



Washington Metropolitan Area Transit Authority

SmartView: Bus Stop and Walk Path Accessibility Feature on the WMATA Trip Planner

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Background

Metrobus - 100% Accessible

- ✓ Low-Floor Talking Buses
- ✓ Dual Wheelchair Stations
- ✓ ADA Trained Operators

Environment - 50% accessible

- ✓ All Metro-owned stops accessible
- ❖ 12,000 stops are not owned by Metro—only 50% are accessible





Challenges

- While our region works to make accessibility improvements to bus stops, how can customers with disabilities plan their travel around these barriers?
- How many customers are forced to use paratransit because of them?
- What if the bus stop is accessible but the path of travel to it is not?



Solutions

Bus Stop and Accessible Path Improvements

- Define the accessibility of a bus stop as being inclusive of an accessible path thereto
- Promote bus stop improvement by jurisdictional owners and share resources, grants, and other funding to accomplish
- Chart progress on improvements via a Board-sponsored metric

Bus Stop and Accessible Path Information

- Inform customers on bus stop accessibility and amenities through Metro's Trip Planner
- Provide needed pathway accessibility information between bus stop and origin/destination



SmartView – Customer Interface

Trip Planner integrates bus stop accessibility and amenity information with a street view.

To plan a bus trip, customers enter:

- Starting Location
- Destination
- Preferred mode
- Time and date
- How far they can walk

The screenshot shows the 'LET'S METRO' Trip Planner interface. At the top, there is a blue header with a white right-pointing arrow icon and the text 'LET'S METRO'. Below this is a section titled 'TRIP PLANNER'. It features two input fields: 'FROM' with the value 'METRO CENTER METRO STATION' and 'TO' with the value 'Capitol Hill'. Each field has a location pin icon to its right. Below these fields are three radio buttons for 'Travel by': 'Bus' (selected), 'Rail', and 'Both'. The time and date section includes 'Leave At' (2:10 PM) and 'February 23'. There is a dropdown menu for 'Show me the route that' with the selected option 'Gets me there first'. Below that is a field for 'I can walk up to' with the value '1/2 mile'. At the bottom left, there is a link 'FEWER OPTIONS' with an upward arrow. At the bottom right, there is a blue button labeled 'PLAN MY TRIP'.



Trip Planner Customer Itinerary

Two itineraries result:

Itinerary 1

From Metro Center

- Take the 30S Bus (27 minute trip)

- Walk less than 0.1 mile to Capitol Hill

Click on the underlined stop locations for accessibility information

Trip Planner Results



From METRO CENTER STATION | To Capitol Hill

Leaving at 2:10 PM | On February 23

[MODIFY MY TRIP](#)

[PLAN RETURN TRIP](#)

ITINERARY 1 - 27 MINS

Leave at: 2:16pm

Arrive at: 2:40pm



Depart from PENNSYLVANIA AVE NW & 13TH ST NW

Board **30S** towards SOUTHERN AVE STATION

Exit at PENNSYLVANIA AVE SE & NORTH CAROLINA AVE SE



Walk a short distance to your destination.

\$1.75 SmarTrip Fare

\$0.85 SmarTrip(Senior/Disabled/Medicare)

Only Cash & SmarTrip are accepted on buses

[Show Details](#)

ITINERARY 2 - 27 MINS

Leave at: 2:24pm

Arrive at: 2:48pm



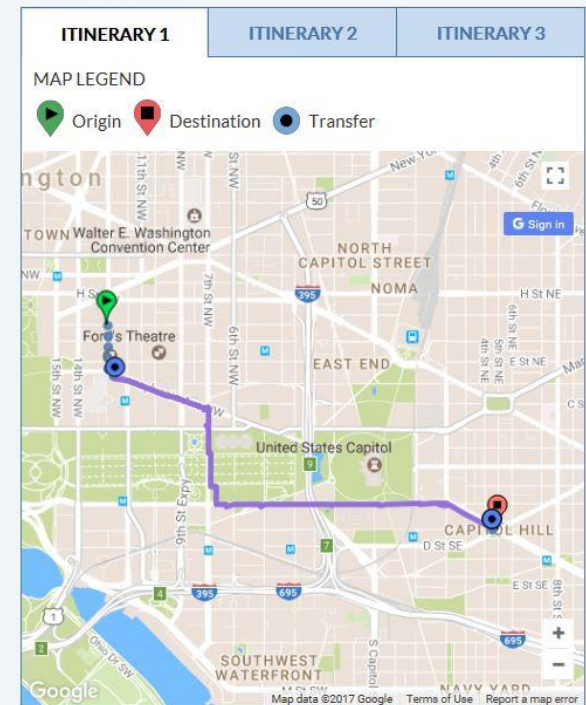
Depart from PENNSYLVANIA AVE NW & 13TH ST NW

Board **36** towards NAYLOR RD STATION

Exit at PENNSYLVANIA AVE SE & NORTH CAROLINA AVE SE



Walk a short distance to your destination.






