Opportunities in Regional Air Mobility

WPPA Annual Meeting

December 11, 2024

The Community Air Mobility Initiative is a 501(c)(3) public nonprofit supporting the sustainable and responsible integration of advanced air mobility into our daily transportation needs through education, communication, and collaboration.

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What is Advanced Air Mobility (AAM)?

Advanced Air Mobility is a broad concept that focuses on emerging aviation markets and use cases for urban, suburban and rural operations. AAM includes:

- Local use cases of an approximately 50-mile (80-km) radius in rural or urban areas
- Intraregional use cases up to a few hundred miles

Source: NASA STEM Learning

The objective of Advanced Air Mobility is to move people and cargo between places more effectively, especially in currently underserved local, regional, urban and rural environments.

Source: NASA

What Types of Aircraft will be Used?

These new aircraft range in size from small, cargo-carrying, uncrewed aerial vehicles (UAVs or drones) to passenger-carrying air taxis that carry out short range missions. The vast majority of AAM aircraft under development will serve two to seven passengers (or an equivalent weight of cargo).

Variations include:

- **Vehicle configuration**
- **Takeoff characteristics**
- **Aspects of automation**
- **Fuel types**

What are Potential Benefits of AAM?

- Reduced emergency response times
- Increased range of access to the urban core
- Workforce development and economic opportunities
- Stronger connection of rural areas to urban opportunities
- Increased utility of GA airport infrastructure
- Additional disaster response capabilities
- Increased electrification
- Elimination of transportation deserts

Potential Community Concerns with AAM

Flight Paths & En-route Operations

- Location and Time of Operations
- Air congestion and ops tempo
- Privacy, noise, and visual pollution

Vertiports & Aerodromes

- Environmental impacts in the vertiport vicinity
- Social and economic impacts (e.g., gentrification and displacement)

Service Characteristics

- Affordability, ADA access, etc.

Cross-cutting and Other Issues

- Environmental justice
- Allocation of limited public resources

CAMI's Resources

CAMI
Community Air Mobility Initiative

The Community Air Mobility Initiative presents:

AAM 101

An introduction to advanced air mobility for state and local decision makers

August 2, 2022
SFO Museum
located at SFO, just before and to the left of the security checkpoint entrance at Boarding A (boarding pass not required)

Presentations: 1:00-5:30 PDT
Followed by a networking reception

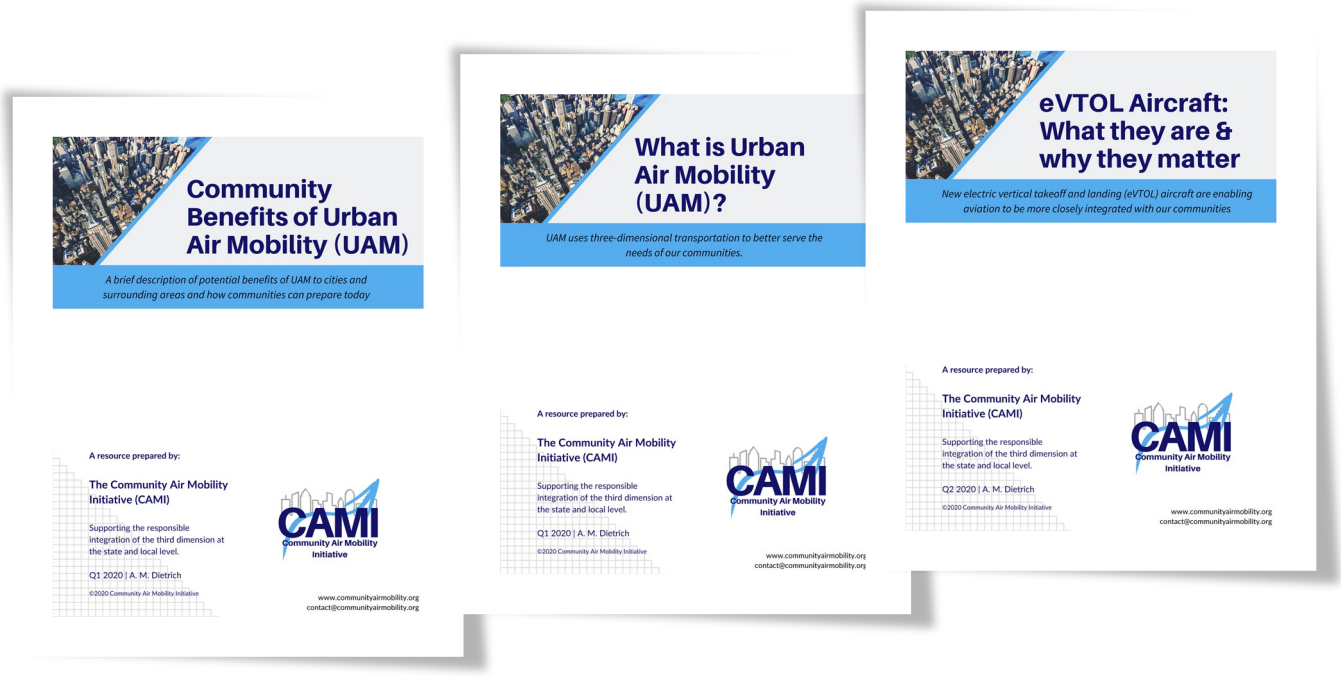
Registration:
Government Rate: $75/person
General Rate: $100/person
*CAMI members receive 25% discount

