Eastern Pennsylvania Freight Summit 2018

Lehigh University
June 21-22

Program Summary

Hosted by

LVPC
Lehigh Valley Planning Commission

Convened By

TCRPC
Regional Planning Commission

DVRC
Delaware Valley Regional Planning Commission

Pennsylvania Department of Transportation
Table of Contents

Executive Summary .................................................................................................................. 2
Introduction ................................................................................................................................. 8
Thank You from Summit Co-Hosts .......................................................................................... 10
Opening Remarks: Leslie S. Richards, Secretary, PennDOT .................................................. 11
Welcome and Opening Remarks ............................................................................................ 14
Plenary Session: Regional Perspectives .................................................................................. 19
Plenary Session: Beyond the Border ....................................................................................... 26
Featured Lunchtime Speaker .................................................................................................... 34
Plenary Session: Multimodal ................................................................................................... 38
Truck Parking P3 ....................................................................................................................... 45
Guided Tours of Manufacturing and Distribution Facilities in the Region ............................... 50
Appendix 1: Program ................................................................................................................ 54
Appendix 2: Panelist Bios (presented alphabetically) ............................................................... 55
Appendix 3: Attendees ............................................................................................................. 62
Appendix 4: Presentations ....................................................................................................... 69
Appendix 5: Post-Summit Survey Results ............................................................................... 70

Lehigh University’s Iacocca Hall, site of the Eastern Pennsylvania Freight Summit
Executive Summary

The Pennsylvania Department of Transportation (PennDOT), in conjunction with the Lehigh Valley Planning Commission (LVPC), Tri-County Regional Planning Commission (TCRPC), and Delaware Valley Regional Planning Commission (DVRPC), convened the inaugural Eastern Pennsylvania Freight Summit on June 21-22, 2018, at Lehigh University in Bethlehem, PA. More than 225 attendees representing private- and public-sector organizations from Pennsylvania and the surrounding region met to discuss and begin to identify solutions to address multimodal freight challenges facing 25 counties in Eastern Pennsylvania.

Day 1 included six sessions focused on local, regional, state, and federal trends related to freight movement and their impact in Eastern Pennsylvania. Day 2 included guided tours of various manufacturing and e-commerce facilities throughout the Lehigh Valley to give summit participants a better understanding of how freight movement impacts businesses and communities.

Key trends, regional freight strengths and challenges, and results of a post-summit survey are presented below.

Summit Take-Aways

Session content included current, relevant topics such as global trends impacting Pennsylvania and its eastern counties, changes in the trucking industry and the resultant impacts on truck parking and workforce, and how planning is being used to address regional freight transportation and ever-changing logistics challenges and opportunities. The following key trends were discussed at the summit.

- **Panama Canal Expansion is Driving Increases in Freight Shipping** – The expansion of the Panama Canal is continuing to drive increased shipping to and from Pennsylvania and New York/New Jersey ports, significantly improving the marketability of ports in the Eastern U.S. To prepare for the resultant increase in cargo shipments resulting from the Panama Canal expansion, both PhilaPort and the Port of New York and New Jersey have completed or are in the process of completing port improvement projects. The expansion is impacting U.S. freight transportation to the extent that the eastern U.S. is becoming competitive with California’s Inland Empire, the top freight logistics hub in the nation.

- **Inland Port Development is Needed** – Even with the infrastructure improvements at both PhilaPort and the Port of New York and New Jersey, truck traffic congestion is severe in and around the ports. Inland ports would help to alleviate freight movement congestion in and around the ports.

- **E-Commerce is Increasing Demand for Warehouse and Distribution Space** – Rising e-commerce demand has dramatically increased the number and square footage of warehouse distribution facilities constructed. While Southcentral Pennsylvania is the Commonwealth’s mature region for warehouse distribution, the Eastern Pennsylvania’s strategic geographic location—particularly the Lehigh Valley—makes it an epicenter for e-commerce-related freight movement.
A total of 19.6 million square feet (MSF) of warehouse space has been approved and/or constructed in the Lehigh Valley since 2013. An additional 12 MSF of warehouse space has been proposed, and more than 35 MSF of warehouse space has been proposed and/or constructed in less than five years. Warehouse distribution development is pushing up into Northeast Pennsylvania around Scranton and Hazelton, with more than 13.9 MSF of new warehouse distribution space added between 2017 and 2018.

- **Warehouse and Distribution Space is Changing** – Not only has e-commerce had an impact on existing retail real estate (with a total of 7,027 store closures announced in 2017, and 2,050 announced in the 1st quarter of 2018), but highly localized distribution centers are becoming more common and are being paired with larger facilities. These small (approximately 10,000 SF) distribution centers are located in urban/suburban areas and have been constructed to complete the “last-mile” to consumers. Localized distribution centers help facilitate one-hour delivery and are fed by larger warehouse distribution facilities on the outskirts of urban areas. Development of multi-story warehouses, enabled by increased automation, is a new trend that could potentially triple the volume of freight generated per acre. In the future, the increased use of 3D printing could shift the configuration of warehouse distribution space as it shortens supply chains due to localized manufacturing and distribution.

- **Planning for Local and Regional Land Use Impacts** – Regions need to anticipate and prioritize to address challenges and changes by balancing growth with community needs. The rapid rise in e-commerce, combined with the continued growth in the manufacturing sectors, has changed the landscape of many communities in the Lehigh Valley and elsewhere in Pennsylvania and is adding significant freight traffic to local and state roads. The rapid increase in development has left many local governments faced with the need to quickly assess community-changing land development plans that have the potential for substantial traffic impacts.

- **Intelligent Logistics Systems Are Needed for Performance and Safety** – Monitoring performance of the freight supply chain is critical for both efficiency and safety. Development of new intelligent logistics systems can improve the performance of the trucking industry. Data analytics can be used to predict the probability of equipment breakdown.

- **Agency traffic management across jurisdictional borders is critical** – Incidents do not stop at borders. Therefore, systems and people need to be connected, going beyond a connection between jurisdictions.

- **Need for Public Education and Outreach** – People do not typically associate the traffic congestion and delay they experience with their desire for consumer goods and blazingly fast delivery. Freight is often forgotten and misunderstood by the public. Public education and
outreach would help foster a better understanding of the causes of traffic congestion and how the general public and trucking industry can safely interact.

- **Economic Impact of Truck-Related Crashes** – Sizable economic costs are associated with truck-related crash congestion. Workers caught in congested traffic contributes to significant opportunity costs that can range as high as thousands of dollars per hour. Closing one lane reduces overall traffic flow capacity by 65 percent.

- **Critical Need for Skilled Truck Drivers** – Skilled truck drivers are needed to service current and future warehouse distribution facilities. However, finding and retaining qualified drivers is a significant industry issue. The current driver turnover rate is 300 percent and by 2020 there is projected to be a national driver shortage of 100,000.

- **Truck Parking is a Pressing Issue** – The longstanding insufficiency of designated truck parking spaces (rest areas, truck stops, at shipper or consignee lot) is exacerbated by federal regulations that further restrict a truck driver’s time behind the wheel—rules enforced by electronic driver logs. There is a critical need to identify appropriate, safe locations for truck drivers to park when out of drive time. The following truck parking needs/concerns and potential solutions were identified:

  **Identified Truck Parking Needs/Issues & Potential Solutions**

<table>
<thead>
<tr>
<th>Need / Issue</th>
<th>Potential Solutions</th>
</tr>
</thead>
</table>
| • Lack of a sufficient number of truck parking spaces within a given corridor | • Identify underutilized public properties (such as abandoned rest areas and inspection-only facilities) and private properties for truck parking.  
  • Work with local and regional governments to provide for truck parking as part of local land use regulations.  
  • Divide long-haul trips into stages handled by different drivers, keeping drivers closer to home and reducing the need for truck parking for rest periods. |
| • Lack of truck staging areas                                               | • Develop staging areas for truck drivers to stop while waiting to make deliveries.  
  • Adopt land use regulations to allow for staging/basic driver amenities at fulfillment centers.  
  • Identify ways to retrofit existing fulfillment centers to provide truck parking. |
| • Need real-time informational awareness to direct drivers to available parking | • Variable message boards  
  • 511 website real-time updates  
  • Rest stop real-time updates  
  • Truck driver apps (promote interoperability)  
  • App emphasis versus driving distraction |
| • Regulations prohibit retail sales at rest areas                           | • Change federal regulations to provide basic amenities such as meal options |
Identified Truck Parking Needs/Issues & Potential Solutions

<table>
<thead>
<tr>
<th>Need / Issue</th>
<th>Potential Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Identify existing truck parking standards and best practices</td>
<td>• Research ITE and APA standards and best practices</td>
</tr>
<tr>
<td></td>
<td>• Attend I-95 Corridor Coalition Truck Parking Symposium Fall 2018</td>
</tr>
<tr>
<td>• Lack of community awareness of issue</td>
<td>• Develop and conduct public outreach to educate the public about the link between consumer goods, truck drivers, and the need for truck parking</td>
</tr>
<tr>
<td>• Transfer findings to promote collaboration</td>
<td>• Pass along findings and adopted practices to other regions and states to improve knowledge-sharing</td>
</tr>
</tbody>
</table>

• **Future Impact of Autonomous Vehicles** – The full deployment of autonomous vehicles in the future will have a significant impact on the way freight is effectively and safely moved throughout the U.S. Across the county there is an increase in adoption of autonomous vehicle legislation with 33 states introducing legislation in 2017. Pennsylvania is recognized as a national leader in autonomous vehicle development and PennDOT convened Pennsylvania’s second Automated Vehicle Summit in April 2018.

**Post-Summit Survey Results**

PennDOT administered a post-summit survey to identify the value of the event to participants and gauge the level of interest in conducting future events focused on freight issues and opportunities. A total of 80 attendees responded. Results are summarized below. Full results, including responses to open-ended questions, are included in Appendix 5 of the summary report.

- Nearly all respondents agreed or strongly agreed that:
  - Freight transportation is an important topic for the public to know about,
  - The summit covered the most important freight topics,
  - Content was engaging and stimulating,
  - Panelists presented all sides of the topic,
  - They expect that content could be used in their life/work, and
  - They would plan on attending another freight summit in the future.

- More than 50 percent of respondents would recommend a similar freight summit be held in Western Pennsylvania.

- All panels were found to be informative, with the Truck Parking – P3 panel found to be the most informative.

- Some of the freight topics that should be addressed/expanded on in the future include:
  - Aviation and rail freight
  - Autonomous vehicles
  - Driver education
  - Planning for changes over time
  - Emerging/changing technology
• Several freight operations and management issues/concerns were identified for PennDOT to research.
  o Detailed look at truck parking including FHWA regulations
  o Better utilization of railroads and increased multimodal opportunities
  o Working with the private sector to obtain and analyze freight data
  o Improving education and safety for both truck and automobile drivers
  o Funding for transportation improvements
  o Assist municipalities in addressing increasing freight traffic
  o Conduct a state freight summit
• Twenty-nine respondents suggested questions to include in a Truck Parking Request for Information. Suggested questions can be found in Appendix 5 of the summary report.
• Summary of additional feedback and suggestions:
  o With the exception of truck parking, the summit discussed issues but did not begin to address solutions.
  o More opportunities for attendees to interact/participate during sessions were needed. More time for questions/answers should have been allotted.
  o Include a working session for various teams to work on actual problems.
  o Moderators should introduce speakers and facilitate questions and answers but should not have their own presentation.
  o Include more focus on aviation.
  o Combine insight/results from PA AV Summits with the PA Freight Summit.
  o Invite truck drivers to participate in the conference for actual “hands-on-the wheel” perspectives.
  o Tours were very useful but should not be held on a Friday.
  o Convene a statewide conference.
  o Summit was a great first effort; keep up the great work.
• A total of 23 individuals were interested in serving on a planning committee for a future freight summit.
Acronyms

BCO  Beneficial Cargo Owner
DVRPC  Delaware Valley Regional Planning Commission
EFS  Eastern Pennsylvania Freight Summit 2018
ELD  Electronic logging device
FHWA  Federal Highway Administration
LANTA  Lehigh and Northampton Transportation Authority
LVPC  Lehigh Valley Planning Commission
LVTS  Lehigh Valley Transportation Study
MPC  Pennsylvania Municipalities Planning Code
MPO  Metropolitan Planning Organization
MSF  million square feet
NJTPA  North Jersey Transportation Planning Authority
NS  Norfolk Southern
P3  Public-private partnership
PennDOT  Pennsylvania Department of Transportation
PURTA  Pennsylvania Public Utility Realty Tax Act
RPO  Rural Planning Organization
TEU  twenty-foot equivalent unit
TCRPC  Tri-County Regional Planning Commission
UAV  Unmanned Aerial Vehicle
ULCV  Ultra Large Container Vessel
VDOT  Virginia Department of Transportation
WBLV  Workforce Board Lehigh Valley

Other freight acronyms: https://ops.fhwa.dot.gov/freight/fpd/glossary/index.htm
Introduction

The Pennsylvania Department of Transportation (PennDOT), in conjunction with the Lehigh Valley Planning Commission (LVPC), Tri-County Regional Planning Commission (TCRPC), and Delaware Valley Regional Planning Commission (DVRPC), convened the inaugural Eastern Pennsylvania Freight Summit (EFS) on June 21 – 22, 2018, at Lehigh University in Bethlehem.

Freight transportation in Pennsylvania, particularly in the 25 counties located in the eastern portion of the state (see map, following page), is being significantly affected by consumer buying trends as well as global infrastructure investment. The rapid rise in e-commerce, driven by consumers wanting goods as quickly as possible, has increased demand for strategically located logistics facilities in Eastern Pennsylvania. This has resulted in increased commercial truck traffic on local roads and the region’s Interstates. The phenomenon of large warehouses and distribution facilities rapidly expanding into suburban and rural lands has left municipal officials struggling to keep ahead of the growth as they work to balance community needs with the economic benefit of an expanding consumer economy.

Coupled with the increase in e-commerce-induced transportation changes, ports along the U.S. East Coast have made or are in the process of making port infrastructure improvements to receive super-sized cargo vessels. The Panama Canal can now accommodate these ships due to its 2016 expansion, which is already transforming the global economy and revitalizing the maritime industry.

In light of these global and regional influences, PennDOT envisioned the summit as a forum to share ideas and information about the freight transportation challenges and opportunities facing Eastern Pennsylvania—and ultimately to share those thoughts and ideas with planning partners and business entities throughout the state.

Day 1 of the summit was held at Lehigh University’s Iacocca Hall and included sessions focused on local, regional, state, and federal trends related to freight movement and their impact on the 25 counties of Eastern Pennsylvania. Day 2 included guided tours of manufacturing and e-commerce facilities throughout the Lehigh Valley to gain a practical understanding of how freight impacts businesses and communities.

PennDOT also administered a post-summit survey to identify the event’s value to participants and gauge the level of interest in conducting future events focused on freight issues and opportunities.

This report summarizes proceedings from the freight summit, including a summary of each session, an overview of trends impacting freight transport in Eastern Pennsylvania, and post-summit survey results.

Finally, the report includes a list of next steps to improve freight transportation infrastructure to address the opportunities and challenges brought about by Pennsylvania’s strategic locational advantages.
The Eastern Pennsylvania Freight Summit 2018 program, speaker bios, list of attendees, PowerPoint presentation, and post-summit survey results are included in the report appendices.
Thank you to everyone who was part of our inaugural Eastern Pennsylvania Freight Summit! More than 225 attendees joined us for a conference that was packed with thought-provoking presentations and productive networking in a venue with panoramic views of the Lehigh Valley. Special thanks also go to our sponsors. We could not have carried out this event without your generous support.

Throughout the two-day event, we were fortunate to have engaging speakers, panelists, and freight practitioners covering how the ongoing evolution in freight movement will change how we need to plan for the societal benefits and challenges this industry is presenting to us.

If you have further suggestions or comments related to freight planning, please use the appropriate contact information provided below.

Becky Bradley, AICP, Executive Director, Lehigh Valley Planning Commission  
Steve Deck, AICP, Executive Director, Tri-County Regional Planning Commission  
Barry Seymour, Executive Director, Delaware Valley Regional Planning Commission

<table>
<thead>
<tr>
<th>Planning Partner</th>
<th>County</th>
<th>Contact</th>
<th>Phone</th>
<th>E-Mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams County</td>
<td>Adams</td>
<td>Sherri Clayton</td>
<td>(717) 337-9824</td>
<td><a href="mailto:sclayton@adamscounty.us">sclayton@adamscounty.us</a></td>
</tr>
<tr>
<td>DVRPC</td>
<td>Bucks</td>
<td>Ted Dahlburg</td>
<td>(215) 238-2844</td>
<td><a href="mailto:tdahlburg@dvrpc.org">tdahlburg@dvrpc.org</a></td>
</tr>
<tr>
<td></td>
<td>Chester</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delaware</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Montgomery</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philadelphia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Franklin MPO</td>
<td>Franklin</td>
<td>Phil Tarquino</td>
<td>(717) 261-3855</td>
<td><a href="mailto:ptarquino@franklincountypa.gov">ptarquino@franklincountypa.gov</a></td>
</tr>
<tr>
<td>HATS MPO</td>
<td>Cumberland</td>
<td>Casey Baxendale</td>
<td>(717) 234-2639</td>
<td><a href="mailto:scbaxendale@tcrpc-pa.org">scbaxendale@tcrpc-pa.org</a></td>
</tr>
<tr>
<td></td>
<td>Dauphin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lackawanna/Luzerne MPO</td>
<td>Lackawanna</td>
<td>George Kelly</td>
<td>(570) 963-6830</td>
<td><a href="mailto:kellyg@lackawannacounty.org">kellyg@lackawannacounty.org</a></td>
</tr>
<tr>
<td></td>
<td>Luzerne</td>
<td>James Ferry</td>
<td>(570) 825-1560</td>
<td><a href="mailto:james.ferry@luzernecounty.org">james.ferry@luzernecounty.org</a></td>
</tr>
<tr>
<td>Lancaster MPO</td>
<td>Lancaster</td>
<td>Bob Bini</td>
<td>(717) 299-8333</td>
<td><a href="mailto:rbini@co.lancaster.pa.us">rbini@co.lancaster.pa.us</a></td>
</tr>
<tr>
<td>Lebanon MPO</td>
<td>Lebanon</td>
<td>Julie Cheyney</td>
<td>(717) 228-444</td>
<td><a href="mailto:jcheyney@lebcnty.org">jcheyney@lebcnty.org</a></td>
</tr>
<tr>
<td>Lehigh Valley MPO</td>
<td>Lehigh</td>
<td>Michael Donchez</td>
<td>(610) 264-4544</td>
<td><a href="mailto:mdonchez@lvpc.org">mdonchez@lvpc.org</a></td>
</tr>
<tr>
<td></td>
<td>Northampton</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEPA MPO</td>
<td>Carbon</td>
<td>Alan Baranski</td>
<td>(570) 655-5581</td>
<td><a href="mailto:abaranski@nepa-alliance.org">abaranski@nepa-alliance.org</a></td>
</tr>
<tr>
<td></td>
<td>Monroe</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pike</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Schuylkill</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northern Tier RPO</td>
<td>Susquehanna</td>
<td>Brian Baker</td>
<td>(570) 265-9103</td>
<td><a href="mailto:baker@northertier.org">baker@northertier.org</a></td>
</tr>
<tr>
<td></td>
<td>Wyoming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading MPO</td>
<td>Berks</td>
<td>Alan Piper</td>
<td>(610) 478-6300</td>
<td><a href="mailto:apiper@countyofberks.com">apiper@countyofberks.com</a></td>
</tr>
<tr>
<td>Wayne County</td>
<td>Wayne</td>
<td>Craig Rickard</td>
<td>(570) 253-5970</td>
<td><a href="mailto:crickard@co.wayne.pa.us">crickard@co.wayne.pa.us</a></td>
</tr>
<tr>
<td>York MPO</td>
<td>York</td>
<td>Will Clark</td>
<td>(717) 771-9870</td>
<td><a href="mailto:wclark@ycpc.org">wclark@ycpc.org</a></td>
</tr>
</tbody>
</table>
Opening Remarks: Leslie S. Richards, Secretary, PennDOT

Welcome to the freight summit and a special thank you to our co-hosts:

- Becky Bradley, Executive Director of the Lehigh Valley Planning Commission;
- Steve Deck, Executive Director of the Tri-County Regional Planning Commission; and
- Barry Seymour, Executive Director of the Delaware Valley Regional Planning Commission

Our regional planning commissions are PennDOT’s Planning Partners—they serve as vital links between local communities and state and federal policy and funding. They are on the front lines of planning and prioritizing the transportation projects that shape our daily lives.

