





Traffic and Congestion in DC

DDOT • DPW • DFHV • MPD • OP • WMATA • MWCOG

Agenda



- 1. What is the current state of traffic and congestion in DC?
- 2. What factors contribute to traffic and congestion in DC?
- 3. What does the District do to address traffic and congestion?
- **4.** What new strategies can the District try to reduce traffic and congestion?







WHAT IS THE CURRENT STATE OF TRAFFIC AND CONGESTION IN DC?

- √ How Do People Commute In and Out of DC?
- √ How Travel Times Have Increased in DC
- ✓ Travel Times on Major Roadways
- ✓ Top Fifteen (15) Bottleneck Locations in DC



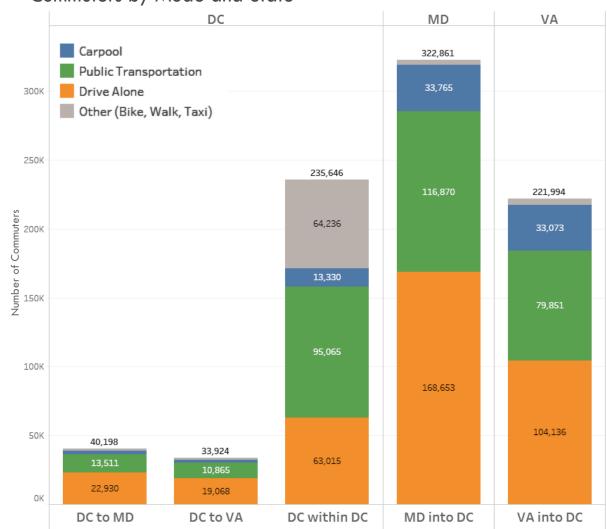
Commuting in and out of DC



Primary Commute Mode for people who work in DC

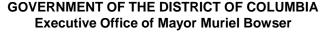
	2007	2016
Drive Alone	42%	38%
Carpool	9%	6%
Bus/Train	37%	45%
Bike/Walk	5%	6%

Commuters by Mode and State



Source: Census Bureau (2013); Commuter Connections State Of The Commute Survey 2016



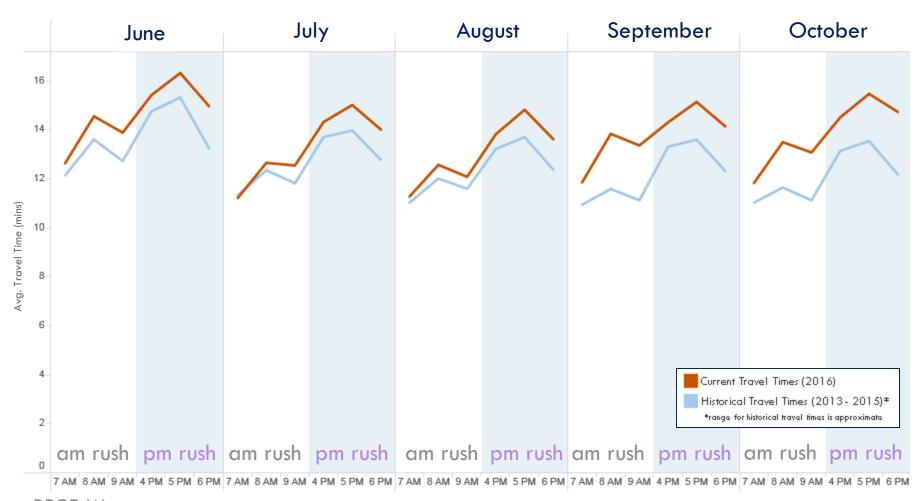




Increase in Travel Times

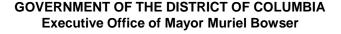


According to Waze data, travel times have increased in comparison to historical travel times during rush periods



