The Google Maps (Waze) for Drones
HIGHWAYS IN THE SKY - THE NEXT KEY AMERICAN INFRASTRUCTURE

Our core purpose is to **SAFELY INTEGRATE DRONES** into the national airspace and our communities at scale.

**AIRSPACE LINK** is partnering with Federal, State & Local Government to deploy key **DIGITAL INFRASTRUCTURE** for every drone operation.

#DRONESFORGOOD
IS YOUR STATE & YOUR LOCAL GOVERNMENTS PREPARED FOR THE NEXT DIMENSION OF MOBILITY?
DO YOU KNOW
THE RULES & REGULATIONS?
WHEN AND WHERE FLIGHTS ARE HAPPENING?
CURRENT STATE OF MARKET:
FEDERAL REGULATORS LAYING THE FOUNDATION FOR INDUSTRY GROWTH

- **52,411 Drones Registered in Washington (10th in the US)**
- **Final ruling for Remote ID Flights Over People**
- **NASA Unmanned Aircraft System Traffic Management (UTM) Testing**
- **FAA Modernization & Reform Act requires plan for commercial drones by 2015**
- **FAA Low Altitude Authorization & Notification Capability (LAANC - UTM)**
  - White House authorizes drone registration
- **FAA Reauthorization Act mandates Integration Pilot Program (IPP)**
  - 10 sites, 2 cities – Reno & San Diego
- **Part 107 ruling for commercial operations (License)**
  - 14,657 Commercial Drone Pilots in Washington (6th in the US)
- **FAA BEYOND Visual Line of Sight (BVLOS)**
  - NASA Advanced Air Mobility
- **FAA Type Certification**
  - Digital and Physical Drone Infrastructure Deployment
- **BVLOS, Package Delivery Cargo, Passengers Advanced Air Mobility**

Timeline:
- **2012 - 2015**: FAA Modernization & Reform Act requires plan for commercial drones by 2015
- **2016**: Part 107 ruling for commercial operations (License)
- **2017**: FAA Low Altitude Authorization & Notification Capability (LAANC - UTM)
- **2018 - 2020**: FAA Reauthorization Act mandates Integration Pilot Program (IPP)
- **2020 - 2022**: Final ruling for Remote ID Flights Over People
- **2021 - 2022**: FAA Type Certification
  - Digital and Physical Drone Infrastructure Deployment
- **2022 - 2025**: BVLOS, Package Delivery Cargo, Passengers Advanced Air Mobility
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2012 - 2015
- FAA Modernization & Reform Act requires plan for commercial drones by 2015

2015 - 2019
- 1.7 million drones registered with the FAA and 52,411 in Washington

2016
- UAS Flights + Operations
- 8.5 million drones in the US today, 250 million drones globally
- The drone cargo transport & delivery market will grow to $7.4 Billion by 2027
- The drone market will grow to $42.8 billion by 2025 from $22.5 billion in 2020
- 1.7 million drones registered with the FAA and 52,411 in Washington

2017

2020 - 2022
- BVLOS, Package Delivery Cargo, Passengers

2021 - 2022
- Advanced Air Mobility

2022 - 2025
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Digital and Physical Drone Infrastructure Deployment

BVLOS, Package Delivery Cargo, Passengers

Advanced Air Mobility

2012 - 2019

2017

2022 - 2025
INDUSTRY CHALLENGE – SAFELY SCALING DRONE OPERATIONS

Flying a drone safely + legally

- 40% of US population reside in controlled airspace and require FAA approval
- 400 local ordinances. Every region has different rules, regulations, hazards and risks

DIFFICULTY: ★★★★

Flying a drone Beyond Visual Line of Sight

- Expensive and time consuming to receive FAA waiver approval
- $100k+ and 3+ months to generate safety case for the FAA to receive waiver approval

DIFFICULTY: ★★★★★

Flying advanced drone operations at scale

- Extremely expensive and time consuming to install and manage infrastructure
- $1m+ and 8+ months to receive FAA approval, requires aircraft type certification

DIFFICULTY: ★★★★★

NO SHARED UAS INFRASTRUCTURE
OPPORTUNITIES & CHALLENGES FOR DRONE PACKAGE DELIVERY

Opportunities

• New mobility option (supplies, packages, people).
• Save lives (public safety, organ delivery, 10 in WA).
• New jobs, new revenue.
• Serve up to **53.9 of the population**.
• Recover up to **$582.5 million per year in total time savings** for consumers.
• Help **22,000 people** with mobility challenges to obtain their prescription medication.
• Avoid up to **294 million miles per year** in road use and up to **580 car crashes per year**.
• Reduce up to **113,900 tons per year of CO2 emissions**, equivalent to 46,000 acres per year of new forest.

Challenges

• Public acceptance & community engagement
• Building the infrastructure
• Maintaining the Infrastructure
• Enforcing the rules and regulations
• Policy & regulations (BVLOS)
• Communication between Federal, State & Local Government, commercial & recreational drone pilots

Virginia Tech 2020 Drone Delivery Study
OPPORTUNITIES & CHALLENGES FOR DRONE PACKAGE DELIVERY

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**UAS Flights + Operations Revenue**

- Free for resident recreational flyers and simple Part 107 commercial operations.
- Estimated UAS infrastructure Gov. revenue of $3.6m per year per 1m population.
- Shared use UAS Infrastructure for advanced commercial UAS operations.
- Safe Registration & Permitting Fees.
AIRHUB PLATFORM & SERVICES HELPS AGENCIES PREPARE AND PARTICIPATE

Low Altitude Authorization and Notification System
Unmanned Aircraft System Traffic Management (UTM)
Simple Flight Authorization (Residents, Business and Commercial)
Advanced Flight Authorization
Safety Case Reporting
Flight and Route Optimize Planning
BVLOS Waivers
Authoritative Visualizations

Transportation Planning
Risk Modeling
Advisory Management
Flight Reports
Edit & Publishing
Permitting
Ordinance
Federal Data Exchange
Flight Restrictions
Geo-Enrichment
Machine Learning

FAA Approved
729 Airports

AirHub™ for Pilots & Developers

AirHub™ for Government
FLYSAFE PROGRAM | TURN-KEY SOLUTION FOR STATE & LOCAL AGENCIES

- Register your drone (see rules)
- Check airspace rules and restrictions
- Obtain necessary authorizations
- Understand what you are flying near and over
- Have a safety checklist
- Use our free interactive map and authorization tools
BEER DELIVERY: NEW HAVEN
CITY OF ONTARIO CALIFORNIA
Take the High Road.
OHIO MULTI-MODAL ORGAN TRANSPORT
Stadium Advisory
Flying drones in and around stadiums is prohibited starting one hour before and ending one hour after the scheduled time of any event. Specifically, UAS operations are prohibited within a radius of three (3) nautical miles of the stadium or venue.
Ohio Multi-Modal Organ Transport
Golf Course Food Delivery
Detroit Aerotropolis
AUTOMOTIVE PARTS DELIVERY IN MILWAUKEE

Identify top sites based on order frequency

Understand airspace characteristics and ground risk