

Preparing Appalachia for an Electric Aviation Future

A rapidly developing “Next Generation” of Advanced Aviation Mobility (AAM) aircraft offers numerous opportunities for rural America through improvements to currently impeded critical uses such as emergency medical services, market access, and package deliveries. The Ohio University (OU) George Voinovich School of Leadership and Public Service (GVS), in partnership with the Appalachian Regional Commission (ARC) is assessing how potential uses of AAM can create novel opportunities to meet the medical, business, transportation, and logistical needs of communities throughout Appalachia.

Appalachian AAM Potential Use Cases

GVS has identified a set of potential applications (“Use Cases”) of AAM capabilities in Appalachia and is studying how conducting cost-benefit analyses of AAM application development requirements and projected benefits. These include:

1. On-Demand Air Taxi: Non-scheduled local point-to-point transportation
2. Regional Air Mobility: Scheduled or on-demand transportation between cities, over 50–75 mile distances
3. Airport Shuttle: Scheduled or on-demand transportation between major and regional airports and Appalachian Ohio towns and cities
4. Emergency Services: Medical services transportation system, including emergency medical evacuations, patient and equipment transportation, organ delivery, and search-and-rescue operations
5. Corporate/Business Aviation: Transportation by Appalachian Ohio businesses to conduct market development, customer service, product and service delivery, and interfacility travel
6. Cargo and Freight Delivery: Expedited logistical support of Appalachian Ohio businesses and customers in supply chain and end user distribution of intermediary and finished goods
7. Tourism: Transportation of visitors and provision of aerial touring on a scheduled and non-scheduled basis.

Regional Briefings

In this ongoing project, GVS is conducting a series of regional briefings with the fifteen Appalachian local development districts (LDDs) encompassed by the PASEAF airport cohort and other regional economic development and aviation industry organizations to integrate those use cases into local and LDD economic development strategies. The purpose of these briefings is to engage with both identified stakeholders, aviation industry and entrepreneurs, and community members to:

- 1) familiarize audiences with emerging AAM aircraft capabilities and requirements,
- 2) describe potential AAM “Use Case” applications in the Appalachian Ohio region, and
- 3) engage with audiences in prioritization of prospective AAM applications in their communities.

The outcomes of these briefings will be used to structure and prioritize potential policy and program strategies to position Appalachian communities to benefit from near- and long-term opportunities presented by future Advanced Air Mobility applications.