

Options for a City Drone Program

Mayor and City Council Work Session
Monday, November 14, 2016

What is a Drone?

- Known under Federal regulations as an Unmanned Aircraft Vehicle (UAV)
- Regulated closely by the Federal Aviation Administration (FAA)
- Permitted (and intended to be encouraged) by Federal law under the FAA Modernization and Reform Act of 2012 (FMRA)

City Drone

- Drone included in FY 2016 Community & Public Relations Budget. Purchased June, 2016
- Initial desired uses included:
 - Photography/videography of City's special events and public programs
 - Virtual tours of parks and facilities

Other Identified Uses

- GIS Data collection and updating
- Public construction and stormwater project inspection
- Impervious surface verification for stormwater billing
- Planning analysis and review
- Permitting and large project progress review

Uses *(continued)*

- Limited Property Maintenance Review for Code Enforcement, within privacy policy restrictions
- Parking Issues
- Management of Forest Conservation, Drainage/Ponds, Wildlife
- Potential Public Safety – Animal Control

Flight Requirements

FAA regulations for public entities require:

- An approved FAA application and/or
- Pilot training and/or
- Established policies and procedures on safety, flight reporting, data retention, privacy and
- A flight and safety manual

Contracted Services

Considerations

- Because we are within 30 miles of Reagan National Airport, commercial drone use is limited but not prohibited
- Costs may be prohibitive, \$100 to \$300 or more per hour, plus delays and timing for each use
- Can be challenging to ensure we obtain the video footage we are seeking
- City would still need to process the data and apply privacy and data retention policies

Other Key Considerations for a Successful City Drone (UAV) Program

- Safety, training for flight as well as drone and equipment maintenance
- Privacy limits and related data use restrictions
- Avoidance of FAA fines up to \$10,000
- Insurance coverage through LGIT
- Possible training grants available from LGIT

FAA Applications and Usage Limits

Section 334: Limited Uses For Public Entities

- Uses limited to *core government functions* – public safety, inspections and maintenance
- Uses do not include event photography, etc.
- Less training and less required FAA reporting
- Strict enforcement, with fines of \$10,000 or suspension of approved application

Section 333:

Broader Civil Commercial Uses

- More permitted uses, including public event coverage, marketing, virtual tours
- Trained pilot required
- More heavily monitored
- Ongoing FAA reporting (not self-regulated)

Section 107: Usage Allowance

- New rule without a formal application
- Pilots must be FAA certified
- Significant use limits, including
 - Daytime flights only
 - Always within pilot line of sight
 - Not over other persons
- Can serve as a starting point for a program

Summary of FAA Requirements

- Application selected will impact uses
- Drone must be registered for any use
- Pilot and Secondary Observer generally required for many flights
- Training for FAA pilot certification required

Staff Workgroup

- Includes representatives from P&CA, Public Works, PR&C, IT, CPR, CMO
- Focusing on uses and next steps
- Met July 28
 - Supports proposed drone program
 - Supports contracting with aviation expert to assist with FAA application, policies and training
 - Will continue to assist and monitor program

Contractor with Aviation Expertise

- Needed to assist with:
 - Permission from Montgomery County Regional Airport as it is within 5 miles
 - FAA applications and reporting
 - Establishing policies, including on privacy
 - Manual development for flights and drone maintenance
 - Training
 - Operational program development
- Received and reviewed five proposals
- Will focus on most comprehensive proposal at best cost

Next Steps for Drone Program

Finalize staffing and management

- Community and Public Relations for pilot/secondary observer
- Community and Public Relations for management
 - FAA reporting
 - Equipment maintenance
 - Flight coordination
- Anticipating starting Spring to Summer 2017

Questions?