

# SUBURBAN MARYLAND CRITICAL URBAN FREIGHT CORRIDORS UPDATE

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TPB Freight Subcommittee  
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# Introduction

- The TPB, in coordination with states, is responsible for identifying **Critical Urban Freight Corridors** to receive National Highway Freight Program (NHFP) funding, which ensures the condition and performance of highways deemed most critical to freight movement
- The FAST Act capped the number of CUFC miles a state or MPO could designate; the Infrastructure Investment and Jobs Act (IIJA) subsequently increased the limit

Legislation	Mileage Limitation
2015 FAST Act	Up to 75 miles of highway or 10 percent of the PHFS mileage in the state, whichever was greater ( <b>25 mi. in TPB region</b> )
2021 IIJA	Up to 150 miles of highway or 10 percent of the PHFS mileage in the state, whichever is greater ( <b>50 mi. in TPB region</b> )

- MDOT and TPB staff recently collaborated to develop recommended changes to the portion of Maryland’s CUFC network in our region to reflect the mileage increase



# Timeline for Adoption

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The following schedule is anticipated for the formal adoption of the updated segments:

- ➔ • **March 14 TPB Freight Subcommittee** - comments welcome through April 3
- **April 5 TPB Technical Committee** – request review
- **May 3 TPB Steering Committee** – request approval



# Suburban Maryland

## Critical Urban Freight Corridors Update: Background, Methodology, and Recommendations





# Critical Urban/Rural Freight Corridor Mileage Designation Update

03/14/2024

Youngmin Choi

# Contents

1. CUFC/CRFC Overview, Requirements, Eligible Projects
2. New Mileage under IIJA
3. Designation Process
4. Sample Segment Analysis

# National Highway Freight Network

- The Fixing America's Surface Transportation (FAST) Act established the National Highway Freight Network (NHFN).
- This act aimed to enhance the performance of U.S. freight transportation by strategically allocating Federal resources and policies to crucial highway segments.
- The NHFN includes the following subsystems of roadways:
  - I. Primary Highway Freight System (PHFS)
  - II. Other Interstate portions not on the PHFS (non-PHFS)
  - III. Critical Rural Freight Corridors (CRFCs)
  - IV. Critical Urban Freight Corridors (CUFCs)

# Implications of Corridor Designation

- 1. Critical Connectivity:** CUFCs and CRFCs are important freight corridors that provide critical connectivity to the NHFN
- 2. Resource Allocation:** States can direct resources toward improved system performance and efficient movement of freight on the NHFN
- 3. Increased NHFN:** The designation of CRFCs and CUFCs will increase the state's NHFN



# NHFP Eligible Projects

List of project types eligible for NHFP funding:

1. Preliminary engineering and design
2. Construction, rehabilitation, acquisition of lands
3. ITS and other technology
4. Widening of shoulders
5. Truck parking facilities
6. Highway or bridge projects

NOTE: Eligible projects along CUFCs/CRFCs designated corridors are candidates for NHFP funding. However, projects can still be paid for with other types of funding

