COMMONWEALTH of VIRGINIA
Office of the
SECRETARY of TRANSPORTATION

VTrans Freight Element: Webinar # 2

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June 1, 2021

Discussion Items

- **Purpose of the Webinar**
- **Resources**
- **Context and Background**
- **Identification of Freight Issues**
- **Freight Trends**
- **Next Steps**

Purpose of the Webinar

- **This is second in a series of two or three freight planning-related webinars.**

1.	**March 24 (complete):**	Overview of state freight plans, purpose, initial analysis
2.	**June 1 (today):**	Trends, additional analysis, and tools for localities and regional entities
3.	**June/July:**	As needed

- **Information presented during this webinar is subject to change based on feedback and**

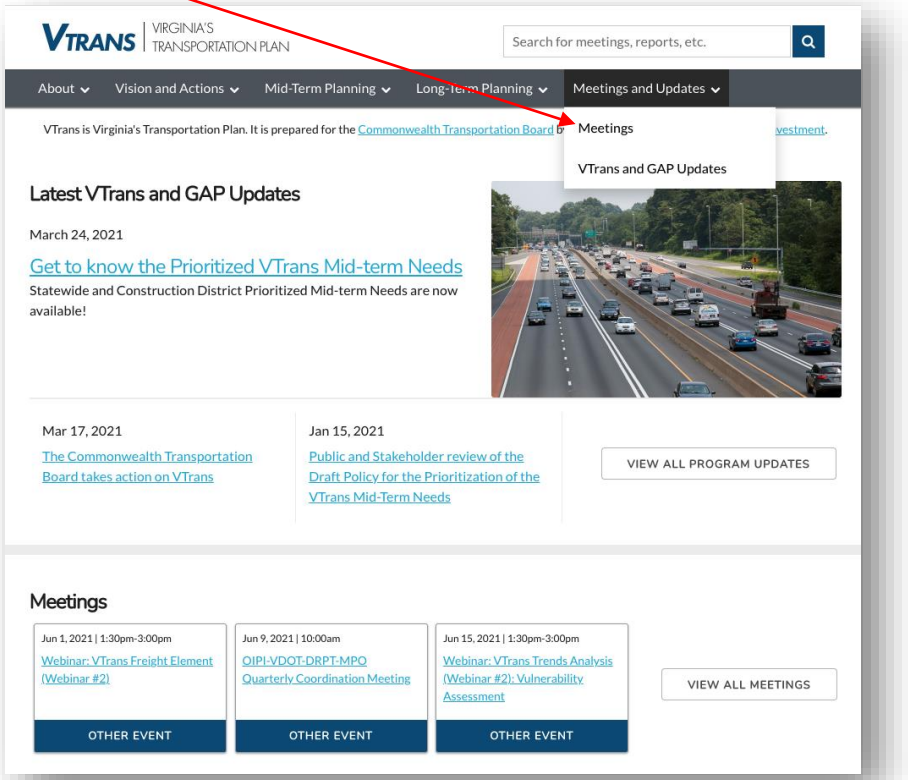
Purpose of the Webinar

- **There are two main purposes:**
  - Gather initial feedback prior to substantial completion of the VTrans Freight Element and associated actions
  - "Crowdsource" ideas, opportunities, and challenges based on this initial analysis

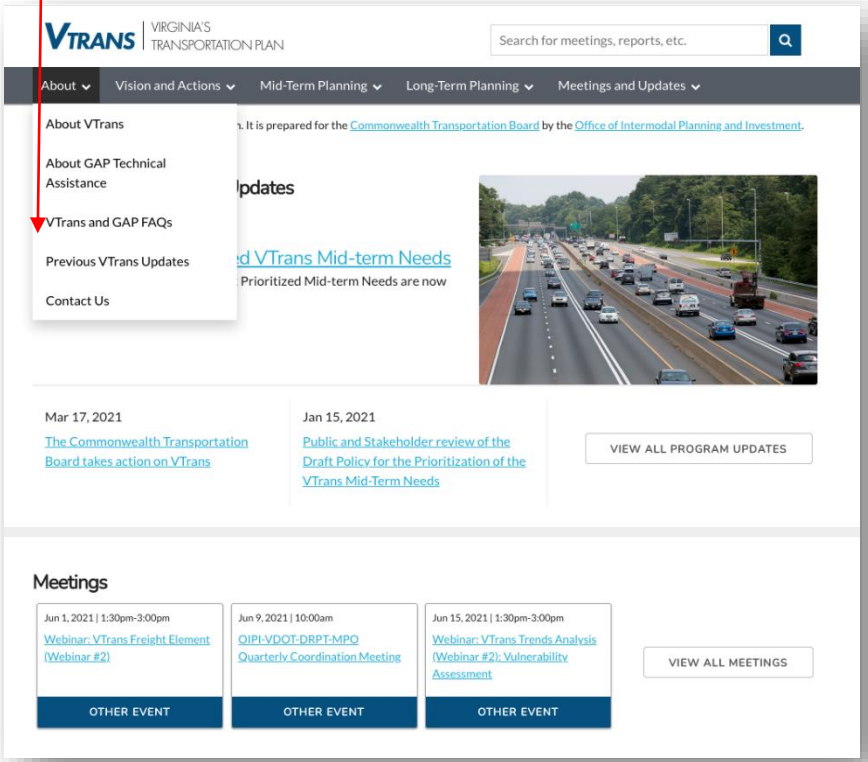
- **Caveats**
  - This initial analysis is for discussion only and may contain errors and omissions. For any discrepancies, please share with OIPI's Statewide Transportation Planning (STP) Team.

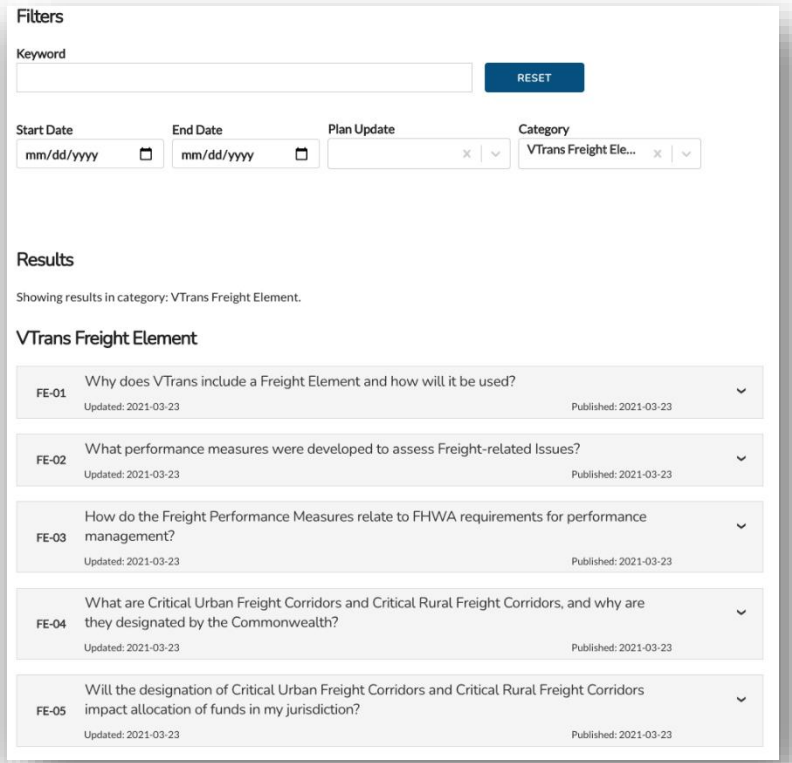
Photo credit: Virginia Department of Transportation

- **Meetings Page contains information and materials presented at this webinar**



- **Frequently Asked Questions page addresses five (5) questions related to the VTrans Freight Element**





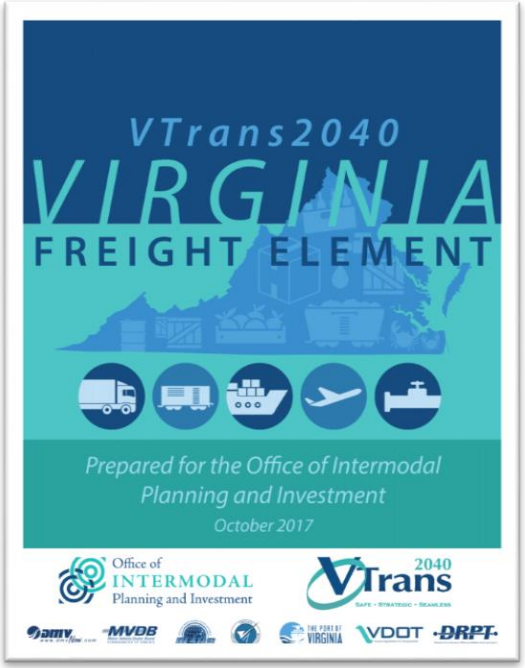
VTRANS | VIRGINIA'S TRANSPORTATION PLAN

CONTEXT AND BACKGROUND

- **OIPI is developing the VTrans Freight Element to meet requirements for 49 U.S.C. 70202 FAST Act State Freight Plans.**
  - States that receive funding under the National Highway Freight Program (NHFP) are required to develop a State Freight Plan that provides a comprehensive plan for the immediate and long-range planning activities and investments of the State with respect to freight.
  - The freight plan may be developed separate from or incorporated into the Long-Range Statewide Transportation Plans required by **23 U.S.C. 135**.
  - The requirement is to update Freight Plan "not less frequently than once every 5 years."