This summit is an important opportunity for the public and private sectors to roll up our sleeves together and put forth our best thinking about real-world issues. How can government at all levels help create the conditions in which the private sector can thrive? And—for all of us who were stuck in truck traffic this morning—how can we keep our region livable for residents, desirable for visitors, and in good shape for our children and grandchildren?

Freight is vitally important to this region, and this region is vitally important to goods movement on a national and international scale. We are after all the Keystone State, and are in an enviable position to benefit from goods movement:

- We are the only state with three ports, and boast direct access to the Atlantic, the St. Lawrence Seaway, and the Ohio River.
- Pennsylvania has the greatest number of railroads in the U.S.—64—and we are near the top in total track mileage. In 2011, 209 million tons—or 18 percent—of Pennsylvania freight was moved by rail.
- Linking these modes are more than 120,000 linear miles of roadway, including vital Interstate routes that serve the Northeast corridor, the East Coast, and our nation’s heartland.
- Roughly 43 percent of those roadway miles are within the 25-county Eastern Pennsylvania region represented at this summit.

With the growth of e-commerce and the Lehigh Valley’s close proximity to 80 million consumers, the distribution industry has exploded in this region over the past decade. This growth has helped create 28,000 jobs in the Lehigh Valley, but generates an enormous volume of traffic on our already congested roadways—64 percent of Pennsylvania’s population lives in Eastern Pennsylvania.

At PennDOT we have had our eye on freight trends and implications for some time.

I’d like to give you some highlights on how PennDOT is proactively PLANNING for freight, and how Pennsylvania is INVESTING in freight.
PennDOT formally released its first-ever freight plan in 2016.

We organized a Freight Work Group that meets quarterly to advance freight planning in the state.

New tools have been developed to support statewide and regional transportation planning for freight.

The PennDOT Connects initiative prompts earlier consideration of freight issues as part of project planning, resulting in projects that more effectively address the complex realities in our communities.

In terms of investments, a $300 million Commonwealth investment in the Port of Philadelphia will double container capacity.

We’re putting $2.5 billion a year into construction statewide, systematically enhancing the efficiency of goods movement through and within Pennsylvania by maintaining vital freight routes and strategically enhancing capacity.

Pennsylvania is a national leader in legislation enabling public-private partnerships—or P3s—with active P3 projects in progress.

Being able to undertake more projects under more types of contracts matters—freight movement and profitability is deeply linked to the connectivity and efficiency of our roadways and bridges.

Through our P3 Rapid Bridge Replacement Program, 558 structurally deficient bridges around the state are being replaced—sooner and with fewer delays to trucks and other traffic—than would otherwise be possible.

We have a forthcoming P3 on truck parking that in fact spurred this summit.

In 2011, trucks moved more than 867 million tons of goods on Pennsylvania highways.

By 2040—which is not as far away as it sounds—that number is projected to increase sharply, to nearly 1.5 billion tons of freight being hauled by truck through and within our state—that’s 80 percent of the state’s freight by volume being transported by trucks on our roads and bridges.

Among other improvements, more truck parking spaces are urgently needed TODAY in the Lehigh Valley and other congested regions of Pennsylvania to allow drivers to safely meet freight demand and comply with federal hours-of-service regulations. This is a natural opportunity for the public and private sectors to collaborate to meet a need and address a very practical problem. You each have a unique perspective on the topic of truck parking, and PennDOT seeks your input in developing a P3 Request for Qualifications that will best leverage public and private resources and produce the desired results. Pennsylvania has a strong P3 law, but we need more entrepreneurial ideas and technological innovation from the private sector.

One of this afternoon’s panel discussions is centered on truck parking, but I ask you to keep the issue at the forefront of your mind throughout your discussions. As you complete your post-summit survey, please put some real thought into the ingredients for success for a truck parking P3. We will be carefully considering all your ideas—this is an immediate opportunity for you to help improve freight transportation in the Lehigh Valley and beyond.
In a broader context I ask you all to take what you learn today and tomorrow, apply it to making improvements in your own sphere of influence, and stay engaged across sectors and disciplines following this summit. PennDOT and our Planning Partners know that the best decisions are produced when we bring together a wide range of voices and perspectives.

Freight is an enormous factor in Pennsylvania’s prosperity and quality of life. Goods movement is a desirable and powerful engine of economic and job growth in Pennsylvania. Pennsylvania’s freight plan projects that by 2040, the value of freight moved in the state will more than double from 2011 values, to more than $3.7 trillion. That is only the value of goods themselves, not the economic impact they generate.

However, we must acknowledge that moving large volumes of freight generates serious impacts—particularly to air quality and safety—and introduces congestion and land use impacts that can severely detract from a region.

PennDOT is eager to do our part in creating the conditions that allow goods movement to strengthen the Keystone State, striking the optimum balance between economic growth and preserving the livability of our communities.

We thank you for your hard work toward these shared goals.
Welcome and Opening Remarks

**Jim Ritzman, Deputy Secretary for Planning Pennsylvania Department of Transportation**

- Jim Ritzman called the Eastern Pennsylvania Freight Summit 2018 (EFS) to order and thanked participants and sponsors.
- Jim noted the importance of **PA On Track**—Pennsylvania’s **Long Range Transportation Plan** and **Comprehensive Freight Movement Plan**—in ensuring the connection between transportation and planning.

**Phil Armstrong, County Executive Lehigh County**

- Welcomed summit attendees to the Lehigh Valley and discussed the three ‘Ls’ that the Lehigh Valley possesses: Location, Land, and Labor.
- The region’s geographically favorable position places it within a half-day’s travel of New York, Baltimore, Philadelphia, and Washington.
- While Lehigh County has experienced development over the past few years, open space and farmland preservation is a priority.
  - A total of 307 farms have been preserved in the county, which ranks fourth statewide in open space preservation.
- The Lehigh Valley maintains good quality of life with access to nature and bicycle and pedestrian activities.
- Labor is available to meet employer needs and employment is anticipated to increase by more than 17 percent.
- While the Lehigh Valley has a highly skilled workforce, there is a shortage of qualified truck drivers to meet the expanding needs of warehouse facilities.
- Over 9 MSF of new development was approved in 2016—a 168 percent increase over the previous year.
- Businesses and people are seeking Bethlehem, Easton, and Allentown as locations for new investment.
• With the success in economic growth, the region must look at freight problems in order to maintain the region’s competitive advantage and continue to grow.

• Of the 256 bridges in Lehigh and Northampton counties, nearly 30 percent have structural issues.

• The region looks to the state and federal levels for infrastructure funding.
  • Act 89 (Pennsylvania’s Comprehensive Transportation Funding Plan) allows counties the option to assess a $5 vehicle registration fee to generate additional revenue for highway and bridge improvements.

LAMONT McCLURE, JR., COUNTY EXECUTIVE
NORTHAMPTON COUNTY

• While public officials come and go, the attendees at the EFS are long-term professionals who make decisions every day that affect our quality of life.

• The Lehigh Valley is the “beating heart” of the Boston-Washington corridor.

• People are very concerned about congestion on highways and there are concerns with building fulfillment centers.

• Air quality is increasingly a major issue in the Lehigh Valley.

• Bethlehem Mayor Bob Donchez notes that the success of the I-78/ Rt. 412 corridor expansion project has facilitated the development of the region’s intermodal capacity.
  • The positive impact of the intermodal capacity developed in Bethlehem has nearly offset the negative economic impact of Bethlehem Steel’s bankruptcy.

• The Fed Ex project in Allen Township is an astonishing development. The rapid pace of development has created disparities in tax revenues between communities that have and do not have fulfillment center development.

• The 30-day review period established under the MPC is often not enough time for municipalities to adequately evaluate the impacts created by these enormous land developments.

• There are concerns as to whether the positive benefits associated with new development will outweigh the negative impacts to quality of life.
  • To address these concerns and continue to attract companies such as Amazon, Fed Ex, and UPS, it is important to implement multi-municipal plans.
Pennsylvania is no longer the “tundra” from the New York City perspective.

Background on Eastern Pennsylvania’s warehouse distribution market includes:
- The distribution market is 360 MSF with Central Pennsylvania as the largest and most mature market at 180 MSF.
- The Lehigh Valley is 97 MSF, currently growing fast, and becoming part of the Northern New Jersey market.
- Northeast Pennsylvania is the newest market, at 60 MSF.

As the economy goes so goes industrial, meaning fluctuations in gross domestic product tend to mirror industrial net absorption (vacancy rates).

Industrial development in the Lehigh Valley generally tracks with the national economy.

Locations closer to New York City are at plateau levels for transportation and warehouse employment, while the Lehigh Valley is generally tracking the same levels of employment growth as the Inland Empire in California.

Eastern Pennsylvania has relatively little vacancy and phantom space (leased but unoccupied).

The amount of warehouse distribution square footage under construction in the first quarter in the PA-78/I-81 corridor (14 MSF) is third behind the Dallas/Ft. Worth and Atlanta markets. The Inland Empire ranks fourth while the New York and New Jersey market is sixth (8 MSF).

Square footage under construction as a percentage of inventory reveals the PA-78/I-81 corridor is ranked third nationally behind Denver and Baltimore. New York and New Jersey is ranked seventh.

There has been a long-term shift from manufacturing employment to distribution employment in the greater Philadelphia region, with manufacturing losing employment and distribution gaining employment.

What is driving demand in the region?
- E-Commerce – An additional 60–80 MSF of distribution space is needed to keep pace with sales. 1.25 MSF of distribution space is required for every $1B in sales.
o Grocery sales, including cold storage – Of the $24B in grocery sales, only 3 percent is online, and only 20 percent is true e-commerce. Online grocery purchases will shift approximately 100 MSF of cold storage demand from industrial to retail, requiring 300 MSF of retail cold storage and 180 MSF of industrial cold storage.

o Truck Drive Time – The Lehigh Valley provides a favorable truck drive location in proximity to the major metropolitan areas of New York, Philadelphia, and Washington.

• Transportation/Infrastructure Trends
  o Transportation and warehouse employment is up.
  o Transportation is the primary cost associated with warehousing as an industry.
  o Warehousing costs are comprised of:
    ▪ Real estate – 5 percent
    ▪ Labor – 15 to 18 percent
    ▪ Inventory – 15 to 18 percent
    ▪ Transportation – 50 percent or more
  o Wages are increasing; retaining workers requires increasing warehousing and transportation wages from $15 to $16 per hour to up to $18 per hour.

• There has been a decline in manufacturing and growth in warehouse and transportation employment.

• What are demand drivers?
  o Retailers are finding a mix between in-store and e-commerce.
  o Retail as an industry is currently in the process of reinventing itself.
  o $1B in sales requires 1.25 MSF of distribution space.
  o Employee parking is growing.
  o Automation is growing.
  o Of the $350 million cost of a fulfillment center, the cost of real estate ranges between $50 and $60 million.

• Truck traffic congestion is worse in New York and New Jersey. That is why companies are moving to Eastern Pennsylvania.

• Driver recruitment and retention is an issue.

• The volume of freight being moved is growing and will continue to grow.
  o Port volume is increasing post-Panamax with ports on the East Coast increasing market share (New York/New Jersey, Baltimore, Norfolk, Philadelphia).
  o The Port of New York and New Jersey has experienced a 5 percent per year growth in TEUs and there is a need to move cargo out to locations where it can be staged more quickly and easily.
  o Bethlehem warehouses can be used to stage goods that are shipped to the ports and then transported out west by rail or truck.
  o Developing inland ports will help alleviate port congestion.
Driver recruitment and retention are enormous issues.

- If a driver has a dedicated route and can be close to home, driver retention can be increased.
- The driver turnover rate is 300 percent. By 2020 there is projected to be a national driver shortage of 100,000.
- One way to improve driver retention and driver conditions is incorporating autonomous vehicles into trucking. There is an increase in adoption of autonomous vehicle legislation around the country, with 33 states introducing legislation in 2017.
- Pennsylvania is viewed as a national leader in autonomous vehicle development.
- The amount of funding going into research and innovation through companies such as WAYMO is significant. As an example, the 2017 market value of Ford was $42 billion with 6.6 million automobile deliverables; WAYMO was valued at $70 billion with zero automobile deliverables.

- The population served by a one-day drive from Eastern Pennsylvania is concentrated around the mid-Atlantic and Midwest due to limits on the maximum of hours drivers are permitted to drive in one day.
- A “sleepless truck” shifts the concentration in populations served to the Midwest.
- The transition to autonomous vehicles is similar to the transition from the use of horses to automobiles.
- As an example, in 1906, horses and horse-drawn carriages outnumbered cars. In 1906 Georgia Supreme Court legislation cited that, “The automobile and automobile operators are to be classified the same as rabid and ferocious animals....” By 1912, cars outnumbered horse-drawn vehicles.
- Trends suggest demand for industrial space will remain favorable and expansion should continue through 2019.
- E-commerce companies such as Amazon will continue to rapidly expand and will continue to rely on logistics companies such as Fed Ex and UPS for transporting goods.
Plenary Session: Regional Perspectives

Between 45 to 65 percent of households have an Amazon Prime membership, driven by the desire to have things quickly.

Keeping goods moving efficiently requires regional solutions.

LVPC serves the two-county region of Lehigh and Northampton counties.

LVPC also staffs LVTS, which is the region’s federally designated MPO.

LVPC and LVTS have traditionally prepared separate plans: a regional comprehensive plan and a transportation plan. Currently, one plan and one strategy is being prepared for both.

A poll of the community found that the quality of life, particularly parks, recreation, and open space, were valued most. Top concerns included warehouses, traffic, and to a lesser extent housing.

The Lehigh Valley has had a sustained growth in population and a net immigration of citizens largely from New York and New Jersey.
People are moving to the Lehigh Valley because of the region’s high quality of life, access to major metropolitan areas, and affordability. These are the same reasons why businesses are moving to and expanding in the Lehigh Valley.

Some of the largest industries are food and beverage manufacturers (e.g., Sam Adams, Nestlé) which locate in the region because of high quality aquifers.

Over 40 million tons of freight moves around and through the Lehigh Valley. This number is expected to double by 2040.

The Lehigh Valley International Airport has experienced a 337 percent increase in air cargo volume in the past two years.

Over 90 percent of freight is moved by truck.

19.6 MSF of warehouse space has been approved/constructed since 2013; an additional 12 MSF of warehouse space has been proposed.

Over 35 MSF of warehouse space has been proposed/constructed in less than five years.

Many of the newer industrial and commercial facilities are on the fringe of the region’s developed areas and are competing with the same lands as housing.

As an example, Lower Macungie Township suburbanized overnight. Most workers cannot afford to live in the communities where they work.

LANTA works with developers who pay a fee to provide bus service to transport workers from new housing developments to employment centers.

LVPC and partners work to find ways to improve air quality and maximize mobility.

The key is to balance growth with community needs.

Steve Deck, Executive Director
Tri-County Regional Planning Commission

Why is warehouse distribution so dominant in the Harrisburg area? Location, location, location.

The Harrisburg area is the junction of several transportation modes: I-81, I-83, the Pennsylvania Turnpike, major freight rail hubs east and west of the Susquehanna River, passenger rail, and is the third-largest cargo hub in the state.

The region is mature in terms of warehouse distribution space. Both Amazon and UPS have regional hubs in the region.

I-81 has been expanded to six lanes in several stretches to accommodate increased freight volume. I-83 is at capacity.

Congestion will be present on the region’s roads for the foreseeable future.

A major issue in the region is highway safety. On average there are 400 crashes per year on the region’s major transportation routes.

Traffic incident management teams consisting of towing, police, fire, and EMS have been established to clear accidents as quickly as possible.
• One hundred thirty (130) miles of major freight corridors have been identified in the Harrisburg region, with additional 50 miles identified for future designation.

• The region has 40 miles of critical urban freight corridors proposed, and 8 miles of critical rural freight corridors.

• As rural municipalities do not have many opportunities for generating tax revenues, part of the region’s growth management strategy is to develop a formalized freight network to help municipalities identify growth opportunities.

BARRY SEYMOUR, EXECUTIVE DIRECTOR
DELAWARE VALLEY REGIONAL PLANNING COMMISSION

• The 25-county Eastern Pennsylvania area is one large region that needs to work together.

• Within the DVRPC region of Pennsylvania and New Jersey there are 6 million people, 3 million jobs, and 500,000 jobs in freight/distribution.

• Traffic congestion is an issue, but it is not as bad as other areas.
  o Traffic is improving in the DVRPC region due to major infrastructure investment.
  o I-95 is being rebuilt and a new interchange will connect I-95 to the Pennsylvania Turnpike.
  o Flex lanes are being installed on the Schuylkill Expressway and I-476.

• Land availability is an issue as the Philadelphia area is developed and primarily urban.

• Special events that generate tremendous traffic often take place in and around Philadelphia, such as the Papal visit in 2015 and the Democratic National Convention in 2016.

• A trend is localized distribution centers. These are small 10,000 SF distribution centers in the city to make one-hour deliveries. The localized distribution centers are fed by larger facilities.

• The region has high unemployment in certain segments of the workforce, although warehouse distribution jobs provide good wages and entry into the workforce.

• The region is working to link job training to workforce needs.

• A study of Philadelphia’s freight infrastructure identified 67 freight centers. These freight centers are used in all analysis. This is helpful to forecast and identify transportation upgrades and model e-commerce deliveries throughout the day.

• Truck parking is a regional issue.
  o There are 1,110 truck parking spaces and not enough spaces to accommodate drivers who reach their daily hour limit while in the region.
  o Philadelphia residents who are truck drivers come home and need to park in their neighborhood.
DVRPC is working with the City of Philadelphia to address downtown e-commerce deliveries by developing a delivery handbook.¹

DVRPC is now working with smaller cities to share best practices included in the delivery handbook.

