Purpose

The RAPID mobile application (RAPp) supports field reconnaissance missions and data management through the following capabilities:

- Mission Planning
- Team Communication
- Geographic Survey Tools
- Social Science Survey Tools
- Data Tagging
- Data Transfer to DesignSafe

Data Collection Process

Field Reconnaissance
- Plan Reconnaissance Effort
- Collect Data

RAPID Facility
- Analyze Data and Create New Products
- Tag and Upload Data

DesignSafe-CI
- Cyberinfrastructure
- Upload, Tag, Explore, Share, and Publish Data
DesignSafe-CI

A cyberinfrastructure for the natural hazards community

- Field Recon Data Model
- Metadata
- Cloud-based Platform
- Data Storage
  - Curation, Sharing, Publication
- Tools for Research
  - Recon Portal, HazMapper, & More

RAPID Coordination with DesignSafe

- RAPID Website
- Monthly Meetings
- Data Model Working Group
- Field Reconnaissance Data Model
- Data Upload Services
- Tools
  - Potree, SfM, Image Viewer
  - Portal, HazMapper, and More
Data Workflow Concept

Mobile Software Suite

Companion apps will be included alongside RApp to provide additional capabilities.
RApp

RApp integrates mission planning and coordination, data collection, and data management into a single, unified package.

- All data collected is treated equally, allowing novel approaches to organization and comparisons.
- Tedious tasks are simplified, allowing field recon teams to spend more time on data collection efforts.

RAPID App: Development Stages

- Concept
- Design research group (DRG) student assessment
- DRG Student Prototyping
- Feasibility Studies
- Professional Prototyping
- Design Iteration
- Coordination with DesignSafe
- Development
- Years 3-5: Updates
RAPID App: Mission Planning

- Mission Coordination
- Cacheable Maps
- Route, Area, and Location Planning
- Location Tracking
- Inventory
- Checklist
- Data Synchronizing
- and Much More