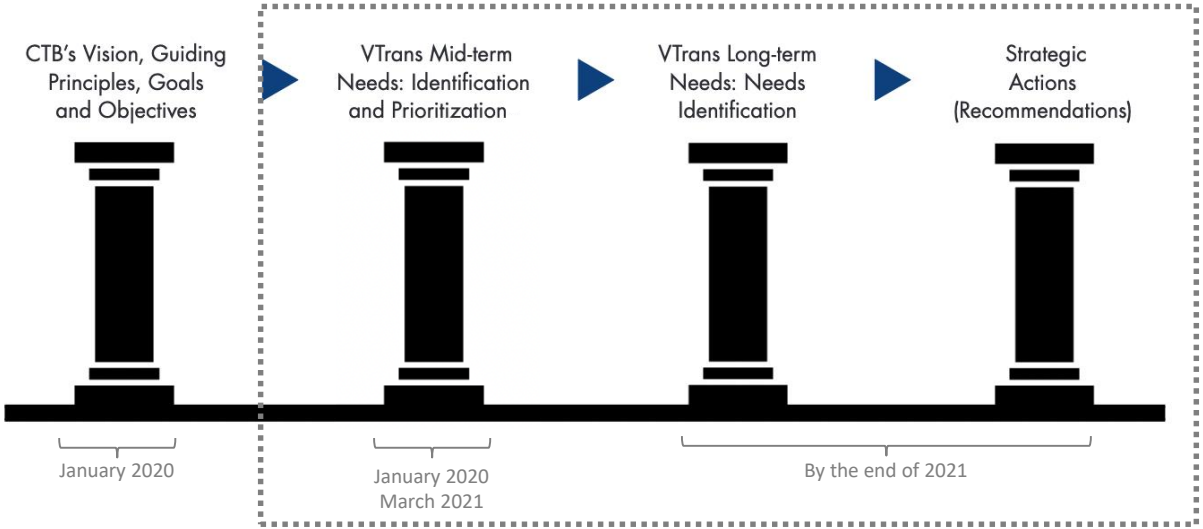
Photo credit: Virginia Department of Transportation

- **In Virginia, Freight Plan requirements are addressed by VTrans - Virginia's Transportation Plan.**
  - Virginia's Freight Plan/Element was updated last updated in 2017.
  - The intent is to update Virginia's Freight Plan/Element by the end of 2021.



VTrans 2040 Freight Element

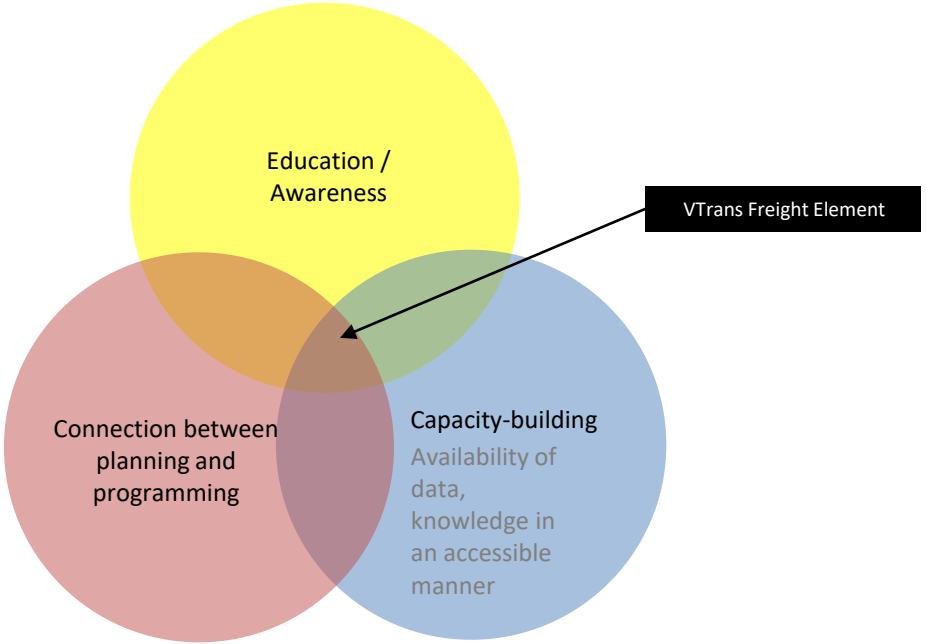
- **VTrans has four major elements:**
  - Planning for VTrans Freight Element may inform Mid- and Long-term Needs as well as Strategic Actions



- **This VTrans Element is expected to further advance the following transportation Goals A and C established by the Commonwealth Transportation Board**
  - **Goal A - Economic Competitiveness and Prosperity**
  - Goal B: Accessible and Connected Places
  - **Goal C: Safety for All Users**
  - Goal D: Proactive System Management
  - Goal E – Healthy Communities and Sustainable Transportation Communities

Photo credit: Virginia Department of Transportation

- **Beyond meeting requirements, a statewide Freight Plan can serve a wide range of purposes.**



1. **Multimodal / Intermodal Analysis**
   - Includes mutlimodal / intermodal analysis. There are, however, challenges because:
     - Incentive mechanisms are different for the private sector
     - Limited and proprietary datasets for rail and air transportation make analysis more challenging

2. **Freight Element is integrated in VTrans**
   - Benefits from and potentially informs the Board-adopted policies for VTrans Mid-Term Needs Identification and Prioritization
   - Informs VTrans Strategic Actions to be submitted to the General Assembly and the Office of the Governor

3. **Data-driven, transparent, and replicable process**
   - Explains the underlying issues
   - Analyzes different datasets to explore issues, approaches, and potential solutions that can inform the policy

Photo credit: Virginia Department of Transportation

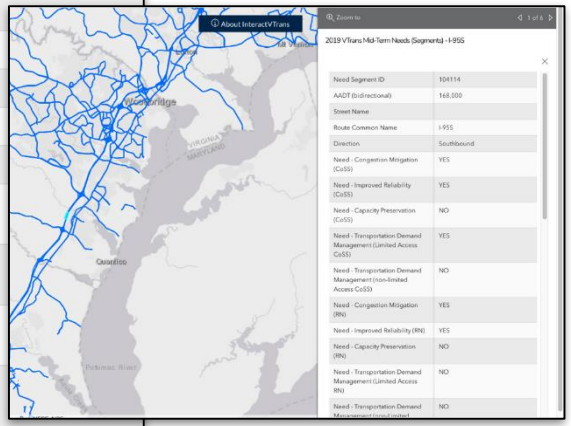
VTRANS | VIRGINIA'S TRANSPORTATION PLAN

IDENTIFICATION OF FREIGHT ISSUES

- **Individual measures are important but are likely to provide an incomplete picture**

- **We are utilizing the approach deployed for the development of the VTrans Mid-term Needs**
  - We will focus on interactions between measures. Examples:
    - Locations with truck **congestion/reliability issues** and locations with **high number of crashes** involving trucks

Need Segment ID	104114
AADT (bidirectional)	168,000
Street Name	
Route Common Name	I-95S
Direction	Southbound
Need - Congestion Mitigation (CoSS)	YES
Need - Improved Reliability (CoSS)	YES
Need - Capacity Preservation (CoSS)	NO
Need - Transportation Demand Management (Limited Access CoSS)	YES
Need - Transportation Demand Management (non-limited Access CoSS)	NO
Need - Congestion Mitigation (RN)	YES
Need - Improved Reliability (RN)	YES
Need - Capacity Preservation (RN)	NO
Need - Transportation Demand Management (Limited Access RN)	NO
Need - Transportation Demand	NO



- **We are also developing different data points and measures to identify locations where truck- or freight-specific issues may exist**
- **Please share ideas either based on your needs, experience, or familiarity with work in other places**

A partial listing of data points under development and for discussion

Category	Measure
Safety	Number of Truck-involved Crashes
	Number of Truck-involved Crashes with Fatalities and Serious Injuries
	Severity of Truck-involved Crashes (using Equivalent Property Damage or EPDO)
Commodity Flows	Commodity Flow by Truck - Volume
	Commodity Flow by Truck – Value
	Commodity Flow by Rail
	Commodity Flow at the Port of Virginia and Airports
Congestion and Reliability	Cumulative Truck Delay
	Level of Truck Travel Time Reliability (LOTTTR)
	Truck Planning Time Index
	Truck Bottlenecks
Restrictions and Challenges	Truck Operating Restrictions (i.e. facility, lane or vehicle type restrictions)
	Vertical and Horizontal Clearance Issues
	Over-height, Over-weight, and Over-width Restrictions
Truck Parking	Supply of truck parking
	Truck parking gap - supply and (estimated) demand (under development)

New for discussion today

Under development

Presented during the March 24 Webinar

- **Noteworthy Items**
  - Truck-involved Crash does not mean a Truck at fault. The "Truck-involved" only implies that a is truck involved, not necessarily at-fault, in a crash.
  - Number of truck-involved are very small so this data should be seen along with all crashes, not in isolation.

