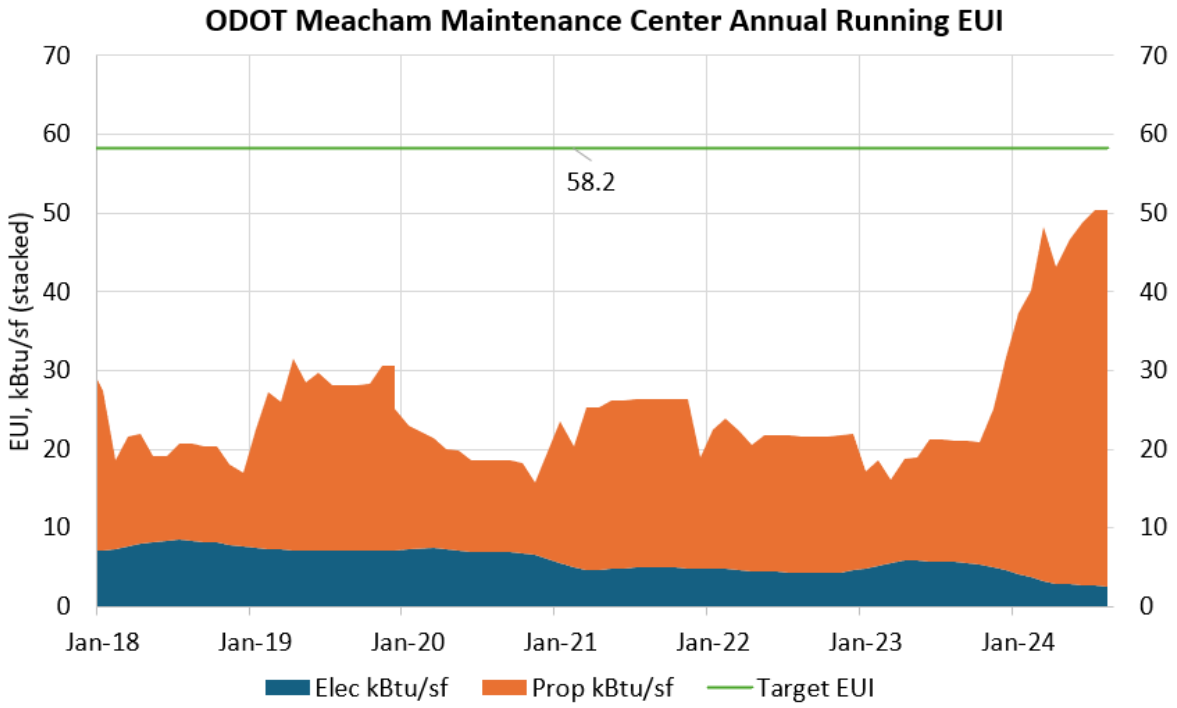
calculated by dividing the total annual energy consumed (in units of thousand Btu, or kBtu) by the gross conditioned floor area (in units of square feet, or sf) of the building.

After construction is complete, ODOE continues to work with state agencies to ensure each of their projects' energy goals are being met. Post-occupancy energy data is graphed below for four renovation projects that completed construction during previous SEED cycles. For each building, plots show running annual EUI, the sum of the previous twelve months of energy use as reported to ODOE for January 2018 through August 2024. Each plot shows electricity EUI (Elec kBtu/sf in blue area), natural gas EUI (NG kBtu/sf in orange area), any solar generation (Solar kBtu/sf in red area), the net EUI based on summing electricity, natural gas, and solar component (Net EUI kBtu/sf in turquoise line), and the SEED target EUI (EUI Target in green line). Some energy use may be atypical due to construction over this time, as well as the lingering effects of the coronavirus pandemic.

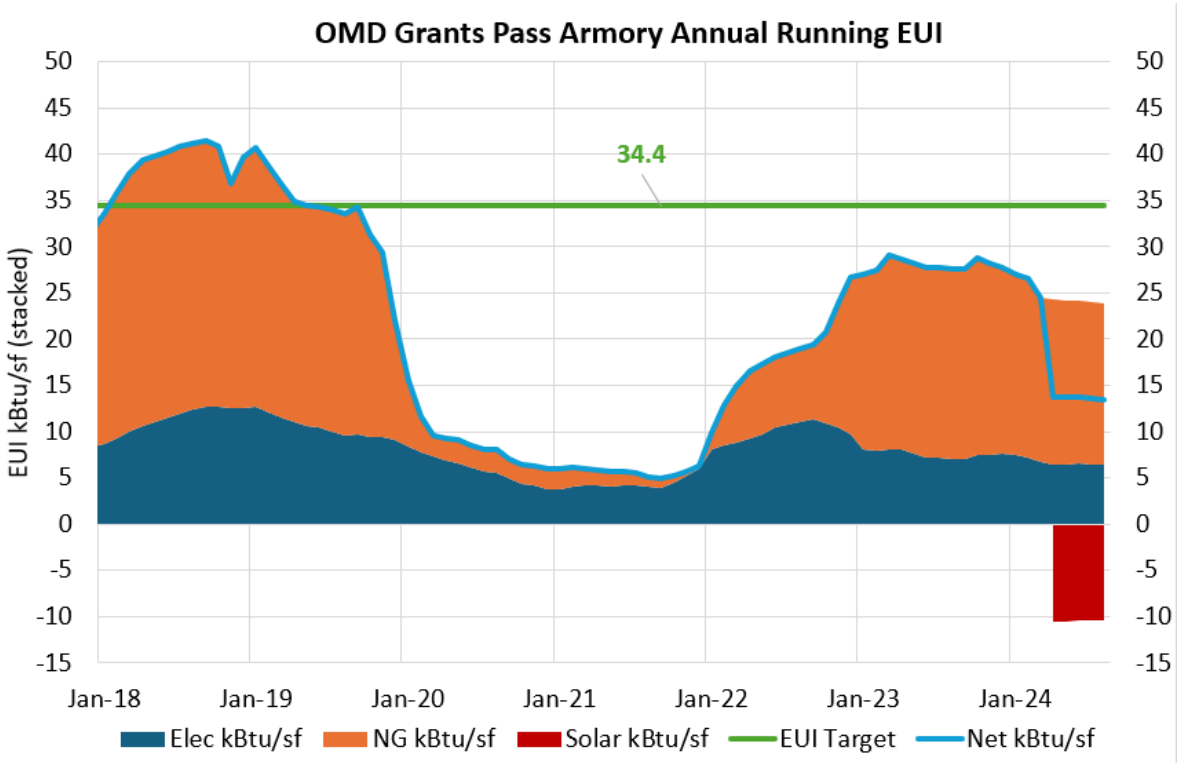
The OMD Medford Readiness Center is a National Guard facility which completed a renovation of portion of the building in 2017. The facility had low baseline energy consumption, leaving limited opportunities for significant energy reductions, but it was still expected to reach a 10.8 percent reduction in energy use compared to code. Post-renovation, the facility did not initially meet its design EUI target of 27.4 kBtu/sf/yr. Operational improvements have been made over time to reduce energy use, and a solar photovoltaic system has also been installed. The Medford Readiness Center is currently on track to achieve a net annual energy consumption of about 20 kBtu/sf/yr.



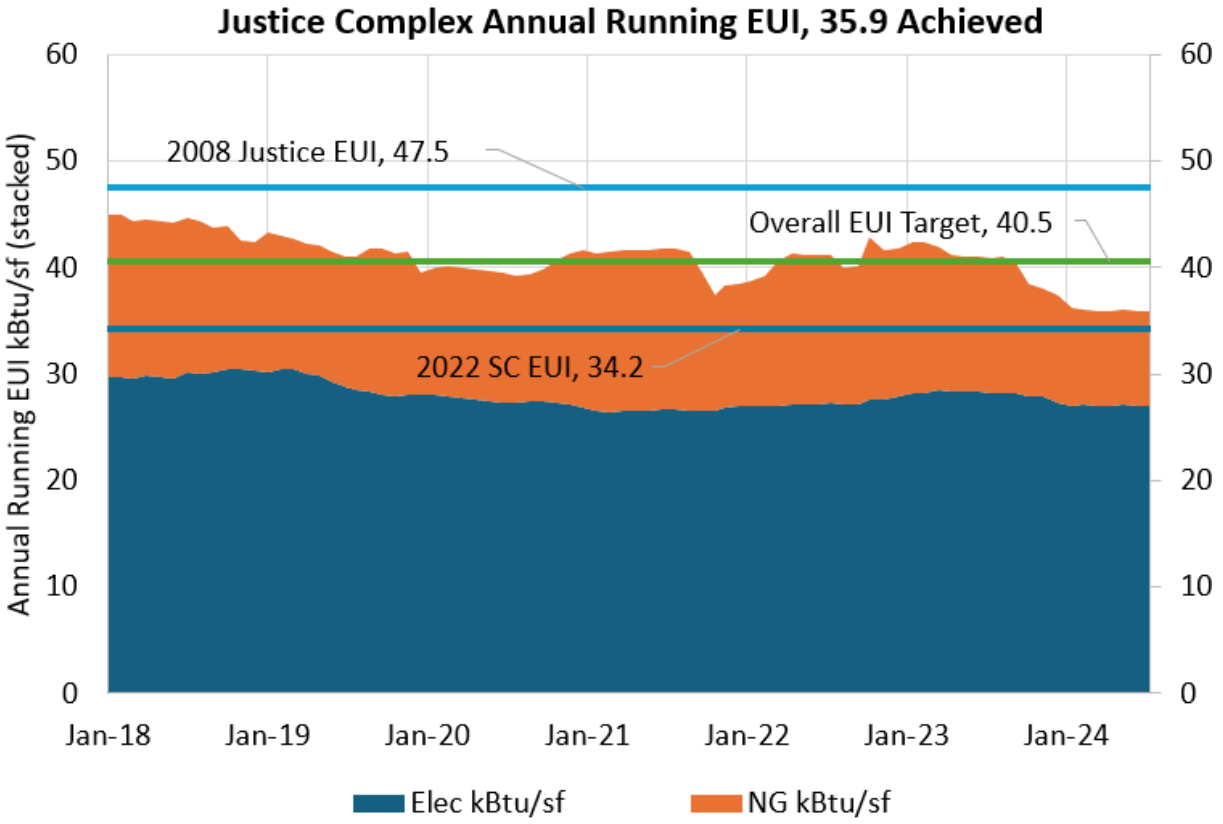
The Meacham Maintenance Station was redesigned to provide new fleet storage and maintenance services. Project construction was completed in 2022, and the building currently houses offices, storage, training and crew rooms, showers, mechanical and electrical spaces, and several large bay areas for holding, maintaining, and dispatching road maintenance equipment and vehicles. Energy consumption remained low until the end of 2023 as fleet services began at this facility. While EUI has increased to about 50 kBtu/sf, it has so far stayed below the EUI design target of 58.2 kBtu/sf.



Renovation of the Grants Pass Armory and Readiness Center was completed in early 2022. This facility provides administration, training, classroom, and office spaces for the National Guard. Originally built in 1972, this recent renovation project included updates to the envelope, mechanical, electrical, plumbing, and structural systems in the building. Post-retrofit energy consumption is not only lower than pre-retrofit consumption but is also below the 34.4 EUI design target. Installation of a photovoltaic solar array at this site is reducing net energy consumption even further, to less than 15 kBtu/sf.



The Oregon Supreme Court building was constructed in 1914 and is the oldest continuously operating government building on the Capitol Mall. Renovation of this building, with the aim to preserve and protect the historic structure and improve the building's safety, function, efficiency, and access, was completed in 2022. The project included earthquake reinforcement with base isolation technology and upgrades to heating, cooling, electrical, technology, plumbing systems, and accessibility to meet modern standards. The energy consumption at the facility is metered together with the District Court building, with this two-building complex completing a previous SEED renovation in 2008. Collectively, both buildings are beating their overall EUI design target of 40.5 kBtu/sf, currently using about 35.9 kBtu/sf.



SECTION 3: AGENCY STATUS REPORTS

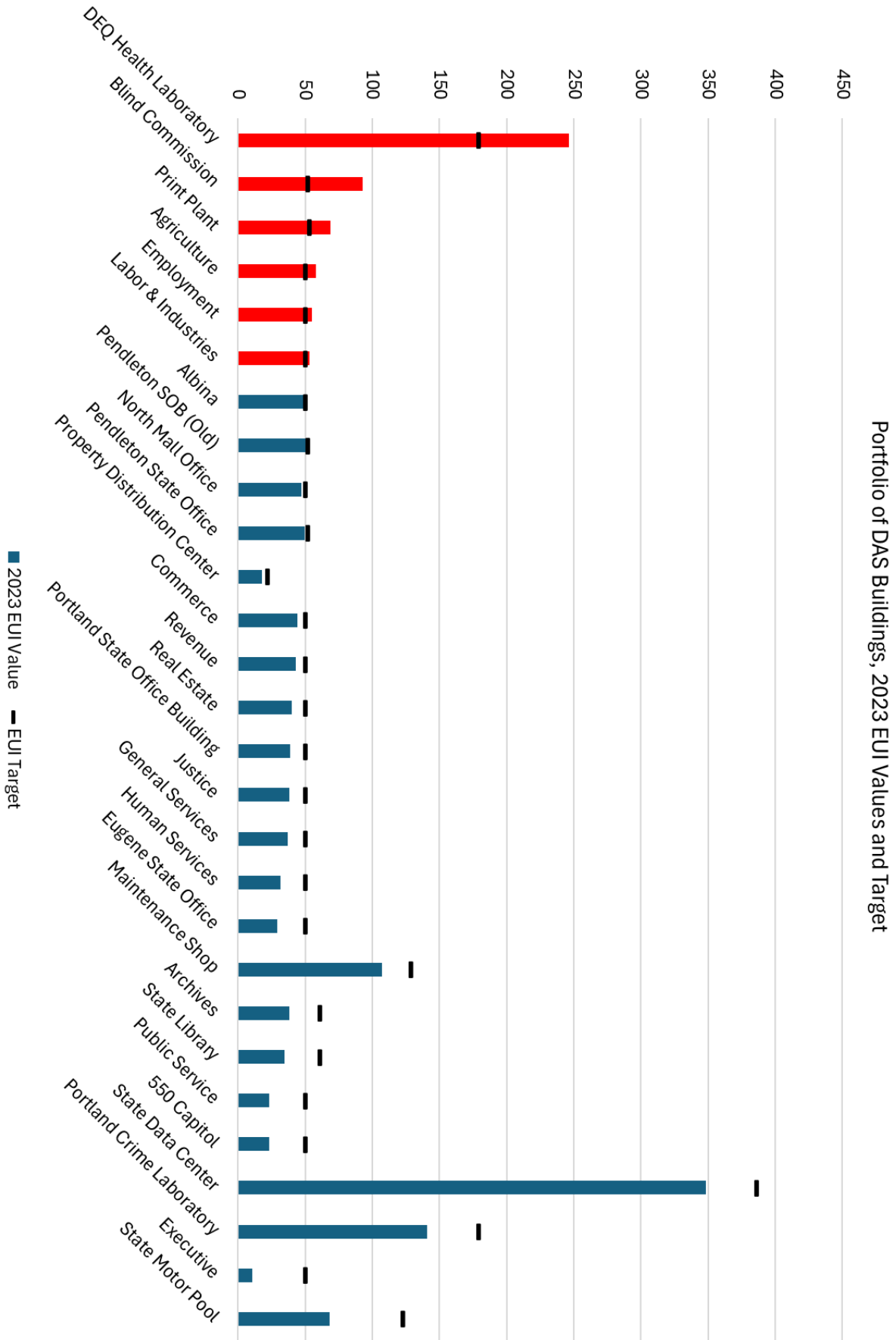
The information below has been updated to represent the current building conditions in the state by each agency. Agencies are displayed alphabetically, and each section begins with a table comprised of all buildings in the agency's portfolio, the 2023 EUI value, the EUI target as well as the points to target. Please note that the red values indicate that a building did not reach its target. The table is followed by a chart that visualizes the same data.