Source: DDOT; Waze



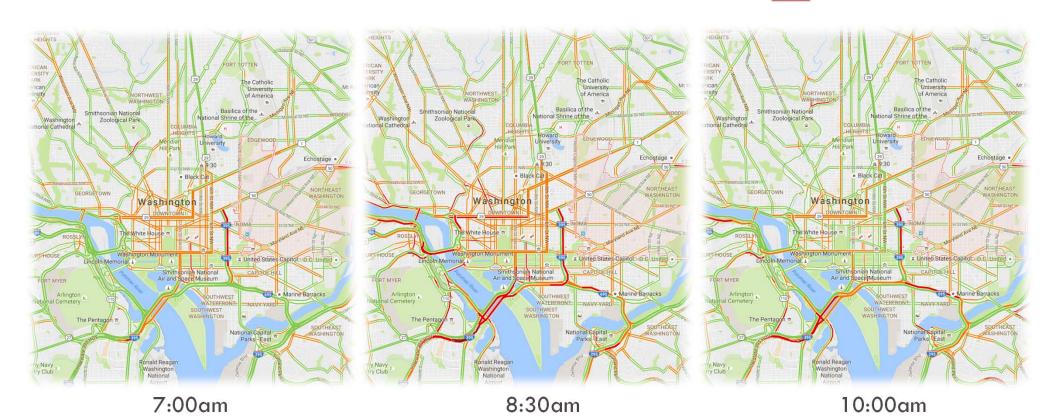


Travel Times on a Typical Tuesday



MORNING COMMUTE

No traffic delays Medium amount of traffic Traffic delays Heavier traffic delays



Source: Google Maps



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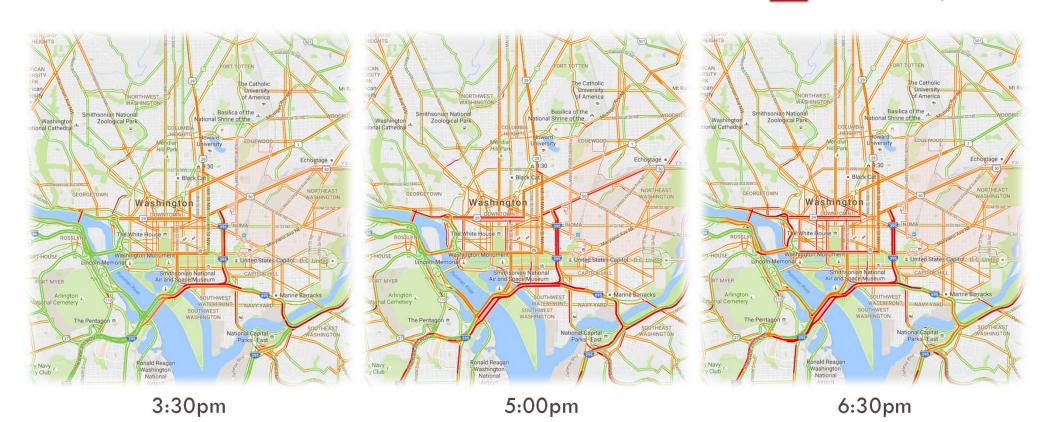


Travel Times on a Typical Tuesday



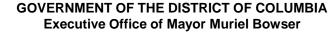
AFTERNOON COMMUTE

No traffic delays Medium amount of traffic Traffic delays Heavier traffic delays



Source: Google Maps





Top Traffic Bottleneck Locations in DC

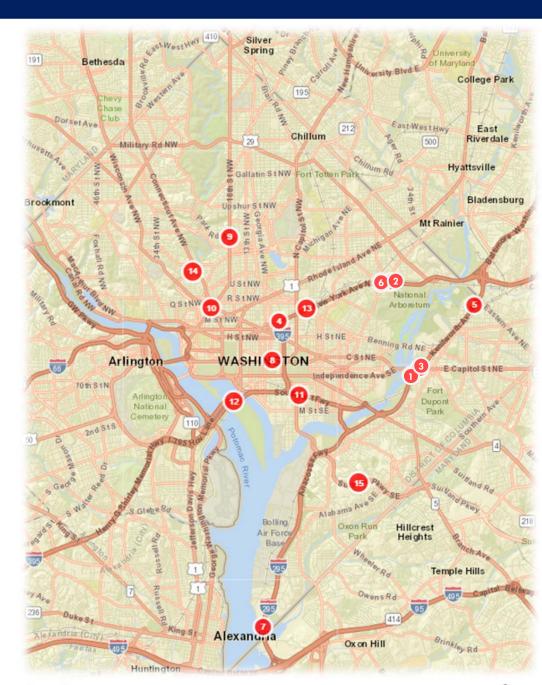


Rank Location

- 1 DC-295 S @ Capitol St
- 2 US-50 W @ Bladensburg Rd
- 3 DC-295 N @ Capitol St
- 4 US-50 W @ I-395
- 5 DC-295 N @ Eastern Ave
- 6 US-50 E @ Bladensburg Rd
- 7 I-295 S @ DC-MD State Border
- 8 Constitution Ave E @ Pennsylvania Ave
- 9 16th St S @ Park Rd
- 10 New Hampshire Ave S @ Connecticut Ave
- 11 I-295 N @ I-395
- 12 I-395 S @ Ohio Dr
- 13 US-50 W @ Florida Ave
- 14 Beach Dr S @ Rock Creek Pkwy/24th St
- 15 Suitland Pkwy W @ Stanton Rd











WHAT FACTORS CONTRIBUTE TO TRAFFIC AND CONGESTION IN DC?

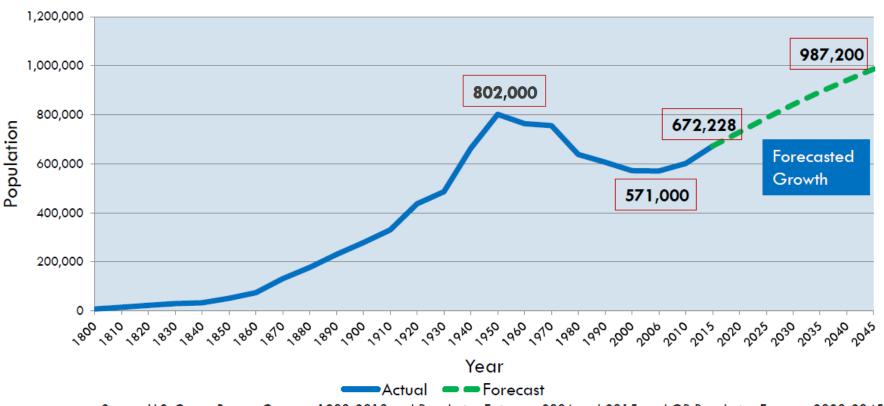
- ✓ More People: Population, Tourism, and Special Event Growth
- ✓ More Business: Increase in Construction Permits, Deliveries
 & the On-Demand Economy
- ✓ Declining Metrorail Ridership
- ✓ Lower Gas Prices
- ✓ Major System Shocks: SafeTrack & Beach Drive
- ✓ Ongoing System Shocks: Ongoing Breakdowns on Metro,
 Traffic Incidents and Accidents, Dignitary Moves



Population Growth



In the 10 years 2005 to 2015, the District of Columbia added over 100,000 people



Source: U.S. Census Bureau Censuses 1800-2010 and Population Estimates 2006 and 2015, and OP Population Forecast 2020-2045