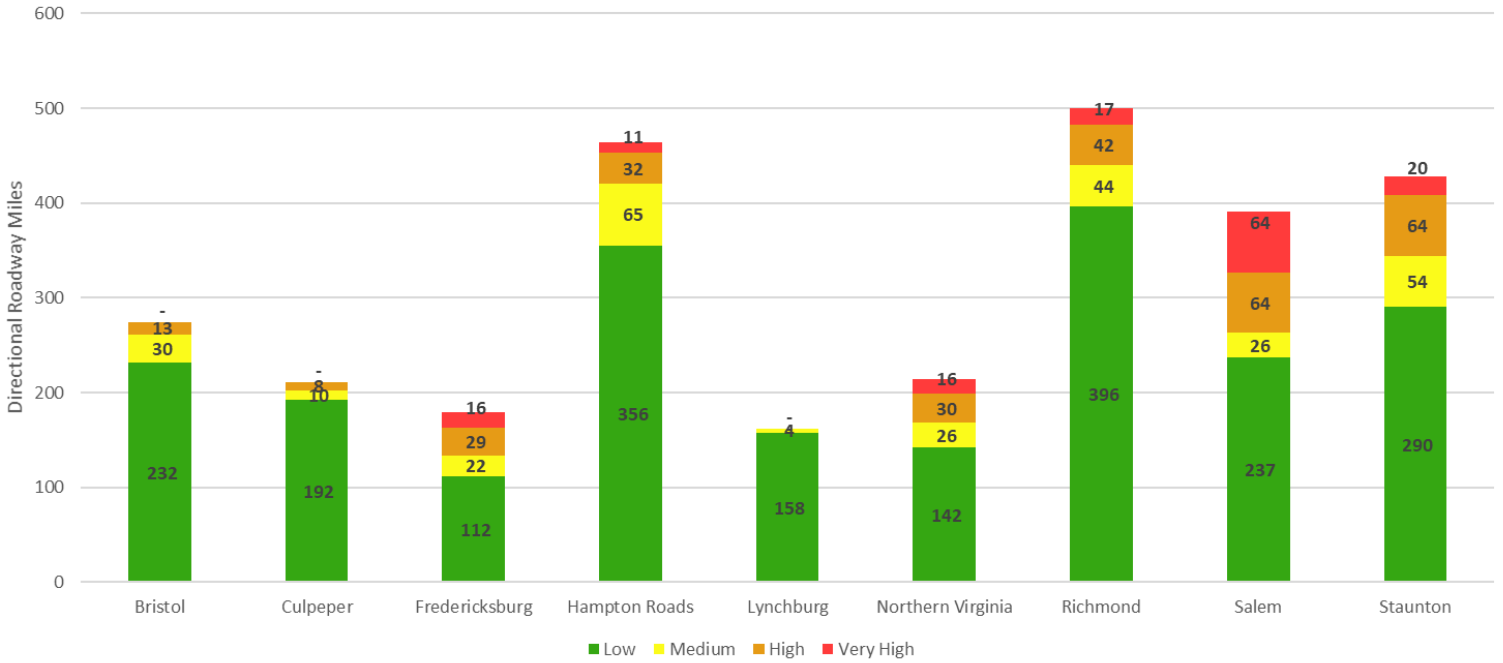
Measure	Steps	Source	Year of Analysis
Number of Truck-involved Crashes (Frequency)	1. Joined crashes to network by route name and milepost 2. Spatially joined crashes not matched by route name and milepost 3. Summarized statistics at segment level 4. Identified segments with: (a) at least two or more crashes; (2) crashes in at least two or more years. 5. Calculated crashes per roadway directional mile	Virginia Department of Transportation (VDOT) – Expanded definition of Large Truck	2015 - 2019
Number of Truck-involved Crashes with Fatalities and Serious Injuries			
Severity of Truck-involved Crashes (Severity - using Equivalent Property Damage or EPDO)	1. Joined crashes to network by route name and milepost 2. Spatially joined crashes not matched by route name and milepost 3. Summarized statistics at segment level 4. Identified segments with: (a) at least two or more crashes; (2) crashes in at least two or more years. 5. Calculated Equivalent Property Damage Only (EPDO) values from 5-years of truck-involved crash data using value conversions from the SMART SCALE Technical Guide.2	Virginia Department of Transportation (VDOT) – Expanded definition of Large Truck	2015 - 2019
Truck Safety (Combines Frequency and Severity)	Locations where frequency (top/worst 25% mileage) and severity (top/worst 25% mileage) of truck crashes overlaps		

New for discussion today

Under development

Presented during the March 24 Webinar

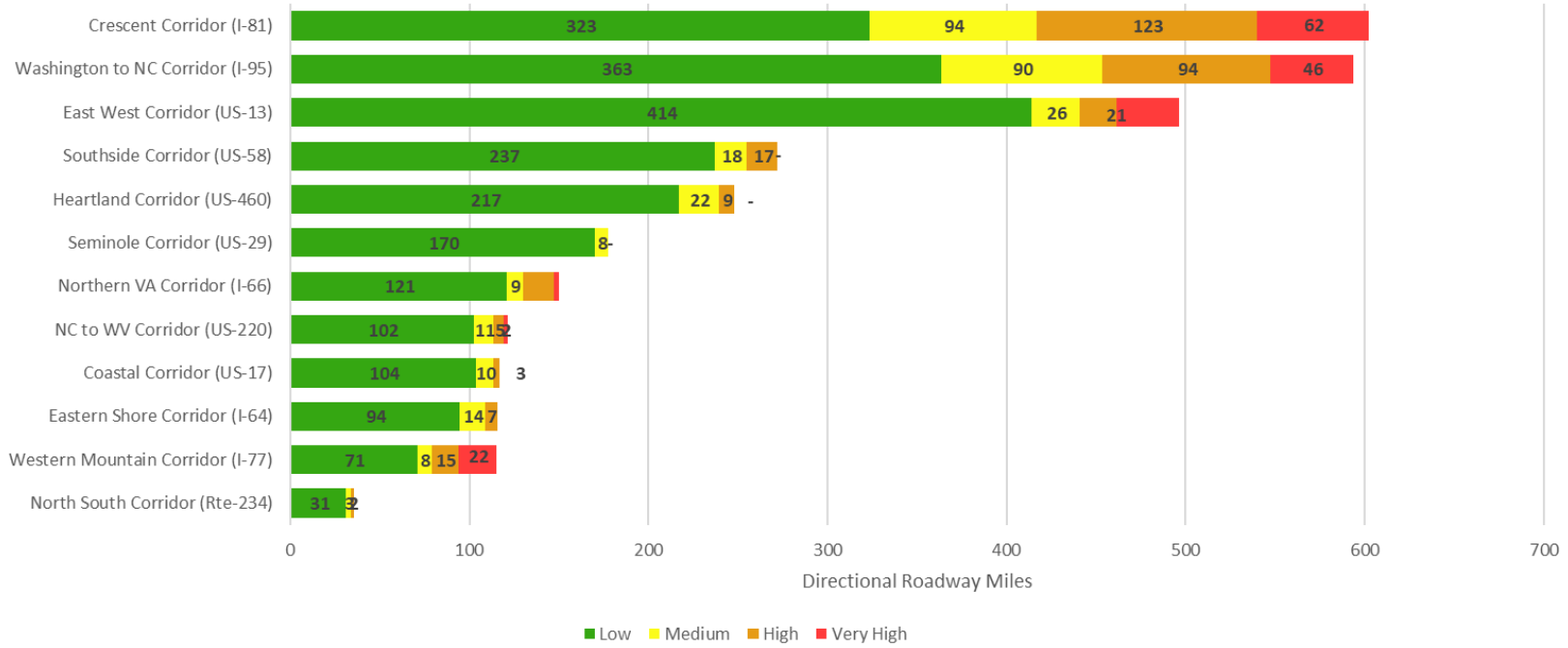
IDENTIFICATION OF FREIGHT ISSUES I TRUCK SAFETY FREQUENCY (BY CONSTRUCTION DISTRICT)



Utilize this weblink to view a map with the following layers:

- "Truck Safety – Crash Frequency Score"
- "Truck Safety – Severity Score (EPDO)"
- "Truck Safety – Crash Frequency + Severity Score"

IDENTIFICATION OF FREIGHT ISSUES I TRUCK SAFETY FREQUENCY (BY COSS*)



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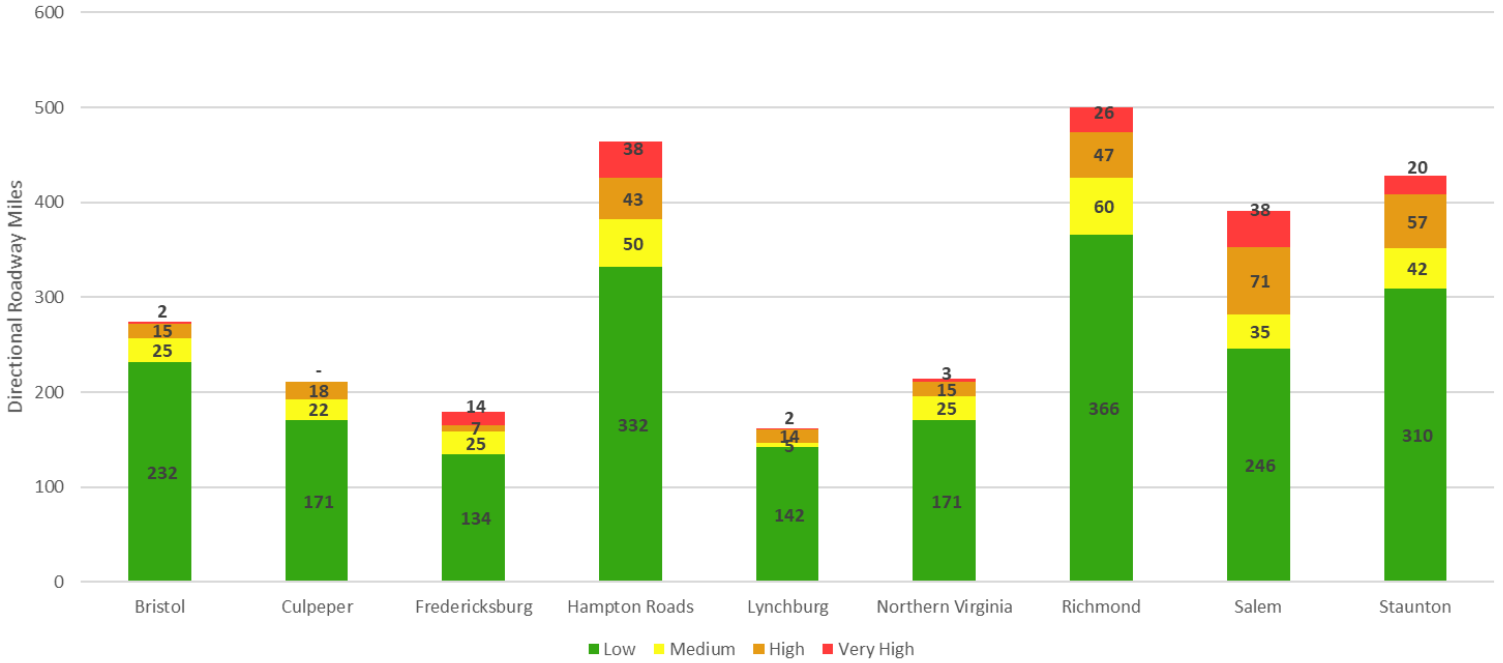
- "Truck Safety – Crash Frequency + Severity Score"

*Note: CoSS includes all Primary CoSS (e.g. I-95) and CoSS Components (e.g. US-1). Please refer to this webpage for a list of CoSS roadways.

