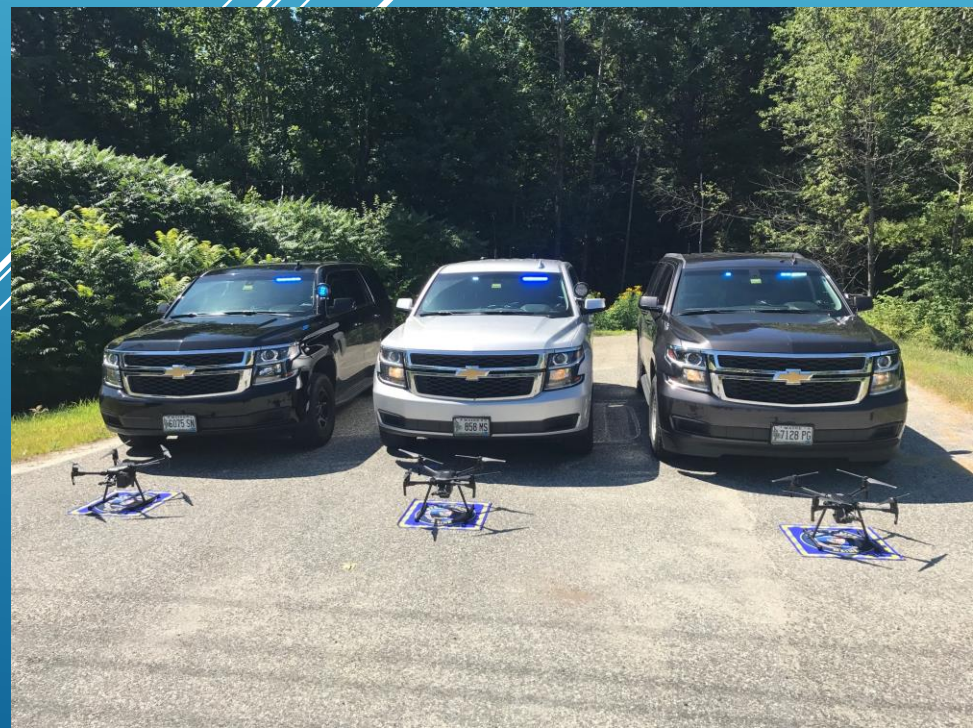
UAV'S IN PUBLIC SAFETY

Applications by Maine State Police



BACKGROUND:

