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# Freight White Paper

Resilience 2050

September 29, 2022



# ***Resilience 2050: Adapting to the Challenges of Tomorrow***

- **Long-Range Transportation Plan**
  - Seeks to make the best use of resources that support the Baltimore regions transportation system
  - Current plan is *Maximize2045*
  - Draft for new LRTP in spring 2023 for public review and comment
- **What is the LRTP?**
  - Establishes regions broad transportation goals and strategies
  - Guide investment over the life of the plan (minimum of 20 years)
  - Fiscally constrained and Air Quality constrained

# Resilience 2050: Adapting to the Challenges of Tomorrow – Cont.

- **Regional goals**
  - Improve Accessibility
  - Increase Mobility
  - Improve System Safety
  - Improve & Maintain Ex. Infrastructure
  - Create Environmentally Responsible Transportation System
  - Improve System Security
  - Promote Prosperity and Economic Opportunity
  - Foster Participation & Cooperation among stakeholders
  - Promote Informed Decision Making
- **Strategies within each goal**

# Resilience 2050: Adapting to the Challenges of Tomorrow – Cont.

- **White Papers intended to engage the public**  
**Project Scoring**

- Traffic Safety
- Freight
- Transit
- Air Quality and Conformity
- Emerging technologies

Coming soon:

- Active Transportation
- Forecasting population, households, and employment

Click on the link to read and provide input on any of the [white papers](#) for *Resilience 2050*.

# Freight Overview in the Baltimore Region

- Port of Baltimore
- Rail Freight
- Air Freight
- Regional Freight
- Roadway Freight (trucks)



# Port of Baltimore

- **Impacts from COVID-19**
  - Cargo volumes mixed
  - Cruise industry
- **Economic Impacts**
  - Over 30,000 jobs generated by POB
    - 15,000+ direct
    - Nearly 17,000 induced
    - Over 5,000 indirect
  - 102,000 other jobs directly related to Port activities
- **Revenues**
  - \$3.3 billion in personal income
    - Direct jobs earn 9.5% more than the average annual wage for MD
  - \$2.6 billion in business revenues
  - \$395 million in state, county & municipal tax revenues



# Rail Freight

- **History of Rail in MD**
  - 1<sup>st</sup> RR in North America
  - B & O chartered in 1827
  - By mid-1870's Rail dominated both passenger and freight
  - Decline with Automobiles
  - Amtrak and Conrail established to revitalize passenger and freight
  - 2 Class I RR operate in MD
    - Norfolk Southern
    - CSX



# Rail Freight – Cont.

- Over 800 miles of track in MD

RAILROAD	MILES LEASED	MILES OWNED/ OPERATED	TOTAL MILES OPERATED (EXCLUDING TRACKAGE RIGHT)
Class I Railroads	5	514	519
Class II Railroads	0	0	0
Class III Railroads	115	132	247
Amtrak	0	97	93
MARC	0	3	3
Tourist Railroads	7	17	24
<b>Total Mileage</b>	<b>127</b>	<b>763</b>	<b>886</b>

- **Howard Street Tunnel**
  - Reconstruct to provide double stack capabilities
  - Eliminates major freight bottleneck between Baltimore and Philadelphia
  - \$466 million cost
  - Includes 21 other clearance/obstruction projects – 11 in Baltimore City
  - Anticipate completion mid-2025



# Air Freight

- **BWI employs 9,700**
- **57% of regional air cargo**
  - More than double cargo of Dulles and Reagan combined
  - Top 5 Amazon facility
  - Air cargo increased 19% per year over the last 5 years
- **Impacts of Pandemic**
  - Unprecedented increase in demand for e-commerce
  - Record cargo operations in 2021
  - Passenger traffic rebounded in 2021



# Regional Freight

- **Top Commodities Within the Baltimore Region**
  - Weight – Gasoline, gravel, nonmetal mineral products
  - Value – Gasoline, motorized vehicles, mixed freight
- **Top Commodities Outbound from the Baltimore Region**
  - Weight – Coal n.e.c., crude petroleum, gravel
  - Value – Motorized vehicles, electronics, mixed freight
- **Top Commodities Inbound to the Baltimore Region**
  - Weight – Coal n.e.c., coal, food products
  - Value – Electronics, motorized vehicles, mixed freight

# Regional Freight – cont.

METHOD FOR MOVING FREIGHT	TOTAL VALUE (MILLIONS)	TOTAL TONNAGE (THOUSANDS)
Air	\$7,433	103
Other*	\$60,162	6,405
Pipeline	\$8,005	26,553
Rail	\$13,662	35,503
Truck	\$304,289	203,652
Water	\$1,580	7,019
<b>All Freight</b>	<b>\$395,131</b>	<b>279,235</b>

\*includes multiple modes, mail, and other and unknown categories

# Legislation

- **ISTEA (1991)**
  - Beginning of separate funding for Freight
- **MAP -21 (2012)**
  - Commercial Motor Vehicle Safety initiatives
  - Established National Freight Policy and National Freight Network
  - Designated Critical Rural Freight Corridors
  - National Strategic Freight Plan
  - Increased federal funding for freight projects to 95/5 for projects on the interstate
  - States encouraged to form Freight Advisory Committees

# Legislation – Cont.

- **Fast Act (2015)**
  - Established the Nationally Significant Freight and Highway Projects Program
  - Established the National Highway Freight Program
- **IIJA (2021)**
  - Added \$244 billion in new investments affecting freight transportation
  - Created the Office of Multimodal Freight Infrastructure and Policy
  - Made key updates to the National Freight Plan