This updated method better aligns with the Department of Administrative Services' dashboard on building performance and sustainability while also indicating those not meeting SEED requirements.

Oregon Department of Administrative Services | 79% Meeting Requirement

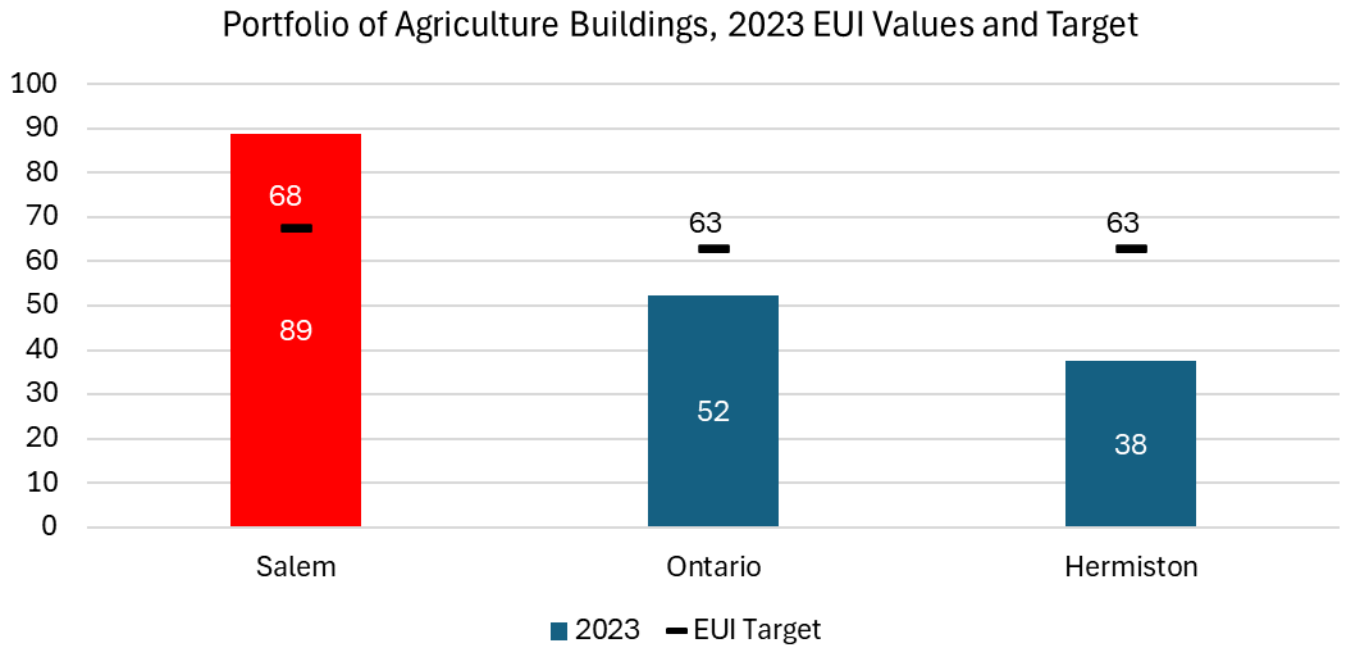
Building Name	2023 Building EUI	EUI Target	Points to target
DEQ Health Laboratory	246	179	-67
Blind Commission	93	52	-41
Print Plant	69	53	-16
Agriculture	58	50	-8
Employment	55	50	-5
Labor & Industries	54	50	-4
Albina	50	50	0
Pendleton SOB (Old)	52	52	0
North Mall Office	48	50	3
Pendleton State Office	49	52	3
Property Distribution Center	18	22	4
Commerce	44	50	6
Revenue	43	50	7
Real Estate	40	50	10
Portland State Office Building	39	50	11
Justice	38	50	12
General Services	37	50	13
Human Services	32	50	18
Eugene State Office	29	50	21
Maintenance Shop	108	129	22
Archives	38	61	23
State Library	35	61	26
Public Service	23	50	27
550 Capitol	23	50	27
State Data Center	348	386	38
Portland Crime Laboratory	141	179	38
Executive*	11	50	39
State Motor Pool	68	123	55

*Occupied for half of the year. Currently under construction.


Portfolio of DAS Buildings, 2023 EUI Values and Target
0
50
100
150
200
250
300
350
400
450
DEQ Health Laboratory
Blind Commission
Print Plant
Agriculture
Employment
Labor & Industries
Albina
Pendleton SOB (Old)
North Mall Office
Pendleton State Office
Property Distribution Center
Commerce
Revenue
Real Estate
Portland State Office Building
Justice
General Services
Human Services
Eugene State Office
Maintenance Shop
Archives
State Library
Public Service
550 Capitol
State Data Center
Portland Crime Laboratory
Executive
State Motor Pool
2023 EUI Value
EUI Target

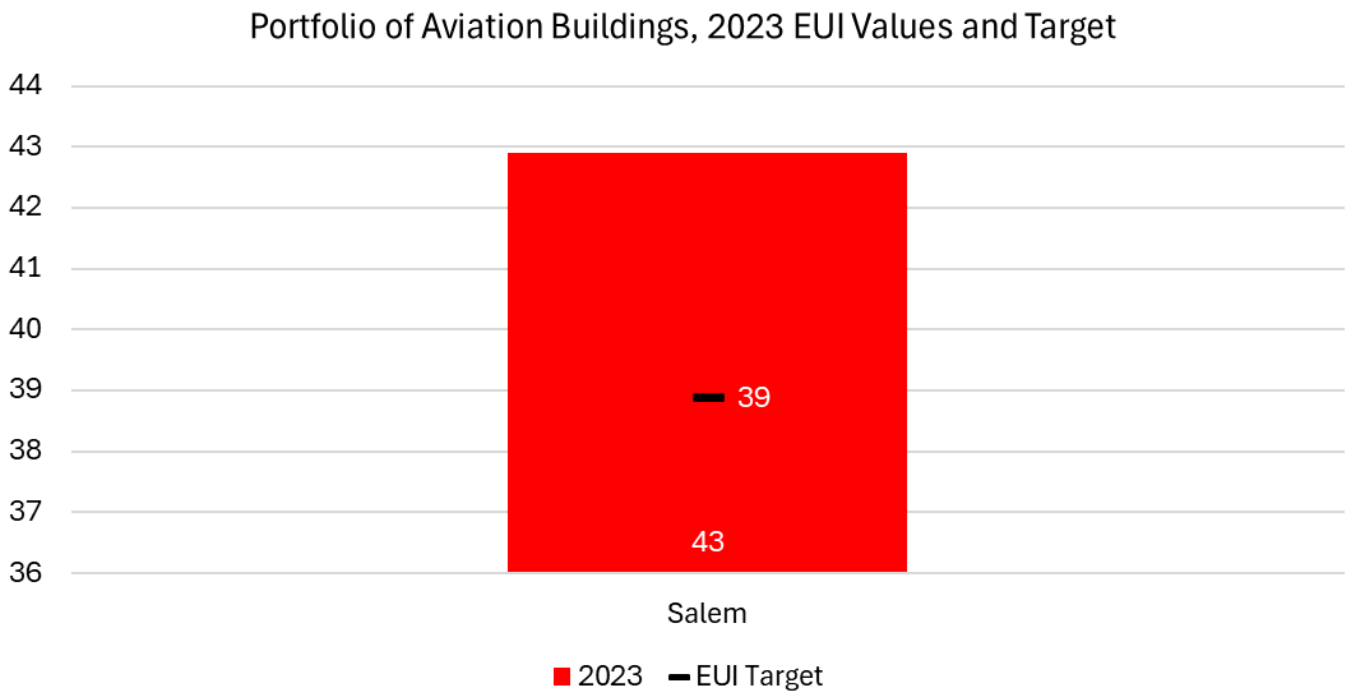
Oregon Department of Agriculture | 66% Meeting Requirement

Building Name	2023 Building EUI	EUI Target	Points to target
Salem	89	68	**-21**
Ontario	52	63	11
Hermiston	38	63	25



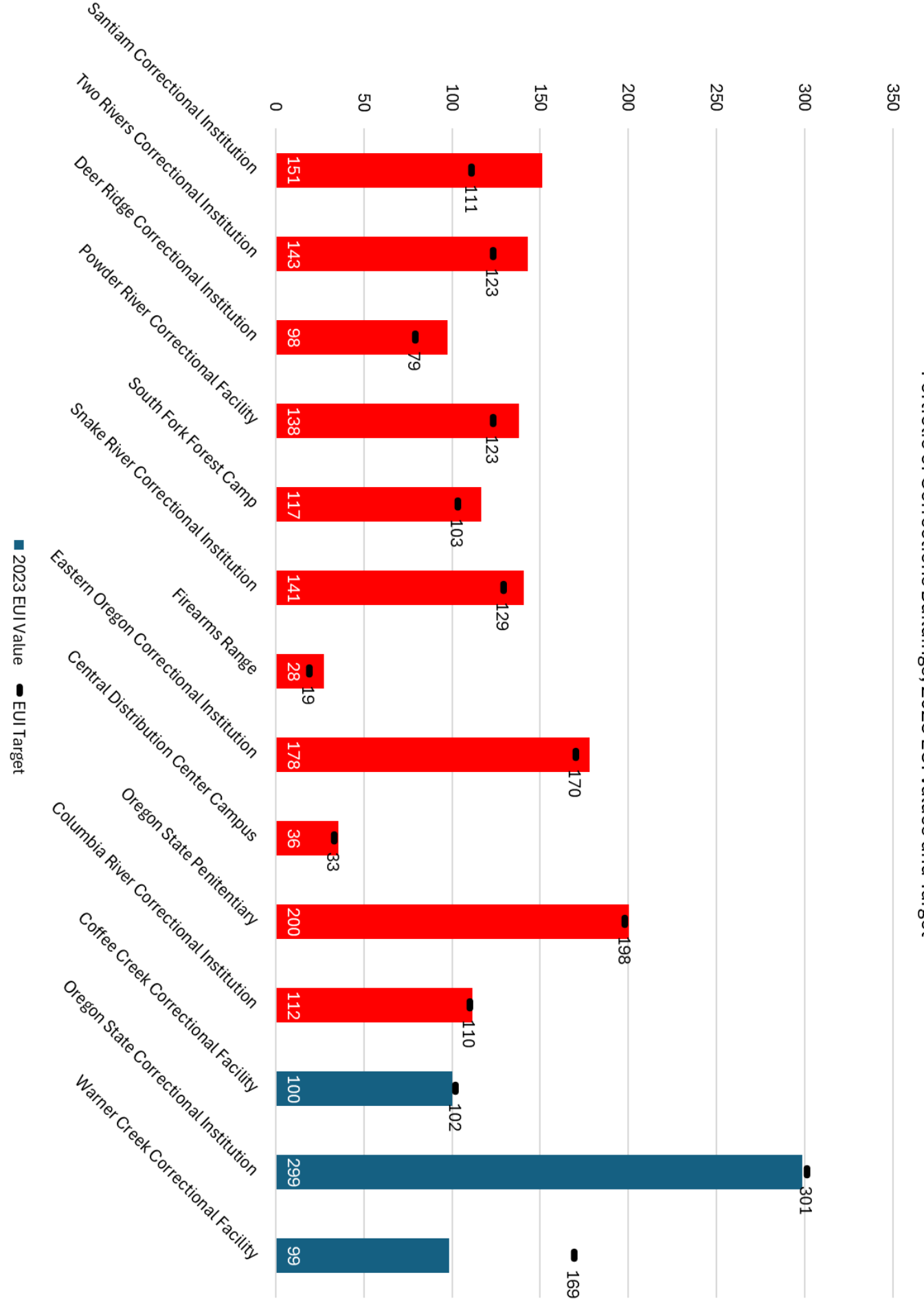
Oregon Department of Aviation | 0% Meeting Requirement

Building Name	2023 Building EUI	EUI Target	Points to target
Salem Office - Aviation	43	39	-4



