











## **ABOUT**

## The Agency

#### **About**

• Standalone agency under executive branch.

#### **Statistics:**

- Staff of 15.
- 28 state operated airports out of 97 public use.
- 12 Airports part of National Plan of Integrated Airport Systems (NPIAS).
- Total budget of \$24.25 million/year.
- Operating budget of \$3.1 million/year.





## **ABOUT**

#### What we do

#### What does the agency do?

- Operate the 28 state owned airports.
- License airports.
- Provide grants to public use airports.
- Administer Pavement Evaluation and Maintenance programs for public use airports.
- Register public use drones.
- Work with local governments and land use planning organizations. (ORS 836.600-636)





## **CHALLENGES**

## The Agency

#### What we face:

- \$0.03/gal tax on jet fuel
- \$0.11/gal tax on av-gas
- Operations share, ½ cent has not changed since 2000.
- Registration fees on aircraft <\$700</li>
- Finding new revenue sources to replace fuel taxes when switching to electric.
- Preparing for AAM.
- Supporting education cannot be from fuel tax revenue.



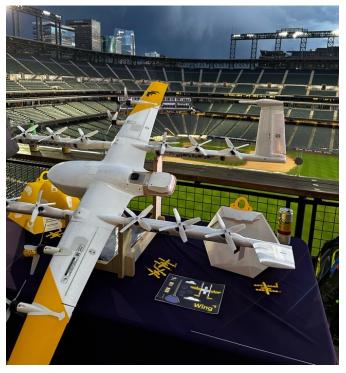


## **COMING SOON**

## Drone delivery? Flying Cars?

#### What is AAM?

- Advanced Air Mobility encompasses all forms of new aviation including:
  - Drones
  - Urban Air Mobility
  - Regional Cargo Mobility
  - Regional Air Mobility
- Using all forms of fuel including electric and sustainable fuels.





## **IS IT REAL?**

Yes.

#### It's coming...

- To cities with big populations and those states with demonstrated needs.
- And probably first to airports and will be fixed wing electric.
- And there's still issues to worked outautomation, beyond visual line of sight operations, certification...

#### How will it benefit my community?

- Regional cargo mobility
- Regional passenger mobility
- Medical and cargo delivery
- Public Safety





## **ARE WE BEING LEFT BEHIND?**

Yes.

#### What other states are doing

- Montana using drones for water flow analysis.
- Drone deliveries happening in Arkansas, Arizona, Florida, North Carolina, Virginia, Texas
- Hawaii using drones for pest monitoring and control.
- Washington DOT using drones for graffiti mitigation.
- Massachusetts using drones for railway inspection.
- Many other use cases in other states as well.





### **HOW ABOUT OUR INDUSTRY**

#### Business Oregon Survey - Drones Alone

#### The numbers

- \$840 million in economic impact supporting 2,500 jobs
  - 400 in drone manufacturing
  - 277 in manufacturing
  - 162 in flight operations
- If strategies implemented, potential of economic impact of over \$4 billion supporting close to 12,000 jobs.

OREGON UAS SECTOR ECONOMIC IMPACT SUMMARY			
Impact	Employment	Labor Income	Economic Impact
Direct	1,023.0	\$112,520,023	\$572,959,401
Indirect	627.8	\$47,842,759	\$136,513,258
Induced	813.5	\$43,008,676	\$130,247,512
Total	2,464.3	\$203,371,457	\$839,720,171
Source: IMPLAN 2022			

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"The most aggressive competing states have a number of attributes in common. Most have a UAS coordinator in either their Department of Transportation, the Economic Development Department, or as part of an FAA UAS Test Site. In addition, many states use UAS internally for infrastructure inspections and public safety functions, including accident reconstruction, search and rescue, and bridge inspections."



### WHAT WE NEED

### A Comprehensive Approach

#### **Workforce Development (in progress)**

- Inventory of education/workforce development across the state.
- Alignment and collaboration.

## **Economic Development & Efficiency (in progress)**

- Inventory of aviation companies throughout the state.
- Create Statewide UAS Taskforce or Office

#### **Strategic Plan**

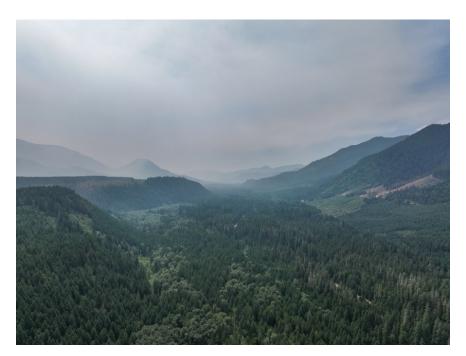
- Prioritization.
- AAM & Advanced Technologies.
- Infrastructure & Education Investment





