

6 TRANSPORTATION PLAN

The Lebanon County 2015-2040 Long Range Transportation Plan identifies many of the county's long-term transportation needs and strategies for improving the transportation network relative to the challenges of providing sustainable community development and redevelopment while at the same time preserving and enhancing our environment. In doing so, the Plan fulfills the federal transportation planning requirements for the Lebanon County Metropolitan Planning Organization (LEBCO MPO), thus ensuring the county's continued eligibility for Federal transportation funds.



The plan includes short-term (1-4 years), medium-term (5-12 years) and long-term (13-25 years) projects and strategies to advance steady progress toward short, medium and long range system goals. The plan will be updated every four years to adapt to changing conditions and new county, regional and state priorities. With SAFETEA-LU, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) have undertaken an administrative process to change the frequency of updates to four years, and this plan satisfies those requirements. As PennDOT develops its new Long Range Transportation Plan and Comprehensive Freight Movement Plan and as USDOT continues to implement its new Strategic Plan (“Transportation for a New Generation”) and any new guidance in relation to Moving Ahead for Progress in the 21st Century (MAP-21), the LEBCO MPO over the next four years will work to incorporate new/required activities into its transportation planning and programming processes.

Introduction

What is a Metropolitan Planning Organization?

A metropolitan planning organization (MPO) is a policy-making body made up of representatives from local, state and federal government and transportation authorities. The Federal Aid Highway Act of 1962 requires the formation of an MPO for any urbanized area with a population greater than 50,000 individuals. Each urbanized area listed by the US Census Bureau must be represented by an MPO in order to carry out the metropolitan transportation planning process specified in Federal transportation regulations (23 USC 134 and 49 USC 5303).

According to the Federal Highway Administration (FHWA), the six core functions of an MPO are:

- **Establish a setting:** Establish and manage a fair and impartial setting for effective regional decision-making in the metropolitan area; understand the trends and conditions that affect transportation.
- **Evaluate alternatives:** Evaluate transportation alternatives, scaled to the size and complexity of the region, to the nature of its transportation issues, and to the realistically available options.
- **Maintain a Long Range Transportation Plan (LRTP):** Develop and update a long range transportation plan for the metropolitan area covering a planning horizon of 20 or more years that fosters (1) mobility and access for people and goods, (2) safe and efficient system performance and preservation, and (3) quality of life.
- **Develop a Transportation Improvement Program (TIP):** Develop a program based on the long range transportation plan and designed to serve the area's goals, using spending, regulating, operating, management, and financial tools.
- **Involve the public:** Involve the general public and all the significantly affected sub-groups in the four essential functions listed above.
- **Develop a Unified Planning Work Program (UPWP):** Receive federal and state funds through the UPWP to carry out the above tasks and other transportation planning and programming (funding) functions.

FHWA and FTA require metropolitan planning organizations in each urbanized area to maintain a continuing, cooperative and comprehensive transportation planning process that considers all modes through three mandated products:

- A Long Range Transportation Plan (LRTP)
- A Transportation Improvement Program (TIP)
- A Unified Planning Work Program (UPWP)

What is the Lebanon County MPO?

In May 2002, based on the 2000 US Census, Lebanon County was designated by the US Census Bureau as an “urbanized area,” defined as a “densely settled territory containing 50,000 or more people,” thus requiring the formation of the Lebanon County MPO.¹

The Lebanon County Metropolitan Planning Organization (LEBCO MPO) is the local agency responsible for transportation planning and programming. It includes representatives from county and local government (elected officials, planning department, emergency management), local transit, aviation, and trail organizations, business and industry (including agriculture and tourism), as well as state and federal

¹ US Census, Federal Register, 67 FR 21962 (May 1, 2002)

transportation agencies. LEBCO MPO provides the county with a collaborative planning forum to address transportation-related issues from a countywide and regional perspective and to plan for and make decisions on the use of federal and state transportation funds.

The Lebanon County MPO is comprised of an MPO Policy Board and an MPO Technical Planning Committee which meet bimonthly at advertised meetings.

- The MPO Policy Board includes voting representatives from Lebanon County government, the City of Lebanon, Lebanon Transit (formerly County of Lebanon Transit), PennDOT's Central Office and District 8-0 office, Lebanon Valley Chamber of Commerce, and two representatives from the County's townships or boroughs. Non-voting, advisory members include representatives from the Federal Highway Administration, the Federal Transit Administration and the Environmental Protection Agency. The role of the Policy Board is to approve all actions of the MPO.
- The MPO Technical Planning Committee includes voting representatives from Lebanon County government, Lebanon County Planning Department, the City of Lebanon, Lebanon Transit, Lebanon Valley Economic Development Corporation, PennDOT's Central Office and District 8-0 office, one representative from the county's townships and one from the county's boroughs, and one representative from the Aviation community. Non-voting, advisory members include representatives from the Federal Highway Administration, the Federal Transit Administration and the Environmental Protection Agency, Lebanon County/City Geographic Information Systems office, the agricultural community, Lebanon Valley Tourist Promotion Agency, Community of Lebanon Association, Lebanon Valley Rails to Trails, Lebanon County Emergency Management Agency, the Lebanon County Human Services Community Action Partnership and the Lebanon Valley Bicycle Coalition (also called Bike Lebanon). The role of the Technical Planning Committee is to provide procedural and technical guidance on the products and processes of the MPO.

Lebanon County Planning Department provides staff support to both the Policy Board and the Technical Planning Committee.

Lebanon County MPO's Region

Lebanon County is a 5th class county in south central Pennsylvania. The county encompasses 362.9 square miles or 232,256 acres. Its population in 2000 was 120,327 persons. It grew by 11% over the next ten years, with the total county population increasing to 133,568 in 2010 which ranks 27th among the state's 67 counties in population and 60th in land area.

The county is comprised of 26 municipalities: sixteen townships of the second class, two townships of the first class, seven boroughs, and one third class city (the City of Lebanon). The City of Lebanon is the county seat and has traditionally been the center of major business and banking activity. The boroughs developed as community centers along major trade and transportation routes, connecting farmers and tradesmen with regional markets.



Lebanon County is bordered by Dauphin County to the north and west, by Berks and Schuylkill Counties to the east, and by Lancaster County to the south. Neighboring metropolitan centers include Harrisburg, Lancaster, Reading, and Pottsville.