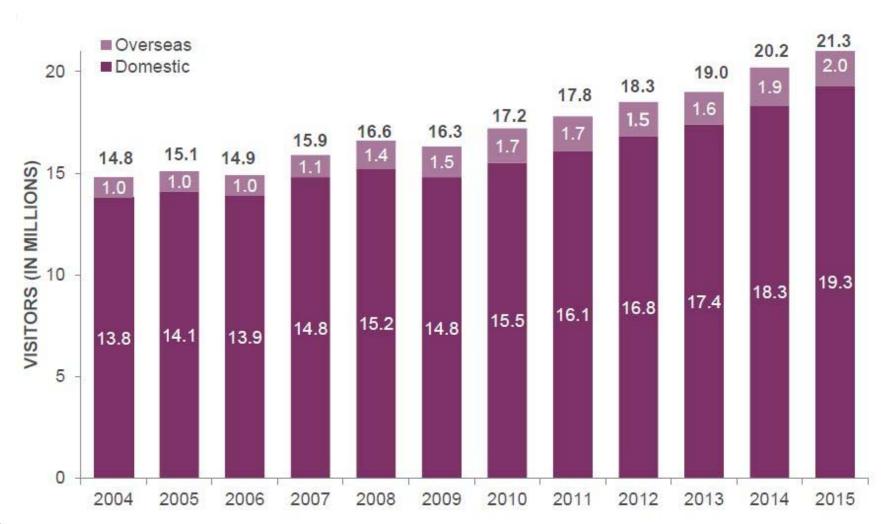


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Tourism in the District



Between 2004 and 2015, the number of visitors has increased by 6.5M





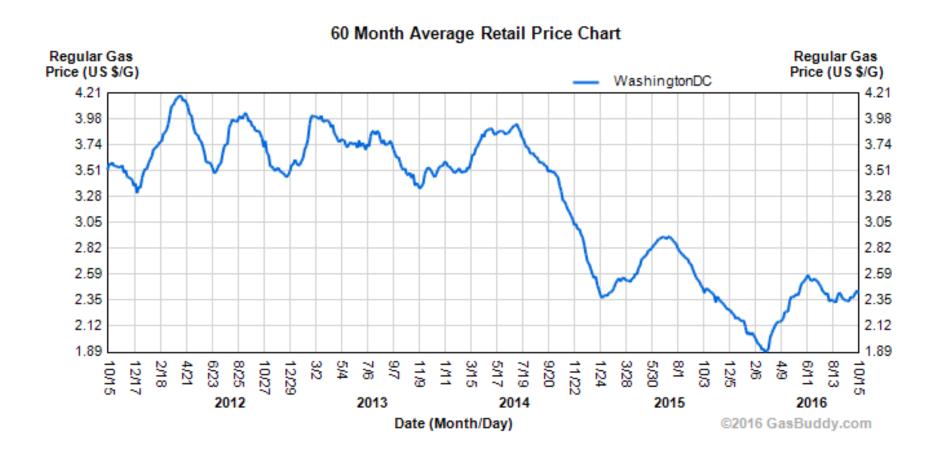
Source: Destination DC

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Gas Prices



Gas prices have dropped over 40 percent since 2012





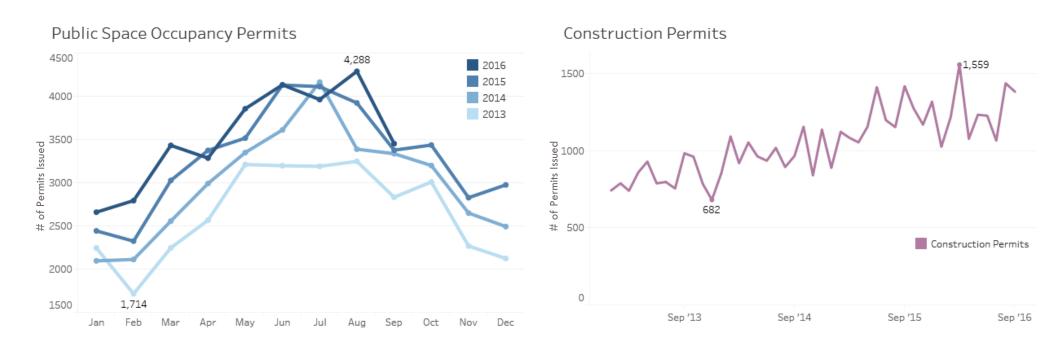
Source: GasBuddy





Issuances of Public Space Occupancy Permits have increased by nearly 40% since 2013

Issuances of Construction Permits have increased by over 80% since 2013



Source: DDOT

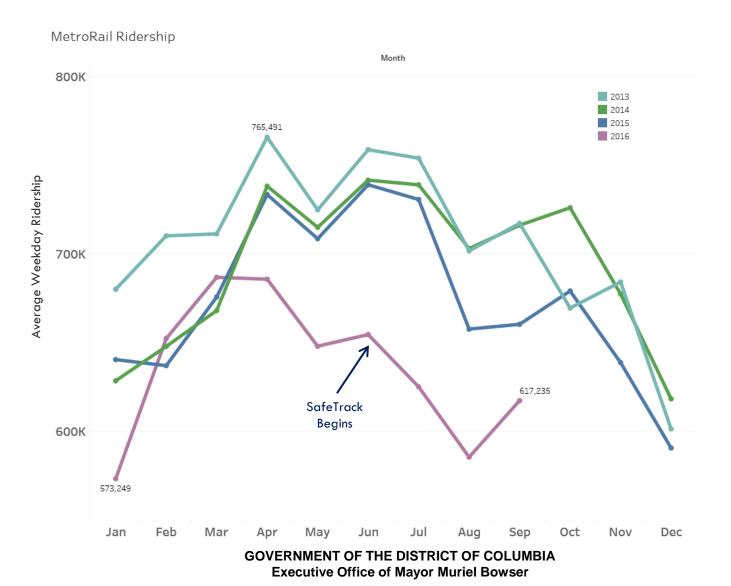




Declining Metrorail Ridership



Despite increasing population, Metrorail ridership continues to decline year over year







Delivery Trucks



Delivery trucks parking illegally and obstructing traffic presumably factor in parking tickets as a "cost of doing business"



A pair of trucks parked on K Street NW force drivers to pull around them on Oct. 31. (Bill O'Leary/The Washington Post)



A delivery truck and a personal car are seen illegally parked on L Street NW (Bill O'Leary/The Washington Post)

"It happens all the time," Hensey, 27, a dog walker who lives in Columbia Heights, said as he fed the meter. "It doubles the commute time."

