

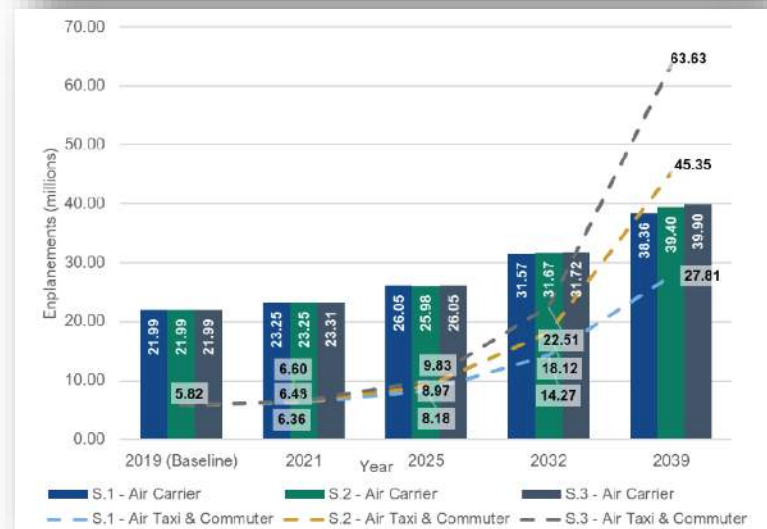
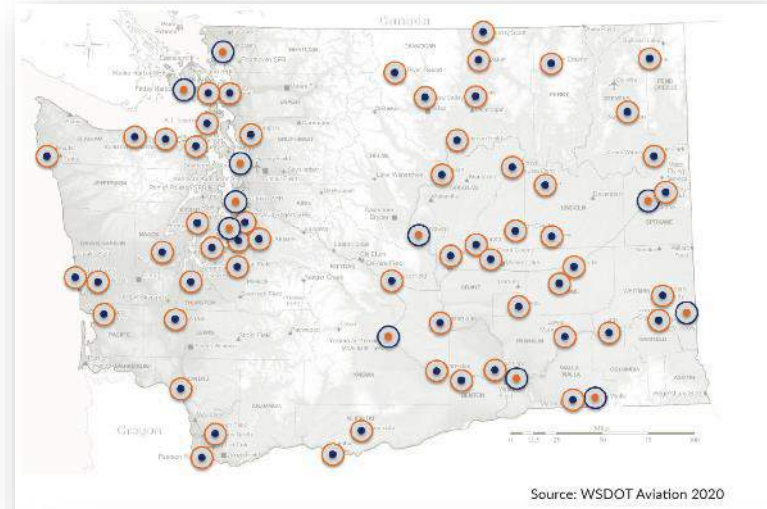
Preparing Washington State for the Future of Flight

Oregon Aviation Industries

David Fleckenstein, WSDOT Aviation Director
Max Platts, WSDOT Emerging Aeronautics Planner
April 22, 2022

Why Advanced Air Mobility

- AAM will improve access to commercial aviation for individuals and businesses
 - Leading to economic growth supporting jobs and connecting communities of all sizes
- Aviation (jet fuel and aviation gasoline) represents 21% of transportation emissions in Washington State = 9.4 million metric tons of carbon dioxide equivalent
- Electric aircraft will reduce aviation emissions and noise
- AAM technology will also help address aviation capacity issues

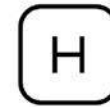


Where we have been and where we are going



AAM Strategy

- Keep pace with industry and regulators
- Be engaged at the national level
- Encourage airports and communities to pursue planning, zoning, and basic infrastructure
- Broaden state efforts to regional efforts
- Make it part of WA Aviation System Plan: Emerging National Trends paper



Funding the Infrastructure Needs

- CY 22 Airport Transformation grants for sustainability projects...electric ground support equipment, electric aircraft charging infrastructure, airport clean power production, electric vehicle charging stations...
- Sustainable Aviation Grant Program for Airport Projects (DEC 2022)
- Work to encourage congress and the FAA to include AAM infrastructure planning and sustainability projects funding



WSDOT Planning Initiatives

- **Encourage and support airports planning efforts in support of eAircraft:**
 - Include electric and other advanced aircraft in airport master planning
 - Identify use cases for electric aviation and establish the necessary electrical service to support that use case
 - Help airports implement electrical service improvements to support aircraft, electric GSE, and EVs
 - Adopt sustainability practices and projects to protect long term viability of the airport
- **Including Electric Aviation in Washington Aviation System Plan Update**
 - Exploring how electric/sustainable aviation can be used to expand air service to existing and underserved airports in state and region
- **Create an environment for the testing and subsequent commercial operation of sustainable aircraft in Washington State.**