- The Port of Philadelphia access has been deepened to 45 feet, enabling the region to accept Post-Panamax cargo ships.
  - Two new super cranes have been installed at a cost of $300 million to receive cargo from these ships.
  - PhilaPort has experienced 30 percent growth over past five years and activity is expected to double over the next decade.
  - PhilaPort is a hub for food distribution and a growth area for cold storage.
  - The wholesale produce market at the port is the largest in world.

- Rail freight is also in a growth mode.
  - There are challenges with at grade crossings, yard capacity, and sharing of rail lines for both freight and passenger service.
  - Rail freight transportation is available through CSX and Norfolk Southern, plus a dozen short line railroads.

- Air cargo at Philadelphia International Airport handles 500,000 tons per year and is the second-busiest UPS hub in the U.S.

- Pipelines are another way to move product and Mariner 1 and 2 pipelines traverse the region.

NANCY DISCHINAT, EXECUTIVE DIRECTOR
WORKFORCE BOARD LEHIGH VALLEY

- The Lehigh Valley is a very competitive environment for workers.

- The Workforce Board Lehigh Valley (WBLV) focuses on high-growth sectors, with transportation jobs a priority and identified as a top occupation as of April 2018.

- The workforce development board works with LANTA and career and technical schools to meet industry needs, post jobs, and work with a logistics/warehousing partnership to make sure resources go to develop a ready workforce.

- Lehigh Valley Workforce Snapshot:
  - Regional unemployment is low at 4.7 percent. The total labor force is 354,100 with 16,200 unemployed workers.
  - Low unemployment means the region is near full employment.
  - Job postings are currently at 10,000—a 43 percent increase over last year.
  - Transportation/logistics/warehousing employers have posted 5,816 job openings.

---

o Jobs most in demand are for tractor-trailer drivers.

o WBLV coordinates job fairs for employers such as FedEx, Amazon, UPS, Walmart, Mack trucks, etc.

o 1.09 jobs are created for every 1 warehouse job.

o Wages in the Transportation & Materials Moving Occupations have increased by 2.05 percent in one year, reflecting the demand for drivers.

• The need for CDL drivers increased 6 percent from 2017 to 2018.
  
o Training dollars have been allocated to address skill gap areas such as CDL, forklift training, heavy equipment operations, and logistics.

o At least 900,000 drivers will be needed in the U.S. over the next 10 years to replace retiring drivers and keep pace with driver demand.

o Currently, tractor-trailer drivers receive paid training.

• Employee retention is an issue.
  
o Companies are working on developing career pathways to enable workers to advance within the company, with the goal of improving employee retention.

• A focus of WBLV is to strengthen the connection between business and education to develop a pipeline of qualified workers.

• To promote and encourage technical jobs, a USA Skills Signing Day is held.

Moderator Questions

QUESTION

What is the importance of approaching freight from a regional perspective and role?

ANSWERS

Becky Bradley – Our staff spends nights with municipal governments. Roads in the Lehigh Valley are owned by the state, Pennsylvania Turnpike Commission, and local municipalities (3,000 miles). LVPC’s role is working with local governments. As local officials are volunteers, we can help them think through complex land use decisions. We have to collaborate across regions for efficient inflow/outflow of freight.

LVPC is part of a Mega-Regional Planning partnership to address goods movement issues. The region is connected to the Port of New York and New Jersey. Our focus needs to be on goods and people movement and sharing data and building consistent travel demand models locally and across the region.

Barry Seymour – The very reason regional planning commissions were created was to provide perspective and scale. Transportation systems are large-scale; regional perspectives focus on how systems work. The second reason why regional planning commissions are so important is access to
funding. Third, regional planning commissions are the neutral conveners. An example is DVRPC’s Goods Movement Taskforce.

Steve Deck – Relationships equal success. TCRPC works with PennDOT District 8-0, six different MPOs, and county and local governments. York MPO is currently heading a study in which the other regional MPOs are participating. PennDOT District 8-0 is conducting an autonomous vehicle study in the district. TCRPC also maintains relationships with multiple chambers of commerce and is developing a strategy to work with the region’s school districts. We work to identify opportunities to coordinate and take a leading role.

QUESTION
What can be done to improve the workforce regionally?

ANSWERS
Barry Seymour – Developing multi-regional partnerships between the public and private sectors would be helpful.

Steve Deck – Good advisory group with public/private sector representation. Stop making documents and start making a process.

Becky Bradley – Do not have static plans but post online. Develop immediate back-and-forth dialog, especially with social media. Bring the public in to allow more conversations to happen.

Barry Seymour – The rate of change is difficult to keep up with (e.g., energy trainloads of North Dakota Bakken crude oil is an example of a market trend that came and went). It is important to learn from market shifts and obtain early information.

QUESTION
Technology companies are coming in to help alleviate congestion for smarter trucking. Are there ways to get around driver time limits?

ANSWERS
Becky Bradley – Autonomous trucks and construction equipment will help alleviate some issues in the future. When developers of large warehouses come into the region, we meet with them and talk about shifts and work with them on timing of workers and trucks to spread trips out throughout the day. We also work with PennDOT District 5-0. Questions we ask are: Where do we explore corridors of adaptive signals? What does the transportation system look like to keep people moving? There is a need to improve immediacy in an effort to achieve improved, more manageable transportation systems. Every month there is something new to think about. Ability to adapt is huge.

Barry Seymour – Eventually, all vehicles will be autonomous. Until then there will be constant change. The deployment of flexible lanes in the Philadelphia region is exciting as the lanes will sense congestion at variable speeds. There are issues with GPS. Truck drivers use GPS to travel through local neighborhoods. GPS
does not indicate where bridge and overpass weight and height issues are located. Technology needs to be improved so these issues can be addressed.

Steve Deck – The autonomous vehicle study being conducted by PennDOT District 8-0 will be useful to make sure the region is in front of the technology, not behind.

**QUESTION**

*How do you address transportation system bridges?*

**ANSWERS**

Steve Deck – Kudos to PennDOT District 8-0 for addressing structurally deficient bridges. The local $5 fee has been useful in developing local bridge bundling programs.

Barry Seymour – One of the core functions of a regional planning organization is to prioritize transportation investments. Most of the funding available is needed to maintain transportation systems. Identification of new funding is needed in order to serve new growth.

**QUESTION**

*Why isn’t transportation infrastructure viewed as a utility? How do you maintain to a state of good repair? Act 89 was a great step, but it is not enough. Federal funds are flat. A gas tax based on fuel efficiency will continually produce lower yields.*

**ANSWER**

Becky Bradley – Truck parking is an issue. Drivers are removing trucks off of sites as soon as a load is delivered. Electronic logging devices (ELDs) are impacting drivers and local governments are receiving complaints from neighbors. There is not a real good answer to the situation. When a developer builds a warehouse in the Lehigh Valley, we talk to them about truck staging. It is a joint responsibility between the public and private sectors. There may be ways to connect to the Internet to find truck spots plus alternative fuel sources. It is important to be flexible, open-minded, and quickly adapt.

**QUESTION**

*Does the panel have anything further to add?*

**ANSWERS**

Nancy Dischinat – The first customer for the workforce development board is the employer.

Becky Bradley – Data, data, data. Big data is more complicated. We need to listen to adapt data to help address problems. We need to convene, talk to each other, and take down walls.

Steve Deck – No single entity will solve the range of issues that are faced. An ongoing process is required to find collective solutions.
The proliferation of distribution centers is a trend affecting retailers and manufacturers.

- Distribution centers more than tripled in four years and almost doubled in two.
- The average size of warehouses is dropping.
- The trend is to develop paired large and small warehouses. The large warehouse feeds into the smaller.
- This is being driven by need for faster time to market.
- Supply chains are becoming more direct to the consumer.
- Increasing warehouse automation is being used as a way to control cost.
- Cross docking is somewhat more stable and is already being used.
- Warehouse size is growing and reconfiguring.

Amazon’s influence holds down retail inventory turns because the company does not own its own store fronts. They don’t need inventory, but variety.

- Big box retailers have to hold more inventory to keep up with a company like Amazon. Fewer turns mean more inventory and the need for more room to hold it.

E-commerce as a percentage of retail is about 9 percent. It is small but growing but disruptive.

- Online purchases of everyday household items are increasing.
- Same-day delivery is a small percentage of overall e-commerce activity but it is growing.
- Currently, 56 percent of Amazon customers are prime members, up by 46 percent. The more consumers purchase from Amazon and the easier that purchase is to make, the need to run to the store for a purchase decreases.

Another trend is the development of multi-story warehouses.

- One such warehouse is located five miles from Seattle and was developed by ProLogis. Multi-story means faster delivery times.
- The e-commerce fulfillment center is 500,000 SF smaller than a traditional warehouse.
- What is typically a 47-acre site can be developed on 14 acres in three stories.
Multi-story warehouses triple the volume of freight generated per acre.

The use of automation in warehouses increases freight space as well.

It would be interesting to put such a center in a community like Hoboken, New Jersey, and feed the center from outside fulfillment centers for same-day delivery.

From left: Mary Ameen, Marygrace Parker, Andy Alden

MARY AMEEN, ACTING EXECUTIVE DIRECTOR
NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY

- New Jersey is a supply chain state. It includes 1 billion SF of industrial space, and more than 450,000 workers are employed in transportation, logistics, and distribution.

- The Port of New York and New Jersey is the largest port on the East Coast with 6.7 million TEUs in 2017.

- The Lehigh Valley, along with New Jersey and New York, is the leading industrial concentration in North America.

- E-commerce requires close proximity to end users and the NJTPA region has seen a tremendous increase in warehouse distribution facilities as a result. This also influences Pennsylvania along I-78 and beyond.
  - In the NJTPA region over 26 MSF of warehouse distribution space has been added since 2008. There is a near zero availability rate.
  - New Jersey Turnpike Interchange 8A includes 70 MSF of warehouse space with an additional 4 MSF under construction.
  - Asking lease rates are now at $14.00/SF triple net [lessee is responsible for costs such as real estate taxes, building insurance, and building maintenance, as well as paying rent and utilities].

- The completion of the Bayonne Bridge Clearance Project in 2017 provides the ability to receive new post-Panamax vessels at the Port of New York and New Jersey.
  - Over 6.7 million TEUs have been handled.
  - As a result, the port has a 32 percent market share of East Coast shipping and 15.4 percent of the U.S. market.

- 2016 Port of New York and New Jersey impact to New Jersey:
200,350 direct jobs; 344,470 total jobs generated.
Over $21 billion in personal income and over $53.8 billion in business income.
Nearly $7 billion in local, state, and federal tax revenues.

2016 Port of New York and New Jersey impact to the Pennsylvania counties of Lehigh, Northampton, Monroe, and Pike:
18,300 direct jobs; 24,490 total jobs generated.
Over $1.4 billion in personal income and more than $3.3 billion in business income.
Nearly $420 million in local, state, and federal tax revenues.

Supply chain professionals are concerned with the following:
Managing the ever-changing retail market.
Just-in-time just isn’t fast enough.
Maintaining operations and supply change through disruptive events.
Maintaining operations amid growing workforce shortages.

Amazon is an e-commerce example:
15 Amazon facilities in the NJTPA region with more under construction.
Amazon has both mid-mile (fulfillment centers) and last-mile (delivery stations) in the NJTPA region.
7 fulfillment centers over 1 MSF in size
One Amazon Prime Now (one-hour delivery service) facility.

In the warehouse distribution industry there is the ability to shift to mid-mile because of changing workforce needs.
The big facilities employ hundreds of workers. The small, quick fulfillment centers employ smaller numbers. The change in fulfillment centers and emerging workspaces require more associated parking and accessibility.

Origin and destination patterns are changing.
Other options beyond single occupancy are available for employees.
Needs to be an effort to efficiently move workers to/from jobs to minimize disruption and employee turnover.

NJTPA is working on several freight initiatives:
Freight Initiatives Committee – state and local partners convening to address freight challenges.
Freight Rail Industrial Opportunity (FRIO) Corridors Program – Public/private partnership to identify and address barriers to freight access to industrial properties.
Goods Movement Community Engagement Tool
Truck Parking and Rest Area Inventory Update – Truck parking is an issue and rest area inventory updates are taking place.
- Pilot Freight Concept Development Program – Advancing regional and local freight initiatives that have been identified through planning studies conducted by NJTPA sub regions.
- The region is seeing trends of multi-story grow houses for food production.
- Promoting collaboration is necessary because the movement of goods does not recognize jurisdictions. This is continual through the Council of Port Performance and MAP Forum.
- Bottom line – Finding the most efficient transportation route is key.

**Marygrace Parker, Director, Freight and Innovation in Transportation, Interstate 95 Corridor Coalition**

- I-95 runs from Maine to Florida with access to large urban areas and as well as rural locations.
- The I-95 Corridor Coalition addresses freight performance across the jurisdictions located along I-95. Members include:
  - 16 states and the District of Columbia
  - 2 Canadian provinces (Quebec and New Brunswick) as associate members
  - Multi-disciplinary members – over 100 federal, state, regional, and local transportation agencies; transportation and transit authorities; and representatives of railroad, trucking, and law enforcement entities.

- The I-95 corridor includes:
  - 21 percent of U.S. road-miles with 35 percent of national vehicle-miles traveled
  - 565 million+ passenger and freight trips per year longer than 100 miles
  - Multi-modal access – railroads, ports, airports
  - 10 percent of the U.S. land mass and 37 percent of national population
- Interoperability across borders is critical.
- Freight movement is increasing nationally and particularly along the East Coast.
- This means freight supply chain performance monitoring is critical.
- Consumer demand for faster delivery via e-commerce is shifting brick-and-mortar logistics.
- FHWA’s National Freight Fluidity Monitoring Program:
  - Move supply chain performance monitoring into real-word application.
  - Support state and regional fluidity measurement programs (e.g., pilots in Greater New York and New Jersey, Chicago).
  - Measure travel time in terms of days or hours of transit and dwell time; travel time reliability measured as the 95th percentile of travel time in days (or hours); transportation cost in current dollars.
  - Modal coverage, including highways, railroads, and waterways.
  - Measure will report high-level performance of supply chains.
- Why is it important to understand supply chains?
Supply chains are how freight users conduct business.

Supply chain performance is key to economic competitiveness. Show performance from end-to-end and across borders. Identify disruptions and quantify effects.

- Outcomes of FHWA Freight Fluidity Project:
  - Design of a national freight fluidity monitoring program.
  - Data sharing and agreement to support long-term monitoring of key national supply chains.
  - Quarterly report documenting market basket supply chain trends.
  - Workshop to share lessons learned.
  - Two pilot programs.

- Traffic Systems Management and Operations (TSMO)
  - Agency implementation of TSMO to improve operation and management of systems.
  - Traffic Management across borders is critical as incidents don’t stop at borders.
  - Critical need to connect systems and people.

- TMC to TMC information needed to improve the ability to share real-time incident information so that agencies and third-party providers “get it right.”

- Traffic Incident Management institutionalized in operations are not only under DOT purview but also law enforcement. Work with law enforcement to understand freight.

- Freight is often forgotten and misunderstood: “Trucks are not big cars...”

- Truck parking – addressing truck parking requires real-time information dissemination.

- I-95 Corridor Coalition Truck Parking Project
  - In an effort to address truck parking, FHWA funding was used to assess northbound rest areas on I-95.
  - Demonstrated proof-of-concept and deployed real-time information system to identify available parking spaces and communicate truck parking information to truck drivers in a safe, timely, useful, and efficient fashion.
  - Cross-border technology capability tested with sites in Virginia and Maryland.
  - Data collection system (in-pavement sensors) deployed and integrated with host system.
  - Permanent installations deployed with 95 percent accuracy rates in northbound public rest areas.
  - VDOT agreed to continue to operate and maintain the “TruckNPark” system when the funding ended.
  - System will be fully integrated into Virginia DOT Statewide ATMS.
  - Real-time information available via VDOT’s 511 and “SmarterRoads” portal to public and to third-party developers/apps (e.g., NATSO’s Park My Truck).

- I-95 Corridor Coalition Truck Parking Workshop
Participants from operating agencies (e.g., state DOTs, turnpike/toll authorities)

Lessons learned from I-95 Corridor Coalition Truck Parking Project

Peer exchange included other truck parking initiatives in corridor (i.e., Florida, Virginia, PA Turnpike) and outside corridor examples (Minnesota and Missouri)

Real-time information from agency ATMS and agency to “hub”/third party

Examine key changes impacting truck parking including Electronic Logging Devices and e-commerce.

What can agencies do to address truck parking challenges?

Capacity expansion of truck parking locations – private and public sector solutions including better utilization of facilities (e.g., private operators of truck stops, distribution/warehouses.

Incorporate truck parking in planning, new projects and expansions, promote low-cost reuse of facilities.

Education/outreach to key stakeholders, including the general public.

Real-time information dissemination for truck drivers.

Where to park – know how far/how long before a space is found.

Solutions must work statewide/corridor-wide/app-wide and be interoperable. There needs to be the ability to give technology to users freely.

Is the point of investment where the trucks are overflowing?

Share truck parking work results.

I-95 Corridor Coalition report will be released during the Coalition Truck Parking Symposium, Fall 2018.

Eastern Corridor states have high incidents of vehicles crossing borders.

Ability for trips to be “seamless” will be critical, especially for trucks due to trip lengths and multiple jurisdictional crossings.

Bottlenecks (both highway and rail) are important to address across corridors in order to not “shift the bottleneck across borders.”

Autonomous systems will produce significant amount of data:

This data needs to be accessible; privacy concerns recognized.

Data for planning/investment should be shared more often and more economically.

Continued expansion of open road tolling/e-tolling necessitates addressing toll violators for lost revenue, accuracy critical in enforcing.

Connected/Automated/Autonomous Vehicles:

Technologies deployed may have different challenges/adaptability than other corridors (e.g., truck platooning).

Deployment of mixed-mode or truck-only lanes may pose challenges due to land use limitations, congestion/capacity availability, and/or public acceptance.
o Need to examine issues/challenges/barriers/opportunities for Multi-State/East Coast seamless and realistic deployment (I-95, I-81 corridors).

o Can we learn from other experiences (i.e., tandems/turnpike doubles)?

o Where will truck platoons “make up/break up” on highway system? The identification and development of break-up lots might be important as trucks traverse the country using automated vehicle technologies.

o Autonomous vehicle testing in the western U.S. does not represent conditions along the East Coast (e.g., rural nature of roads, snow, ice, topography).

• Workforce continues to be an issue in the transportation industry.

  o It is important to keep up the knowledge base to train drivers so they can continue to grow professionally and increase retention. Industry trends change continually. There is the need to keep ahead to appropriately address policy, planning, operations, and investment decisions.

  o Need to invest in and support freight capacity professional development.

  o I-95 Corridor Coalition Freight Academy is a six-day immersion boot camp for the public sector to help understand the needs of the freight industry.

  o Next academy is Spring 2019.