Source: The Washington Post





System Shocks











Metro SafeTrack

Impacts
continue to
shift as surges
progress

Beach Dr Closing

Diverts 20K to 25K vehicles to alternate streets each day

Traffic Incidents

Peaks during AM and PM rush period

Dignitary Moves

Results in road closures and rerouting of traffic







GOVERNMENT OF THE DISTRICT OF COLUMBIA





WHAT DOES THE DISTRICT DO TO ADDRESS TRAFFIC AND CONGESTION?

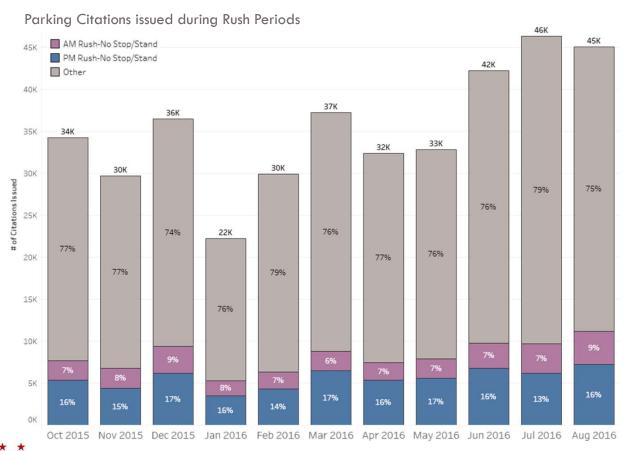
- ✓ Parking & Traffic Enforcement
- ✓ Traffic Control Officers
- ✓ Taxicab Stands, Shared Riding, and Neighborhood Ride Service
- √ Signal Optimization
- ✓ Transit Prioritization programs such as Georgia Ave bus lane
- ✓ Bike Improvements such as bike boxes, protected lanes
- ✓ Pilot Parking project in Chinatown for demand-based fee structure
- ✓ Upcoming mobility study focused on congestion across all modes of transit



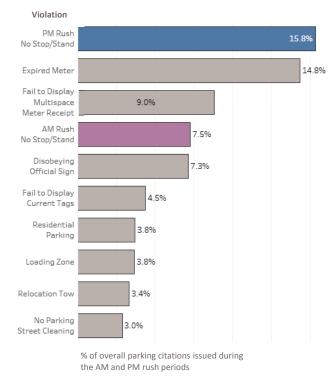
Rush Hour Parking Enforcement



Although rush hour parking violations are among the top 4 four types of tickets issued during rush hour period, they represent a smaller overall share of tickets issued during the period



Parking Citations issued during Rush Periods by Type (Top 10)



Source: DPW

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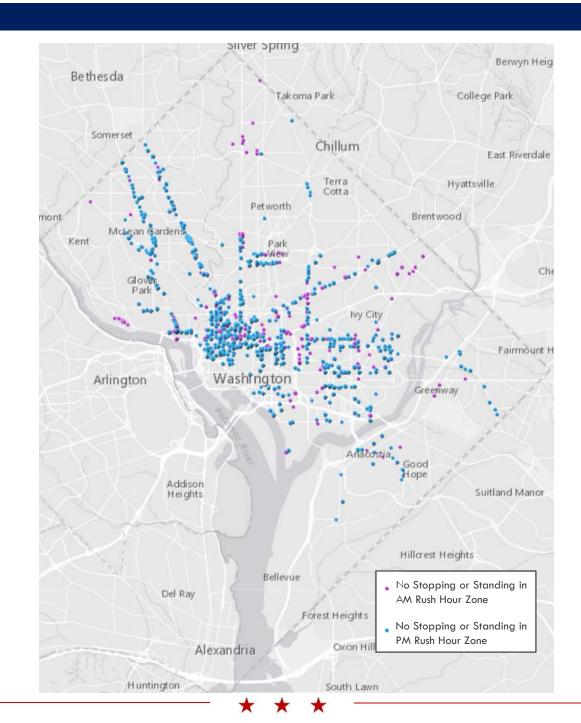




Rush Hour Parking Enforcement



Locations where Rush Hour Parking violations have been issued in August 2016



Source: DPW



Taxicab Stands and Shared Ride Zones

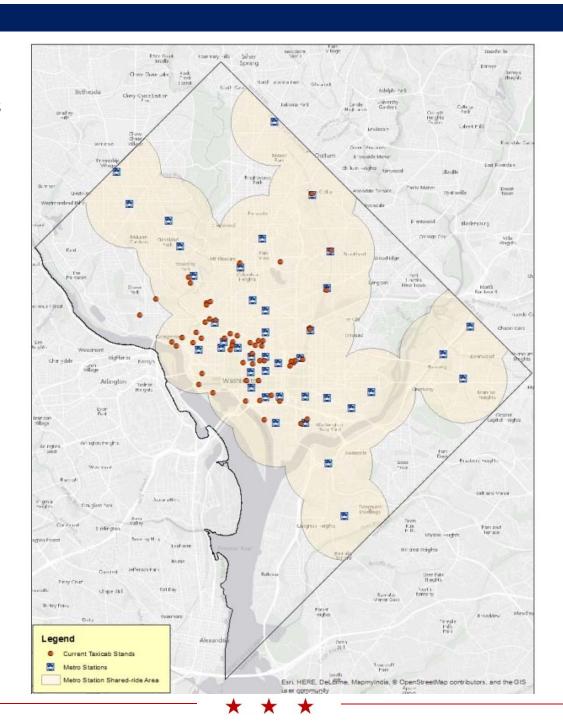


Shared Ride Zones are within a one-mile radius of Metro stations and designated taxicab stands***