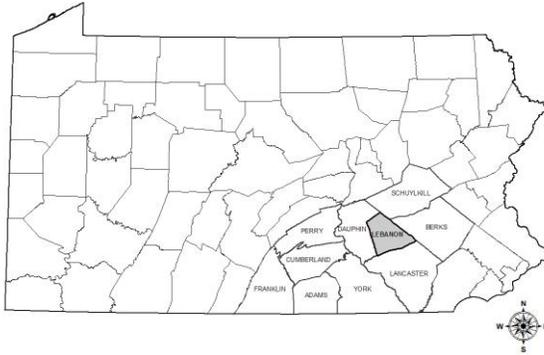


Figure 6-1

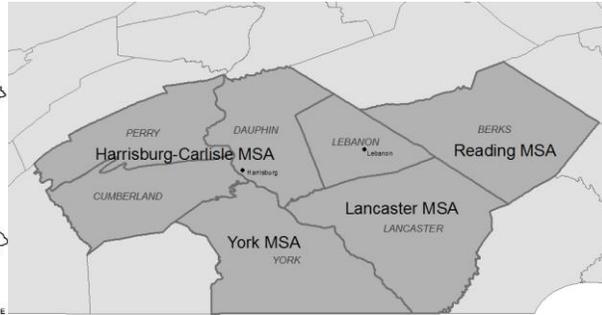


Figure 6-2

The MPO territory includes all of Lebanon County, since the boundary was expanded in April of 2009 to include Palmyra Borough and portions of North Londonderry Township and South Londonderry Township, which were previously under the Harrisburg MPO.

Further description of Lebanon County’s location within the surrounding region can be found in *Chapter 2 – Regional Setting of the Comprehensive Plan*.

Chapter 2 focuses on historic population statistics and population projections. Lebanon County has shown consistent growth over the past four decades, from 90,853 residents in 1960 to 133,568 residents in 2010. Other portions of the comprehensive plan note that approximately 75% of the population lives within three miles of US Route 422. For future planning, population projections were based upon the linear projection method. The county is expected to continue to grow through 2020, and in terms of growth rates, the county’s foreseeable growth rate is expected to be similar to that of the 1980-1990 decade.

The median age in Lebanon County is also projected to remain above that of the state resulting from the aging Baby Boomers and the growing number of senior citizen housing complexes. The MPO will continue to monitor and become more involved in initiatives like Grace@HOME, Lebanon County Age-Wave Initiative and iTNAmerica to determine how best to partner with the private sector to address the growing transportation needs of the elderly, which includes all modes ... continuing to drive, using door-to-door private/public services, riding Lebanon Transit, bicycling or walking short distances, etc. Aging in-place is the goal of these initiatives.

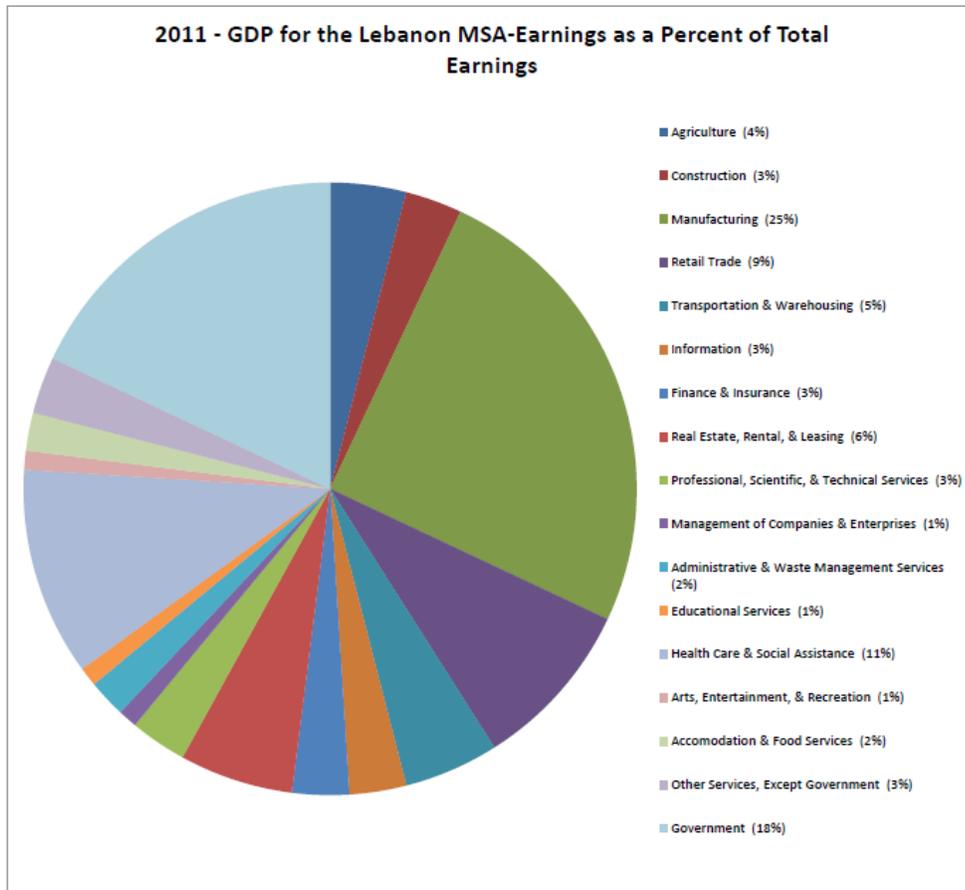
While all minority ethnic groups grew in Lebanon County between 2000 and 2010, the most significant growth occurred among the Hispanic population.

Between 2000 and 2010, almost 6,272 new dwelling units were constructed in Lebanon County. Housing growth in Lebanon County during that period was 12.7%; outpacing statewide growth of 6%. Housing growth took place in all but 5 of Lebanon County’s municipalities. The average household size in Lebanon County is 2.49 persons. In the last 20 years, 95% of the new residential units were single family

dwellings or mobile homes and less than 5% were multifamily dwellings. The most recent national recession has hurt the housing market in Lebanon County, with new housing starts being dramatically reduced in 2008 through 2010; however, that trend is now reversing itself. These and other housing facts, figures and programs are outlined in *Chapter 12 – Housing Plan from the County Comprehensive*.

A very detailed assessment of Lebanon County’s economic structure, performance, and labor force are documented in *Chapter 8 – Economic Development Plan*. The county’s economy has evolved from one based primarily on agricultural pursuits to a diverse mixture of agricultural, industrial, manufacturing and service enterprises. The diversity of the modern-day Lebanon County economy is shown in Figure 6.3 below. Please note that agriculture and agriculture-related earnings are listed in separate tables and charts in the *Economic Profile*.

Figure 6-3 Earnings as a Percent of Total Earnings



Source: US Bureau of Economic Analysis

Lebanon County had one of the fastest growing economies over the last several years according to the US Department of Commerce. With a rate of 6.27%, Lebanon County ranked 30th nationwide among 382 metropolitan areas. The US average growth rate for metropolitan areas was 2.50%. Lebanon's gross domestic product has risen steadily from \$3.392 billion in 2007 to \$3.772 billion in 2010 to \$4.001 billion in 2013. The county's jobless rate dropped to 4.7% in April, which was the third lowest in the state and lower than statewide (5.7%) and national (6.7%) averages.

