

FREIGHT PLANNING IN THE BALTIMORE REGION

2013 AMPO Annual Meeting

October 23, 2013

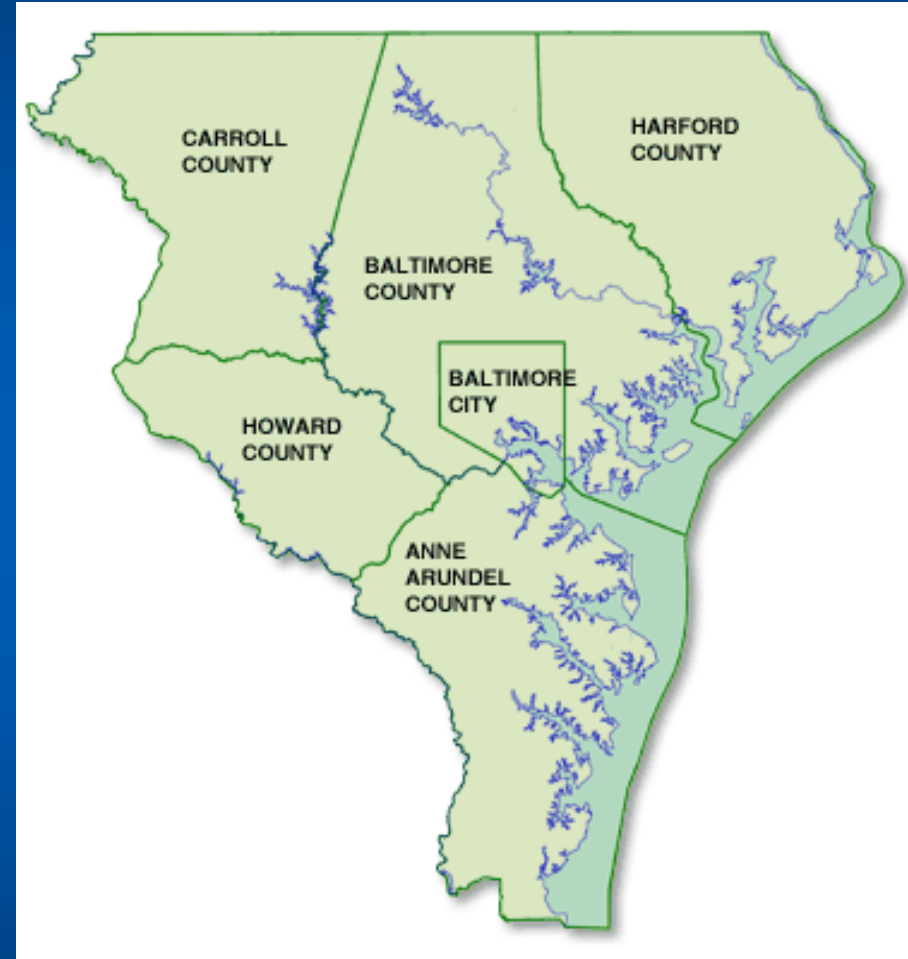


Baltimore Metropolitan Council



Baltimore Regional Transportation Board (BRTB)

- The Baltimore Regional Transportation Board (BRTB) is the Metropolitan Planning Organization for the Baltimore region.
- The BRTB is a 11 member board representing the cities of Annapolis and Baltimore, the counties of Anne Arundel, Baltimore, Carroll, Harford and Howard and the Maryland Department of Transportation, the Maryland Department of the Environment the Maryland Department of Planning and the Maryland Transit Administration.



Regional Freight Planning – Why do we care?

- Freight traffic will nearly double in the Baltimore Region by 2030
- Freight plays a significant role in the Region's economy
 - Transportation reliability affects economic growth
 - Congestion increases business and consumer costs
 - Competitiveness for many Maryland industries depends on freight infrastructure and performance
- A healthy freight system provides
 - Environmental benefits
 - Enhanced safety
 - Decreased costs for everyone

Baltimore Regional Freight Data Overview

- 2003 Baltimore Region Freight Totals
 - 307 million tons
 - \$966 billion
- Baltimore is a “through” region
 - 42% of tonnage
 - 49% of value
- Truck is highest tonnage and value mode
 - 80% of tonnage
 - 81% of value