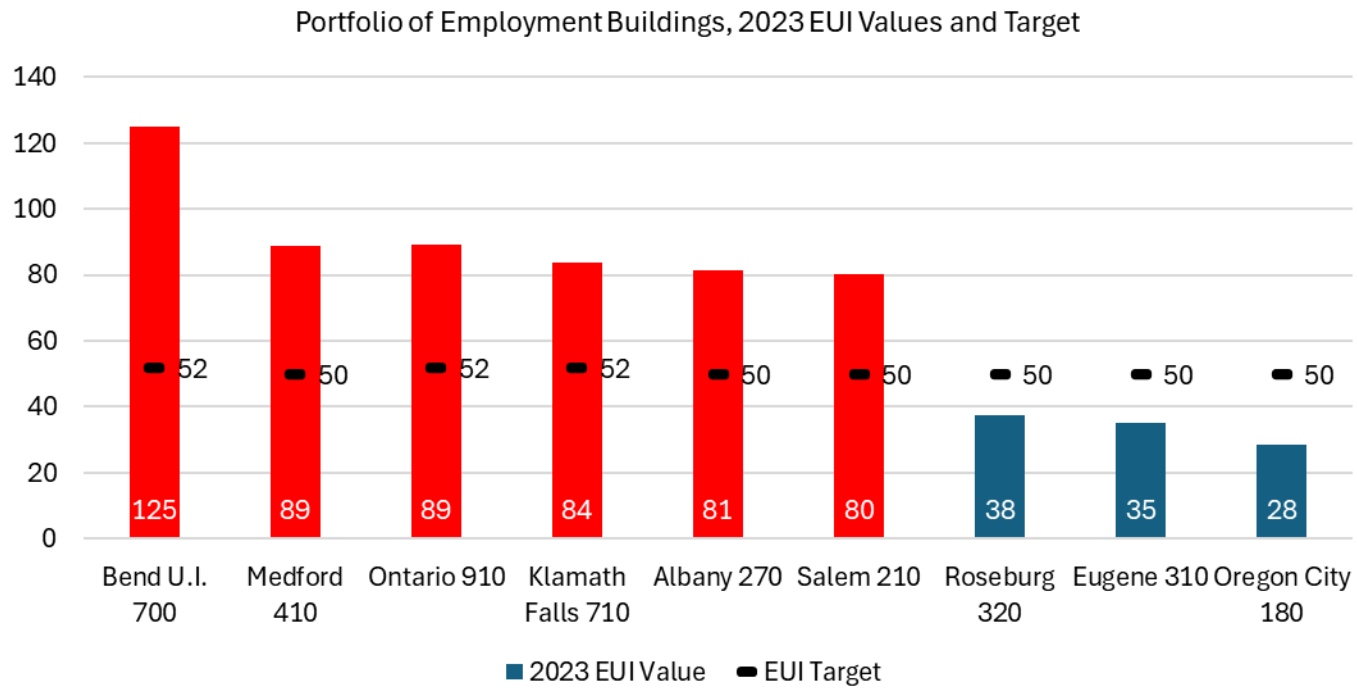
Oregon Department of Corrections | 21% Meeting Requirement

Building name	2023 Building EUI	EUI Target	Points from target
Santiam Correctional Institution	151	111	-40
Two Rivers Correctional Institution	143	123	-20
Deer Ridge Correctional Institution	98	79	-19
Powder River Correctional Facility	138	123	-15
South Fork Forest Camp	117	103	-14
Snake River Correctional Institution	141	129	-12
Firearms Range	28	19	-9
Eastern Oregon Correctional Institution	178	170	-8
Central Distribution Center Campus	36	33	-3
Oregon State Penitentiary	200	198	-2
Columbia River Correctional Institution	112	110	-2
Coffee Creek Correctional Facility	100	102	2
Oregon State Correctional Institution	299	301	2
Warner Creek Correctional Facility	99	169	70


Portfolio of Corrections Buildings, 2023 EUI Values and Target
0
50
100
150
200
250
300
350
Santiam Correctional Institution
Two Rivers Correctional Institution
Deer Ridge Correctional Institution
Powder River Correctional Facility
South Fork Forest Camp
Snake River Correctional Institution
Eastern Oregon Correctional Institution
Firearms Range
Central Distribution Center Campus
Oregon State Penitentiary
Columbia River Correctional Institution
Coffee Creek Correctional Facility
Oregon State Correctional Institution
Warner Creek Correctional Facility
151
111
143
123
98
79
138
123
117
103
141
129
28
19
178
170
36
33
200
198
112
110
100
102
299
301
99
169
2023 EUI Value
EUI Target

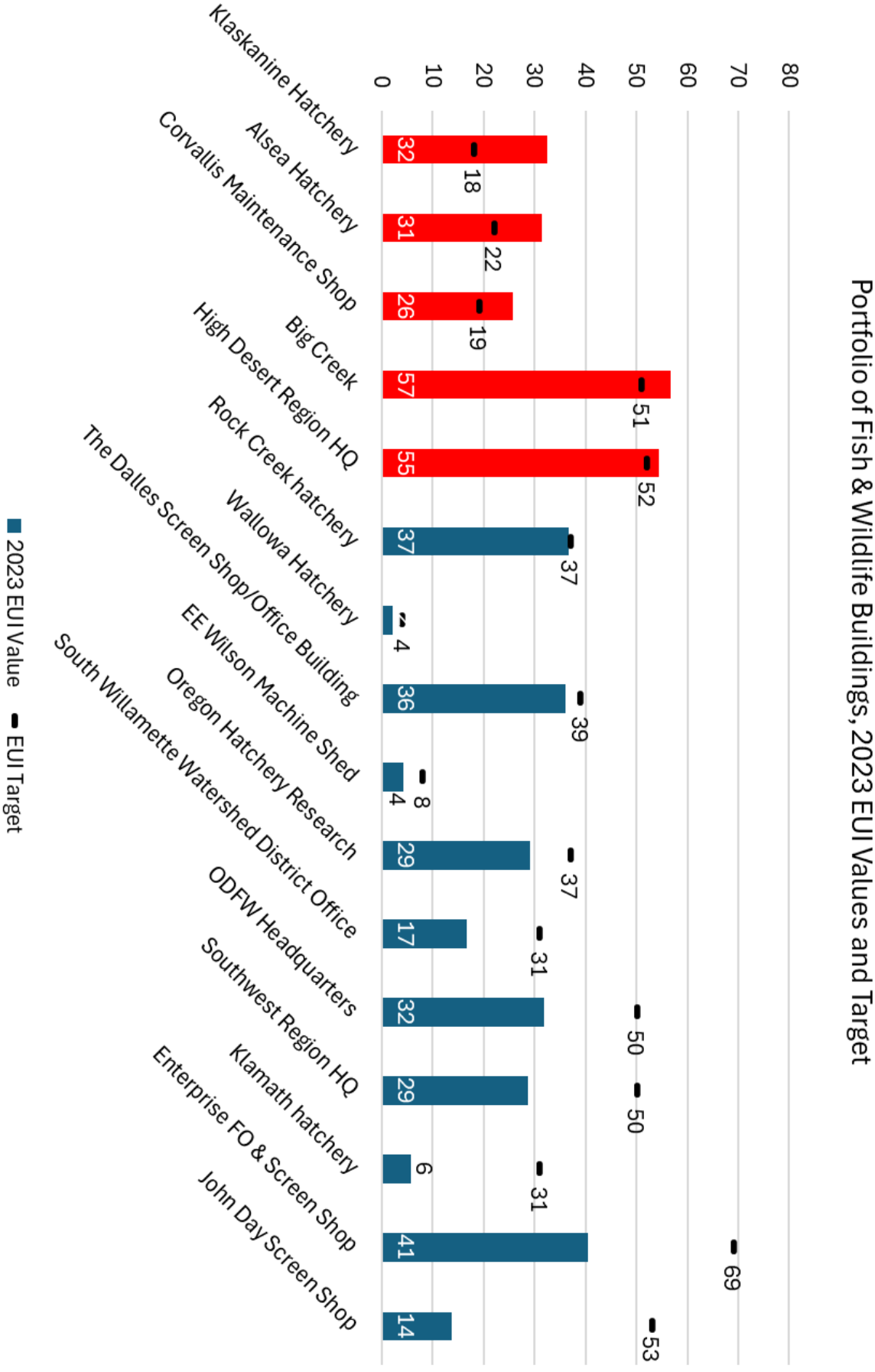
Department of Employment | 33% Meeting Requirement

Building name	2023 Building EUI	EUI Target	Points from target
Bend U.I. 700	125	52	**-73**
Medford 410	89	50	**-39**
Ontario 910	89	52	**-37**
Klamath Falls 710	84	52	**-32**
Albany 270	81	50	**-31**
Salem 210	80	50	**-30**
Roseburg 320	38	50	12
Eugene 310	35	50	15
Oregon City 180	28	50	22



Oregon Department of Fish And Wildlife | 69% Meeting Requirement

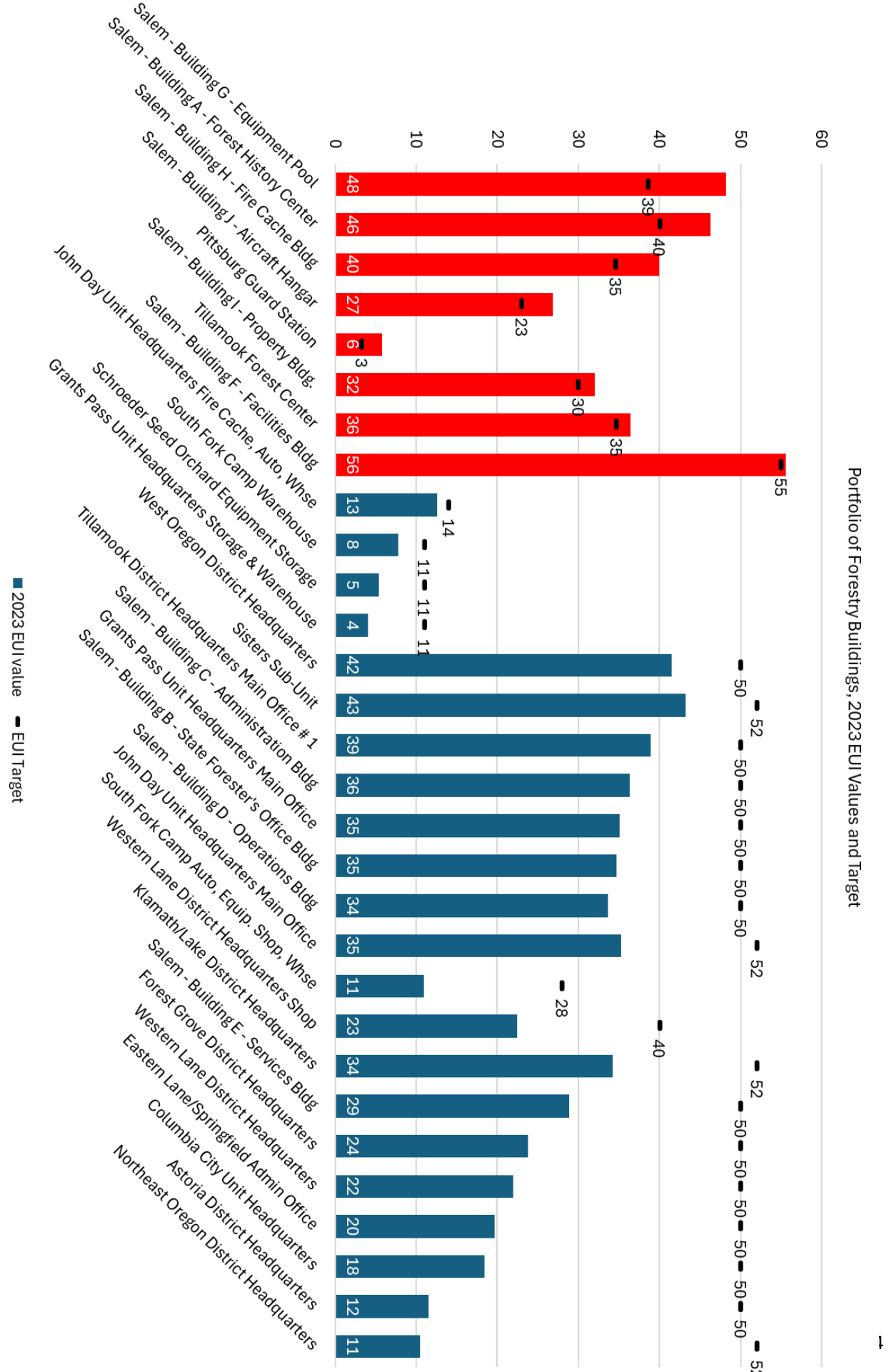
Building name	2023 Building EUI	EUI Target	Points from target
Klaskanine Hatchery	32	18	-14
Alsea Hatchery	31	22	-9
Corvallis Maintenance Shop	26	19	-7
Big Creek	57	51	-6
High Desert Region HQ	55	52	-3
Rock Creek hatchery	37	37	0
Wallowa Hatchery	2	4	2
The Dalles Screen Shop/Office Building	36	39	3
EE Wilson Machine Shed	4	8	4
Oregon Hatchery Research	29	37	8
South Willamette Watershed District Office	17	31	14
ODFW Headquarters	32	50	18
Southwest Region HQ	29	50	21
Klamath hatchery	6	31	25
Enterprise FO & Screen Shop	41	69	29
John Day Screen Shop	14	53	39


Portfolio of Fish & Wildlife Buildings, 2023 EUI Values and Target
0
10
20
30
40
50
60
70
80
Klaskanine Hatchery
Alsea Hatchery
Corvallis Maintenance Shop
Big Creek
High Desert Region HQ
Rock Creek hatchery
Wallowa Hatchery
The Dalles Screen Shop/Office Building
EE Wilson Machine Shed
Oregon Hatchery Research
South Willamette Watershed District Office
ODFW Headquarters
Southwest Region HQ
Klamath hatchery
Enterprise FO & Screen Shop
John Day Screen Shop
32
18
31
22
26
19
57
51
55
52
37
37
4
36
39
4
8
29
37
17
31
32
50
29
50
6
31
41
69
14
53
2023 EUI Value
EUI Target

Department of Forestry | 73% Meeting Requirement

Building name	2023 Building EUI	EUI Target	Points to target
Salem - Building G - Equipment Pool	48	39	-10
Salem - Building A - Forest History Center	46	40	-6
Salem - Building H - Fire Cache Building	40	35	-5
Salem - Building J - Aircraft Hangar	27	23	-4
Pittsburg Guard Station	6	3	-3
Salem - Building I - Property Bldg.	32	30	-2
Tillamook Forest Center	36	35	-2
Salem - Building F - Facilities	56	55	-1
John Day Unit Headquarters Fire Cache, Auto, Whse	13	14	1
South Fork Camp Warehouse	8	11	3
Schroeder Seed Orchard Equipment Storage	5	11	6
Grants Pass Unit Headquarters Storage & Warehouse	4	11	7
West Oregon District Headquarters	42	50	9
Sisters Sub-Unit	43	52	9
Tillamook District Headquarters Main Office # 1	39	50	11
Salem - Building C - Administration Bldg.	36	50	14
Grants Pass Unit Headquarters Main Office	35	50	15
Salem - Building B - State Forester's Office Bldg.	35	50	15
Salem - Building D - Operations Bldg.	34	50	16

