



**Washington Metropolitan Area Transit
Authority**

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

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GIS in Transit Conference
October 16, 2013 | Washington D.C.



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

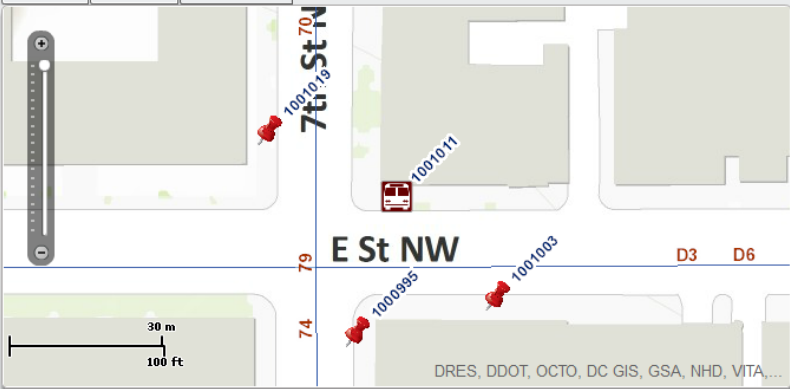
Metro Bus Stop Information [Trip Planner](#) [Find a Stop](#) [Enter Stop #](#)



Bus Stop 1001011 Survey Date: 6/29/2006

LOCATION	AMENITIES	ACCESSIBILITY
On Street : E ST NW	<input checked="" type="checkbox"/> Bench	<input checked="" type="checkbox"/> Crosswalk
Near Street : 7TH ST NW	<input checked="" type="checkbox"/> Bike Racks	<input checked="" type="checkbox"/> Curb Ramp
Direction : NorthWest	<input checked="" type="checkbox"/> Lighting	<input checked="" type="checkbox"/> Pedestrian Crossing Signal
Location : Intersection	<input checked="" type="checkbox"/> Route Map	<input checked="" type="checkbox"/> Unobstructed Sidewalk
Bus Routes : D3, D6	<input checked="" type="checkbox"/> Route Schedule	<input checked="" type="checkbox"/> Gentle Sidewalk Slope
	<input checked="" type="checkbox"/> Sidewalk to Curb	<input checked="" type="checkbox"/> Stop Sign or Traffic Light
	<input checked="" type="checkbox"/> Shelter	

Imagery [Streets](#) [Topographic](#) [Google Street View](#) [Bing Bird's Eye](#) [Report a Problem](#)



DRES, DDOT, OCTO, DC GIS, GSA, NHD, VITA, ...



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.

Washington Metropolitan Area Transit Authority

Home Rail **Bus** **Accessibility** Getting Around Fares Rider Tools About Metro

Rider Tools

- Trip Planner**
- Alerts & Advisories
- ELstat
- Elevator/Escalator Status
- Next Train Arrivals
- Next Bus Arrivals
- Service Nearby
- MetroAlerts
- Savings Calculator
- Developer Resources

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Home Rail **Bus** **Accessibility** Getting Around Fares Rider Tools About Metro

Trip Planner

Modify itinerary | More options | Print

Itineraries shown below may not account for temporary delays or detours caused by unexpected service disruptions, scheduled track work, construction or special events. Alerts and advisories that may affect your trip will be displayed below your itinerary.

From 600 5TH ST NW to WHITE HOUSE on 6/19/2013

Itinerary 1 (approx 13 min transit)

- Walk 0.23 mile N from 600 5TH ST NW to H ST & BET 4TH & 5TH ST NW
- BUS DEPARTS FROM**
H ST & BET 4TH & 5TH ST NW at 11:36am
- BOARD**
X2 BUS towards LAFAYETTE SQUARE
- ARRIVE**
NW H ST & NW MADISON PL at 11:49am
- Walk 0.13 mile SW to WHITE HOUSE

Current bus alerts for this trip: D4, X2: Due to traffic congestion at North Capitol & H St (NE & NW), buses are experiencing up to 30 minute delays in both directions.

