



UAS Implementation

New Hampshire Department of Transportation

The following information describes the necessary components in a successful UAS program and the UAS implementation recommendations for NH DOT to employ UAS. The implementation recommendations are divided by two major phases. The initial phase implements simple UAS missions with little to no processing required, while the second phase uses UAS to create geospatial products.

UAS PROGRAM COMPONENTS

UAS WORKFLOW



Human Resources

- UAS Operators
- GIS/CAD
- App Development
- Photography
- Video
- Network
- Storage
- Domain Expertise



Equipment

- Platforms
- Sensors
- Supplies



IT/GIS

- Workstations
- Storage
- Software
- Cloud



Planning



Flight Operations



Data Processing



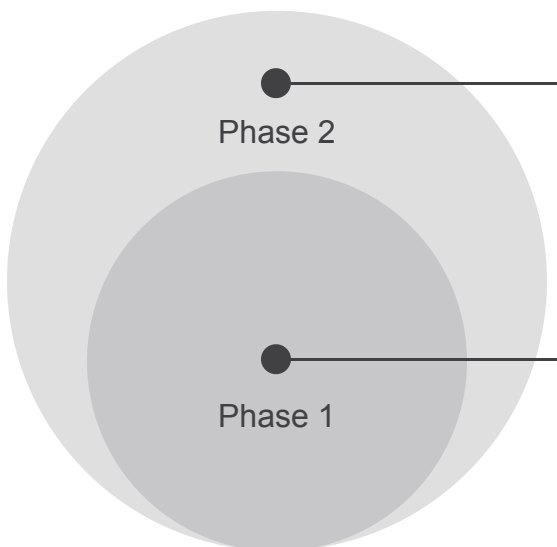
Value Added



Products

IMPLEMENTATION

EQUIPMENT



Phase 2

Phase 1

This phase will involve an organizational shift within NH DOT to adopt the collection, processing, use of geospatial UAS data. This will require investments in mapping UAS, specialized software, data storage, and trained GIS professionals.

This initial phase is to implement simple UAS platforms that will allow NH DOT to begin using UAS in-house without investing in the resources necessary to perform advanced UAS processing and analysis. This phase will use UAS for aerial perspective through photos and videos. That requires minimal or no additional processing or software to view the data.

- Mapping UAS Platform(s)
- Sensor(s)
- GIS/CAD Expertise
- Workstations
- Software
- Additional UAS Supplies

- Quadcopter(s) UAS
- Data Storage
- Trained UAS Operators

IT/GIS CONSIDERATIONS

MORE INFORMATION



- Software
- Hardware
- Expertise



- Data Processing
- Data Storage
- Data Analytics



- Data Accessibility
- Data Integration
- Data Format



For more information on NH DOT case studies project view the [final report](#).



View each case studies [Story Map](#) and [Fact Sheet](#) for more detailed information on each case study.