John Day Unit Headquarters Main Office	35	52	17
South Fork Camp Auto, Equip. Shop, Whse	11	28	17
Western Lane District Headquarters Shop	23	40	18
Klamath/Lake District Headquarters	34	52	18
Salem - Building E - Services Bldg.	29	50	21
Forest Grove District Headquarters	24	50	26
Western Lane District Headquarters	22	50	28
Eastern Lane/Springfield Admin Office	20	50	30
Columbia City Unit Headquarters	18	50	32
Astoria District Headquarters	12	50	39
Northeast Oregon District Headquarters	11	52	42


Portfolio of Forestry Buildings, 2023 EUI Values and Target
2023 EUI value
EUI Target
0
10
20
30
40
50
60
Salem - Building G - Equipment Pool
Salem - Building A - Forest History Center
Salem - Building H - Fire Cache Bldg
Salem - Building J - Aircraft Hangar
Pittsburg Guard Station
Salem - Building I - Property Bldg.
Tillamook Forest Center
Salem - Building F - Facilities Bldg
John Day Unit Headquarters Fire Cache, Auto, Whse
Schroeder Seed Orchard Equipment Storage
South Fork Camp Warehouse
Grants Pass Unit Headquarters Storage & Warehouse
West Oregon District Headquarters
Sisters Sub-Unit
Tillamook District Headquarters Main Office # 1
Salem - Building C - Administration Bldg
Grants Pass Unit Headquarters Main Office
Salem - Building B - State Forester's Office Bldg
John Day Unit Headquarters Main Office
South Fork Camp Auto, Equip. Shop, Whse
Western Lane District Headquarters Shop
Klamath/Lake District Headquarters
Salem - Building E - Services Bldg
Forest Grove District Headquarters
Western Lane District Headquarters
Eastern Lane/Springfield Admin Office
Columbia City Unit Headquarters
Astoria District Headquarters
Northeast Oregon District Headquarters
48
46
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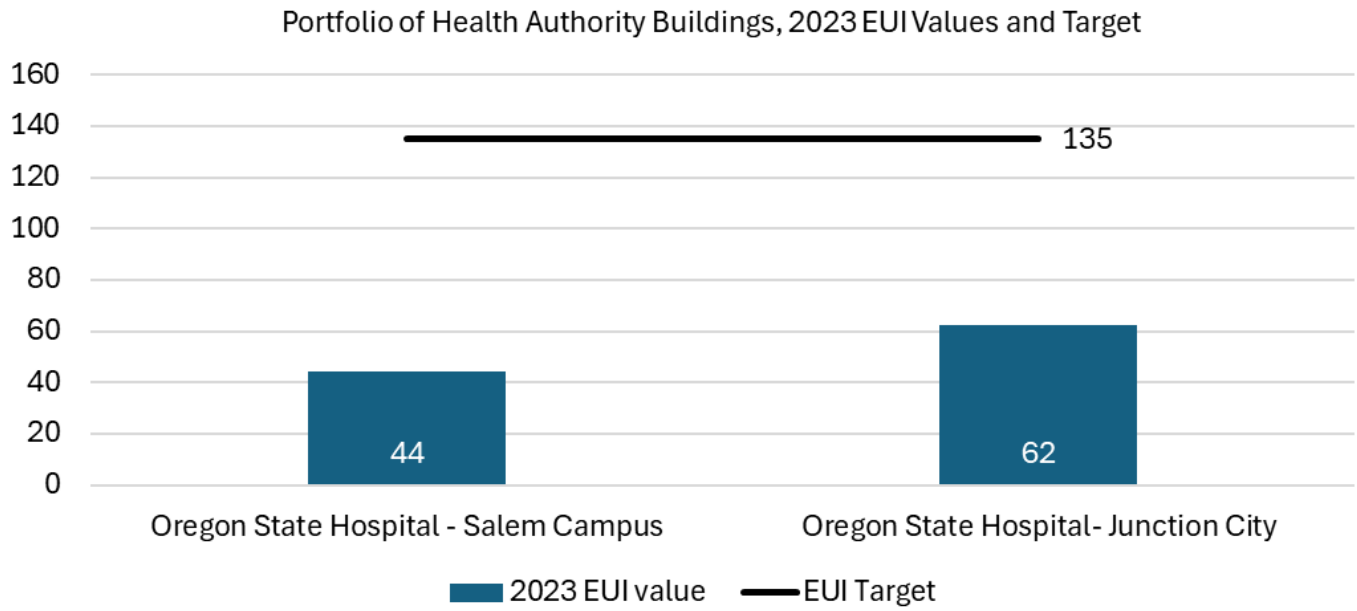
52

Oregon Health Authority | 100% Meeting Requirement

Building Name	2023 Building EUI	EUI Target	Points to target
Oregon State Hospital - Salem Campus	44	135	91
Oregon State Hospital- Junction City	62	135	73

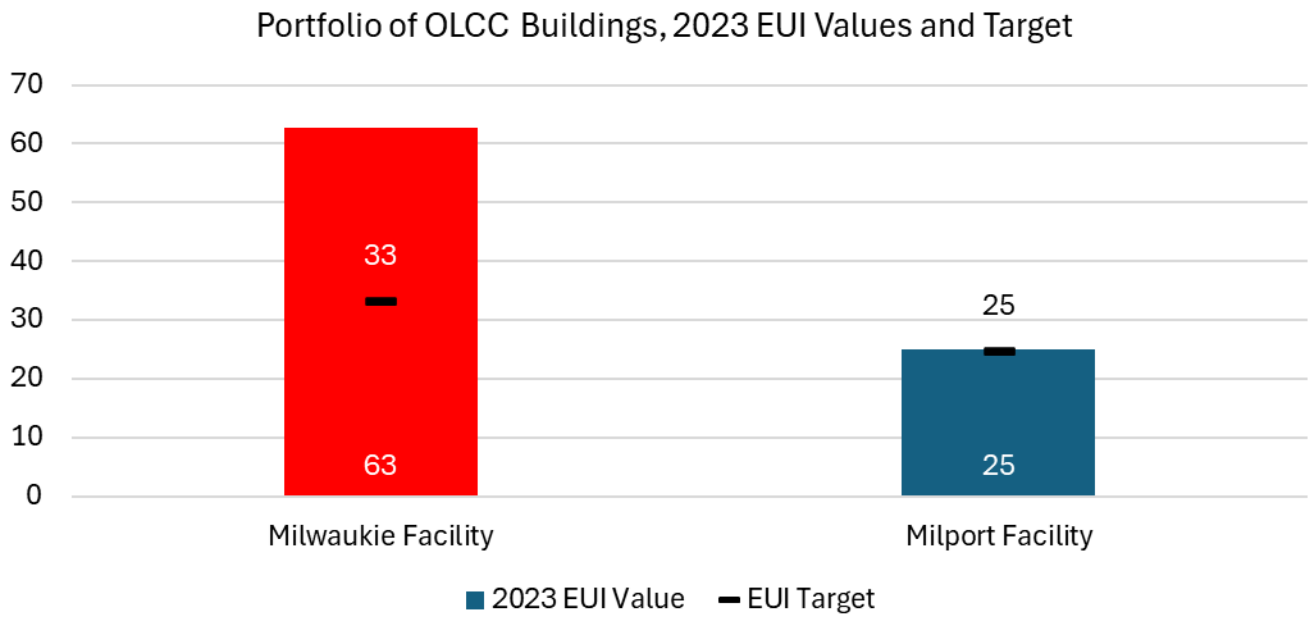


Oregon Department of Legislative Services

Data is not available because the DLS' only building, the State Capitol, is in the midst of renovations. Any values are not representative of the building. ODOE will work with DLS to ensure that data is compiled once construction is complete and the building is back to normal function.

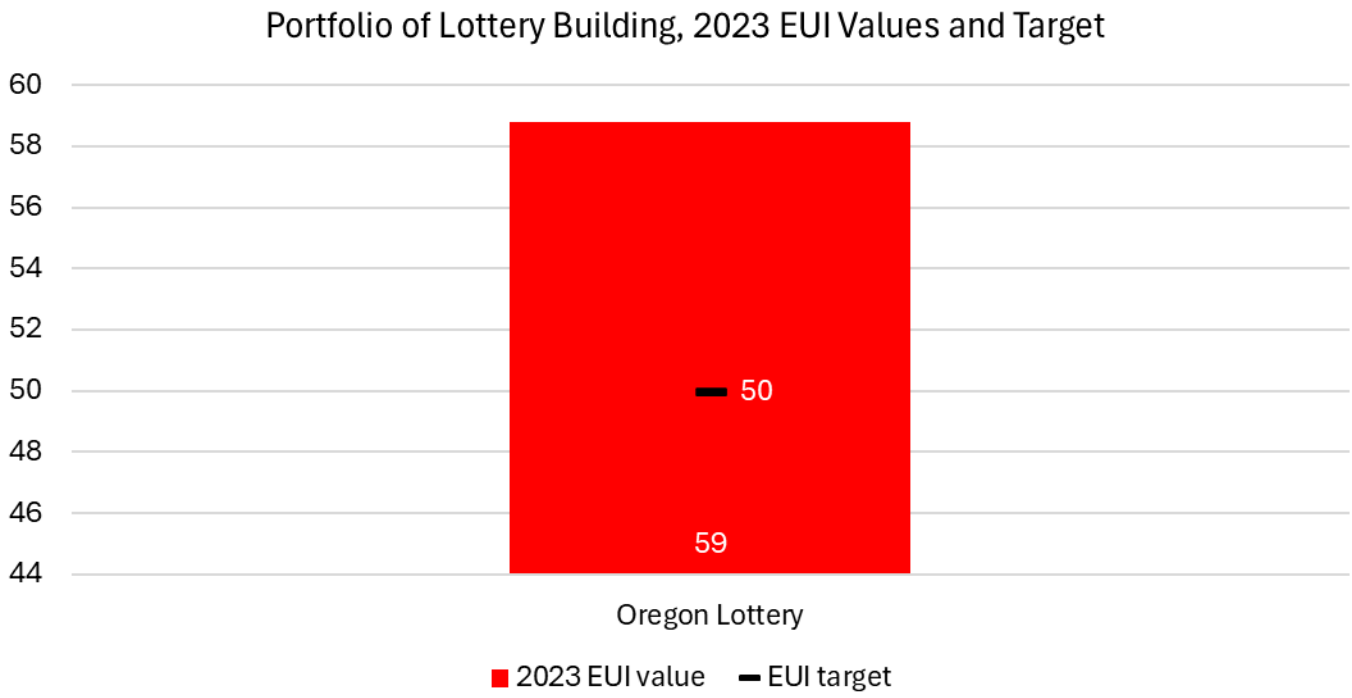
Oregon Liquor and Cannabis Commission | 50% Meeting Requirement

Building name	2023 Building EUI	EUI Target	Points to target
Milwaukie Facility	63	33	**-30**
Milport Facility	25	25	0



Oregon Lottery | 0% Meeting Requirement

Building name	2023 Building EUI	EUI target	Points to target
Oregon Lottery	59	50	-9