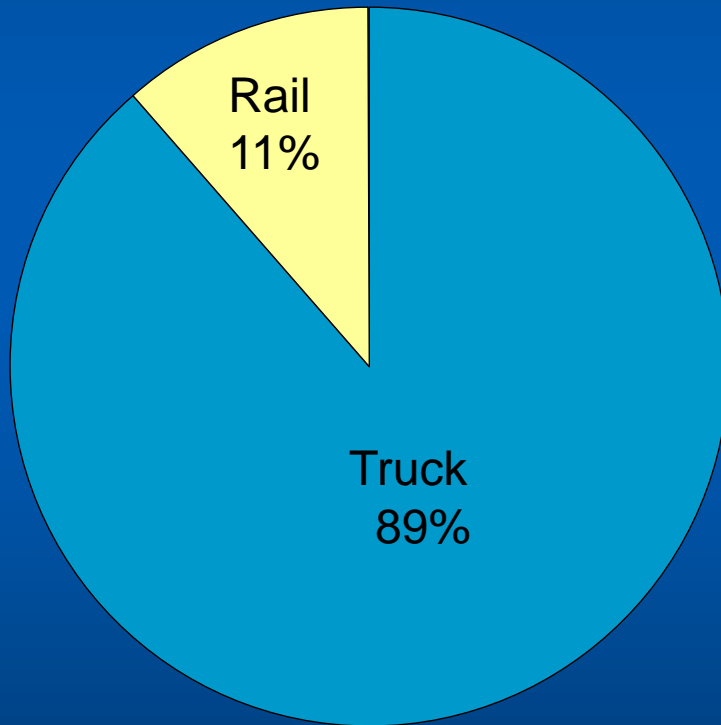
In 2003:

- 307 million tons
- \$966,000,000,000



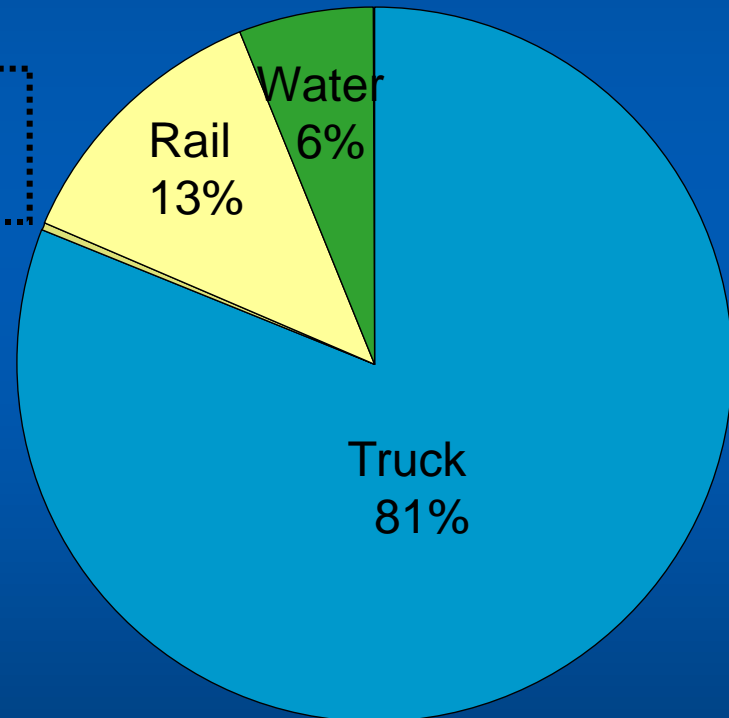
Statewide and Regional Mode Split 2003 by Value

