Curb Ramps and Data Collection Needs

Data Consortium Meeting

November 29, 2018

HDR
PROBLEMS

- DOJ / FHWA
- Compliance
- Inventory
- Consistency amongst agencies
If a public entity has responsibility or authority over streets, roads, or walkways, its transition plan shall include a schedule for providing curb ramps or other sloped areas where pedestrian walks cross curbs, giving priority to walkways serving entities covered by the Act, including State and local government offices and facilities, transportation, places of public accommodation, and employers, followed by walkways serving other areas.
ULTIMATE REMEDIES FOR NON COMPLIANCE

Where noncompliance exists:
For Federal-aid recipient: FHWA can withhold federal money, after enforcement process required at 49 C.F.R. §§ 27.121 – 27.129.

For State or local government, regardless of federal funds: FHWA shall seek voluntary compliance agreement with public agency, and if voluntary negotiations are unsuccessful, shall send case to the Attorney General for appropriate action.
The Transition Plan schedule should:

✓ Identify existing facilities that limit access for persons with disabilities.
✓ Describe in detail methods to be used to make facilities accessible.
✓ Specify schedule for improving facilities by prioritizing needs of persons with disabilities in existing facilities.
✓ Indicate official responsible for implementation of plan.
CURB RAMP DATA COLLECTION

- A single curb ramp may require over 50 points of information

- Manual collection is:
  - Time consuming
  - Costly
  - Hazardous
Mobile Mapping for Roadways

Mobile LiDAR is a noninvasive, state-of-the-art laser scanning solution that is ideal for civil engineering firms, transportation or utility entities, or government agencies managing route projects. Project applications include 3-D asset inventory/mapping, GIS mapping, as-built surveys, engineering design, digital terrain models, planimetrics, 3-D modeling, engineering/route selection, vegetation surveys, crossing surveys, 3-D corridor mapping for preliminary engineering, and obstruction surveys.
BENEFITS OF USING MOBILE LIDAR:

- **Cost & Time Savings** – Mobile LiDAR can gather all required point measurements in one setting, eliminating the need for additional mobilization costs. With data collection speeds up to 1,000,000 points per second, this can mean significant savings for design firms or government agencies managing tight project budgets.

- **Increased Safety** – Data can be collected remotely, day or night, removing the need for traffic diversion caused by traditional surveying activities and increasing safety for project personnel and the general public.

- **Enhanced Accuracy** – The system provides designers with a more complete picture of the project with highly accurate point density measurements and the ability to locate features that are inaccessible with current technology.

SAM’s mobile LiDAR system utilizes two 360-degree sensors to provide data density spacing from 0.01 foot with efficient acquisition of millions of 3-D design points per minute, far exceeding the efficiency of traditional survey methods.
CURB RAMP DATA

- Data covering entire ramp
- Consistent collection
- Accurate
- Displays true definition
- Can be used for compliance
NEXT STEPS

➢ Data Architectural Plan
➢ Data Management Plan
➢ Consolidate Share
  ➢ Common Consistent Data Collection
  ➢ Appropriate Metadata
Questions?