• Action steps:

  o Recognize the uniqueness of the region and how this influences projects, including technologies.

  o Improve public and private sector collaboration.

  o Forums convened by I-95 Corridor Coalition, I-81 Corridor Coalition, AASHTO, NASTO, PennDOT.

  o Private sector participation in freight professional capacity development such as the Freight Academy.

  o Share information, strategies, best practices in order to leverage work to save time and money.

  o Emphasize “collaboration” over competition by identifying and seeking out multi-state, multi-corridor research, activities, projects.
Andy Alden, Executive Director
Interstate 81 Corridor Coalition

- Research is being conducted on eco-transportation alternative systems, automating the last mile, and the use of drones.
- There is an increase in handling and transfer of freight, i.e., increased granularity in freight movement. This requires more space to handle and transfer freight.
- Population shifts across the U.S. and to the West Coast are influencing transportation.
- Trucking companies include many smaller operators. Federal and state regulations impact small businesses from a cost perspective.
- Even if rail intermodal use doubles, rail freight will still account for less than 2 percent of freight movement.
- The density of traffic from freight does not have as big of an impact on I-95, which includes denser development as compared to inland roads like I-81.
- A Cumberland County, Pennsylvania, commissioner reported that distribution centers have overwhelmed the Carlisle area. Truck incidents are increasingly interrupting traffic flow.
- Public education and awareness is needed to inform people that trucks are not big cars.
- Economic costs are associated with crash congestion.
  - A study reported that the cost of employees delayed due to a traffic incident is $700/minute or $42,000 per hour.
  - Incident costs delay employees reporting to work on time and cause increased manufacturing costs.
  - I-81 delays are caused by recurring rush hour congestion on non-Interstate roads, delays on I-81 due to crashes, and the elevation profile of I-81.
  - Crashes can also be attributed to following too closely. Ticketing drivers who loiter in the left lane has helped to reduce incidents.
  - Closing one lane reduces overall traffic flow capacity by 65 percent.
- Connected vehicles are a trend and the private sector is moving forward, with the federal government lagging behind a little.
  - Peloton has implemented truck-to-truck connectivity technology. The real benefit for the trucking industry is the increased fuel savings by reducing drag on connected trucks.
  - Uber is working with Otto to research automated truck work.
  - Autonomous technology will enable the driver to take the truck out to the highway and turn over the driving through autonomous technology.
- Truck parking is a national problem. Truck drivers are having a hard time finding the right parking space (place) at right time.
  - With shrinking fuel tax bases, the use of general funds to address truck parking might need to be considered.
- UAV Technology
o UAV incident response is 45 minutes versus 2 to 3 hours.
o Tethered drones can be used to monitor traffic conditions.

Moderator Questions

QUESTION
Western Pennsylvania and Ohio are trying to integrate freight maintenance considerations into highway development in anticipation of autonomous and connected vehicle deployment. Items such as mandatory striping for autonomous vehicles could be accomplished before the technology is fully deployed. Are there other things that can be accomplished that are simple? Autonomous sensors on trucks and cars are becoming available? How are truckers using sensors?

ANSWERS
Marygrace Parker – We still have driver behavior to address. When looking at truck/vehicle interactions, it is most often the driver of the passenger car that is responsible. Vehicle-to-vehicle connectivity technology is not yet in place. Volvo Trucks is working on such technology.

Andy Alden – Education is an issue. We need to create an environment to get to deployment of autonomous vehicles. We are not teaching people how to use the assistive technology that is currently in vehicles. Explain how adaptive cruise control can be used to maintain a safe driving distance in front of you. If a truck brakes hard, the adaptive cruise control could be disabled. There needs to be better education about the interaction between light and heavy vehicles.

Featured Lunchtime Speaker

Darlene Heller, Director of Planning
City of Bethlehem

- Darlene Heller introduced Ed Konjoyan.

Ed Konjoyan, Senior Vice President
Majestic Realty
• Freight & Logistics
  o Every day is a Freight Day
  o Freight is the lifeblood of our economy, moving at all hours of every day.
  o Freight includes raw materials, work in progress, inventory, and finished goods.
  o It is transported by truck, train, ship, and aircraft.
  o Freight goes unnoticed. Similar to an offensive lineman, freight gets no praise for doing its job. It only gets noticed when something goes wrong.
  o Freight is “what,” and logistics/goods movement is the “how.”
  o Supply chain breakdown:
    ▪ 50 percent transportation
    ▪ 22 percent inventory
    ▪ 10 percent labor
    ▪ 8 percent customer service
    ▪ 4 percent rent
  o Freight does not move without infrastructure planning, funding, and construction.
  o Freight infrastructure needs to be smart, sensible, and what a community wants and can live with.
  o Freight and logistics are mostly invisible but significant.
    ▪ Spending in the U.S. logistics and transportation industry totaled $1.48 trillion in 2015, and represented 8 percent of annual gross domestic product (GDP).

• Majestic Realty Co.
  o Majestic turns raw land into thriving logistics parks.
  o Long-term, build-and-hold business model
  o Own and manage a portfolio of approximately 80 MSF.
  o Largest privately-owned light industrial developer and owner in the U.S.
  o Virtuous Cycle of Vertical Integration through:
    ▪ Majestic Management Co. (MMC) – day-to-day tenant interaction, design and operational improvements of portfolio buildings.
    ▪ Commerce Construction Co. (CCC) – In-house design and construction with feedback from MMC and MRC to design/build projects value engineered for long-term ownership.
    ▪ Majestic Realty Co. (MRC) – Works with CCC to assess viability of land opportunities. Entitles, finances, develops, markets, and leases building to tenants.
  o How do you manage onslaught of development?
  o Development brings about direct, indirect, and induced economic benefits.
  o The key in managing the transition is to “skate to where the puck is going to be, not where it has been.”
Majestic Realty Foundation was established to be in communities for the long haul.

With an 80 MSF portfolio, Majestic sticks to the fundamentals in real estate industry.

E-commerce and the last mile fulfillment are increasing.

BCO beneficial cargo owner

New transportation infrastructure and technology is constantly being developed, e.g., “drone hives.”

Why Eastern PA?

The Lehigh Valley is in transition. It is managing the transition into a more developed area.

Similar to what Lehigh County Executive Phil Armstrong said earlier, it is about location as well as population and infrastructure.

Location + Population + Infrastructure = Inland Empire Northeast.

Freight is the lifeblood of the economy and the aorta runs through Eastern Pennsylvania.

- 32 percent of the U.S. population is within 500 miles.
- 9 percent of the U.S. population is within 100 miles.

E-commerce is a disruptor and the last mile to population is key.

- E-commerce is a disruptor to both transportation and real estate. There were 7,027 announced store closures in 2017 and 2,050 announced store closures in the first quarter of 2018.
- Many malls are at risk of closure due to e-commerce.
- As an example, the Schuylkill Mall was demolished in early 2018 and is being replaced by two industrial buildings.

Panama Canal expansion is also a disruptor.

- A third set of locks added capacity.
- Larger locks = bigger ships = lower cost.
- New locks increased container ship capacity from 5,000 TEUs to 12,000+ TEUs.
- The raising of the Bayonne Bridge by 64 feet enables the Port of New York and New Jersey to receive post-Panamax cargo ships.
- All water routes are available to transport goods to the Eastern U.S.
- Water cargo shipping is shifting to the Northeast due to similar time and lower cost that West Coast ports.
- Via Panama Canal – 22 days, all-water.
- Via LA/LB Port – 14 days water, 4 to 7 days rail to Northeast
- Walmart was shipping 80 percent out of Southern California in 2002; today ships out 15 percent.

Eastern PA versus Southern California’s Inland Empire

Inland Empire

- #1 freight logistics market in country, in San Bernardino and Riverside counties
- Access to largest seaport complex (LA/LB)
- Access to second-largest metropolitan population
- More land available for larger buildings
- More business-friendly
- 500 MSF light industrial market size
  
  o Bethlehem – Inland Empire NE
    - Light industrial market size – Eastern Pennsylvania and New Jersey (1.3 BSF) versus LA and Inland Empire (1.5 BSF)
  
  o Seaport comparisons (2017)
    - Los Angeles, CA – 9.3M TEUs
    - Long Beach, CA – 7.5M TEUs
    - New York and New Jersey – 6.7 TEUs
    - PhilaPort – 362,812 TEUs with increased capacity to 1 M TEUs

- Air Cargo
  
  - Greater LA/IE - 2.583 million metric tons
  - Eastern PA/New York and New Jersey – 2.521 million metric tons

  o Amazon ships more merchandise, has more flights, and serves more people out of LVIA than any of the other 10 Prime Air facilities in the U.S.

  o Freight tonnage should be declining as should associated buildings and space for storage because products are getting smaller and are packaged differently.
    
    - Based on Pennsylvania’s comprehensive freight movement plan, there is a projected increase in freight from 1,145.5 million tons in 2011 to 1,872.2 million tons by 2040.
    - The value is double but we are worried about tonnage. Some areas that might have greater growth based on tonnage say that freight will grow.

- Majestic Bethlehem Center
  
  o Pennsylvania’s Act 2 enables state and federal sign-off for environmental liability (Brownfields cleanup program).
    
    - Acquired 441 acres and performed extensive environmental characterization.

  o Planned 8 MSF including flexible zoning, foreign trade zone, economic incentives
    
    - On-site rail for direct rail-served buildings
    - Adjacent intermodal which eliminates drayage costs and present heavy-haul opportunity.
    - New road infrastructure
    - Intermodal
    - Rail to buildings
    - Foreign Trade Zone
    - Build on spec

  o Forward-thinking infrastructure improvements to I-78 by LVIP.
    
    - Infrastructure access to Commerce Center Boulevard to unlock land.
    - Two left-turn lanes looking forward to planning infrastructure.
Walmart Majestic dedicated e-commerce facility.

Trick of the facilities is car parking.

1 MSF is 21 football fields.

Labor is addressed through:

- Training – Program in Supply Chain Management and Logistics Technology at Lehigh Career & Technical Institute
- Helping job seekers/employers find matches – PA Career Link
- Workforce transportation – LANTA provides public, fixed-route bus service in Lehigh and Northampton counties.
- There are 16,000 unemployed – the population of Carlisle.

Plenary Session: Multimodal

From left: Rudy Husband, Joseph Fitzpatrick, Jim Walsh, Paul Kent

**JOSEPH FITZPATRICK, ESQ., SHAREHOLDER AND FOUNDER FITZPATRICK LENTZ & BUBBA, P.C. (MODERATOR)**

- Shared one case study about the changing rules of supply chains.
- Lehigh Valley Rail Management vs. Northampton County Board of Assessment Appeals.
  - A specialty tax assessment case; which developed a modern approach to rail right-of-way, and indirectly, multimodal freight transportation, as well as marketplace and technical realities.
- Pennsylvania has property tax exemptions for public utilities through the Public Utility Realty Tax Act (PURTA).  
  - Several years ago, Northampton County unexpectedly removed the PURTA exemption status for much of LVRM’s intermodal facility in Bethlehem.

---

2 Pennsylvania Department of Revenue. PURTA is levied against certain entities furnishing utility services regulated by the Pennsylvania Public Utility Commission or a similar regulatory body. The Commonwealth imposes this tax on public utility realty in lieu of local real estate taxes and distributes the local realty tax equivalent to local taxing authorities.

• PA Department of Revenue and Northampton County took the view that railroad right-of-way (exempt under PURTA) was limited to “the rails and the areas in between.” This resulted in increased tax obligation.

• The opinion did not recognize the operational need for engineered aisles for packers, container car storage, or operations areas.

• LVRM appealed the assessment determination and lost. The case was appealed to trial court and LVRM lost again (CSX decision from Delaware County).

• After CSX decision, the Court allowed LVRM to present additional testimony on intermodal transit and nature of the technology.

• LVRM invoked statutory construction laws and history of intermodal transit in an additional trial hearing. The purpose was to establish the largest area of intermodal facility as necessary under PURTA statute.

• The taxing authority cited 19th Century cases to support narrow definition of railroad right-of-way as exempt “public utility realty.” Among others, 1869 case cited by County to support traditional limited government view of railroad right-of-way.

• Commonwealth Court held that intermodal facilities were akin to railroad “switching yards.”

• Take-away: Industry needs to be proactive; legislature, local government, industry representatives must be educated on the changing face of freight transportation.

PAUL KENT, SENIOR VICE PRESIDENT FOR PORTS & INFRASTRUCTURE
NATHAN ASSOCIATES, INC.

• Mentioned Kuznets Curve – As an economy develops, market forces first increase and then decrease economic inequality.

• Border is country-to-country. Challenges are very similar but different.

• Several strategic drivers are shaping logistics.

• Global economy and trade growth:
  o The gap between GDP and trade growth is narrowing.

• Excess fleet capacity/liner concentration [larger shipping companies are increasing market share at the expense of smaller companies].
  o New and larger alliances are emerging that are being driven largely by excess capacity.
  o Consolidations have taken place over the past 15 or 20 years.
  o The top five carriers control 62 percent of container trades, an increase from 44 percent just four years ago.

• Global Arctic Route? The New Silk Road.
  o Arctic area is navigable year-round and the Chinese have embraced.
  o If that happens, Suez and Panama Canals lose. Suez Canal at risk of losing 60 percent of its trade.
Panama Canal at risk of losing 30 percent of its trade. Panama Canal is seeking to expand to four locks to accommodate ultra-large carriers.

When the Panama Canal expansion was finished it was already obsolete.

- 3D as a disruptive technology:
  - The last value-added is as close to the consumer as possible. 3D printing is a disruptive technology as it enables this to happen.
  - Manufacturing benefits.
  - Reduces raw material input waste.
  - Reduces lead time for developing prototypes.
  - Customizable.
  - Shortens supply chains with renewed emphasis on local manufacturing and distribution.
  - Assuming the current availability of 3D printing technology, an estimated 15 percent of trade flows can be substituted by its use.
  - As an example, Adidas produces shoes in Vietnam. 3D printing will allow speed factories to be located close to consumers. This will reduce the supply chain. An estimated 95 percent could be manufactured by 3D printing.
  - The limitation is the expense associated with the use of power and “ink” is expensive. A total of 30 percent to 35 percent of manufactured goods could be manufactured using 3D printing.

- Intelligent logistics systems:
  - Enabled by the Internet for things with transactions facilitated and secured by blockchain.
  - Freight and truck idling equals lost time and revenue. Intelligent logistics systems tools are available to mitigate and provide sensing and sense-making.
  - Enables supply chain managers to re-route trucks to avoid congestion points or avoid creating them.
  - Direct trucks to alternative routes or other pick-ups or deliveries until congestion dissipates.
  - Through predictive analytics, traffic managers weigh congestion likelihood and revise algorithms to stage freight movements and available assets.
  - Data analytics can be used to predict the probability of a breakdown.

- Improved supply chain efficiency:
  - Average cost of delay to shippers’ operations = $56 per hour.
  - Eliminating port inefficiencies can increase GDP growth by 0.5 percent.
  - Reducing delay times by 70 minutes on South Africa portion of Maputo Corridor allows trucks to undertake 5.41 more trips/vehicle/year.
  - Supply chain managers challenged to increase freight velocity which requires reducing idle time of both freight and equipment.
o Desire to improve efficiency encouraged emergence of disruptive technologies for improving supply chain efficiency through technologies such as 3D printing and the Internet (things to buy).

• Driver implications caused by the global supply chain:
  o Global GDP growth slowing – countries are enjoying GDP growth shift to purchases of services, peak impact of trade agreements realized, substitution of labor with capital
  o Alliance rationalization efforts likely to result in fewer vessel calls/higher peak load volumes.
  o Pennsylvania is ranked fifth of the top 10 states with the highest congestion costs to the trucking industry ($422 M; 2013 dollars).
  o Competitiveness extends beyond port gates to markets. The sensitivity to time, cost, and reliability imperative for attracting customers/tenants.
  o Supply chains likely to be impacted by emerging disruptive technologies.
  o Implement ways to improve efficiencies or else other people will catch up.

• Freight logistics implications
  o Conditions outside port gates are as important as those inside the gates.
  o Greater reliance on competitive intelligence gathering – Identify transport logistics chains associated with relevant current and prospective markets and measure TLC performance: time, cost, reliability, and variability, and mitigate chokepoints.
  o Establish stakeholder collaboration – Conduct regular forums for exchanging views on freight system issues, lead cooperative efforts to communicate and advocate for needed logistics chain improvements, collaborate to pursue strategic opportunities such as logistics distribution.
  o Organize strategic capture sessions with relevant partners to pursue leads.
  o Play leadership role in leveraging government assistance and collaboration for improving hinterland transport systems.
  o Engage in P3 transactions.
    ▪ P3 likely to become more commonplace out of necessity because the global infrastructure gap will generate investor competition and ports must be able to develop bankable projects to secure P3 deals. Potential P3 projects include truck staging and linked freight assets. Membership club and insurance investment.

• Addressing truck parking:
  o Port terminal operators use a terminal operating system. Vessels also have a window system for loading and discharge. Couldn’t the same type of system be used for a truck appointment system?
  o If an appointment is scheduled, trucks would need to report on time. Truck staging areas could be developed to create micro-economies. This would allow drivers to get other tasks accomplished while waiting to make a scheduled delivery. It would provide a comfortable and safe space to park.
State contribution doesn’t always have to be equity but could also be access to land.

- The future of freight logistics is historic. “In 50 years...the cost of distributing necessities and luxuries has nearly trebled, while the production costs have gone down one-fifth. What we are saving in production we are losing in distribution.” - Ralph Borsodi, The Distribution Age, 1929

**Rudy Husband, Vice President of Government Relations**
**Norfolk Southern**

- Freight movement in the U.S. by percent ton-miles:
  - Rail – 39.5 percent
  - Truck – 28.6 percent
  - Pipeline – 19.6 percent
  - Water – 12.0 percent
  - Air – 0.3 percent

- Truck versus rail – In transportation world we are competing partners.
  - Compete, but interchange lots of business.
  - Convert truck trips to rail, yet trucking companies are some of largest customers.
  - Agnostic about ports. Do not incent one port over the other.

- NS focus is on making connections:
  - 19,500 route-miles across 22 states and the District of Columbia
  - 20 percent of NS business is with short lines; more than 250 short lines.
  - Doubling more than 40K network lines.
  - 43 ports served
  - 61 automotive facilities served
  - 55 intermodal terminals
  - 41 rail-truck transfer facilities

- Market Outlook
  - Merchandise such as chemical, lumber, paper, grain, etc., have a strong outlook. Downside is the fluctuation of the automotive market. Big spikes in auto traffic are followed by slowdowns.
  - Economy is good so to set prices we are at capacity.
  - Intermodal is the big story. Tight truck capacity. Dynamic changes in hours of service and driver shortages make it hard to be in long-haul trucking. E-commerce capacities have grown. Pricing improvements in intermodal.
  - It is interesting that the new Fed Ex facility in the Lehigh Valley did not consider rail access.
The coal market within the U.S. is not good, but there is strength in exports. Competition from Australia and South America for the China market as China has more than 30 coal-fired power plants.

The availability of natural gas in Pennsylvania has enabled power plant conversion. NS has been moving a lot of frac sand and pipe to allow it to happen.

