2024

Sustainable Aviation Grant Program for Airports Report to Legislative Transportation Committees

Washington State Department of Transportation 10/1/2024

### Introduction

Per the 2023-25 Transportation Budget, <u>ESHB 1125</u>, Section 213, the following report is provided to the Legislature identifying the recommended selection of sustainable aviation projects for funding by the Legislature from the Sustainable Aviation Grant Program for Airports.

## I. Executive Summary

The primary purpose of this report is to address the assigned task from ESHB 1125 for the Washington State Department of Transportation (WSDOT) to identify the selection of sustainable aviation projects for funding by the legislature.

The purpose of the grant program is to support the adoption of energy efficient and clean energy airport infrastructure to reduce harmful aviation-related emissions, and transition airports to more environmentally sustainable operations.

The department recommends funding three projects totaling \$2,100,000.

## II. Sustainable Aviation Grant Program for Airports

In September 2022, WSDOT established an application process and evaluation criteria for the Sustainable Aviation Grants Program for Airports. WSDOT submitted its first report to the legislature identifying an initial list of projects recommended for funding through the new grant on December 1, 2022. During the 2023 legislative session, the legislature passed, and Governor Inslee subsequently signed into law ESHB 1125 providing funding for the recommended projects during the 2023-2025 biennium. The legislation also directs the Department of Transportation to identify and recommend a selection of sustainable aviation projects for funding by the legislature in the 2025-2027 biennium.

In July 2024 WSDOT revised the application and process including incorporating an environmental justice component into the application documentation and evaluation criteria and adjusting the list of eligible projects identified in ESHB 1125.

Based on the criteria outlined in ESHB 1125, eligible projects may include, but are not limited to:

- Mobile battery charging technology
- Hydrogen electrolyzers and storage
- Electric ground equipment
- Hangar charging technology

Projects are evaluated on their ability to advance the state of sustainable aviation technology and lead to future innovation, reduce the harmful effects of aviation-related emissions, reduce the reliance on fossil fuels, and to reduce environmental health disparities and create environmental benefits to overburdened communities and vulnerable populations.

WSDOT Aviation staff evaluated applications based on the following criteria:

- Project helps the airport become more environmentally sustainable -15
- Project supports future sustainable aviation technologies and/or Advanced Air Mobility -15

- Project reduces dependence on fossil fuels -15
- Project increases the airport's ability to produce sustainable energy or reduces reliance on grid infrastructure -15
- Project provides environmental benefits to identified overburdened and vulnerable communities -15
- Demonstrated need for project -10
- Project reduces or offsets greenhouse gas emissions -15
- Local matching funds provided (No matching funds are required for the grant, however providing local matching funds will increase the overall points earned for the application) - 10
- Readiness to proceed 10
- Total points possible -120

# III. Selection of Sustainable Aviation Projects

The department solicited funding applications from airport sponsors with an August 16, 2024 deadline. The solicitation was widely advertised to aviation stakeholders as a news release, posted on the WSDOT Aviation Division's website, and included in the monthly newsletter 'Washington Skies'. Additionally, the announcement was republished by the Washington Airport Management Associations bi-weekly 'WAMA Waypoints'.

Applications were received from eight airports requesting just over \$4 million in funding for twelve separate projects that can be broken down into three categories: Solar and battery storage, Electric aircraft and vehicle charging infrastructure, and Airport equipment.

# Sustainable Aviation Grant Program for Airports - Applications August 2024

Airport	Project	Local Funds	Sustainable Aviation Grant Funds	Project Total
Arlington Municipal	Runway 11/29 Solar Lighting System	39,275	746,225	785,500
Arlington Municipal	EV Charging Station Installation	2,000	38,000	40,000
Chehalis-Centralia	West Solar Arrays & Battery Storage	250,000	750,000	1,000,000
Deer Park Municipal	Electric Riding Lawn Mower	750	6,750	7,500
Deer Park Municipal	Electric Snow Blower	500	4,500	5,000
Deer Park Municipal	Electric Aircraft Tug	1,500	13,500	15,000
Seattle Paine Field International	5 - EV Ford F-150 Trucks & Charging Stations	13,203	250,866	264,069
Seattle Paine Field International	East Apron & Taxiway F Rehab - Conduit for Future Electric Infrastructure	5,805,555	305,556	6,111,111
Friday Harbor	Procure & Install Solar Arrays & Battery Storage	30,000	470,000	500,000
Boeing Field / King County International	Procure Four Electric Mowers (2-Airside / 2-Landside)	3,750	71,250	75,000
Pangborn Memorial	Electric Aircraft Charging Stations & Strategic Plan	75,000	750,000	825,000
Yakima Air Terminal / McAllister Field	Solar Covered Car Canopy	1,200,000	600,000	1,800,000
Total		7,421,533	4,006,646	11,428,180

# IV. Projects Recommended for Funding

Applications were independently reviewed and scored by three Aviation Division staff members based on the established scoring criteria. Generally, solar projects ranked highest, followed by electric aircraft charging stations, then electrification of airport equipment.

The department is recommending three projects for funding at a total amount of \$2,100,000. This recommendation includes the three highest scoring projects.

Sustainable Aviation Grant Program for Airports - Projects Recommended for Funding FY2026						
Airport	Project	Local Funds	Sustainable Aviation Grant Funds	Project Total		
Chehalis-Centralia	West Solar Arrays & Battery Storage	250,000	750,000	1,000,000		
Pangborn Memorial	Electric Aircraft Charging Stations & Strategic Plan	75,000	750,000	825,000		
Yakima Air Terminal / McAllister Field	Solar Covered Car Canopy	1,200,000	600,000	1,800,000		
Total		1.525.000	2.100.000	3.625.000		

#### City of Chehalis – Chehalis Centralia Airport:

The project includes design and construction of a canopy with a ~25kW solar array for the fuel farm (Phase I), a ~25kW ground-based solar array adjacent to the fuel farm (Phase II), and a ~50kW roof-based solar array on a T-hangar (Phase III), and significant battery storage. This will ultimately reduce the airport's energy use by at least 25%. The project will create resiliency and reduce greenhouse gas emissions in an overburdened community while reducing costs and generating revenue for the airport.

### • Chelan-Douglas Regional Port Authority – Pangborn Memorial Airport:

The project includes the procurement and installation of multiple electric aircraft charging stations at the airport to support the growing adoption of a variety of aircraft models. There will be local agency coordination with the Douglas County Public Utility District to update electrical infrastructure to support the charging stations. The chargers will be strategically placed to optimize accessibility and efficiency, meeting both current and future demands. Additionally, the project will integrate a monitoring system to track usage, performance, and maintenance needs, ensuring the infrastructure remains effective and reliable. The project will result in reduced greenhouse gas emissions by facilitating the use of electric aircraft and position the airport as a leader in sustainable aviation technology.

### • City of Yakima – Yakima Air Terminal / McAllister Field:

The project includes a 200kW solar covered car canopy for the airport terminal parking lot. The canopy will cover the first row of parking providing both renewable energy for the airport terminal building, but also added customer experience for passengers. The solar arrays will generate over 270,000kWh annually and will generate over \$91,000 per year in operational savings and revenue

for the airport. The project makes significant strides to reduce the airport's carbon footprint by providing nearly 65% of the current terminal energy consumption which will reduce more than 5,677 Metric Tons of CO2 over the guaranteed production life of the infrastructure.