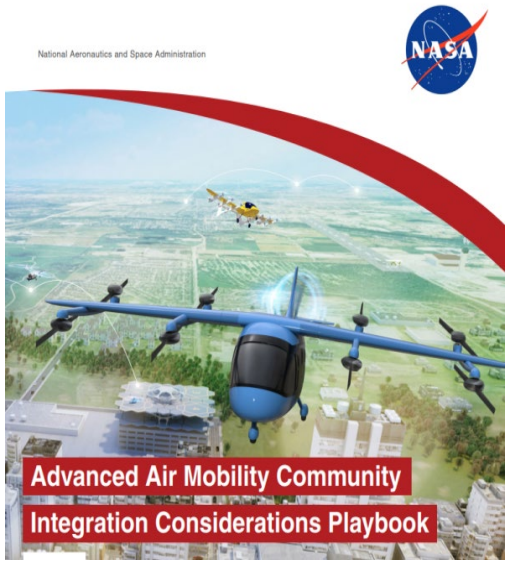
Registration available at communityairmobility.org

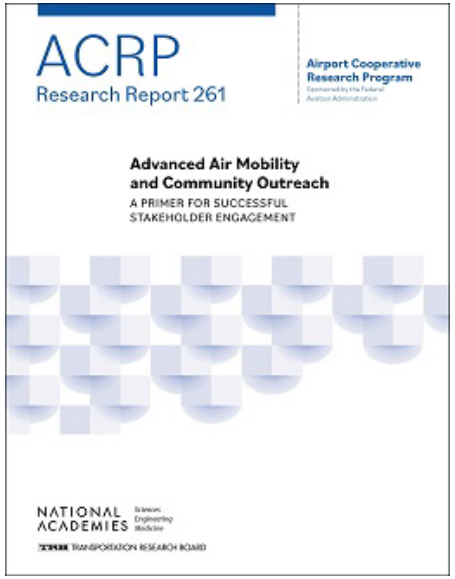
Event Sponsors:
A limited number of event sponsorship opportunities are available for $1000 and include event logo recognition and two complimentary registrations.

Featured Topics:

- Fundamentals of Advanced Aircraft Mobility
  - Aircraft and Air Traffic Management
  - Community and Regional Use Cases
  - Legal and Regulatory Framework
  - Infrastructure Considerations
  - Markets and Opportunities
- Integrating Advanced Air Mobility into Communities
  - Equity Issues
  - Integration into Multimodal Transportation Systems
  - Community and Environmental Impacts
  - Planning for Advanced Air Mobility
- Q&A with the presenters
- Open Discussion and Networking