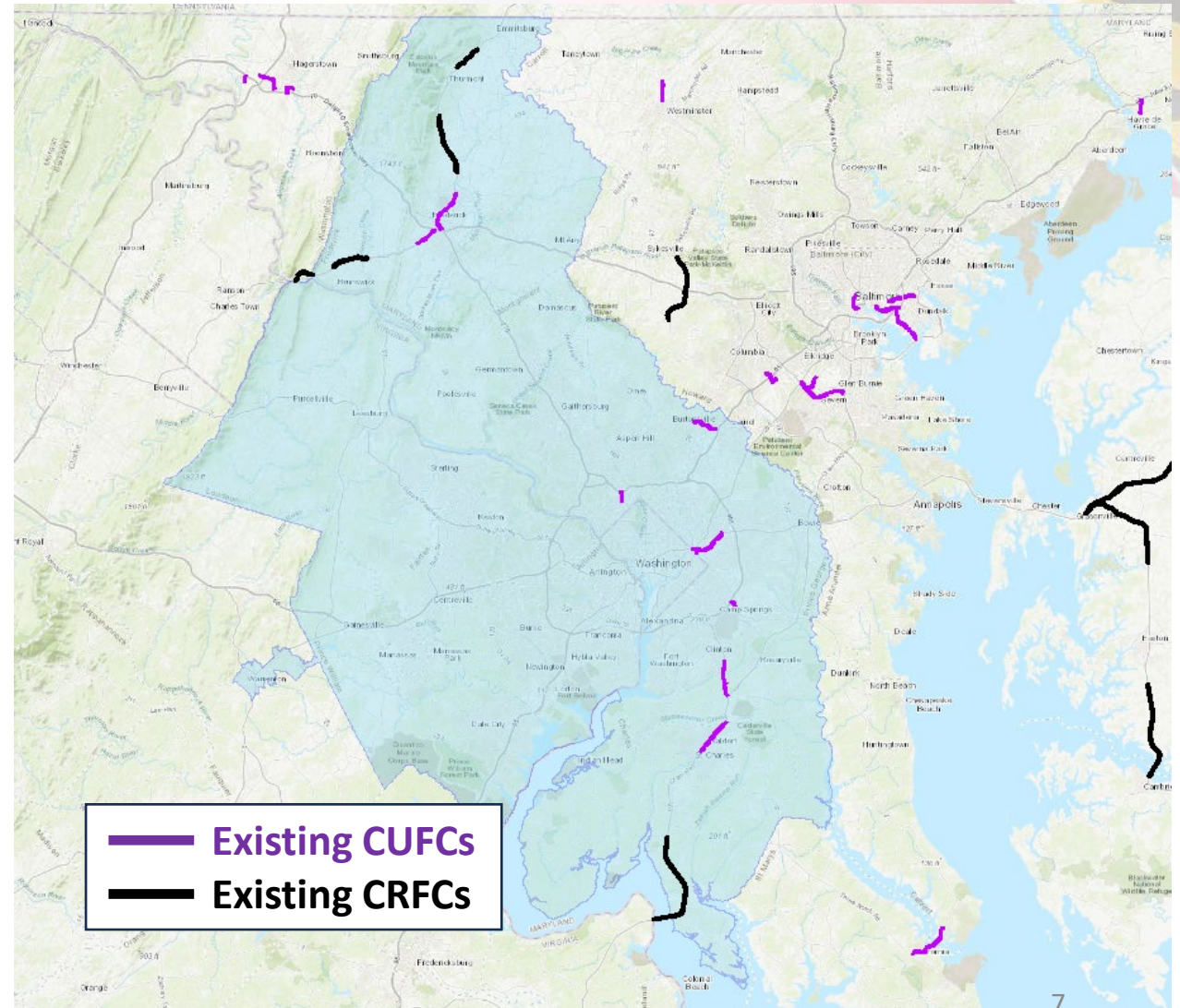
# Current NHFP Funded Maryland Projects

(FY 2022-2025 STIP)

- Statewide Truck Stop Technology Enhancements
  - include \$2,468,000 in NHFP funding for design and \$8,400,000 in NHFP funding for construction
- Statewide Virtual Weigh Station Network Database
  - include \$714,000 in NHFP funding for design
- Statewide Static Scale Replacement and Electronics
  - include \$617,000 in NHFP funding for design and \$6,300,000 in NHFP funding for construction
- Others: I-695 TSMO improvements (I-70 to MD 43), MD 4 Interchange Construction at Suitland Parkway, Freight AV Implementation Plan

