

The background of the slide is a light blue gradient with a faint, semi-transparent map of Michigan overlaid. The map is centered and occupies most of the background area.

Michigan Unmanned Aerial Systems Task Force

Welcome to MDOT's Office of
Aeronautics

September 6, 2017 Agenda

- Welcome
- Overview of Private Use Issues
- Discussion of Private use Issues
- Selection of Report Sections for Private Use
- Future Meetings – Schedule
- Public Comment

UAS - Private Sector

Opportunities & Challenges

Table of Contents

- Applications
- Expected Sales
- Value of Drones
- Concerns and Barriers
- Legislation
- Questions



Applications

- Inspections

- Public Infrastructure
- Utility Infrastructure
- Facility Management
- Insurance



- Marketing

- Tourism
- Advertising



- Mapping / Surveying

- Construction
- First Responders / Law Enforcement
- Agriculture



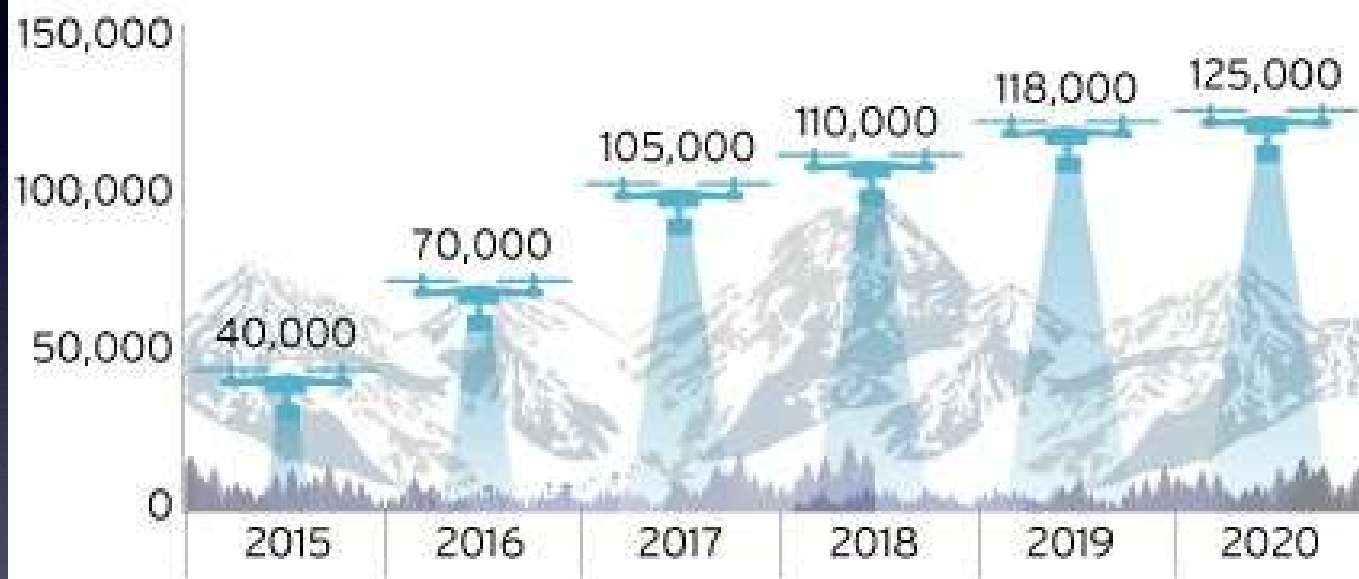
DEM / DSM



CONTOURS

Expected Sales

Projected Annual Sales of Unmanned Vehicles

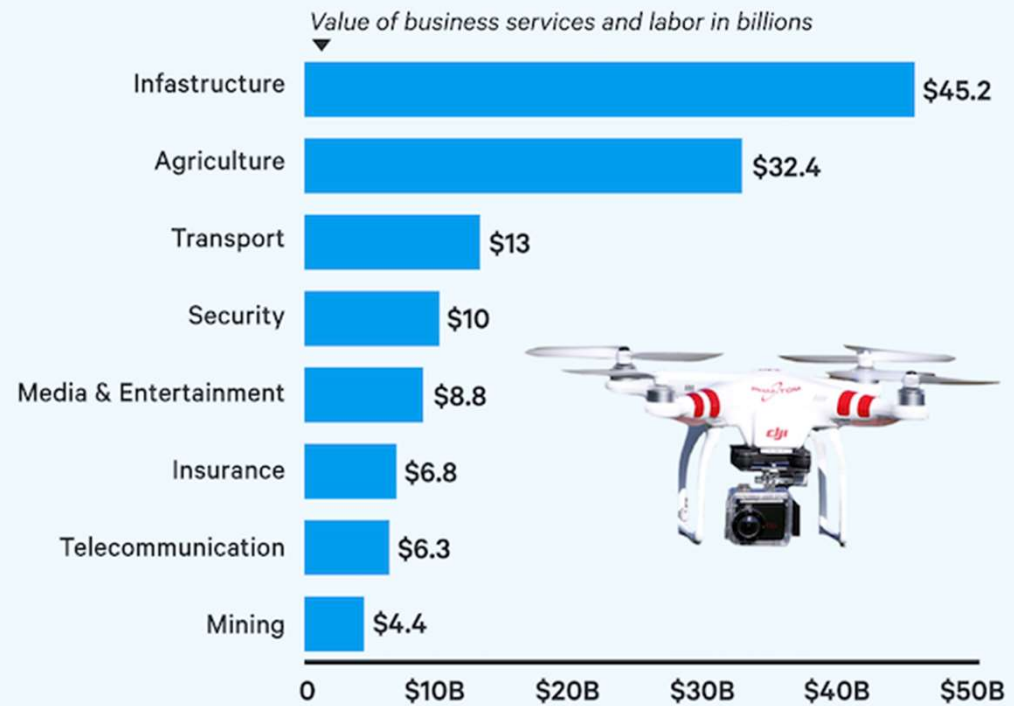


Source: Association of Unmanned Vehicle Systems International.⁴

Where will they be used?

Value of Drones

Predicted value of drones by industry



SOURCE: PwC

TECH INSIDER

Creativity will decide future of UAV's

Value of Drones

Why use UAV's in commercial/private space?

- **Financial**
 - Faster, more cost effective, method yielding better results
- **Safety**
 - Replacing the human element
- **Innovation**
 - New opportunities appear frequently

Value of Drones

Specific Example: Utility Infrastructure

- **Electric Line Inspections**

- Financial
- Safety
- Carbon Footprint
- Customer Value (reliability)

- **Wind Turbine Inspections**

- Financial
- Safety

- **Gas Facility Inspections**

- Financial
- Safety



Concerns and Barriers

- **Privacy / Trespass**

- Example: Real Estate – Imagery of neighbors homes
- Communication, education, and transparency

- **Secured Sites (Prisons)**

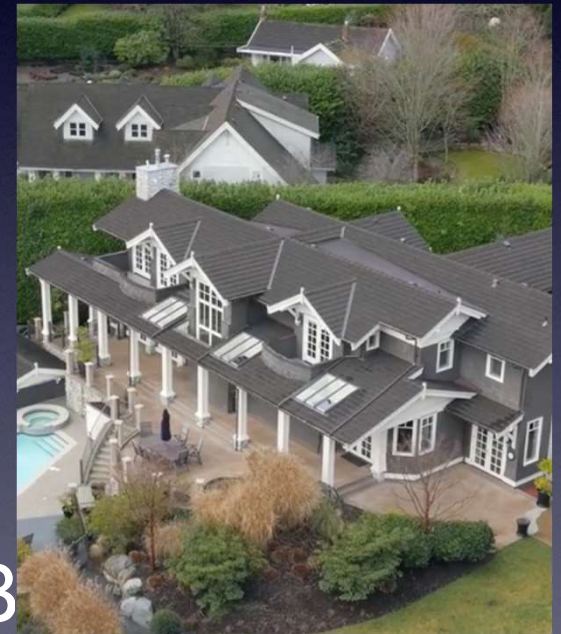
- Responsibility of Law Enforcement