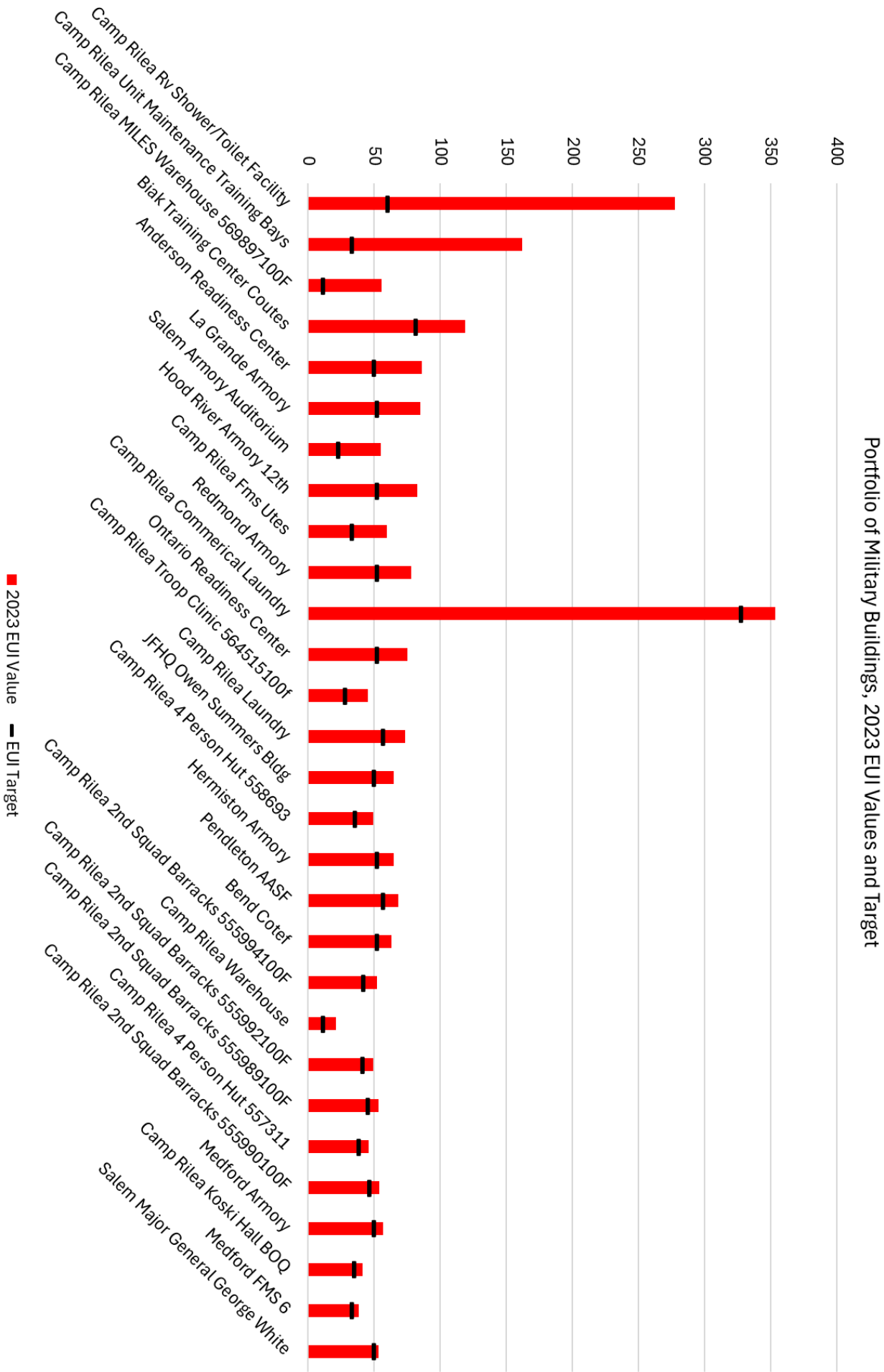


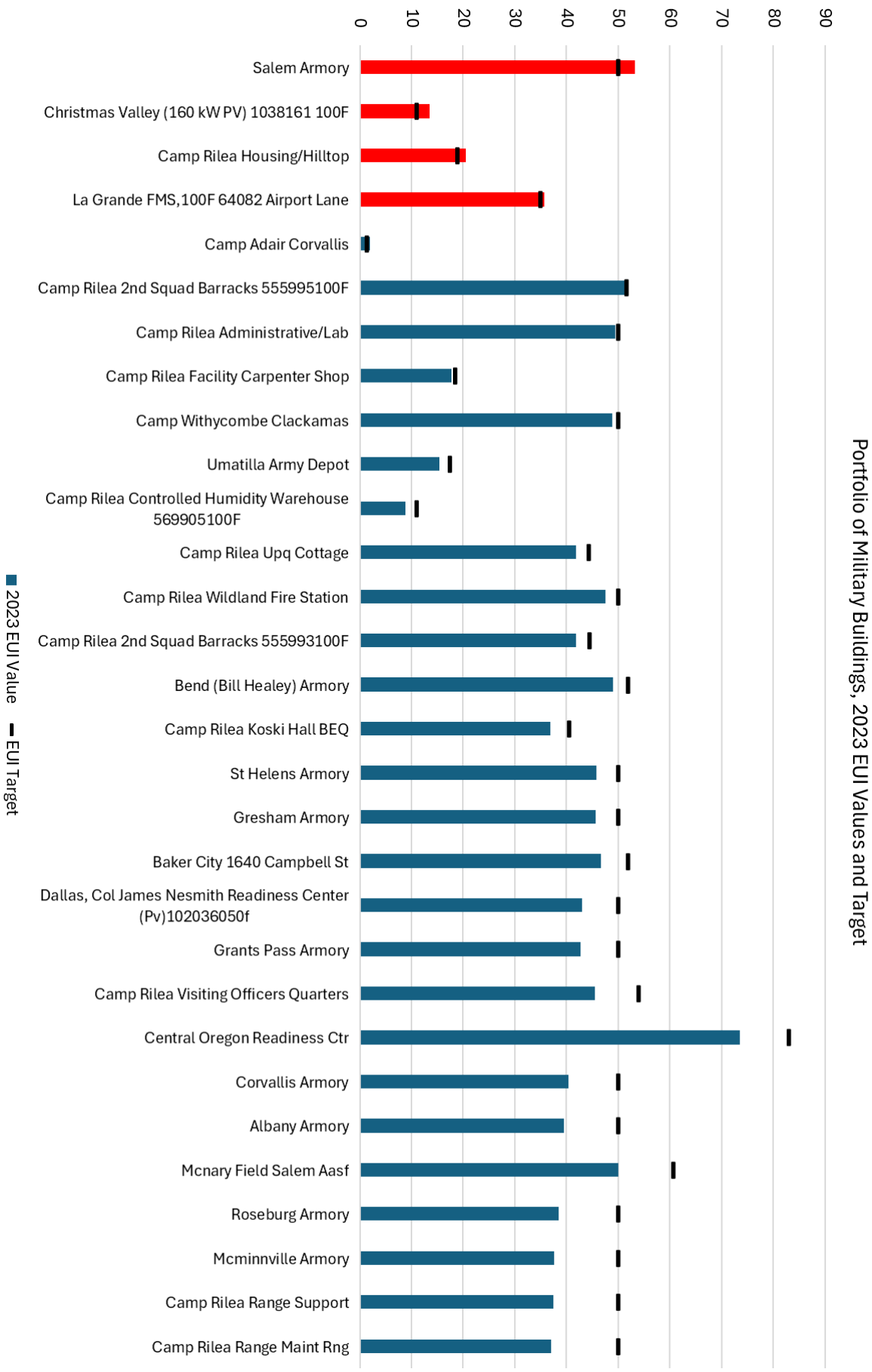
Oregon Military Department | 58% Meeting Requirement

Building name	2023 EUI Value	EUI Target	Points from target
Camp Rilea Rv Shower/Toilet Facility	278	60	-218
Camp Rilea Unit Maintenance Training Bays	162	33	-129
Camp Rilea MILES Warehouse 569897100F	55	11	-44
Biak Training Center Coutes	119	82	-37
Anderson Readiness Center	86	50	-36
La Grande Armory	85	52	-33
Salem Armory Auditorium	55	23	-32
Hood River Armory 12th	83	52	-31
Camp Rilea Fms Utes	60	33	-27
Redmond Armory	78	52	-26
Camp Rilea Commerical Laundry	353	328	-26
Ontario Readiness Center	75	52	-23
Camp Rilea Troop Clinic 564515100f	45	28	-17
Camp Rilea Laundry	73	57	-17
JFHQ Owen Summers Bldg	65	50	-15
Camp Rilea 4 Person Hut 558693	49	35	-14
Hermiston Armory	65	52	-13
Pendleton AASF	68	57	-12
Bend Cotef	63	52	-11
Camp Rilea 2nd Squad Barracks 555994100F	52	41	-10
Camp Rilea Warehouse	21	11	-10
Camp Rilea 2nd Squad Barracks 555992100F	49	41	-8
Camp Rilea 2nd Squad Barracks 555989100F	53	45	-8
Camp Rilea 4 Person Hut 557311	46	38	-8
Camp Rilea 2nd Squad Barracks 555990100F	54	46	-8
Medford Armory	57	50	-7

Camp Rilea Koski Hall BOQ	41	35	**-6**
Medford FMS 6	38	33	**-5**
Salem Major General George White	53	50	**-3**
Salem Armory	53	50	**-3**
Christmas Valley (160 kW PV) 1038161 100F	14	11	**-3**
Camp Rilea Housing/Hilltop	21	19	**-2**
La Grande FMS,100F 64082 Airport Lane	36	35	**-1**
Camp Adair Corvallis	2	1	**-1**
Camp Rilea 2nd Squad Barracks 555995100F	52	52	0
Camp Rilea Administrative/Lab	49	50	1
Camp Rilea Facility Carpenter Shop	18	19	1
Camp Withycombe Clackamas	49	50	1
Umatilla Army Depot	15	17	2
Camp Rilea Controlled Humidity Warehouse 569905100F	9	11	2
Camp Rilea Upq Cottage	42	44	2
Camp Rilea Wildland Fire Station	48	50	3
Camp Rilea 2nd Squad Barracks 555993100F	42	44	3
Bend (Bill Healey) Armory	49	52	3
Camp Rilea Koski Hall BEQ	37	41	4
St Helens Armory	46	50	4
Gresham Armory	46	50	4
Baker City 1640 Campbell St	47	52	5
Dallas, Col James Nesmith Readiness Center (Pv)102036050f	43	50	7
Grants Pass Armory	43	50	7
Camp Rilea Visiting Officers Quarters	46	54	8
Central Oregon Readiness Ctr	74	83	10

Corvallis Armory	40	50	10
Albany Armory	40	50	11
Mcnary Field Salem Aasf	50	61	11
Roseburg Armory	39	50	12
Mcminnville Armory	38	50	12
Camp Rilea Range Support	37	50	13
Camp Rilea Range Maint Rng	37	50	13
Milton Freewater Armory	38	52	14
Kliever Memorial Armory	36	50	14
Camp Rilea Koski Annex	35	50	15
Richard A Miller Armory Fms 3	35	50	15
Woodburn Armory	35	50	15
Camp Rilea Physical Fitness Center	10	26	16
2lt Alfred Sharff Usarc (Maison Rc & Fms)	34	50	16
Lane County Afrc Fms 5	34	50	16
Salem Fms	34	50	16
Ashland Armory	33	50	17
Newport Armory	31	50	19
Fort Dalles Readiness Center	33	52	19
Salem Reserve Center	26	50	24
Pendleton Armory	26	52	26
Camp Rilea Facility Roads / Ground	7	33	26
Coos Bay Armory	23	50	28
Camp Rilea Armory	18	50	32
Camp Rilea Toilet & Shower	159	195	36
Camp Rilea Sim Building	8	50	42
Camp Rilea 2nd Squad Barracks 555991100F	45	90	45
Camp Rilea Dining Facility	53	156	104


Portfolio of Military Buildings, 2023 EUI Values and Target
0
50
100
150
200
250
300
350
400
2023 EUI Value
EUI Target
Camp Rilea Rv Shower/Toilet Facility
Camp Rilea Unit Maintenance Training Bays
Camp Rilea MILES Warehouse 569897100F
Biak Training Center Coutes
Anderson Readiness Center
La Grande Armory
Salem Armory Auditorium
Hood River Armory 12th
Camp Rilea Fms Utes
Redmond Armory
Camp Rilea Commerical Laundry
Ontario Readiness Center
Camp Rilea Troop Clinic 564515100f
Camp Rilea Laundry
JFHQ Owen Summers Bldg
Camp Rilea 4 Person Hut 558693
Hermiston Armory
Pendleton AASF
Bend Cotef
Camp Rilea 2nd Squad Barracks 555994100F
Camp Rilea Warehouse
Camp Rilea 2nd Squad Barracks 555992100F
Camp Rilea 2nd Squad Barracks 555989100F
Camp Rilea 4 Person Hut 557311
Camp Rilea 2nd Squad Barracks 555990100F
Medford Armory
Camp Rilea Koski Hall BOQ
Medford FMS 6
Salem Major General George White


0
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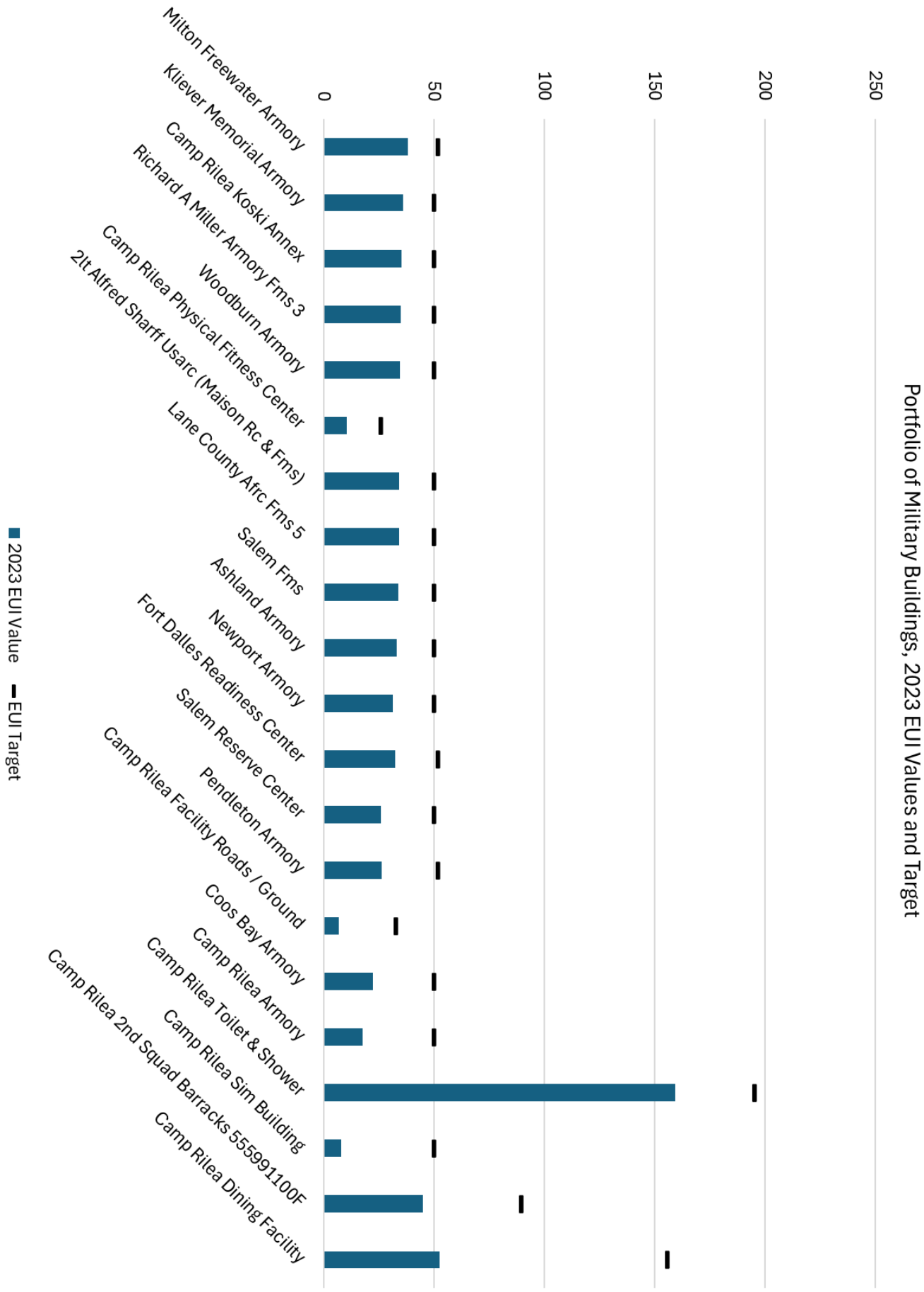
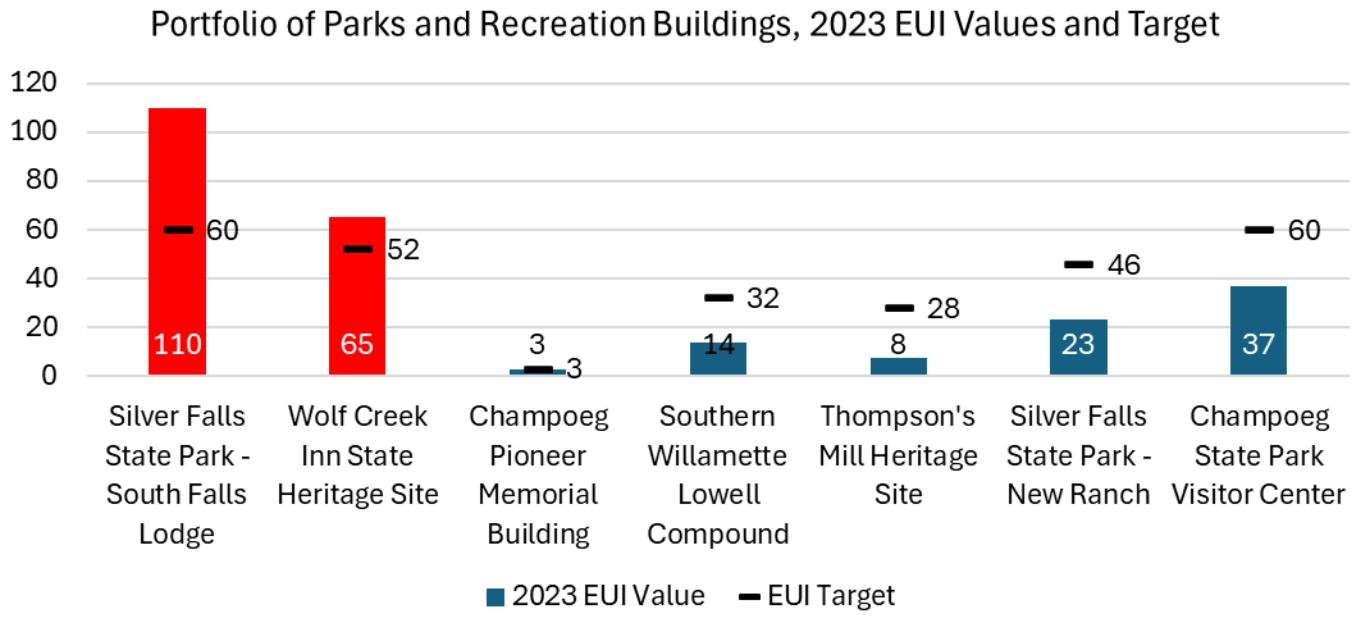
Salem Armory
Christmas Valley (160 kW PV) 1038161 100F
Camp Rilea Housing/Hilltop
La Grande FMS,100F 64082 Airport Lane
Camp Adair Corvallis
Camp Rilea 2nd Squad Barracks 555995100F
Camp Rilea Administrative/Lab
Camp Rilea Facility Carpenter Shop
Camp Withycombe Clackamas
Umatilla Army Depot
Camp Rilea Controlled Humidity Warehouse 569905100F
Camp Rilea Upq Cottage
Camp Rilea Wildland Fire Station
Camp Rilea 2nd Squad Barracks 555993100F
Bend (Bill Healey) Armory
Camp Rilea Koski Hall BEQ
St Helens Armory
Gresham Armory
Baker City 1640 Campbell St
Dallas, Col James Nesmith Readiness Center (Pv)102036050f
Grants Pass Armory
Camp Rilea Visiting Officers Quarters
Central Oregon Readiness Ctr
Corvallis Armory
Albany Armory
Mcnary Field Salem Aasf
Roseburg Armory
Mcminnville Armory
Camp Rilea Range Support
Camp Rilea Range Maint Rng
2023 EUI Value
EUI Target
Portfolio of Military Buildings, 2023 EUI Values and Target