Sustainable Aviation Partner Airports

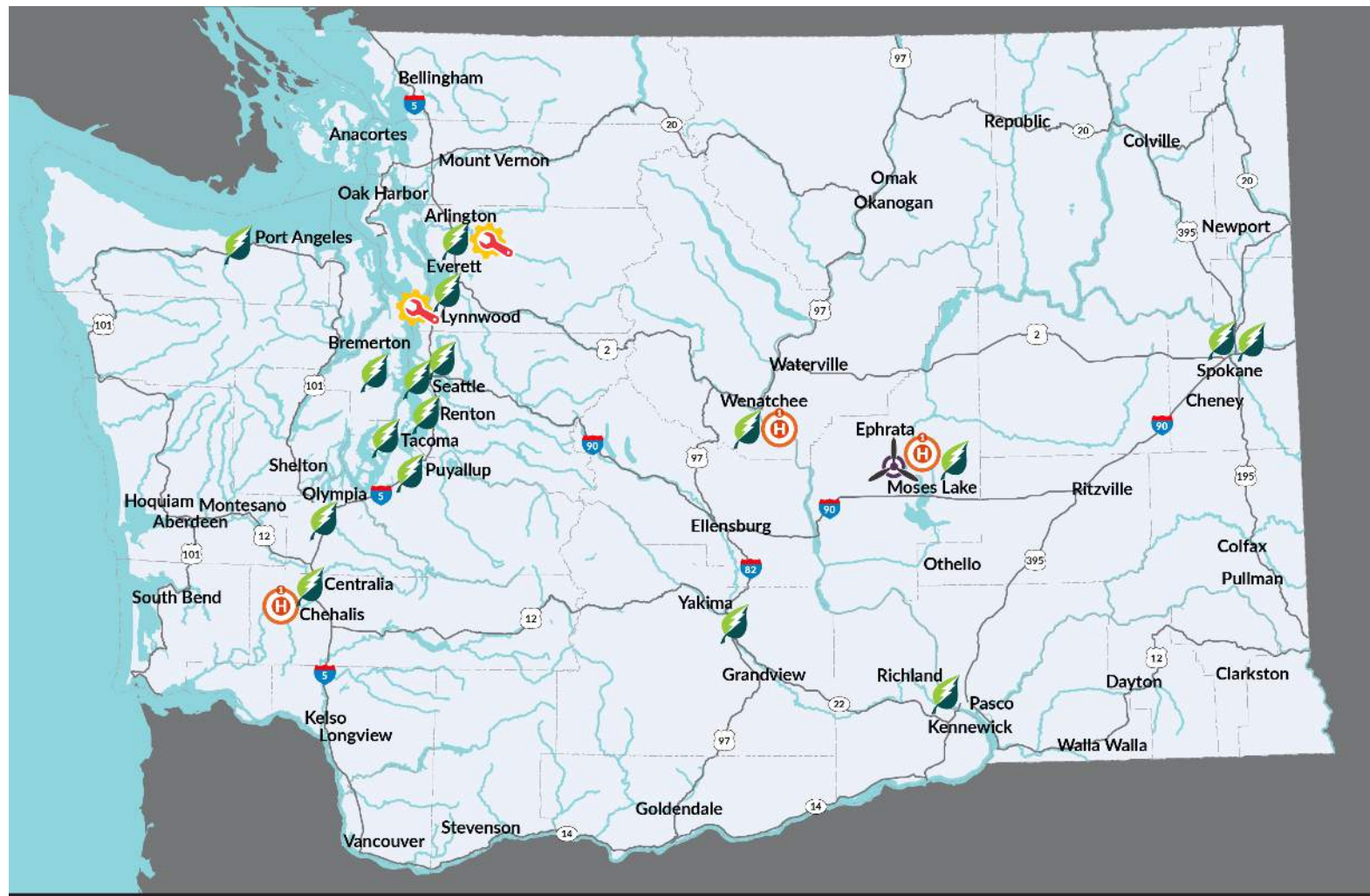
Washington is full of diverse regional communities and in order to set the groundwork for a robust air mobility network across the state, WSDOT has identified airports that are uniquely positioned to help advance emerging aviation technologies

- Goal is to help airports plan for the future and make industry stakeholder connections

Partner Airports:

- Arlington Municipal Airport
- Chehalis/Centralia Airport
- Ephrata Municipal Airport
- Grant County International Airport
- Kenmore Air Harbor
- King County International Airport
Boeing Field
- Olympia Regional Airport
- Pangborn Memorial Airport
- Pierce County Airports
- Richland Airport
- Seattle-Tacoma International Airport
- Spokane Airports
- William R. Fairchild International Airport
- Yakima Air Terminal