**Jim Walsh, Senior Director of Operations, PhilaPort**

- The Port of Philadelphia was created in July 1989 as an independent agency of the Commonwealth.
  - Landlord port leasing terminals out to operators and tenants
  - Rebranded as PhilaPort in 2017.
- PhilaPort has 17 facilities on over 1,000 acres
- Commodity Unit/Tonnage (2017)
  - Dry container – 30 percent
  - Refrigerated container – 24 percent
  - Liquid bulk – 22 percent
  - Forest products – 13 percent
  - Steel – 4 percent
  - Auto – 4 percent
  - Cocoa beans – 3 percent
- Port rankings in 2017 – First in cocoa beans, 8th in steel and forest products, 9th in auto, 10th in liquid bulk, and 16th in container
- Governor Wolf released $300 million in state funding for port improvements (Port Development Plan) including:
  - Installation of new cranes to accommodate Post-Panamax vessels.
  - Construction of Southport Auto Terminal to increase from 155,000 units to 350,000 units. The property was former Naval housing. The terminal will include a vehicle processing center. Vehicles will be 100 percent trucked out.
  - Improvements at the Tioga Marine Terminal to increase forest product imports from 465,000 metric tons to 540,000 metric tons.
  - Wood pulp from Brazil is transported to Chester and Mehoopany (Wyoming County) as a renewal resource.
  - A new warehouse is being constructed to accommodate additional wood pulp year-round.
- Port improvements will result in:
  - Increase in TEUs from 500,000 to 900,000
- Increase in jobs from 10,341 to 17,020
- Switch from diesel to electric
- Increase in annual tax benefits from $69.6 M to $108.4M
- Total container volumes (TEUs) have increased from 287,683 in 2011 to 545,408 in 2017.

- Delaware River Main Channel Deepening Project
  - Dredging in the Delaware River was necessary to service ships coming from the Panama Canal which now allows for one-way traffic.
  - Current 40-foot depth to be deepened to 45 feet at mean low water
  - 103 miles in length
  - Cost of $392 million
  - 16 million cubic yards of dredge spoils
  - Completion targeted for December 2018.

- PhilaPort granted $90,000 in funds (2018) to The Pilots’ Association for the Bay and River Delaware for a five-day simulation training program to handle ULCV coming from the Panama Canal.

- Pilots and tug captains receive training at a Baltimore facility to determine go/no-go decisions based on tide and wind.

- Cocoa beans are processed in Chester and sent up to Hershey.

- Liquid bulk ethanol chemicals

- Packer Avenue Marine Terminal started receiving neo-Panamax vessels in August 2016.
  - Current vessel capacity is 12,200 TEUs
  - 12,000 TEUs vessels 22 containers wide called the Philly stow.
  - Need rail installed in Packer Yards

- Tidal action of the Delaware River impacts ships coming in and out.

- Vessels cannot go farther north than the Walt Whitman Bridge. As you get to the Ben Franklin Bridge there is a six-foot tidal window in Philadelphia.

**Moderator Questions**

**QUESTION**

What questions should summit attendees be asking each other and what are greatest challenges?

**ANSWERS**

Jim Walsh – Packer Avenue receives 1,200 to 1,500 trucks per day. Need to look at locations for offsite staging. Trucks travel in and block city streets. Work with the city and state to develop staging areas to get trucks off of city streets and go intermodal.
Rudy Husband – Planning projects requires a look at the long horizon. Everyone is proud of the new FedEx facility but there is no rail access. Dumping hundreds of trucks onto the road will have a traffic impact. Building a 3-mile spur to serve such a facility might more economical in the long run as compared to the impact on local roads from increased truck traffic. Look for opportunities for multi-modal facilities, not just truck or rail.

QUESTION

P3 projects are tougher in this part of world than others. What do you see as implementation obstacles?

ANSWER

Paul Kent – Bankability. It is important to take a banker’s point of view when looking at project. Market assessment, trades, time, and cost competitiveness. How much risk is there? When engineering is added, what is an order of magnitude cost estimate? Is risk balanced? A deal doesn’t always need to be cash contribution, but available land can be used in the project. There is no reason a truck parking area has to be so close—it can be 30 miles away.

QUESTION

How do you spur public-private between DOT, rail, and the federal government? How do you move projects forward?

ANSWER

Rudy Husband – PennDOT is good at supporting rail freight projects. Worked very well together to invest in projects to leverage public and private money. Projects have clear public benefits. USDOT grant programs.

Truck Parking P3

ALAN WILLIAMSON, SENIOR PROJECT MANAGER
HNTB (MODERATOR)

JEFF PURDY, TRANSPORTATION SPECIALIST
FHWA OFFICE OF FREIGHT MANAGEMENT & OPERATIONS

- Section 1401(c) of MAP-21, known as “Jason’s Law,” places a national priority on safe truck parking. It required USDOT to conduct a survey and comparative assessment of commercial vehicle parking facilities in each state.

- Results of survey and assessment (survey being updated in 2018):
  - Truck parking capacity is a problem in all states, although the level of awareness varies significantly among states.
The survey identified the number of truck parking spaces by type in each state compared to the volume of truck traffic.

Consistent, continued measurement is important to understand dynamic truck parking needs and whether the situation is improving.

Truck parking analysis should be a component of State Department of Transportation (DOT) and Metropolitan Planning Organization (MPO) freight plans, as well as regional and corridor-based freight planning.

Public- and private-sector coordination is critical for analysis and project development to address long-term truck parking needs.

- Truck parking focus areas:
  - Parking capacity – Develop creative and innovative means to provide parking capacity to prevent damage to infrastructure such as shoulders. Some state DOTs are converting closed rest areas or evaluating truck parking accommodation at weigh stations. Assess both parking capacity and demand in specific regions and corridors. A shortage was identified in major metropolitan areas, especially along the I-95 corridor.
  - Technology and data - Use of technology and data to understand parking demands and maximize utilization of parking. Develop truck parking data information system.
  - Funding, finance, and regulations – Provide innovative funding and finance to develop, operate, and maintain parking facilities.
  - State, regional, and local government coordination – Coordination among government entities is essential, as is understanding how to adapt to future needs, trends, and technology. Coordination is needed to include truck parking in local land use regulations.

- Use of partnerships to champion opportunities:
  - Need
    - Local - Support business and industry
    - State – Support safe transportation
    - National – Support economic development
  - Location
    - Determined by origins and destination, corridors, metro regions, and hours of service.
  - Resources
    - Funding /financing - P3s, land, infrastructure, and technology
  - Responsibility
    - Public – federal, state, MPO, local
    - Private – Facility operators, technology companies, drivers/carriers

- Incorporate truck parking into every stage of the supply chain:
Local economic development organizations can help to identify safe locations for trucks to park.

Share information at all levels and industries.

**KEVIN STEWART, PRESIDENT AND CEO**  
**PENNSYLVANIA MOTOR TRUCK ASSOCIATION**

- Trucking industry has 31,000 trucking companies.
- The American Transportation Research Institute identified several concerns with truck parking as identified by drivers.
  - ELDs are the number one concern.
    - Logs were previously tracked by pencil.
    - After 14 hours of work, a driver is required to take 10 hours of rest. If stopped by law enforcement, the driver is placed out of service for 10 hours.
  - Truck parking is the number two concern.
    - Most drivers have an advance plan about the general location they aim to reach for their required rest. Things don't always work as planned and accidents and other delays cannot be predicted.
    - Parking demand exceeds inventory.
    - 31 percent of drivers note a parking shortage.
    - 70 percent of drivers prefer private truck stops.
    - Drivers choose parking based on destination or route of travel.
    - Parking is not necessarily based on amenities.
  - Hours of service – number three.
  - Amenities – number four.

- Low-cost fixes to address truck parking:
  - Rest areas that are now closed. Inspection-only facilities.
  - 19 in Pennsylvania are now closed.
  - The problem is state rest areas are limited to no more than two hours due to laws.
  - Police and troopers are chasing truckers off of shoulders.
  - FFCMA could potentially relax hours of service rules for personal conveyance.

**JOE GURINKO, DEPUTY DIRECTOR**  
**PENNDOT P3 OFFICE**

- What is a P3 project? Contractual agreement between public and private entities to:
  - Design, build, finance, operate, and/or maintain transportation facilities.
- Transfer responsibility to the private sector for a defined period of time.
- Ensure the private partner receives payments.

**Benefits of P3s**
- Accelerate the delivery of major transportation projects.
- Access private-sector skills and innovation.
- Leverage private investment to enable major projects.
- Shift key risks to private sector (away from taxpayers). Private expertise is needed to manage risk.

**Why undertake a P3 project?**
- When the public sector can get more value using P3 approach by lower construction and/or operation costs, time savings in construction and/or delivery, and innovation in technology or expertise.
- Public entity must assess “value” for money analysis, of risks transferred to private partner, of potential for efficiencies, and qualitative factors.

**Important considerations for P3 projects:**
- P3 is a procurement tool and not a funding source.
- Transferring risks to the private sector comes with a cost.
- Accelerating project delivery can have potential long-term impact.

**A Request for Information (RFI) issued by PennDOT is the first step.**
- An RFI is an exploratory process primarily to gather information. It is used to help make a decision on next steps. RFIs are seldom the final stage and are often used to build the P3 process.
- A P3 subject area is not a core service for PennDOT like truck parking.

**Truck parking is not a problem until it is. Not only for through traffic but for drivers in city. Repurpose city land to redevelop for truck parking.**

- Hoteling for trucks.
- ELDs have leveled the playing field. Truck parking is a system of inefficiency.

**Truck Parking Issues/Solutions**
Alan Williamson facilitated summit attendee discussion to identify truck parking issues and solutions. The *Freight Trends Impacting Eastern Pennsylvania* section includes a matrix summarizing attendee suggestions.

- A P3 application could be the identification of available lots for truck parking.
- Truck drivers need to know real-time information. This information varies by driver and type of electronic application being used.
• Variable message boards would be helpful because we don’t want truck drivers on their cell phones searching for a spot.

• Look at the PA Turnpike system to monitor parking.

• Florida includes truck parking information on its 511 website and at all state rest areas.

• Make sure that truck driver app formats are interoperable.

• Regulations prohibit retail sales at rest areas to develop amenities. A solution is to change regulations. Develop rest areas and allow for retail sales.

• Use underutilized public properties to address problem.

• In areas of truck parking deficit, outreach with communities and planning commissions was conducted. Outreach resulted in zero interest. Land is being saved for job producers.

• Slip ramps into major commercial retail development could be potential locations for truck parking.

• Work with communities (local and regional agencies) to be more proactive to address truck parking to minimize impacts.

• Private companies like Flying J understand the economics of trucking. Why aren’t private sector developers stepping up? What are you willing to pay?

• Pay a fee for rest and reserved parking. It is helpful for a driver to know that is where they are going to be—just like making a hotel reservation.

• Develop staging areas around Port of New York and New Jersey and Lehigh Valley. This can reduce the need for overnight truck parking.

• Truck parking is an economically driven problem. Difficult to make money on a truck parking facility. There are expenses such as buildings, paving, oil dripping, maintenance. Truck drivers cannot afford to spend the money on overnight parking. How does an operator make money?

• Funding/financing is a problem: The public can’t take the expense. Developer can’t make a profit. PennDOT doesn’t have the funds.

• It is up to municipalities to require staging areas and lounges at distribution facilities. Put in basic parking requirements such as X number of docks requires X number of extra truck spaces.

• Develop standards that municipalities must abide by. FHWA cannot tell local communities what to do.

• Does FHWA have standards for truck parking? ITE and APA to look at recommendations for zoning standards to one staging for every loading dock.

• Working on developing a knowledge base of issues the industry is dealing with.
  
  • What about truck parking at large warehouse distribution facilities that are not new (retrofits)?

• Low-hanging fruit—short term, not truck parking but fatigue-related crashes. Reduction in classes downstream of available rest areas. We are reducing by providing the places to rest.

• Abandoned plant sites could be considered and possibly converted to truck parking areas as a potential low-cost option.
Guided Tours of Manufacturing and Distribution Facilities in the Region

Overview

Day 2 of the summit program included guided tours of manufacturing and distribution facilities in the Lehigh Valley. The tour included onsite visits to Zulily’s distribution center and Mack Truck’s manufacturing facility, as well as a drive-by tour of FedEx Ground’s site development. Drive-through tours of industrial sites were also conducted including: Lehigh Valley Rail Management, LVIP VII, and the West Lehigh County manufacturing hub. During lunch, municipal officials from Upper Macungie Township and Allen Township (pictured, above) provided insights on working with the business community and residents during ongoing periods of intense land development.

Two charter buses transported summit participants throughout the Lehigh Valley and LVPC staff provided background details on challenges facing the region’s communities, facilities, and infrastructure. A high-level overview of information presented during the tours is summarized in the following section.

Zulily Bethlehem Fulfillment Center

- Zulily’s Bethlehem fulfillment center opened in 2017
  - $44 million investment
  - 800,000 SF facility is located at Lehigh Valley Industrial Park VII on former Bethlehem Steel property.
  - The fulfillment center includes significant company-developed automation and includes 1 million storage bins and 6 miles of conveyors.
- Zulily’s e-commerce model is focused on online browsing rather than direct product searches like Amazon and Zappos. The target demographic is young mothers.
- The company currently employs 3,200 around the country.
- Zulily is now part of Qurate Retail Group which also includes the following retailers: QVC, HSN, Ballard Designs, Frontgate, Garnet Hill, Grandinroad, and Improvements.
• In terms of e-commerce market share, Qurate ranks third, behind Amazon and Walmart.
• Zulily uses major carriers to ship/receive goods (e.g., UPS, USPS, Fed Ex).

**Mack Truck Lehigh Valley Operations**

• Mack Truck’s Lehigh Valley Operations (LVO) is located in Lower Macungie Township.
• The manufacturing facility has been in operation since 1975 and is currently 1 MSF in size.
• Production is increasing. Approximately 60 trucks were constructed per day in 2013; today that number is 130.
• Truck engines are constructed at Mack’s facilities in Hagerstown, Maryland, and transported to the Lehigh Valley facility.
• Nearly 2,300 workers are employed at the facility.
• Expanding the operation requires people (available employees) and communities (local government partner). Challenges include the following:
  o People – Low unemployment in the region makes it difficult to find workers. Workers face longer commutes due to traffic congestion.
  o Communities – Local government is discouraging truck traffic, which is out of sync with industry needs.
  o Need a business/government partnership to address issues.
• About 600 trucks are hauling parts and finished goods to/from Mack (and parent company Volvo Group) facilities in Shippensburg, PA; Hagerstown, MD; and Virginia.
  o About 300 trucks per day travel along PA 100 to/from the Mack Lehigh Valley facility.
  o Deliveries are not scheduled but arrive throughout the day to the plant and warehouse (located directly across the road from the plant). Box trucks are used to transport parts from the warehouse to the plant.
• Available truck drivers are a concern and currently there are not enough drivers to cover daily trips.
• The cost of trucking parts/finished goods has increased from $1.25/land mile in 2011 to $1.75/land mile in 2018.
• While Mack Trucks has traditionally focused on making vocational truck products (e.g., Caterpillar, etc.), it has expanded to the long-haul highway market (e.g., Freightliner)
• Customers are throughout the U.S. and in 19 different countries.
• Several years ago, there was an uptick in the manufacturing of CNG/LNG fueled engines for companies like UPS. CNG/LNG-fueled vehicles are no longer the trend, due to both gasoline prices and the lack of fueling stations.
• The current trend in fuel is improving the use of batteries.
• Between 1960 and 2000 there were not too many changes in the way trucks were manufactured. Starting in the early 1980s there was a shift to fuel economy when manufacturing vehicles.
LVIP VII / Lehigh Industrial Rail Management, LLC

- The Bethlehem Intermodal terminal is located in Majestic Bethlehem Center on part of the 6,000 acres that was the former Bethlehem Steel manufacturing’s coke works.
- Lehigh Industrial Rail Management, LLC, operates the intermodal center.
- There are 7 miles of rail running north–south along the Lehigh River.
- The intermodal facility has 50 miles of track, storage for 1,000 rail cars, and 250 transloading spots.
- A total of 14,000 lifts per month are completed, working seven days/week.
- Infrastructure investments have enabled the intermodal yard to receive double-stack rail cars and increased carload limits from 286K to 315K.
- Discussed expansion plans have included an additional 100-acre parcel to include six tracks with 4.5 miles of rail, and 1,200 transload spots.
- Discussions about developing an inland port at the intermodal facility have been ongoing.

Insight from Upper Macungie Township and Allen Township

- Upper Macungie Township
  - Upper Macungie Township has experienced significant industrial and distribution center construction over the last several decades.
  - Zoning drives land development.
- Education
  - Upper Macungie Police Department has formed the “Good Neighbor Coalition.”
  - The coalition is a partnership among the trucking industry, landowners (such as Liberty and Jaindl), residents, and police.
  - The focus is to develop understanding and collaboration among all partners to ensure the safe and efficient movement of truck traffic throughout the community.
  - An issue identified by citizens has been trucks traveling through residential neighborhoods due to GPS directions.
  - Solutions are developed using a collaborative approach.
- Allen Township
  - Allen Township is recently experiencing a tremendous influx in land development proposals for warehouse distribution space.
  - Between 2013 to 2022 a total of 6.5 MSF of warehouse distribution space will have been constructed in the township.
  - The Township has worked with the developer of the new Fed Ex facility to facilitate $30M in transportation improvements.
  - Road improvements surrounding the new Fed Ex facility will facilitate the movement of 13,000 trips per day (trucks and cars).
**ADDITIONAL NOTES**

- Significant national manufacturers/companies maintain operations in the Lehigh Valley (Behr, Amazon, Ocean Spray, Nestle)
  - Amazon - 12 warehouse facilities
  - Nestle - 4 facilities

- The Lehigh Valley is the largest exporter of bottled water in the country due to high quality groundwater aquifer resources which attract manufacturers such as Ocean Spray and Sam Adams.

- A potential interchange along I-78 at Adams Road is being proposed. This would help serve businesses located in the western Lehigh Valley industrial corridor.
Appendix 1: Program

Day 1 – June 21, 2018

Welcome & Keynote Address
• James Ritzman, Deputy Secretary for Planning, Pennsylvania Department of Transportation
• Phil Armstrong, Lehigh County Executive
• Lamont McClure, Northampton County Executive
• Leslie S. Richards, Secretary, Pennsylvania Department of Transportation
• Bill Wolf, Executive Vice President, CBRE

Morning Session I – Regional Perspectives: Freight trends and issues within the 25-county region
• Becky Bradley, Executive Director, Lehigh Valley Planning Commission
• Steve Deck, Executive Director, Tri-County Regional Planning Commission
• Barry Seymour, Executive Director, Delaware Valley Regional Planning Commission
• Moderator: Erich Zimmerman, National association of Regional Councils

Morning Session II – Beyond the Border: What forces beyond our region should we be watching closely?
• Andy Alden, Executive Director, Interstate 81 Corridor Coalition
• Mary Ameen, Deputy Executive Director, North Jersey Transportation Planning Authority
• Marygrace Parker, Director, Freight and Innovation in Transportation Program Manager, Interstate 95 Corridor Coalition
• Moderator: Joseph Bryan, Vice President, Freight & Logistics Advisory Services, WSP

Lunch and Featured Speaker
• Ed Konjoyan, Majestic Realty

Afternoon Session I – Multimodal: How are ports and railroads addressing changes in supply chains and growing freight volume?
• Paul Kent, Senior Vice President for Ports & Infrastructure, Nathan Associates, Inc.
• Rudy Husband, Vice President of Government Relations, Norfolk Southern
• Jim Walsh, Senior Director of Operations, PhilaPort
• Moderator: Joseph Fitzpatrick, Esq., Fitzpatrick Lentz & Bubba, P.C.