\$ 1.60 SmarTrip Fare

- \$ 0.80 SmarTrip (Senior/Disabled/Medicare)
- \$ 1.80 Cash / Farecard
- \$ 0.90 Cash / Farecard (Senior/Disabled/Medicare)

(Only Cash & SmarTrip are accepted on Buses)

Email itinerary 1 Send

Itinerary 2 (approx 8 min transit)

- Walk 0.29 mile W from 600 5TH ST NW to NW 9TH ST & NW F ST
- BUS DEPARTS FROM**
NW 9TH ST & NW F ST at 11:42am
- BOARD**
42 BUS towards MT PLEASANT VIA DAMS MORGAN
- ARRIVE**
1 ST & 15TH ST NW at 11:50am



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.



Bus Stop 1001011

Survey Date: 6/29/2006

LOCATION	AMENITIES ?	ACCESSIBILITY ?
On Street : E ST NW	<input checked="" type="checkbox"/> Bench	<input checked="" type="checkbox"/> Crosswalk
Near Street : 7TH ST NW	<input checked="" type="checkbox"/> Bike Racks	<input checked="" type="checkbox"/> Curb Ramp
Direction : NorthWest	<input checked="" type="checkbox"/> Lighting	<input checked="" type="checkbox"/> Pedestrian Crossing Signal
Location : Intersection	<input checked="" type="checkbox"/> Route Map	<input checked="" type="checkbox"/> Unobstructed Sidewalk
Bus Routes : D3, D6	<input checked="" type="checkbox"/> Route Schedule	<input checked="" type="checkbox"/> Gentle Sidewalk Slope
	<input checked="" type="checkbox"/> Sidewalk to Curb	<input checked="" type="checkbox"/> Stop Sign or Traffic Light
	<input checked="" type="checkbox"/> Shelter	

Imagery **Streets** Topographic [Google Street View](#) [Bing Bird's Eye](#) [Report a Problem](#)

74 79 70
1001019
7th St NW
1001011
E St NW
1000995 1001003
D3 D6
DRES, DDOT, OCTO, DC GIS, GSA, NHD, VITA,...



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.



Bus Stop 1000342

Survey Date: 5/4/2006

LOCATION	AMENITIES	ACCESSIBILITY
On Street : ALABAMA AVE SE	<input checked="" type="checkbox"/> Bench	<input checked="" type="checkbox"/> Crosswalk
Near Street : 31ST ST SE	<input checked="" type="checkbox"/> Bike Racks	<input checked="" type="checkbox"/> Curb Ramp
Direction : SouthWest	<input checked="" type="checkbox"/> Lighting	<input checked="" type="checkbox"/> Pedestrian Crossing Signal
Location : Intersection	<input checked="" type="checkbox"/> Route Map	<input checked="" type="checkbox"/> Unobstructed Sidewalk
Bus Routes : V5, W4	<input checked="" type="checkbox"/> Route Schedule	<input checked="" type="checkbox"/> Gentle Sidewalk Slope
	<input checked="" type="checkbox"/> Sidewalk to Curb	<input checked="" type="checkbox"/> Stop Sign or Traffic Light
	<input checked="" type="checkbox"/> Shelter	

No Shelters At Bus Stop.

[Imagery](#)

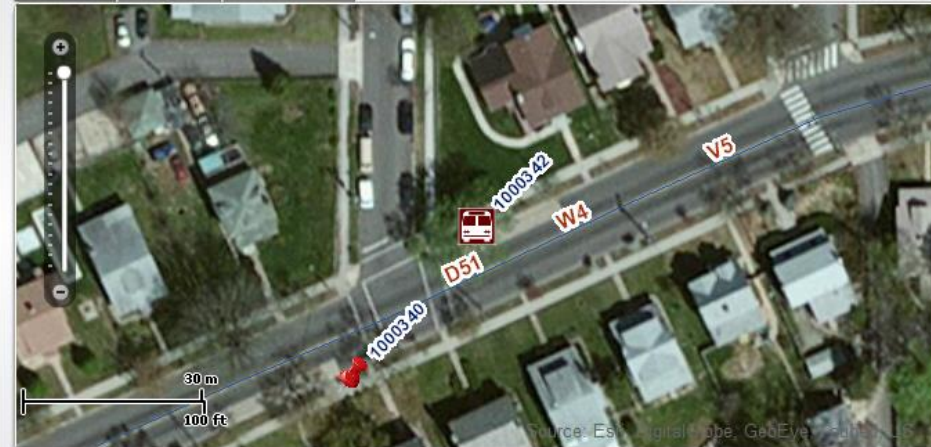
[Streets](#)