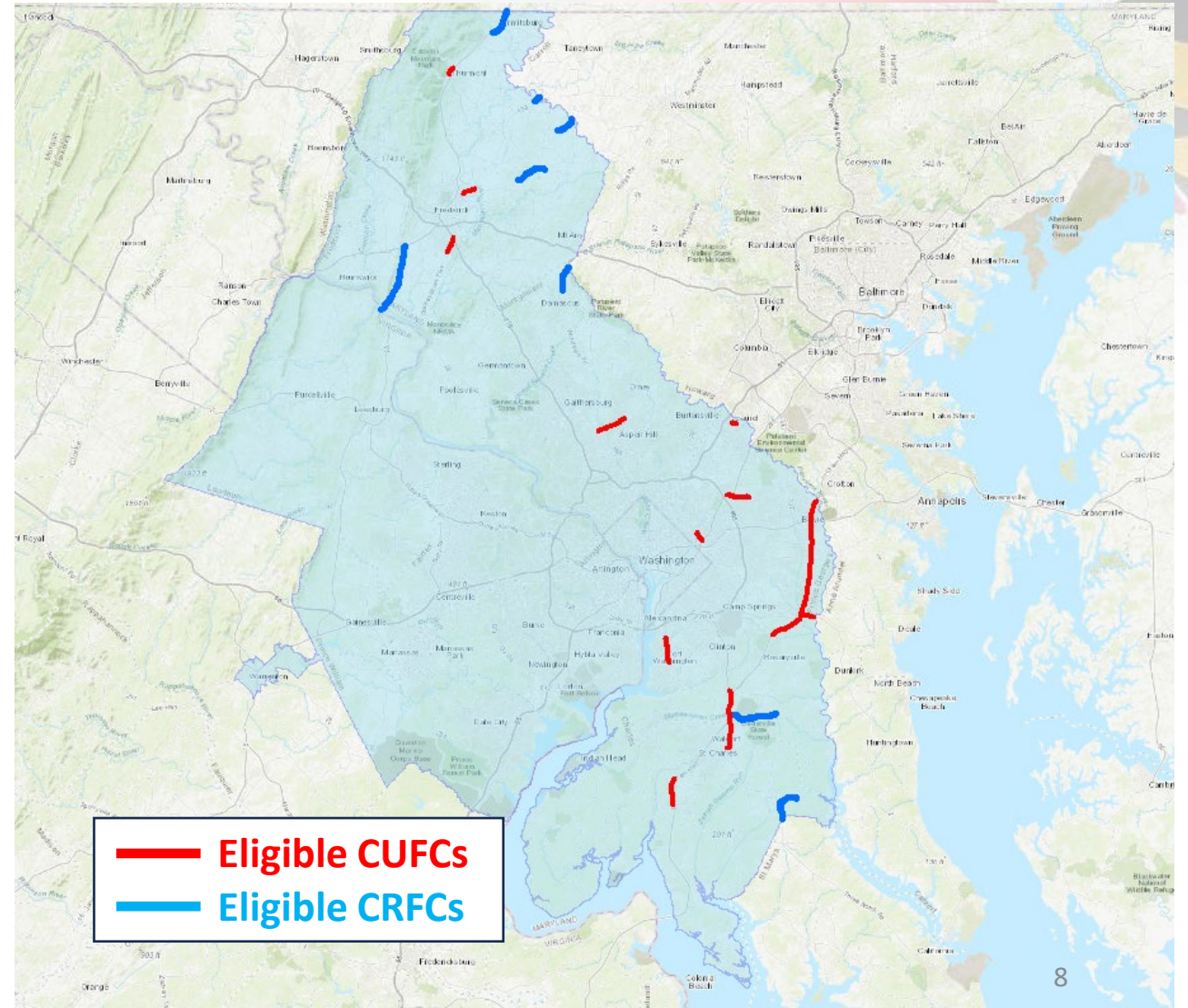
# 2017 CUFC/CRFC Designation

- The FAST Act set the State's mileage caps
  - CUFC: 75 total miles
  - CRFC: 150 total miles
- TPB currently has
  - 25-mile CUFCs
  - 22.5-mile CRFCs



# 2023 New Mileage Under IJA

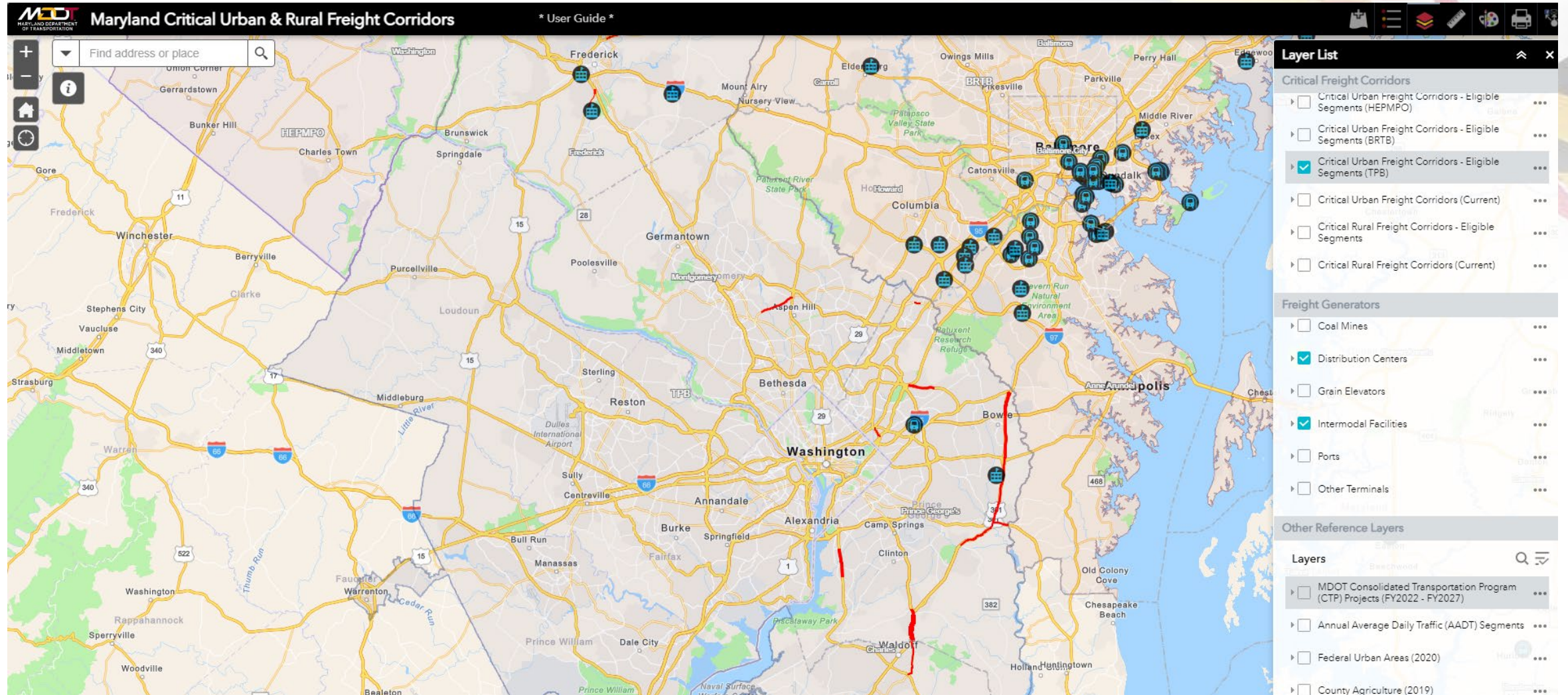
- The IJA modified the state's mileage caps
  - CUFC: 150 total miles
  - CRFC: 300 total miles
- TPB agreed to designate the total 50 CUFC miles  
*(25 miles under FAST + 25 miles under IJA)*
- The same requirements for eligibility are applied



