



RAPID Facility Cyberinfrastructure Elements

Joe Wartman

Director, RAPID Facility
University of Washington

RAPID Facility Workshop
18 May 2018, Miami, Florida

NSF Award Number: CMMI 1611820



RAPID software

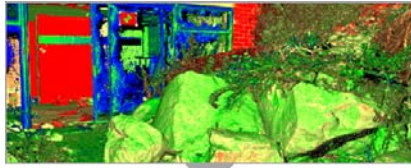
RAPID software and technology supports field reconnaissance missions and data management through the following capabilities:



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



Data Collection Process



Field Reconnaissance

- ◆ Plan Reconnaissance Effort
- ◆ Collect Data



RAPID Facility

- ◆ Analyze Data and Create New Products
- ◆ Tag and Upload Data

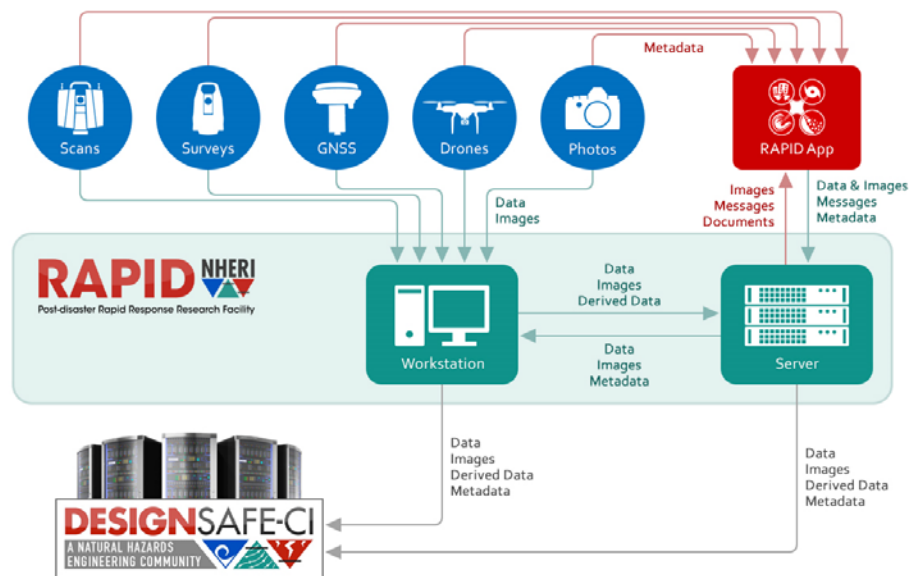


DesignSafe-CI

- ◆ Cyberinfrastructure
- ◆ Upload, Tag, Explore, Share, and Publish Data



Data Workflow



Data Processing

- ◆ Included for all NSF users at no cost:
 - Registration of lidar data
 - Upload of raw (and registered) data to DesignSafe
- ◆ RAPID HQ at UW has:
 - High speed processing computers
 - 3D CAVE for visualization and analysis of data sets
- ◆ Additional processing options (point cloud development from lidar and/or images):
 - You or your students and associates come to RAPID HQ, or borrow a high-power laptop computer and work at your location
 - Work within the DesignSafe cloud environment
 - Ask us to process