# Issues Facing Truck Drivers

- Driver Shortage
- Bottlenecks
- Truck Parking
- Curb Utilization
- Fuel costs



# Driver Shortage

- **American Transportation Research Institute (ATRI)**
  - Top issue 5 years in a row
  - Shortage of up to 80,000 drivers
    - Up from 60,000 just 2 years ago
- **Global issue**
  - European Union and China
  - Other regions around the world



# Driver Shortage – Cont.

- **What is causing the shortage?**
  - Drivers are getting older
    - Average age of driver is 55 in the U.S.
  - Pandemic
    - Stalled training
    - Health concerns
  - Age to drive across state lines
  - Attracting women drivers
    - 47% of population
    - 6% of commercial drivers
  - Lifestyle
    - New drivers get the worst assignments



# Driver Shortage – Cont.

- **Possible solutions**

- Increased pay
  - Sign-on bonuses
- Increased benefits
- Decreasing time on the road
- Increasing time at home
  - Localized routes
- Lowering the regulated driving age from 21 to 18
- Diversifying recruiting methods to attract more women, minorities and veterans
- Improve image



# Bottlenecks

- Growing demand – limited capacity
- Recurring
  - Steep grades
  - Lane drops
  - Merges
  - Signalized intersections
    - Most occur on interstates or arterial roadways
    - Some are localized
      - Ports
      - Airports



# Bottlenecks – Cont.

- **Non-recurring**
  - Weather
  - Work zones
  - Crashes
  - Breakdowns
  - Poorly timed traffic control
- **Cost of Bottlenecks in the Baltimore Region**
  - Since 2019, 1.97 million truck person-hour delays
  - Over \$110 million per year

# Bottlenecks – Cont.

LOCATION	HOURS OF DELAY	COST OF DELAY
Anne Arundel County	387,835	\$21,884,206
Baltimore County	665,560	\$37,341,134
Baltimore City	84,182	\$4,855,175
Carroll County	128,085	\$7,283,923
Harford County	207,290	\$11,666,376
Howard County	494,873	\$27,360,254
<b>Totals</b>	<b>1,967,825</b>	<b>\$110,391,068</b>

\*Data for Queen Anne’s County unavailable

# Truck Parking

- **ATRI continues to list truck parking as a top 10 issue**
- **Maryland has over 2,900 truck parking spaces**
  - 2,307 at private truck facilities
  - 333 at MDOT Facilities
    - Rest areas
    - Welcome centers
    - Travel plazas
    - 262 spaces at 14 Weigh and Inspection stations
  - Majority of parking along 3 most truck-trafficked interstates
    - I-95
    - I-70
    - I-68

# Truck Parking – Cont.

- **What happens when demand outweighs supply?**
  - Trucks begin to park in undesignated areas
    - Shoulders
    - Freeway ramps
    - Local roadways
    - Private parking lots
  - **ATRI study indicates drivers begin looking for parking an average of 56 minutes before the end of their hours of service**
    - \$5,600/year in lost wages
    - In Maryland that equates to over \$130 million in lost wages

# Truck Parking – Cont.

- **Obstacles and Challenges**
  - Lack of sufficient parking spots
  - Lack of amenities
  - Lack of knowledge where parking is available
  - Rural vs Urban
  - Lack of legislation, regulation and planning



# Curb Utilization

- **Fighting for Curb Space – competing interests**
  - Food deliveries
  - Bus stops
  - Taxi stands
  - Trash collection
  - Automobile parking
  - E-commerce deliveries
  - Freight deliveries



# Curb Utilization –Cont.

- **Possible Solutions**
  - Flex Zones
  - Time of Day Restrictions
  - Off-Peak Delivery
  - Delivery vehicle staging zones
  - Urban consolidation centers
  - Paid access to freight zones
  - Moving delivery locations

# What is the BRTB and what are we doing to address Freight Issues

- **What is BRTB?**
  - Federally designated MPO for the Baltimore region
  - FMTF is a subcommittee of the BRTB
    - FMTF Representatives
      - MDOT SHA
      - MPA
      - MdTA
      - MMTA
      - FHWA
      - FMCSA
      - Class I RR
      - Private Sector consultants
      - Others

# Work of BRTB and FMTF

- **What do we do?**
  - **Critical Urban Freight Corridors**
    - Connects an intermodal facility to highway freight system, interstate or intermodal facility
    - Located within a corridor on the highway freight system and provides an alternative highway option important to goods movement
    - Serves a major freight generator, logistics center, or manufacturing and warehouse industrial land
    - Is important to the movement of freight within the region, as determined by the MPO or the state.
- **Short-term and Long-range plans**
  - BRTB responsible for approving short-term program (TIP) and long-range plans (LRTP)
    - Several MDOT SHA projects include NHFP funds

# Quotables

- *Facilitating freight is facilitating quality of life, literally delivering for Baltimore and Maryland residents and businesses. Solving shared transportation, safety, trade, manufacturing and supply chain challenges is essential to driving economic success and expanding opportunities for all. Achieving those goals requires collaboration and perseverance to bring together a broad range of public and private stakeholders, often through vehicles like the Baltimore Regional Transportation Board and Freight Movement Task Force. Now is the time to work together and chart a course for the future that recognizes the true role of freight, not just delivering goods, but delivering goods for our region and beyond.*

Tom Madrecki, Vice President, Supply Chain, Consumer  
Brands Association (CBA), Chair, BRTB's FMTF

- *Freight deliveries are vital to the economic success of the Baltimore metropolitan region. Maryland Motor Truck Association appreciates the opportunity to work with the Baltimore Regional Transportation Board (BRTB) to reinforce the importance of coordination among planning, transportation, and economic development agencies to ensure a connected and safe freight transportation system so the industry can continue to deliver the goods Marylanders need. Without trucks, America stops.*

Louis Campion, President & CEO, Maryland  
Motor Truck Association (MMTA)

# For More Information

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