Maryland
Mode Split

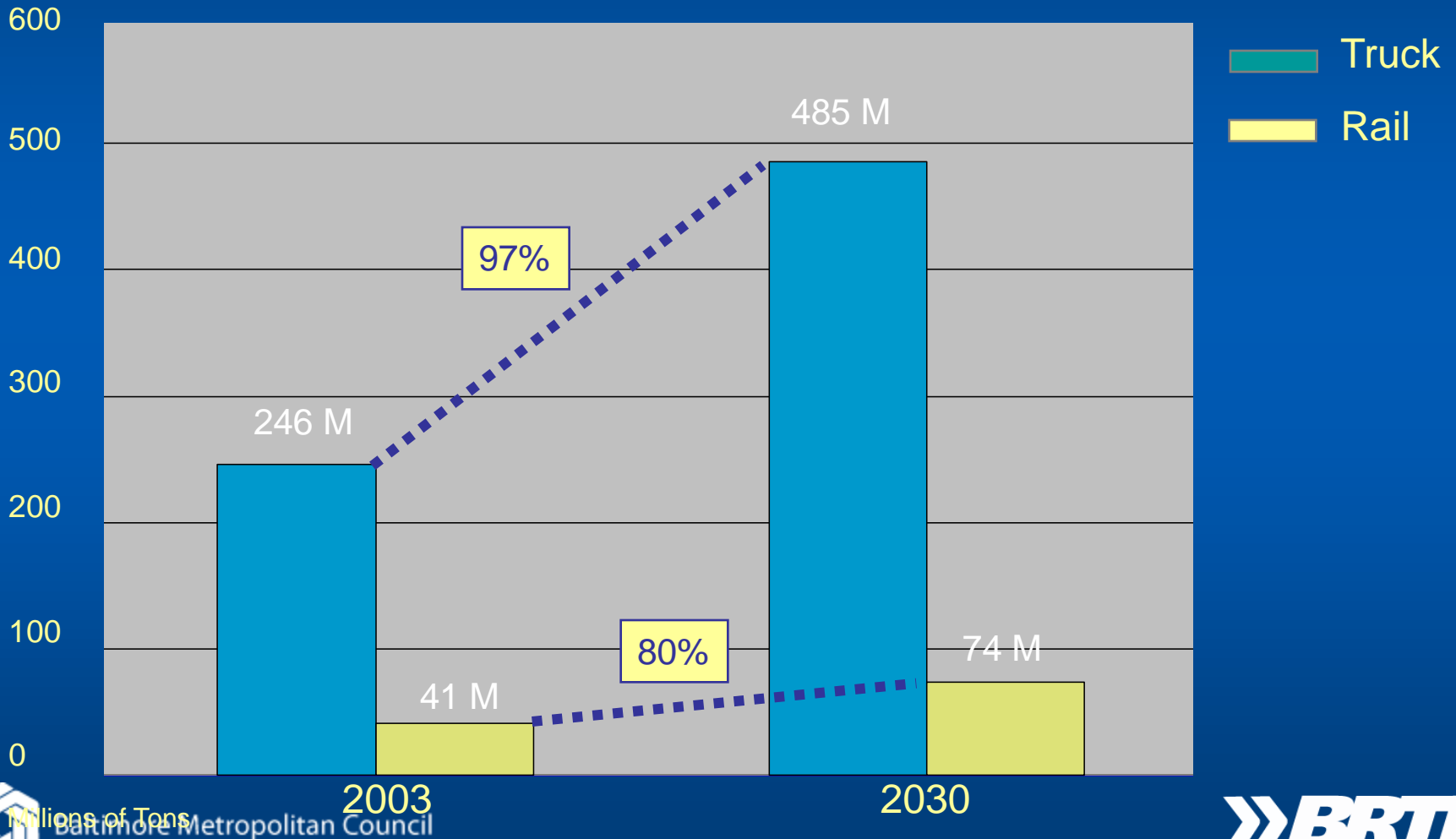


Baltimore Region
Mode Split

Air
.07%



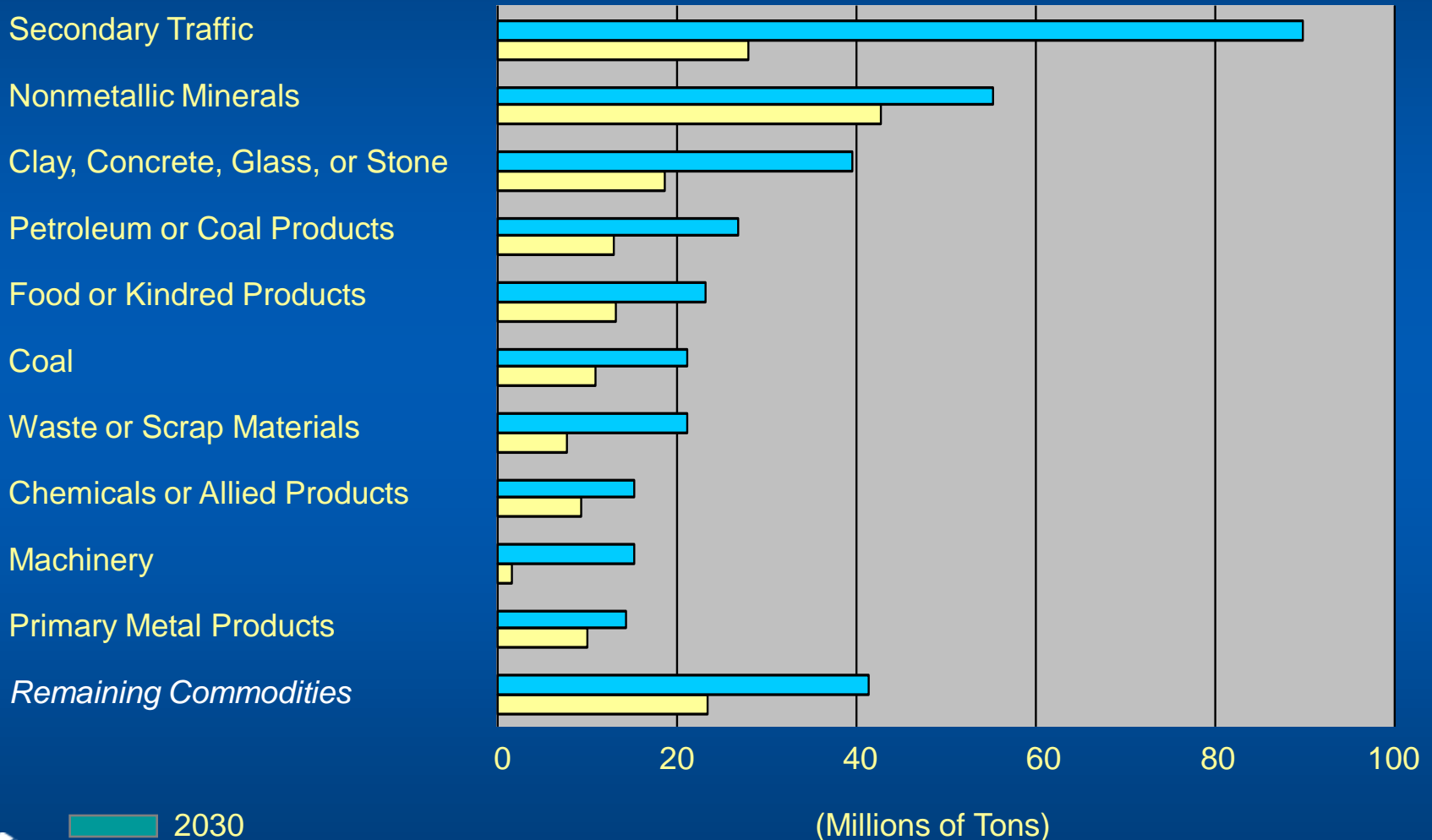
Baltimore Region: Tonnage Growth Rates by Mode 2003 to 2030



Millions of Tons



Baltimore Region: Top Commodity Growth – All Modes 2003 to 2030



Baltimore Region Top Trading Partners by Weight

- 2003

- Pennsylvania
- Maryland
- Virginia
- Great Lakes States (IN, IL, MI, WI, OH)
- New York
- Southeastern States (FL, GA, NC, SC)
- New Jersey
- Delaware
- West Gulf States (TX-OK-AR-LA)

- 2030

- Maryland
- Pennsylvania
- Virginia
- Great Lakes States (IN, IL, MI, WI, OH)
- Southeastern States (FL, GA, NC, SC)
- New York
- New Jersey
- Delaware
- West Gulf States (TX-OK-AR-LA)



Freight Assets in the Region

- Baltimore Region is home to the Port of Baltimore (POB), two class I railroads (CSX and NS), BWI Airport, Domino Sugar, and several warehousing and distribution centers
- POB is one of two East Coast ports with a 50-foot channel and berth to accommodate post-panamax ships



Port of Baltimore

- Top port among 360 U.S. ports for handling autos and light trucks, farm and construction machinery, imported forest products, imported sugar, aluminum and gypsum.
- Overall Baltimore is ranked ninth for the total dollar value of international cargo and 11th for international tonnage.
- POB generates 14,630 direct jobs and another 108,000 jobs linked to port activities.
- The port is responsible for \$3 billion in personal wages and salary and more than \$300 million in state and local taxes.
- Recently secured \$10 million in TIGER grants to increase its cargo handling capacity and provide rail access at its Fairfield Marine Terminal.





If it's in your life,
it's probably on our trains.



The National Gateway: Connecting East Coast ports to the Midwest with double-stack freight rail network



National Gateway



- \$850 million in investments with more than \$10 billion of public benefits
- Involves 61 clearance projects and 6 intermodal terminals
- State, Federal (TIGER), and CSX funding
- Supported by six Governors, DC, and broad coalition of business, environmental and other groups



The Baltimore Intermodal Facility – The Need

- The expansion of the Panama Canal is anticipated to change trade shipping routes.
- The Port of Baltimore is also expanding to accommodate this growth.
- Relocation of CSX's domestic operations will allow for additional Port-related development in and around Seagirt.



- By 2030, the volume of freight moving through Maryland is anticipated to grow by 75 percent.
- Movement of freight by double-stack containers has become an industry standard. Maryland's rail infrastructure cannot currently ship double-stack.