Afternoon Session II: Truck Parking P3: What is the extent of the truck parking problem in Pennsylvania, and how can the public and private sectors work together to address it?
• Jeff Purdy, Transportation Specialist, FHWA Office of Freight Management & Operations
• Kevin Stewart, President and CEO, Pennsylvania Motor Truck Association
• Joe Gurinko, Deputy Director, PennDOT P3 Office
• Moderator: Alan Williamson, Senior Project Manager, HNTB

Day 2 – June 22, 2018

Guided tours of manufacturing and distribution facilities in the region.
Appendix 2: Panelist Bios (presented alphabetically)

Andy Alden serves as the Executive Director of the Interstate 81 Corridor Coalition and leads the Eco-Transportation and Alternative Systems Research Group at the Virginia Tech Transportation Institute. He is a registered professional engineer who has worked in the environmental and information technology fields, and in the development and deployment of vehicle data acquisition systems and related naturalistic research methods. His current focus is advancing safe and sustainable transportation through the application of emerging and alternative technologies. Recent research has focused on automated “last-mile” shuttles, road weather safety, bus transit efficiency, animal-vehicle conflict, applied road salt impacts, and the use of unmanned aerial systems in support of surface transportation.

Mary D. Ameen is Acting Executive Director of the North Jersey Transportation Planning Authority (NJTPA), one of the nation’s largest Metropolitan Planning Organizations (MPOs).

Mrs. Ameen joined the NJTPA in 2006 as the Director of External Affairs, and was appointed Deputy Executive Director in 2012. The NJTPA has responsibility for decision-making, policy formulation, and coordination of all transportation planning in the 13-county northern New Jersey region, including approval of federally-funded transportation projects and annual capital expenditures of over $2 billion.

She is a 2014 Alumna of Lead New Jersey, a fellowship which engages leaders from diverse backgrounds to create systemic change around New Jersey’s most challenging issues.

Mrs. Ameen is licensed as a Professional Engineer in New Jersey, and she is admitted to practice law in the State of New Jersey and in the Commonwealth of Pennsylvania. She is a Fellow in the Institute of Transportation Engineers, and is a member of the Board of Directors of ITS – New Jersey. She also co-chairs the Travel Information Services Committee of the I-95 Corridor Coalition, which supports the development of a multimodal information system to provide agencies and travelers with accurate and timely information.

Previously, Mrs. Ameen served as the Assistant Chief Engineer for the New Jersey Highway Authority and as the Director of Strategic Transportation Policy and Planning for the New Jersey Turnpike Authority.

Becky Bradley is the Executive Director of the Lehigh Valley Planning Commission (LVPC), which serves Lehigh and Northampton counties. She has more than 20 years of experience in city, regional, economic development, historic preservation, and transportation planning. She has been the Executive Director of the LVPC since 2013 and is leading a nearly $4 billion regional transportation planning program, as well as balancing the needs of the Lehig
Valley’s rapidly growing population through LVPC’s county planning responsibilities.

Prior to joining LVPC, Bradley was the Director of Planning, Codes, and Development for the City of Easton. In this capacity she was instrumental in the revitalization of the community, including the addition of the Lehigh Valley’s first sculpture trail, the state’s first road diet, and the opening of over 60 restaurants and shops.

**Joseph Bryan** heads the consulting practice in freight transportation and logistics policy, planning, and management for WSP. He has been a leading contributor to the development of public and public–private freight planning in the U.S., working at the urban, corridor, state, and national levels. His public consulting draws on his professional experience with truckload, less-than-truckload (LTL), air and rail freight companies, where he has held senior positions in marketing and operations. He recently served as a senior advisor to New Jersey’s state freight plan and led plans in Illinois and Oklahoma. He is currently engaged in the creation of freight-centric design standards for the Texas highway system, helping NYMTC respond to new developments in the freight market, managing a statewide air cargo strategy in Washington, and developing new multimodal freight fluidity measures for FHWA and the I-95 Corridor Coalition. Mr. Bryan is a member of the Advisory Committee on Supply Chain Competitiveness of the U.S. Dept. of Commerce, and is a member and past chair of the Urban Freight Committee of the Transportation Research Board. Mr. Bryan earned a BA from Princeton University and an MBA from Dartmouth College’s Tuck School of Business.

**Steve Deck** is the Executive Director of the Tri-County Regional Planning Commission, which serves the Harrisburg MPO area of Cumberland, Dauphin, and Perry counties. He has more than 30 years of transportation and community planning experience as a consultant for multiple firms, providing services to PennDOT, municipalities, counties, and MPOs/RPOs across Pennsylvania. He is a lifelong resident of the Harrisburg area and, as such, has personally witnessed much of the growth and development of the region, particularly in the warehousing and trucking industries.

**Nancy Dischinat** is the Executive Director of the Workforce Board Lehigh Valley. She has over 30 years’ experience in the business of workforce development. As the Executive Director of the Workforce Board Lehigh Valley she works to align workforce development with economic development and education in the Lehigh Valley. This strategy results in economic growth, a universal understanding of skills and skills gaps, and knowledge about the employability, educational, and training requirements needed for work.

Under her leadership, the Workforce Board Lehigh Valley effectively negotiates strategic partnerships and alliances, educates and convenes legislative and policy makers on workforce issues, and builds and manages relationships with
key stakeholders related to workforce, economic development, education, and the community.

Nancy also serves on numerous business and community committees and associations, and is a local, state, and national speaker on workforce issues.

**Joseph Fitzpatrick, Esq.**, is recognized as one of Eastern Pennsylvania’s premier development attorneys. His practice includes real estate, zoning, and related litigation and business. He leads clients’ development teams in major transportation, commercial, and warehouse/logistics projects. He represents client interests regarding negotiations and entitlements with all governmental agencies.

Mr. Fitzpatrick is a Director for public–private sector organization Team Pennsylvania Foundation serving economic development, technology, and employment opportunities in Pennsylvania. He is a Trustee of the philanthropic Stabler Foundation. Mr. Fitzpatrick earned degrees from the University of Pennsylvania and the Temple University School of Law.

**Joseph Gurinko** was named Deputy Director of PennDOT’s Public-Private Transportation Partnerships (P3) Office in June 2017. In that position, he provides strategic support in the areas of program management, project development, and administration to the P3 Board. His current responsibilities include developing a project screening process for proposed P3 projects and serving as the P3 Office liaison to the P3 CNG Fueling Stations Project and the P3 Wetlands Mitigation Banking Project.

Prior to joining PennDOT, Joe spent 33 years as a transportation planner for Lehigh and Northampton counties, where he was responsible for ensuring that the counties met planning regulations to receive federal and state transportation funding.

**Rudy Husband** is currently responsible for Norfolk Southern’s government relations in Pennsylvania and New England, based in Harrisburg, PA. He has worked in the rail industry for 30 years in a variety of labor relations, corporate communications, and government relations positions for both Conrail and Norfolk Southern. Rudy has a BA in Political Science from the University of Vermont and an MA in Education from George Washington University.
Paul Kent has more than three decades’ experience in ports and logistics, having conducted or directed more than 200 projects in nearly 50 countries worldwide in the areas of strategic and master planning, growth strategy analysis, P3 transactions, institutional and regulatory reform, asset and logistics chain performance, and international arbitration. His clients include multilateral financial institutions, national governments, donor organizations, project owners, and investment banks. Before joining Nathan Associates, Paul was Associate Director of Louisiana State University’s National Ports and Waterways Institute. Paul holds a PhD in Maritime Economics from Russia’s Central Scientific Institute for Water Transport Economics and Operations in Moscow, an M.S. degree in Urban Studies from the University of New Orleans, and Master of Public Administration and B.A. in Political Science degrees from West Virginia University. He is currently working on his book, The Business of Sea Ports: A Guide for Practitioners, to be published in 2019.

Marygrace M. Parker serves as the Director – Freight and Innovation in Transportation for the I-95 Corridor Coalition. Mrs. Parker supports and facilitates communication and coordination of multi-agency /multi-state activities, initiatives, and planning studies related to the coalition’s Intermodal Freight and Passenger Movement Committee and staffs the coalition’s Innovation in Transportation Committee, which includes activities related to emerging initiatives such as connected and automated vehicle technologies. Mrs. Parker has managed corridor/multi-jurisdictional freight-related projects. These include I-95 Corridor bottleneck studies for highway and rail such as the highly acclaimed Mid-Atlantic, Northeast, and Southeast Rail Studies, and the I-95 Corridor real-time truck parking pilot project, which has been successfully deployed in five locations in Virginia and is now operated by VDOT. She has also led several port- and maritime-related studies, including the effort that resulted in the I-95 Coalition region’s designation as the M-95 Corridor under the America’s Marine Highway Program. She led development of and serves as project manager for the coalition’s nationally recognized Freight Academy public sector professional capacity-building program.

She has represented the coalition on numerous external planning activities with state and regional transportation systems operating agencies focused on freight and goods movement as well as coordinated operations for traffic management and incident response. She has served on various regional and national committees including the USDOT Secretary’s Marine Transportation System National Advisory Committee and National Highway Cooperative Research project committees, and is currently a member of the TRB Intermodal Freight Transport Committee.

Prior to her work with the coalition, Mrs. Parker served as Director of the Office of Traffic Management for the New York State Thruway Authority. Her
responsibilities included oversight of several bureaus dealing with traffic management and operations, including programs related to commercial vehicle operations.

Jeff Purdy has worked on a wide variety of transportation, land use, and environmental planning projects at the local, state, and federal levels. He currently works in the Federal Highway Administration Office of Freight Management and Operations in Washington, DC. Jeff’s responsibilities include freight performance measures, freight demand modeling and data improvement, and truck parking. Prior to moving to FHWA headquarters, he served as the Technical Services Team Leader and Transportation Planner for the FHWA Wyoming Division, overseeing statewide and metropolitan transportation planning, freight planning, STIP approvals, vehicle size and weight, air quality, transportation enhancements, right-of-way, and research.

Before joining FHWA, Jeff worked for a community and transportation planning consulting firm in Michigan. While in consulting, he had the opportunity to work on a wide range of projects, including community comprehensive plans, transportation EAs and EISs, multimodal transportation plans, highway corridor studies, access management plans, transit projects, municipal parking studies, traffic impact studies, development codes, and urban design plans for downtowns and new town centers. Jeff began his career as a planner for the Air Force, working on base comprehensive planning, NEPA compliance for Air Force projects, and site plans for the military construction program.

Jeff has a Bachelor of Science and Masters of Urban Planning from Michigan State University.

Barry Seymour is Executive Director of the Delaware Valley Regional Planning Commission (DVRPC), the federally-designated Metropolitan Planning Organization for the Greater Philadelphia region, with a focus on transportation, land use, the environment, and economic growth. In his time at DVRPC, Mr. Seymour instituted the first municipal grant program for revitalization of urban neighborhoods and older suburban communities, spearheaded the Pennsylvania and New Jersey Smart Transportation initiative, and is leading a regional planning program to address climate change. He is a recipient of the 2008 Pennsylvania Governor’s Award for Local Government Excellence.

Mr. Seymour previously served as Director of Waterfront and Open Space Planning for the New York City Department of City Planning, and an Environmental Planner with the Long Island Regional Planning Board. He holds a Bachelor of Science degree from Tufts University and a Master of Regional Planning degree from the University of North Carolina at Chapel Hill.
Kevin Stewart is the President and CEO of the Pennsylvania Motor Truck Association and has served in that capacity since July 2016. Between 2013 and 2016 he served as the association’s Director of Safety. Prior to joining PMTA Mr. Stewart was involved in the Commonwealth of Pennsylvania’s Commercial Vehicle Safety Program for 33 years. He began his career with the Pennsylvania Department of Transportation (PennDOT) in 1980 as a roadside enforcement officer and progressed through the ranks to a regional manager position where he oversaw the operation of 10 of the Commonwealth’s 28 Commercial Vehicle Enforcement Teams and the division’s administrative staff. He was an Associate Staff Instructor for the Federal Motor Carrier Safety Administration and was responsible for Pennsylvania’s Motor Carrier Safety Assistance Program (MCSAP) for municipal police officers, which numbered over 200 officers representing approximately 180 different departments.

In 2005, PennDOT’s motor carrier enforcement operation was transferred to the Pennsylvania State Police (PSP), Bureau of Patrol, Commercial Vehicle Safety Division, where Mr. Stewart served as the division Program Administrator until 2013. In addition to many other duties, the Commercial Vehicle Safety Division was responsible for the statewide programmatic oversight of the Commonwealth’s size and weight enforcement, commercial vehicle inspection program, and education and outreach for industry and the law enforcement community.

James B. Walsh joined the Philadelphia Regional Port Authority in April 2004 as Director of Operations. Recently the Philadelphia Regional Port Authority has undergone a restructuring and rebranding. The PRPA, now known as PhilaPort, owns 10 marine terminals and 1,000 acres of real estate along the Delaware River. These properties are leased to private terminal operators in an effort to promote waterborne commerce and provide employment opportunities for the local community. In his new role as Senior Director of Operations, he is responsible for ensuring that the lease agreements between the authority and the terminal operators are honored. He also oversees the engineering, maintenance, and real estate departments.

Prior to being hired by the authority Mr. Walsh spent nine years at Packer Avenue Marine Terminal where he supervised the daily shipboard operations of one of the largest and busiest marine terminals on the Delaware River. During his time at Packer Avenue, Mr. Walsh gained an in-depth knowledge of the Philadelphia waterfront including terminal operations, labor/management issues, and security procedures.

Mr. Walsh attended the United States Merchant Marine Academy where he studied Marine Transportation and earned a Bachelor of Science degree. During his time at the academy he sailed aboard three U.S.-flagged container vessels that called ports throughout Europe and the Caribbean. Mr. Walsh served for 10 years in the U.S. Naval reserve where he attained the rank of Lieutenant.
Mr. Walsh is member of the North Atlantic Ports Association as well as the American Association of Port Authorities where he serves on the operations committee. He is also the chairman of USCG Sector Delaware by Area Maritime Security Committee.

Alan Williamson joined HNTB in August 2017 as a Senior Project Manager. Currently, he supports the PennDOT P3 Office as a technical advisor providing P3 feasibility screening services on solicited and unsolicited proposals, manages P3 procurement document preparations, and provides general program management advisory services.

Between 2004 and 2017, Alan worked for the Pennsylvania Turnpike Commission in the Engineering Department. He provided engineering and project management services for a wide array of highway and facility projects to deliver the Commission’s highway capital program. In his last five years, he served as the Cashless Tolling project manager and led the Commission’s efforts on highway conversion staging, new or modified toll facility design and construction, cashless toll revenue modeling, and public outreach campaigns, and developed transition strategies for toll collection employees.

Before joining the Commission in August 2004, he served as a geotechnical project engineer for GTS Technologies, Inc., and F.T. Kitlinski and Associates, Inc. Alan has over 20 years of experience in the transportation industry. Alan earned his Bachelor’s and Master’s Degrees in Civil Engineering at West Virginia University and is a registered Professional Engineer in Pennsylvania.

Erich Zimmermann is the Deputy Executive Director and Director of Transportation Programs at the National Association of Regional Councils (NARC). Erich is responsible for NARC’s transportation portfolio, which includes managing priorities for NARC’s members, lobbying for regional priorities on Capitol Hill, and carrying out a variety of programmatic, research, and communication initiatives to keep members informed. Erich works with members to refine policy priorities and recommendations for the federal surface transportation authorization and other relevant legislation, and amplifies these messages to Congress and the Administration. He guides member concerns, responses, and recommendations to federal implementation of the current transportation authorization and other federal rulemaking. Erich is a member of the Transportation Research Board’s Metropolitan Policy, Planning, and Processes Committee (ADA20), serves as a Board Member on the Consortium for Scenario Planning, and serves on the Leadership Council for the National Center for Sustainable Transportation at University of California, Davis.