***NOTE: The current shared ride expansion for taxicabs will run only through the SafeTrack period

Source: DFHV

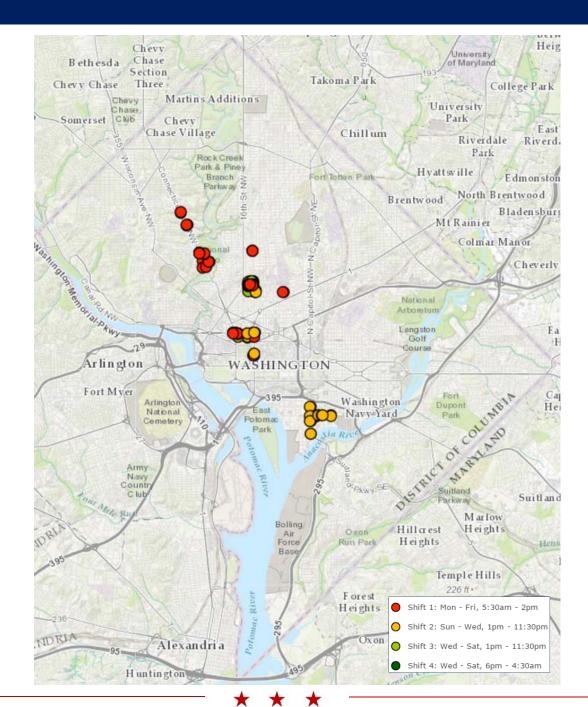




Traffic Control Officer (TCO) Deployment



113 total Traffic Control Officers including supervisors and leads



Source: DDOT





TOPICS FOR DISCUSSION: NEW STRATEGIES

- ✓ Parking & Traffic Enforcement
- √ Commercial Deliveries
- ✓ Permits & Special Events
- ✓ Public Transit
- ✓ Major Shocks
- ✓ Ongoing Shocks
- ✓ Metro And Regional Collaboration
- ✓ Data
- Alternative Work Schedules



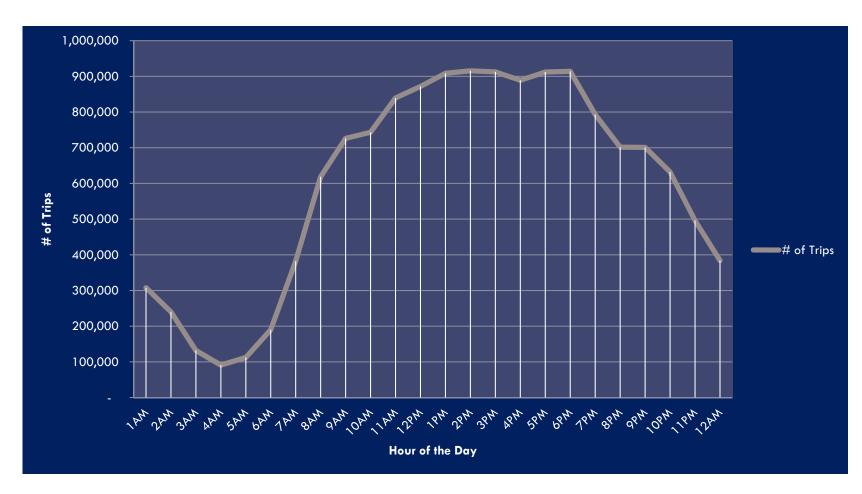


APPENDIX









Taxicab Ridership by Hour of Day: October, 2015 - September, 2016

Source: DFHV



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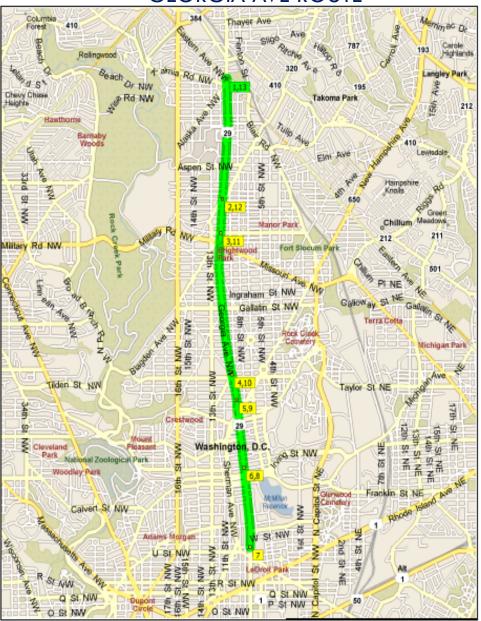