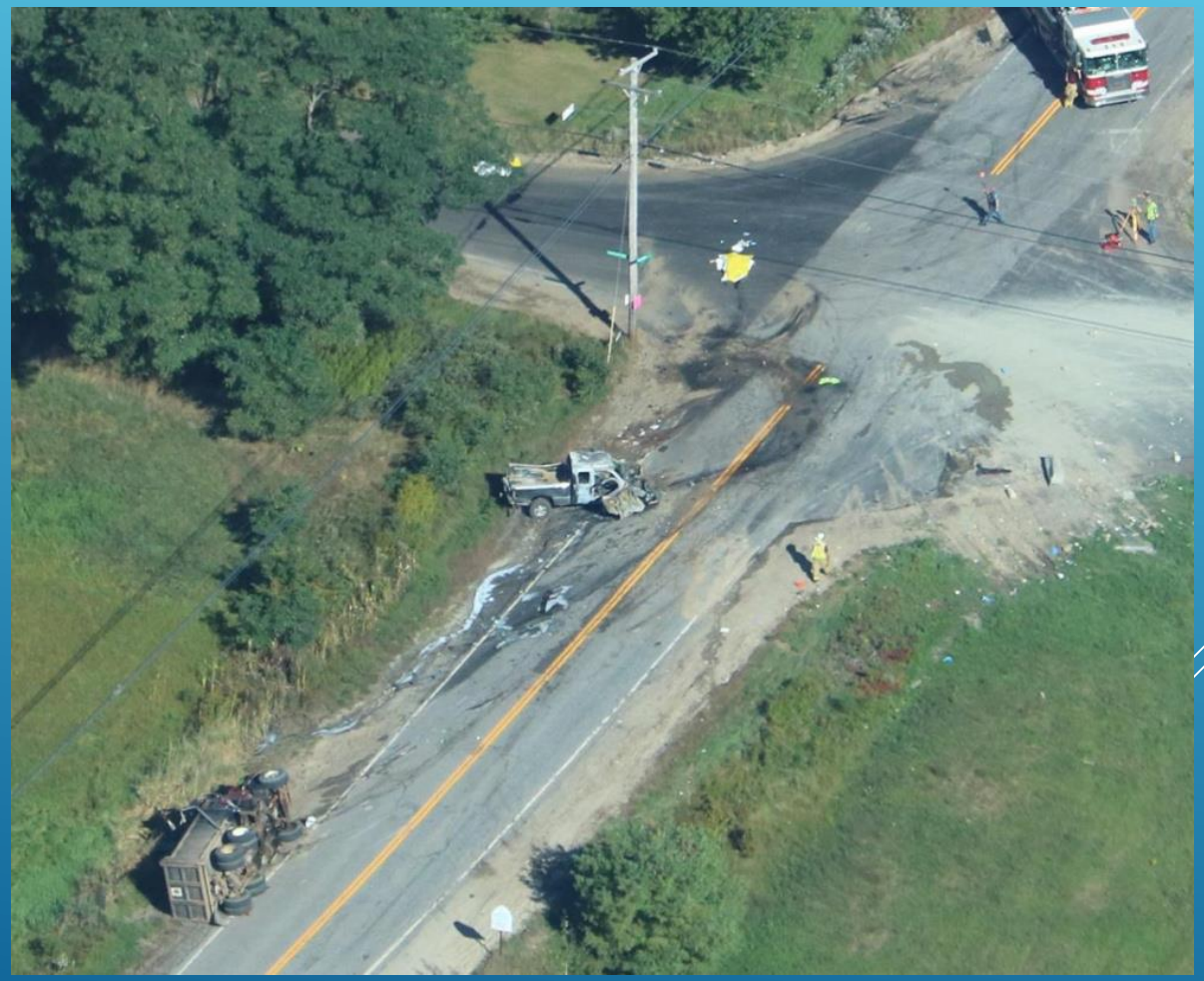
- 2017 – State Legislature passes bill to allow the use of Unmanned Aerial Vehicles for Law Enforcement
- May 2017 – MSP trained 3 Crash Reconstruction Experts and 2 Pilots in UAV operation.
- June 2017 – Purchased 3 DJI Matrice 200 UAV's for Crash Reconstruction purposes
- To Date –
  - 48 Crash Reconstruction Mapping Flights
  - 17 Crime Scene Mapping Flights
  - 5 Fire Scene Mapping Flights
  - 16 Search/Rescue Flights

UAV APPLICATIONS FOR CRASH INVESTIGATION

- Overhead Photos to show collision

UAV APPLICATIONS FOR CRASH INVESTIGATION

- Scene Documentation



UAV APPLICATIONS FOR CRASH INVESTIGATION

- Scene Analysis

BENEFIT OF UAV OVER TRADITIONAL METHODS

- Time on Scene
  - The longer the roadway is obstructed, the greater the risk of secondary crashes.
  - Roadway shut downs have a huge economic impact
  - Shut downs place tremendous strain on public safety assets and can hinder a response in an emergency

