



EXECUTIVE SUMMARY

This Long Range Transportation Plan (LRTP) for the SEDA-COG Metropolitan Planning Organization (MPO) presents an overview, trend evaluation, condition assessment, and a guide for ongoing management and development of the transportation system serving the eight-county MPO region. The Plan's goals mirror the ten federal planning factors expressed in the Fixing America's Surface Transportation (FAST) Act, with the following overarching vision:

"To create and maintain an integrated intermodal transportation system that facilitates the efficient and safe movement of people and goods while maintaining the region's character, enhancing the quality of life and economic vitality."

This LRTP document assembles a summary of the inventories, processes, activities, and products produced during the 12-month plan development schedule.

Planning Themes

In many significant ways, the SEDA-COG MPO region finds itself in a transitional period, starting with the designation of the MPO in 2013 and continuing reactivation of the Central Susquehanna Valley Transportation (CSVT) project, new transportation funding through Act 89, and more prescriptive project programming philosophies, among other emerging economic and demographic trends. The transitions are developmental, as the MPO grows its role of leadership and support of transportation planning in the expansive eight-county area. The transitions are also transformational, as the impacts of the CSVT project are realized and performance-based planning exerts greater influence over project development and programming. The following key themes underpin the narratives in this LRTP:

- Identification of the Bloomsburg-Berwick Urbanized Area (UZA) led to the designation of the SEDA-COG MPO in 2013.
- Authorizing transportation legislation at the federal level moved the focus to performance based planning, added new planning factors and changed the mix of funding programs.
- Pennsylvania Act 89 of 2013 brought significant new resources to bear, and the passage of Act 13 of 2012 made dedicated funding available for locally-owned, at-risk bridges at the county level.
- With funding available under Act 89, the project programming philosophy shifted from an exclusive focus on asset management to a carefully considered suite of repair, maintenance, and capacity projects that PennDOT has developed under the label "Decade of Investment"—including the Central Susquehanna Valley Transportation (CSVT) Project.
- Programming philosophies emphasize preservation techniques to extend the life of bridges between replacement or rehabilitation projects. Recent MPO efforts have also considered removal of closed bridges (as opposed to replacements) and bundling of local bridge projects for cost savings.
- Sustained oversupply of natural gas has led to a significant decrease in commodity prices for gas and oil, and drilling efforts in the Marcellus region have dropped off, reducing highway traffic and demand for rail service. It remains to be seen whether or not (and to what extent) gas drilling activity will resume in the future.
- Regionalization of transit services and the emergence of rabbittransit as the operator of transit services in four of the eight MPO counties are changing how public transportation is delivered.



Planning Outcomes

The planning outreach and activities worked progressively from identification of plan goals and transportation issues, through project identification and prioritization, and ultimately to a fiscally-constrained listing of 37 transportation projects that achieve the plan goals and fit the funding available from 2029 to 2040. The following planning outcomes are notable.

Regional Transportation Context

The SEDA-COG MPO planning region is characterized by its expansive size, encompassing more than 3,500 square miles, with a population of about 375,000 (2010 Census) throughout a web of urban clusters interspersed with large tracts of rural agricultural and forested land. The largest of the urban clusters—the Bloomsburg-Berwick UZA with a population of about 53,600 (2010 Census)—triggered the transition of the former Rural Planning Organization (RPO) to Metropolitan Planning Organization (MPO) status in 2013.

The MPO region has experienced modest growth during the last 10 years, with population and employment growth rates near the Pennsylvania average. Similar long-term growth rates are expected in the future. Ongoing growth in the Plain Sect communities (Amish and Old Order Mennonite) has raised attention to the accommodation and safety of horse-drawn vehicle traffic.