IDENTIFICATION OF FREIGHT ISSUES I TRUCK SAFETY MAGNITUDE (BY CONSTRUCTION DISTRICT)



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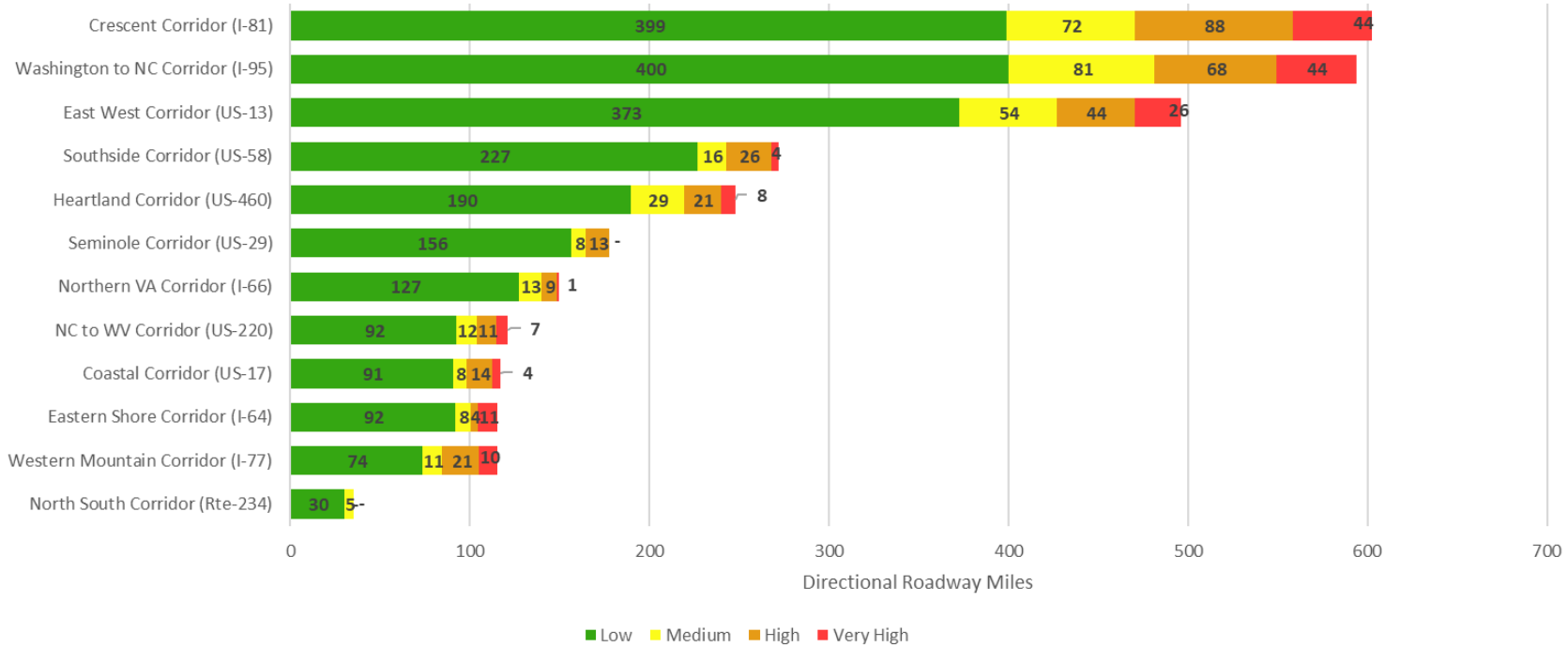

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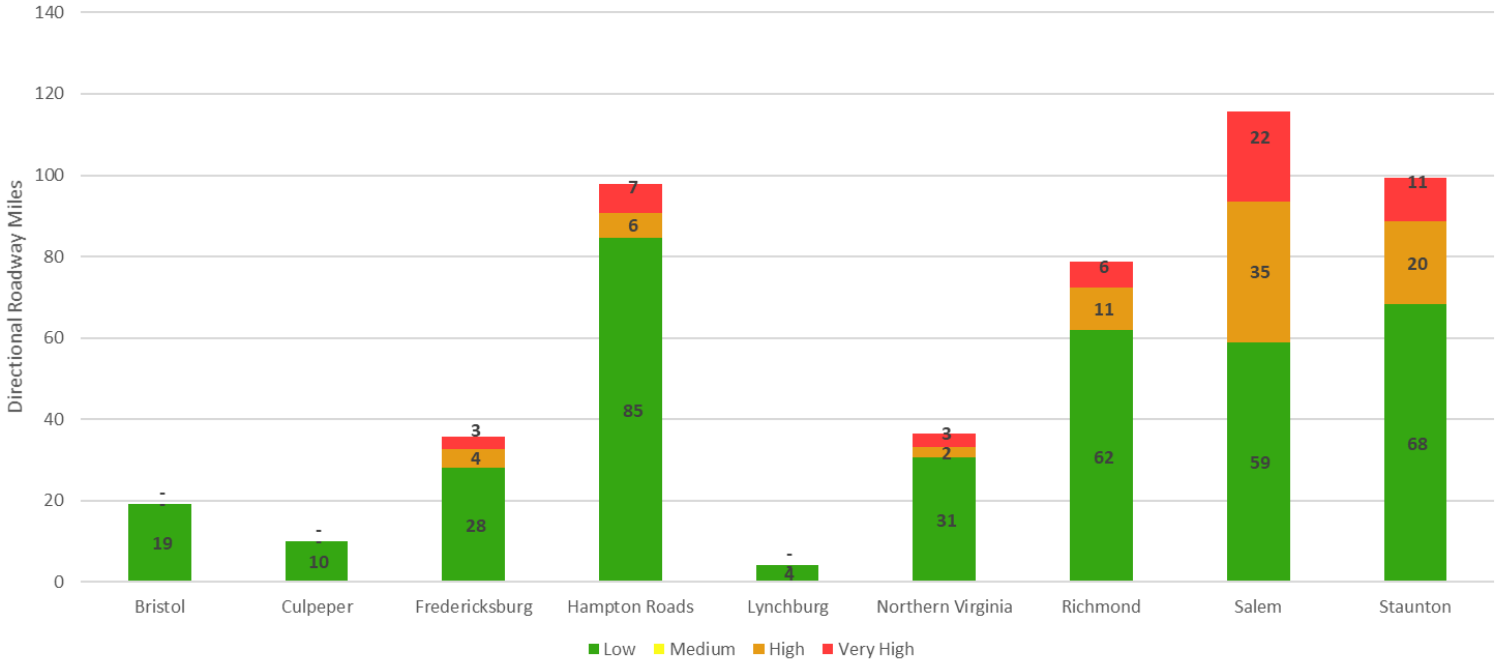
- **Truck Safety Issues**
  - The **intersection of truck crash frequency and severity**

		Directional Mileage with Truck Crash Frequency Score					
		Very High (Top 5%)	High (Top 5-15%)	Medium (Top 15-25%)	Low (Bottom 75%)	None	Total
Directional Mileage with Truck Crash Severity Score (EPDO)	Very High (Top 5%)	53	37	37	16	0	143
	High (Top 5-15%)	63	77	43	105	0	288
	Medium (Top 15-25%)	5	79	60	145	0	289
	Low (Bottom 75%)	23	90	142	1,849	0	2,104
	None	0	0	0	0	195,545	195,545
	Total	144	283	281	2,115	195,545	198,368

IDENTIFICATION OF FREIGHT ISSUES I TRUCK SAFETY FREQUENCY + SEVERITY (BY CONSTRUCTION DISTRICT)



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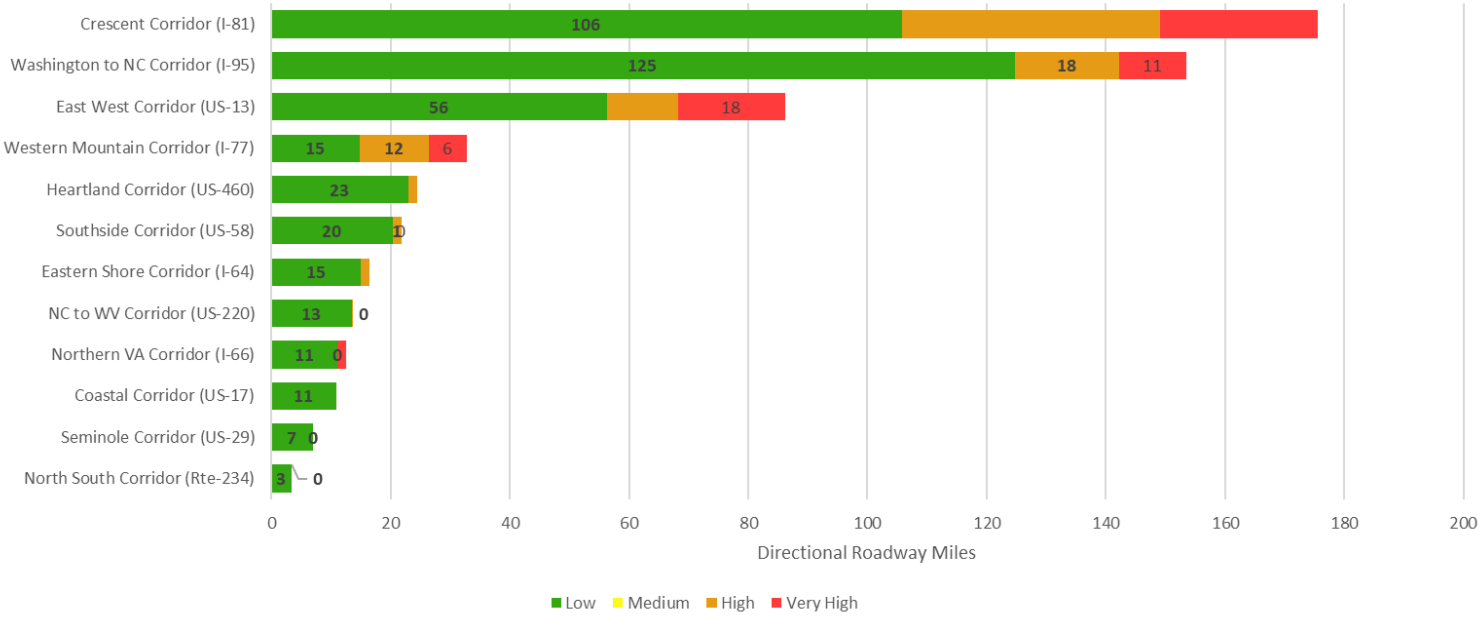

