

Freight Route Signage Plan for Washington, D.C.




Laura Richards

Policy, Planning and Sustainability Admin
DC Department of Transportation

Sabra, Wang & Associates, Inc.

AECOM

Presentation Agenda

- Project Background, Objectives, and Goals
 - State of the Practice
 - Freight Routes and Indicator Mapping
 - Signing Program, Policy, and Methodology
 - Priority Corridor Identification
 - Stakeholder Input
- 

Why do we need a Freight Signage Plan?


- Sign clutter
- Conflicting messages
- Driver confusion
- Enforcement/Regulation
- Cost
- Proactive vs. Reactive



Freight Signage Goals and Objectives

- Project Goals/ Objectives
 - Provide positive truck route guidance
 - Develop easy to follow traveler information/ sign symbology
 - Incorporate with sign asset inventory and technology platforms
 - Pilot project

Literature Review

- **Strategic Plans** (MoveDC, Freight Plan, Vision Zero, Truck Safety Enforcement)
 - Signage plan recommendation in Freight Plan
 - Truck Improvement Corridors (signal timing, managed lanes)
 - Loading Zone Pricing
 - COG NCR Freight Plan, VDOT Freight Plan, MDOT Freight Plan
 - Other State DOTs
- 

Peer Jurisdiction Interviews


- New York, NY, Baltimore, MD, Seattle, WA
Atlanta, GA, Portland, OR, Tampa, FL
- Others?
- Survey Questionnaire
 - Stakeholders involved and engagement methods
 - Corridor screening
 - Sign design development/ approval
 - Technology platforms
 - Outcomes/ lessons learned

Initial State-of-The-Practice Findings

- Advanced warning signs for bridge clearance notifications (FHWA)
- Camera enforcement for truck route compliance (Baltimore)
- Customized GPS navigation for Trucks (Illinois DOT)
- Thru Streets Program (NYCDOT)
- Color Coded Truck Network Map by Truck Length (CalTrans)

