

RAPID Facility Mission and Values

- ◆ The RAPID facility provides investigators with the equipment, software, and support services needed to collect, process, and analyze perishable data from natural hazard and disaster events.
- ◆ We promote reconnaissance-based science, shared resources, open data, interdisciplinary research, community engagement, and innovation to reduce the adverse impacts of natural hazards.

RAPID Facility Strategic Activities

To achieve its mission, the RAPID facility engages in the following strategic activities.

- ◆ Acquiring, maintaining, and operating state-of-the-art data collection equipment
- ◆ Developing and supporting mobile applications to support interdisciplinary field reconnaissance
- ◆ Providing advisory services and basic logistics support for research investigations
- ◆ Facilitating the systematic archiving, processing and visualization of acquired data in DesignSafe-CI
- ◆ Training a broad user base through workshops and other activities
- ◆ Engaging the public through community outreach and education

Facility Resources

- ◆ Advanced Geomatics Technologies
- ◆ Seismic Instrumentation
- ◆ Wind and Storm Surge Instrumentation
- ◆ **Social Science Reconnaissance Equipment**
- ◆ Ground Investigation
- ◆ Imaging Equipment
- ◆ Software tools
- ◆ Full list:
<https://rapid.designsafe-ci.org>



RAPID Engagement in December Tornadoes

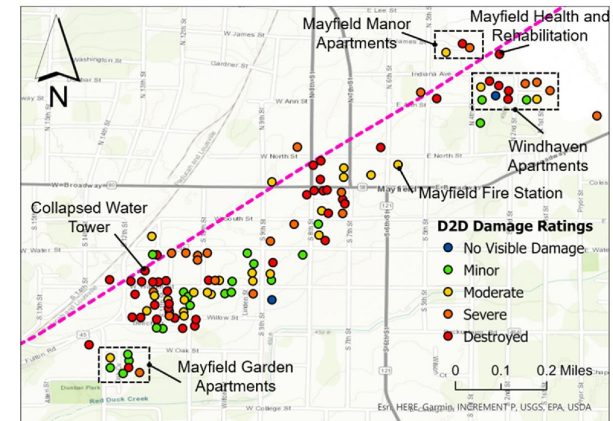
- ◆ RAPID Supported the Structural Engineering Extreme Event Reconnaissance Network (StEER) to collect perishable data three days after the event
- ◆ Data via RAPID Facility and StEER Network available on DesignSafe (<https://doi.org/10.17603/ds2-2b2k-ws96>)
- ◆ Unmanned Aerial Imagery



- ◆ LiDAR Scans

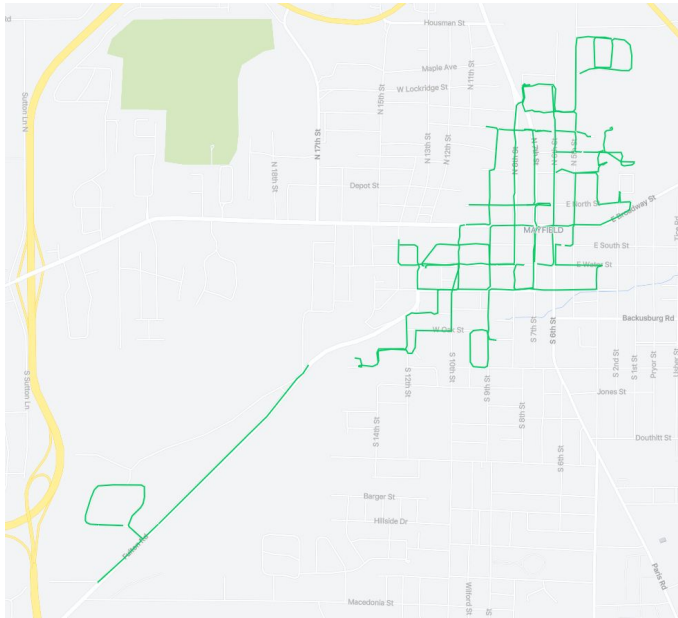


- ◆ Door-to-Door Assessments



December 2021 – Midwest Tornado Outbreak

◆ Street-Level Panoramic Imaging

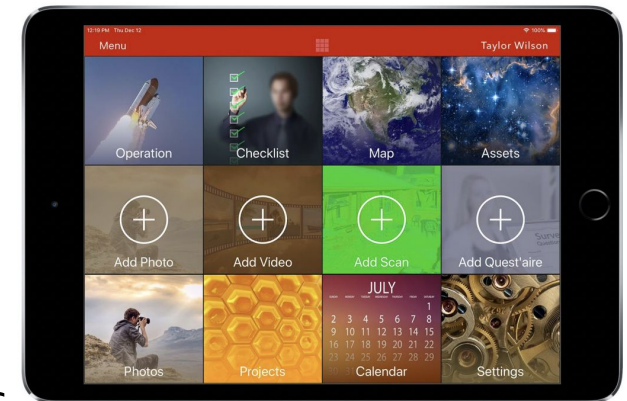


Green lines show streetview route around Mayfield, KY as viewed publicly via [Mapillary.com/app](https://www.mapillary.com/app). This is one of several areas driven.



RApp

- ◆ iPad App developed for reconnaissance community
- ◆ Questionnaires, checklists, photos, videos, scans, KML, and more
- ◆ Advanced questionnaires
 - Branching & display logic
 - Matrix questions
 - Location feature
 - Shareable questionnaire templates
- ◆ Automatically syncs data from RApp to DesignSafe + additional data users wish to upload
- ◆ RApp Lite forthcoming
 - iPhone App optimized for smaller displays
 - Customizable interface
 - Automatically syncs data to DesignSafe



RAPID Facility Social Science Support

- ◆ Guidance on use of RAPID equipment and data for social science research
- ◆ RAPID Technical Assistance for research proposals
- ◆ Development of case studies for RAPID social science applications
- ◆ Gather feedback from social science user community

Contact Information

Dr. Nicole Errett
Social Sciences Lead
(nerrett@uw.edu)

Dr. Jamie Vickery
Social Sciences Specialist
(vickeryj@uw.edu)