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- **Noteworthy Items**
  - Transearch data is based on estimates, and the method of categorizing internal and external flows might have to be revisited

Measure	Steps	Source	Year of Analysis
Commodity Flow by Truck - Volume Commodity Flow by Truck - Value	1. Retained "Truck" mode groups. 2. Linked trips to highway routes using first and last node lookup table. 3. Calculated totals for tonnage and value and assigned to Transearch network. 4. Developed methods to join Transearch network to the LRS network through a crosswalk created by overlay route events and route name. 5. Bidirectional flows assigned to each direction	Transearch	2017, 2030, 2045
Commodity Flow by Rail	1. Calculated totals for tonnage and value and assigned to Waybill network. 2. Developed method to transfer totals for tonnage and value from Waybill to Virginia Rail Network using buffer with automated clean-up based on flows, railroad ownership, and overlap length. 3. Excluded the following attributes in the field ""Rail Type" • Lead • Passing Siding • Rail to Trail • Removed • Spur • Switch • Yard	Surface Transportation Board	2017
Other Port and Airport facility-level data	This has been developed as a trend.	Various sources	Multiple years

New for discussion today

Under development

Presented during the March 24 Webinar

- **Caution is recommended while viewing and citing these numbers as this data may not show trip chains.**
  - For example, overseas trade movements will show the U.S. port as the origin point for import shipments.
  - Similarly, cargo delivered to a facility in Virginia with a destination outside the state may be tagged as having a destination in Virginia.
- **In short, there are limitations, but numbers are generally indicative of activity on Virginia's roadways.**

Commodity Flow - Tonnage in 2017

		Origin	
		Internal*	External**
Destination	Internal*	12%	21%
	External**	16%	51%

Internal: Trip Origin is in Virginia
External: Trip Destination is outside Virginia

Commodity Flow – Projected Tonnage Growth

	Total	Internal-to-Internal	Internal-to-External	External-to-Internal	External-to-External
2030	31%	37%	33%	24%	30%
2045	90%	105%	92%	83%	88%

Utilize this weblink to view a map with the following layers:

- "Commodity Flow – II (Internal to Internal) Bidirectional Truck Tonnage (2017)"
- "Commodity Flow – IE (Internal to External) Bidirectional Truck Tonnage (2017)"
- "Commodity Flow – EI (External to Internal) Bidirectional Truck Tonnage (2017)"
- "Commodity Flow – EE (External to External) Bidirectional Truck Tonnage (2017)"

- **Online tool: An online interactive tool is available in on the VTrans website in draft format to view commodity flow and major destinations.**
- **There are limitations, but numbers are generally indicative of activity on Virginia's roadways.**
- **Note this tool is in a draft format. Please share comments and suggestions for refinement.**

Select Criteria for:
State, Construction District, MPO or PDC

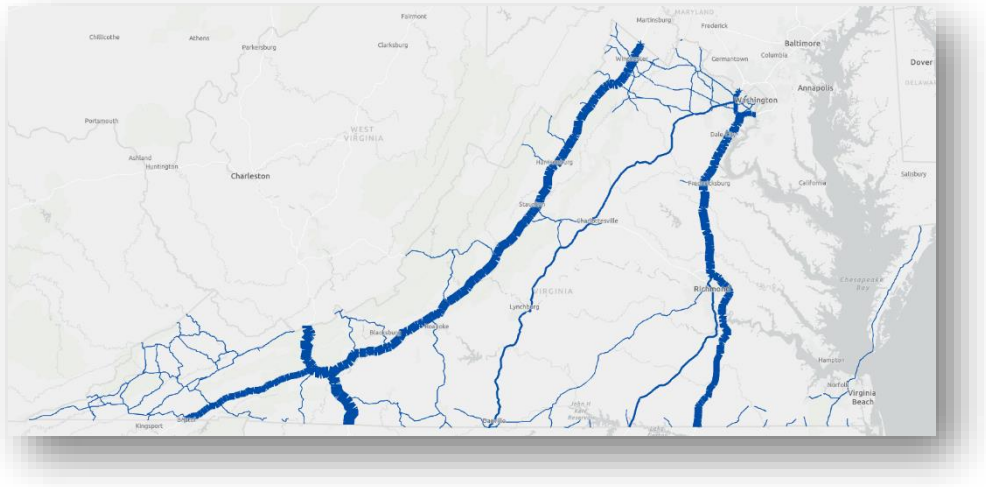
Origin or designations

Commodities

Utilize this weblink to view a map with the following layers:

- "Commodity Flow – II (Internal to Internal) Bidirectional Truck Tonnage (2017)"
- "Commodity Flow – IE (Internal to External) Bidirectional Truck Tonnage (2017)"
- "Commodity Flow – EI (External to Internal) Bidirectional Truck Tonnage (2017)"
- "Commodity Flow – EE (External to External) Bidirectional Truck Tonnage (2017)"

- **REMINDER: Individual measures are important but are likely to provide an incomplete picture**
- **Our next steps are to:**
  - Analyze commodity flow via other modes
  - Existing and potential opportunities for internal modal connections
  - Utilize this data to analyze other issues (e.g. Safety)



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- "Commodity Flow – EE (External to External) Bidirectional Truck Tonnage (2017)"

- **Noteworthy Items**
  - Trucks have different operating characteristics – heavier loads, more impacted by roadway geometry, different operating hours.

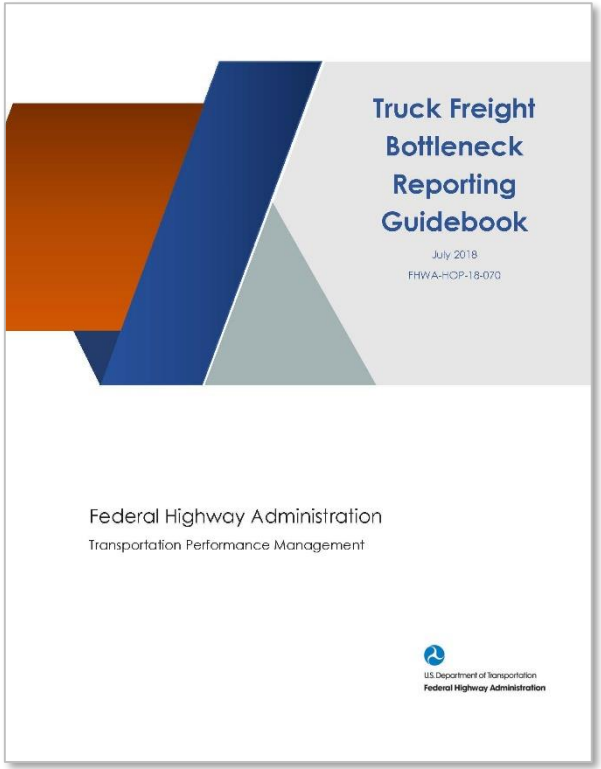
Measure	Steps	Source	Year of Analysis
Total Cumulative Truck Delay	If 2% or higher weighted weekday and weekend hours (6 am – 8 pm) have average truck speed < 75% of truck reference speed or 65 mph: Calculate difference between reference travel time and travel time, multiplied by truck AADT, normalized by segment length, and ranked on a seven-point scale	National Performance Management Research Data Set (NPMRDS)	2017, 2018, 2019
Truck Travel Time Reliability (Based on Level Truck Travel Time Reliability or LOTTR)	Weighted sum of weekday and weekend hours (6 am – 8 pm) where the 80th percentile / 50th percentile truck travel time exceeds 1.3, multiplied by truck AADT, ranked on a seven-point scale		
Truck Travel Time (Based on Planning Time Index or PTI)	Weighted sum of weekday and weekend hours (6 am – 8 pm) where the 95th percentile / 50th percentile truck travel time exceeds 1.3		
Truck Bottlenecks	Locations where truck congestion (top/worst 25% mileage) and truck reliability (top/worst 25% mileage) issues overlap	National Performance Management Research Data Set (NPMRDS)	