Portfolio of Military Buildings, 2023 EUI Values and Target
0
50
100
150
200
250
Milton Freewater Armory
Kliever Memorial Armory
Camp Rilea Koski Annex
Richard A Miller Armory Fms 3
Woodburn Armory
Camp Rilea Physical Fitness Center
2lt Alfred Sharff Usarc (Maison Rc & Fms)
Lane County Afrc Fms 5
Salem Fms
Ashland Armory
Newport Armory
Fort Dalles Readiness Center
Salem Reserve Center
Pendleton Armory
Camp Rilea Facility Roads / Ground
Coos Bay Armory
Camp Rilea Armory
Camp Rilea Toilet & Shower
Camp Rilea Sim Building
Camp Rilea 2nd Squad Barracks 555991100F
Camp Rilea Dining Facility
2023 EUI Value
EUI Target

Oregon Parks and Recreation Department | 71% Meeting Requirement

Building name	2023 Building EUI	EUI Target	Points to target
Silver Falls State Park - South Falls Lodge	110	60	**-50**
Wolf Creek Inn State Heritage Site	65	52	**-13**
Champoeg Pioneer Memorial Building	3	3	0
Southern Willamette Lowell Compound	14	32	18
Thompson's Mill Heritage Site	8	28	20
Silver Falls State Park - New Ranch	23	46	23
Champoeg State Park Visitor Center	37	60	23

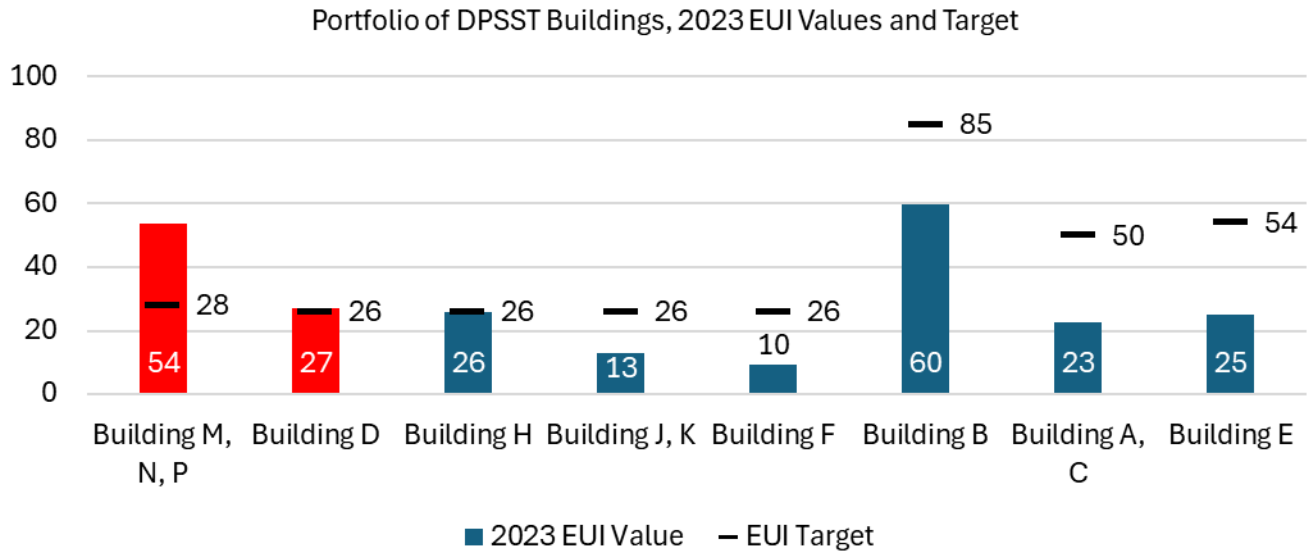


Oregon Public Employee Retirement System

PERS has not reported energy data in the last few years. ODOE is working with the agency to inventory all years of energy data in Energy Star Portfolio Manager for future reporting.

Oregon Department of Public Safety Standards and Training | 75% Meeting Requirement

Building name	2023 Building EUI	EUI Target	Points to target
Building M, N, P	54	28	-26
Building D	27	26	-1
Building H	26	26	0
Building J, K	13	26	13
Building F	10	26	17
Building B	60	85	25
Building A, C	23	50	28
Building E	25	54	29

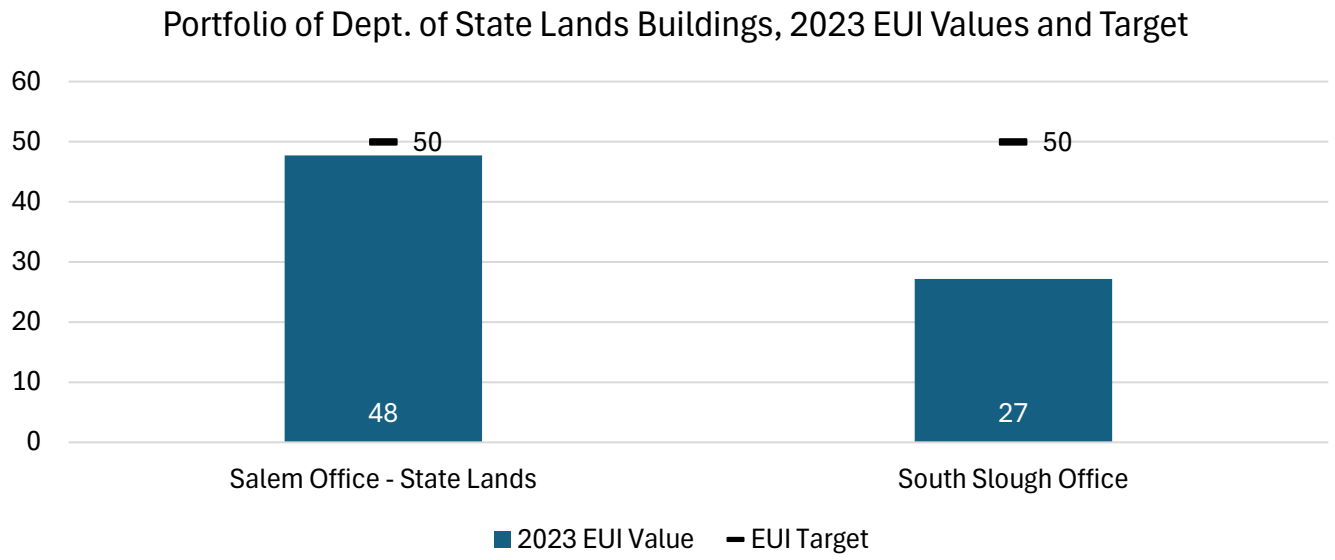


Oregon School for the Deaf

OSD has not reported energy data in the last few years. ODOE is working with the agency to inventory all years of energy data in Energy Star Portfolio Manager for future reporting.

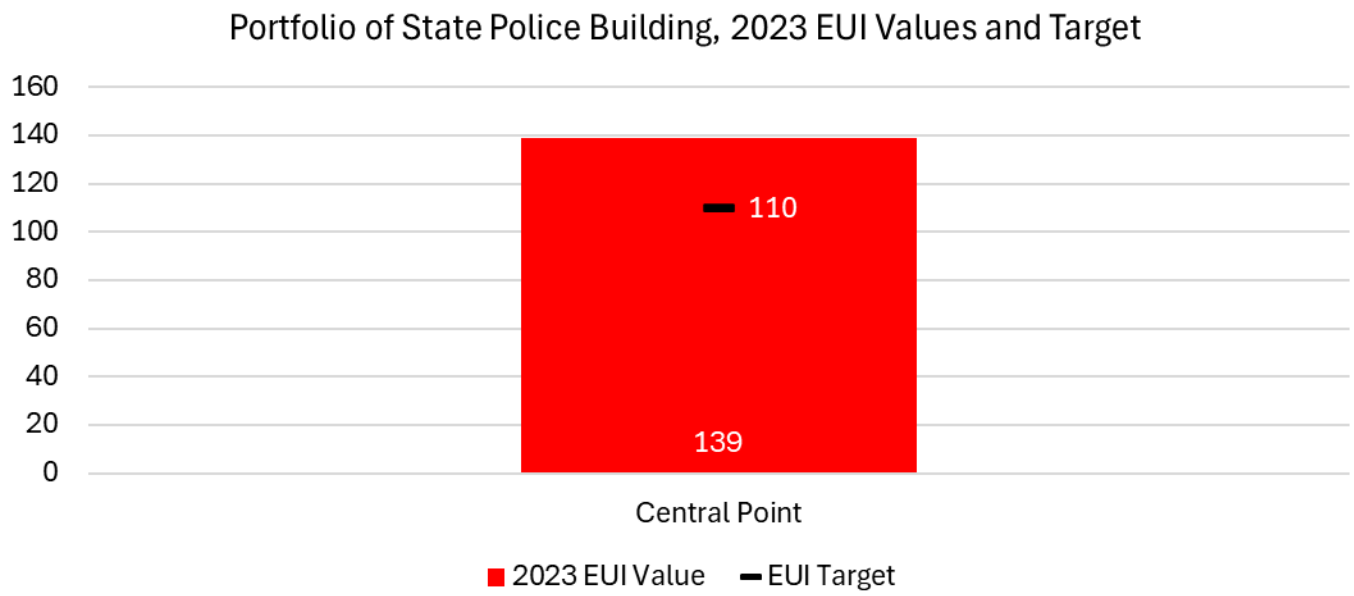
Oregon Department of State Lands | 100% Meeting Requirement

Building name	2023 Building EUI	EUI Target	Points to target
Salem Office - State Lands	48	50	2
South Slough Office	27	50	23



Oregon State Police | 0% Meeting Requirement

Building name	2023 Building EUI	EUI Target	Points to target
Central Point	139	110	-29



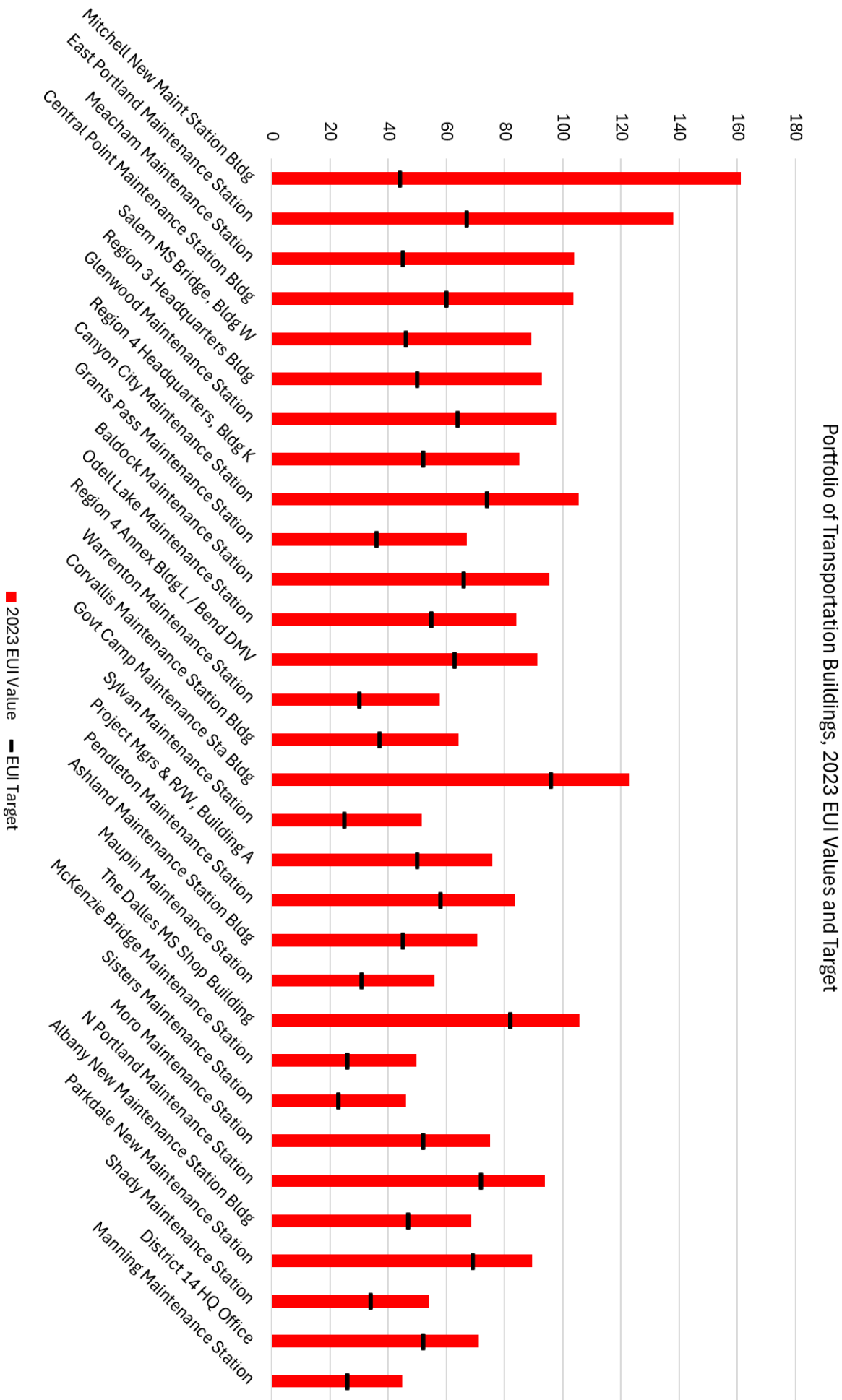
Oregon Department of Transportation | 34% Meeting Requirement

