

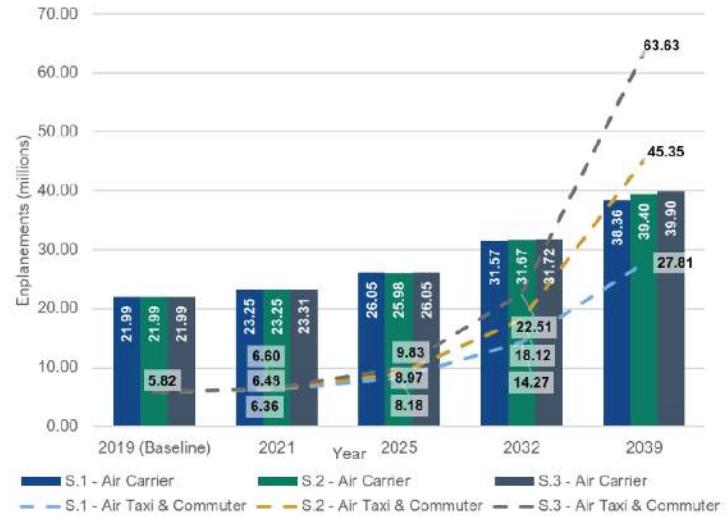
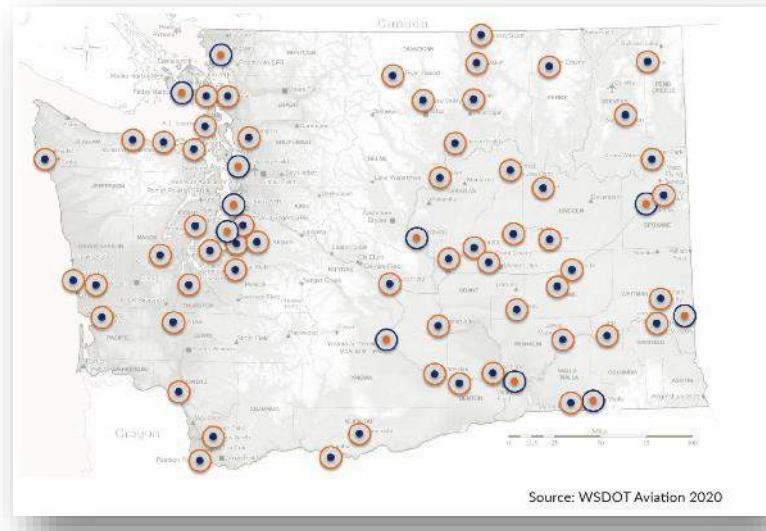
# **Preparing Washington State for the Future of Flight**