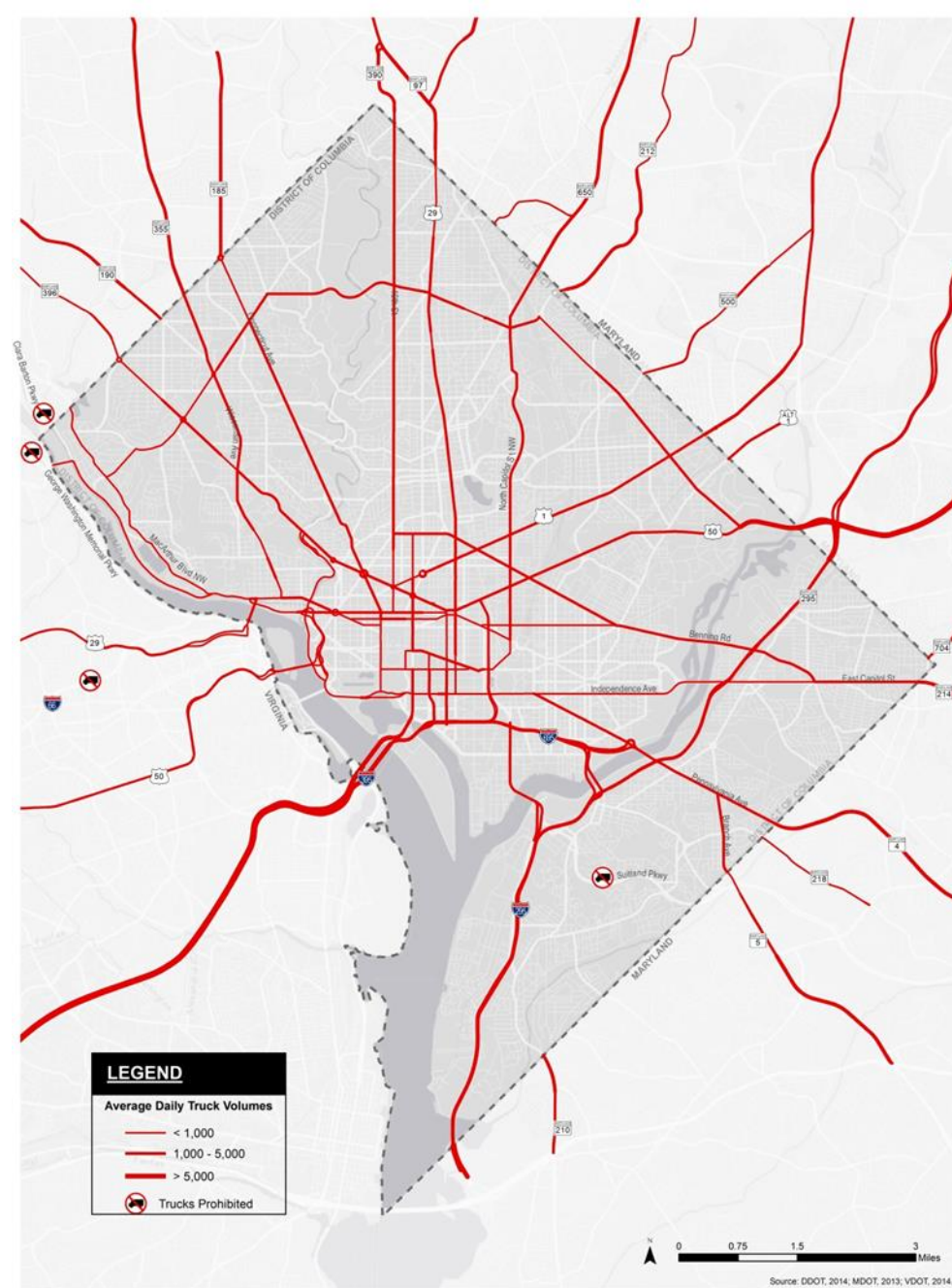


Freight Route Mapping

- Truck AADT
 - Approved/ Designated Through Truck Routes
 - Truck/ Bus Restricted Routes and Areas
 - Weight and Height Restricted Bridges
 - Truck Crashes
 - Priority Corridors (truck signal timing, traffic congestion)
 - Freight Related Land Uses/ Generators
 - Truck Parking and Movement Violations
 - Loading Zones
- 