The Baltimore Intermodal Project – The Benefits

- Create economic growth and jobs by supporting expansion and growth at the Port of Baltimore.
- Connect Maryland's businesses and consumers to new markets.
- Re-assert Maryland's competitive advantage in the freight industry by modernizing state's rail infrastructure.
- Relieve highway congestion.
- Allow the State to leverage private dollars for public good.



BALTIMORE MARITIME INDUSTRIAL ZONING OVERLAY DISTRICT (MIZOD)

- MIZOD was created by the City of Baltimore to protect frontage land along the harbor that had harbor access of at least 18 feet of draft
- MIZOD was passed in 2004 for a 10-year period. In 2009, a 10-year extension of the original authorization was approved in 2009 that solidified the status of the MIZOD through 2024



Freight Movement Task Force (FMTF)

- The Freight Movement Task Force (FMTF) serves as an advisory committee of the BRTB. Members include representatives from organizations with freight concerns from across the modes, including railroad operators; port operators; trucking firms; airport operators; freight shippers and receivers; economic development organizations; and academics. In addition, the task force includes staff from the Maryland Department of Transportation and local government representatives.
- The FMTF's main function is to provide the public and the freight movement community a voice in the regional transportation planning process. The FMTF is a forum for Baltimore region freight stakeholders to share information and discuss motor truck, rail, air, and waterway concerns.
- Chair – Crystal Darcy (MPA), Vice-chair – Armand Patella (Picorp)



Freight Studies under FMTF

- Several intersection studies to improve truck movement (1999-2006)
- Regional Freight Profile (2007)
- Truck Movement through local communities – Dundalk (2009)
- POB Freight Rail and Industrial Market Opportunities Analysis (2011)
- Overnight Truck Parking along I-83 (2013)





Figure ES-1 Port of Baltimore Rail Analysis - Study Area

FMTF Outreach - Anne Arundel Community College – Annual Truck Pull, April 4, 2013





Programming Freight Projects in the LRP

- In late 2010, BRTB proposed reviewing the criteria for projects of Regional Significance to include freight projects
- In early 2011, the Technical Committee recommended a more detailed study on how to evaluate freight projects on a regional basis as a FY 12 UPWP activity
- The current Long Range Plan (LRP), Plan-It 2035, approved in November 2011, includes two regionally significant freight projects (highway) in Baltimore City – recognized need for a more structured approach for next update



Existing Freight Project Prioritization Criteria

Regionally significant project:

- Project is a primary inter-state and regional freight link
- Project connects to a major regional economic “engine”: e.g., Port of Baltimore, Baltimore/ Washington International Thurgood Marshall Airport, downtown Baltimore

Technical scoring of other candidate projects (scoring by BMC staff):

- Project supports greater freight movement (measured as truck volumes)
- Project will improve infrastructure enabling access to and supporting a major activity center, including Port of Baltimore



Ongoing Initiatives

- Develop regional goals and objectives to promote the use of alternative freight mobility, e.g. rail and intermodal freight and balancing the needs of truck and rail freight.
- Work with Maryland Department of Environment (MDE) and other state agencies to develop strategies to address CO₂/GHG emissions reductions through the integration of regional transportation and land use planning to achieve the State's GHG reduction goals.
- Form a Freight Regional Oversight Group (FROG).



FROG Mission

*Compile a master list of freight projects in the region and identify **Local Economic Activity Corridors (LEAC)** that can be eligible for federal funding opportunities (TIGER, Long Range Plan, etc.) in support of state and local economic development efforts.*