www.communityairmobility.org

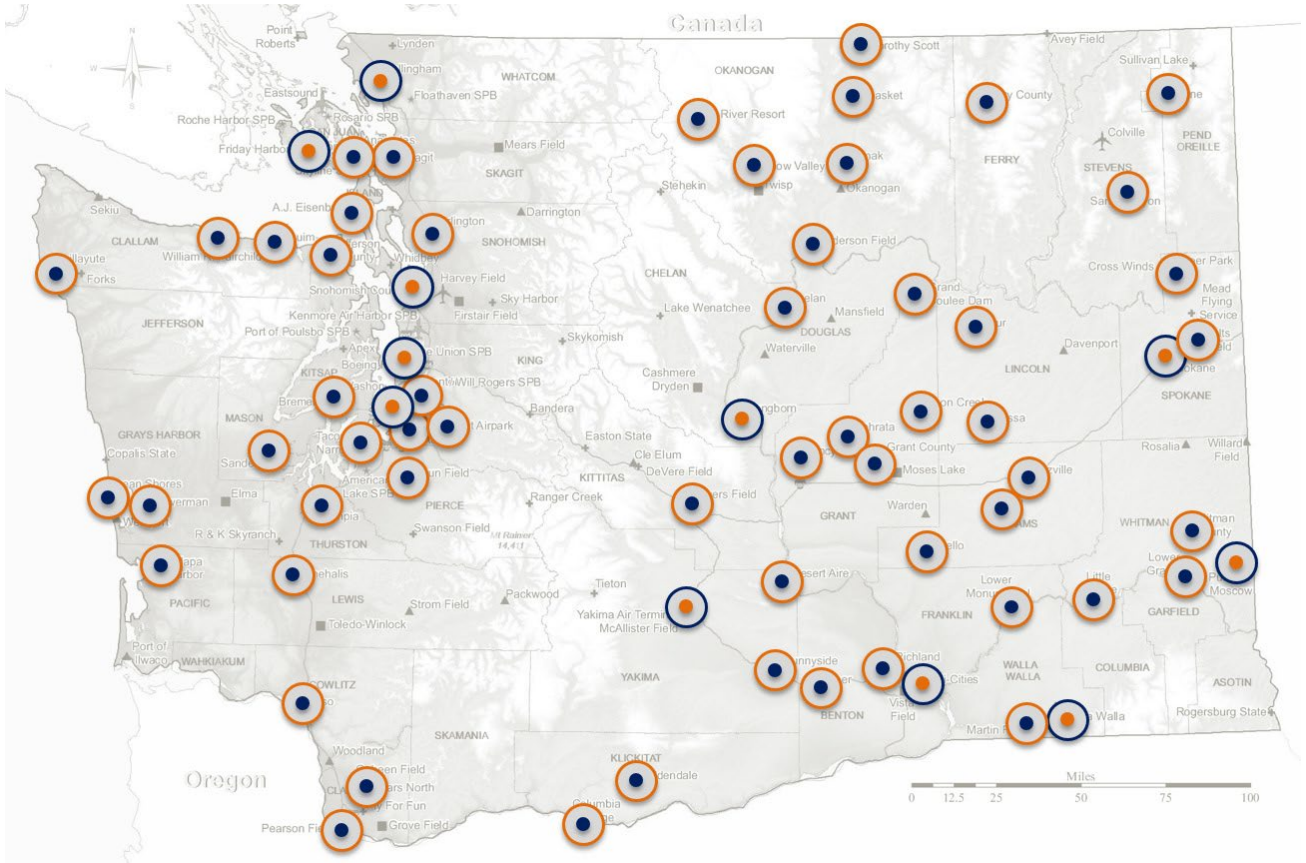
URBAN AIR POLICY COLLABORATIVE | Mission and Participants

The mission of the Urban Air Policy Collaborative is to develop a policy framework for the local implementation of advanced air mobility through the sharing of knowledge, discussion of issues, development of recommendations and collaboration with peers through an ongoing program of workshops, presentations and conversations.

The UAPC has two programs – the Cohort and the Forum

The next UAPC Cohort begins in January 2025

Regional Air Mobility in Washington



- Washington has about 140 public airports
- Currently 13 of these airports have scheduled service
- 82 of these airports have been determined to be capable of supporting electric aircraft (3000’ runway)
- Small airports can connect communities in a clean, cost-effective manner