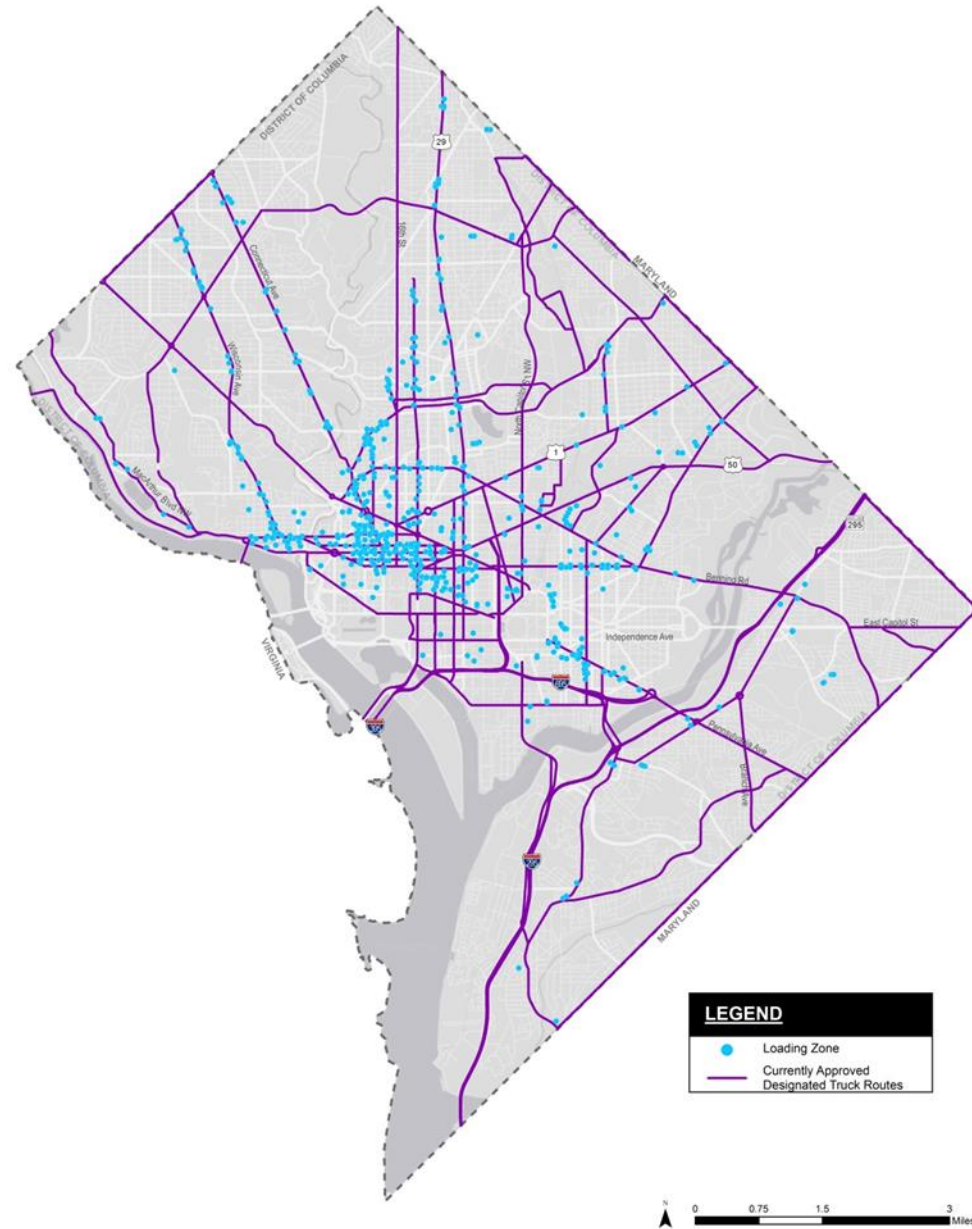
Truck AADT

- Highest truck volumes on east side and interstates/ New York Avenue



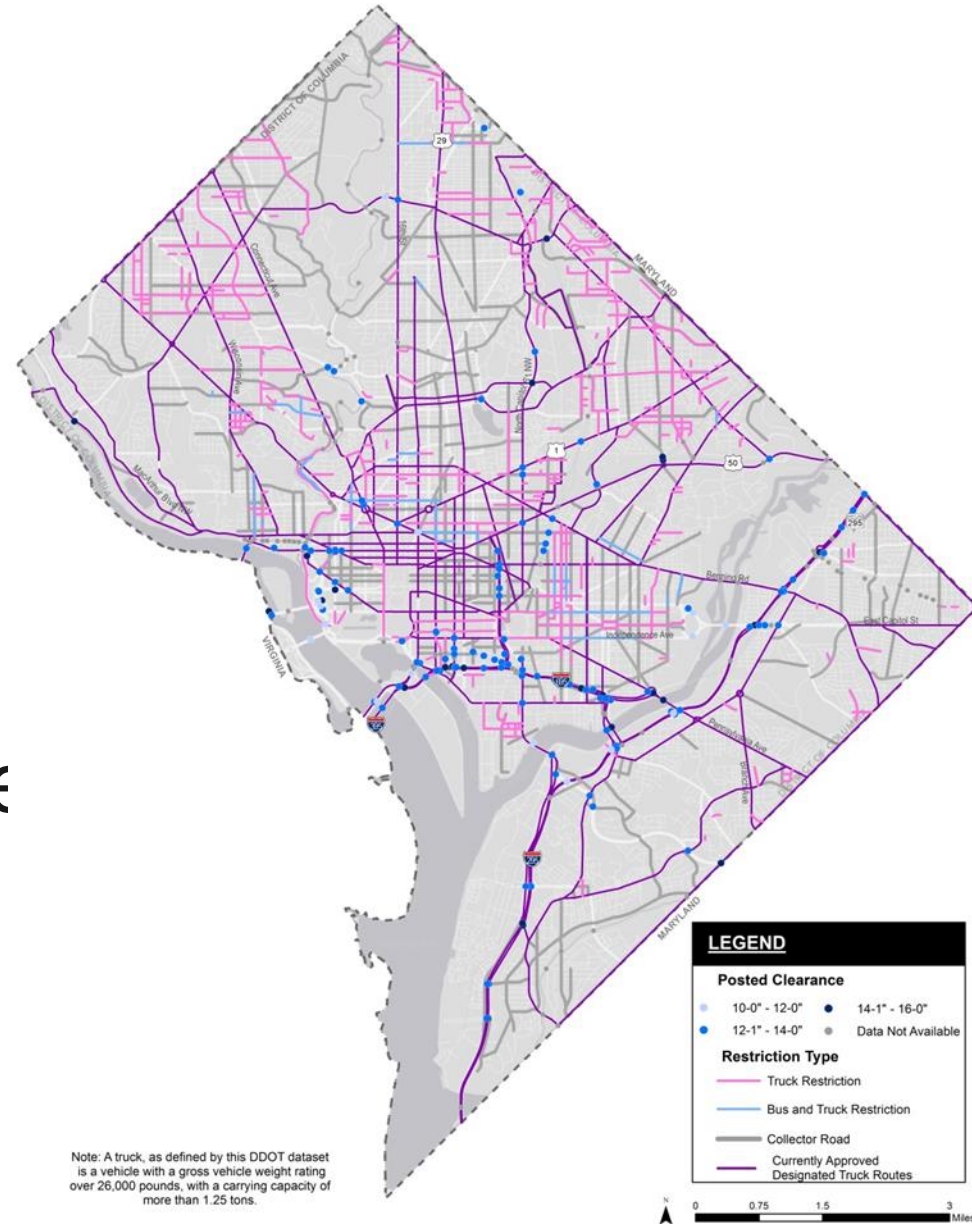
Current Truck Routes and Loading Zones

