West Virginia Freight Plan
(in progress)
These slides reflect ongoing analysis for the state freight plan and are not final.
Introductions - Project Team

WVDOT

- Brian Carr
  WVDOH Planning Division – Freight Plan Project Manager
- Elwood Penn
  Director, WVDOH Planning Division

Consultant Team

- Lisa Destro (CS)
  Project Manager
- Rebecca Wingate (CS)
  Deputy PM
- David Jackson (CS)
  Principal in Charge
- Dorry Funaki (MM)
  Lead non-highway modes & stakeholder engagement support
Agenda

- Introductions
- Plan Overview
- Technical Activities Update
- Draft Vision and Goals Update
- Discussion and Input
- Next Steps
- Q&A
Plan Overview
Purpose of the Plan

- Update the West Virginia State Freight Plan to meet all federal guidelines
- Gather freight related data and conduct a robust stakeholder engagement effort on freight related issues
- Develop data-driven, performance-based decision-making tools
- Assess the freight system conditions, and identify needs and opportunities to support future planning, policies, and investment in West Virginia
- Identify and prioritize projects, policies, and strategies to support West Virginia’s freight-related goals
Federal Requirements for Freight Plans
FAST Act (2015)

<table>
<thead>
<tr>
<th>State Freight Plans shall include, at a minimum:</th>
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</thead>
<tbody>
<tr>
<td>Identification of significant statewide freight trends, needs and issues</td>
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<tr>
<td>Description of freight policies, strategies and performance measures that will guide freight-related transportation investment decisions</td>
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<tr>
<td>Critical multimodal rural freight facilities and rural and urban freight corridors</td>
</tr>
<tr>
<td>Link to national multimodal freight policy and highway freight program goals</td>
</tr>
<tr>
<td>Description of how innovative technologies and operational strategies (including intelligent transportation systems) that improve the safety and efficiency of freight movements were considered</td>
</tr>
</tbody>
</table>
Federal Requirements for Freight Plans
Infrastructure Investment and Jobs Act (IIJA, 2021)

State Freight Plans shall include, at a minimum:

- **Assessment of commercial motor vehicle parking** facilities
- **Description of supply chain cargo flows**
- **Inventory of commercial ports**
- **Discussion of the impacts of e-commerce on freight infrastructure**
- **Considerations of military freight**

  Strategies and goals to decrease a) the severity of impacts of **extreme weather and natural disasters** on freight mobility, b) the impacts of freight movement on **local air pollution**, c) the impacts of freight movement on **flooding and stormwater runoff**, and d) the impacts of freight movement on **wildlife habitat loss**

- In carrying out activities under the State freight plan, a) enhance **reliability or redundancy** of freight transportation, or b) incorporate the ability to rapidly restore **access and reliability** with respect to freight transportation
Plan Technical Approach

**Where are we now?**
Information we need to know to make decisions and invest in our system
- Public/private sector engagement
- Align with LRTP and other planning efforts

**Where do we want to go?**
Vision, goals, strategies and investments that will help us get there
- Public/private sector input on vision and goals, needs and projects

**How do we get there?**
A plan to work with partners to achieve WVDOT’s freight system goals
- Roles and opportunities for partners
- Raise public awareness

**Stakeholder Outreach**
- Public/private sector engagement
- Align with LRTP and other planning efforts

**Data, Tools, Resources**
- Public/commercial freight, economic and passenger data
- Review other plans
- Freight flow tool
- Data-driven/ stakeholder-informed needs assessment
- Aligns with existing DOT plans & priorities

**Plan Outputs**
- Infrastructure conditions and performance
- Commodity flows and forecasts
  - Industry trends

- Freight vision & goals
  - Needs assessment and project identification

- Identification of key strategies and investments
  - Implementation plan

West Virginia State Freight Plan
Role of the Freight Advisory Committee

Who?
- Advisors, stakeholders, and subject matter experts

Why?
- Validate vision and goals
- Offer insight on local and regional freight-related issues, trends, and needs
- Share information with institution/organization represented
- Inform recommendations, solutions, and strategies

