

The future growth of a region and investment in infrastructure is not only controlled by demographic and market forces, but also by government policy instituted to control and guide growth, direct funding or maintain order through various safety or improvement measures. Thus, a literature review of various documents was performed to provide additional insight into the existing policies that impact freight transportation within the Lehigh Valley. Information referenced during this review included the following sources:

- Federal Highway Administration (FHWA): <a href="http://www.fhwa.dot.gov/map21/summaryinfo.cfm">http://www.fhwa.dot.gov/map21/summaryinfo.cfm</a>
- Lehigh Valley Rail Freight Study 2007 (August 2007)
- Lehigh Valley Surface Transportation Plan 2011-2030 (October 2010)
- Pennsylvania Intercity Passenger and Freight Rail Plan (February 2010)
- Pennsylvania Department of Environmental Protection (DEP): http://www.dep.state.pa.us/dep/deputate/airwaste/ aq/cars/idling.htm
- Truck Parking In Pennsylvania, produced by the Pennsylvania State Transportation Advisory Committee (December 2007).
- United States Environmental Protection Agency (EPA): http://www.epa.gov/cleandiesel/basicinfo.htm

Although not comprehensive, the following samples provide an overview of policies that have a significant impact on the movement of freight or compliance and regulatory practices.

# Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21)

On July 6, 2012 this federal law was enacted to provide a longer term highway authorization, providing funding and policy and programmatic framework for investments to direct future

growth of surface transportation infrastructure. Many of the funding programs enabled by this legislation mandate policies that impact freight movement on the statewide and local levels. Examples of this include the following:

- National Highway Performance Program (NHPP) —
  requires states to develop a risk and performance-based
  asset management plan for the NHS to ensure adequate
  system performance. The program also requires minimum standards for bridges and pavement conditions
  within the NHS. If the criteria are not met, a portion of
  the funding provided in the program must be used to
  rectify the issue.
- Highway Safety Improvement Program (HSIP) emphasizes a data-driven, strategic approach to improving highway safety. Each state is required to identify key safety problems, establish the severity and adopt performance-based goals to maximize safety. This process is carried out through a required Strategic Highway Safety Plan (SHSP). The Lehigh Valley MPO is a partner in the production of this document.
- Surface Transportation Program (STP) provides
  flexible funding to improve conditions and performance
  on Federal-Aid highways, bridge projects on any public
  road or facilities for non-motorized transportation and
  transit. The breadth of this funding includes numerous
  transportation enhancement projects, such as truck
  parking, electric vehicle charging infrastructure, congestion pricing and travel demand strategies. Policies implemented to address needs in these areas would have a
  direct impact on local freight movement.

## Truck Freight Regulations

Several important regulations have a direct impact on truck transport within the Lehigh Valley. One of the most significant

are federal hours of service regulations provided in 49 CFR, Parts 385, 386 390 and 395. These regulations imposed maximum hours of operation and minimum required rest periods to help prevent safety incidents related to driver fatigue. The implications of this policy result in a need for additional truck parking so that drivers can comply with the established criteria. As previously noted, the demand for truck parking along several major routes within the Lehigh Valley is already over capacity.

As a result of unmet demand for truck parking, as well as a driver perception that adequate facilities are not readily available, many truckers have been observed parking on the shoulder of highway exit/entrance ramps or along emergency pull off areas. However, the PA vehicle code, Title 75, prohibits parking on limited access highways. This presents an enforcement dilemma for law enforcement officers, since the lack of legal parking areas and federal hours of service requirements may necessitate the parking of vehicles in these areas. Additionally, waking a fatigued driver and requiring them to continue driving may present a greater safety hazard than the truck parked on the shoulder of the roadway.

In addition to the above regulations, Pennsylvania's Diesel-Powered Motor Vehicle Idling Act (Act 124 of 2008) limits the amount of time a parked diesel vehicle may allow the primary engine to idle. The Act does not include any accessory generators that may be installed on a truck. Generally, Act 124 prohibits a vehicle in excess of 10,001 pounds to idle for more than five minutes in any 60-minute period. Since not all trucks are equipped with accessory generators, this policy underscores the importance of providing adequate parking facilities with amenities, such as electrification to provide heat, air conditioning, electricity, internet and other comforts to cabs during the required rest periods.

Similar to PA Act 124, the National Clean Diesel Campaign, established by the EPA, includes regulatory programs to establish standards for new diesel engines. It also provides provisions for the reduction of emissions in existing diesel engines, including maintenance repair and retrofit strategies. This could ultimately impact operating costs for shippers.

### Weight Limits on Bridges and Roads

As noted previously, pavements and bridges can begin to deteriorate under normal use. PA Title 75 C.S. § 4902(a) establishes a restriction on vehicles in excess of maximum size or weight limits on posted roads and bridges. These restrictions are established through an engineering study to help extend the functional life of a facility, or to eliminate potential safety concerns related to the use of any vehicle exceeding the current rating of a facility. Posted weight restrictions can have a significant impact on the movement of freight through a region, since any vehicle exceeding the limit must follow an alternate detour.