Some of the larger employers in Lebanon County include

NAME	FULL & PART-TIME EMPLOYEES
Department of Military and Veteran Affairs at Fort Indiantown Gap	16,500
VA Medical Center	1,800
Good Samaritan Hospital	1,100
Lebanon County	900
Philhaven Hospital	900
Cornwall Lebanon School District	650
Tyco Electronics	650
MSC Industrial Supply Company	550
Weaber, Inc.	500

The largest full time employer in Lebanon County is the VA Medical Center. And just to the west in Hershey, PA, well over 44,500 people are employed at various locations, with many living in Lebanon County.

The Long Range Transportation Plan

As an MPO, Lebanon County is required by federal regulations to develop a Long Range Transportation Plan (LRTP) and update that plan every four years. The horizon year of this plan is 2040. The Lebanon County Comprehensive Plan was finalized in late 2007 and as implementation began in calendar year 2008, the transportation plan (which as a part of the comprehensive plan) was also amended at that time. This is the next update of the plan, not including the transportation system profile which is updated on a sporadic basis as funding and staffing permits. A new plan and TIP will be adopted on June 19, 2014. The next major plan update will be completed in June of 2018.

Based upon state and federal requirements, the LEBCO MPO LRTP must:

- Have a minimum 20-year planning horizon
- Be updated at least once every four years

- Be based on the latest available estimates and assumptions on population, land use, travel, employment, congestion and economic activity
- Identify an integrated, multimodal transportation system, giving emphasis to facilities that serve important national and regional functions
- Contain operational and management strategies to improve the performance of existing infrastructure to maximize safety and mobility of people and goods
- Conform to state and federal air quality standards
- Provide for multimodal capacity increases if needed based upon regional needs and priorities
- Be fiscally constrained by identifying sources of funds “reasonably expected to be available” to implement the plan
- Discuss potential environmental mitigation activities
- Include transportation and transit enhancements, as well as address pedestrian and bicycle facility improvements
- Provide for public participation, including publications with electronically accessible formats.

Key elements of the Comprehensive Plan that will influence the transportation plan in the near future are the Community Facilities Plan, the Housing Plan, the Natural Resources/Open Space/Recreation Plan, the Cultural and Historic Resources Plan, the Land Use Plan and the Energy Conservation Plan.

Each successive update of this document will respond to the trends and projected changes in the county’s demographics, economy, and transportation needs and serve as a guide for future transportation investments. This plan will be reviewed and updated every four years and, when appropriate, the vision and goals will be refined and adjusted.

The LEBCO MPO Long Range Transportation Planning process comprises two main elements:

- **Goals and policy statements** – a description of the transportation system that Lebanon County strives to provide and other policies addressing areas such as maintenance, preservation, safety, mobility, access and decision making.
- **A transportation plan** – a prioritized list of projects, improvements and other strategies and services to be programmed and funded through private, local, state, and/or federal sources.

(Please note that the status of the LRTP changes every two years as the LEBCO MPO adopts a new Transportation Improvement Program (TIP) but the Lebanon County Comprehensive Plan remains static.)

The MPO also developed a **Transportation System Profile** several years ago, but it only gets updated as funding and staffing permits. The profile is an inventory of transportation facilities and an assessment of its capacity to serve its users; this



includes historic and forecasted user demand of the transportation facilities and a discussion of the need and opportunities for transportation planning to sustain Lebanon County's quality of life. The profile was one of many background documents for the County Comprehensive Plan. No new county-wide data, information and/or trends for the profile were collected, summarized or analyzed in calendar years 2010, 2011, 2012 and 2013.

Vision Statement, Goals and Policy Considerations

Introduction

The Lebanon County LRTP is organized around a vision statement, six goals, and numerous policy statements that identify the basic values for the plan's development and implementation.

The vision statement, goals and policy considerations were developed in conjunction with the MPO's Policy Board and Technical Planning Committee and continue to be refined over time.

Vision Statement

The Vision Statement conveys the preferred future direction and condition of the community concerning the countywide transportation network.

The Lebanon County Long Range Transportation Plan (LRTP) Vision Statement

The transportation system of Lebanon County will safely, efficiently and effectively serve the mobility, access and travel needs of residents, businesses and visitors.

Goals

The Plan is organized around six goals that identify key directions or areas of priority.

The Lebanon County Long Range Transportation Plan's (LRTP's) Goals

- Provide a safe and secure transportation system;
- Provide a multi-modal system that is efficient, interconnected and accessible;
- Promote a sustainable transportation system that complements the county's natural and built environment;
- Meet the challenges and opportunities of growth through collaborative planning, funding and project implementation;

- Target investments for maximum local and regional benefit and impact; and
- Utilize all available funding sources to finance investments for the transportation network.

Policy Statements

The Lebanon County Long Range Transportation Plan process has identified a multi-faceted policy statement as a method of assessing candidate projects and strategies to ensure that they adhere to the vision and goals listed above as well as the eight federal planning factors.

Lebanon County Long Range Transportation Plan Policy Statements:

- Establish databases and monitoring systems to ensure that funding is targeted to preserve Lebanon County's transportation infrastructure;
- Maintain and improve the existing transportation system;
- Improve the safety and security of the transportation system for motorized and non-motorized users;
- Increase the efficiency and connectivity for moving both people and goods, including the protection of future transportation corridors;
- Promote efficient system management and operation, including the application of access management provisions in local regulations;
- Focus on affordable and sensible operational improvements;
- Enhance the integration and connectivity of the transportation system for people and freight;
- Ensure that the county's bicycle and pedestrian network is fully integrated into the county's multimodal transportation system;
- Emphasize transit's role in support of the continued economic health of Lebanon County and its integral relationship to mobility, land use and overall community development;
- Coordinate transportation system improvements with land use, infrastructure, and other community development and tourism policies and with key stakeholders;
- Encourage local support for transportation improvements as well as opportunities for private sector involvement;
- Support the economic vitality of Lebanon County by contributing to its competitiveness, productivity and efficiency, as well as enhancing its potential to attract visitors to experience its "scenic byways", historic communities and recreational trails;
- Protect and enhance the environment, promote energy conservation, preserve the county's small towns and agricultural landscapes, improve the quality of life and encourage a healthy lifestyle;
- Promote community and neighborhood livability, including the protection of scenic corridors; and
- Maintain the City/County Geographic Information Systems (GIS) geodatabase with up-to-date software and current data sets.

LEBCO MPO's Primary Focus

Based upon the above vision, goals and policy statements, the LEBCO MPO intends to primarily focus on highway and transit projects, programs and services that (1) preserve, maintain and enhance the existing system; (2) provide properly-scaled operational improvements to the existing system; and (3) promote safety and efficiency in the existing system. Current guidance from PennDOT, FHWA and FTA recommends that at a minimum, at least 90% of the LEBCO MPO's funding for projects be dedicated to system preservation, including 85% of these funds for structurally deficient bridges. At this time, the LEBCO MPO views capacity-adding projects as the exception, not the rule, to solving the county's transportation problems.