- Funding may need to come from state congress

- **Variation in Rules Across the State**

- Creates issues for state-wide programs

- **Beyond Visual Line of Sight (B**

- Limits some very beneficial use cases



Concerns and Barriers

Privacy with Imagery

- Unauthorized capture of people in imagery
 - Imagery cannot be used to promote a product, service, or idea
 - Example: Mapping a park and capturing imagery of people having a picnic.
 - Allowed under current Privacy Laws
- Authorized capture of people in imagery
 - Can be used to promote a product, service, or idea after proper authorization is received.
- Reasonable Right to Privacy
 - Operate UAVs under existing privacy laws.
 - In a public space there is not a reasonable right to privacy.
 - In your home there is a reasonable right to privacy.

Legislation

General Rules

- **Avoid Redundant UAV Specific Legislation**
 - If a statute already covers it, don't duplicate for UAVs
 - Example: Rights to access property
- **Licensure Should Provide Operational Benefits**
 - Additional requirements put on commercial UAV use should come with operational leeway

Specific Rules

- **Privacy /Trespass**
 - Operate under existing privacy laws currently used by
- **Beyond Visual Line of Sight**
 - Allow licensed pilots to operate BVLOS with additional safety restrictions
 - Would required coordination with FAA.

Questions



Report Inclusion – Private Use

Group Discussion

- Privacy
- Use of Imagery
- Uniformity Across State
- Identification of UAS (UTM)

Future Meetings - Schedule

- Schedule
 - September 27
 - October 11
 - November 1
 - November 8
 - November 15
 - November 20th (approx. 90 days)

Future Meetings – Topics

- Private UAS Use – Opportunities / Challenges
 - Group leader for presentation
- Public UAS Use – Opportunities / Challenges
 - Group leader for presentation
- Economic Development and State Support For Growth
- Report Drafting



Task Force Open Discussion

Questions, Comments, Concerns



Public Comment