- Most loading zones are on designated truck routes



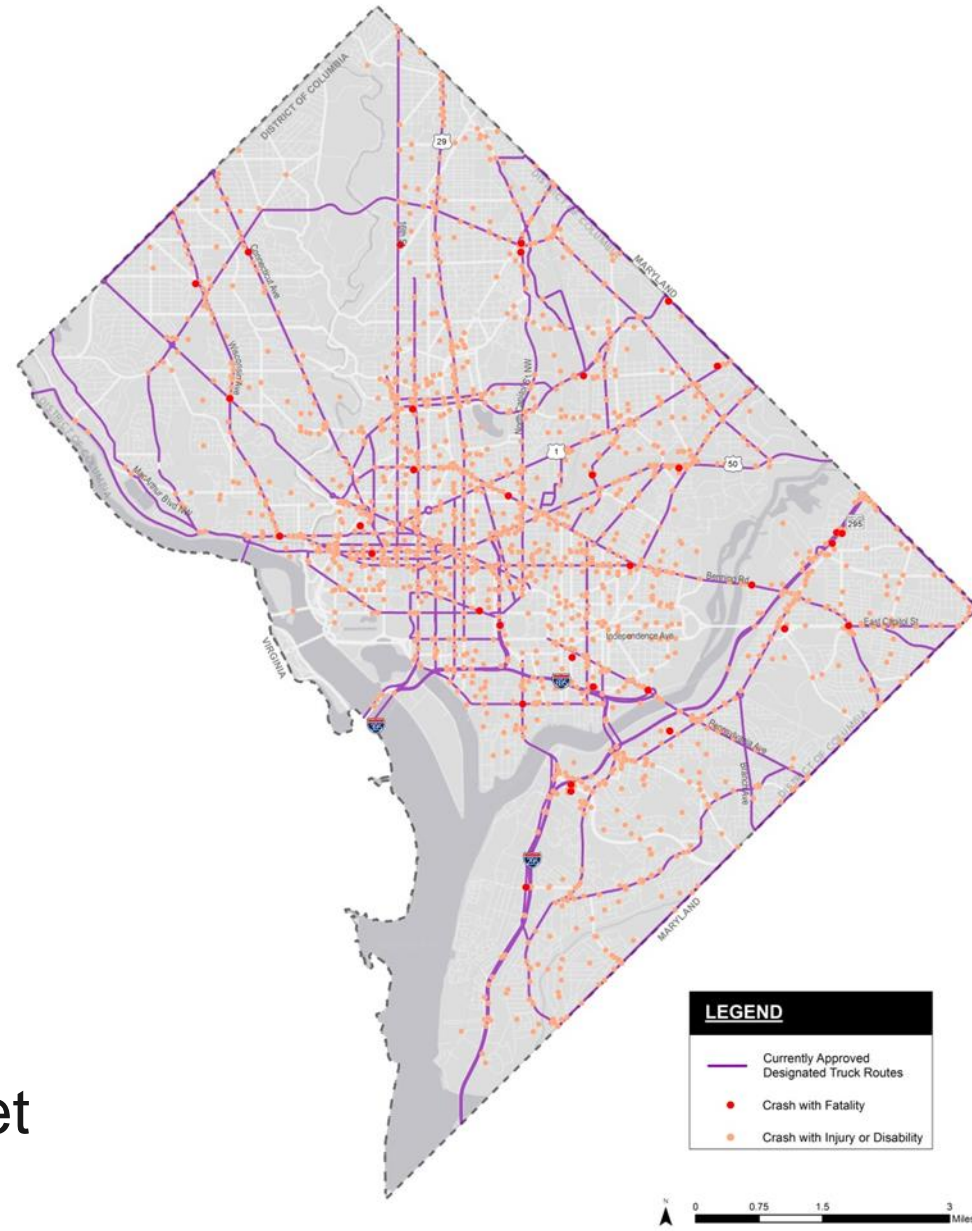
Truck Restrictions

- Some collector roadways are posted for truck restrictions
- Some low clearance bridges are on designated truck routes