When?
- Up to 3 times over the next 3-4 months
Key Scope Tasks

- Material Review and Data Collection Plan
- Stakeholder Engagement
- Assess the Existing Multimodal Freight System
- Identify Deficiencies and Impacts to the Freight System and Economy
- Develop Strategies to Address Deficiencies and Trends
- Current and Future Freight Trends
- Develop Final Plan Documents
# Plan Schedule

<table>
<thead>
<tr>
<th>Task</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
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**Legend:**
- PM
- Deliverable
- Technical Activity
- Engagement Activity
- FHWA Review
Technical Activities
Modal Profiles Overview

- Highway
- Rail
- Aviation
- Waterways
- Pipeline

Inventory
Existing and Future Demand
Condition
Safety
Performance
Needs
Highway Modal Profile
Network Overview

- 38,850 miles of public road
- 35,038 miles state maintained (90%)
- 52.2 million vehicle miles daily in 2019
- 3.8 million truck miles daily in 2021

Source: State of the System Highway Fact Sheet, WVDOH – Planning Division, 2019; WV HPMS, 2021
Truck Traffic Volumes

- Segments around Charleston on I-77 support more than 19,000 trucks per day
- I-81, in the Eastern Panhandle near Martinsburg, also carries nearly 19,800 trucks per day
- US-35 (over 10,400 near the Ohio border) and US-50 (over 10,800 near I-79) are among the highest truck trafficked, non-interstate corridors in the state.
- SR-9 is a notable truck corridor connecting I-81 and US-340 in the Eastern Panhandle (over 2,900 near I-81), and SR-2 (over 2,500 near Wheeling)

Pavement Performance

- The majority of the state’s lane-miles, about 75%, are in good to fair condition.
- About 25% of West Virginia’s roadways exhibit poor pavement conditions indicating that they are in need of rehabilitation in the near or immediate future.

Generally, poorer pavements are concentrated on lower functional class roadways – e.g., Local and Minor Collectors

Approximately 85% of poor pavements statewide are located on local, minor collector, and major collector roadways

<table>
<thead>
<tr>
<th>Roadway Type</th>
<th>Local</th>
<th>Minor Collector</th>
<th>Major Collector</th>
<th>Minor Arterial</th>
<th>Principal Arterial - Other</th>
<th>Principal Arterial – Freeways &amp; Expressways</th>
<th>Interstate</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Good</td>
<td>3.4%</td>
<td>3.9%</td>
<td>17.8%</td>
<td>33.8%</td>
<td>59.8%</td>
<td>19.2%</td>
<td>84.6%</td>
<td>38.6%</td>
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<tr>
<td>Fair</td>
<td>22.4%</td>
<td>29.3%</td>
<td>48.1%</td>
<td>50.5%</td>
<td>33.8%</td>
<td>50.5%</td>
<td>13.8%</td>
<td>36.1%</td>
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<tr>
<td>Poor</td>
<td>74.2%</td>
<td>66.8%</td>
<td>34.1%</td>
<td>15.7%</td>
<td>6.4%</td>
<td>30.3%</td>
<td>1.6%</td>
<td>25.4%</td>
</tr>
</tbody>
</table>

Of the state’s ~7,300 bridges, 80% are in good to fair condition

844 bridges carry National Highway Freight Network routes

» 86% are in good to fair condition

Poor condition bridges are broadly distributed throughout the state

<table>
<thead>
<tr>
<th>Owner</th>
<th>Poor</th>
<th>% Poor</th>
<th>Fair</th>
<th>% Fair</th>
<th>Good</th>
<th>% Good</th>
<th>Total</th>
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<tbody>
<tr>
<td>State</td>
<td>1,409</td>
<td>20%</td>
<td>3,948</td>
<td>56%</td>
<td>1,662</td>
<td>24%</td>
<td>7,019</td>
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<tr>
<td>County</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
<td>100%</td>
<td>2</td>
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<tr>
<td>City</td>
<td>33</td>
<td>33%</td>
<td>54</td>
<td>53%</td>
<td>14</td>
<td>14%</td>
<td>101</td>
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<tr>
<td>Other¹</td>
<td>19</td>
<td>10%</td>
<td>143</td>
<td>73%</td>
<td>33</td>
<td>17%</td>
<td>195</td>
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<tr>
<td>Total</td>
<td>1,461</td>
<td>20%</td>
<td>4,145</td>
<td>57%</td>
<td>1,711</td>
<td>23%</td>
<td>7,317</td>
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</table>