Accessibility Information

Clicking on the bus stop gives:

- Photos (forward, left, right)
- Amenities
- Accessibility
- Links to:
 - Google Street View
 - Bing “Bird’s Eye” Map View
 - Report a bus stop problem

Bus Stop Information

Trip Planner Find a Stop 1000976



Stop ID 1000976 Survey Date: 07/07/2009

On Street: PENNSYLVANIA AVE NW
Near Street: 13TH ST NW

Location	Amenities	Accessibility
Direction: Southeast Location: Far Side Bus Routes: W 13, 30N, 30 S, A9, P17, P19, 39, 32, 36, 37, 33	<ul style="list-style-type: none">✓ Bench✗ Bike Racks✓ Lighting✗ Route Map✓ Route Schedule✓ Sidewalk to Curb✓ Shelter	<ul style="list-style-type: none">✓ Crosswalk✓ Curb Ramp✓ Pedestrian Crossing Signal✓ Unobstructed Sidewalk✗ Gentle Sidewalk Slope✓ Stop Sign or Traffic Light

Imagery Street Topographic

Google Street View Bing Bird's Eye Report a Problem





Reporting Bus Stop Problems

Customer Comment Form

Metro values your feedback regarding Metrobus, Metrorail, and MetroAccess service. Using the form below, please provide as much detail as possible to help us follow up appropriately.

To ensure that you receive our reply, please add the address "csvc@wmata.com" to your contacts.

Thanks for riding with us.

Service *

METROBUS

Topic *

Bus Stop

Category *

ACCESSIBILITY

Route

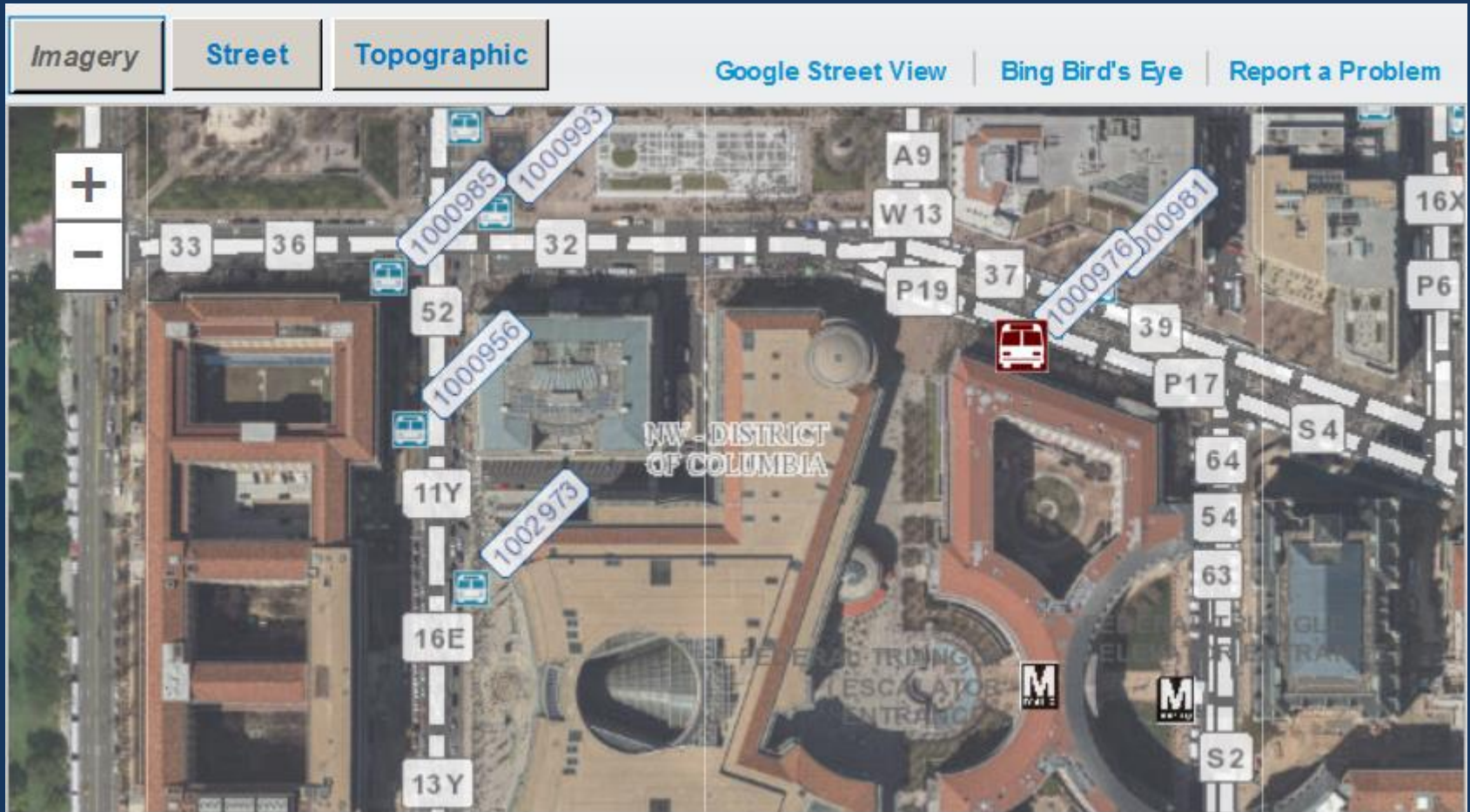
54

The prior SmartView screen provides a link to leave a detailed customer comment.