BENEFIT OF UAV OVER TRADITIONAL METHODS

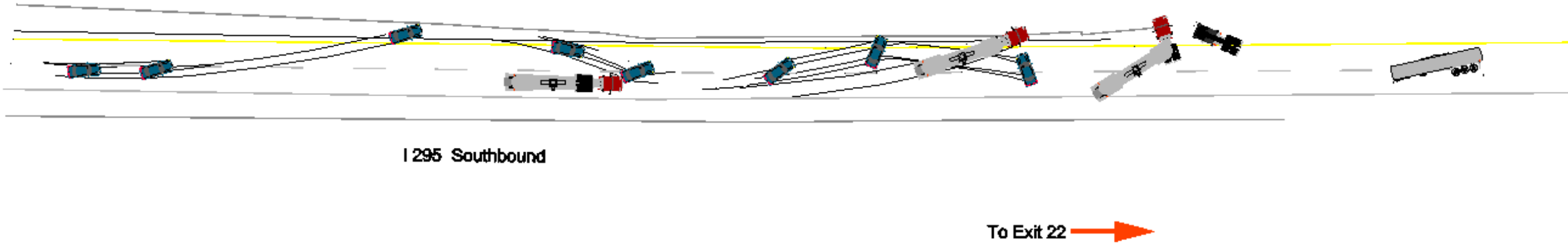
- Time on Scene
  - A Typical Forensic Mapping takes 1 to 2 hours and we collect 200 – 300 points. Roadway must typically be shut down for officer safety.
  - The UAV can collect 100 to 200 photographs which can generate a point cloud containing millions of points in a 10 – 15 minute flight. Roadway can generally stay open.

BENEFIT OF UAV OVER TRADITIONAL METHODS

- Time on Scene
  - The UAV doesn't care about scene complexity

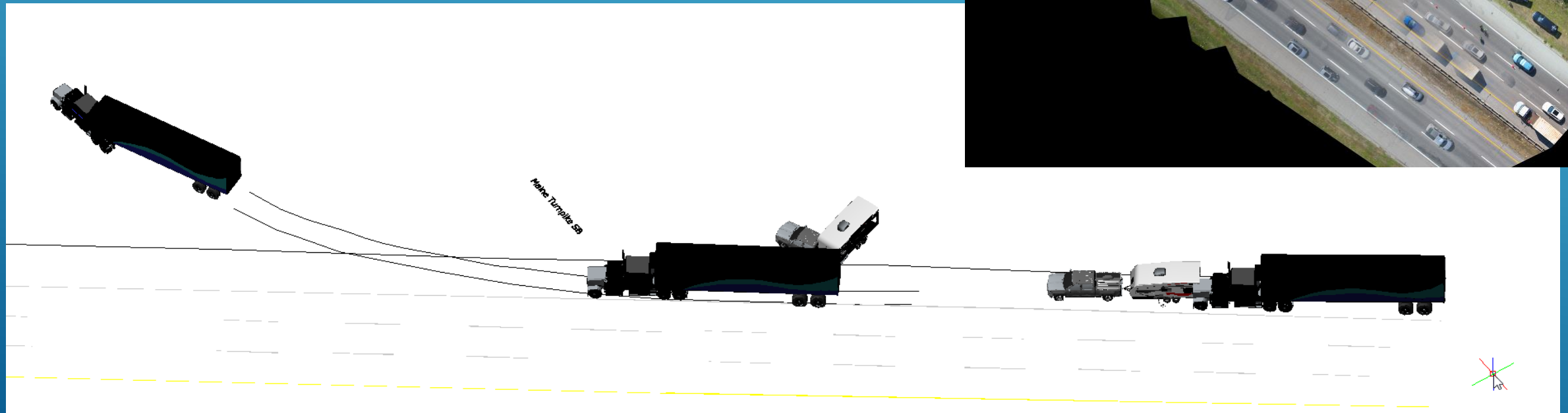
BENEFIT OF UAV OVER TRADITIONAL METHODS

- Time On Scene Mapping: 3 Hours
- Road completely shut down 1 hour
- Traffic in shoulder 3 hours



BENEFIT OF UAV OVER TRADITIONAL METHODS

- UAV set up- 15 minutes
- UAV Flight Time – 11 minutes
- 2 lanes of travel fully left open
- Time on scene 1 hour



ADDITIONAL UAV USES

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