Source: FHWA, National Bridge Inventory, 2021; Cambridge Systematics, Inc. analysis.
Truck Buffer Time Index

- Measures predictability of travel times
- High Buffer Time Index values indicate unreliable truck travel times while low values indicate more reliable travel times
- Poor reliability was most prevalent in the following areas
  » Charleston: I-64 and I-77
  » Wheeling: I-70

Source: FHWA, National Performance Management Research Data Set, 2021; Cambridge Systematics, Inc. analysis.
## Truck Buffer Time Index

### Length-Weighted Average Buffer Time Index - Interstate Highways

<table>
<thead>
<tr>
<th>Urbanized Area</th>
<th>Buffer Time Index</th>
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<tbody>
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<td>Wheeling, WV/OH</td>
<td>6.2</td>
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<tr>
<td>Beckley, WV</td>
<td>16.4</td>
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<tr>
<td>Charleston, WV</td>
<td>14.3</td>
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<tr>
<td>Huntington, WV/KY/OH</td>
<td>12.5</td>
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<tr>
<td>Parkersburg, WV/OH</td>
<td>12.3</td>
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<tr>
<td>Hagerstown, MD/WV/PA</td>
<td>6.2</td>
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### Length-Weighted Average Buffer Time Index - Non-Interstate NHS

<table>
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<tr>
<th>Urbanized Area</th>
<th>Buffer Time Index</th>
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<tbody>
<tr>
<td>Wheeling, WV/OH</td>
<td>95.2</td>
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<tr>
<td>Morgantown, WV</td>
<td>94.4</td>
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<td>Beckley, WV</td>
<td>78.5</td>
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<td>Charleston, WV</td>
<td>72.8</td>
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<tr>
<td>Huntington, WV/KY/OH</td>
<td>72.5</td>
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<tr>
<td>Parkersburg, WV/OH</td>
<td>67.4</td>
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<tr>
<td>Hagerstown, MD/WV/PA</td>
<td>53.7</td>
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<tr>
<td>Weirton-Steubenville, WV/OH</td>
<td>52.4</td>
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</table>

Source: FHWA, National Performance Management Research Data Set, 2021; Cambridge Systematics, Inc. analysis.
Fatal and Serious Injury Truck-Involved Crashes

- There were 518 fatal and serious injury crashes involving trucks in West Virginia based on 2017-2021 data.
- This represents over 10% of all fatal and serious injury crashes in the state.

Source: WVDOT; Cambridge Systematics, Inc. analysis.
Truck Parking

- 61 parking facilities
  - Public: 25
  - Private: 36

- 1,860 total parking spaces
  - Public: 636
  - Private: 1,224

- 78 crashes involved parked trucks between 2017-2021
  - 4% resulted in a fatality, and 45% resulted in some type of injury

Source: FHWA, Jason’s Law Survey; Pilot Flying J; TravelCenters of America; various third-party truck parking websites; Cambridge Systematics, Inc. analysis.
Rail Network

- 2,226 route miles in West Virginia
- Owned by 13 freight railroads
- Majority owned by CSX Transportation (CSX) and Norfolk Southern (NS) - own 1,819 miles (80% of state mileage)
- 11 regional / short line railroads operating in the state owning remaining 20%
West Virginia Class I Freight Rail Tonnage (2018)

Legend

2018 Tonnage
- Greater than 20 million
- 10 million - 20 million
- 5 million - 10 million
- 2 million - 5 million
- Less than 2 million

- Blue: Class I - CSX Transportation
- Red: Class I - Norfolk Southern
- Black: Interstates
Rail Trends and Themes

» COVID-19 pandemic
  » Severely impacted freight railroad traffic and operations
  » In 2020, rail carloads were down 13%, revenue ton-miles down 10.8%, and total operating revenue dropped 11% when compared with 2019

» Changes in U.S. Energy Policy
  » Coal shipments, the largest rail-supported commodity has dropped precipitously resulting in a significant decrease in revenue ton-miles in West Virginia

» Coal is trending downwards, and it remains to be seen what commodity or commodities will replace this revenue gap in the future

» Improvement of multimodal connections, and public rail access via transload operations and development of spur tracks to access industries, may help improve freight volumes and network balance