New for discussion today

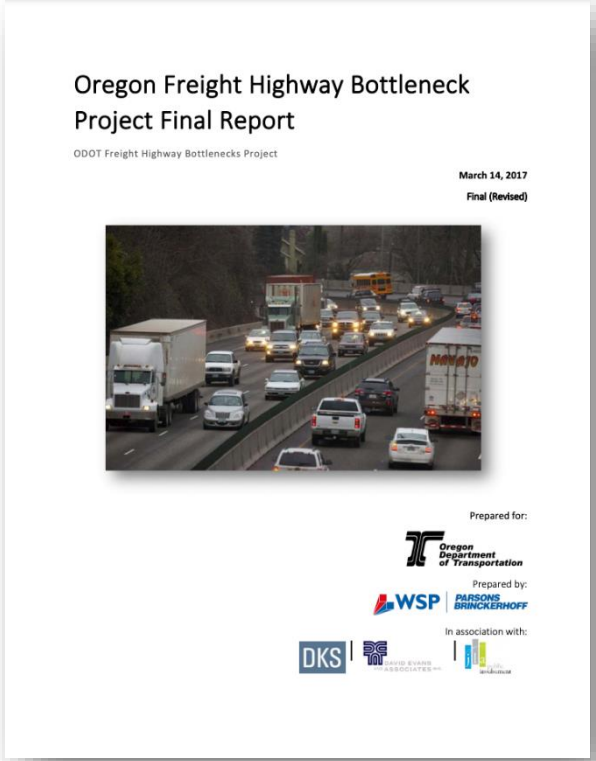
Under development

Presented during the March 24 Webinar

- **Freight Bottleneck Definition**
  - Under 23 U.S.C. 150, and specified in 23 CFR 490.107, Congress requires performance reports by States.
  - Requires State DOTs to identify and describe the ways in which they are addressing congestion at freight bottlenecks.
  - Bottleneck defined as: “a segment of roadway identified by the State DOT as having constraints that cause a significant impact on freight mobility and reliability. Bottlenecks may include highway sections that **do not meet thresholds for freight reliability** identified in 23 CFR §490.613 or other locations identified by the State DOT. Causes may include **recurring congestion, that delays freight trucks, or roadway features** that impact truck movements, such as steep grades, substandard vertical or horizontal clearances, weight restrictions, delays at border crossings or terminals, or truck operating restrictions.”



- **Bottleneck Definition deployed by State of Oregon**
  - Two performance indicators for identifying truck bottlenecks: delay and unreliability. Both indicators calculated using NPMRDS data for travel times and HERS-ST for truck volumes.
    - Delay = [(Average annual delay per truck) * (Annual average truck traffic)] / Segment length
    - Unreliability = [(Travel time index) * (Annualized average truck traffic per day)] / Segment length
  - The initial thresholds were adjusted through an iterative process of stakeholder feedback, resulting in the following final thresholds:



- **Truck Bottlenecks**
  - The **intersection of congestion and reliability**

		Directional Mileage with Truck Reliability Issues (LOTTR)					
		Very High (Top 5%)	High (Top 5-15%)	Medium (Top 15-25%)	Low (Bottom 75%)	None	Total
Directional Mileage with Truck Congestion Issues (Cumulative Truck Delay)	Very High (Top 5%)	57	8	5	10	126	207
	High (Top 5-15%)	15	35	12	36	314	412
	Medium (Top 15-25%)	7	35	15	61	294	412
	Low (Bottom 75%)	7	93	138	1,129	1,722	3,088
	None	0	2	2	53	194,193	194,249
	Total	86	172	172	1,290	196,648	198,368

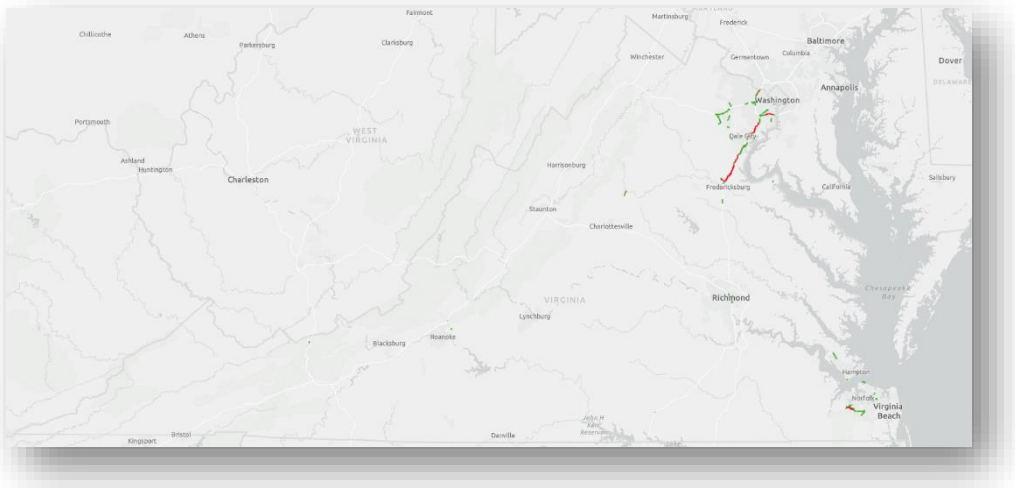
Utilize this weblink to view a map with the following layers:

- "Congestion and Reliability – Cumulative Truck Delay"
- "Congestion and Reliability – Truck LOTTR"
- "Congestion and Reliability – Truck Bottlenecks"

- **REMINDER: Individual measures are important but are likely to provide an incomplete picture**

- **Noteworthy Observations**

  - This draft definition for defining Truck Bottlenecks, if finalized, will be used for federal performance reporting purposes.



- **Noteworthy Items**
  - Truck parking is one of the emerging areas that will require substantial work in the coming months.

Measure		Source	Year of Analysis
Truck Parking Supply	If 2% or higher weighted weekday and weekend hours (6 am – 8 pm) have average truck speed < 75% of truck reference speed or 65 mph: Calculate difference between reference travel time and travel time, multiplied by truck AADT, normalized by segment length, and ranked on a seven-point scale	The American Transportation Research Institute (ATRI)	2021
Truck Parking Demand	Weighted sum of weekday and weekend hours (6 am – 8 pm) where the 80th percentile / 50th percentile truck travel time exceeds 1.3, multiplied by truck AADT, ranked on a seven-point scale	The American Transportation Research Institute (ATRI)	May, June, Sept 2019
Truck Parking Gap	Weighted sum of weekday and weekend hours (6 am – 8 pm) where the 95th percentile / 50th percentile truck travel time exceeds 1.3	The American Transportation Research Institute (ATRI)	

New for discussion today

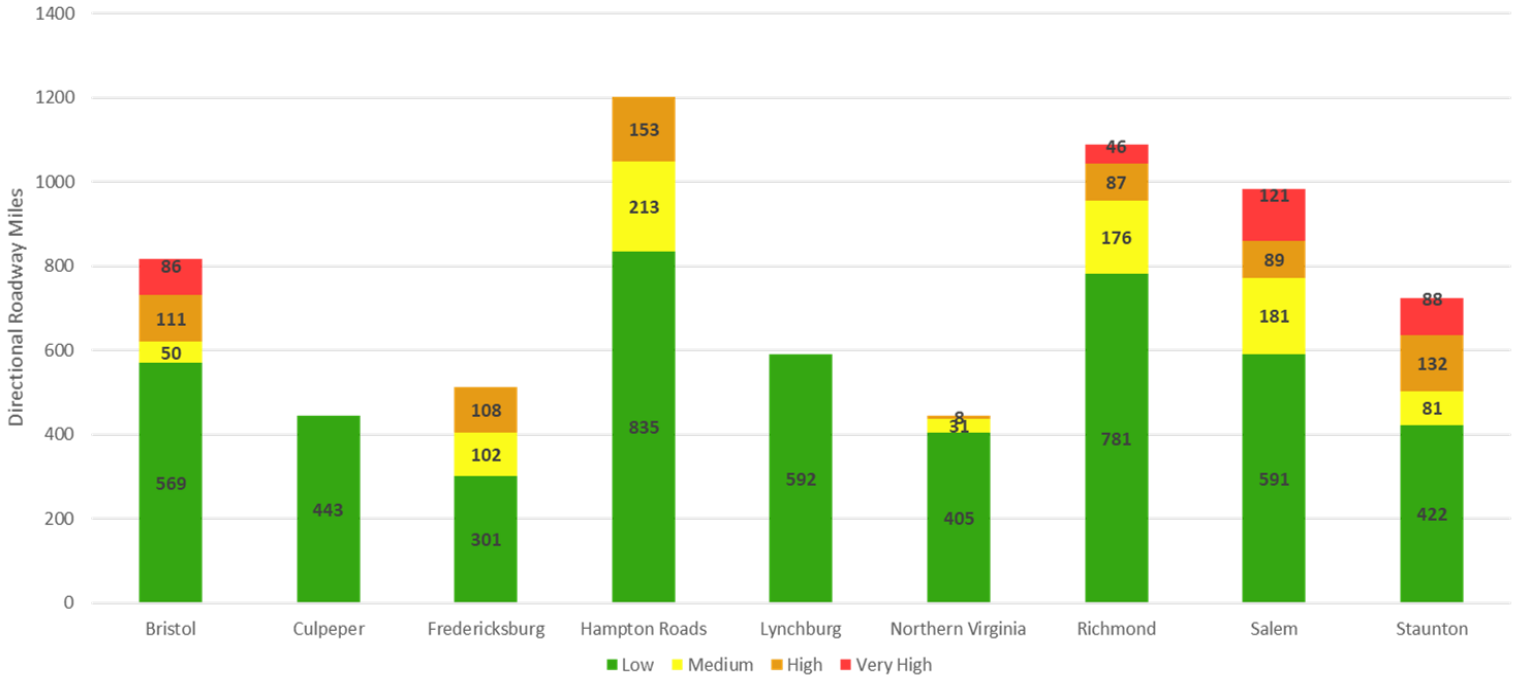
Under development

Presented during the March 24 Webinar

- **Noteworthy Items**
  - In Virginia, most of the available and documented truck parking is provided by private vendors.
  - Our goal is to utilize this parking supply data to identify **Truck Parking Gaps**.