Prior to NARC, Erich spent nearly a decade at the nonpartisan budget watchdog Taxpayers for Common Sense. He has a B.A. in Political Communication from The George Washington University and a M.S. in Environmental Studies from the University of Montana.
## Appendix 3: Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lauri Ahlskog</td>
<td>Lancaster County</td>
</tr>
<tr>
<td>Andy Alden</td>
<td>I-81 Corridor Coalition</td>
</tr>
<tr>
<td>Anna Aleynick</td>
<td>AECOM</td>
</tr>
<tr>
<td>Mary Ameen</td>
<td>North Jersey Transportation Planning Authority</td>
</tr>
<tr>
<td>Will Anderson</td>
<td>Benesch</td>
</tr>
<tr>
<td>Phillips Armstrong</td>
<td>Lehigh County Executive</td>
</tr>
<tr>
<td>Matt Assad</td>
<td>Lehigh Valley Planning Commission</td>
</tr>
<tr>
<td>Leo Bagley</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Alan Baranski</td>
<td>Northeastern Pennsylvania Alliance</td>
</tr>
<tr>
<td>Justin Barclay</td>
<td>Lehigh Valley Planning Commission</td>
</tr>
<tr>
<td>Casey Baxendale</td>
<td>Tri-County Regional Planning Commission</td>
</tr>
<tr>
<td>Carl Belke</td>
<td>Philadelphia Belt Line Railroad</td>
</tr>
<tr>
<td>Christopher Bertz</td>
<td>Nestle Waters</td>
</tr>
<tr>
<td>Robert Betz</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Bob Bini</td>
<td>Lancaster County</td>
</tr>
<tr>
<td>Thomas Bonin</td>
<td>Wilkes-Barre Scranton Airport</td>
</tr>
<tr>
<td>Beth Bonini</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Mark Boris</td>
<td>Borton-Lawson Engineering</td>
</tr>
<tr>
<td>Becky Bradley</td>
<td>Lehigh Valley Planning Commission</td>
</tr>
<tr>
<td>Cortez Brown</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Joseph Bryan</td>
<td>WSP</td>
</tr>
<tr>
<td>Jesse Buerk</td>
<td>Delaware Valley Regional Planning Commission</td>
</tr>
<tr>
<td>Whitney Burdge</td>
<td>Lehigh Valley Planning Commission</td>
</tr>
<tr>
<td>Samantha Burns</td>
<td>Lower Mount Bethel Township</td>
</tr>
<tr>
<td>Ed Burns</td>
<td>County of Berks</td>
</tr>
<tr>
<td>Daniel Butch</td>
<td>Luzerne County</td>
</tr>
<tr>
<td>Gordon Campbell</td>
<td>Lehigh Valley Planning Commissioner</td>
</tr>
<tr>
<td>Stephen Chiaramonte</td>
<td>WSP</td>
</tr>
<tr>
<td>Hannah Clark</td>
<td>City of Allentown</td>
</tr>
<tr>
<td>Will Clark</td>
<td>York County Planning Commission</td>
</tr>
</tbody>
</table>
Gene Clater  Lehigh Valley Planning Commissioner
Roger Cohen  Pennsylvania Department of Transportation
Edgardo Colón  Upper Macungie Township Police Department
Connor Corpora  Office of U.S. Senator Bob Casey
Tim Cotter  Federal Highway Administration
Ted Dahlbuer  Delaware Valley Regional Planning Commission
Michael Davis  ICF Inc.
Steve Deck  Tri-County Regional Planning Commission
Paul Delp  Lansdale Warehouse Co. Inc.
John Diacogiannis  Hanover Township, Lehigh Valley Planning Commissioner
Nancy Dischinat  Workforce Board Lehigh Valley
Bob Dolan  XPO Logistics
Michael Donchez  Lehigh Valley Planning Commission
Matthew Dorner  City of Bethlehem
Ronald Drnevich  Gannett Fleming, Inc.
Ralph Eberhardt  Michael Baker International
Tom Edinger  Delaware Valley Regional Planning Commission
Michael Emili  Northampton County, Lehigh Valley Planning Commissioner
Natasha Fackler  Pennsylvania Department of Transportation
James Ferry  Luzerne County
Jay Finnigan  Hanover Township, Northampton County
Mark Fiorini  Westgate Global Logistics
Tom Fiorini  Westgate Global Logistics
Joseph Fitzpatrick, Jr.  Fitzpatrick, Lentz & Bubba
Jim Flohr  Pennsylvania Department of Transportation
Janet Flynn  Pennsylvania Department of Transportation
Dan Fogarty  County of Berks
Gerald Fry  Johnson, Mirmiran & Thompson
Brian Funkhouser  Michael Baker International
Marta Gabriel  Office of U.S. Senator Pat Toomey
Elissa Garofalo  Delaware & Lehigh National Heritage Corridor
Diane Glass  Strasburg Rail Road Company
Program Summary

Michael Golembiewski  County of Berks
Tony Goreski  Pennsylvania Department of Transportation
Elizabeth Grant  Franklin County Metropolitan Planning Organization
Ray Green  Pennsylvania Department of Transportation
Scott Grenerth  Truck Specialized Parking Services
Joe Gurinko  Pennsylvania Department of Transportation
Virginia Haas  Lehigh County
Brian Hare  Pennsylvania Department of Transportation
Mark Hartney  Northampton County
Matt Hedge  Pennsylvania Department of Transportation
Heather Heeter  Borton-Lawson
Darlene Heller  City of Bethlehem, Lehigh Valley Planning Commissioner
Holly Herdman  PTC
Steve Herzenberg  Keystone Research Center
James Hess  AECOM
Brian Hite  Lehigh Valley Planning Commission
Barbara Holcomb  Delaware River Port Authority
George Horas  Benesch
Jason Hursch  Larson Design Group
Rudy Husband  Norfolk Southern Corp.
Robert Ibach  Upper Macungie Township
David Imschweiler  DJI Insurance Agency
Kimberly Jacobsen  Jones Lang LaSalle, IP, Inc.
Adam Jaindl  Jaindl Land Company
David Jaindl  Jaindl Land Company
Craig Kackenmeister  Lehigh Valley Planning Commission
Frank Kane  Lehigh County
Mike Keiser  Pennsylvania Department of Transportation
Paul Kent  Nathan Associates Inc.
Amy Kessler  North Central Pennsylvania Regional Planning and Development Commission
George Kinney  South Whitehall Township
Rich Kirkpatrick  Pennsylvania Department of Transportation
Andrew Kleiner  Lehigh Valley Economic Development Corporation
Chris Kocher  Wildlands Conservancy
Fred Koeck  Derby LLC
Vanessa Koenigkramer  Pennsylvania Department of Transportation
Ed Konjoyan  Majestic Realty Co.
Gina Kormanik  Workforce Board Lehigh Valley
Laura Krol  Pennsylvania Department of Transportation
Chris Kufro  Pennsylvania Department of Transportation
Dave Kuhn  Graphic Packaging International, Inc.
Bob Lammi  Lehigh Valley Planning Commissioner
Gail Landis  County of Berks
Amanda Leindecker  Pennsylvania Department of Transportation
Jamie Lemon  Michael Baker International
Denise Leonard  Lehigh Valley Planning Commission
Bowen Liu  Lehigh Valley Planning Commission
Teresa Mackey  Lehigh Valley Planning Commission
Casey Markey  Pennsylvania Department of Transportation
George McAuley  Pennsylvania Department of Transportation
Tony McCloskey  Pennsylvania Department of Transportation
Lamont McClure, Jr.  Northampton County Executive
Jay McGee  HNTB Corporation
Hugh McGowan  Pennsylvania Department of Transportation
Thomas McKeon  Berks County
Kate McMahon  Northeastern Pennsylvania Alliance
Ryan McNary  Pennsylvania Department of Transportation
David McNerney  Berks County
Ryan Meyer  Lehigh-Northampton Airport Authority
Alan Meyers  WSP
Rick Molchany  Lehigh County
Jim Mosca  Pennsylvania Department of Transportation
Brooks Mountcastle  Appalachian Trail Conservancy
Dan Mulligan  Global Container Terminals Inc.
<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandra Newman</td>
<td>Lower Mount Bethel Township</td>
</tr>
<tr>
<td>Larissa Newton</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>April Niver</td>
<td>Office of Congressman Cartwright</td>
</tr>
<tr>
<td>Alicia Nolan</td>
<td>Federal Highway Administration</td>
</tr>
<tr>
<td>Rodney Oglesby</td>
<td>CSX Corporation</td>
</tr>
<tr>
<td>Megan Olivera</td>
<td>Quest Corporation of America</td>
</tr>
<tr>
<td>Jonathan Owens</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Steve Panko</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Chandra Parasa</td>
<td>Lehigh Valley Planning Commission</td>
</tr>
<tr>
<td>Marygrace Parker</td>
<td>I-95 Corridor Coalition</td>
</tr>
<tr>
<td>Scott Pasterski</td>
<td>Keystone Consulting Engineers</td>
</tr>
<tr>
<td>Manohar Patwardhan</td>
<td>Intelisitics, Inc.</td>
</tr>
<tr>
<td>Yipeng Peng</td>
<td>University of Pennsylvania</td>
</tr>
<tr>
<td>Robert Peterson</td>
<td>Alliance Shippers Inc</td>
</tr>
<tr>
<td>Ashley Peterson</td>
<td>Nestle Waters</td>
</tr>
<tr>
<td>Rosalin Petrucci</td>
<td>J.G. Petrucci Company, Inc.</td>
</tr>
<tr>
<td>Chris Pettit</td>
<td>ICF Inc.</td>
</tr>
<tr>
<td>Alan Piper</td>
<td>County of Berks</td>
</tr>
<tr>
<td>Steve Pitoniak</td>
<td>Lackawanna County Regional Planning Commission</td>
</tr>
<tr>
<td>Scott Plauner</td>
<td>Industrial Banking Consultant</td>
</tr>
<tr>
<td>Gene Porochniak</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Jay Prager</td>
<td>Industrial Banking Consultant</td>
</tr>
<tr>
<td>Jeff Purdy</td>
<td>Federal Highway Administration Office of Freight Management and Operations</td>
</tr>
<tr>
<td>Beth Raves</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Mike Rebert</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Geoff Reese</td>
<td>Lehigh Valley Planning Commission</td>
</tr>
<tr>
<td>Christian Regosch</td>
<td>Berks County</td>
</tr>
<tr>
<td>Jessica Rehrig</td>
<td>Benesch</td>
</tr>
<tr>
<td>Amber Reimnitz</td>
<td>Pennsylvania Turnpike Commission</td>
</tr>
<tr>
<td>Jake Reynolds</td>
<td>Reynolds Business Systems</td>
</tr>
<tr>
<td>Leslie Richards</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Name</td>
<td>Organization</td>
</tr>
<tr>
<td>--------------------</td>
<td>---------------------------------------------------</td>
</tr>
<tr>
<td>Bruce Rider</td>
<td>Lehigh Valley Planning Commission</td>
</tr>
<tr>
<td>Mike Rimer</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Peter Rio III</td>
<td>County of Berks</td>
</tr>
<tr>
<td>Nolan Ritchie</td>
<td>PA Senate Transportation Committee</td>
</tr>
<tr>
<td>James Ritzman</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>George Roberts</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Dean Roberts</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Sue Rockwell</td>
<td>Lehigh Valley Planning Commission</td>
</tr>
<tr>
<td>Debra Rogers</td>
<td>ICF Inc.</td>
</tr>
<tr>
<td>Frank Ross</td>
<td>Federal Highway Administration</td>
</tr>
<tr>
<td>Mike Ruane</td>
<td>Delaware Valley Regional Planning Commission</td>
</tr>
<tr>
<td>Jennifer Ruth</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Patrick Sabatino</td>
<td>Lehigh Valley Rail Management LLC</td>
</tr>
<tr>
<td>Asa Saidman</td>
<td>Greater Lehigh Valley Chamber of Commerce</td>
</tr>
<tr>
<td>Elizabeth Schoonmaker</td>
<td>Delaware Valley Regional Planning Commission</td>
</tr>
<tr>
<td>Amanda Schumacher</td>
<td>McCrossin</td>
</tr>
<tr>
<td>Liz Schwartz</td>
<td>Benesch</td>
</tr>
<tr>
<td>Jill Seitz</td>
<td>Lehigh Valley Planning Commission</td>
</tr>
<tr>
<td>Barry Seymour</td>
<td>Delaware Valley Regional Planning Commission</td>
</tr>
<tr>
<td>Mike Shaffer</td>
<td>York County Planning Commission</td>
</tr>
<tr>
<td>Larry Shifflet</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Justin Shuey</td>
<td>Long Nyquist &amp; Associates</td>
</tr>
<tr>
<td>Jennifer Smethers</td>
<td>Lower Mount Bethel Township</td>
</tr>
<tr>
<td>Denise Soisson</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Robin Spaseff</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Brian Stewart</td>
<td>Cambridge Systematics</td>
</tr>
<tr>
<td>Kevin Stewart</td>
<td>Pennsylvania Motor Truck Association</td>
</tr>
<tr>
<td>Thomas Stoudt</td>
<td>Lehigh-Northampton Airport Authority</td>
</tr>
<tr>
<td>Marian Sumner</td>
<td>U.S. Navy Planning Liaison Officer</td>
</tr>
<tr>
<td>Matthew Szuchyt</td>
<td>The Office of Senator Pat Browne</td>
</tr>
<tr>
<td>Michelle Tarquino</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
<tr>
<td>Kathryn Tartaglio</td>
<td>Pennsylvania Department of Transportation</td>
</tr>
</tbody>
</table>
Jake Terkanian  CBRE Group, Inc.
Doug Tomlinson  Pennsylvania Department of Transportation
Dennis Toomey  Pennsylvania Department of Transportation
David Torrey
Paul Truban  Stantec
Elena Tucci  Lehigh Valley Planning Commission
James Tyrrell  Philadelphia International Airport
Jessie Valentine-Geyer  New England Motor Freight
Jay Vasell  Pennsylvania Resources Council
Bethany Vazquez  Lehigh Valley Planning Commission
Tracy Vernon  Vernon Land Use, LLC
Steve Viscelli  University of Pennsylvania
John von Kerczek  Lehigh Valley Planning Commission
Scott Vottero  Pennsylvania Department of Transportation
James Vozar  JVI-LLC
Sara Walfoort  Southwestern Planning Commission
Dan Walston  Federal Highway Administration
Angela Watson  Pennsylvania Department of Transportation
Alan Williamson  HNTB
Bill Wolf  CBRE
Max Wolf  CBRE
Gerald Yob  Lehigh Valley Planning Commissioner
Ron Young  Pennsylvania Department of Transportation
Lindsay Young  PhilaPort
Steve Ytkin  Exclusive Transportation for Industry, Inc.
Greg Zebrowski  Lehigh Valley Planning Commissioner
Randy Zimmerman  Lehigh Career & Technical Institute
Erich Zimmermann  The National Association of Regional Councils
Frank Zukas  Schuylkill Economic Development Corporation
Appendix 4: Presentations

To peruse summit presentations, please go to the Lehigh Valley Planning Commission’s website, at www.lvpc.org/freightlv.html.
Appendix 5: Post-Summit Survey Results

1. Please indicate which best describes your role:

- Shipper/Receiver (43%)
- Carrier (10%)
- Traffic/Civil Engineer (16%)
- Local Government (24%)
- Other (Please Specify) (3%)

2. Considering your overall experience at the Eastern Pennsylvania Freight Summit, please indicate your level of agreement with the following:

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is an important topic for the public to know about.</td>
<td>1</td>
<td>14</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>The summit was able to cover the most important freight topics.</td>
<td>1</td>
<td>1</td>
<td>38</td>
<td>40</td>
</tr>
<tr>
<td>The content was engaging and stimulating.</td>
<td>1</td>
<td>1</td>
<td>36</td>
<td>40</td>
</tr>
<tr>
<td>The panelists represented all sides of the topic.</td>
<td>2</td>
<td>39</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>I expect to be able to use what I learned from this summit in my life/work.</td>
<td>1</td>
<td>1</td>
<td>47</td>
<td>30</td>
</tr>
<tr>
<td>I would plan to attend another freight summit in the future.</td>
<td>1</td>
<td>1</td>
<td>32</td>
<td>45</td>
</tr>
</tbody>
</table>

3. Would you recommend this event if we held a similar event in western Pennsylvania?

Yes – 53
Maybe – 20
No – 6*

*Reasons why not (open-ended responses):
I believe discussing the regional issues with regional stakeholders are important. Also statewide issues need to be discussed regionally I would suggest one day, at least three locations linked by video, with one session presented from each location and then opportunity to discuss the presentations within each of the regions.

- Our installations are in Philadelphia and Mechanicsburg
- I have no interest in Western PA
- Summit talk about issues but did not come up with what can/will be done to address the issue.
- Too far to drive, and the east has more freight activity

4. Which panel or topics did you find most informative? Please select all that apply.

<table>
<thead>
<tr>
<th>Panel/Topic</th>
<th>Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Remarks - PennDOT Secretary Leslie Richards</td>
<td>46</td>
</tr>
<tr>
<td>Keynote Speaker - Bill Wolf</td>
<td>35</td>
</tr>
<tr>
<td>Regional Perspectives - LVPC, TCRPC, and DVRPC</td>
<td>50</td>
</tr>
<tr>
<td>Beyond the Border - NJTPA and I-95, I-81 Corridor Coalitions</td>
<td>40</td>
</tr>
<tr>
<td>Featured Speaker - Ed Konjoyan</td>
<td>49</td>
</tr>
<tr>
<td>Multimodal - Ports and Railroads</td>
<td>48</td>
</tr>
<tr>
<td>Truck Parking - P3</td>
<td>62</td>
</tr>
</tbody>
</table>

In what way(s) could this information benefit you? (open-ended responses)

- Aligning highway and bridge asset management and improvement efforts with regional and industry freight movement needs.
- All were beneficial. Private sector involvement is very essential to understanding the magnitude and influence of freight development from a regional and local perspective.
- As a planner, hearing all different perspectives, especially the Multimodal (Rail and Ports) really helped supplement the general information about trucking that I already know.
- Assists the school in knowing the needs of the industry for new drivers and what areas there is employment opportunities for the graduates of the program. Also gives us a current perspective of what is going on in the Transportation Industry.
- Better informed on key issues related to local planning activities.
- Discussion/presentations from individuals in the industry/private sector as to what the challenges, needs and future opportunities are in moving freight in their specific region of the Commonwealth—how these needs/opportunities can be supported through improvements to the multimodal transportation network in Pennsylvania. Impacts on economic development/jobs, etc. in the Commonwealth.
- Helped to get an appreciation for what is happening on the ground, not just in theory.
- I learned about what other MPOs are doing to help us in beginning our freight planning.
• It will help in the writing of our new regional plan.
• It will help me inform municipalities of potential truck parking issues and increased volume of truck traffic.
• Learning of freight trucking challenges, the global context, and potential freight congestion mitigation options.
• Most important topic to the Lehigh Valley region in regards to truck parking and relative congestion.
• [It was] motivating to see women in transportation knowing how important the transportation of goods is.
• Nancy Dischinat’s (of Work Force LV) presentation was amazing.
• Planning on building sites for trucks.
• The event was well put together; informative; stimulating and good networking; - Loved and appreciated all aspects of the Summit. Nice Job.
• The Truck Parking P3 session touched most on problems and solutions and sparked the most conversation with the audience. Other sessions touched only on problems and statistics; solutions were not discussed.
• This information will be directly applicable to our work with the Lancaster County Transportation Coordinating Committee (MPO).
• Understanding how others view problems/solutions to the same challenges. So many groups have a vested interest in freight movement but solutions are hard to agree on.
• We need and use this information for the planning program.

5. What freight topics were not addressed that should be brought up in the future? (Open-ended responses)

• A more detailed look at the current and projected freight interrelationships among NY, NJ, DE, MD, and PA MPOs.
• Addressing community negativity due to traffic impacts.
• All topics related to freight were addressed very well. Would like to hear more on freight by rail.
• Automated trucking was touched on, but not a focus.
• Automation and TSMO.
• Commercial Motor Vehicle (CMV) Permitting. CMV safety enforcement, and size and weight enforcement.
• Deeper dive into the long-term forces running counter to the current expansion of e-commerce-driven freight movement such as land and workforce availability, infrastructure, 3D technology, etc.

• Downtown delivery issues. More discussion of parking—there are several aspects of this issue. More about the private sector's role, etc.

• Driver education: getting out to the drivers to educate them on availabilities, limitations, regulations of truck parking in PA. Public Education: Making the folks who complain about truck parking but expect to have their package delivered within 48 hours. How else would the package get to your house...the trucks.

• Emerging technology (AVs and platooning); critical importance of global trade to economic prosperity, danger of protectionism.

• Freight moved through aviation. As it continues to progress, update on impacts of autonomous vehicles on the movement of freight.

• How counties and cities can foster collaboration between competing firms to advance mutual interests.

• How do we engage young people in the Logistics and Supply Chain industry?

• How is Pennsylvania prioritizing freight funding or freight impacts into the decision-making process or project selection process? Review of historic INRIX travel time reliability data on some the highest growth truck corridors in the state.

• How to solve truck parking issues.

• Integrating truck staging areas on a dynamic basis to address supply-demand issues.

• Last-mile deliveries that have increased due to the phenomenon of e-commerce.

• Last-mile delivery and parking associated with delivery trucks.

• Like to see smaller venue with local whiteboarding issues that could be added, i.e., high school vocational schools possibility to have starter schools/training for CDL, etc.

• Mega-region planning seems inevitable.

• More clarity on P3 potential.

• More emphasis on planned freight movement scheduling as opposed to state and local government reactionary efforts. Focus on private opportunities for truck parking issues to develop scope for P3 opportunities. Linkage of freight movement to people movement through many different modes on both sides. Corridor improvement opportunities focusing on ease of flow for freight and passenger movement.