» Look for other commodities to replace the shipment of coal
Heartland Intermodal Gateway

- Cargo-transfer station between rail / truck along the Norfolk Southern rail line in Pritchard, WV

- Limited demand / recently shifted from state to Wayne County ownership
Intermodal Trends and Themes

**Benefits:**
- Improves efficiency of transfers between multiple freight modes
- Reduces negative impacts of freight on local communities
- Potential to relieve highway congestion by diverting trucks to rail
- Facilities that allow double-stacking containers on railway cars increases capacity and efficiency of freight system

**Opportunities:**
- Combination of rail and inland waterways, provides an intermodal option for moving bulk commodities (which is a major portion of WV’s economy)
- Identify future opportunities for Heartland Intermodal Gateway through a Wayne County-led needs assessment
Waterway Modal Profile
Marine Network

- 275 miles of navigable waterways in West Virginia including the Ohio, the Kanawha and Monongahela Rivers
- Ohio River Basin, Ohio River System (ORS) is a vital node in the nation's marine network for freight shipping
Waterborne Freight Shipping

- The **Mid-Ohio Valley Port** (OH and WV) is the 17th largest port in the US by tonnage
  - Public and private terminals on the Ohio River (from Hancock to Jackson Counties)
  - 35.9 million tons in 2020 (coal, sand and gravel, and petrochemicals)

- **Huntington – Tristate** (KY, OH, & WV) is the 22nd largest US port by tonnage
  - Terminals along parts of the Ohio (Mason to Wayne Counties), Big Sandy and Kanawha Rivers
  - 29.7 million tons in 2020, a 52% decline from 2010 (coal, gasoline, limestone and crude oil)

**Source:** [https://www.bts.gov/content/tonnage-top-50-us-water-ports-ranked-total-tons](https://www.bts.gov/content/tonnage-top-50-us-water-ports-ranked-total-tons)
Waterway Trends and Themes

- Inland waterways transport significant freight volumes along the Ohio River

- The pandemic caused an overall drop of 6 percent in waterborne tonnage handled, which was less than the decrease in traffic experienced by other transportation modes

- Record low water on the Ohio River in 2022 has impacted the flow of freight traffic
Aviation Modal Profile
Freight Air Cargo Operations

- Air Cargo Freighter
- Integrated Carrier
- Air Cargo Terminal
Aviation Network

- There are 23 airports in West Virginia
- Major airports in West Virginia which support air cargo movement:
  - Tri-State/Milton J. Ferguson Field (HTS)
  - Charleston Yeager (CRW)
  - Eastern West Virginia Regional (MRB)
- Air Freight activity accounts for the smallest portion of West Virginia Domestic Freight Flows (West Virginia Freight Rail Plan, 2012)
West Virginia Airports Air Cargo Activity

West Virginia Airport Air Cargo Activity

- Raleigh County Memorial Airport: 4%
- Tri-State/Milton J. Ferguson Field: 95%
- Other Airports: 1%

Source Notes: Bureau of Transportation Statistics | 2021 | Air Carrier Summary : T3: U.S. Air Carrier Airport Activity Statistics | Other airports include: (1) North Central West Virginia (2) Greenbrier Valley, and (3) West Virginia International Yeager airports
Aviation Trends and Themes

» Rise of E-commerce
  » Shift of consumer habits and the increase of air cargo since the onset of the pandemic. Air freight has increased by 16.5% from 2019 to 2021

» Sustainable Aviation Fuel
  » Investment in low-carbon alternatives to traditional jet fuel made from crude oil

» Advance Air Mobility/Urban Air Mobility (AAM/UAM)
  » Future of Aviation designed to reach previously unserved markets
  » Focus on both supply/delivery and passenger operations
  » Potential Shift in Modal Split of Freight Distribution
Pipeline Modal Profile
Pipeline Network

- West Virginia pipeline network moves the state’s high-value oil and gas commodities
- Heavy trucks, drilling, and production equipment are using existing roadway network

Source: National Pipeline Mapping System
New Pipelines

- Over 1,000 miles of new pipeline projects were in design, regulatory approval, or construction in 2018

- Major pipelines under construction in West Virginia spanning 1,368 miles:
  - Mountain Valley Pipeline
  - Atlantic Coast Pipeline
  - Mountaineer Gas Company Eastern Panhandle Expansion
  - Rover Pipeline
  - Goff Connector Pipeline
  - Hammerhead Pipeline
  - Checkmark Pipeline
Pipeline Network Statistics

All above statistics are within the State of West Virginia and are sourced from the 2018 West Virginia Freight Plan.