Having the best possible understanding about "our assets" (roadway pavement, bridges, traffic signals, transit rolling stock, etc.) will enable the LEBCO MPO to make wise funding choices. **The LEBCO MPO strongly supports MAP-21's emphasis on transportation performance management (PM) and asset management (AM) as a strategic approach that uses system information to make investment and policy decisions to achieve national, state and local goals.** Over time, new performance measures will be established by the LEBCO MPO; some will be short-term in nature and others will be long-term endeavors. These strategies will be further identified in future LRTPs along with key milestones. This will be done to improve (1) safety; (2) infrastructure condition; (3) system reliability; (4) freight movement and economic vitality; (5) environmental sustainability; and (6) project delivery. The LEBCO MPO will work with PennDOT, FHWA and FTA to incorporate safety measures first into the LRTP early in calendar year 2015 and the other five measures in late 2015 and beyond as per the current implementation schedule from USDOT.

The LEBCO MPO's future performance measures will be S.M.A.R.T. – **S**pecific, **M**easurable, **A**greed Upon by All Key Partners, **R**ealistic and **T**ime-Bound. Presently, the LEBCO MPO desires to:

- have all of its Interstate and NHS routes in excellent or good condition for pavement smoothness
- have all non-NHS state routes in excellent, good or fair condition for pavement smoothness
- reduce the number and percentage of structurally deficient bridges to below the nationwide average for state bridges and for local bridges
- lower fatalities and serious accidents based upon the previous years' statistics and the past rolling 5-year average
- improve travel times in the MPO's 6 corridors of concern.

The above measures are qualitative but have helped to guide many of the planning and programming decisions made by the MPO since 2003.

The MPO recently adopted a Regional Operations Plan (ROP) for the southern portion of the county; it was developed to fully understand the impacts from major developments in the area ... North Cornwall Commons, The Preserve at Historic Cornwall Village, job expansion at the VA Medical Center, etc. The MPO recently

completed a PA Route 241 Road Safety Audit (RSA) to address higher than normal crash rates in this corridor from US Route 322 into the City of Lebanon at PA Route 72. The MPO’s Congestion Management Processes (CMP) Plan is currently being updated; it’s now called Lebanon County Moves. Projects, programs and services that will be recommended in this CMP update will be incorporated into future plans and programs. Implementation of the Lebanon Transit (LT) Business Plan has been fully completed as per various new projects, programs and services. Working with the Harrisburg MPO, Capital Area Transit (CAT), Commuter Services of PA and the Modern Transit Partnership (MTP), the LEBCO MPO and Lebanon Transit also intend to implement over time the bus service recommendations from the Corridor 2 Premium Transit Operations Plan for US Route 422/US Route 322/I-83 from Lebanon through Hershey on to Harrisburg as well as the key recommendations for Lebanon County from the Commuter Services of PA’s 9-County Regional Transit Coordination Study. The ongoing Regional Bicycle Connectivity Study in Dauphin and Lebanon Counties will address the needs of bicyclists in Derry Township and western portions of Lebanon County. Beginning in July of 2014, the MPO will start a new transit study to investigate a new route or routes and a new park-and-ride lot or lots to service the growing businesses and industries in NE Lebanon County and NW Berks County. And the LEBCO MPO and Lebanon Transit are active partners in PennDOT’s ongoing Phase 2 Study entitled, SC PA Public Transportation Regionalization Study. The LEBCO MPO is also working very closely with PennDOT staff to evaluate roadway pavement conditions based upon International Roughness Index (IRI) and Overall Pavement Index (OPI) information and to program (fund) projects accordingly, many of which are included in PennDOT’s Decade of Investment (DOI) list for Lebanon County. All of these initiatives will help the LEBCO MPO in future years with regard to establishing priorities for project implementation.

Federal Planning Factors

As required by federal regulation, eight planning factors are considered in this Long Range Transportation Plan and reflected in the LRTP’s Vision, Goals and Policy Statements. Table 6-1 lists the federal planning factors and the applicable goal or policy statement item(s) identified for the LEBCO MPO LRTP.

Table 6-1 Federal Planning Factors and LEBCO MPO LRTP Compliance

Federal Planning Factor	LEBCO MPO LRTP Goal or Policy Statement Item(s)
<ul style="list-style-type: none"> Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency. 	<ul style="list-style-type: none"> Support the economic vitality of Lebanon County by contributing to its competitiveness, productivity and efficiency, as well as enhancing its potential to attract visitors to experience its “scenic byways”, historic communities and recreation trails. Emphasize transit’s role in support of the continued economic health of Lebanon County and its integral relationship to mobility, land use and overall community development.
<ul style="list-style-type: none"> Increase the safety of the transportation system for motorized and non- 	<ul style="list-style-type: none"> Improve the safety and security of the transportation system for motorized and non-motorized users.

Federal Planning Factor	LEBCO MPO LRTP Goal or Policy Statement Item(s)
motorized users.	
<ul style="list-style-type: none"> • Increase the security of the transportation system for motorized and non-motorized users. 	<ul style="list-style-type: none"> • Improve the safety and security of the transportation system for motorized and non-motorized users.
<ul style="list-style-type: none"> • Increase the accessibility and mobility for people and for freight. 	<ul style="list-style-type: none"> • Increase the efficiency and connectivity for moving both people and goods, including the protection of future transportation corridors. • Enhance the integration and connectivity of the transportation system for people and freight. • Ensure that the county's bicycle and pedestrian network is fully integrated into the county's multimodal transportation system. • Emphasize transit's role in support of the continued economic health of Lebanon County and its integral relationship to mobility, land use and overall community development. • Coordinate transportation system improvements with land use, infrastructure, and other community development and tourism policies and with key stakeholders. • With the county's aging population, the age wave initiative must be thoroughly explored to meet these changing mobility needs.
<ul style="list-style-type: none"> • Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns. 	<ul style="list-style-type: none"> • Protect and enhance the environment, promote energy conservation, preserve the county's small towns and agricultural landscapes, improve the quality of life and encourage a healthy lifestyle. • Coordinate transportation system improvements with land use, infrastructure, and other community development and tourism policies and with key stakeholders.
<ul style="list-style-type: none"> • Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight. 	<ul style="list-style-type: none"> • Enhance the integration and connectivity of the transportation system for people and freight; • Ensure that the county's bicycle and pedestrian network is fully integrated into the county's multimodal transportation system.
<ul style="list-style-type: none"> • Promote efficient system management and operation. 	<ul style="list-style-type: none"> • Promote efficient system management and operation, including the application of access management provisions in local regulations.
<ul style="list-style-type: none"> • Preserve the Existing System 	<ul style="list-style-type: none"> • Maintain and improve the existing transportation system

6 *TRANSPORTATION PLAN*

Conditions and Trends

Throughout Pennsylvania, there is increasing recognition of the linkages between land use and transportation and how land use impacts the efficiency and effectiveness of the transportation system. Proactive planning in anticipation of growth is critical to mitigate the impacts of the population increases expected for Lebanon County as described in other locations within the Lebanon County Comprehensive Plan.