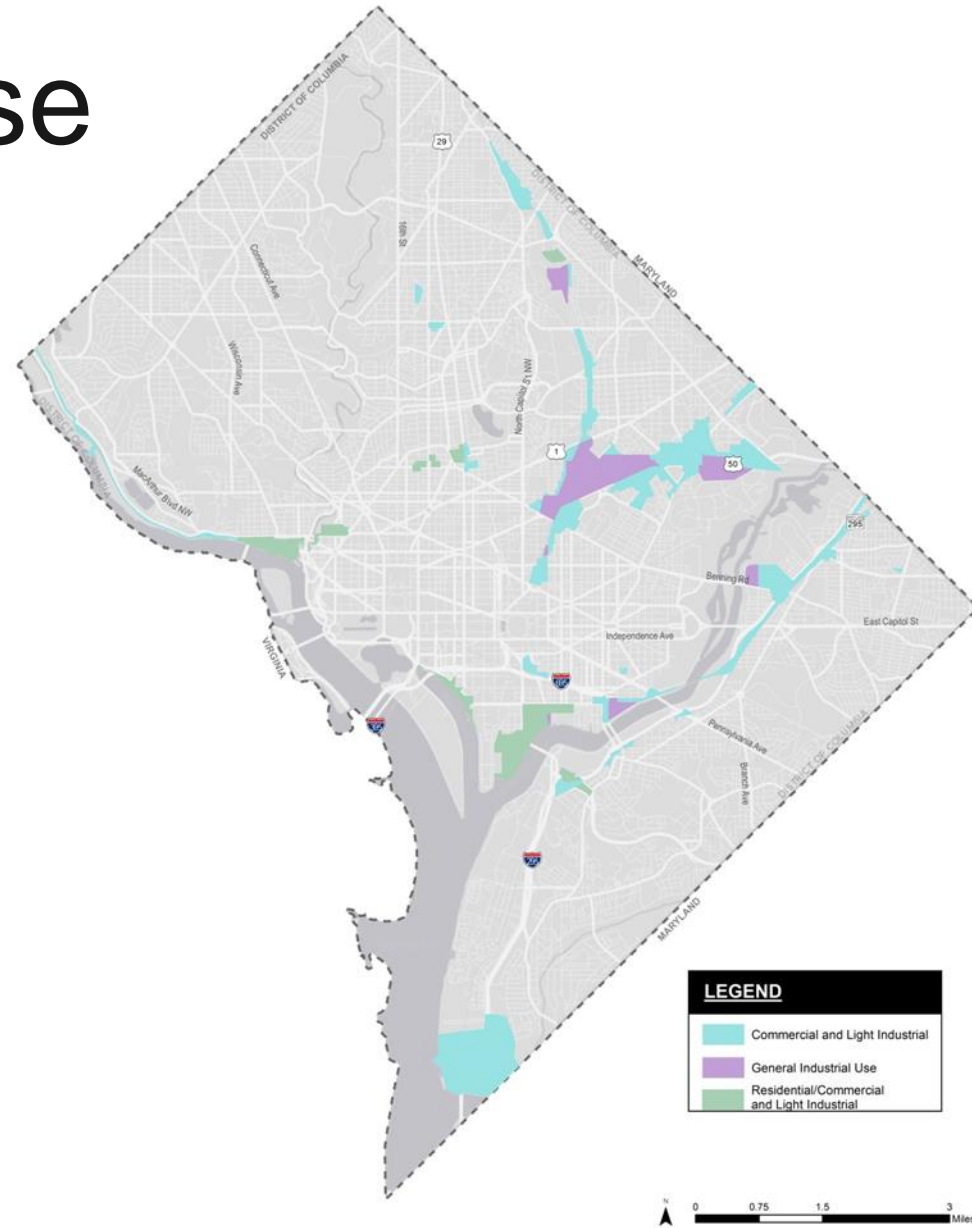
Truck Crashes

- Data includes all commercial vehicles
- 17,109 total crashes from 2010-2015
- 16% (2,365) reported with injury only
- 0.6% (112) disability injuries
- 0.2% (34) fatalities
- 87% (14,955) of all crashes are within 500 feet of a truck route