# Rail Safety Improvement Act of 2008 (RSIA)

This policy, administered by the Federal Railroad Administration (FRA), established safety regulations related to railroad safety, such as hours of service requirements, positive train control implementation, safety at highway rail grade crossings, etc. The Act requires states to maintain a state rail plan that establishes priorities and strategies to enhance rail service. Certain requirements of this Act, such as a requirement for positive train control (PTC) on all passenger lines and freight lines that carry toxic-by-inhalation (TIH) materials, could represent a significant cost for rail carriers and intermodal facilities as new wireless communications and track side devices are installed to establish the network of safety controls comprising the PTC system.

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## Rail Freight Assistance Program (RFAP)

This program, administered by the PennDOT Bureau of Rail Freight, Ports and Waterways, provides 28 grants totaling \$8.5 million for freight rehabilitation and construction. The program is intended to help reduce the number of annual truck trips on the Commonwealth's highway system.

# **Lehigh Valley MPO Policies**

The Lehigh Valley Surface Transportation Plan 2011–2030 notes that MPO projects must pass through a screening process to determine how the specific projects address various transportation issues. The desirability and priority of a project can be based on how well the project advances these goals and policies established by the MPO. Although a listing of these goals and policies can be found in the region's Long Range Transportation Plan, a sample of MPO policies that could directly impact freight transportation is listed below:

#### General

- Projects must be on the Federal-Aid System or a state road to be eligible for federal or state funds unless federal safety funds are used, in which case all public roads are eligible. Projects other than transportation enhancements must have a cost greater than \$100,000 due to the cost of procuring funding.
- Highest priority shall be assigned to those projects that are essential for safety, maintenance of the transportation system and/or relief of congestion.
- Highway
- Give high priority to projects that upgrade unsafe roads and intersections, rehabilitate or replace deficient bridges and upgrade existing highways that are deficient.

- Upgrade unsafe roads and intersections to current design standards.
- Conduct planning studies on high priority congestion and safety corridors and program appropriate improvements.
- Safety projects shall be identified based on the high priority safety corridors.
- Maintenance priorities will be determined through a combination of life cycle considerations and road condition (IRI values). Priority will be given to roads that have high traffic volumes and a high level of regional importance. Priorities will be revisited at least every two years.
- Bridges with a sufficiency rating of 0 to 50 are eligible for replacement. Bridges with a sufficiency rating of 50 to 80 are eligible for rehabilitation. Bridges posted or judged to be structurally deficient will also receive priority treatment. All other bridges are eligible for preventive maintenance improvements only.
- Access management practices should be initiated in accord with recommendations of the LVPC report entitled Access Management on Arterial Roads.
- Support highway capacity improvements only in areas designated for urban development in the Comprehensive Plan for the Lehigh Valley...2030.
- Projects with a congestion relief (mobility) justification must have documented evidence of existing congestion or forecasts of future congestion. They must be identified in the LVTS Congestion Management Process.
- Congestion relief and access improvement projects shall address intermodal connections where such connections are appropriate.
- Preserve arterial roads for their through traffic carrying function by reducing on-street parking and curb cuts for driveways through access management techniques.

- Highway improvements should be scaled to needs that result from reliable and documented travel forecast procedures.
- Improvements to existing highways at current locations are generally preferred over relocations and bypasses.
- Improvement of existing interchanges on Route 22, I-78, the Pennsylvania Turnpike and Route 33 to resolve major safety and capacity problems will be supported if sufficient funds are available. Interchanges at new locations are not recommended unless there is a compelling and well-documented need that cannot be met by upgrading an existing interchange.
- This plan supports strategies for transportation system management, intelligent transportation systems, access management practices and context sensitive design in appropriate situations.
- Travel demand on existing facilities should be met to the greatest degree possible by programming low cost safety and mobility improvements.
- Support development of park and ride lots where there is documented demand for such facilities.
- Improve sidewalk, trail and local street connectivity to reduce the number of vehicle trips taken on the major highway network.
- Municipalities should adopt impact fee ordinances to help finance highway improvements.

#### Transit

- When feasible, transit should be used to mitigate short term, high volume traffic destinations, such as special events, rather than building permanent capacity improvements.
- Fixed route transit service should be provided only in those areas where there is a market for such service

- and it is financially feasible through operating revenues and necessary subsidies.
- The use of private contractors for the provision of transit service should be considered when such service is provided at equivalent service levels with lesser public subsidies.
- Replace buses on a regular basis based upon life-cycle costs and LANta's financial capacity.
- Rail rights-of-way should be preserved for future rail reuse if analysis shows that the reestablishment of future passenger service is warranted and financially feasible.

#### Rail Freight

- Provide competitive rail freight service through private capital investment in rail facilities.
- Public investment in acquiring, upgrading or operating lines proposed for abandonment should be limited to those instances where the investment is cost-effective relative to employment opportunities and tax revenues and/or is a cost-effective way of reducing highway travel.
- Land near rail lines that meets the Comprehensive Plan's criteria for industrial siting should be designated for industrial uses.
- Support increasing rail clearances in the Lehigh Valley to accommodate double-stack rail cars and wide loads.
- Plan, program and build intermodal transportation improvements to accommodate current and future travel demand.
- Support access to facilities and freight terminals that are otherwise compatible with the regional Comprehensive Plan.
- Provide safe at-grade crossings by upgrading to current safety standards.