CHEHALIS CENTRALIA
A • I • R • P • O • R • T

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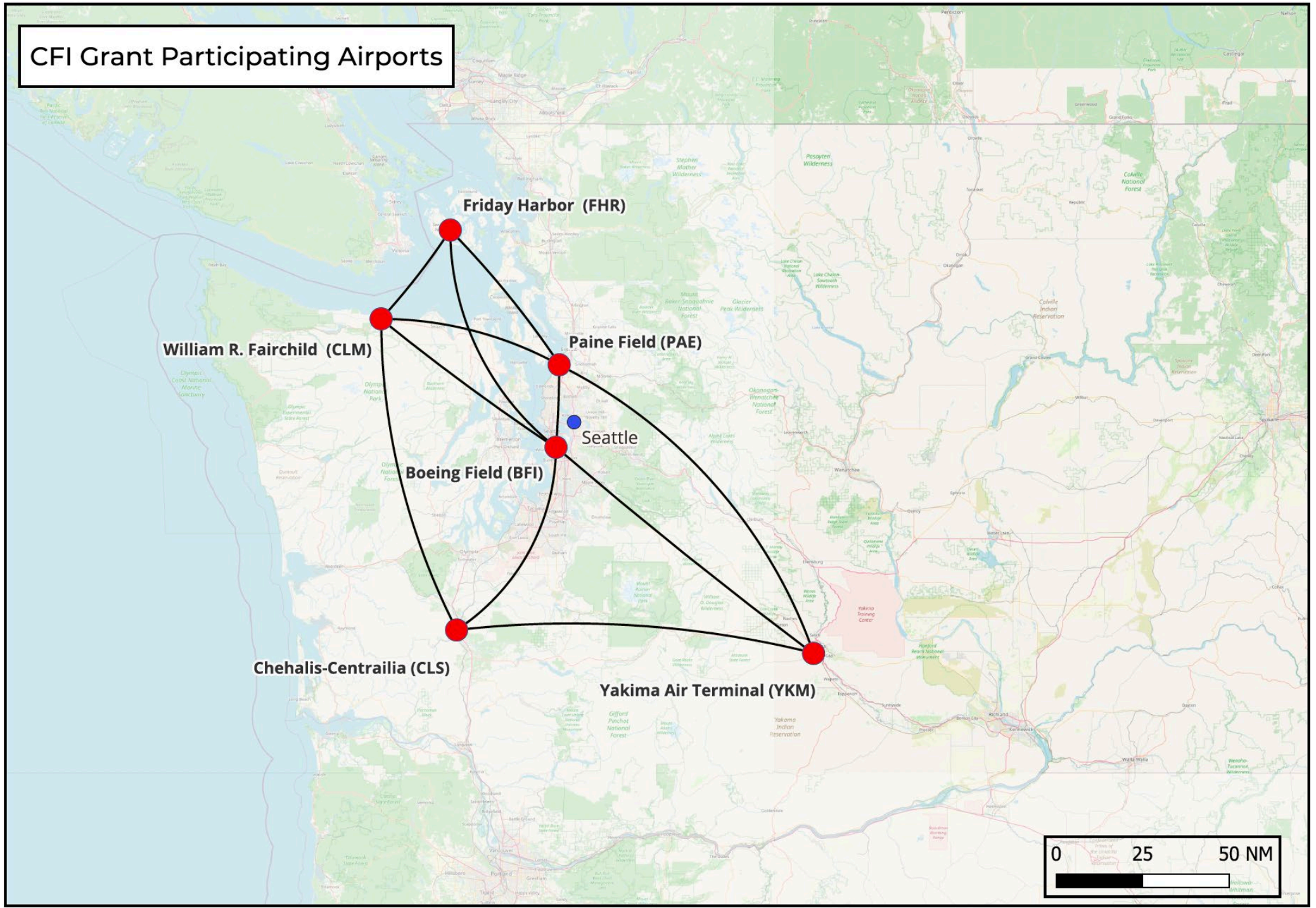
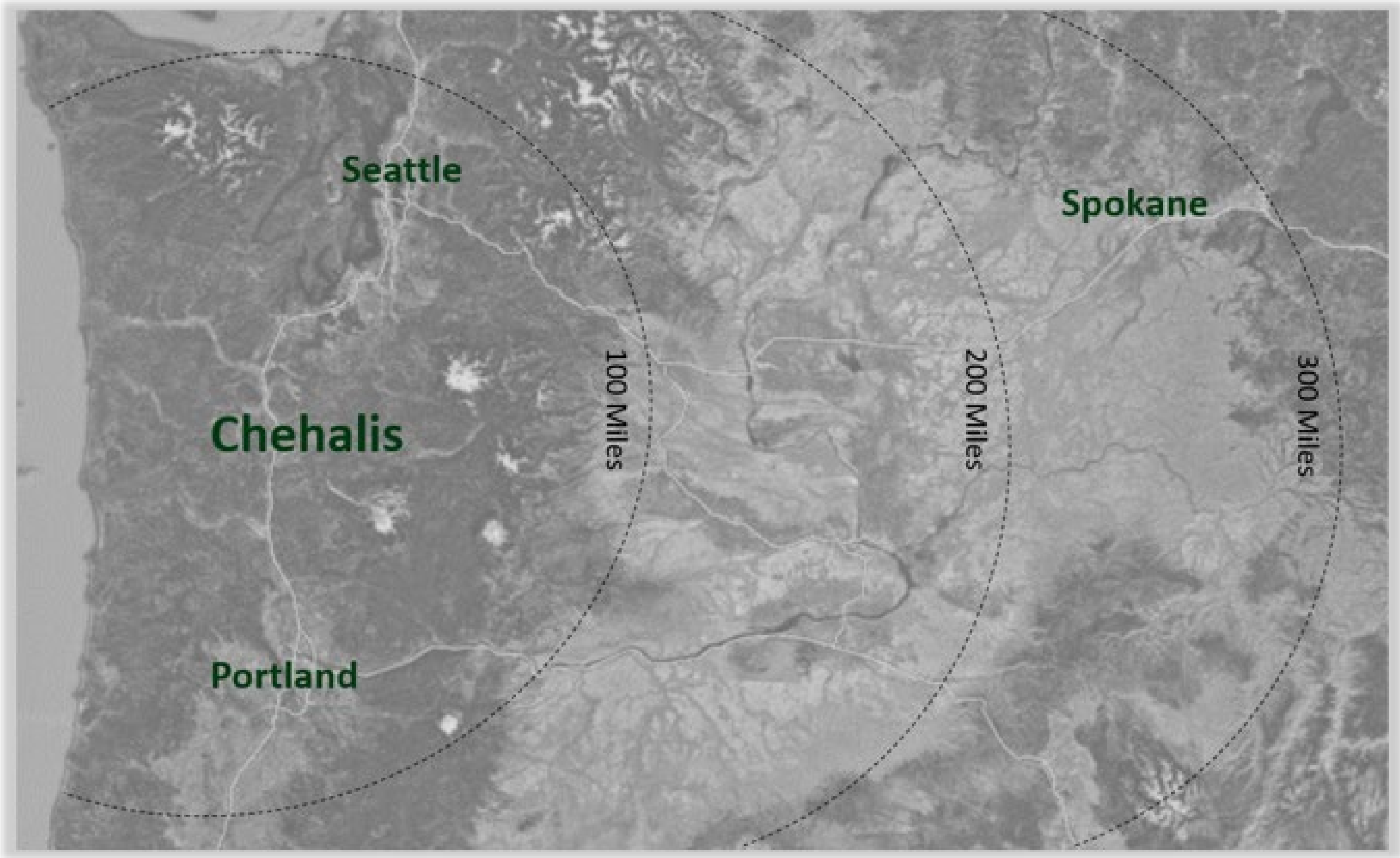
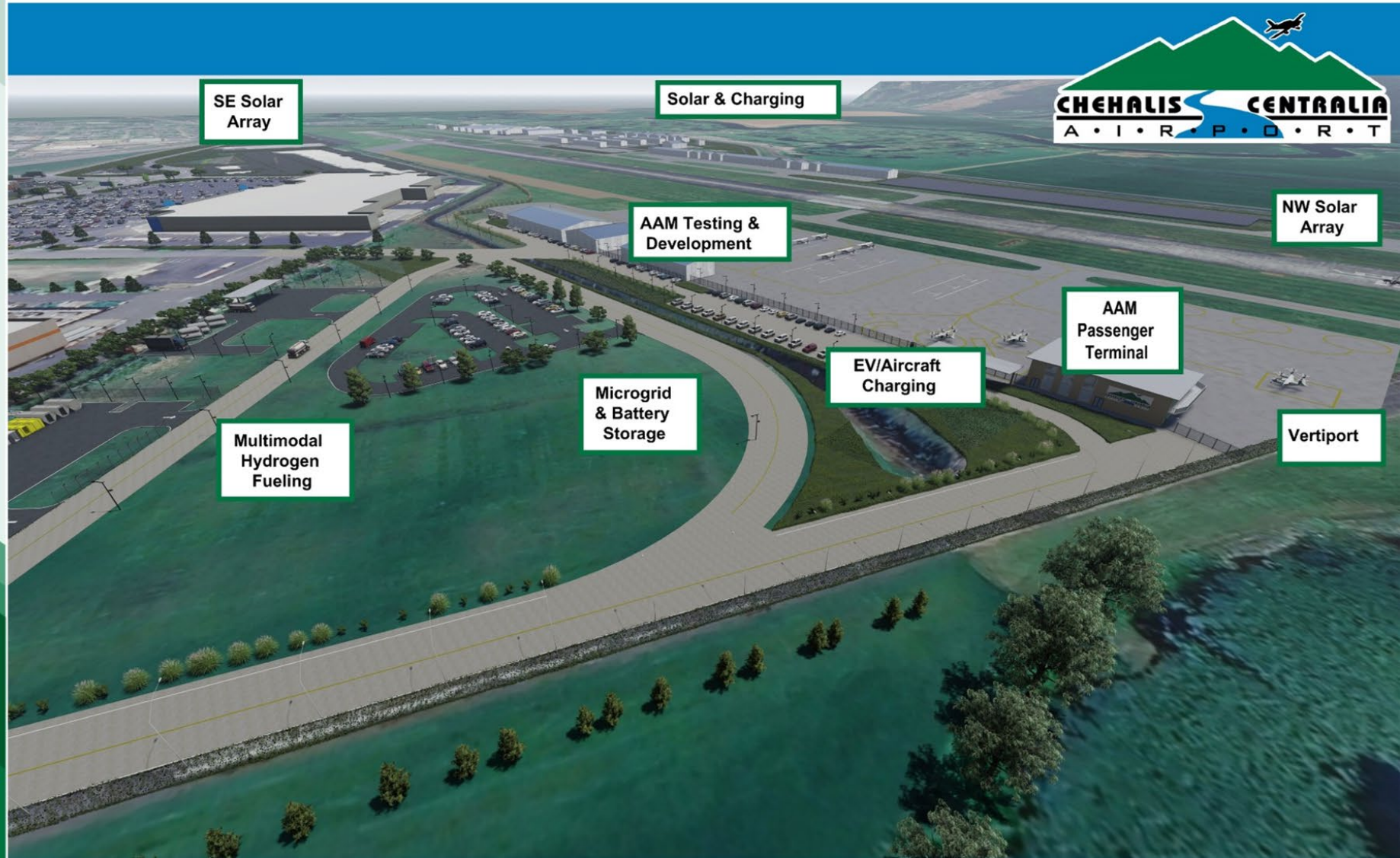