The evaluation of existing conditions and observable trends in the use of the transportation network provides a starting point for the development of strategies and projects for inclusion in the Long Range Transportation Plan (LRTP).

The Transportation System Profile contains a brief (but slightly outdated) description of Lebanon County's existing transportation network including an inventory of roads, bridges, public transit, rail freight lines, airports and bicycle and pedestrian facilities. The Profile revealed many of the locations where problems exist, which trends are changing the way that the system is being used, and how future demand may require enhancements to accommodate growth.

Overall Countywide Trends

Recent and projected future residential and business/employment growth within Lebanon County has affected the transportation network's efficiency and changed the way residents, workers and others use the system. Some generally observed countywide trends include:

- The number of residents and jobs within Lebanon County are expected to grow until at least 2020.
- Residents are currently traveling longer and farther to work than they did ten years ago.
- Traffic fatalities remain too high ... 20 in 2006; 19 in 2007; 22 in 2008; 21 in 2009; 15 in 2010; 24 in 2011; 15 in 2012; and 19 in 2013.
- Transit ridership grew in 2007, 2008 and 2009, declined slightly in 2010, but grew slightly again in 2011, declined slightly in 2012 and increased slightly in 2013. So far, ridership trends in 2014 are slightly up. Shared-Ride ridership for persons over 65 years of age or for persons with disabilities has declined very slightly over the last three years.
- Traffic pressure from increasing demand for residential and business development will continue to impact the county's roadway infrastructure; however, traffic on a few of the county's main state roads declined slightly over

the last two years as indicated in the annual traffic count reports from PennDOT.

- Traffic on local roads and streets has increased in many locations, as more trips are diverted off of the state and federal roads based upon real or perceived congestion.
- Even with the recent increase in state transportation funds, few capacity adding projects will be done in Lebanon County over the next several decades. For example, roads will not be widened to add additional traffic lanes. Consequently, we need to better maintain and operate what we have, and we need to focus more on emerging trends that development and higher densities bring ... more transit service, improved conditions for walking and bicycling, etc.
- Freight and goods movement appears to be on the increase throughout the county. This will be confirmed later in 2014 and 2015 when PennDOT releases detailed freight/goods movement information for each MPO and RPO that is being gathered and analyzed during the PA On Track effort to develop the Commonwealth's next Long Range Transportation Plan and the state's first-ever Comprehensive Freight Movement Plan. The County also has an excellent handle on current and future goods movement since we are involved in every major development subdivision, zoning and land development review, every Transportation Impact Study (TIS)/Transportation Impact Analysis (TIA) and every PennDOT Highway Occupancy Permit (HOP).

The net effect of the trends identified above reinforces the need for a coordinated planning approach that reinforces the link between land use, transportation and economic development to smartly accommodate future residential and job growth.

Key Trends by Mode

The Transportation Profile focused on each transportation mode to highlight usage trends and key indicators that required further evaluation in the Long Range Transportation Plan. On the following three pages, Table 6-2 summarizes some of the key transportation trends identified in the Profile or information recently obtained from other sources. Please note that when USDOT issues new performance indicators for all modes of transportation as part of its new strategic plan ("Transportation for a New Generation") or MAP-21 implementation, the LEBCO MPO will begin using them as key decision support tools.

Table 6-2 Key Trends by Transportation Mode

Mode or Facility	Key Trends and Indicators for Additional Evaluation
<p>Highway, Roadway, Bridges and ITS</p>	<ul style="list-style-type: none"> • Traffic growth on the interstates is the result of additional goods movement, longer commutes to work, industrial, commercial and residential development in areas near interchanges, specifically along I-81, I-78 and US Route 22. • The LEBCO MPO will continue to coordinate with the I-81 Corridor Coalition as it begins its detailed assessment of the local industrial ecosystem along the entire corridor. • When substantial traffic growth occurs again on critical PA state roads and local roads, they must be examined to determine whether operational improvements, safety measures or capacity enhancements are necessary. • Congestion management will dictate evaluation of highway corridors instead of individual highway segment projects. • Countywide population and employment growth will increase traffic throughout the system. Capacity, traffic congestion, pavement and bridge conditions, access management and traffic signal operations will need to be examined to both ensure safety/efficiency and consistency with community character. • High Occurrence Crash Locations must be evaluated to identify the reason for the high number of traffic incidents as well as any trends or conditions that will continue to compromise system safety. • Posted and closed bridges must be addressed. • Bridge condition trends in the county need to improve.
<p>Transit</p>	<ul style="list-style-type: none"> • Local transit ridership has declined very slightly in calendar year 2013. • Regional express bus service is being enhanced to ease traffic congestion that heads west during the weekdays to Hershey and Harrisburg. A new weekday express bus route into Berks County was started in mid-2013, but it was terminated prematurely by the Berks and Reading Area Transportation Authority (BARTA) in early 2014. • Lebanon Transit routes must continue to be restructured to eliminate routes with little or no ridership or ridership growth potential. A new route may be needed to NE Lebanon County and NW Berks County to get persons to and from these new major employment sites; a 2014-2015 UPWP study will sort out this need. • The majority of minority and low-income residents are located in and around the City of Lebanon, where transit opportunities currently exist and are being more effectively enhanced. These routes may need additional marketing and/or further restructuring. • The Corridor 2 Premium Transit Operations Plan’s recommendations need to be pursued by LT and Capitol Area Transit (CAT). • Over the long run, the Corridor 2 Feasibility Study’s rail recommendations need to be further analyzed via more detailed evaluations ... station locations, ridership projections, environmental analyses, and preliminary engineering. Working with Norfolk Southern to build a third track to operate passenger rail service and to expand freight rail operations will be a complicated and very long range endeavor.