• More emphasis on rail and moving freight from truck to rail for long hauls.

• More options for reducing the tensions between automobile and truck traffic. We learned about the problems, but not much about solutions.
• Moving forward to a Western theme, there needs to be breakout sessions that result in providing options for a particular problem. A spokesperson for each group would report out. More interaction amongst the attendees in a working session is needed.

• Municipality's ability to manage/control freight within their region.

• Need to consider the economic impact of having truck parking available and how this will lower crashes, which will result in less of a negative economic impact on the commonwealth. More truck parking, equals rested drivers, equals reduction in crashes.

• Off-hours operations to help ease congestion—is the community able to receive freight at off-peak hours?

• Retailers' perspectives.

• Potential for an inland port in the Lehigh Valley.

• The growth in air freight.

• Reinforcing driver behavior (car and truck) via communication and education, planning for distribution centers and parking accommodations on the TIP and TYP (being proactive vs reactive) when working with municipalities and planning partners.

• The deplorable conditions of the roads and how billions of dollars are lost either from poor winter maintenance or traffic hold-ups due to poor summer planning.

• The major impact that freight will impose on future Transportation Improvement Programs (TIPs) for all Planning Partners statewide.

• Truck size and weight.

• Ways that other countries and areas in the world are dealing with the same issues.

• Workforce session. National driver shortage crisis.

6. If there were any panels or topics you did not find useful, please select them from the list and tell us why. (open-ended responses)

Opening Remarks - PennDOT Secretary Leslie Richards

• It was nice to have the Secretary there, but not a necessary topic for a very crowded agenda and schedule. Also, the panels were not designed for interaction with the audience. Having each panelist present multiple slides (10-20 minutes each) left minimal time for questions from the audience, sometimes only 1 or 2 questions were asked from the audience or even by the moderator. Also, please eliminate all slides for any moderator in the future, they were unnecessary and a time killer.

Keynote Speaker – Bill Wolf

• Keynote seemed to focus on the Lehigh Valley too much.
Regional Perspectives – LVPC, TCRPC, and DVRPC

- Not that it wasn't informative, but each executive director could have just had a page in the program that highlighted their region’s successes and left it at that.

Beyond the Border – NJTPA and I-95, I-81 Corridor Coalitions

- The focus of my attention is Pennsylvania

Featured Speaker – Ed Konjoyan

- No feedback

Multimodal – Ports and Railroads

- There is not the urgency for rail that there is for over-the-road transportation which is a larger percentage of domestic freight.

Truck Parking – P3

- No feedback

“All panels and topics were useful” – General Feedback

- Most of the panels, while very informative, could have benefited from shorter presentations and more time for discussion/Q&A.
- Lunch time was difficult due to them allowing the entire group to get up at one time and go through the buffet line. They should have been sent up by so many tables at a time and an additional buffet line should have been set up. This may have allowed the Keynote speaker to speak on time. I finally got through the line at the end which was almost over an hour and I feel like I had to rush my lunch down so that I could concentrate on the Keynote Speaker. I feel that I wasn’t able to pay the attention to him that he deserved from his lecture so I am not sure how much I received out of his message.
- I did not understand why the moderators spoke longer than the actual speakers in most cases. It was always my understanding the moderators would introduce and provide a bio for each speaker; this did not happen and was the main reason the agenda/time fell behind.
- There was too much packed into small time slots and many speakers exceeded time limits.
- I did find all panels and topics were useful; however, I think further discussion needs to take place with any moderators ahead of any future events like this. Two of the four panel moderators brought their own 15(+-) minute presentations which had good information but this is not the role they were assigned to fill.
- All content was relevant however became too PowerPoint-heavy and not like a panel format, at all. There was nearly no time following the presentations for any questions to be raised to the panel.
7. Are there certain concerns related to freight operations and management that PennDOT should research in more detail? If so, what are they? (open-ended responses)

- A more detailed look at the current and projected freight interrelationships among NY, NJ, DE, MD, PA MPOs. A more detailed look at truck parking needs across PA.
- Absolutely, I feel there is a need for more discussion regarding the parking and proper safe rest areas for the truck drivers who are passing through Pennsylvania and the Mid-Atlantic Region.
- As the new mega distribution centers are being built, it should be required that overnight parking be made available for drivers ... % of overall doors i.e., 20% if a 100-door facility and additional 20 spots for truck trailers to take their break or mandatory 10-hour break.
- Better utilization of our railroads.
- Concern for construction and getting the information immediately to the carriers for road construction/accidents as well as involving carriers, on their needs for rest/truck stops.
- Consider other options to AV as this is not a near-to-midterm solution to congestion and trucker safety.
- Working with the private industry to obtain and analyze freight data.
- Education. Drivers (trucks and cars both) should be re-educated and not just “handed” a license every four years. Safety is and should remain a concern on the highways and is a reason ELD was implemented. Reinforcing education, communication, and driver behavior at the DMV, may result in a high level of safety on the BPNs for both ADT and ADTT.
- For freight specifically, how does FHWA plan to address Jason's Law with respect to parking? Will additional federal funds be allocated to the interstates for truck parking, or will TRB be completing a study on the best course of action on how distribution centers should be handling parking nationwide?
- Encourage the co-locating of manufacturing facilities and warehouse facilities on the same parcel to avoid local truck shuttles between the two. There are several firms conducting that type of operation in the L.V.
- Freight inventory tools that may be used/are being used to model freight operations and infrastructure needs.
- Freight mode interconnectivity. Cohabitation of facilities with a mix of freight and people movement. CAV supporting the above.
- Funding for infrastructure off the interstates, local and state roadway improvements.
- How to help municipalities to handle the freight traffic created by their neighbors.
- How will Freight impact future TIPs and LRTPs??
• I think continued research into the truck parking issue statewide is a definite must. Another topic I've always found intriguing (which may be more localized rather than statewide) is downtown delivery methods. Some cities and towns are better at it than others, but I think it would be a good conversation.

• I wouldn't call it a concern but I'll say I noticed a divide between all three regions; PennDOT needs to get these regions singing from the same sheet of paper.

• Lanes / highways dedicated to truck traffic, to help mitigate the conflicts with automobiles. Some areas have HOV lanes; why not similar for trucks?

• More use of multi-modal.

• Potential impact to tariffs/ trade war for local businesses.

• Private development at the local level. Identify locations where these occur and distance from rail and resulting congestion on adjacent roads.

• Public awareness or public outreach for Pennsylvania and this industry.

• Regulations/policy related to land use planning and impact fees.

• Requesting FHWA remove the regulation written in the early 70's that does not allow for retail along on the interstate. If this regulation was removed it would be a win-win for everyone. PennDOT would get revenue from the business lease / profits, you would bring in competitive businesses that would maintain the lots, you would encourage the mom and pop shops to clean up and provide a nicer atmosphere, and it would give the truckers a place to rest safely off the road...

• STRAHNET connector for Philadelphia Navy Yard.

• The creation of a State Freight Advisory Committee, and conducting a State Freight Summit...similar to Ohio's DOT Annual Freight Summit.

• The truck parking issue is not going away anytime soon, so please keep going with this. Also, the impact of trucking on our roads and bridges is going to be more and more significant—statewide conversation about routing for long and medium hauls in collaboration with the trucking community is important.

• I'm not sure there is that much that you can do about the local roads, other than keep bridges in good order and help local governments via the MPOs learn about ways to maintain their infrastructure --- maybe the MPOs could work with PennDOT, PSATS, the boroughs association and the National League of Cities and Counties in a joint effort to develop a guide for investment in local infrastructure including best practices, innovations, etc.

• The truck parking issue is very complex and requires more study. How much of this problem is caused by deregulation that has led to many truck drivers becoming "owner/operators"? This allows private companies to avoid the issue of providing parking and staging areas by placing the responsibility on the drivers. How much should
the public sector invest to solve a problem caused by lack of investment/responsibility by the private sector? It's a difficult question.

- Truck parking issues and how to get ahead of the traffic demand curve in infrastructure improvements.
- Truck parking, with freight tonnage expected to increase meaning more trucks, safe facilities for the parking should be addressed at the state and federal level. The money involved with truck parking to make it feasible will have to be subsidized by the state and federal governments or money raised with a truck parking impact fee.
- Trucking parking and closed rest stops.

8. In your opinion, what questions should PennDOT include in their Truck Parking Request for Information (RFI) that would assist in finding successful solutions to this challenge? (open-ended responses)

- A recognition of the differences between rural and urban areas in providing truck parking options. Encourage partnerships (funding and planning) in providing truck parking locations.
- Access; amenities; last-mile locations; fees if any/applicable.
- Any questions related to emerging solutions: what possible solutions, what possible parking costs, etc.
- Assuming that survey would be sent to several trucking organizations and developers:
  - What commodities in the truck parking lot would be needed to attract truckers?
  - What size of lot would be needed?
  - What range of revenue would be needed from the private side to sustain a partnership with the state?
- Consider a county loading dock tax on a per dock/door basis to pay for construction of local truck parking facilities. In short, have a County Truck Parking Authority similar to city parking authorities.
- Could the existing business model of not-for-profit urban public parking authorities commonly found in Pennsylvania cities and large town CBDs be a viable model to consider for industrial multi-municipal partnership for locating, funding, operating, maintaining, and marketing strategic truck parking facilities for resting and delivery staging in concentrated industry/freight corridors or other sub regional industrial b2b/freight distribution centers?
- Currently, where (city/town/interchange/exit, etc.) is the worst area for finding truck parking within Pennsylvania? Which regions are the most hazardous for truck parking and why (robbery, destruction of vehicle/equipment, etc.)?
- Details on existing and projected future demand.
- How local governments consider truck parking in their plans and zoning regulations.
• How many Service/Truck stops can be designed and constructed on some of our biggest freight corridors.

• How to fund a Truck N Park lot, Pennsylvania loved to fund Park and Ride lots, PennDOT needs to fund and establish Truck N Park lots along Interstates and congested trucking bottlenecks.

• How to pay for it, should it be an impact fee, added to warehouse square footage, or an additional fee on ALL registrations—not just class 3 and larger trucks.

• How to require shippers/receivers to allow/expand truck holding areas.

• How would notification and possible reservation of space be handled?

• Is it possible to have a truck parking bank—collect funds from the Corps. that benefit the most from the trucking industry.

• It’s not just a matter of facilities, but the effective integration of capacity for more visible capacity availability. Truck drivers need to know well in advance along their routes of where there is space availability for truck parking and how long the queues are at their final destination. Also suggest looking at incentive programs that would encourage drivers to drive during off-peak driving times. Some sort of tax rebate program on fuel charges? With ELDs, it is much easier to track driving times.

• Mandatory available parking at the distribution centers.

• More information on economics and incentives to induce private sector to respond and efficiencies to reduce parking demand.

• Ordinance samples from municipalities requiring truck parking to be accommodated in development plans.

• Questions about context-specific needs. Questions about existing local/regional policies that could be leveraged to support truck parking and timelines about updates of these policies to potentially be coordinated with a larger scale approach.

• Regional restrictions in congested areas—driving freight to logical corridors and holding locations linked to congestion reduction. Industry linkage (goods flow management) coordination requirements.

• Require new facilities to provide overnight parking lots at the drop-off pick-up locations (warehouses); require current warehouses to allow truck parking at their facilities.

• Identifying who will operate and maintain truck parking facilities is critical. Are there opportunities to create parking/staging areas as a P3 by incorporating other services? (As suggested by Paul Kent.)

• What about a web app that includes designated truck routes, parking, height and weight, restrictions, etc.? And also offers an Uber-like service that would pick up a driver when he/she hits their hours of service limit—but with another truck driver who could move the vehicle and give a ride to the original trucker, taking them (and their vehicle) safely to a truck stop.
• Should former rest stops be reopened and used for truck parking?
• What local ordinances near the interstate system allow overnight parking? Can school districts (athletic parking) allow overnight parking between 12-5am? Should trailers and tractors separate to allow tractors to fill in amenity-rich areas easier?
• Where they should be located to best serve the truckers in this region.
• PennDOT should consider surrounding state initiatives and if there is a way efforts could be combined to create a multistate, connected approach.
• Why does the private sector not have a big enough concern for this issue to the point that they are trying to solve it without public support?

9. Do you have any additional feedback or suggestions for future freight events? If so, please share them. (open-ended responses)

• All in all this was an excellent summit and I look forward to any future summits that are planned. I would definitely consider attending.
• Annual eastern PA logistics summit to promote eastern pa throughout the country and globe...
• Better lunch as always. The tours were amazing.
• Combining insights / results / discussions from PA AV Summits with Freight Summits, because truck platooning and truck AVs may be early adopters of the new AV technology.
• Dealing with truck parking "in town," deliveries, mail, all of those uses competing for downtown curb space.
• Do a better job of keeping your speakers on time.
• Don't hold field views on Fridays...especially late in the day due to travel.
• Great first effort.
• Hold an annual Pennsylvania State Freight Summit.
• It would make sense if this was just a statewide event and not limited to east vs. west and have a day and half/two days of sessions with breakouts. Also, working sessions on topics would be great too.
• I would make sure that the field views be kept as part of the programs.
• I would not have a buffet style lunch with that many people. I would recommend having people select the sandwich choice and having it be a sit down to ensure it goes smoother.
• Include a working session for various teams to work on actual problems.
• Include Freight Transportation Managers as presenters to get the industry side.
• It was well-done. Perhaps putting a bit more effort into the audience feedback & participation to spur discussion with the audience.

• It's always great to have opportunities to gather everyone together to have an open discussion about various transportation topics. Keep up the great work.

• Make presentations available—have facilitator/moderator comments limited.

• Need to get a rep or two from the drivers, actual drivers not the President of the PMTA but actual “hands-on-the-wheel” drivers.

• See notes in the panelist question as well. All panelists should have a maximum of 2-3 minutes of individual slides, and no slides for the moderator. Maximum time for the moderator to ask the panelists questions, a minimum of 15 minutes for the audience to ask questions of the panelists as well.

• The bus tour was a little long for a Friday afternoon. First day or shorter day might be better

• The event was well-run, and should be used as a model for future events. Philadelphia for the next Eastern PA summit?

• The events covered here were very good and could be replicated in a western summit to address that audience. Don't have another summit in this region unless fresh topics or information are available.

• The summit was well planned, and the speakers were very knowledgeable about their respective segment of the transportation industry. I learned much more about the challenges e-commerce presents to the transportation industry, especially the trucking industry. The only suggestion I have is to perhaps include a representative from the Aviation mode next time. The Lehigh Valley International Airport representatives have done an amazing job with their airport, and could provide a very informative presentation.

• To accommodate travel, two half-day sessions with a half-day tour/field workshop would be preferred.

• Very well organized, excellent diversity of interests in the audience and among panelists. Minor things: suggest raising the podium for better visibility of the speaker to the audience, having a floor-mounted screen to enable panelists to see presentations without having to turn their heads to see the presentations.
10. Would you be interested in serving on a planning committee for a future freight summit?

Yes – 23
No – 52

<table>
<thead>
<tr>
<th>Name</th>
<th>Org/Title</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bob Bini</td>
<td>Lancaster County Planning Commission</td>
<td><a href="mailto:rbini@co.lancaster.pa.us">rbini@co.lancaster.pa.us</a></td>
</tr>
<tr>
<td>Becky Bradley</td>
<td>Lehigh Valley Planning Commission</td>
<td><a href="mailto:bbradley@lvpc.org">bbradley@lvpc.org</a></td>
</tr>
<tr>
<td>Ed Burns</td>
<td>Burns Logistics Solutions Inc.</td>
<td><a href="mailto:EBUURNS@BURNSLOGISTICSINC.COM">EBUURNS@BURNSLOGISTICSINC.COM</a></td>
</tr>
<tr>
<td>Gordon Campbell</td>
<td>LVPC Commissioner</td>
<td><a href="mailto:gmcsir@gmail.com">gmcsir@gmail.com</a></td>
</tr>
<tr>
<td>Roger Cohen</td>
<td>PennDOT</td>
<td><a href="mailto:rogecohen@pa.gov">rogecohen@pa.gov</a></td>
</tr>
<tr>
<td>Janet Flynn</td>
<td>PennDOT Bureau of Aviation</td>
<td><a href="mailto:janflynn@pa.gov">janflynn@pa.gov</a></td>
</tr>
<tr>
<td>Elizabeth Grant</td>
<td>Franklin MPO</td>
<td><a href="mailto:emgrant@franklincountypa.gov">emgrant@franklincountypa.gov</a></td>
</tr>
<tr>
<td>Jason Hursh</td>
<td>Larson Design Group</td>
<td><a href="mailto:jhurst@larsondesigngroup.com">jhurst@larsondesigngroup.com</a></td>
</tr>
<tr>
<td>George McAuley</td>
<td>Deputy Secretary</td>
<td><a href="mailto:gmcauley@pa.gov">gmcauley@pa.gov</a></td>
</tr>
<tr>
<td>Tony McCloskey</td>
<td>PennDOT</td>
<td><a href="mailto:amccloskey@pa.gov">amccloskey@pa.gov</a></td>
</tr>
<tr>
<td>Chandra Parasa</td>
<td>LVPC</td>
<td><a href="mailto:cparasa@lvpc.org">cparasa@lvpc.org</a></td>
</tr>
<tr>
<td>Rosalin Petrucci</td>
<td>jgpetrucci co.,inc.</td>
<td><a href="mailto:rpetrucci@jgpetrucci.com">rpetrucci@jgpetrucci.com</a></td>
</tr>
<tr>
<td>Scott Plavener</td>
<td>Me</td>
<td><a href="mailto:mer@aol.com">mer@aol.com</a></td>
</tr>
<tr>
<td>Gene Porochniak</td>
<td>PennDOT</td>
<td><a href="mailto:eporochnia@pa.gov">eporochnia@pa.gov</a></td>
</tr>
<tr>
<td>Christian Regosch</td>
<td>Bucks County</td>
<td><a href="mailto:cpregosch@buckscounty.org">cpregosch@buckscounty.org</a></td>
</tr>
<tr>
<td>Michael Rimer</td>
<td>PennDOT</td>
<td><a href="mailto:mrimer@pa.gov">mrimer@pa.gov</a></td>
</tr>
<tr>
<td>Scott Vottero</td>
<td>PennDOT</td>
<td><a href="mailto:svottero@pa.gov">svottero@pa.gov</a></td>
</tr>
<tr>
<td>Dan Walston</td>
<td>FHWA</td>
<td><a href="mailto:christopher.walston@dot.gov">christopher.walston@dot.gov</a></td>
</tr>
<tr>
<td>Alan Williamson</td>
<td>HNTB Corporation</td>
<td><a href="mailto:arwilliamson@hntb.com">arwilliamson@hntb.com</a></td>
</tr>
<tr>
<td>Steve Ytkin</td>
<td>ETI Company.com</td>
<td><a href="mailto:sytkin1@etigroup.com">sytkin1@etigroup.com</a></td>
</tr>
<tr>
<td>Randy Zimmerman</td>
<td>Training Coordinator</td>
<td><a href="mailto:zimmermanr@lcti.org">zimmermanr@lcti.org</a></td>
</tr>
</tbody>
</table>