Achieving the promise of Unmanned Aircraft Systems (UAS) for Smarter Mobility

Presentation for DDC UAS Midwest Conference

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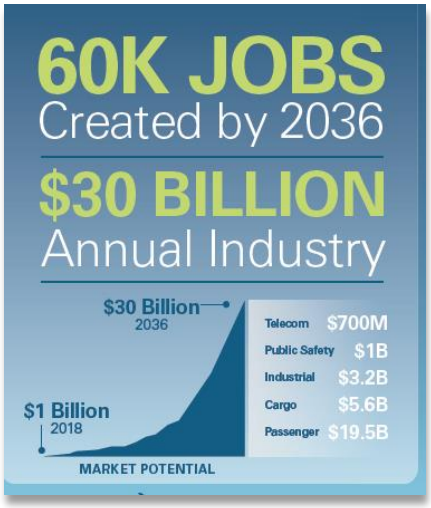
The drone industry in the U.S. has potential to soar to $30B[1]



50%

By 2024, commercial UAS will drive **50%** of total UAS economic activity and continue to increase its share[2]

$25B+

Package and Passenger delivery present **25B+** market opportunity. **750M** passenger trips and **500M** package deliveries annually by 2030[3]

Achieving the promise of UAS requires the right regulatory environment and investment at both the state and federal level

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[1]Aerospace Industries Association (AIA) – US Market size for larger UAS
[2]Teal Group Report
[3]NASA UAM Market Study

States are investing to prepare for growth and enable safety

NUAIR
MAKING FUTURE SKIES SAFER

NORTHERN PLAINS UAS TEST SITE

NDDOT
North Dakota Department of Transportation

flyOhio

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

UDOT
Keeping Utah Moving

Kansas Department of Transportation
KANSAS DEPARTMENT OF TRANSPORTATION (KDOT)

POTENTIAL *NEW* OPPORTUNITIES/ROLES:

- PLAN/ESTABLISH "CORRIDORS IN THE SKY"
- MANAGE UAV TRAFFIC/CORRIDOR ACTIVITY
- REGISTER/AUTHORIZE UAS USERS
- SET POLICIES (TAKE-OFF/LANDING, NO FLY ZONES, ETC.)
- PROVIDE ALERTS & ADVISORIES (EVENTS, CHANGES)
- ENSURE PUBLIC SAFETY/ENGAGE COMMUNITY

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UAS corridors open up new commercial opportunities

- Hospital logistics – medical supply, lab work, organs
- B2B supply chain – movement of parts, materials
- Public sector services (Public Safety/First Responders, DOT's own transport operations)
- Future: Package Delivery and Urban Air Mobility

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What is needed to support UAS corridors?

VISIBILITY/SITUATIONAL AWARENESS: Integration w/ other USS, GCS, radar feeds, etc.

FLIGHT PLAN AUTHORIZATIONS: Based on policies/rules e.g., LAANC and other state/local -assigned altitudes, direction, no fly zones, etc.

CONFORMANCE MONITORING/airspace negotiation across USS's

AWARENESS OF ADVISORIES: FAA, State, local, FAA TFRs

REMOTE ID INSIGHT: Insight into UA/Pilot Remote ID and relevant data

APPROVAL SERVICES: To conduct advanced UAS operations on corridor

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Delivering services needed for UAS corridors

USS/UTM (TRAFFIC MANAGEMENT)

- UAS Registration
- Flight Planning
- Flight Authorization
- Flight Operations Mgt.
- Conformance Monitoring
- Deconfliction
- LAANC
- GCS Integration
- Remote ID

USS INTER-WORKING

- Amazon
- Google
- Airbus
- Anra
- Unifly
- Uber
- Skyward

SURVEILLANCE AND OPERATIONAL INSIGHTS SERVICE FOR CRITICAL INFRASTRUCTURE

WAIVERS & EXEMPTIONS FOR ADVANCED UAS OPERATION ENABLEMENT

- BVLOS, Multi-vehicle, over people

ON DEMAND AIRSPACE MANAGEMENT APPLICATIONS

- First Responder
- Department of Transportation

REPORTING, ACCOUNTING & SETTLEMENT

- Corridor usage reports & analysis
- Billing, Clearing and Settlement

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The opportunities are game-changing and life-changing!

Historic organ delivery by drone – AiRXOS & University of Maryland

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Questions?

THANK YOU

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