Total Commodity Miles by Type:
- Crude Oil, 4.6 miles
- Refined Petroleum Products, 40 miles
- High Volatile Liquid, 409 miles

System Production:
- Gas Production: 7.78 trillion gallons
- Oil Production: 316 million gallons
- LNG Production: 98.6 million gallons

Gas Pipeline System Mileage by Purpose:
- Gas Transmission, 3,504 miles
- Gas Gathering, 447 miles
- Gas Distribution - Main miles, 10,883 miles
- Gas Distribution - Service miles, 2,262 miles
Trends and Themes

Coal will remain a major contributor to West Virginia’s economy in terms of jobs, incomes, tax revenues, and gross state product. However, natural gas prices are contributing to declines in coal electric power generation.

Pipelines are the principal means of natural gas transport in West Virginia.

West Virginia ranked 4th in the nation for the production of natural gas.
Commodity Flow Analysis Overview
Commodity Flow – Directional Split

- Total tonnage is projected to decrease by 13% (41M tons)
- Share of inbound tonnage will increase in 2050; internal & outbound will decrease
- Decline in freight activity due primarily to decline in energy products (coal)
  - Other commodity types will increase

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Tonnage</th>
<th>Outbound</th>
<th>Inbound</th>
<th>Internal</th>
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</thead>
<tbody>
<tr>
<td>2019</td>
<td>326M Tons</td>
<td>29.4%</td>
<td>17.6%</td>
<td>53.0%</td>
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<tr>
<td>2050</td>
<td>285M Tons</td>
<td>27.1%</td>
<td>25.9%</td>
<td>47.0%</td>
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</table>
Commodity Flow – Directional Split

- Total value is projected to increase by 76% ($97B)
  - Contrasts with tonnage decreasing by 13%
- Similar to tonnage, the share of inbound value increases while internal and outbound decreases

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
<th>Inbound</th>
<th>Outbound</th>
<th>Internal</th>
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<tbody>
<tr>
<td>2019</td>
<td>$127B</td>
<td>43.0%</td>
<td>38.6%</td>
<td>18.4%</td>
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<tr>
<td>2050</td>
<td>$224B</td>
<td>49.0%</td>
<td>37.0%</td>
<td>14.0%</td>
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</tbody>
</table>
Commodity Flow – Mode Split

- Fairly even split among modes in 2019
- By 2050, truck and pipeline will make up almost 80% of statewide tonnage
- Decrease in water and rail due primarily to decrease in coal
  - 90% of freight moved by water and rail is coal
Commodity Flow – Mode Split

- Not as much of a difference between 2019 and 2050 in terms of mode split

- Share of truck freight and “other” freight will increase, the rest will decrease
  - Other freight includes multiple modes/mail, air freight, and more

<table>
<thead>
<tr>
<th>Year</th>
<th>Mode</th>
<th>Share</th>
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<tbody>
<tr>
<td>2019</td>
<td>Truck</td>
<td>65.8%</td>
</tr>
<tr>
<td></td>
<td>Pipeline</td>
<td>15.2%</td>
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<tr>
<td></td>
<td>Water</td>
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<tr>
<td></td>
<td>Rail</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>11.3%</td>
</tr>
</tbody>
</table>

$127B

<table>
<thead>
<tr>
<th>Year</th>
<th>Mode</th>
<th>Share</th>
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<tbody>
<tr>
<td>2050</td>
<td>Truck</td>
<td>68.5%</td>
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<td>Pipeline</td>
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<tr>
<td></td>
<td>Rail</td>
<td>3.5%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>1.2%</td>
</tr>
</tbody>
</table>

$224B
Commodity Flow – Top Commodities

➤ Energy products are the clear top commodity by tonnage in both years
  » However, energy products are the only commodity projected to decrease by 2050

➤ Chemicals, pharmaceuticals, plastics, & rubber increases the most
  » Almost triples from 9.6M in 2019 to 26.7M in 2050
Commodity Flow – Top Commodities