# Designation Process

- For **CUFC**, the designation of segments is **led by SHA & TPB**
  - SHA has developed a methodology for identifying eligible segments statewide:
    - AADTT and proximity to freight generators to determine which segments are eligible under the law
    - The 2020 urban area boundary change is reflected
  - TPB's board will decide on the approval of the designated CUFCs
    - TPB is applying regional considerations to the identified segments (e.g., equity factors)
- For **CRFC**, the designation of segments is **led by SHA**
  - Work with regional planners and district staff to identify segments
  - Review TPB staff/subcommittee/committee for concurrence

# Review: Online Map for Eligible CUFCs & CRFCs

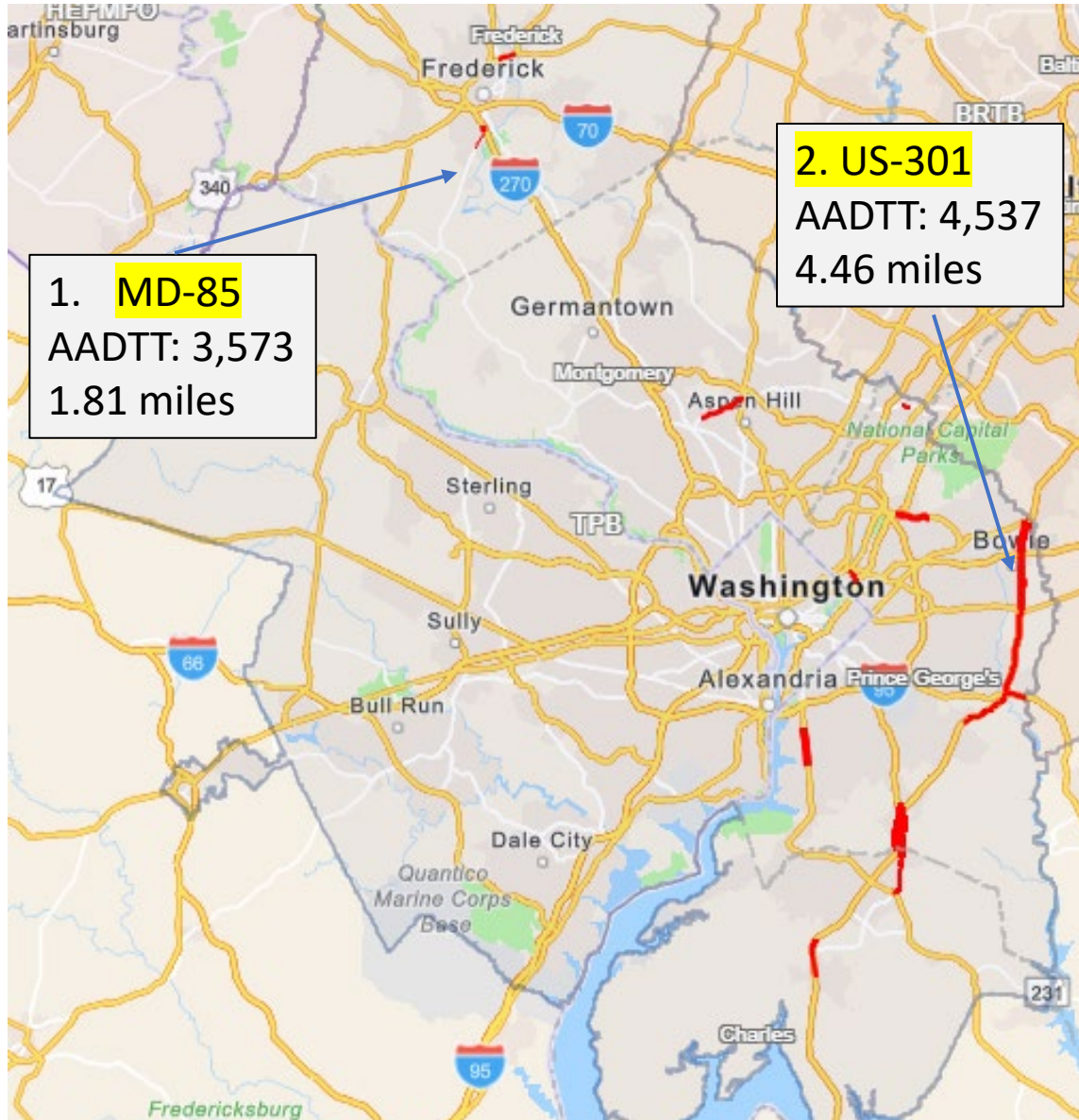


Link: <https://maryland.maps.arcgis.com/apps/webappviewer/index.html?id=e88e40cd0a1a40beae354638aa1601ce>

# Review: Spreadsheet for Eligible CUFCs & CRFCs

ROADNAME	From	To	ID_PREFI	ID RTE_N	F_SYSTEM_D	AADT	TRUCK_A/	LENGTH
Crain Hwy	Croom Rd	Pennsylvania Ave	US	301	Principal Arterial	36200	2726	3.75
Southern Md Blvd	Crain Hwy	Stephanie Roper Hwy (Bridge)	MD	4	Principal Arterial	40901	2565	2.87
Crain Hwy	E Charles St	E Hawthorne Dr	US	301	Principal Arterial	38422	2478	0.73
Buckeystown Pike	English Muffin Way	Shockley Dr	MD	85	Minor Arterial	16720	2490	1.38
Crain Hwy	E Hawthorne Dr	Washongton Ave	US	301	Principal Arterial	37712	2468	2.1
Crain Hwy	Mattawoman Creek	Short Cut Rd	US	301	Principal Arterial	102923	4634	2.55
Crain Hwy	Collington Rd	US-50	US	301	Principal Arterial	58792	4115	0.86
Liberty Rd	N Market St	Woodsboro Pike	MD	26	Principal Arterial	31080	2752	1.37
Norbeck Rd	E Gude Dr	Georgia Ave	MD	28	Principal Arterial	42383	2197	3.22
Indian Head Hwy	Fort Washington Rd	Livingston Rd	MD	210	Principal Arterial	67933	2121	2.64
Crain Hwy	Central Ave	Collington Rd	US	301	Principal Arterial	62382	4537	3.06
Crain Hwy	Pennsylvania Ave	Central Ave	US	301	Principal Arterial	45682	3471	5.99
Crain Hwy	Mattawoman Beantown Rd	Mattawoman Creek	US	301	Principal Arterial	102923	4634	0.13
Kenilworth Ave	Baltimore Washington Pkwy S	Annapolis Rd	MD	201	Principal Arterial	32103	3237	1
Crain Hwy	Join Hanson Hwy W	Annapolis Rd	MD	3	Principal Arterial	73532	5103	2.2
Sandy Spring Rd	Van Dusen Rd	9th St	MD	198	Principal Arterial	31444	4797	0.58
Catoctin Mountain Hwy	W Main St	N Church St	US	15	Principal Arterial	32940	3826	0.82
Mattawoman Beantown Rd	Leonardtwn Rd	Chain Hwy	MD	5	Principal Arterial	36193	2498	3.21
Pennsylvania Ave	Chain Hwy	Patuxent River (Bridge)	MD	4	Principal Arterial	40901	2565	1.43
Branch Ave	Chain Hwy (merging/diverging point)	Accokeek Rd (merging/diverging)	MD	5	Principal Arterial	64352	3679	0.51
Greenbelt Rd	Baltimore Washington Pkwy S	Good Luck Rd	MD	193	Principal Arterial	52865	4696	2.52
Buckeystown Pike	Shockley Dr	I-270	MD	85	Minor Arterial	49613	3573	0.43

