Adapting Generalized Drone Surveys: Including Social Media Content on LEA Use of Drones

Valeria Garcia and Wyatt Layne

Faculty Advisors: Alyssa Chamberlain and Danielle Wallace
Neighborhood Observations, Disorder, and Drones

Objective 1:

Neighborhood disorder (the visual cues in a neighborhood that attunes you to safety) is notoriously hard and costly to measure.

The gold standard of disorder measurement is systematic social observation (SSO) which involves borrowing the detailed and replicable methods of surveys and using them for direct field observations in the neighborhood.

In this project, we seek a middle ground, where higher quality, direct observations are being made of the neighborhood through unmanned aerial systems (UAV; aka, drones), which make less intensive demands on researchers’ time and presence.

Objective 2:

We also examine individuals’ perceptions of UAVs through surveys.

UAV surveys focus on...

- Use and knowledge of UAVs
- Comfortableness with government users
- Privacy concerns about UAV use and from who (i.e., when hobbyists, government, first responders use UAVs).

Next wave of UAVs focusing on perceptions of UAV use by law enforcement.
UAV Use in Law Enforcement

"Currently 1,500 law enforcement agencies in 49 U.S. states are using UAVs to assist officers in the field."

LEAs use UAVs in a number of ways:

- Search/rescue
- Suspects who have fled
- Fires
- Protests/Marches

Generally positively received as tools by LEAs

- Seen as critical to search and rescue
- Assess fires
- Follow fleeing suspects without the use of a helicopter
How the Public Feels about UAV use in LEAs is Unknown

Public likely has concerns over

- Privacy
- Abuse
- Release of information from UAV use

LEA use of UAVs may

- Be more frequent in areas with higher crime (disproportionate use and exposure of residents)
- Impact negative public perceptions of the police
- Reduce police legitimacy if not first vetted with public
Current Study

Purpose of this study is to assess public perceptions and concerns related to the use of UAVs by LEAs.

We will utilize a survey to determine how the public perceives UAV use among LEAs.

- Content Areas
- Survey design and implementation
- Sample questions
- Inclusion of social media
We will include survey questions covering several areas:

- Prior experience/exposure with UAVs
- Privacy concerns related to LEAs use of drones
- Access to UAV video (public vs. private)
- Justifiable uses for UAVs use by LEAs
- Impacts on police/community relations (both positive and negative)
Survey Design and Implementation

- Web based survey will be administered using Amazon’s Mechanical Turk (MTurk)
- Survey respondents will be randomly selected from within the United States
- Data analysis will be conducted in Stata
Example Questions for Survey

- Drones are useful for law enforcement conducting a search and rescue operation (agree/disagree)
- I am concerned about my privacy being violated by drones operated by law enforcement agencies
- I would feel angry or annoyed if I were recorded by a police drone
- I would feel angry or annoyed if my home/property were recorded by a drone
Social Media and Drones

Law enforcement agencies increasingly using social media to highlight usefulness of drones:

In a recent survey of 800 law enforcement agencies in the US, 88 percent of agencies reported using social media.

Why are agencies posting on social media?

- Allows for transparency
- Shows effectiveness
- Eliminates rumors, suspicions, or fears
- Opens for new applications and ideas from the public
Conclusion

This study seeks to assist LEAs with the implementation of UAVs in several ways:

- Identify the public's concerns over the use of drones
  - In doing so, we can provide guidance to LEAs to alleviate these concerns
- Identify what areas of UAV use the public is more comfortable with
  - The public may be more supportive of targeted versus general use
- Assess how drone usage might impact the relationship between the community and the police
  - Is policing depersonalized?
- Assess if social media is a useful tool to combat public concerns regarding the use of drones.