## **RESILIENCY & ECONOMIC DEVELOPMENT**

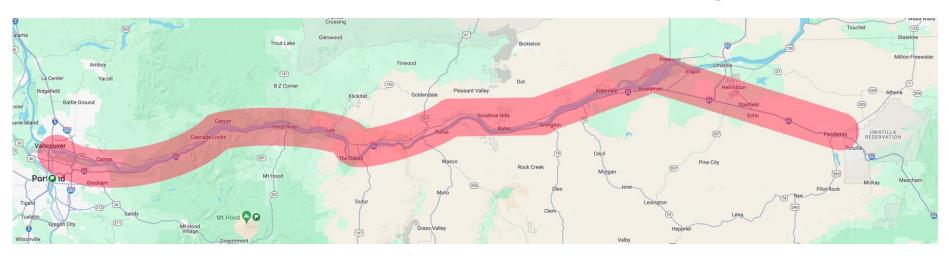
What can we do right now.





## **IMMEDIATE OPPORTUNITIES**

## BVLOS Corridor in the Columbia River Gorge



**Creating a Beyond-Visual-Line-of-Sight (BVLOS)** — The state of Oregon needs to consider establishing one or more BVLOS corridors. This will support UAS delivery and other applications. A "proof-of-concept" BVLOS system in the Hood River or Pendleton area could be a valuable first step.

- Business Oregon

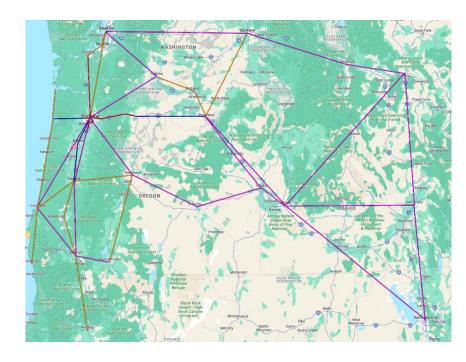


## **REGIONAL CONNECTIVITY**

#### What is the long play?

#### **Create Connections, Opportunity, and Equity**

- Build outward from key locations with infrastructure.
- Emphasizing regional connectivity with focus on connecting rural locations to the national transportation system to supplement Essential Air Service.
- Create jobs in high areas of unemployment.
- Leverage existing companies.
- Work with local education to supply a highly skilled workforce for AAM.
- Create resiliency in cases of natural disaster.
- Create multimodal interconnections.





## **ENABLING RURAL AMERICA**

#### Project Oakridge

#### Oakridge

- A small, highly motivated, economically depressed rural town with declining industry in the middle of the Cascade Range at high risk of wildfires.
- Isolated- one road in and out of the city.
- 36 miles SE of Eugene, OR.

#### Opportunity

- Failing runway on a non-NPIAS airport that needs rehabilitation at a cost of \$3 million.
- Commerce, Economic Development
   Administration Grant of up to \$30 million.
- General aviation airport of the future.





## **The Vision**

## Opportunity

#### Turning testing into real world application

- Autonomous fire detection.
  - Lightning detection and surveillance.
  - Supplement ground sensors.
- Autonomous fire mitigation.
  - AAM fire suppression.
- Cargo logistics hub.
  - Isolated rural community in the middle of the Cascades.

#### What do we have?

 Right players at the right time at the right location.



Drones being developed to track bushfires

Photo: Australian National University appearing in article in Cosmos on Nov. 18, 2023.



## **IMPLEMENTATION**

### What's needed for BVLOS Corridor & Oakridge

#### Infrastructure

- AAM Minimum Viable Infrastructure (AAAC TG16, Multistate Collaborative, NASA)
  - RID, ADS-B, and other sensors
  - Environmental sensors (smoke, EPA)
  - C2 links/spectrum (FCC)
  - Weather sensors (NOAA)
  - UTM in a box
- Electrical, communication infrastructure
- Water sources
- Pavement

#### Capital

Local, state, and federal investment.





## REPLICABLE RESULTS

## Local Project, International Impact

#### Results

- Saving lives and property by preventing disasters.
- Creating an international model for firedetection & suppression with AAM operations that can be replicated throughout United States and beyond.
- Aviation deconfliction in the real world.
- Creating a resilient cities that can serve as a model for other rural cities.
- Creating jobs for rural local economies through cargo logistics.





## **HOW CAN WE HELP?**

Ask us.

#### Collaboration

- Collaborate with the Department of Aviation and don't hesitate to ask questions!
- Work with private industry to educate and prepare the public for operations.
- Talk to MPO's about new developments.
- Connect with the public.





# THANK YOU! QUESTIONS?

