AIR TAXI – THE FUTURE OF VERTICAL TRANSPORTATION
VERTICAL TRANSPORTATION

- The Need
- Air Taxi 101
- Vertiport Example – Gannett Fleming’s Skyport
- Q&A
RESHAPE THE CITIES OF TOMORROW...

SIMPLER

CLEANER

SAFER

IMPROVE QUALITY OF LIFE

LESS TRAFFIC CONGESTION

MAXIMIZE HUMAN WELL BEING
ODOT’s Mission

“To provide easy movement of people and goods from place to place, we will:

Take care of what we have;
Make our system work better;
Improve safety;
Enhance capacity.”
THE BASICS

• What
  • Small passenger aircraft

• Where
  • 500-2,000 ft in the air

• How
  • Vertiports?

• When
  • On-demand
APPEAL

- Reduced Noise Signature
  - At least 15 dB quieter than any helicopter
- Increased Redundancy
  - Distributed Electric Propulsion
- Greener Energy
  - No Carbon Emissions
- Increased Safety
  - No Jet Fuel
- Future Autonomous Operations
  - Filling the pilot shortage void
CHALLENGES

Infrastructure

- Vertiports need to be defined
- Inaccurate & unaccounted for infrastructure
- Airspace integration
- Rapid recharging
- Power grid support
PLAYERS

ASTM
American Society of Testing and Materials International

FAA
Federal Aviation Administration

ICAO
International Civil Aviation Organization

NFPA
National Fire Protection Association

IBC
International Building Code

IFC
International Fire Code
THE UBER CHALLENGE

NOW

Developing E-VTOL vehicles

Roll-out and adoption

2020
2023

Move 600 people in 1 hour

Los Angeles  Dallas  Dubai

Move 4000 people in 1 hour
OUR PARAMETERS

100' FSA
70' FATO
45' TLOF

200 FEET from FATO to FATO

7.5' SAFE WALKWAY
45' PARKING PAD

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OUR PARAMETERS

LANDING & TAKE-OFF AREA

PASSENGER LOADING/UNLOADING & CHARGING AREA

PASSENGER STAGING AREA

THE "PAW" MODULE

Supports up to 52 VTOLs per hour

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OUR SOLUTION

HOW TO MITIGATE FOR NOISE WITHOUT DOWNWASH

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THROUGHPUT 2025 GOALS

Baseline
150 ARRIVALS & DEPARTURES/HOUR

Optimization
208 ARRIVALS & DEPARTURES/HOUR

1.3 acres footprint

Supports up to 52 VTOLs per hour
LANDING OR TAKE OFF EVERY 24 SECONDS
| **1** | DROP-OFF/PICK-UP
• Connection with public transportation
• UberPool Cars, Uber Jump
• Plaza and street furniture |
| **2** | AUTONOMOUS VEHICLE STORAGE
• Chargepoint recharging stations |
| **3** | AUTONOMOUS VEHICLE STORAGE |
| **4** | UBER ELEVATE SKYPORT
• Uber Air
• Photovoltaic Cells
• Acoustic Baffles / Safety Barrier |

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OVER 200 FLIGHTS/HR WITHIN 1.25 AC

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Questions

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