According to SEDA-COG’s 2014 survey of local stakeholders, transportation is generally viewed as a strength of the MPO region. The following transportation system elements were documented:

- The highway system includes more than 6,700 miles of roadway. Major highway routes include Interstates 80 and 180, US 220, US 11, US 15, and US 322. Completion of the \$670 million Central Susquehanna Valley Transportation (CSVT) Project is planned for 2024 and will complete a 13-mile limited-access highway connection between US 11/15 south of Selinsgrove and I-80. The project is currently the largest new highway project in the state and presents the SEDA-COG MPO with a significant planning challenge.
- Transit service is almost entirely demand-responsive. Minimal passenger rail service is currently provided between Harrisburg and Pittsburgh (Pennsylvanian Line), with a station in Lewistown. Transit agencies are currently considering regionalization of services, whether through agency consolidation or contracting of services with outside operators.
- Freight rail service is significant, with two class 1 railroads and active short-lines. The SEDA-COG Joint Rail Authority is active in six of the eight MPO counties, overseeing approximately 200 miles of rail infrastructure and keeping it intact through public ownership.
- The MPO region is served by nine general aviation airports.
- The MPO region currently includes two rail-trails and other land and water trails. While most of the current trails network is recreational in nature, public and agency interest in formalizing and growing the functional and recreational trails networks are driving new discussions of how the region plans, funds, and maintains the trails and greenways network.



Core Transportation Inventories & Trends

The Core Inventories and Trends provide a systematic, data-driven evaluation of transportation infrastructure condition, travel demand, roadway safety, and system operation.

- The higher-level highway systems are in comparatively good condition, with mostly “good” and “excellent” pavement quality and bridge conditions meeting or exceeding PennDOT targets. As a result, SEDA-COG MPO has maximum flexibility in deciding its investment priorities.
- The MPO region’s Highways carry approximately 10 million vehicle-miles per day, with a decreasing trend of about one percent per year noted from 2010 to 2014.
- With construction of the CSVT Project, significant traffic congestion issues will be addressed; future traffic congestion will likely be concentrated on the I-80 corridor and at certain intersection and interchange points along US 522 and US 11.
- Trends in highway fatalities, serious injuries, and associated rates indicate that future targets are currently being achieved in the SEDA-COG MPO region. PennDOT and SEDA-COG MPO continue working toward the Federal goals for crash reduction and the aspiration for zero highway deaths through roadway safety reviews and other coordinated efforts for targeting high crash locations.

Issues & Implications

The Issues and Implications explore the “transitions” planning theme organized around the highest priority issues identified in the 2015 SEDA-COG MPO Strategic Plan.

A. Central Susquehanna Valley Transportation Project

The CSVT is a major capacity-adding project. The new roadway will address a major freight and passenger bottleneck. The CSVT is being designed in two sections with construction of the Northern Section commencing in 2016. Construction of the Northern Section is anticipated to be completed by 2021 and the Southern Section by 2024. Implications of the CSVT include:

- A need for land use planning and traffic operations support for directly affected and surrounding municipalities, including consideration for pursuit of PennDOT special study funding to address secondary impacts around interchanges providing local access.
- A need for recalibration of the impacted travel corridors in terms of functional classification, network classification (Business Plan, Corridor Modernization), operations and future maintenance needs.
- There is broad consensus that the land use and economic effects of CSVT deserve additional study, beyond what is provided in the CSVT Environmental Impact Statement (EIS). However, the method and driver of the study has not yet been established.

B. Economic Development

The current trend in economic development is from traditional, large scale manufacturing industries to smaller, technology-driven manufacturing and service industries. In terms of the MPO region’s economy, improving transportation infrastructure and services should improve the vitality of the



region's downtowns and urban cores, connect workers to available jobs, and lower shipping costs for freight haulers. Per the 2015 Strategic Plan:

- There should be consideration as to overlapping priorities (i.e., Appalachian Regional Commission) that could assist project funding.
- The MPO should advocate and actively plan for improvements on strategic highway corridors in order to improve economic opportunities in the region.

The June of 2015 Comprehensive Economic Development Strategy (CEDS), updated for the entire 11-county SEDA-COG region, identified two Economic Development Centers (EDC's) - the Bellefonte-State College EDC (Centre County) and the Central Susquehanna EDC. Only the Central Susquehanna EDC includes the MPO region. Planning issues identified in the CEDS and related to economic development include:

- Combining of the Transsearch data (freight data), the analysis from the SEDA-COG Comprehensive Economic Development Strategy (CEDS) and the new Commodity Information Management System (CIMS) tool available from PennDOT should be investigated moving forward.
- Efforts must be made to maintain the menu of enterprise development technical assistance services and to increase entrepreneurship opportunities and assistance.
- The region's basic infrastructure (water / sewer facilities, telecommunications, natural gas infrastructure, inter-regional transportation systems - rail, airports, and surface transportation, industrial parks / designated growth areas) needs to be upgraded and/or expanded.