Measure	Truck Parking Spaces	Number of Facilities
Private	6,787	112
Public	782	37
TOTAL	7,569	149

Identification of Freight Issues I Truck Parking Supply (By Construction District)



Utilize this weblink to view a map with the following layers:

- "Truck Parking – Supply"
- "Truck Parking – Gap + Commodity Flow Score"

This chart and the maps show directional milage by construct district with the most available supply. Red color indicates mileage where with "Very High" supply of parking.

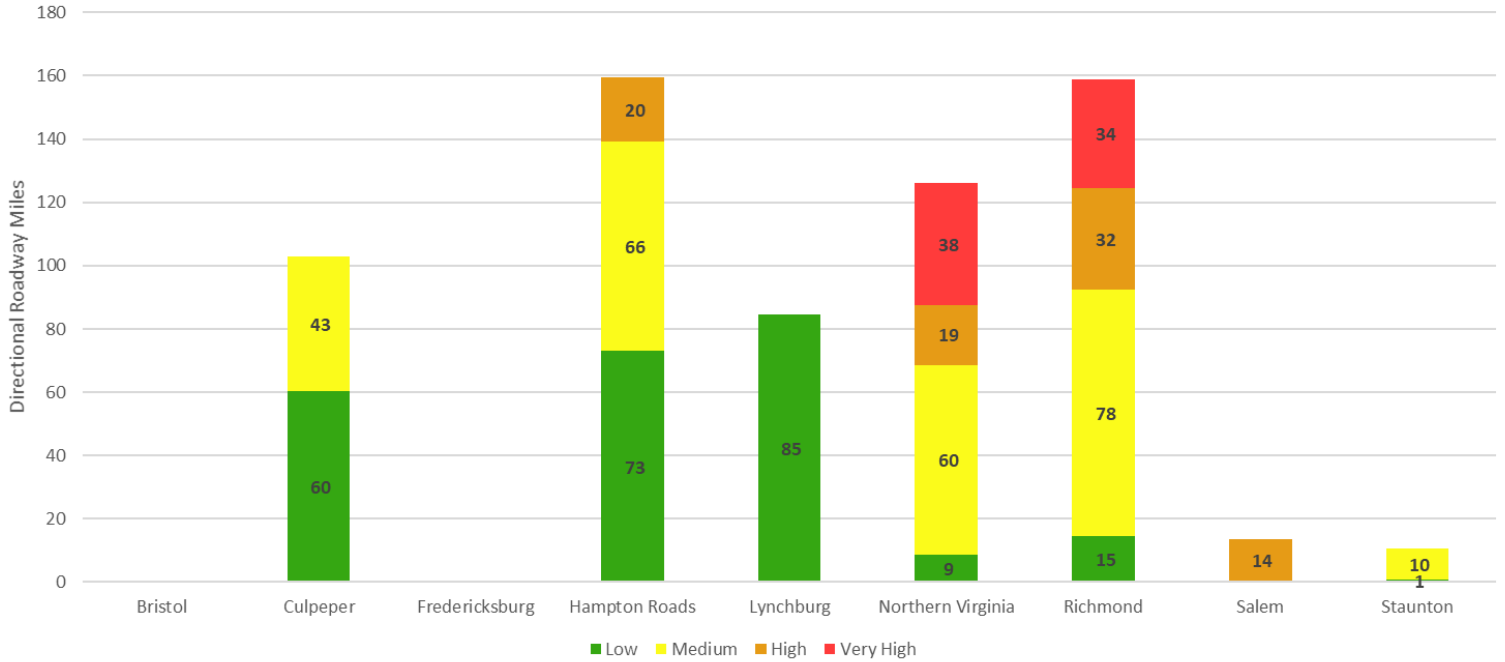
- **Truck Parking Gap Issues**
  - The **intersection of truck parking gaps and commodity movements**

		Directional Mileage Statewide 2017 Commodity Flow Tonnage					
		Very High (Top 5%)	High (Top 5-15%)	Medium (Top 15-25%)	Low (Bottom 75%)	None	Total
Directional Mileage with Parking Gap	Very High (Top 5%)	73	85	498	3,791	3,091	7,538
	High (Top 5-15%)	-	-	-			
	Medium (Top 15-25%)	-	-	-			
	Low (Bottom 75%)	288	645	213	442	142	1,730
	None	0	1	2	1,178	187,920	189,101
	Total	361	731	713	5,411	191,153	198,368

Utilize this weblink to view a map with the following layers:

- "Truck Parking – Supply"
- "Truck Parking – Gap + Commodity Flow Score"

IDENTIFICATION OF FREIGHT ISSUES I TRUCK PARKING – GAP + COMMODITY FLOW (BY CONSTRUCTION DISTRICT)



Utilize this weblink to view a map with the following layers:

- "Truck Parking – Supply"
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*Note: CoSS includes all Primary CoSS (e.g. I-95) and CoSS Components (e.g. US-1). Please refer to this webpage for a complete list of CoSS roadways.

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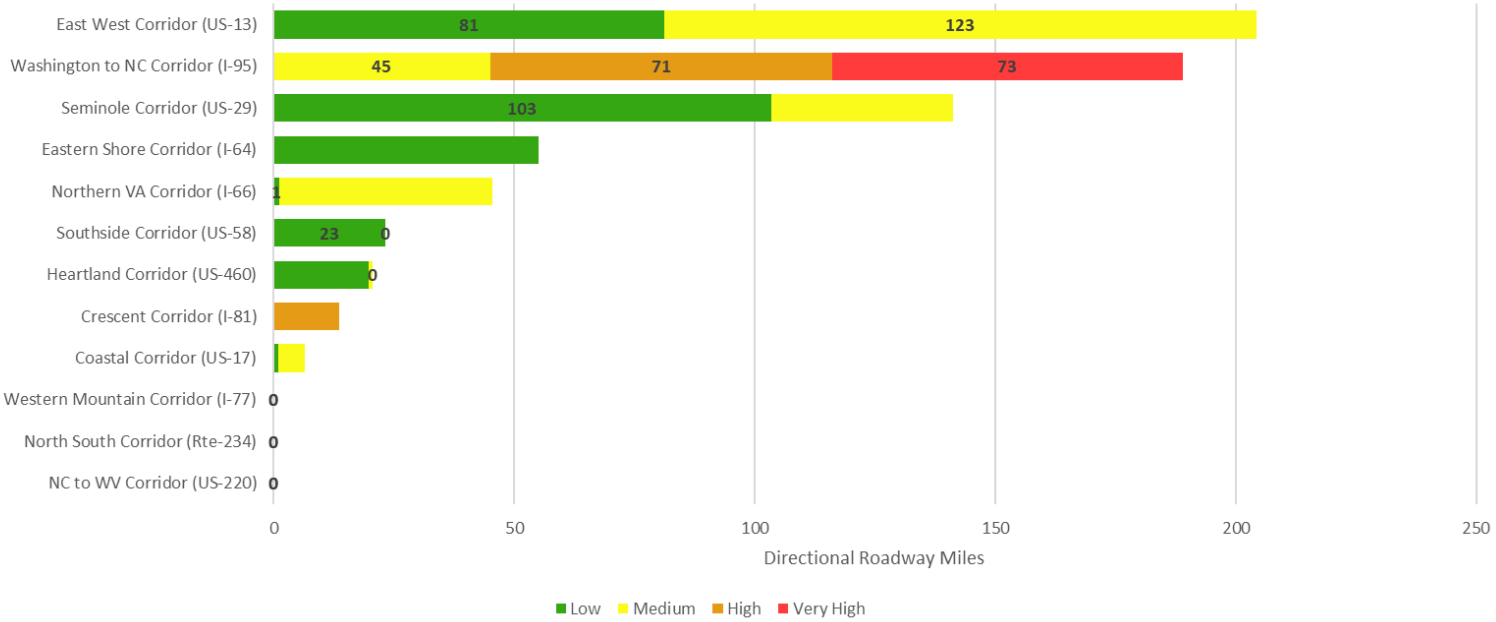

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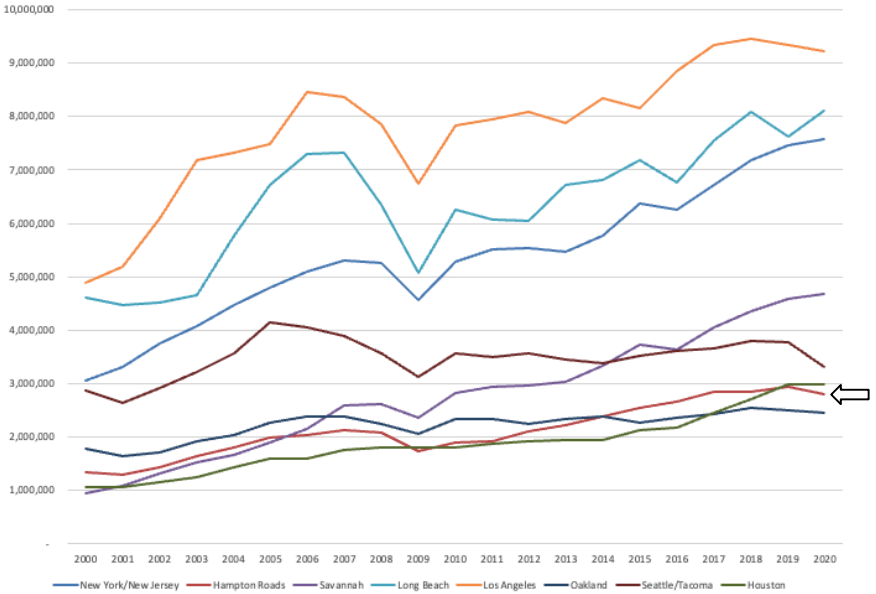
VTRANS | VIRGINIA'S TRANSPORTATION PLAN

Freight Trends

- **Truck Trip Generators and Destinations**
  - Compared to passenger vehicles, trucks have fewer trip generation and destination points, therefore truck volumes tend to be more concentrated in/around certain generators.
  - The Port of Virginia is one of the significant publicly-owned trip generators. There are several other privately-owned generators as well.

