Port -2-Point (P2P) Working Group

Technical Committee

April 5, 2016
Regional Freight Issues

- 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
Freight Movement Task Force (FMTF) - Purpose

• To provide the freight movement community with a voice in the regional transportation planning process by:
  – Improving communication and information/technology among public and private sector freight movement interests.
  – Identifying short-term impediments and recommending improvements for the efficient, effective, environmentally-sensitive, and safe movement of freight.
  – Providing input into the allocation of long-term transportation resources.

• Recommended the creation of the P2P working group in late 2015
P2P – Purpose and Need

- International volumes projected to rise due to the increased attractiveness of the Port of Baltimore (POB).
- Most of the current and future development of the Tradepoint Atlantic (TPA) property is in response to and the prediction of this future growth.
- Possible outcomes associated with the increase in freight traffic around the Port are:
  - Greater volumes of freight on existing routes.
  - Additional delays on existing routes adding to the cost of doing business.
  - Cause current traffic to seek alternative routes through existing neighborhoods causing additional route restrictions in response.
  - Ultimately, this will lead to a limited flow of tonnage thereby decreasing the throughput these terminals can accommodate and efficiencies they can obtain.
  - Decreased air quality due to delays/congestion
Stakeholders

- Maryland Motor Truck Association (MMTA)
- Tradepoint Atlantic
- MDOT
  - Maryland Port Administration (MPA)
  - State Highway Administration (SHA)
  - Office of Freight and Multimodalism (MDOT)
  - Maryland Transportation Authority (MdTA)
  - Office of Planning and Capital Programming (MDOT)
- Baltimore County
  - Department of Public Works
  - Office of Economic Development
  - Executive Office
- Baltimore City Department of Transportation
P2P Mission

• Lead and coordinate efforts to study access improvements between the Port of Baltimore (POB) and Tradepoint Atlantic (TPA).

• Open a discussion on the subject, involving all key stakeholders in order to:
  – Determine the need for improvements by quantifying the short and long-term benefits.
  – Discuss the feasibility of the improvements on a practical and funding basis.
  – Develop a consensus on the best possible plan to move forward.
P2P – Study Topics

- Freight flows not just between these major hubs, but also for north, south and westbound origin and destination traffic.
- High capacity connection to an existing interstate system for a 21st century Port.
- Access road for the FSK turn-around.
- Toll for northbound I-695 access.
- Alternative route during peak periods and traffic events.
- Reduce the overall cost-per-move by the interaction of these dynamic efficiencies.
P2P Study Goal - Traffic

- To determine if there is adequate capacity for efficient truck movement along existing highway infrastructure surrounding the Port and Tradepoint Atlantic (TPA) to accommodate the growth in container and induced (non-container, passenger, annual growth, etc.) traffic with minimal impact to communities.
Data Collection

• Collect baseline (2015-16) data on truck and passenger movements along existing routes connecting Seagirt Marine Terminal (SMT) to TPA.

• Travel time runs using trucks along the two primary routes connecting SMT and TPA.

• Develop assumptions on daily/hourly trips between SMT and TPA.

• Assign trips to network using travel demand model for 2015 and 2025. Background traffic will be based on round 8B socioeconomic forecasts.
1. Conduct level of service analysis at key intersections and segments. The following are some of the intersections that will be studied closely:

a. Broening Highway at Holabird Avenue
b. Broening Highway at Keith Avenue
c. Broening Highway at SMT entrance
d. Broening Highway at FSK Bridge loop
e. MD 158 at MD 157
f. MD 157 (Peninsula Expressway) at I-695
g. Peninsula Expressway/Sollers Point Road at Merritt Boulevard
h. Merritt Boulevard at Holabird/Wise Avenue
i. Holabird Avenue at Delvale Avenue
j. Holabird Avenue at Sollers Point Road
k. Holabird Avenue at Dundalk Avenue

(could include intersection configuration, signal timing, crash data, turning radius, sight distance, etc.)
# Figure 3. Truck Classification Types

<table>
<thead>
<tr>
<th>SINGLE UNIT TRUCKS</th>
<th>NON-PORT COMBO TRUCKS</th>
<th>PORT TRUCKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>FedEx/UPS/U-Haul Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dump/Concrete Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single Unit Delivery Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOTNETNUKE Truck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domestic Cargo Combo Trucks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel/Asphalt/Molasses Delivery Trucks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Car Carrier Truck</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PORT TRUCKS (SOUTHEAST/DUNDALK/ESSEX/SEAGIRT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Container Trucks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PORT TRUCKS (FAIRFIELD/MASONVILLE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel/Asphalt/Molasses Delivery Trucks</td>
</tr>
</tbody>
</table>
Data Analysis

1. Conduct level of service analysis at 11 key intersections and segments.
   - could include intersection configuration, signal timing, crash data, turning radius, sight distance, etc.)

2. Six highway sections will be studied:
   - could include number of lanes, lane width, parking, turning radius, truck restrictions (time of day), crash history, Annual Average Daily Traffic (AADT), Annual Average Daily Truck Traffic (AADTT).
Performance Metrics

- Travel time
- Intersection Delay
- Queue length (as appropriate/needed)
- Level of service
Timeline

- Traffic counts to be collected mid April
- Modeling and analysis – summer 2016
- Results/recommendations – fall/winter 2016