Mode or Facility	Key Trends and Indicators for Additional Evaluation
	<ul style="list-style-type: none"> • Continue to work with Commuter Services of PA and the Modern Transit Partnership to help develop, promote and implement transportation options beyond the single occupancy vehicle and encourage choices that reduce those negative impacts. Assist these two non-profit organizations with the implementation of interactive websites and maps of transit routes and nodes (park-and-ride lots, for example). • In the future, we must make all major developments “transit friendly”, especially those parallel to or adjacent to the county’s key corridors (US Route 422, PA Route 72, etc.). • Marketing LT will continue to be very important in the coming years.
Freight Rail	<ul style="list-style-type: none"> • Traffic on Norfolk Southern’s Harrisburg Line is expected to continue to grow. A third rail line (as mentioned above) will help to enhance goods movement in this portion of the Crescent Corridor. • The 9th & 10th Streets Bridges over Norfolk Southern project have removed three at-grade crossings within the City of Lebanon. These bridges have improved traffic flow and access for emergency vehicles and at the same time permit a third track to be built under these structures for future rail service. • The safety of grade crossings countywide has been enhanced by the installation of gates and/or new signals, now at all public at-grade crossings. • If federal regulations are ever relaxed, automated horn zones and other options should be investigated to address noise complaints while preserving safety at rail crossings. • Via TISs, TIAs and HOPs, the county is heavily involved in every new development/redevelopment that brings more trucks and goods movement to the area, so we can assess key roads and intersections to insure that heavy trucks can be safely and efficiently integrated into the network. • In the coming years, the LEBCO MPO will use the findings, conclusions and recommendations from the Commonwealth’s first-ever Comprehensive Freight Movement Plan to better address these issues and opportunities in Lebanon County.
Aviation	<ul style="list-style-type: none"> • Lebanon County has four privately-owned public use airports. The Lebanon County Airport Feasibility Study and Master Plan concluded that while there is local interest in a public general use airport, airport users are generally satisfied that the county’s current capacity meets their needs. • Airport hazard zoning has been instituted to protect all four of these local, public-use airports. • The closest major commercial airport is in Harrisburg (33 miles away). Further examinations may be necessary in the future to determine whether improved airport access should be a priority.
Bicycle and Pedestrian	<ul style="list-style-type: none"> • The Lebanon Valley Rail-Trail (LVRT) continues to be used heavily, and the County desires to take this spine line north to Swatara State Park by 2020 and to add east-west connections to other key destinations. • The Lebanon County Bicycle Transportation Map was produced in 2012 and is updated annually. The map denotes approximately 500 miles of state and local roads that are most critical to bicyclists for destination and scenic/recreational riding. The Lebanon County

Mode or Facility	Key Trends and Indicators for Additional Evaluation
	<p>Bicycle Transportation Priorities Map was completed in 2014, and it identifies the most needed immediate needs for safer bicycling. These maps are resources to assist with the establishment of priorities for shoulder widenings and other bicycle facility amenities in conjunction with state and local road projects and off-road projects. Both maps are available at http://lebcounty.org/Planning/Pages/MPO.aspx .</p> <ul style="list-style-type: none"> • Wide shoulders on various state and local roads help to promote safer walking, bicycling and jogging. • Some communities like Annville, Cleona, Lebanon, Palmyra, Myerstown, Schaefferstown, Richland and Jonestown have areas that are walkable due to sidewalk systems and sidewalk ordinances. Continued maintenance, improvement and expansion of these pedestrian networks is needed. • The LEBCO MPO will work with the Harrisburg MPO and others, especially Derry Township, on the ongoing Regional Bicycle Connectivity Study. • Implementation of bicycle and pedestrian projects that support destination trips need to be pursued by all key parties (municipalities, LEBCO MPO, Lebanon Transit, developers, etc.) to ensure mobility options for all travelers. The ongoing study mentioned above needs to be supported by all key parties. • Bicycling and walking for destination purposes will increase as gas/diesel prices rise, more dense development occurs in our urban places, sidewalks are built/re-built, shoulders are widened, Complete Street concepts are implemented, etc. • Bicycle/motor vehicle crashes need to be reduced. Between 2008 and 2012, one bicyclist was killed in a motor vehicle-related crash. During that same time frame, on average, 2 bicyclists were seriously injured each year in motor vehicle-related crashes. There were numerous minor accidents as well. • Pedestrian/motor vehicle crashes need to be reduced. Between 2008 and 2012, on average, one pedestrian was killed each year in a motor vehicle-related crash. During that same time frame, on average, 3 pedestrians were seriously injured each year in motor vehicle-related crashes. There were numerous minor accidents as well. • As bridge replacement projects occur in the county, bike and ped access must be considered. • Continue to work with Commuter Services of PA on an interactive regional map of key bike rack locations.

This Long Range Transportation Plan identifies various strategies and projects to address the trends and indicators listed below.

Project and System Improvement Evaluation

Introduction

The recommended projects and improvements of the plan represent a significant effort to achieve better land use/transportation relationships and to place a priority on



the improvement of the existing transportation system wherever feasible. Projects are categorized as short-term (1-4 years); medium-term (5-12 years); or long-term (13-25 years) and presented by transportation mode.

The list of projects for consideration in the plan emerged from numerous sources:

- The Lebanon County Metropolitan Planning Organization FFY 2013-2016 Transportation Improvement Program (TIP) carryover projects
- PennDOT's 12-Year Transportation Program (TYP)
- New data and analyses from the ongoing update of the MPO's Congestion Management Processes (CMP) Plan called Lebanon County Moves
- PennDOT District 8-0
- Municipal Officials meetings
- Pennsylvania Turnpike Commission
- Lebanon Transit (LT) (formerly County of Lebanon Transit) Vision, Goals and Objectives
- Lebanon Valley Rails to Trails (LVRT), Inc., Bike Lebanon/Lebanon Valley Bicycle Coalition, other bike/ped advocates
- "Keyperson" interviews
- Transportation outreach to all of the county's municipalities and responses to letters/e-mails/phone calls received from municipalities and individuals in 2013 and 2014
- Analysis of crash cluster data and Road Safety Audit (RSA) data
- Pennsylvania State Police
- Commuter Services of PA and Modern Transit Partnership initiatives
- Past and ongoing studies within the region
- Lebanon Valley Chamber of Commerce and Lebanon Valley Economic Development Corporation meetings
- TV, newspaper, and radio information and outreach, including Radio Omega (former local Hispanic radio station, which went off the air in mid-2009).
- Level #2 Linking Planning and NEPA Forms.

Project Prioritization Process

Beginning in the 1990s, the United States Department of Transportation has required that all long range transportation plans are "fiscally constrained," meaning that the funding for the projects identified in the plan must be reasonably available. Because the Lebanon County Long Range Transportation Plan focuses on maintenance and preservation of the existing system first and safety and operational improvements second, the total potential cost of all candidate projects in the plan is well below the

amount of projected funding available. **It should be noted that more than 90% of the base highway, bridge and transit funding in the TIP goes to maintain, preserve, operate, and enhance the existing transportation system, including making it safer.** Therefore, the plan and TIP are constrained and include numerous projects and some line items for future (yet to be identified) projects. Funding limitations and practical realities require that transportation improvements be prioritized. As a result, a set of evaluation criteria are used to select projects for the TIP based on the Vision, Goals and Policy Statements were applied to the large list of candidate projects and improvements to comply with the fiscal constraint provisions of the US DOT statewide and metropolitan transportation planning regulations.²

Methodology for Evaluating Candidate Improvements

The selection process that produced the list of recommended projects and improvements was developed to balance the variety of community concerns in a clear and defensible manner with an emphasis on system preservation and local public support. The methodology is designed to be used for future plan updates as well.