C. Transportation Investment and Funding

Previous Transportation Improvement Programs (TIPs) have seen a decline of capacity adding projects. In addition, recent PennDOT financial guidance recommends that, as a rule of thumb, 90% of the TIP be allocated to maintenance. Spending trends clearly show a move toward asset management activities. Two other fundamental changes noted in funding include allocations are made more and more on a performance basis and more transportation funding is available through competitive grant programs. Issues related to these funding trends include:

- The Transportation Alternatives Program (TAP) process needs to be modified to ensure project continuity throughout the region.
- More education is needed on the state's new Multimodal Transportation Fund to ensure that the region is proposing the best candidate projects that can successfully compete for these funds.
- Innovative funding solutions may be necessary to ensure projects are able to be completed. Partnerships for infrastructure investment are becoming increasingly necessary as public solutions become more constrained.
- Project funding priorities can sometimes be challenging for municipal officials in rural areas.
- Emerging State priorities may reduce the amount of funding available for transportation such as Act 13 funds - which could be redirected by the new administration.



The implications for the SEDA-COG MPO and its constituencies include the following:

- Increased need for education about the funding programs available and their eligibility.
- Increased importance of winning in competitive programs.
- Increased need for support in assembling functional partnerships and leveraging Public Private Partnerships (P3).
- Assisting local governments in understanding the Local Use Fund provision of Act 89.

D. Bridges and Asset Management

Trends for bridges and asset management include a move from bridge replacement only to maximum benefit strategy and from local only strategies to regionalized strategies and decision-making processes. PennDOT measures bridge condition by whether it is structurally deficient, which is an indication of a bridge's overall status in terms of structural soundness and ability to service the traveling public.

The 2015 Strategic Plan stated that the region's LRTP should seek to quantify the asset management demands of the system as part of a process to balance the economic development and adequate maintenance for the system. Specific strategies included collaboration with PennDOT to identify possible bridge bundling projects, further exploration of how PennDOT's P3 Rapid Bridge Replacement Program has affected the region and remaining needs, use of the eight to twenty feet long bridge inventory for municipal outreach and to develop a municipal capital improvement program for SD local bridges that includes a training/assistance program, and investigation of potential funding streams for local bridges.

During the past several updates to the TIP, the members of the MPO have noted difficulty in programming local bridge projects on the TIP. They have also noted that several of the projects programmed have encountered a range of difficulties in moving to construction. As a result, trends in local bridge conditions show an increase in structurally deficient bridges and deck area, which is in stark contrast to the trends on the state system.

Working with a Local Bridge Subcommittee, the following activities were prioritized for MPO staff to provide more information to local owners of bridges:¹

- Continue to schedule LTAP sessions on classes related to local bridges on a regular basis.
- Schedule technical assistance sessions as requested, and work to make sure that local officials are aware of the option to schedule a technical assistance session on issues related to local bridges, the installation of GRS construction materials, and related topics.
- Develop a resource guide for local officials identifying funding programs that can be used in local bridge work. Post the guide on the SEDA-COG website, and publicize it at county conventions and other venues.
- Continue efforts to complete and share the inventory of local bridges between eight and twenty feet in the SEDA-COG area.

¹ SEDA-COG MPO, *Outcomes and Recommendations from the SEDA-COG MPO Metropolitan Planning Organization Local Bridge Subcommittee*, DRAFT dated January 26, 2016.



- Support county-led efforts to inspect, maintain and repair locally owned bridges between eight and twenty feet long.
- Support county-led efforts to find and apply low-cost replacement methods, including open-bottom aluminum culverts, pipe replacements and other locally developed solutions.

The Local Bridge Subcommittee also considered a bridge prioritization methodology, developed by the MPO staff, for scoring bridges based on ten factors, including condition, context, county priority, local impact, and resiliency.