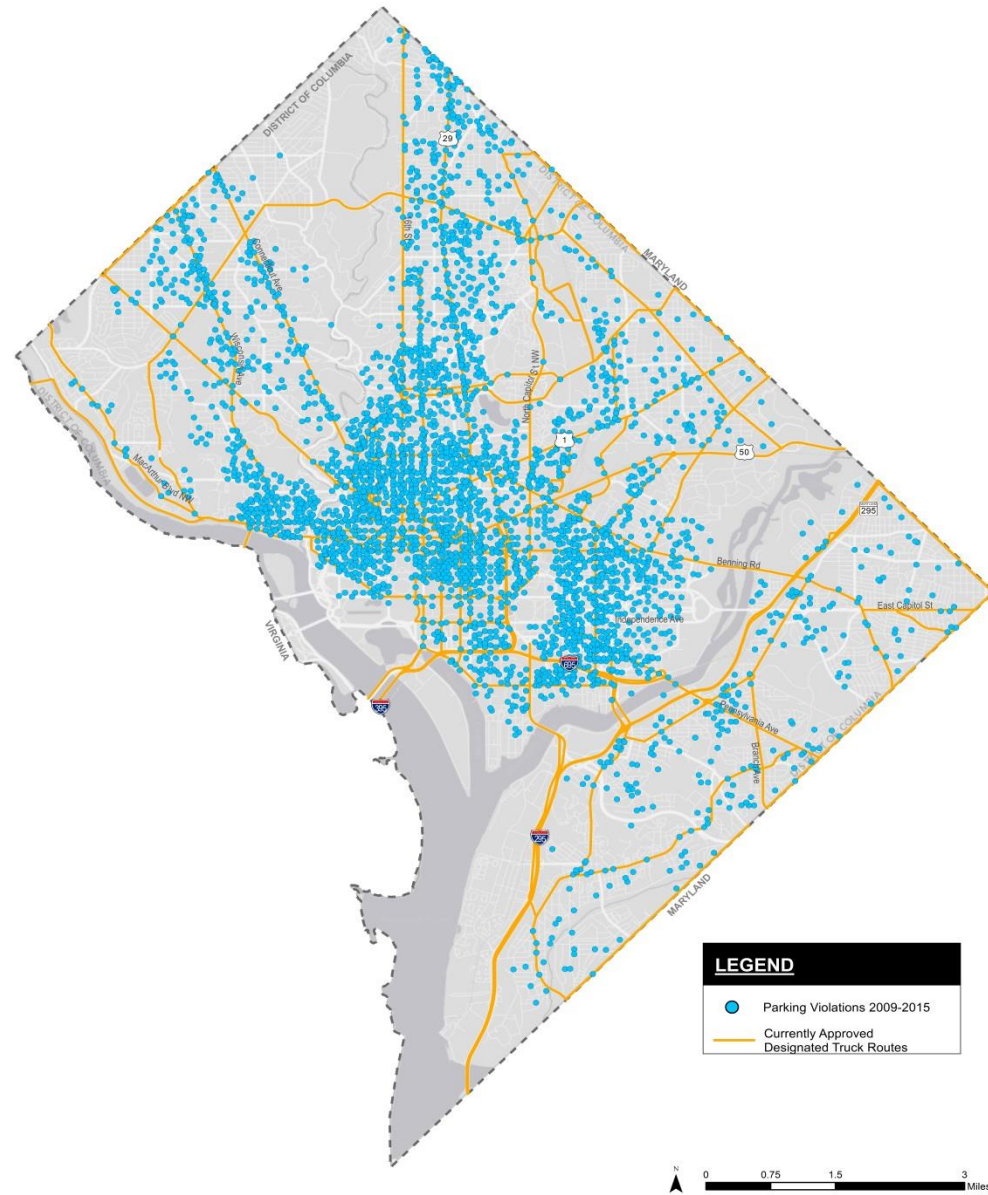
Freight Land Use

- Industrial zoned areas are primarily in northeast and southeast



Truck Parking Violations

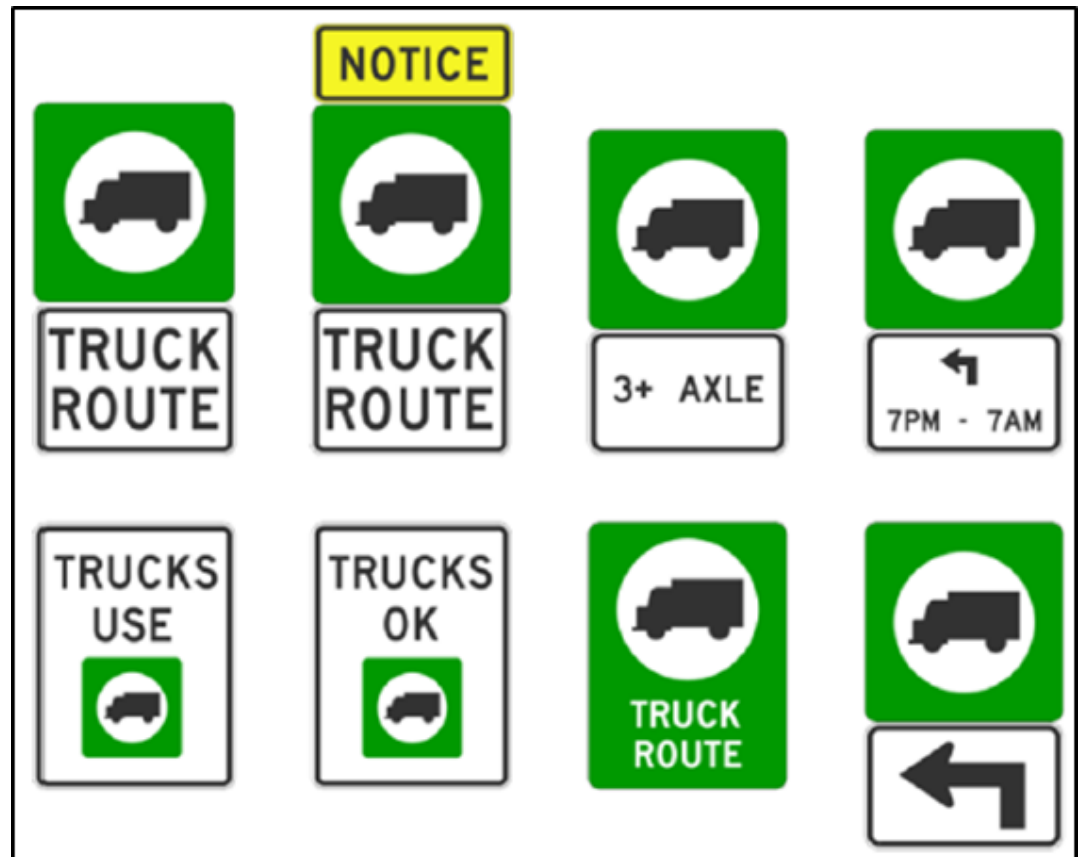
- 90,102 violations from 2009-2015
- 64,130 violations along non-designated truck routes
- Most Violations
 - Double-parked (68%)
 - Parking in entranceway (10%)
 - Unauthorized vehicle in loading zone (5.6%)



Source: District of Columbia Open Data, 2016.

Signage Program and Policy

- Sign Design
- Sign Art
- Sign Logo
- Sign Spacing
- Decision Points



Priority Corridor Identification

- Screening Criteria may include:
 - Truck AADT
 - Traffic Congestion
 - Freight Related Land Use/Generators
 - Truck Origins/ Destination
 - Truck Crash Experience
 - Truck Violations/ Complaints
 - Stakeholder Input

FREIGHT CLASSIFICATION	PRIMARY ACTIVITY			Land Use Connection
	Heavy Freight	Goods Delivery	Services	
Regional Truckway	●	●	●	Routes for interregional and interstate movement of freight. Serves both industrial and commercial land uses via access ramps.
Priority Truck Street	●	○	○	Principal route for truck mobility in Freight Districts, and between Freight Districts, and Regional Truckways. Provides truck access and circulation to industrial and employment land uses.
Major Truck Street	●	●	●	Principal route for truck mobility between commercial centers and corridors. Provides truck access and circulation to regional main streets.
Truck Access Street	○	●	●	Route for distribution of truck trips in neighborhoods. Provides truck access and circulation for delivery of goods and services to commercial and residential uses.
Local Truck Street	○	●	●	Routes for local truck access and circulation to residents and businesses outside of the freight districts.
Freight District	●	○	○	Freight districts are determined by the presence of industrial sanctuary zoning (IG1, IG2 & IH). Streets within a Freight District provide local truck circulation and access. Applies to all streets unless classified with a higher designation.
Railroad Main Lines	●	○	○	Transports freight cargo and passengers over long distances as part of a national rail network.
Railroad Branch Lines	●	○	○	Transports Freight cargo over short distances or distributes it to and from railroad main lines.
Freight Facilities	●	○	○	The major marine terminals, airport, railyards, and intermodal facilities located in Freight Districts.