There are several steps to the project selection process:

- a. Inclusion of previously-programmed projects and improvements.** The LEBCO MPO TIP and the PennDOT 12-Year Transportation Program contain projects that have already been screened through an approved federally-endorsed, comprehensive process and were “grandfathered” into the Lebanon County LRTP. The LEBCO MPO FFY 2015 – 2018 TIP is included in this plan.
- b. Application of vision, goals and policy statements to the Candidate Projects.** The list of candidate LRTP projects were evaluated to ensure compliance with the vision, goals and the policy statements described in the Introduction. This process places a priority on projects that enhance the operation of the current system and enjoy a significant level of local support to ease project implementation and produced the draft list of LRTP preferred projects.
- c. Use of Revenue Projections.** In order to plan and prioritize needs effectively, there must be a common understanding of the projected financial resources available over the 20+ year planning horizon. The revised financial guidance for highways, bridges and transit that includes Act 89 of 2013 revenue projections which was issued on January 10, 2014 by PennDOT was used to generate a fiscally-constrained TIP.

Existing revenue sources include:

- PennDOT
- Federal Highway Administration
- Federal Transit Administration
- Pennsylvania Department of Conservation and Natural Resources
- Pennsylvania Department of Environmental Protection
- Municipal contributions
- Private sector contributions

² 23 CFR 450.322(b)(11)

- d. Public Review and Comment on the Draft Long Range Transportation Plan.** Throughout the development of the Lebanon County Long Range Transportation Plan, the public, the business community, representatives from the various modes of transportation, etc. had the opportunity to meet with MPO staff at a variety of public meetings, special one-on-one sessions and other concurrent events linked to other meetings (i.e., Lebanon Valley Chamber of Commerce Roundtable Sessions). The plan's public outreach efforts are described under the Public Outreach, Stakeholder Review and Environmental Justice Compliance section.
- e. Environmental Justice Review.** As a subset of the public review process, the Federal Highway Administration and Federal Transit Administration require that Long Range Transportation Planning processes are inclusive and that input from traditionally underserved and underrepresented groups be pursued. The Lebanon County LRTP development process included a specific effort to involve all stakeholders as part of the public review strategy in compliance with FHWA and FTA guidance with Title VI/Environmental Justice guidance. The plan's public outreach efforts to the Environmental Justice communities are described under the Public Outreach, Stakeholder Review and Environmental Justice Compliance section.

For a more detailed discussion on project prioritization and selection, the LEBCO MPO has a stand-alone document that is also available for public review and comment. It is called LEBCO MPO Project Prioritization and Selection Process, and it was also adopted in June of 2014.

Methodology for Year of Expenditure (YOE) Project Calculations

Based upon guidance from PennDOT, FHWA and FTA, the costs for the 2015 – 2018 TIP projects and projects within the 4-year time period that are not listed in the new TIP have been updated to reflect year of expenditure (YOE) estimates. The LEBCO MPO has taken a very conservative approach with the projects in the remaining years of the LRTP. We have calculated the year of expenditure costs based upon the mid-year point within the time range for the medium-term. For example, if a project was going to be implemented in years 5 through 12, we used the inflation rate of 1.3686 to calculate the cost of the project, which is the discount rate for year 8 based upon a 04% annual increase in inflation. For projects in the long term in years 13 through 25, we used the discount rate of 2.1911, which is the discount rate for year 25 based upon a 04% annual increase in inflation. This is larger than the 03% annual rate suggested by PennDOT for YOE calculations.

L RTP Recommended Projects and Strategies

Based upon the L RTP project and system improvement evaluation criteria, as well as public and stakeholder input and review, the following seven charts identify Lebanon County MPO's regional priorities by type of mode. These project lists represent Lebanon County's long range vision for transportation projects, programs and services based on the Vision, Goals and Policy Statements identified for this L RTP and complies with the guidance and requirements of USDOT and PennDOT. A list of proposed studies to help identify future needs and projects for subsequent plan updates is included at the end of this section.

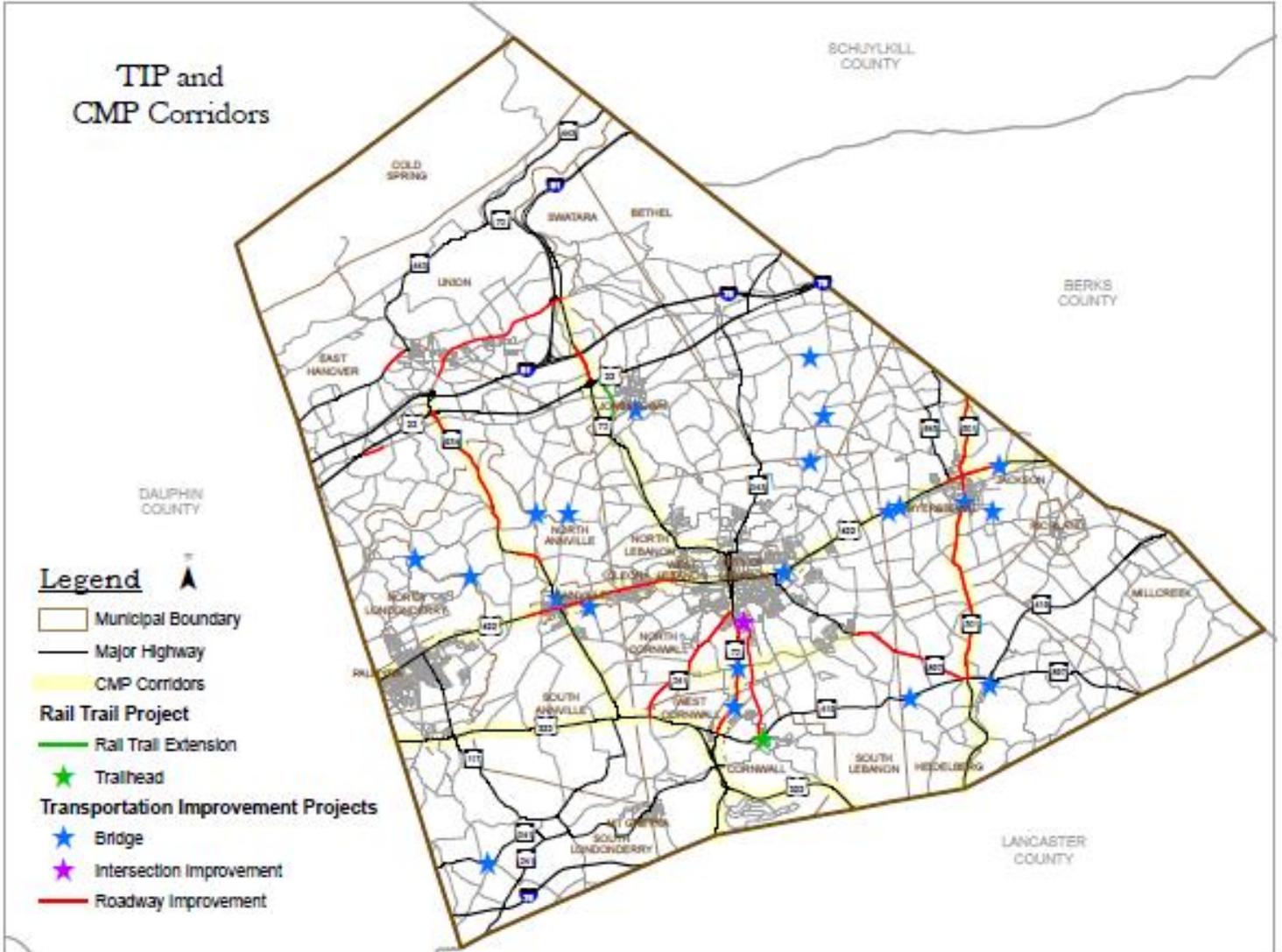
Projects and other strategies relevant to Lebanon County that have appeared in other PennDOT- or USDOT-approved documents, such as the PennDOT 12-Year Program, the Harrisburg Area Transportation Study L RTP/TIP and the Lebanon County MPO Transportation Improvement Program (TIP), are included in this document.