## **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

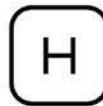


# Where we have been and where we are going



# 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



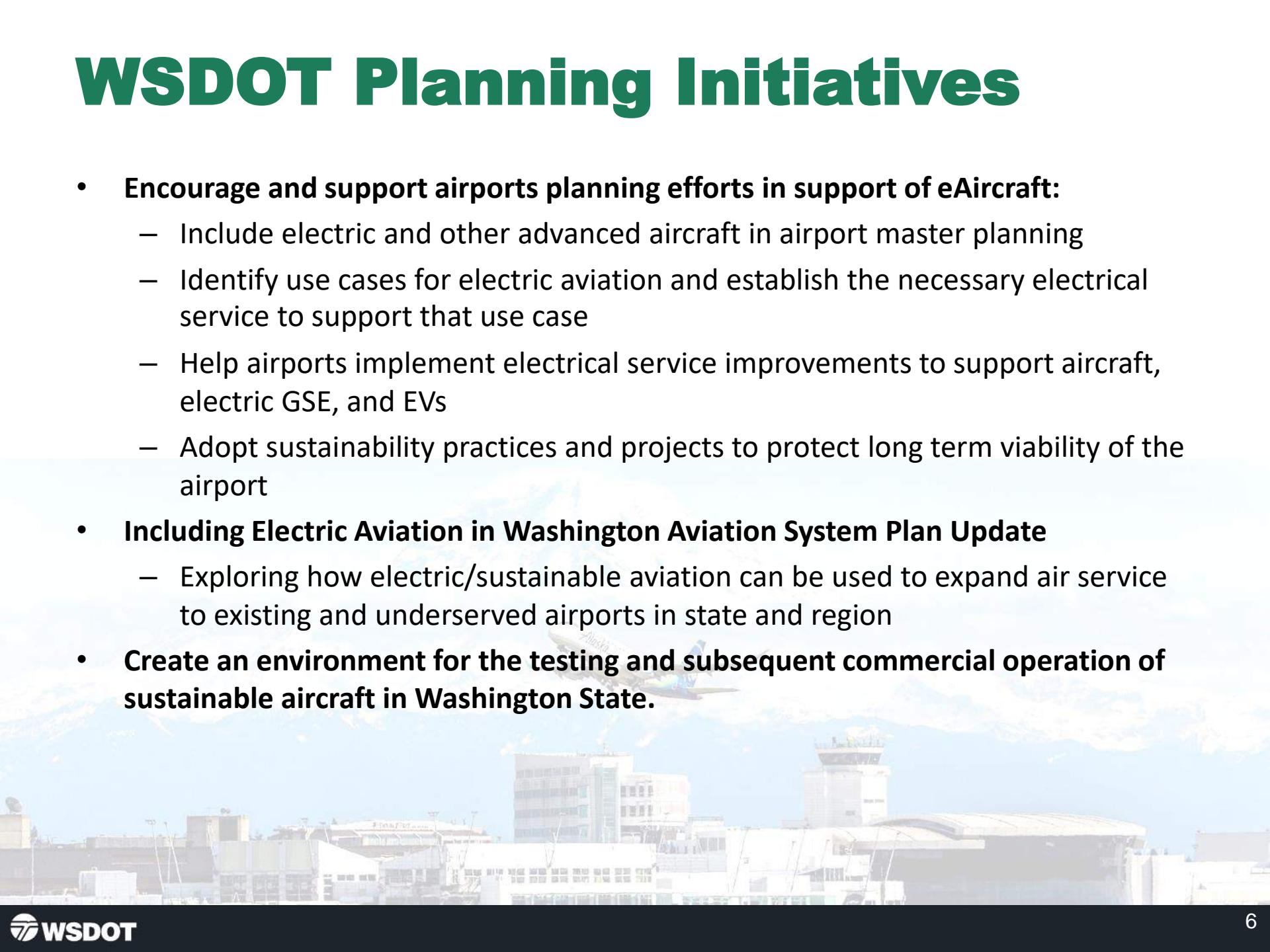
# Funding the Infrastructure Needs

- 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

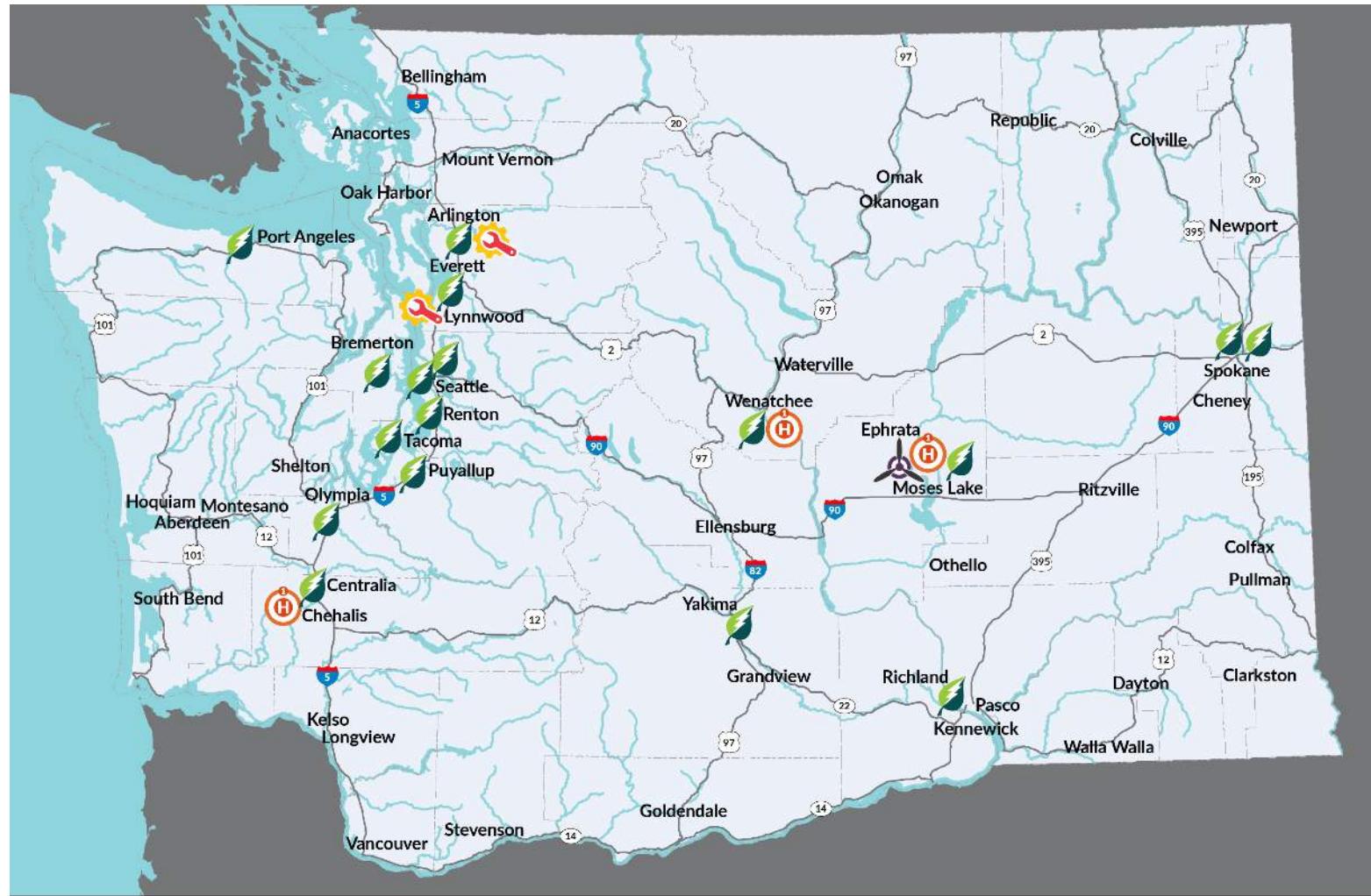
- Goal is to help airports plan for the future and make industry stakeholder connections

