Motivation

- Many UAS will operate at lower altitude (Class G, below 2000 feet).
- There is urgent need for a system for civilian low-altitude airspace and UAS operations.
- Stakeholders want to work with NASA to enable safe operations.

Concept Overview

- UTM System will provide following services:
  - Airspace design and geo-fencing
  - Weather integration
  - Congestion management
  - Separation management
  - Contingency management

Progress

- Developed UTM vision document.
- Defined initial UTM design characteristics.
- Conducted an all-stakeholder workshop to gather feedback.

UtM Workshop

- Overwhelmingly positive response.
- Stakeholders support NASA’s leadership and vision.
- Many partners are ready to engage.
- There is urgency to put a system in place.

Partnerships

- UAS manufacturers.
- Online retailers.
- Communication/navigation/surveillance providers.
- System integrators.
- Emerging UAS operators.
- Cargo operators.
- FAA, NOAA, DoD.
- UAS test sites.

Next Steps

- Obtain authorization to proceed with further development of UTM.
- Refine UTM design, architecture, and use cases.
- Explore partnership arrangements to engage traditional and non-traditional partners.
- Define a spiral development process to do rapid prototyping and early fielding with regular updates.

Near-term goal: enable low-altitude operations within 5 years.
Long-term goal: accommodate increased demand 10-15 years.