Annual TEUs* by Atlantic Ports (Compared to Ports of Los Angeles and Long Beach)



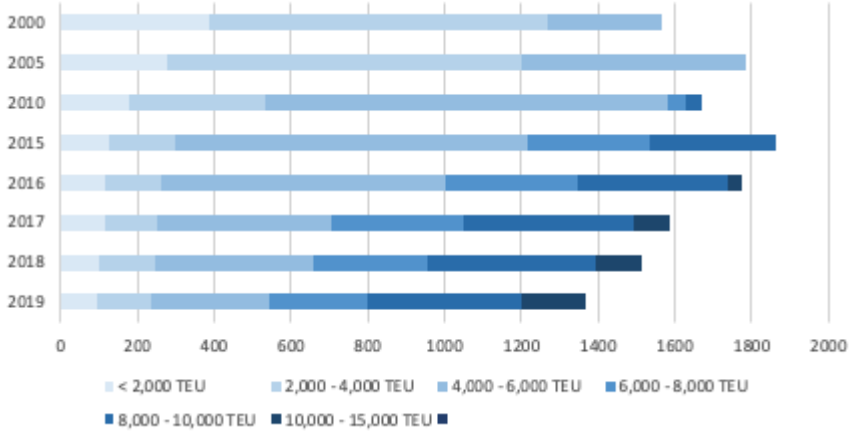
	Growth in TEUs*	
Port	2000-2020	2015-2020
New York/New Jersey	149%	19%
Hampton Roads	109%	10%
Savannah	394%	25%
Long Beach	76%	13%
Los Angeles	89%	13%
Oakland	39%	8%
Seattle/Tacoma	16%	-6%
Houston	183%	41%

Source: American Association of Port Authorities; individual ports

*A TEU or Twenty-foot Equivalent Unit is an exact unit used to measure cargo capacity for container ships and container terminals.

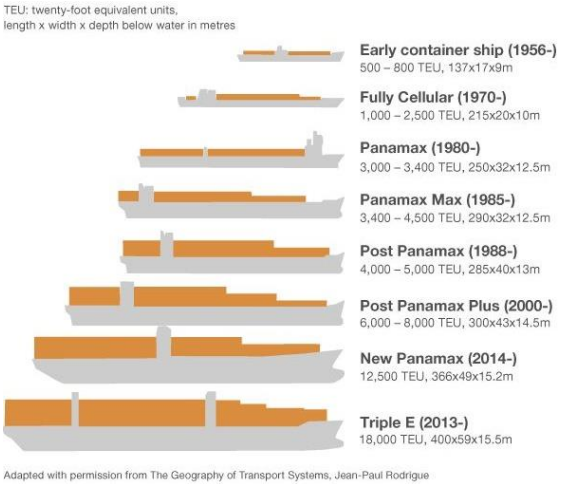
- **Likely Increase in More Concentrated Demand**
  - Available data and trends indicate growth in fewer and larger ships.

Container Ship Calls by Ship Category, Port of Virginia



Source: United States Army Corps of Engineers

Evolution of Container Ships



Source: The Geography of Transport Systems

- **Several factors govern how, when, and where goods/commodities are moved. These factors include:**
  - **Rates:** Rates rarely are the only determinant of mode choice because companies need to maintain a certain level of quality in its operations.
  - **Quality of service:** Quality of service, in just-in-time environment, can be just as critical as any other factor
    - Reliability: On-time delivery
    - Level of service: It includes including transit time
  - **Product type:** High-value products are sent by truck due to the time sensitivity of the demand; lower value goods often moved by rail or barge. Other product type considerations include:
    - Are there perishable items?
    - Loss and damage considerations
  - **Seasonal changes:** extreme weather may result in delays.
  - **Length of haul**
    - Impacts of international supply chains
  - **Access to rail terminals**

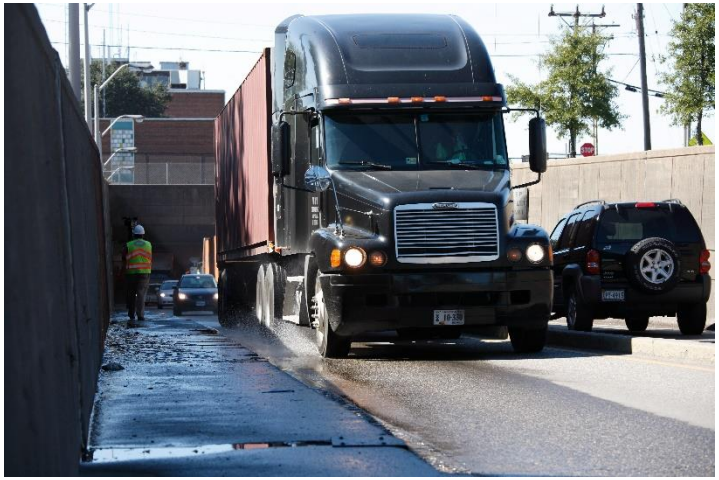
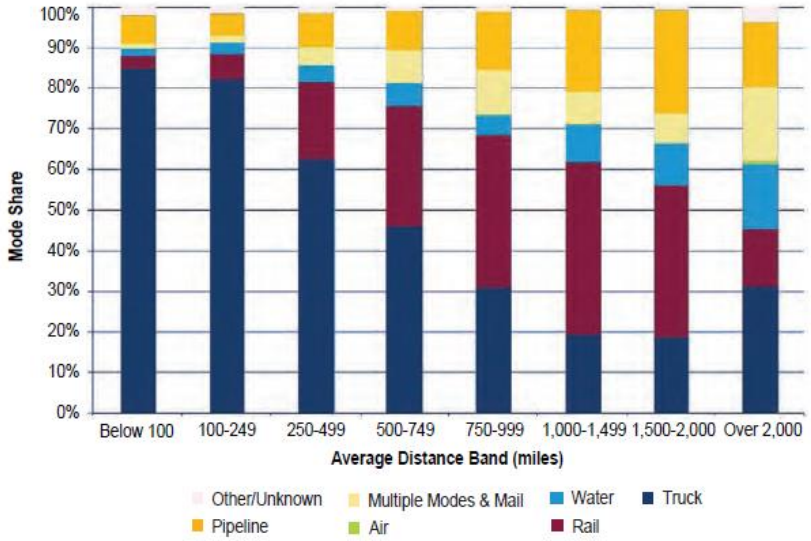


Photo credit: Virginia Department of Transportation

- **Availability and Suitability of of both modes is not necessarily always simultaneously present.**
  - Generally, available research indicates freight rail is not a significantly attractive mode for trips shorter than 500 miles.
  - In some markets, one mode or the other is so dominant that comparisons between the two would be meaningless.
    - Carriage of bulk commodities (e.g., coal) relies on primarily rail
    - Carriage of high-value and very time-sensitive commodities is dominated by truck or aviation

Modal Share of Freight Ton-miles by Distance Band



Source: NCFRP Report 40, Impacts of Policy-Induced Freight Modal Shifts, TRB, 2018.

- **Truck Pricing is complex.**
  - Wages & fuel drive costs
  - Many factors affect price
    - Business cycle
    - Tightness of fleet market
    - Imbalance of cargo flows & available return loads
    - Equip location & empty miles
    - Delays
    - Available equipment types
    - Delays at shipper facilities
    - Cargo types / driver skills required
    - Shipper service requirements
    - Many more

Motor Carrier Costs

Motor Carrier Costs	2011	2012	2013	2014	2015	2016	2017	2018	2019
Vehicle-based									
Fuel Costs	$0.590	$0.641	$0.645	$0.583	$0.403	$0.336	$0.368	$0.433	$0.396
Truck/Trailer Lease or Purchase Payments	$0.189	$0.174	$0.163	$0.215	$0.230	$0.255	$0.264	$0.265	$0.259
Repair & Maintenance	$0.152	$0.138	$0.148	$0.158	$0.156	$0.166	$0.167	$0.171	$0.143
Truck Insurance Premiums	$0.067	$0.063	$0.064	$0.071	$0.074	$0.075	$0.075	$0.084	$0.068
Permits and Licenses	$0.038	$0.022	$0.026	$0.019	$0.019	$0.022	$0.023	$0.024	$0.023
Tires	$0.042	$0.044	$0.041	$0.044	$0.043	$0.035	$0.038	$0.038	$0.036
Tolls	$0.017	$0.019	$0.019	$0.023	$0.020	$0.024	$0.027	$0.030	$0.034
Driver-based									
Driver Wages	$0.460	$0.417	$0.440	$0.462	$0.499	$0.523	$0.557	$0.596	$0.533
Driver Benefits	$0.151	$0.116	$0.129	$0.129	$0.131	$0.155	$0.172	$0.180	$0.160
TOTAL	**$1.706**	**$1.633**	**$1.676**	**$1.703**	**$1.575**	**$1.592**	**$1.691**	**$1.821**	**$1.652**

Source: The American Transportation Research Institute (ATRI)

- **How can Commonwealth or a region increase mode share of freight rail?**
  - Opportunities for mode shift may exist where there are competitive movements - defined as where mode share is somewhat comparable between rail and trucks.
    - Competitive movements do not imply equivalent levels of service or price.
  - Competitive means that the cost and level of service, taken together, are close economic equivalents for shippers in a given market.
    - Allows for trade-offs between price and service
- **There are some challenges**
  - Shifts in international supply chains to east coast could shorten length of haul inland (shift to truck mode)
  - May be more opportunities to apply technology to the trucking sector to reduce empty miles and lower cost
  - Technology may allow some shipments to move from Less-than-truckload (LTL) to multi-stop truckload

Photo credit: Virginia Department of Transportation

OIPI-STP Points of Contact

- **Please provide feedback by Friday, June 18.**

- **For questions and clarifications, please contact:**

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