Providing Bus Stop Amenity and Accessibility Information via WMATA’s Public Website

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Need for Project

• Approximately 11,100 bus stops in the District of Columbia, Maryland, and Virginia.

• All buses in the Metro fleet are accessible.

• MetroAccess is a shared-ride, door-to-door paratransit service for people whose disability prevents them from using bus or rail.
  – 30,000 eligible customers

• Give customers familiarity with stops before they travel.
Bus Stop Information Format

• Application will be available on WMATA.com

• Show photos, maps, and information related to universal and accessible design features.

• Data was collected by surveys

• Information is stored in GIS database
Give Customers Information about Bus Stops using GIS Data

- This tool will give customers the information they need about bus stops along their trip in order to use fixed route with confidence.
  - Accessibility design elements
  - Universal design elements
- The Bus Stop Information application is ready for website integration and internal beta testing.
How to access on WMATA.com

• Access to this application will be on public website:
  – Trip Planner
  – Accessibility dropdown
  – Bus dropdown

• Application will fit within WMATA website frame, and match WMATA website colors and styles.
Application

• Site specific photos from WMATA database.

• Bus stop information will be in the same format for all stops.

• Map from WMATA database.

• Links for external sites with other maps and photos.

• Survey date.
Application

- Navigate to other stops.
- Customers may help update information by “Report a Problem” link.
- Section 508 of the Rehabilitation Act of 1973 compliance
  - Hovering over the text will give a full sentence text description for screen readers.
  - Testing by external organization.
Current Application Stage

- Planning
- Requirements Analysis
- System Design
- Implementation & Test
- Maintenance
Design Challenges

• Should meet Accessibility requirements
  • 508 compliant
• Easy to read and understand GIS data
  • Images, Text, Map
• Visually outstanding
  • Block design
• Blend and Fit within existing website
  • Color Scheme, Application extent
Implementation Challenges

- Choosing Application platform
  - ArcGIS API for Flex
  - ArcGIS API for JavaScript
  - ArcGIS API for Silverlight
- Should be device independent
  - JavaScript, HTML, CSS
- Combining inputs from different data sources
  - GIS and non-GIS data
Integration Challenges

• Hand-off from main non-GIS website “www.WMATA.com”
Next Steps

• Integrate application with main website and perform beta testing.

• WMATA internal involvement and marketing.

• Comments from external focus groups.

• Release to the public summer 2014.
Washington (DC) Metropolitan Area Transit Authority

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Thank You!