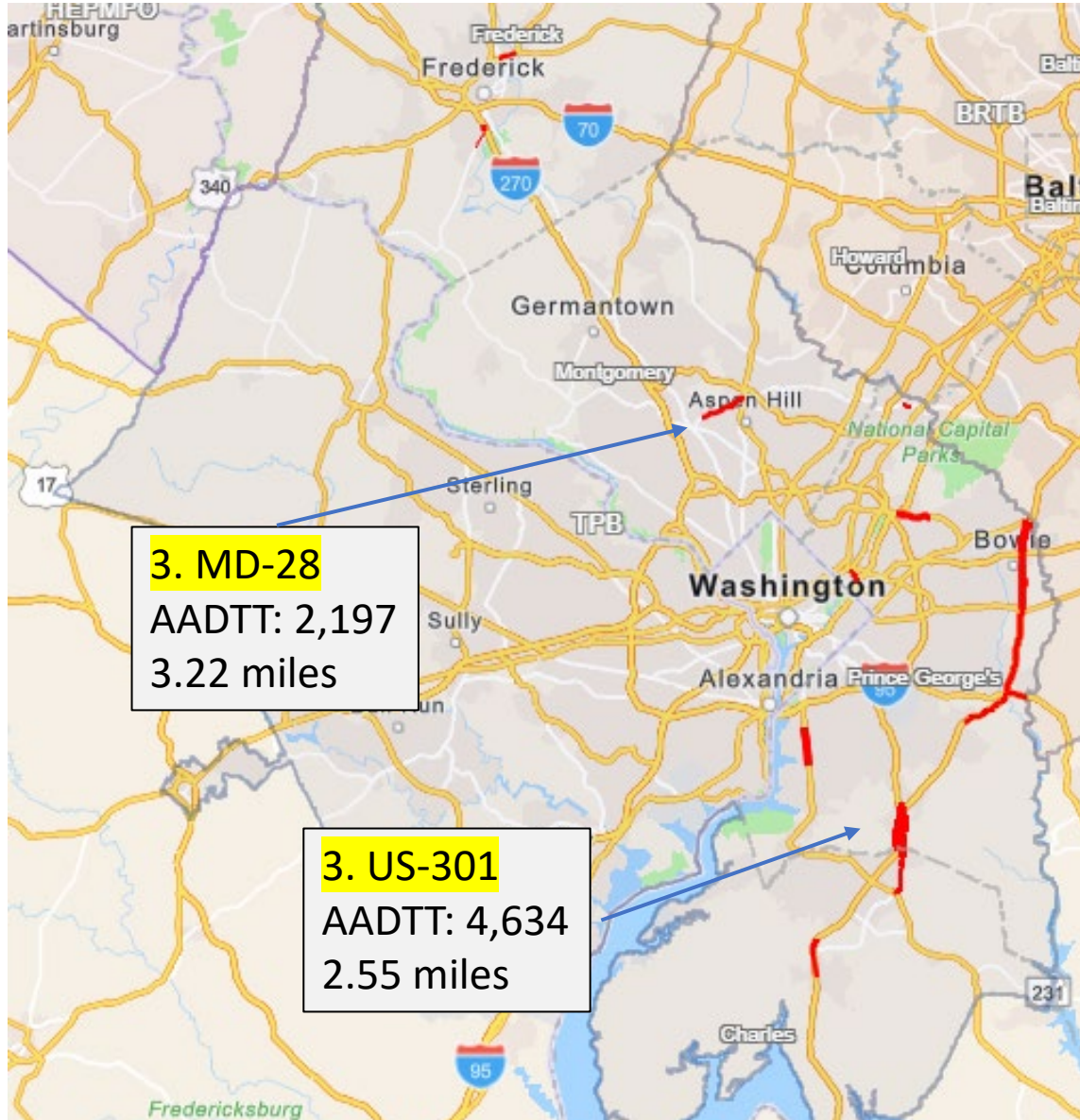
# Sample eligible CUFC segment (total: 34.1 miles)