Sustainable Aviation Network



**Sustainable Aviation
Partner Airports**



**Electric Aircraft
Manufacturing**



Flight Testing



Hydrogen

Connecting WA and Cascadia

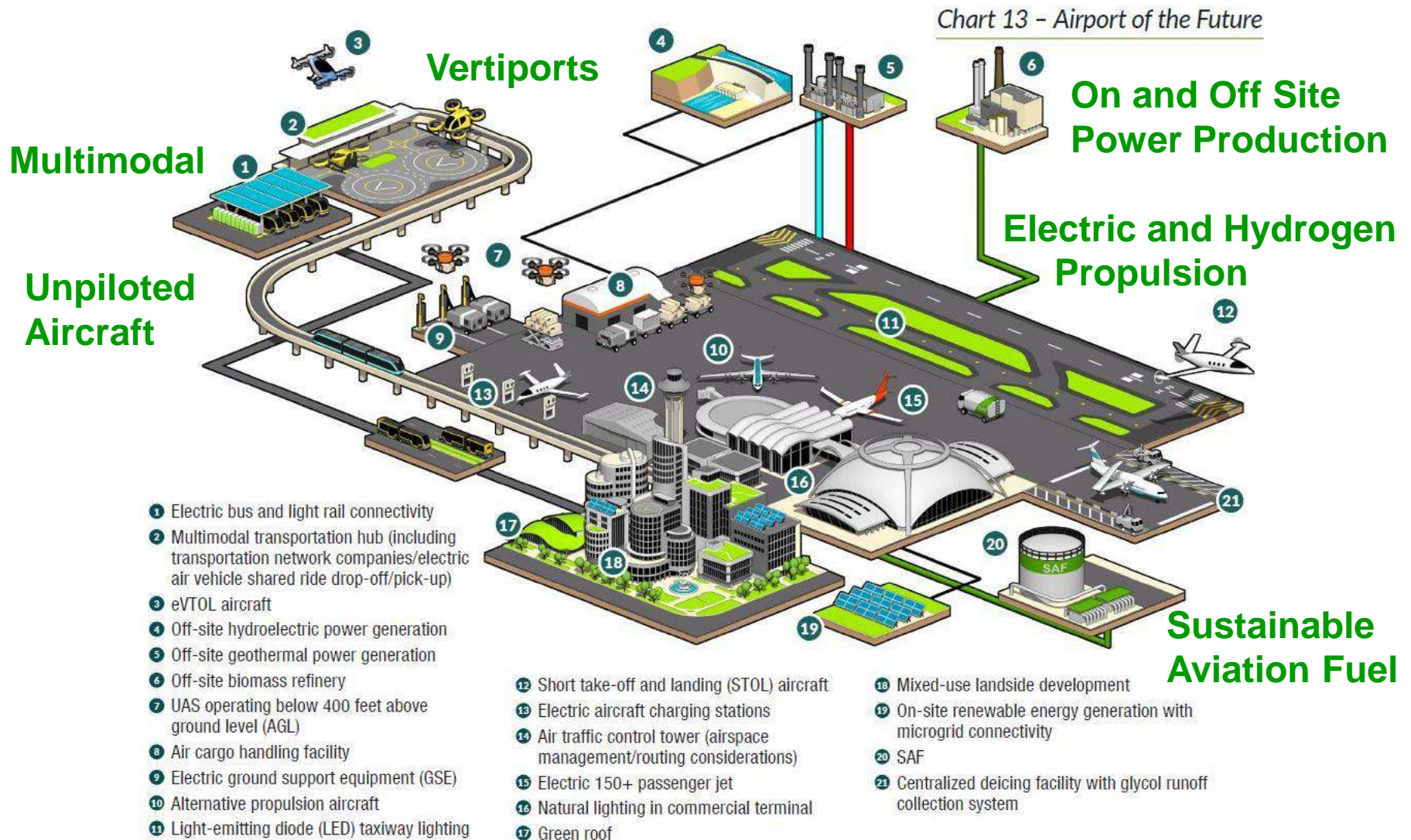
- Distributed Air Service
 - Utilizing local airports
 - Fly from local airport to an airline hub
 - Aircraft electrification has the potential to make this a reality
- Connecting Washington State Airports with the region and the world!
 - Connecting with our neighbors through air travel
 - Working with counterparts in British Columbia and neighboring states to help create an environment conducive to AAM and RAM
- WSDOT will be exploring this concept further in the Washington Aviation System Plan Update



WSDOT/University of Washington Infrastructure Study

- **WSDOT is partnered with the University of Washington Center for Sustainable Transportation to conduct an airport electrical study**
- **Report is a follow-on appendix to the 2020 WA Electric Aircraft Feasibility Study**
 - Two airports were selected from the Partner Airport Network
 - Snohomish County Paine Field, Everett, WA
 - Grant County International, Moses Lake, WA
 - Identifying electrical requirements for electric aircraft operations
 - General Aviation/Flight Training
 - Air Taxi/Commuter
 - Estimate airside electricity demand from electric aircraft and electric ground service equipment.

Airport of the Future



Source: Kimley-Horn

Questions?

David Fleckenstein
WSDOT Aviation Director

(360) 529-6550 or Fleckda@wsdot.wa.gov

Max Platts
Aviation Planner

(360) 890-5258 or max.platts@wsdot.wa.gov