VDOT’s ADA Curb Ramp Assessment Using AGOL and Collector App

Shan Di, Ph.D., PE
Virginia Department of Transportation
The Americans with Disabilities Act (or ADA) was enacted on January 26, 1990 and became effective on January 26, 1992. This act made it unlawful to discriminate against people with disabilities.

Title II of the ADA addresses the programs, activities and services of public entities.

Among the requirements of Title II are that the state government ensure persons with disabilities have access to pedestrian routes in the public right-of-way (ROW).

Full ADA compliance requires public agencies to develop a Transition Plan which identifies all known barriers to accessibility and outlines a schedule for the delivery of improvements to address these barriers.

What is the ADA?
VDOT’S ADA Compliance Program (Phase I – Curb Ramps)

Compliance on alteration projects such that whenever streets, roadways, or highways are altered to provide curb ramps where street level pedestrian walkways cross curbs.

❖ **Scope**
- 56,000+ curb ramps
- 4,100+ miles sidewalk
- Thousands of lane miles of annual paving

❖ **Annual Performance Targets**
- Curb ramp improvements
- Curb ramp assessments
- Targets may change depending on available budget
How to deliver compliance?

- **Assessment**
  - Developed functional condition rating protocol – TE Memo 376
  - Identified key curb ramp attributes for field assessment
  - Use of Collector App and ArcGIS Online Web Application

- **Prioritization**
  - Limited funding for ADA improvements
  - Set priority based on assessment of functional condition rating
  - Expected use
From Pen and Paper to Collector for AGOL
Use of Geo-Form

With the use of geo-form, traditional pen and paper data entry is still supported for people with no access to mobile devices.
The Web Application synthesizes other GIS information including sidewalk inventory, VDOT paving schedules, LRS, and VDOT intersection inventory.

It is the repository to support data-driven decision making for the tracking, planning and prioritization of ADA curb ramp compliance improvements.
Reporting

Dynamically track ADA curb ramp assessment and improvement performance.
Data Collection, Analysis and Reporting
VDOT ADA Compliance Accomplishments
(Phase I – Curb Ramps)

- Effectively collected over 35,000 ADA curb ramp field assessments
- Completed $18M worthy of prioritized improvements
- Dramatically streamlined the business process and greatly reduced the workload of field staff with the use of ArcGIS Online and Collector App