● Primary Activity ● Secondary Activity ○ Limited Activity

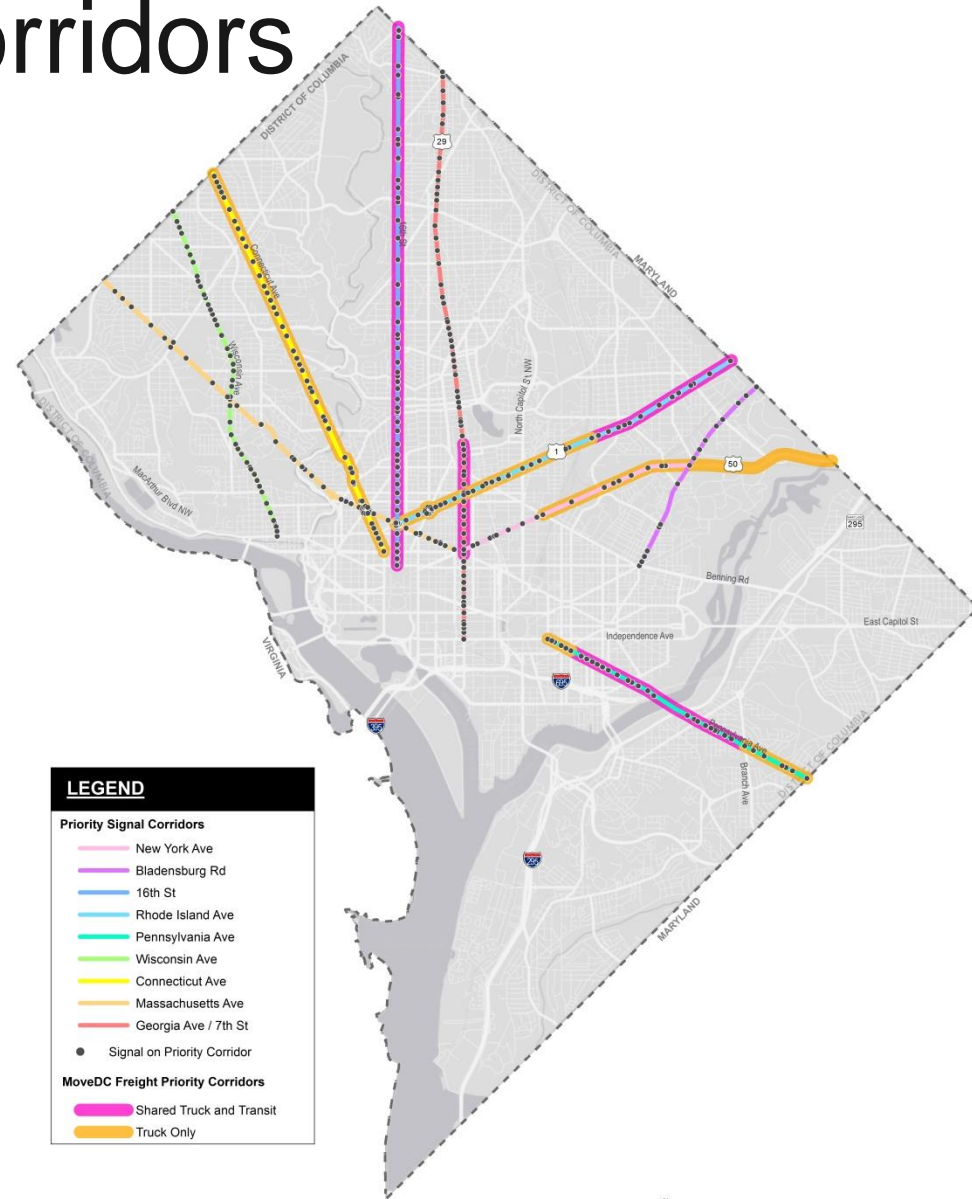
Freight Priority Corridors

Freight Corridor Capital Investments

16 th St NW, from H St NW to Maryland
NY Ave NE (US 50), from Florida Ave NE to Maryland
Pennsylvania Ave SE, from 6 th St SE to Branch Ave SE
Connecticut Ave NW, from K St NW to Maryland
Pennsylvania Ave SE, from Branch Ave SE to Maryland
Rhode Island Ave NE (US 1), from Reed St NE to Maryland
7 th St / Georgia Ave NW, from Massachusetts Ave NW to Barry PI NW
Rhode Island Ave Ne, from Scott Circle NW to Reed St NE