- County: Frederick
  - Road classification: Minor Arterial
  - Truck share: 3%
  - Annual % truck Vol. growth: 1%
  - Volume: **High**
  - CTP Project(s):
    - 1) interchange reconstruction
    - 2) Bicycle and pedestrian improvements
    - 3) Drainage
- County: Prince George's
  - Road classification: Principal Arterial
  - Truck share: 3%
  - Annual % truck Vol. growth: 2%
  - Volume: **High**
  - CTP Project(s):
    - 1) Road widening (US 301 from north of Mount Oak Road)
    - 2) Resurface/rehabilitate



# Sample eligible CUFC segment (total: 34.1 miles)



- 3**
- County: Montgomery
  - Road classification: Principal Arterial
  - Truck share: 2%
  - Annual % truck Vol. growth: 1%
  - Volume: **Moderate - High**
  - CTP Project(s):
    - 1) New MD 97 interchange at MD 28

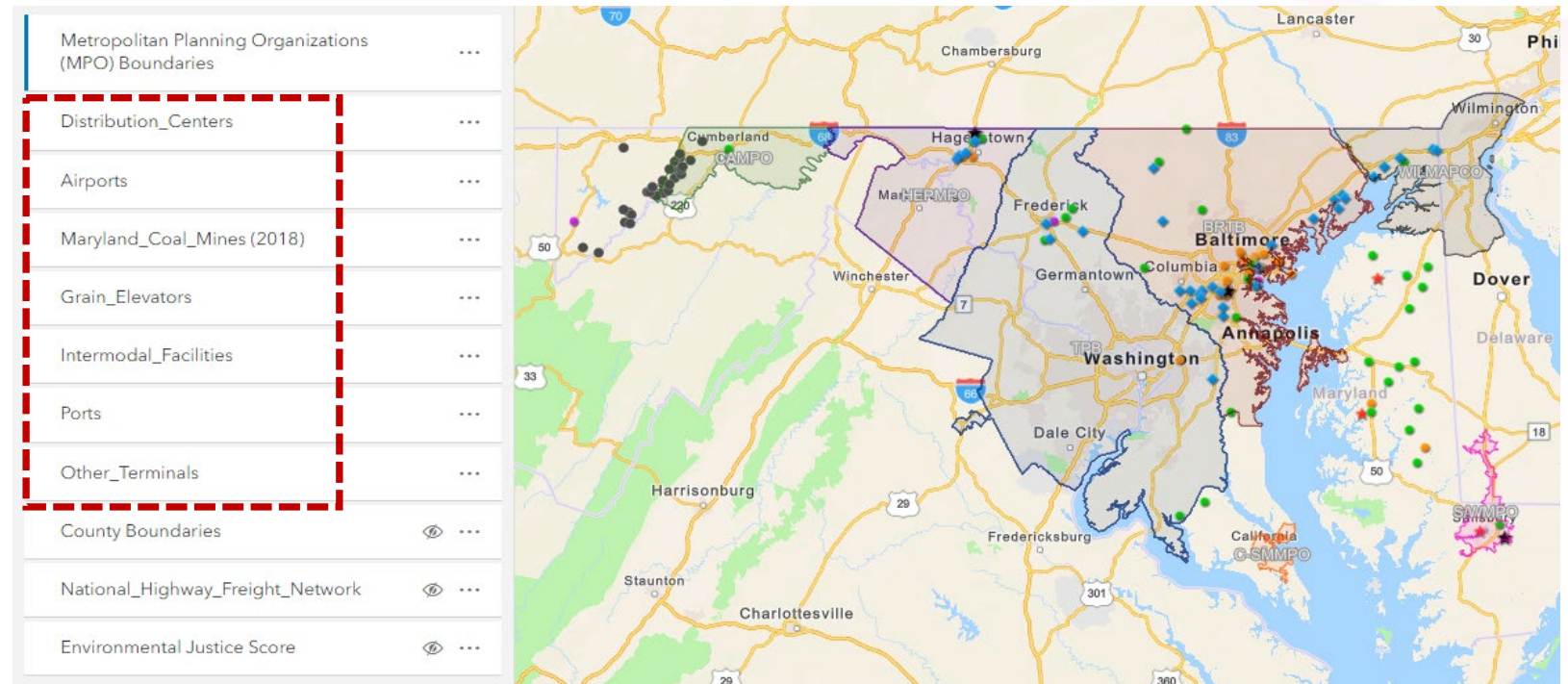
- 4**
- County: Charles
  - Road classification: Principal Arterial
  - Truck share: 2%
  - Annual % truck Vol. growth: 2%
  - Volume: **Very High**
  - CTP Project(s):
    - 1) Construct a flyover from southbound US 301 to MD 5
    - 2) Study to upgrade US 301 intersection at MD 228/MD 5 Business

