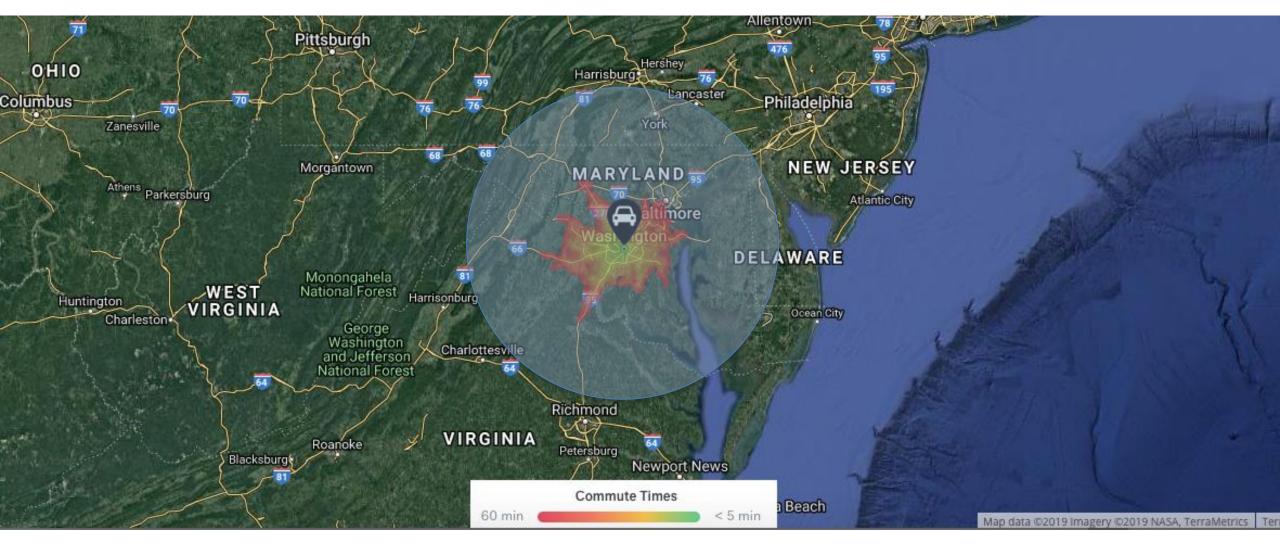
NASA Advanced Air Mobility (AAM) Urban Air Mobility (UAM) and Grand Challenge Global Urban Air Summit, Farnborough UK

the part

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## Aerial Reach – 30 Minute Journey



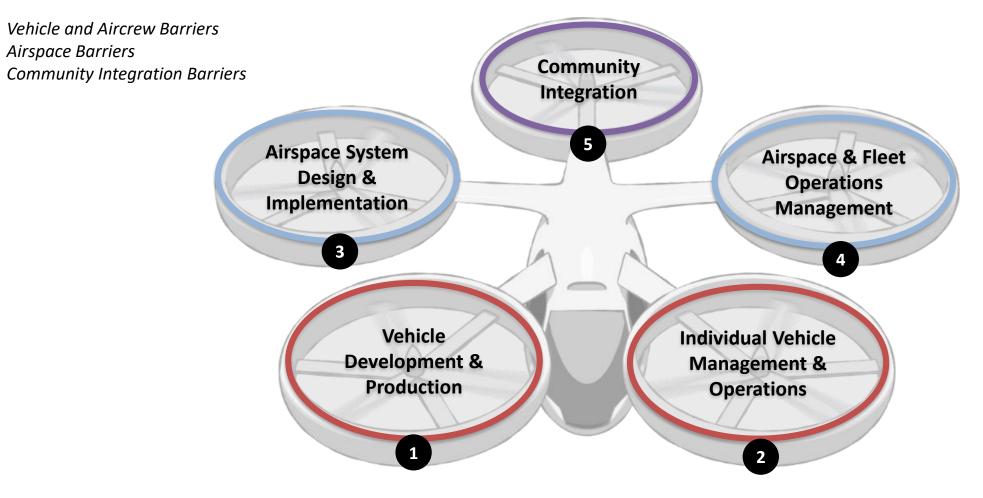


24 hr weighted average60 minute driving commuteWashington, DC.