## 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

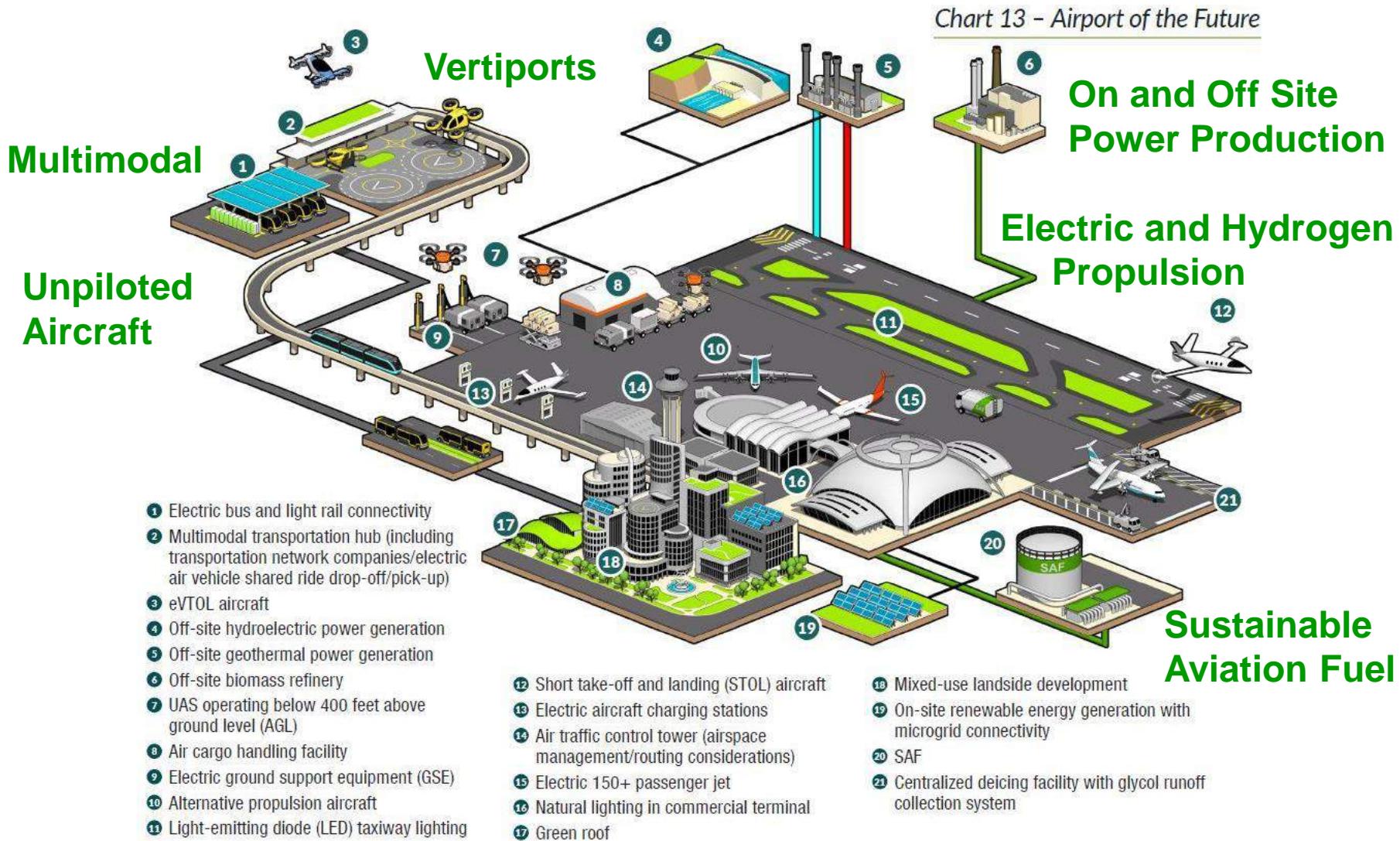
- Distributed Air Service
  - Utilizing local airports
    - Fly from local airport to an airline hub
  - Aircraft electrification has the potential to make this a reality
- Connecting Washington State Airports with the region and the world!
  - Connecting with our neighbors through air travel
  - Working 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?

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