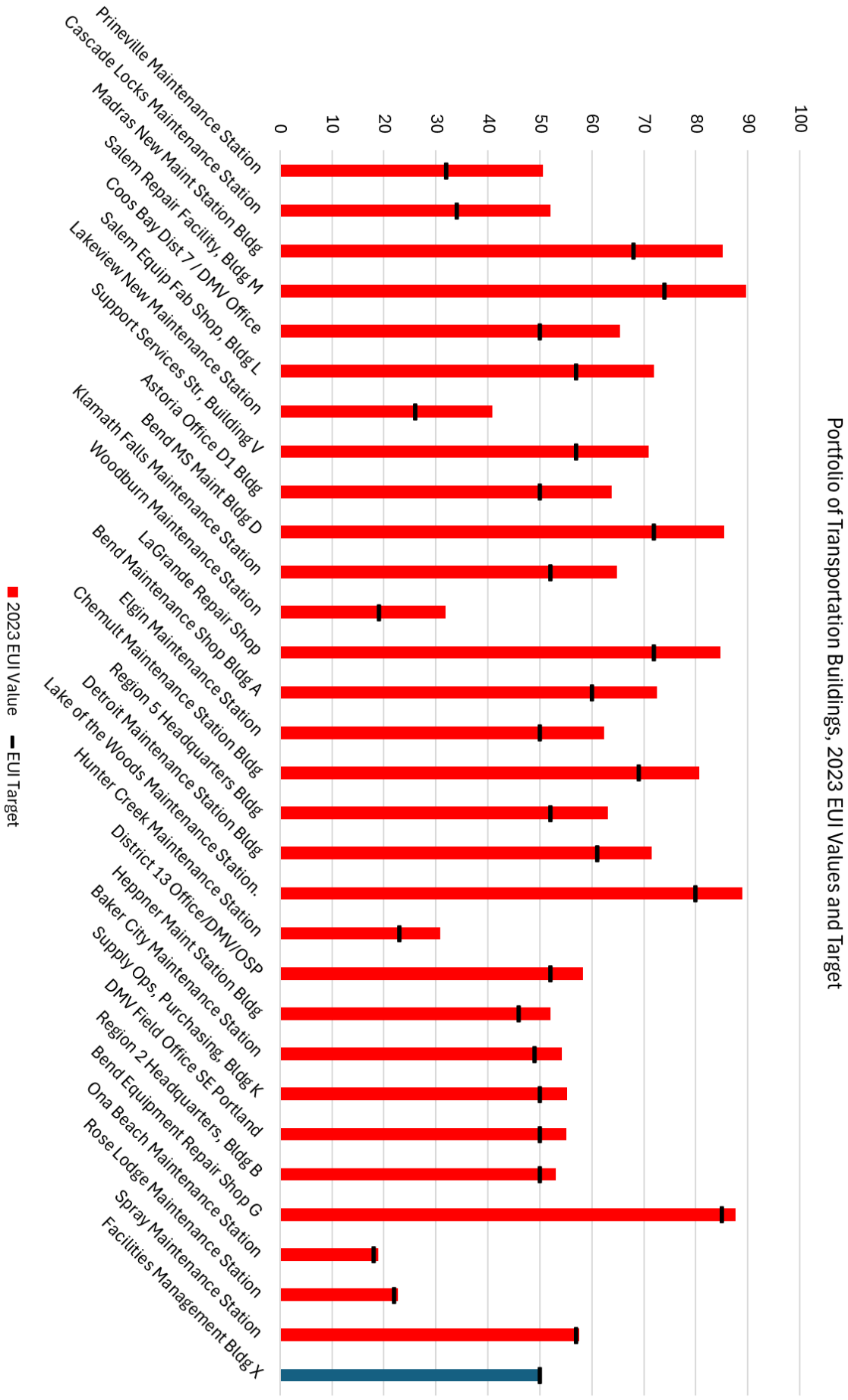
Building name	2023 EUI Value	EUI Target	Points to target
Mitchell New Maint Station Bldg	161	44	-117
East Portland Maintenance Station	138	67	-71
Meacham Maintenance Station	104	45	-59
Central Point Maintenance Station Bldg	104	60	-44
Salem MS Bridge, Bldg W	89	46	-43
Region 3 Headquarters Bldg	93	50	-43
Glenwood Maintenance Station	98	64	-34
Region 4 Headquarters, Bldg K	85	52	-33
Canyon City Maintenance Station	105	74	-31
Grants Pass Maintenance Station	67	36	-31
Baldock Maintenance Station	95	66	-29
Odell Lake Maintenance Station	84	55	-29
Region 4 Annex Bldg L / Bend DMV	91	63	-28
Warrenton Maintenance Station	58	30	-28
Corvallis Maintenance Station Bldg	64	37	-27
Govt Camp Maintenance Sta Bldg	123	96	-27
Sylvan Maintenance Station	52	25	-27
Project Mgrs & R/W, Building A	76	50	-26
Pendleton Maintenance Station	84	58	-26
Ashland Maintenance Station Bldg	71	45	-26
Maupin Maintenance Station	56	31	-25

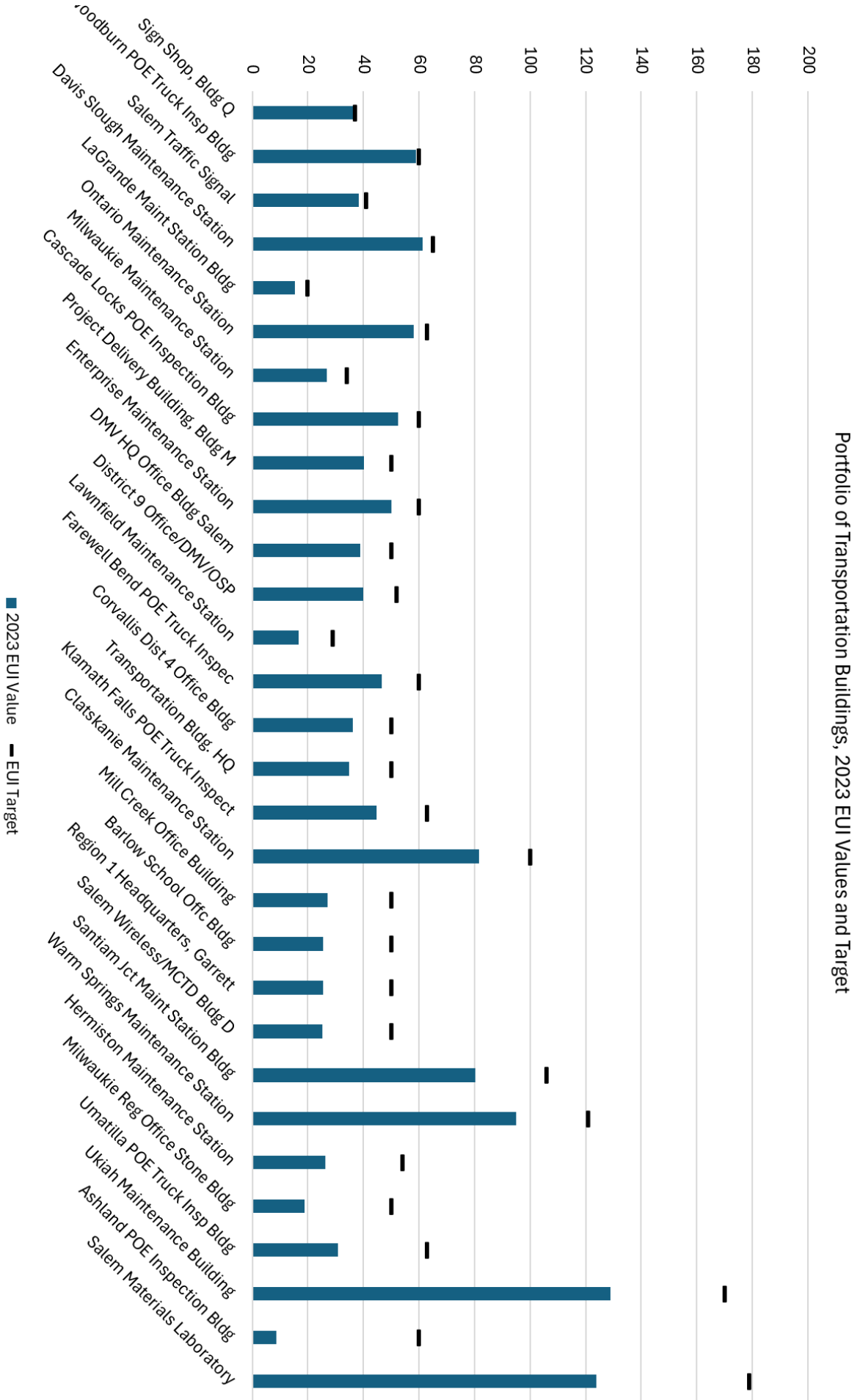
The Dalles MS Shop Building	106	82	**-24**
McKenzie Bridge Maintenance Station	50	26	**-24**
Sisters Maintenance Station	46	23	**-23**
Moro Maintenance Station	75	52	**-23**
N Portland Maintenance Station	94	72	**-22**
Albany New Maintenance Station Bldg	69	47	**-22**
Parkdale New Maintenance Station	90	69	**-21**
Shady Maintenance Station	54	34	**-20**
District 14 HQ Office	71	52	**-19**
Manning Maintenance Station	45	26	**-19**
Prineville Maintenance Station	51	32	**-19**
Cascade Locks Maintenance Station	52	34	**-18**
Madras New Maint Station Bldg	85	68	**-17**
Salem Repair Facility, Bldg M	90	74	**-16**
Coos Bay Dist 7 / DMV Office	65	50	**-15**
Salem Equip Fab Shop, Bldg L	72	57	**-15**
Lakeview New Maintenance Station	41	26	**-15**
Support Services Str, Building V	71	57	**-14**
Astoria Office D1 Bldg	64	50	**-14**
Bend MS Maint Bldg D	85	72	**-13**
Klamath Falls Maintenance Station	65	52	**-13**
Woodburn Maintenance Station	32	19	**-13**
LaGrande Repair Shop	85	72	**-13**
Bend Maintenance Shop Bldg A	73	60	**-13**

Elgin Maintenance Station	62	50	**-12**
Chemult Maintenance Station Bldg	81	69	**-12**
Region 5 Headquarters Bldg	63	52	**-11**
Detroit Maintenance Station Bldg	72	61	**-11**
Lake of the Woods Maintenance Station.	89	80	**-9**
Hunter Creek Maintenance Station	31	23	**-8**
District 13 Office/DMV/OSP	58	52	**-6**
Heppner Maint Station Bldg	52	46	**-6**
Baker City Maintenance Station	54	49	**-5**
Supply Ops, Purchasing, Bldg K	55	50	**-5**
DMV Field Office SE Portland	55	50	**-5**
Region 2 Headquarters, Bldg B	53	50	**-3**
Bend Equipment Repair Shop G	88	85	**-3**
Ona Beach Maintenance Station	19	18	**-1**
Rose Lodge Maintenance Station	23	22	**-1**
Spray Maintenance Station	58	57	**-1**
Facilities Management Bldg X	50	50	0
Sign Shop, Bldg Q	36	37	1
Woodburn POE Truck Insp Bldg	59	60	1
Salem Traffic Signal	38	41	3
Davis Slough Maintenance Station	61	65	4
LaGrande Maint Station Bldg	15	20	5
Ontario Maintenance Station	58	63	5
Milwaukie Maintenance Station	27	34	7

Cascade Locks POE Inspection Bldg	52	60	8
Project Delivery Building, Bldg M	40	50	10
Enterprise Maintenance Station	50	60	10
DMV HQ Office Bldg Salem	39	50	11
District 9 Office/DMV/OSP	40	52	12
Lawnfield Maintenance Station	17	29	12
Farewell Bend POE Truck Inspec	47	60	14
Corvallis Dist 4 Office Bldg	36	50	14
Transportation Bldg. HQ	35	50	15
Klamath Falls POE Truck Inspect	45	63	18
Clatskanie Maintenance Station	82	100	19
Mill Creek Office Building	27	50	23
Barlow School Offc Bldg	26	50	24
Region 1 Headquarters, Garrett	25	50	25
Salem Wireless/MCTD Bldg D	25	50	25
Santiam Jct Maint Station Bldg	80	106	26
Warm Springs Maintenance Station	95	121	26
Hermiston Maintenance Station	26	54	28
Milwaukie Reg Office Stone Bldg	19	50	31
Umatilla POE Truck Insp Bldg	31	63	32
Ukiah Maintenance Building	129	170	41
Ashland POE Inspection Bldg	9	60	51
Salem Materials Laboratory	124	179	55