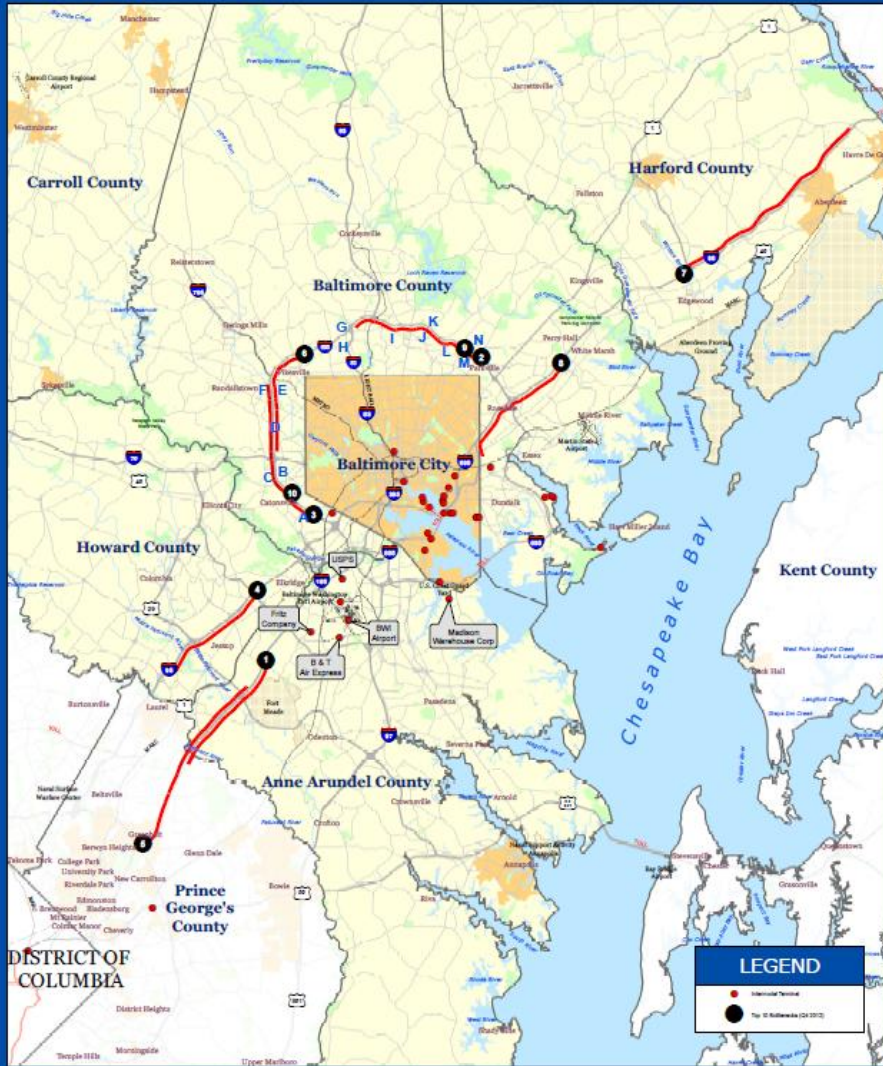


FROG Mission

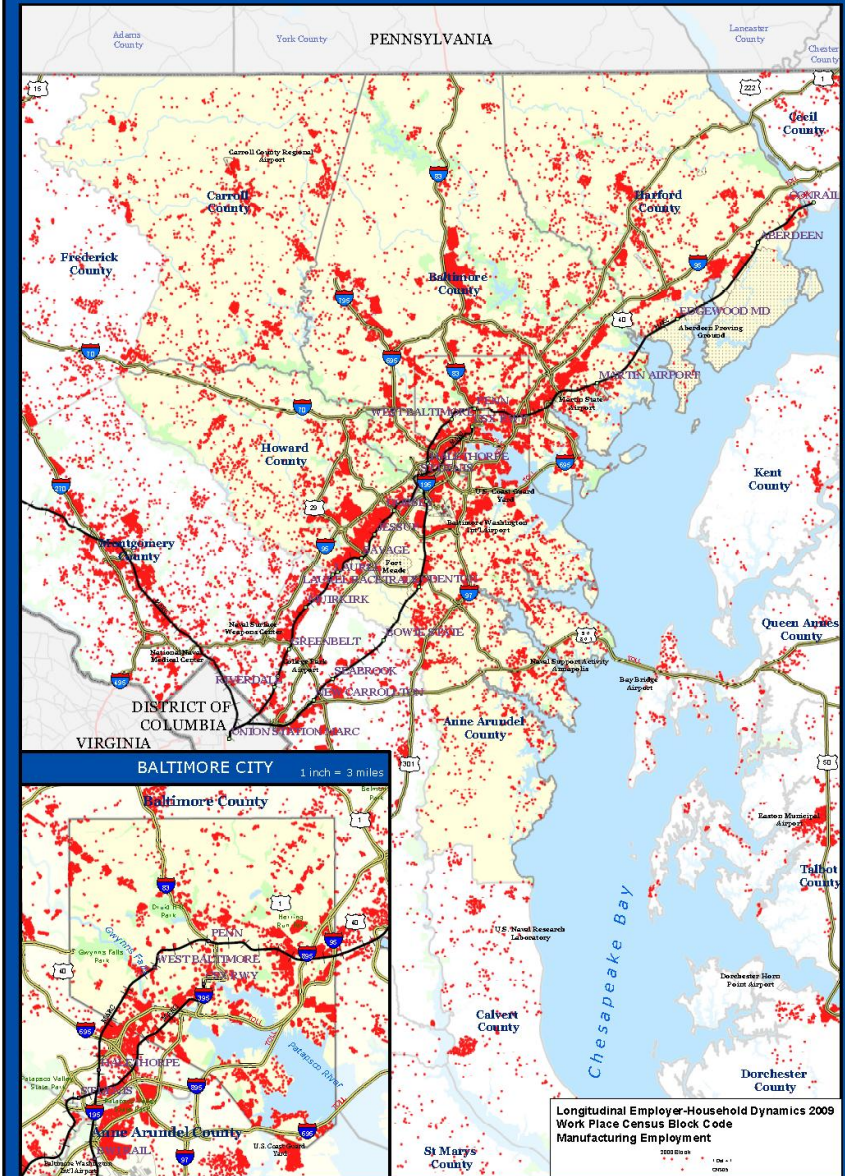
1. Define freight for the purposes of this study
 - Truck, Rail, Water, Air, Commodities
2. Identify Local Economic Activity Corridors (LEACs)
3. Develop regional freight project prioritization criteria
4. Develop/identify methodology for benefit/cost analysis