Neighborhood Ride Service by Taxicab: Ward 4 Routes

WASHINGTON HOSPITAL CENTER ROUTE

Takoma Park Rock Creek Park Ma hall D,

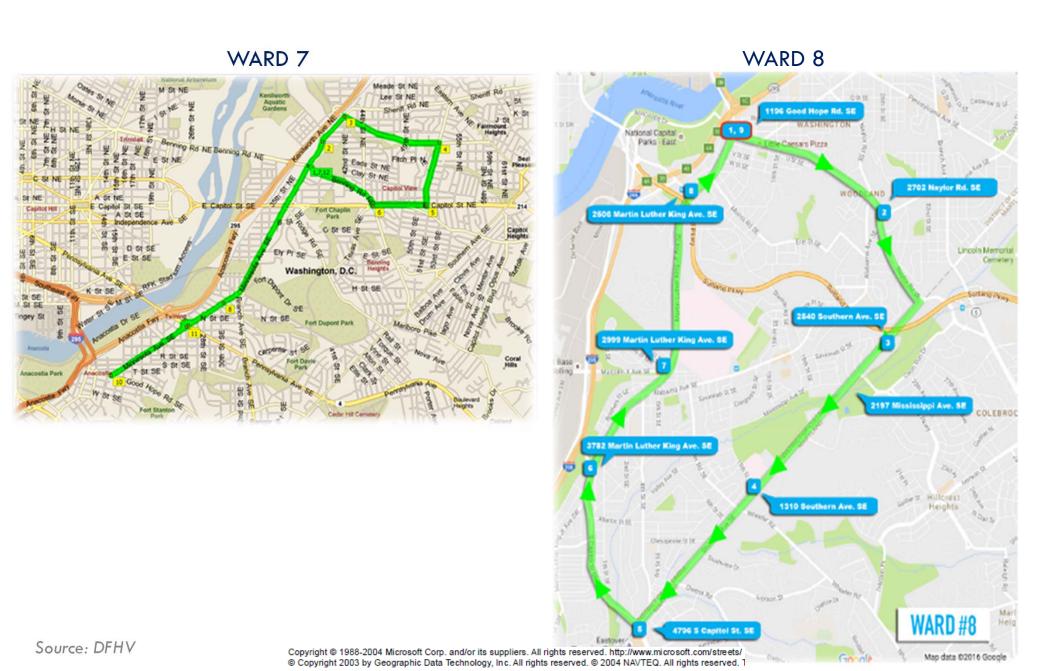
GEORGIA AVE ROUTE



Source: DFHV



Neighborhood Ride Service by Taxicab: Ward 7 and 8 Routes



Top 50 Traffic Bottlenecks in DC



Rank Location

- DC-295 S @ CAPITOL ST
- US-50 W @ BLADENSBURG RD
- DC-295 N @ CAPITOL ST
- US-50 W @ I-395
- DC-295 N @ EASTERN AVE
- US-50 E @ BLADENSBURG RD
- I-295 S @ DC--MD STATE BORDER
- CONSTITUTION AVE E @ PENNSYLVANIA AVE
- 16TH ST S @ PARK RD
- NEW HAMPSHIRE AVE S @ CONNECTICUT AVE
- I-295 N @ I-395
- I-395 S @ OHIO DR
- US-50 W @ FLORIDA AVE
- BEACH DR S @ ROCK CREEK PKWY/24TH ST
- SUITLAND PKWY W @ STANTON RD
- I-395 N @ 7TH ST SW
- 14TH ST N @ U ST
- SUITLAND PKWY E @ STANTON RD
- I-395 N @ H ST
- I-395 N @ I-695
- CONSTITUTION AVE W @ US-50/23RD ST
- N CAPITOL ST NE S @ US-50/NEW YORK AVE
- CANAL RD W @ ARIZONA AVE
- US-1 N @ INDEPENDENCE AVE
- N CAPITOL ST NE S @ H ST

Rank Location

- 26 CLARA BARTON PKWY E @ CANAL RD
- K ST W @ 27TH ST
- PENNSYLVANIA AVE W @ MINNESOTA AVE
- 29 ROCK CREEK AND POTOMAC PKWY S @ VIRGINIA AVE
- CANAL RD E @ US-29/WHITEHURST FWY
- 31 M ST W @ US-29/FRANCIS SCOTT KEY BRIDGE
- US-50 E @ FLORIDA AVE 32
- M ST E @ PENNSYLVANIA AVE/29TH ST
- US-50 W @ I-66/POTOMAC RIVER FWY/23RD ST
- 14TH ST S @ RHODE ISLAND AVE
- US-50 E @ 17TH ST
- US-1 S @ VERMONT AVE/13TH ST
- I-395 HOV N @ OHIO DR
- E ST E @ 15TH ST
- I-395 S @ MEMORIAL BRIDGE
- 16TH ST N @ PARK RD 41
- 18TH ST S @ FLORIDA AVE
- MASSACHUSETTS AVE E @ RHODE ISLAND AVE/SCOTT CIR
- US-50 E @ MONTANA AVE
- US-29 E @ ROCK CREEK AND POTOMAC PKWY
- FRANKLIN ST E @ US-1/RHODE ISLAND AVE
- S CAPITOL ST SE S @ FREDERICK DOUGLAS MEMORIAL BRIDGE
- US-50 E @ 15TH ST
- N CAPITOL ST NE N @ IRVING ST
- 50 DC-185 S @ CALVERT ST







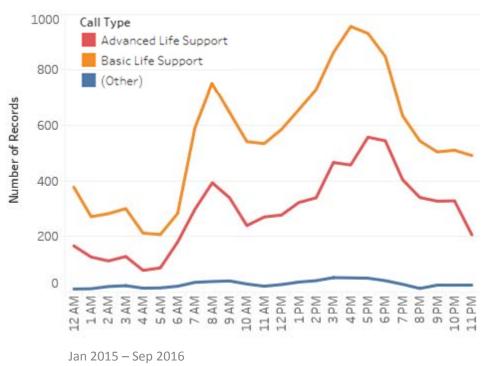


Traffic Crashes and Accidents

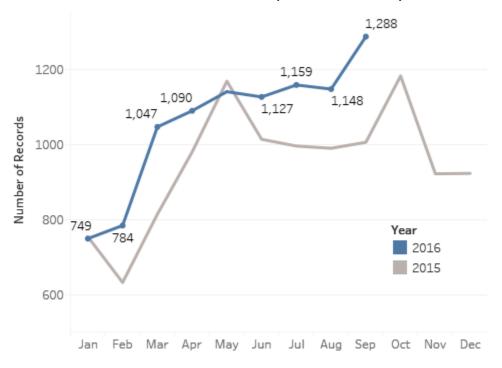


Traffic crashes and accidents are increasing in 2016 and also peak during rush periods

