

# Drone Video Capture Checklist for Traffic Studies

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This document provides a practical and comprehensive checklist for drone operators aiming to collect high-quality video footage for traffic data analysis. The guidelines are compiled from the DataFromSky platform.

## 1. Flight Planning and Camera Configuration

- Define Study Objectives: Clarify the primary goal (e.g., vehicle counts, pedestrian flows, conflict points).
- Select Appropriate Altitude and Angle: Adjust based on analysis requirements to ensure optimal visibility.
- Ensure Camera Stability: Use drones with stabilized cameras or apply post-processing stabilization.

## 2. Video Quality and Recording Settings

- Resolution and Frame Rate: Record in high-definition (preferably 4K) at a minimum of 25 fps.
- Lighting Conditions: Record during daylight with minimal shadows; avoid poor weather.
- Avoid Obstructions: Ensure an unobstructed view free from trees, poles, or buildings.

## 3. Operational Considerations

- Battery Management: Plan for sufficient battery life or use tethered drones for longer sessions.
- Regulatory Compliance: Follow local drone laws, including permissions and line-of-sight operations.
- Synchronization: Sync all devices to enable accurate timestamping.

## 4. Data Management and Processing

- File Formats: Use compatible formats (e.g., .mp4, .avi) with your analysis software.
- Metadata Documentation: Log details like date, time, GPS coordinates, and environmental context.

- Backup and Storage: Implement systems for secure and redundant storage.

## **5. Post-Processing and Analysis**

- Software Compatibility: Verify footage is compatible with tools like DataFromSky.
- Quality Assurance: Review video quality before processing.
- Data Interpretation: Extract traffic metrics (e.g., counts, speeds, trajectories) effectively.

By following this checklist, drone operators can ensure high-quality, actionable data collection, leading to more reliable and insightful traffic studies.