Top 10 Ranked Bottlenecks in the Baltimore Region 4th Quarter 2012



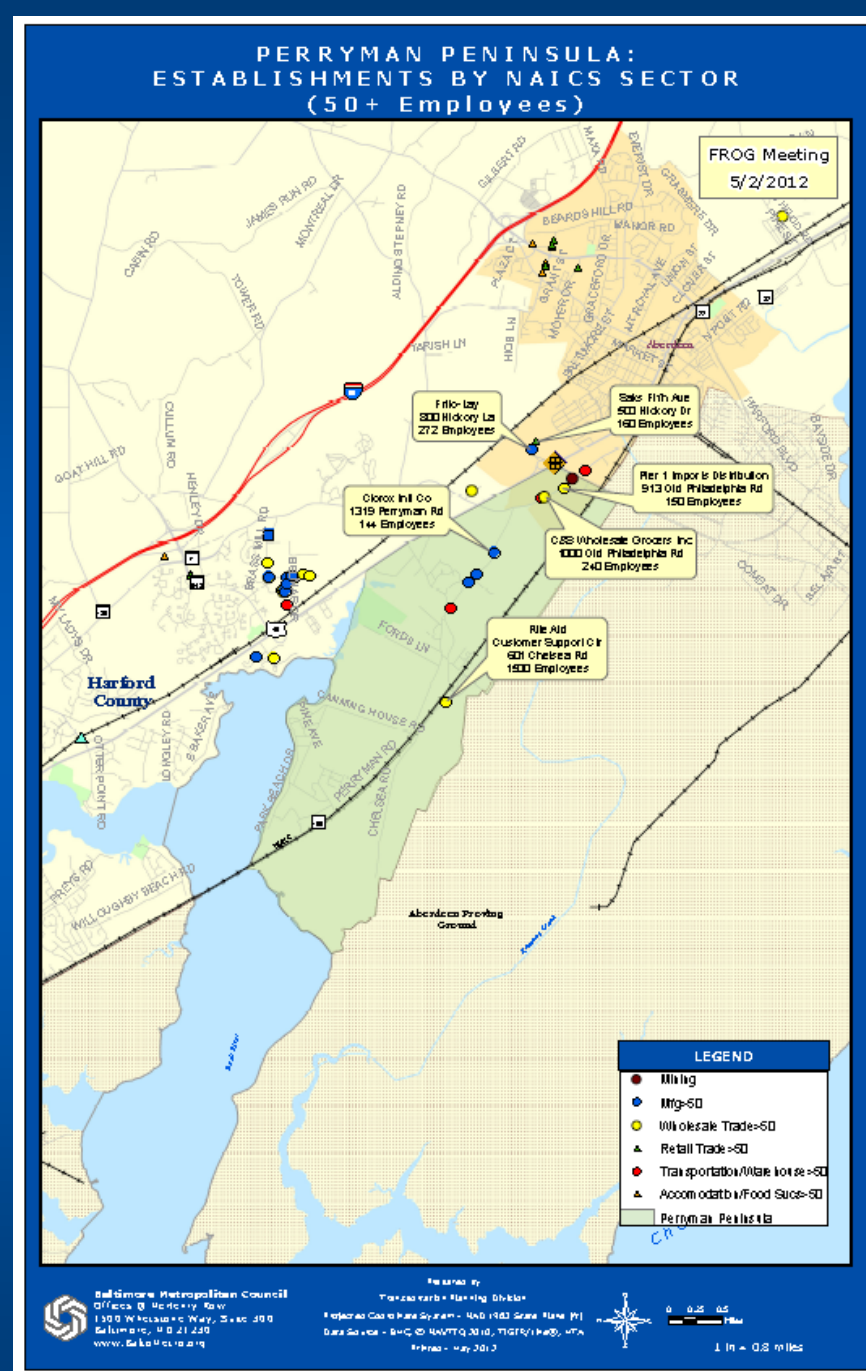
State of Maryland - 2009 LEHD - Workplace Census Block Code All Jobs NAICS Sector 31-33 (Manufacturing)



