COMMITTEE OF THE WHOLE

Unmanned Aircraft System (UAS)

City Council June 18, 2019



UAS PROJECT TIMELINE

- Parks ordinance 2018
- UAS policy drafted
- Equipment obtained
- FAA pilot certification
- Legal review





PURPOSE

The UAV provides:

- An aerial visual perspective used primarily to supplement traffic collision investigations involving serious or fatal injuries
- Safer work environment
- More detailed representation of the scene
- Efficiency allows roadways to open sooner

Additional public safety benefits include assistance with:

- Lost or missing persons searches
- Natural disasters
- Emergent life threatening public safety needs Authorization by the police chief or designee is required for these applications.





COST & TIME SAVING ANALYSIS

- Mapping a collision scene with the UAS will take an hour on average.
- Compared to 3-4 hours with older technology (total station)

December 28, 2018: Car vs. Pedestrian Fatality

- RPD overtime Traffic officers on scene 3 hours
- Overtime cost using total station: \$1,267.74 & roadway closed 4.5 hours
- > Cost using UAS: \$422.58 & roadway closed 2.25 hours
- Cost & Time Savings: \$845.16 and two hours of roadway closure



AERIAL VIEW





3-D SCALE RENDERING



Cityof Redmond

MOSAIC





CRUSH ANALYSIS





PRIVACY CONCERNS

- RPD policy addresses protection of rights and privacy.
- Pilots shall take reasonable precautions to avoid inadvertently recording or transmitting images in areas where there is an expectation of privacy.
- Search warrants will be required when the UAS could collect evidence of criminal wrongdoing.
- UAV pilots shall adhere to FAA guidelines.



UAS PILOT AUTHORIZATION

- RPD's chief pilot is responsible for overall direction and performance of UAS.
- Authorized pilots:
 - Licensed by the FAA and operate under applicable law.
 - Must complete training in the operation, applicable laws, policies, and procedures.
 - Only authorized pilots shall be permitted to operate the UAS



DOCUMENTATION & RETENTION

- UAS pilots will document all deployments in written narratives.
- UAS pilots shall maintain and update a flight log detailing date, time, duration, and reason for flights.
- All images, video, and data obtained through UAS deployment will be used, retained, and disseminated in accordance with department policy, state law, and the public records act.

NEXT STEPS

- Informing City Council
- Public Messaging Campaign
- Training Flights
- FAA pilot certification



THANK YOU

Questions?

Brian Coats, Lieutenant bcoats@Redmond.gov 425.556.2588