CFI Grant Participating Airports
Friday Harbor (FHR)
William R. Fairchild (CLM)
Paine Field (PAE)
Seattle
Boeing Field (BFI)
Chehalis-Centrailia (CLS)
Yakima Air Terminal (YKM)
0
25
50 NM


Seattle
Spokane
Chehalis
Portland
100 Miles
200 Miles
300 Miles

Chehalis Hub for Aviation Innovation & Sustainable Energy

CHAISE



From Past Pioneers to Future Frontiers

Pioneering electric seaplane aviation

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Harbour Air is the largest seaplane operator in the Americas

A huge part of our success is due to the beauty of the West Coast experience, which is why we're strongly committed to being an industry leader on sustainable initiatives and mitigating our climate impact

45 Aircraft

12 destinations

≈280 Flights per day

≈400,000 passengers per year

Harbour Air eBeaver

Baseline AC

- De Havilland DHC Beaver
- Single pilot, 6 passenger aircraft
- Iconic, stable, proven aircraft

Modification for eBeaver 1.0

- Frame intact, removed everything firewall forward, all engine-related instrumentation
- Updated interior including fuel system structure (156 kWhr battery pack)
- Installed magni500 electric engine
- 4 blade propeller

Considerations

- Charging infrastructure
- Take-off vs landing weight
- Charging rates
- Noise reduction


C-FJOS

Panel Discussion Topics

- What do you see as the future of AAM over the next 5 – 10 years? Specifically, what are the key use cases for the PNW?
- Discuss the role of existing airports in the implementation of regional air mobility. What are the opportunities and challenges?
- What are the funding and infrastructure needs?
- How important is collaboration between various stakeholders (government, private sector, academia, etc) in advancing AAM initiatives?
- How can AAM contribute to the economic vitality of the PNW region? What about sustainability? Resiliency?