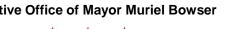
Traffic Crashes and Accidents Reported to 911 by Hour



Traffic Crashes and Accidents Reported to 911 by Month





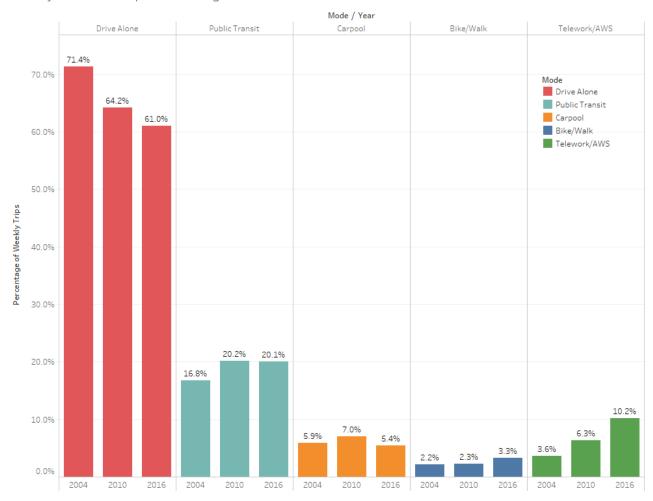






Driving alone in the region is down 10% over the past 12 years

Weekly Commute Trips for the Region



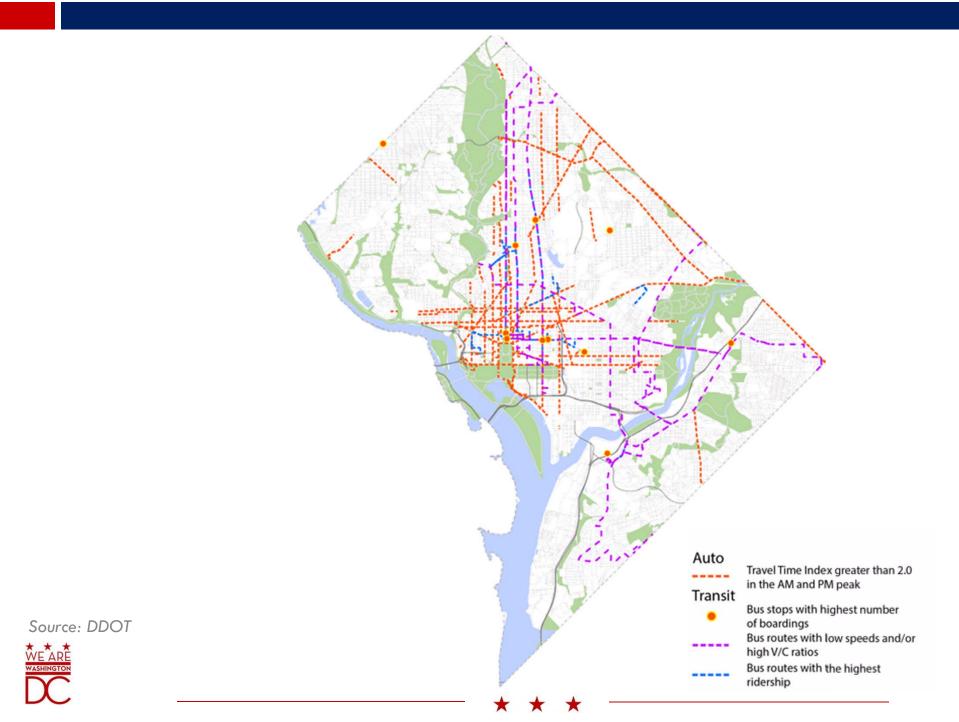








Top Routes for Automobile and Transit Traffic and Congestion



Traffic Counts for MD Crossing Points

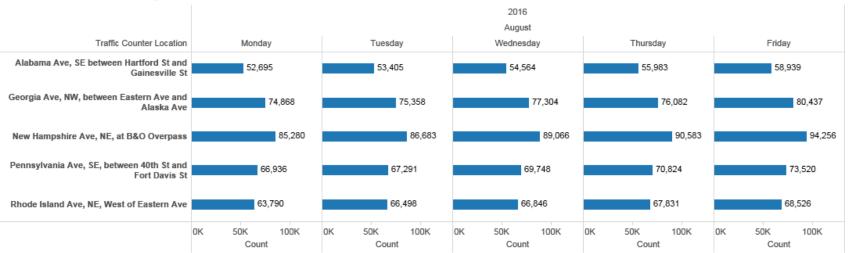


MARYLAND

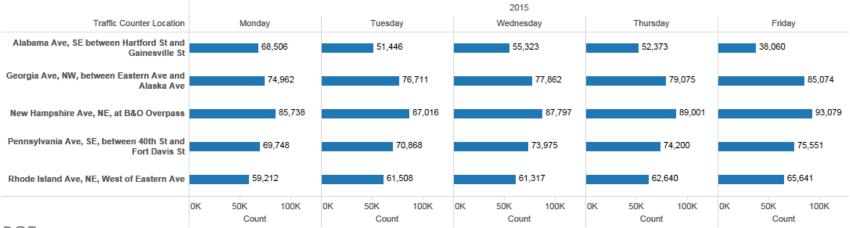




Traffic Counts MD Crossing Points 2016



Fraffic Counts MD Crossing Points 2015



Source: DDOT



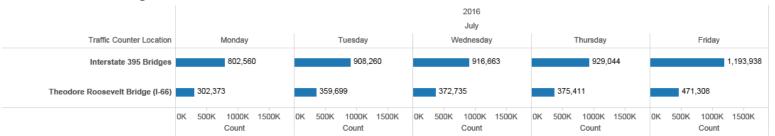


VIRGINIA

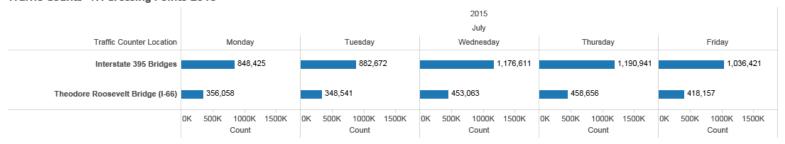




Traffic Counts VA Crossing Points 2016



Traffic Counts VA Crossing Points 2015



Source: DDOT



WMATA Recommendations for Improving Metrobus Speeds

DC Metrobus Hot Spots

#	Change	Type	Location
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1 Enforcement 7th and Massachusetts NW

2 Enforcement Wisconsin and Massachusetts NW

3 Enforcement Independence and Pennsylvania SE

4 Enforcement Pennsylvania and Minnesota Avenue SE

5 Enforcement Wisconsin and M St NW

6 Enforcement 9th and Massachusetts NW

7 Enforcement 6th Street and E Street SW