E. Corridor Modernization

A recent trend in transportation planning has shifted from segmented, jurisdictional-based systems to more connected, corridor-based systems; from old technology (or no technology) to new technology; and from a projects-driven program to a performance based program. This more regional focus on corridors that cross jurisdictions centers on how to "modernize" strategically important corridors to better serve communities, regions and economic development centers. For the SEDA-COG MPO, corridor modernization is primarily focused on traffic signals and Intelligent Transportation Systems (ITS) improvements.

Specific strategies for the region include:

- Investigation of a TIP line item for traffic signals, funded by state and federal sources.
- An inventory of both traffic signal operation needs and ITS-related needs.

Another future and potentially significant need for the SEDA-COG MPO region will be the impact of CSVT on regional corridor operations, especially related to traffic signals.

F. Freight Movement & Priorities

Pennsylvania's most recent update of its multimodal LRTP and the Commonwealth's first comprehensive freight movement plan, "PA On Track," includes a main freight goal to expand and improve system mobility and integrate modal connections. In addition, the FAST Act includes two new programs specific to freight: the National Highway Freight Program and the Nationally Significant Freight and Highway Projects Program. This shows a trend from freight as a secondary issue to freight as a primary planning factor.

In the SEDA-COG MPO region, many of the needs of the general traveling public are similar to those of freight carriers and customers. However, some unique freight needs do exist and to that end, freight strategies in the MPO region include:

- Use of the Statewide Freight Plan to focus in on specific freight types and needs.
- Use of the PA Transportation Advisory Committee (TAC) 2007 study on truck access and parking to identify needs; and
- Identification of the Priority Freight Network in the SEDA-COG MPO region in coordination with PennDOT and FHWA.

Other strategic issues and issues of public concern addressed in the LRTP include horse-drawn vehicle travel and safety, the vulnerability of infrastructure to extreme weather trends, walkable/bikeable



communities, and transportation access and options. Specific planning considerations for these issues include:

- Increased attention to highway and bridge design for the safe accommodation of horse-and-buggy travel, including mitigation of existing crash issues in the corridors where crash trends are noted.
- Further study to identify the roadways and pathways used most by the Plain Sect, key locations of conflict (intersections, bridges), use of edgeline rumble strips and the adequacy of shoulder widths will help target and prioritize projects.
- Continued monitoring of PennDOT's extreme weather vulnerability study (to be completed by September 2016) and consideration as to whether strategies developed through the study should be (or need to be) implemented in the SEDA-COG MPO region.
- Community-based plans for developing walking and biking facilities are needed to give the municipalities support when faced with pressure to waive the requirements.
- To assist with planning for functional networks of sidewalks and paths, the creation of county or regional "model" ordinances could help where municipal ordinances do not have strong requirements.
- When designing and implementing walking and biking facilities, PennDOT's Local Technical Assistance Program (LTAP) Walkable Communities Program should be referenced in terms of pedestrian facility safety and development of potential solutions.
- Transportation access and options considerations should include:
 - Expansion of shared-ride services to evening and weekend hours
 - Improvement of service convenience and amenities
 - Taxi subsidy program
 - Accessible taxi vehicles
 - Expansion of carpool and vanpool services
 - Car sharing programs
 - "Beyond the Region" (inter-city) commuter bus service
 - General public rural demand responsive service
 - Expansion of passenger rail (Amtrak's Keystone West Pennsylvanian Service) to include 2 or 3 trips per day.

Plan Implementation

Plan Implementation synthesizes the core inventories, trend evaluations, and issues and implications through a process that scored, prioritized, and selected transportation projects that best achieve the goals set in the Plan. Strategies and activities that further the plan goals are also identified.

- Project identification and solicitation were completed through a pair of Transportation Issues Forums attended by 45 persons, mostly representing county decision makers and other agency staff. Attendees heard a "state of the District" presentation from PennDOT staff and then interacted with mapping of comment data received by the State Transportation Commission and PennDOT through recent, online webmap surveys. Clusters of comments were evaluated, project ideas suggested, and comments on the ideas (and new ideas) were recorded. The Issues Forums generated 20 new candidate projects to be considered in the LRTP.
- Candidate Projects from the Issues Forums were combined with projects held over from the previous LRTP, the MPO's recent Safety Reviews, the Susquehanna Greenways Partnership, and



the MPO's projects submitted for the Statewide PA On Track Long Range Transportation Plan. The full Candidate List included 81 projects.