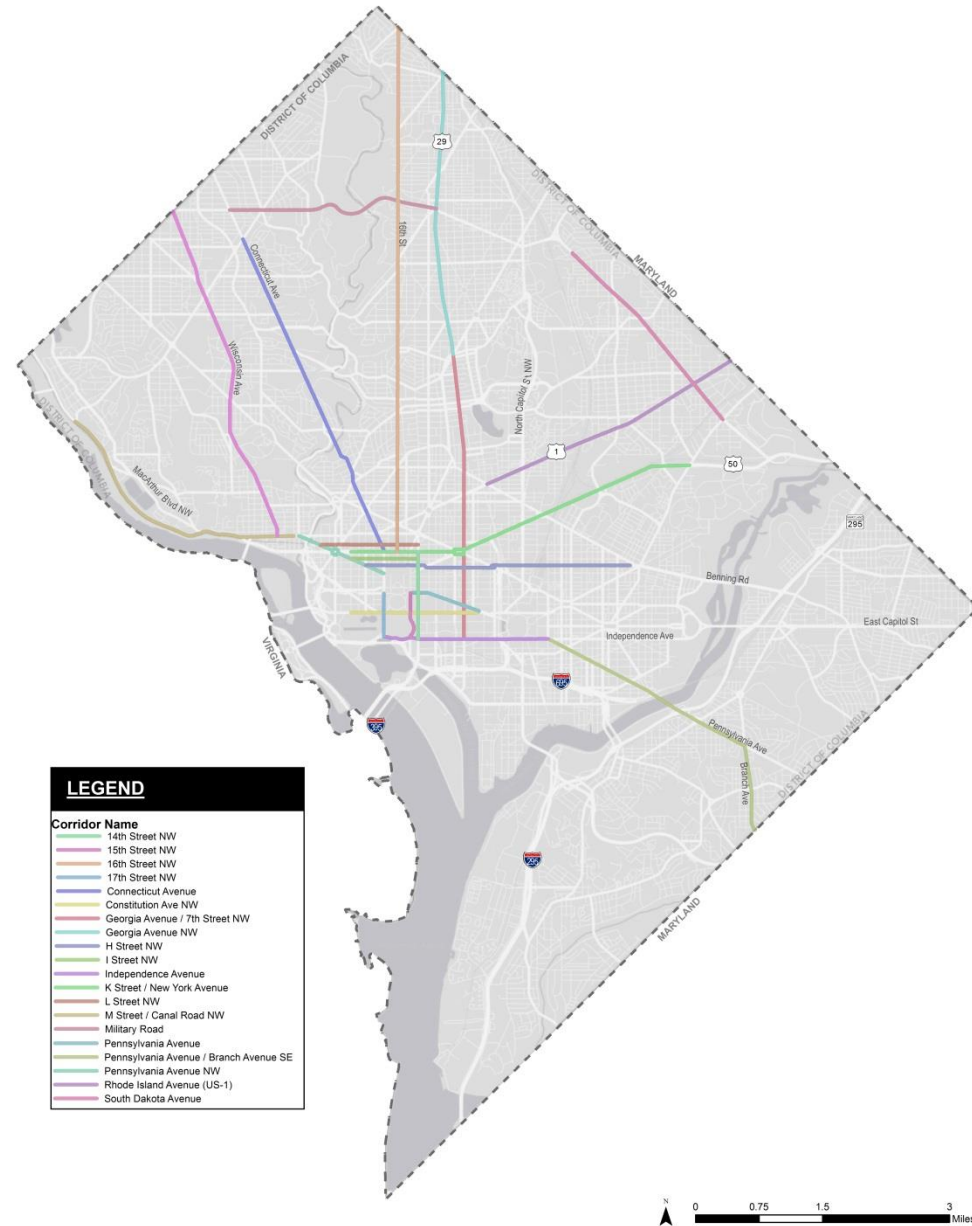
Signal Timing Freight Priority Corridors

New York Avenue
Bladensburg Road
16 th Street
Rhode Island Ave
Connecticut Ave
Pennsylvania Ave
Georgia Ave
Massachusetts Ave
Wisconsin Ave




DDOT Freight Plan Congested Corridors

- 14th, 15th, 16th, 17th
- Connecticut, Wisconsin
- Constitution/ Independence
- Georgia
- H, I, K, L, M/ Canal
- Military
- Pennsylvania, Rhode Island, South Dakota




Signage Implementation

- Sign Location Plan
 - Sign Schedule
 - Sign Fabrication
 - Sign Mounting
 - Sign Placement
 - Existing Conflicting Sign Removal
 - Continued Coordination with Sign Asset Database
 - Sign Maintenance
- 

Stakeholder Input

- Sign Program Concerns
- Areas of Importance/ Focus
- Crowdsourcing Map

Next Steps

- Business/ Area Stakeholder (BIDs, Trade Associations)
 - Regional Stakeholders (COG)
 - Truck Operators
 - Internal Stakeholder Follow Up
 - Priority Corridor Selection
 - Sign Design Details/ MUTCD Compliance
 - Sign Plan and Schedule
 - Complete by End of 2016
- 

Laura Richards

laura.richards2@dc.gov

202-671-2226

Paul Silberman

psilberman@sabra-wang.com

443-741-3697

d.