- Energy products are the top commodity in 2019, but the third-most valuable in 2050
  - Energy products are the only commodity to lose value from 2019 to 2050

- Chemicals, pharmaceuticals, plastics, & rubber increases the most
  - Similarly to by tonnage, this almost triples in value ($27.0B to $78.1B)
Commodity Flow – Top Trading Partners

- Ohio receives the most freight tonnage from WV in 2050 (48M tons)
  - Next-highest are Virginia (28M) and Pennsylvania (25M)
- Pennsylvania sends the most tonnage to WV (18M tons)
- Texas is the highest non-neighboring state for total trade with WV (7.5M tons)
Commodity Flow – Top Trading Partners

- Pennsylvania has the most total trade with WV in 2050 ($36B)
  - 70% is imported to WV, 30% is from WV

- Ohio has the second-highest total trade ($35B)
  - Almost exactly a 50%/50% split between imports/exports

- California is the seventh-highest in total trade value
  - Contrasts to the 19th-highest by total trade tonnage
Commodity Flow Analysis Visualization Tool
West Virginia Freight Flow Viz Tool

- Visualize commodity flow patterns at various geographic levels
- Support MPOs and RPCs in regional planning efforts
- Data sources: FHWA’s Freight Analysis Framework county-level disaggregation
- To be shared with MPOs for user testing and input following the meeting
Draft Vision, Goals and Objectives
The West Virginia Department of Transportation's mission is to responsibly provide a safe, efficient and reliable transportation system that supports economic opportunity and quality of life.
Freight Plan Goals

- System Condition, Efficiency & Fiscal Sustainability
- Safety and Security for All Users
- Economic Vitality
- Multimodal Mobility, Reliability & Accessibility
- Livable & Healthy Communities
Goals & Objectives

System Condition, Efficiency & Fiscal Sustainability

Maintain multimodal and intermodal freight transportation infrastructure in a state of good repair and manage lifecycle costs; efficiently deliver projects, programs and services supporting goods movement; and work to maintain existing funding mechanisms while exploring new alternative and sustainable funding mechanisms.

Objectives:

- **Maintain** the existing freight transportation system and freight assets in a state of good repair
- **Invest** in innovative technologies and program delivery strategies supporting freight movement
- **Explore** new and sustainable revenue options which fund freight investments
Online Polling: Input on Goals/Objectives

Go to
www.menti.com

Enter the code
3343 2533

Or use QR code
Go to www.menti.com and use the code 2504 3510

System Condition, Efficiency & Fiscal Sustainability

Rate the importance of each objective to your area of interest/organization/region

Not important

- Maintain the existing freight transportation system and freight assets in a state of good repair
- Invest in innovative technologies and program delivery strategies supporting freight movement
- Explore new and sustainable revenue options which fund freight investments

Very important
Goals & Objectives

Safety and Security for All Users

Reduce transportation fatalities and serious injuries involving freight vehicles, improve the safety and security of drivers, cargo, and intermodal facilities, and improve the resilience of the freight system particularly to severe weather events and other disruptions.

Objectives:

• **Reduce** fatalities and serious injuries on the multimodal transportation system

• **Enhance** the safety and security of freight operators and cargo

• **Decrease** incident clearance time and recovery and improve management of operational disruptions on freight corridors

• **Manage** a resilient and redundant freight transportation network
Safety and Security for All Users - Rate the importance of each objective to your area of interest/organization/region

- Reduce fatalities and serious injuries on the multimodal transportation system: 4.8
- Enhance the safety and security of freight operators and cargo: 4.5
- Decrease incident clearance time and recovery and improve management of operational disruptions on freight corridors: 4.3
- Manage a resilient and redundant freight transportation network: 4.1
Goals & Objectives

Economic Vitality

Strengthen the ability of communities and industries to access national and international trade markets, retain and grow existing WV statewide and regional economic focus sectors, and support regional economic development that will diversity WV’s economy.