- A Project Scoring and Selection Process was vetted through the Steering Committee, and the Candidate Projects were scored and prioritized according to the scoring criteria.
- Fiscal guidance from PennDOT and an analysis of historic revenue trends were used to estimate that revenues of approximately \$1.5 billion would be available to fund transportation projects from 2017 to 2040. Approximately \$803.6 million would be available in the LRTP Plan Period of 2029 to 2040. Of this amount, 90% was assumed to be a reserve for asset management.
- The Fiscally Constrained List of 37 projects was developed to include prioritized Candidate Projects whose costs fit within the remaining 10% of the revenue available during 2029 to 2040. All Candidate Projects outside of fiscal constraint were placed on the Illustrative Project List.
- The following new implementation items and strategies were added to the Implementation Plan, initially developed by SEDA-COG MPO in the 2011 LRTP:
 - Participate in the development of a multi-agency Greenway and Trail Authority.
 - Examine the establishment of a bicycle/pedestrian advisory committee at the MPO level.
 - Facilitate a coordinated land use-transportation study of CSVT impacts.
 - Support municipalities with CSVT local access interchanges in efforts to plan/prepare for land use and transportation impacts.

Plan Assessment

In Plan Assessment, the transportation investment program was evaluated to provide a feedback loop in the planning process, using performance measures to demonstrate effectiveness and environmental justice to ensure the social equity of the transportation investment program.

- Performance Measures – According to Federal regulation and State guidance, seven performance measures related to Highway Safety, Bridges, and Pavement were established. Baseline data for each measure was compiled, and future targets were either set or referenced to state and federal guidelines and rule-making. SEDA-COG MPO also maintains a separate Performance Measures Report, which tracks several other measures and is updated annually.
- Pennsylvania Scorecard of Influence – PennDOT has provided specific guidance for allocating transportation dollars to fund certain critical infrastructure categories—particularly for bridges and highway pavement. The guidance is tied to how well certain performance targets are being met. The SEDA-COG MPO program was found to meet the guidelines set, and based on the MPO's achievement of performance targets, the guideline placed no limitation on spending for capacity-adding projects.
- Environmental Justice “Benefits & Burdens” Analysis – The Environmental Justice Benefits and Burdens Analysis identifies where high concentrations of minority, in-poverty, and other traditionally underserved populations reside in the SEDA-COG MPO region and evaluates the relative benefit or burden placed on them by the transportation system and ongoing investment



program. Overall, the transportation system and program is equitable across all populations. Analysis of project expenditures shows that, on a per roadway-mile basis, spending is highest in areas with both high minority and high in-poverty populations. Finally, where potential inequities were discovered, particularly for crashes in the vicinity of EJ populations, the plan also notes extensive investment in projects aimed at improving pedestrian and roadway safety.

Plan Participation & Outreach Activities

Planning activities for the 12-month LRTP process revolved around points of outreach, coordination, and participation. One of the first LRTP work plan activities was a Transportation Issues Forum, where trouble spots and project ideas were generated based on comment data from the State Transportation Commission and PennDOT. A LRTP Steering Committee was formed and engaged with guiding the plan process during seven meetings. A Project Scoring Group implemented a project scoring and selection process. Two Strategy Days were held with the PennDOT District staff. Local human services agencies and their staff were engaged in two Environmental Justice Workshops to discuss how to better meet the needs of persons who are underserved by the transportation system. Finally, the plan was presented for public comment during a 30-day comment period.

The LRTP's public and stakeholder involvement process included opportunities for all interested parties to engage in development of the LRTP. Online surveys and in-person activities were conducted, including a Transportation Issues Forum, Environmental Justice Workshops, public comment period, and public meeting. The MPO's Facebook and Twitter pages were used to make "real-time" connections with social media audiences. Finally, an ongoing conversation with MPO committee members was maintained via a Steering Committee, Advisory Group, and Project Scoring Group convened specifically for the LRTP process.