Any time of day ~30 minute (~75mi radius) Aerial Commute Washington, DC.



## **UAM Vision and Framework**

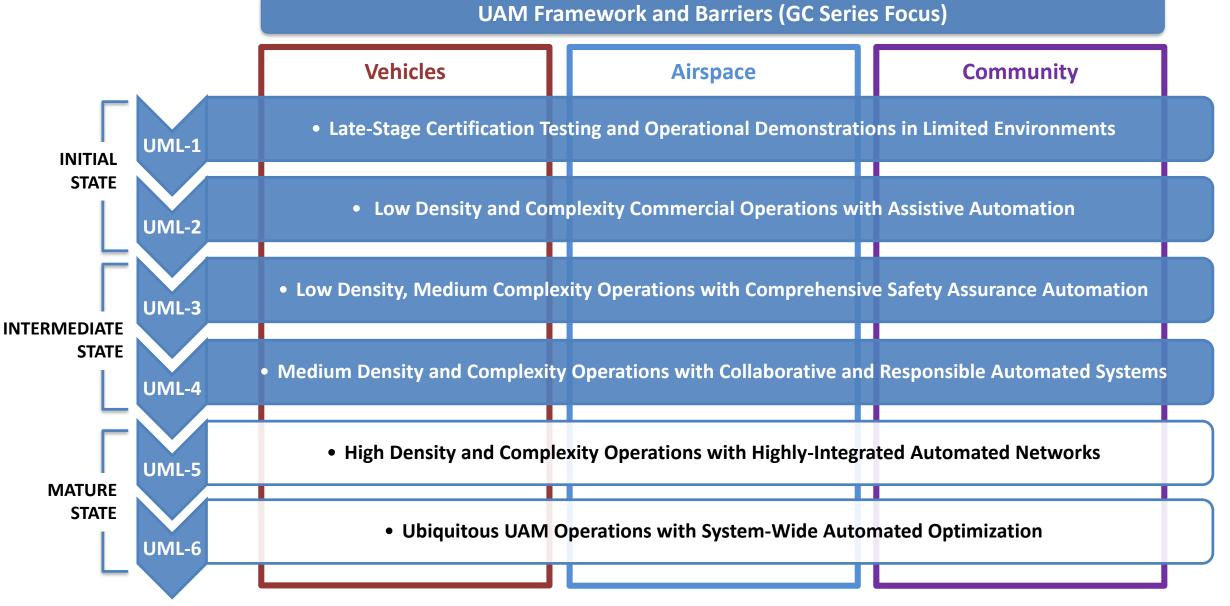


#### Urban Air Mobility (UAM) Vision

Revolutionize mobility around metropolitan areas by enabling a safe, efficient, convenient, affordable, and accessible air transportation system for passengers and cargo



# UAM Maturity Levels (UML)





## The Initial UAM "Grand Challenge"

#### Goal

Improve UAM safety and accelerate scalability through integrated demonstrations of candidate operational concepts and scenarios

### **Objectives**

- **1. Accelerate Certification and Approval**
- 2. Develop Flight Procedure Guidelines
- 3. Evaluate the CNS Trade-Space
- 4. Demonstrate an Airspace Operations Management (AOM) Architecture
- 5. Characterize Community Concerns





#### NASA First Grand Challenge (GC-1) OV-1

**CNS** Contingencies Air-to-Air Conflict Management

Constrained Conflict Management

Noise Evaluation & Response

Vehicle & AOM Interoperability

Distance: ~15 mile

X-33 Site (Elevation: 2,980 ft. UAM Ports & Approaches

> LEGEND Test Scenarios Test Locations

AFRC South Base (Elevation: 2,285 ft.)

10×1

Trajectory Planning & Compliance

Airspace Management Facilities