Objectives:

- **Improve** intermodal freight connections
- **Address** highway freight bottlenecks and improve first-mile/last-mile access
- **Expand** direct freight access to economic activity centers and emerging industries/clusters
- **Partner** with universities, community colleges, and workforce training programs to educate and train new freight operators and supporting workforces
Economic Vitality - Rate the importance of this objective to your area of interest/organization/region

- Improve intermodal freight connectivity: 3.4
- Address highway freight bottlenecks and improve first-mile/last-mile access: 4.2
- Expand direct freight access to economic activity centers and emerging industries/clusters: 3.5
- Partner with universities, community colleges, and workforce training programs to educate and train new freight operators and supporting workforces: 3.2
Goals & Objectives

Multimodal Mobility, Reliability & Accessibility

Facilitate freight mobility and connections for on-demand and reliable goods delivery across all West Virginia communities, including critical services such as health care and emergency management.

Objectives:

• **Manage** recurring congestion and improve reliability on the highway system

• **Enhance** multimodal transportation accessibility to key destinations and jobs

• **Create** new opportunity for access to key destinations and jobs for underserved or disadvantaged populations
Multimodal Mobility, Reliability & Accessibility

- Manage recurring congestion and improve reliability on the highway system: 4.3
- Enhance multimodal transportation accessibility to key destinations and jobs: 3.5
- Create new opportunity for access to key destinations and jobs for underserved or disadvantaged populations: 6.0
Goals & Objectives

Livable & Healthy Communities

Create freight transportation systems that operate efficiently and cleanly, protect the natural environment and maintain access for residents and visitors to experience WV’s natural and cultural destinations.

Objectives:

• **Reduce** emissions from freight movement

• **Mitigate** environmental and community impacts from freight movement

• **Coordinate** freight land use and transportation decisions
1. Maintain the existing freight transportation system and freight assets in a state of good repair
2. Invest in innovative technologies and program delivery strategies supporting freight movement
3. Explore new and sustainable revenue options which fund freight investments

4. Reduce fatalities and serious injuries on the multimodal transportation system
5. Enhance the safety and security of freight operators and cargo
6. Decrease incident clearance time and recovery and improve management of operational disruptions on freight corridors
7. Manage a resilient and redundant freight transportation network

8. Improve intermodal freight connections
9. Address highway freight bottlenecks and improve first-mile/last-mile access
10. Expand direct freight access to economic activity centers and emerging industries/clusters
11. Partner with universities, colleges, and workforce training programs to educate and train new freight operators and supporting workforces

12. Manage recurring congestion and improve reliability on the highway system
13. Enhance multimodal transportation accessibility to key destinations and jobs
14. Create new opportunity for access to key destinations and jobs for underserved or disadvantaged populations

15. Reduce emissions from freight movement
16. Mitigate environmental and community impacts from freight movement
17. Coordinate freight land use and transportation decisions
Select Your Top 5 Objectives That Are Most Important to Address
Is there anything else you would like to see included or emphasized in the Goals/Objectives?

- Not at this time
- Not this time
- Increase major interstate grid to encourage new economic development in growth areas of WV. Example the construction of the I-68 ENERGY CORRIDOR from I-79 to WV Route 2
- Increased major interstate grid to encourage new economic development in growth areas of WV. Example the construction of the I-68 ENERGY CORRIDOR from I-79 to WV Route 2
- Truck parking addressed specifically
- Improved performance of traffic management systems on crashes or road delays on message boards on the interstate network
Input on Needs, Opportunities and Trends
Online Stakeholder Survey

WVDOT Freight Plan - Stakeholder Survey - Working

22 Mar 2023

Freight Stakeholder Survey to collect input on needs and potential solutions

Estimated time to complete: 15 minutes

Start now

CAMBRIDGE SYSTEMATICS
Online Map Tool – Input on Needs, Opportunities and Trends
Next Steps – Through Spring 2023

- Please provide your input and share! Via Online Survey and Online Map Tool (through April 15) **extended through April 21**
  - Team will distribute via email following our meeting

- Establish vision, goals and objectives

- FAC to meet again Truck Parking Workshop – April 11, 19, and May 3

- Freight system designation – CUFC 150 miles (DOH will provide guidance to MPOs over the next few weeks)

- Draft needs assessment, strategies and recommendations

- Draft Plan submitted to WVDOT for review - June-July
Thank You!

Comments/Questions

Check out the Freight Plan website:
https://transportation.wv.gov/highways/programplanning/Pages/Freight-Plan.aspx

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