Longitudinal Employer-Household Dynamics 2009
Work Place Census Block Code
Manufacturing Employment

Perryman Peninsula – sample LEAC

- Preliminary Data Analysis – freight cluster in the Peninsula
- Focus on 1st mile/last mile needs
- Major freight establishments (Clorox, Frito Lay, Rite-Aid)
- Coordination with local Office of Economic Development



Port Access - Proposed Improvement Projects

Name of Project	Description
Boston Street Realignment and Reconstruction	Provides north-south connection between Boston and O'Donnell Sts.; widen Boston St.; provide partial continuation of grid system
Oversize/Overweight Turnaround	Reconstruction of Service Rd. 3 at FSK Bridge
New Back Gate for Port – Dundalk Marine Terminal	Construction of rear gate at southwest corner of Port near Broening Hwy. and Maryland Ave.; consider in conjunction with Oversize/Overweight Turnaround Project
Danville Ave. Extension/Canton Truck Bypass	Extension from Clinton to Haven St. in former CSX ROW; trucks would bypass Canton Crossing development
New Vail St. Extension	Extension north of about 1200 ft. from current terminus at Keith Ave; provides direct access from Seagirt Terminal to Chesapeake Commerce Center
Colgate Creek Bridge	Rehabilitation of bridge
Fairfield/Masonville Terminal Access	Improves access routes for the terminal to accommodate oversize vehicles; intersection modifications
Boston St. Lowering	Lowers Boston St. in Canton industrial area under I-895 for improved clearance



Regional Freight Issues/Challenges

- Freight is not local/regional
- Defining regional freight needs/projects – highway, rail, water, air
- Data and tools – commodity flows, freight analysis framework, travel demand model, private sector (rail), benefit cost analysis
- Project prioritization criteria – highway and transit well established – freight not so much
- Overnight Truck parking – supply and demand – ongoing challenge for past 10 years
- Greenhouse gas emission measurement and reporting
- Performance measures – MAP-21 requirements
- Safety – link to Strategic Highway Safety Plan
 - Education – Operation Lifesaver (rail crossing), smooth operator (aggressive driving around trucks)
- Mobility – link to Congestion Management Process (CMP)
- Technology and operations



Challenges to Incorporating Freight in the Planning Process

- Ports, railroads, and intermodal terminals are primarily owned and operated by the private sector – data availability and participation
- The trucking industry is all private sector but the infrastructure required to move goods by truck is owned and financed, for the most part, by the public sector – data availability and participation
- State and local governments typically have limited experience with financing freight transportation improvement projects – learning process
 - Source: Financing Freight Improvements, USDOT, FHWA, January 2007



Eligibility of STP funds for rail and freight projects

- The STP program provides flexible funding for projects on any federal-aid highway, bridges on public roads, transit capital investments, and intracity and intercity bus terminals and facilities. Eligible freight projects include:
 - Preservation of abandoned rail corridors;
 - Bridge clearance increases to accommodate double-stack freight trains;
 - Capital costs of advanced truck stop electrification systems; and
 - Freight transfer yards.
- Source: Financing Freight Improvements, USDOT, FHWA, January 2007



Opportunities to Improving Freight in the Planning Process

- Building partnerships with the public and private sector stakeholders – FMTF, FROG, other regional MPO's (TPB, WILMAPCO, DVRPC, etc.)
- Local and regional plans/maps including/showing railroads, truck routes
- Work with groups like the I-95 Corridor Coalition – mega-region issues/challenges
- Conduct freight scans to understand regional freight industries/infrastructure
- Partnerships with local universities (Maryland, Morgan, etc.) – resources for research and development
- Local trade groups – Council of Supply Chain Management Professionals (CSCMP) roundtable, Maryland/DC District Export Council, Maryland Motor Truck Association (MMTA), American Trucking Research Institute (ATRI)



Adopting Corridor Approach

“Nationally, the most successful freight programs have adopted a corridor approach to address freight needs. The foundation of the corridor philosophy is to create facilities that move freight in an efficient, safe and secure manner, while keeping freight out of local communities as much as possible”

(source: DVRPC Long Range vision for freight)

- Shift focus from individual projects to a corridor approach



Questions, Comments, Discussion