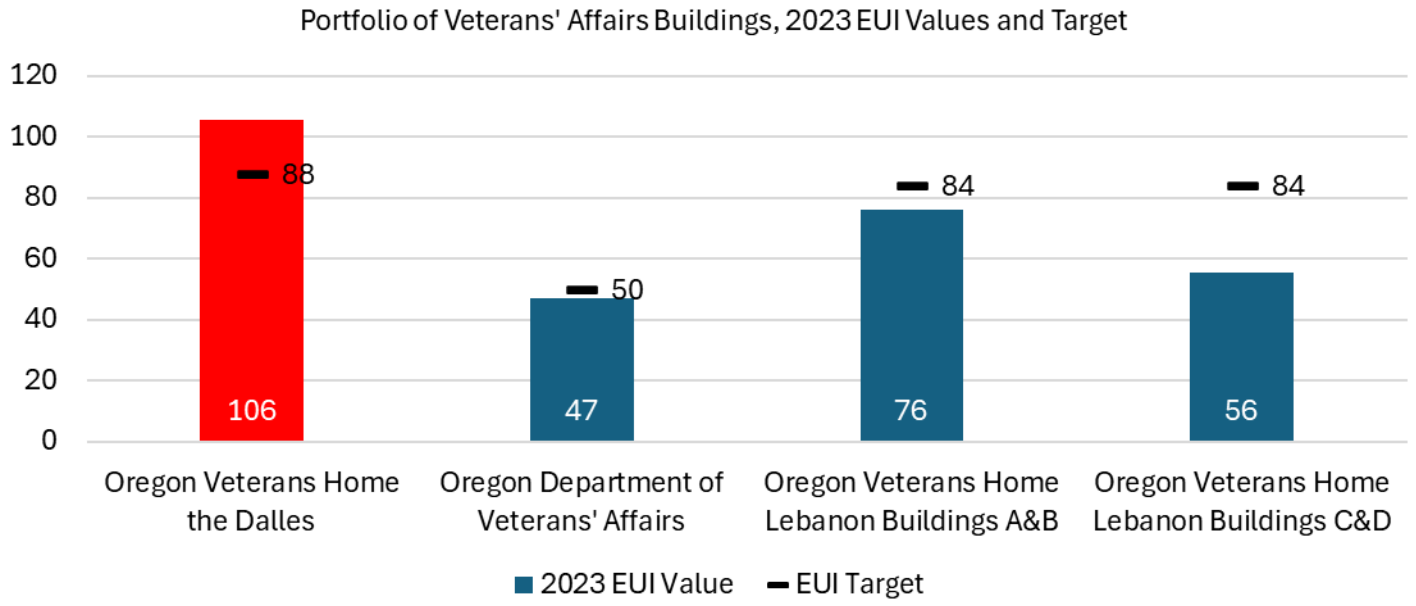

Portfolio of Transportation Buildings, 2023 EUI Values and Target
0
20
40
60
80
100
120
140
160
180
Mitchell New Maint Station Bldg
East Portland Maintenance Station
Meacham Maintenance Station
Central Point Maintenance Station Bldg
Salem MS Bridge, Bldg W
Region 3 Headquarters Bldg
Glenwood Maintenance Station
Region 4 Headquarters, Bldg K
Canyon City Maintenance Station
Grants Pass Maintenance Station
Baldock Maintenance Station
Odell Lake Maintenance Station
Region 4 Annex Bldg L / Bend DMV
Warrenton Maintenance Station
Corvallis Maintenance Station Bldg
Govt Camp Maintenance Station
Sylvan Maintenance Sta Bldg
Project Mgrs & RW, Building A
Pendleton Maintenance Station
Ashland Maintenance Station Bldg
Maupin Maintenance Station
The Dalles MS Shop Building
McKenzie Bridge Maintenance Station
Sisters Maintenance Station
Moro Maintenance Station
N Portland Maintenance Station
Albany New Maintenance Station Bldg
Parkdale New Maintenance Station
Shady Maintenance Station
District 14 HQ Office
Manning Maintenance Station
2023 EUI Value
EUI Target


Portfolio of Transportation Buildings, 2023 EUI Values and Target
0
10
20
30
40
50
60
70
80
90
100
2023 EUI Value
EUI Target
Prineville Maintenance Station
Cascade Locks Maintenance Station
Madras New Maint Station Bldg
Salem Repair Facility, Bldg M
Coos Bay Dist 7 / DMV Office
Salem Equip Fab Shop, Bldg L
Lakeview New Maintenance Station
Support Services Str, Building V
Astoria Office D1 Bldg
Bend MS Maint Bldg D
Klamath Falls Maintenance Station
Woodburn Maintenance Station
LaGrande Repair Shop
Bend Maintenance Shop Bldg A
Elgin Maintenance Station
Chemult Maintenance Station Bldg
Region 5 Headquarters Bldg
Detroit Maintenance Station Bldg
Lake of the Woods Maintenance Station.
Hunter Creek Maintenance Station
District 13 Office/DMV/OSP
Heppner Maint Station Bldg
Baker City Maintenance Station
Supply Ops, Purchasing, Bldg K
DMV Field Office SE Portland
Region 2 Headquarters, Bldg B
Bend Equipment Repair Shop G
Ona Beach Maintenance Station
Rose Lodge Maintenance Station
Spray Maintenance Station
Facilities Management Bldg X


Portfolio of Transportation Buildings, 2023 EUI Values and Target
0
20
40
60
80
100
120
140
160
180
200
2023 EUI Value
EUI Target
Sign Shop, Bldg Q
Woodburn POE Truck Insp Bldg
Salem Traffic Signal
Davis Slough Maintenance Station
LaGrande Maint Station Bldg
Ontario Maintenance Station
Milwaukie Maintenance Station
Cascade Locks POE Inspection Bldg
Project Delivery Building, Bldg M
Enterprise Maintenance Station
DMV HQ Office Bldg Salem
District 9 Office/DMV/OSP
Lawnfield Maintenance Station
Farewell Bend POE Truck Inspec
Corvallis Dist 4 Office Bldg
Transportation Bldg. HQ
Klamath Falls POE Truck Inspect
Clatskanie Maintenance Station
Mill Creek Office Building
Barlow School Offc Bldg
Region 1 Headquarters, Garrett
Salem Wireless/MCTD Bldg D
Santiam Jct Maint Station Bldg
Warm Springs Maintenance Station
Hermiston Maintenance Station
Milwaukie Reg Office Stone Bldg
Umatilla POE Truck Insp Bldg
Ukiah Maintenance Building
Ashland POE Inspection Bldg
Salem Materials Laboratory

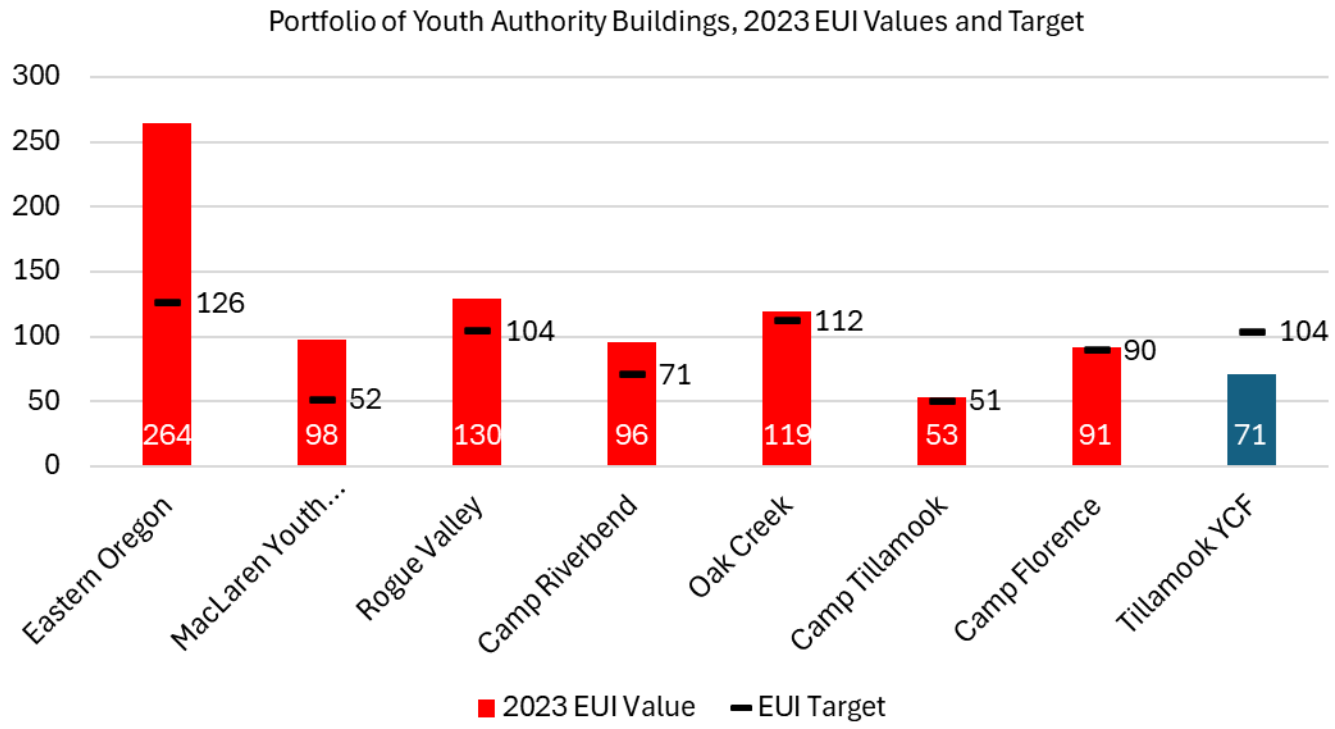
Oregon Department of Veterans' Affairs | 75% Meeting Requirement

Building name	2023 Building EUI	EUI Target	Points to target
Oregon Veterans Home the Dalles	106	88	**-18**
Oregon Department of Veterans' Affairs	47	50	3
Oregon Veterans Home Lebanon Buildings A&B	76	84	8
Oregon Veterans Home Lebanon Buildings C&D	56	84	28



Oregon Youth Authority | 13% Meeting Requirement

Building name	2023 Building EUI	EUI Target	Points to target
Eastern Oregon	264	126	**-138**
MacLaren Youth Correctional Facility	98	52	**-46**
Rogue Valley	130	104	**-25**
Camp Riverbend	96	71	**-25**
Oak Creek	119	112	**-7**
Camp Tillamook	53	51	**-2**
Camp Florence	91	90	**-2**
Tillamook YCF	71	104	33



APPENDIX A: PROGRAM HISTORY

In 1991, the Oregon Department of Energy (ODOE) established the State Energy Efficient Design (SEED) program under ORS 276.900-915.

Adopted legislation states: "It is the policy of the State of Oregon that facilities to be constructed or purchased by authorized state agencies be designed, constructed, renovated and operated so as to minimize the use of energy resources and to serve as models of energy conservation."

In January 2001, the Energy Conservation Initiative was added to the statute, requiring all state agency facilities that are newly constructed or substantially remodeled to perform better than the energy conservation provisions of the Oregon state building code by a minimum of 20 percent. The SEED program divides new construction and renovation projects into two classes depending on their size. Class 1 buildings are 10,000 or more square feet, and Class 2 buildings are less than 10,000 square feet. Regardless of building class, state agencies must incorporate cost-effective energy conservation measures into building projects.

The requirement for state agencies to reduce energy consumption in existing state-owned buildings was added to ORS 276.900-915 in 2001 and agencies were provided additional direction by Governor Brown's Executive Order 17-20. Agencies are required to report energy use to ODOE. ODOE collaborates with state agencies to support uploading and reporting facility energy use, establishing performance benchmarks for their buildings, tracking progress, and providing technical guidance to achieve those goals. The results of these efforts include more detailed energy consumption reporting, and the establishment of facility-specific energy performance targets based on national standards.

EO 17-20 also requires that, beginning for all projects permitted after January 1, 2022, any new state-owned buildings used primarily for office and other commercial workspace are designed to be able to operate as carbon-neutral buildings. DAS, ODOE and DEQ collaborated to issue a Guidance Document for state agencies to reference when undertaking projects subject to these requirements, and this requirement is being incorporated into the general SEED process for high-efficiency design.

In 2023, the Oregon Legislature passed House Bill 3409, establishing an Energy Performance Standard policy for commercial buildings, often referred to as a Building Performance Standard (BPS). The Energy Performance Standard policy for commercial buildings addresses energy use and emissions from existing commercial buildings, which account for nearly 20 percent of energy use in Oregon. It will require many large commercial buildings to enhance energy management practices and implement efficiency measures to meet energy use targets and will be modeled after ASHRAE Standard 100. Additionally, operators will have to implement rigorous energy management and operations and management plans. The program is administered by the Oregon Department of Energy. ODOE's role includes rulemaking to establish the processes and energy targets to comply with the Oregon BPS as well as managing compliance reporting.

APPENDIX B: ENERGY ANALYSIS METHODOLOGY

Executive Order (EO) 17-20, issued in November 2017, states that ODOE will work with all agencies to benchmark and track energy use in state-owned facilities. EO 17-20 reinforced SEED program objectives, supporting state agencies in adopting Energy Use Intensity (EUI) targets for their buildings and tracking progress to those targets. EUI is energy use per square foot per year, which is calculated by dividing the total annual energy consumed (in units of thousand Btu, or kBtu) by the gross floor area (in units of square feet) of the building. EUI for each facility can then be compared to average EUIs for similar building types (i.e., office, hospital, laboratory, etc.) where 2015, or the first full year of tracked energy use, is used to determine the baseline EUI for a facility. Agencies with buildings exceeding target EUIs are directed to evaluate potential retrofits to increase the efficiency of their buildings, and ODOE is directed to guide agencies to implement tactical and achievable energy use reductions.

Performance target EUIs are based on the ASHRAE Standard 100-2015 for climate zones 4C (western Oregon) and 5B (Eastern Oregon). ASHRAE is an international organization promoting sustainable technology for the built environment. ASHRAE Standard 100-2015 is a data-driven, internationally recognized standard for improving energy conservation in existing buildings, providing a comprehensive approach for addressing energy conservation in a quantitative, objective manner.

Not all building types have ASHRAE targets, however, and Oregon Department of Energy staff worked with each agency to establish calculated high-performance targets for those buildings based on their benchmark year of 2015, or whenever they first reported annual energy use.

FOR MORE INFORMATION

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