Bus stop users help us keep our database current and accurate by providing valuable information on bus stop problems or erroneous data about them on our site.



Bird's Eye Map View



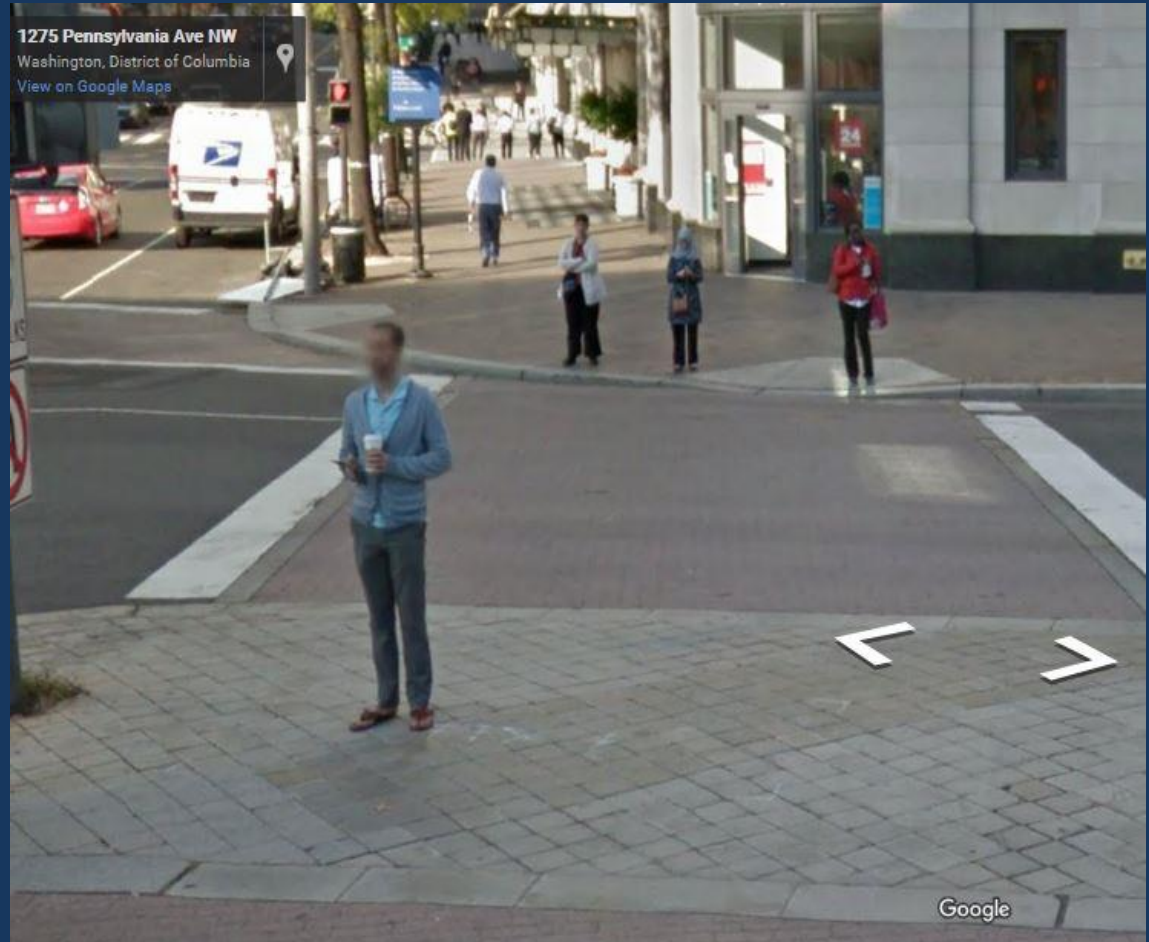


Street View

Can view travel path to stop, destination, and identify:

- Sidewalk
- Curb cuts
- Crosswalk
- Obstructions
- Slope

Available for boarding and deboarding stops





Results

Increased Metrobus Ridership by Paratransit and Half Fare Customers

Fiscal Year (July 1-June 30)	Paratransit Customer Metrobus Trips	Half Fare Customer Metrobus Trips
2015	2,147,000	12,995,000
2016	2,564,000	13,206,000
	+417,000 trips (19.4%)	+211,000 trips (1.6%)

*Trip Planner Smart View launched in early 2015



You've Arrived!

Supports “mainstreaming”
and greater independence

Customers will be more
confident using bus service
and choosing it more often

Every bus trip taken by a
paratransit customer saves
Metro a paratransit trip





Project Time Line and Cost

SmartView was developed in-house by a retained contractor who provided application development.

Because the Trip Planner and the bus stop database already existed, costs were limited to application development.

The cost was \$50,000 and the project took four (4) months to complete.





Project Resources and Contacts

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