# Appendix 1. Methodology: *Segment Identification*

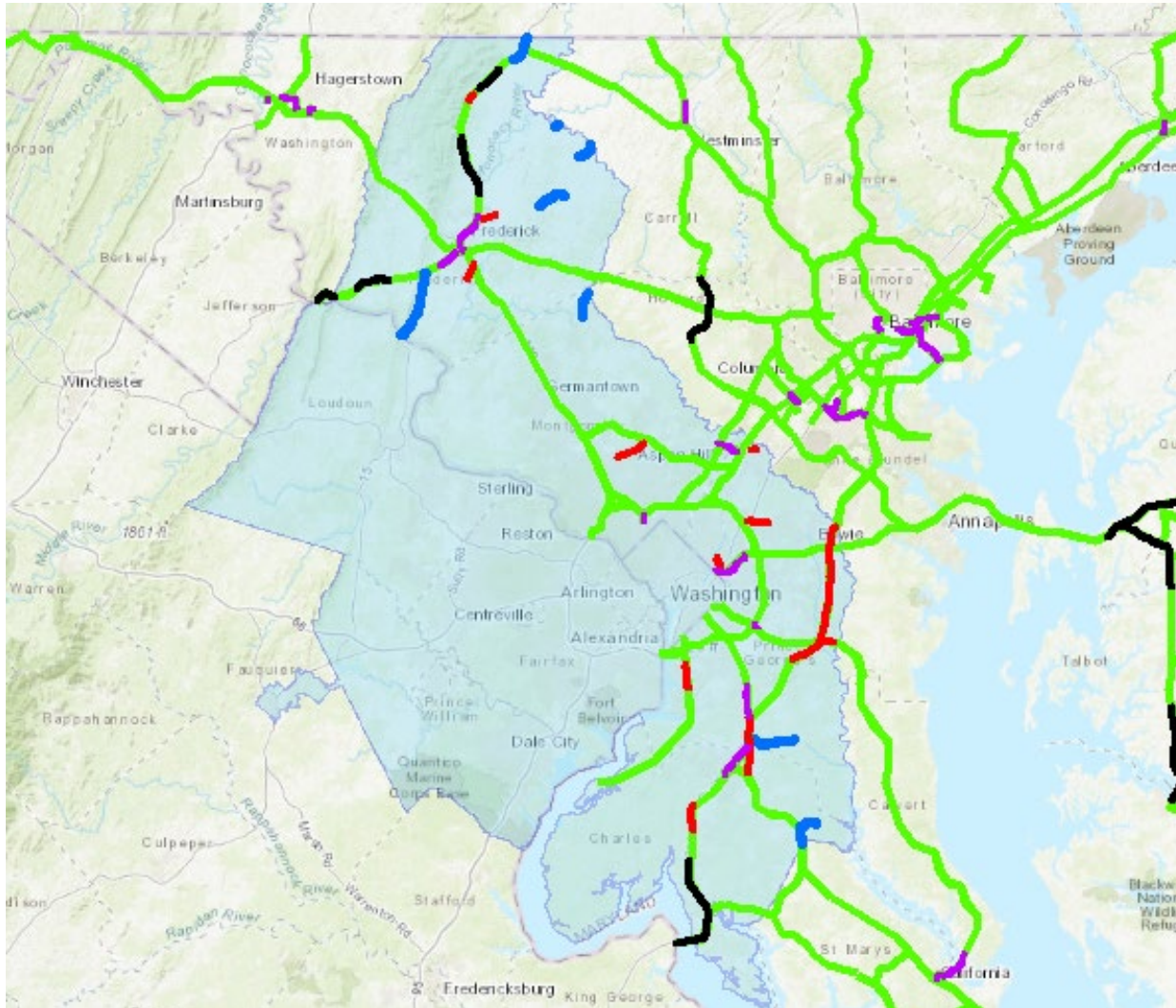
- Collecting the required data for Maryland's highway segment in accordance with the FHWA criteria/requirements outlined in the FAST Act, which includes:
  1. Annual Average Daily Truck Traffic (AADTT)
  2. Urbanized Area Boundary by US Census
  3. Proximity Score for Freight Generators
- Identifying eligible CUFC/CRFC segments, sorted from highest to lowest AADTT and Proximity score within the urban boundary.

# Appendix 1. Methodology: *Proximity Score*

- **Proximity score:** a weighting factor/composite score based on how the roadway segment is close to each freight generator, infrastructure, and facility



# Appendix 2. Maryland Freight Network



- Existing CUFCs
- Existing CRFCs
- Eligible CUFCs
- Eligible CRFCs
- Freight Network