8 Enforcement Columbia Road & 16th Street NW

9 Traffic Changes 8th Street NE from Florida Ave to M Street SE

10 Traffic Changes Martin Luther King Jr Ave SE from Randel Pl to Malcolm X Ave

11 Traffic Changes Benning Road and Minnesota Ave

12 Traffic Changes Martin Luther King Jr. Avenue & Howard Road SE

13 Traffic Changes Mississippi Ave & Atlantic Street SE

14 Traffic Changes Connecticut Ave and Porter Street NW

15 Traffic Changes Michigan Ave and First Street NW

16 Traffic Changes 14th Street & Aspen Street NW

17 Traffic Changes 22nd Street NE and Monroe Street NE

18 Traffic Changes Columbia Road & 15th Street NW

19 Traffic Changes Aspen Street & Georgia Ave NW

20 Traffic Changes Martin Luther King Jr. Avenue & Chesapeake Street SE

21 Traffic Changes Irving Street and 11th Street NW

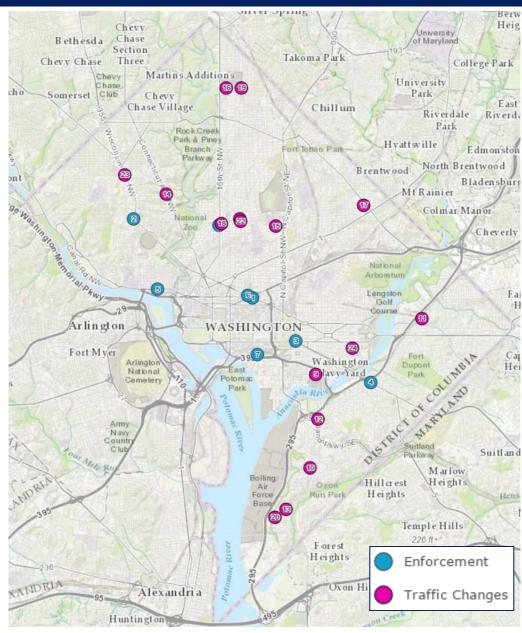
22 Traffic Changes 11th Street and Columbia Rd NW

23 Traffic Changes Wisconsin Ave and Van Ness Street NW

24 Traffic Changes 18th St SE & Massachusetts Ave SE

Source: WMATA







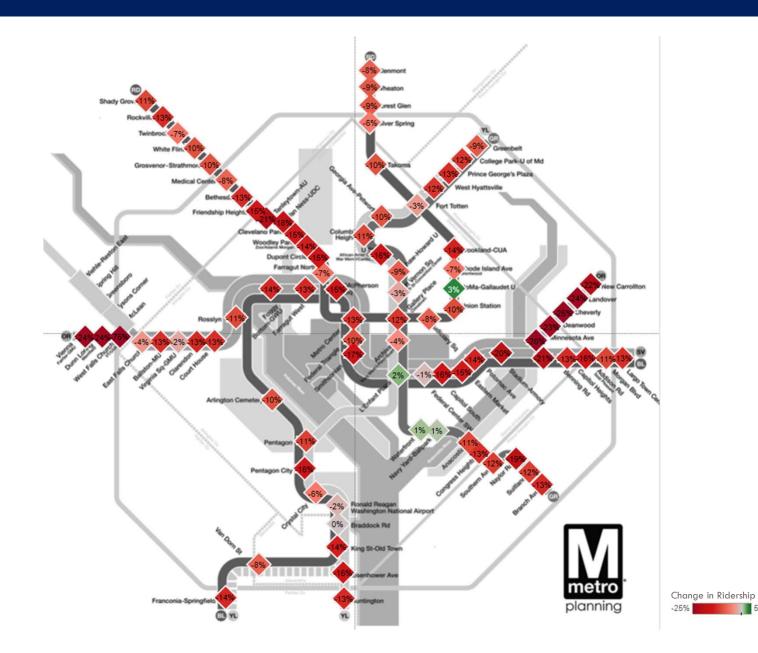


Change in Metrorail Ridership by Station



Between May 2014 and May 2016, Metrorail ridership has declined at all stations except:

- Noma-Galludet U
- L'Enfant Plaza
- Waterfront
- Navy Yard-Ballpark
- Braddock Rd



Source: WMATA