[Topographic](#)

[Google Street View](#)

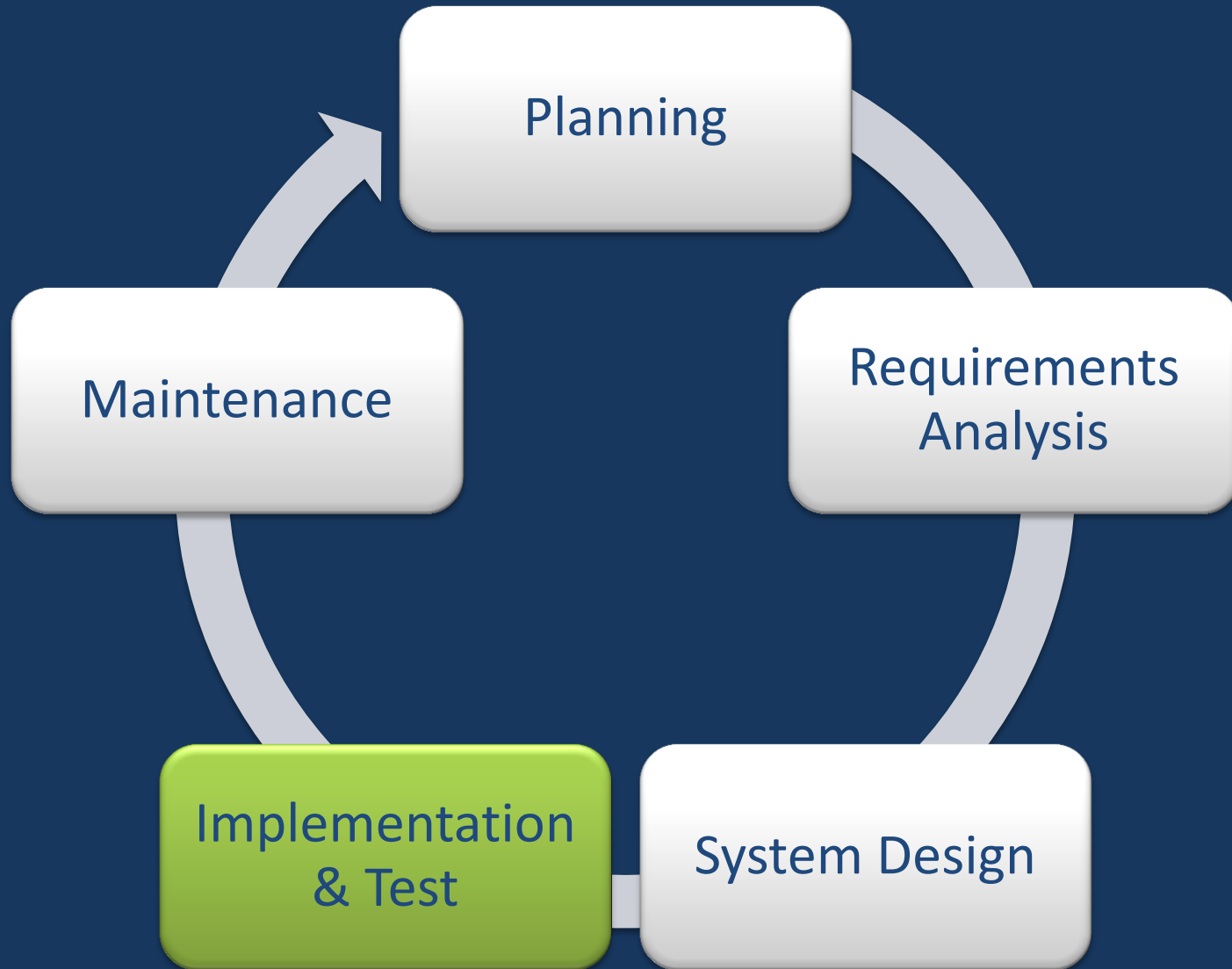
[Bing Bird's Eye](#)

[Report a Problem](#)





Current Application Stage





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.
- Continue to update the data source with ongoing surveys of the bus stops.
 - Data collection ranges from 2007-2013.
- Release to the public summer 2014.



Questions

Washington (DC) Metropolitan Area Transit Authority

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Thank You !