Every FFY 2015 – 2018 Transportation Improvement Program (TIP) project and line item is included in the plan and identified as a TIP project. The plan also includes other short-term (1-4 years) projects, medium-term (5-12 years) projects and long-term (13-25 years) projects and strategies to advance steady progress toward short, medium and long range system goals. These project groupings are distinguished by the following color coding:

2015-2018 TIP Projects
Short-Term (1-4 years)
Medium-Term (5-12 years)
Long Term (13-25 years)

The list of potential projects is expected to expand during future plan updates. The inaugural L RTP (which was adopted in June of 2006) did not contain line items or placeholders beyond the 2007 – 2010 Transportation Improvement Program. Again, beyond the 2015 – 2018 Transportation Improvement Program, line items are not included in this plan. As a result, the plan has significant additional financial capacity in the medium-term and long term elements.

A map of the highway, bridge and rail-trail projects that are included in the 2015 – 2018 TIP appears on the following page.



Highway and Bridge

The LEBCO MPO LRTP identifies **\$208,271,534** in Table 6-3 in highway/roadway-related improvements and bridge improvements over the 25 year span of the Long Range Transportation Plan which includes programmed projects, new projects and proposed studies, like the Cornwall Center Multi-Modal Transportation Study in 2015-2016.

Table 6-3 Highway / Bridge Improvements

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
P3 Bridge Line Item	Construction Phase in FFY 2017	Programmed (TIP) Construction	\$300,000	TIP
P3 Bridge Line Item	Construction Phase in FFY 2018	Programmed (TIP) Construction	\$300,000	TIP
Roadway Maintenance Line Item	Construction Phase in FFY 2015	Programmed (TIP) Construction	\$100,000	TIP
Roadway Maintenance Line Item	Construction Phase in FFY 2016	Programmed (TIP) Construction	\$100,000	TIP
Roadway Maintenance Line Item	Construction Phase in FFY 2017	Programmed (TIP) Construction	\$1,030,000	TIP
Roadway Maintenance Line Item	Construction Phase in FFY 2018	Programmed (TIP) Construction	\$1,570,439	TIP
Bridge Reserve	Construction Phase in FFY 2017 and FFY 2018	Programmed (TIP) Construction	\$1,025	TIP
Highway Reserve	Construction Phase in FFY 2018	Programmed (TIP) Construction	\$125,600	TIP
CMAQ Line Item	Construction Phase in FFY 2016	Programmed (TIP) Construction	\$482,306	TIP
CMAQ Line Item	Construction Phase in FFY 2018	Programmed (TIP) Construction	\$380,377	TIP
Project Delivery	Consultant Assistance in FFY 2015	Programmed (TIP) Pre-Construction Phases	\$400,000	TIP
Project Delivery	Consultant Assistance in FFY 2016	Programmed (TIP) Pre-Construction Phases	\$400,000	TIP

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Project Delivery	Consultant Assistance in FFY 2017	Programmed (TIP) Pre-Construction Phases	\$400,000	TIP
Project Delivery	Consultant Assistance in FFY 2018	Programmed (TIP) Pre-Construction Phases	\$400,000	TIP
Project Delivery	Consultant Assistance in FFY 2015	Programmed (TIP) Construction Phases	\$200,000	TIP
Project Delivery	Consultant Assistance in FFY 2016	Programmed (TIP) Construction Phases	\$200,000	TIP
Project Delivery	Consultant Assistance in FFY 2017	Programmed (TIP) Construction Phases	\$200,000	TIP
Project Delivery	Consultant Assistance in FFY 2018	Programmed (TIP) Construction Phases	\$200,000	TIP
HSIP Line Item	Construction Phase in FFY 2016	Programmed (TIP) Construction Phase	\$341,000	TIP
HSIP Line Item	Construction Phase in FFY 2017	Programmed (TIP) Construction Phase	\$488,000	TIP
HSIP Line Item	Construction Phase in FFY 2018	Programmed (TIP) Construction Phase	\$1,088,000	TIP
HATS STU Line Item	Construction Phase in FFY 2015	Programmed (TIP) Construction	\$325,665	TIP
HATS STU Line Item	Construction Phase in FFY 2016	Programmed (TIP) Construction	\$325,665	TIP
HATS STU Line Item	Construction Phase in FFY 2017	Programmed (TIP) Construction	\$325,665	TIP
HATS STU Line Item	Construction Phase in FFY 2018	Programmed (TIP) Construction	\$325,665	TIP
LVRT Cornwall Trailhead	Construction Phase in FFY 2016	Programmed (TIP) Construction	\$200,000	TIP
LVRT Phase 9	Construction Phase in FFY 2015	Programmed (TIP) Construction	\$400,000	TIP



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Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
LVRT Phase 9	Construction Phase in FFY 2016	Programmed (TIP) Construction	\$152,590	TIP
LT Bus Purchase	Purchase Bus with CMAQ Funds in FFY 2017	Programmed (TIP) Construction	\$400,000	TIP
LT Bus Purchase	Purchase Bus with CMAQ Funds in FFY 2018	Programmed (TIP) Construction	\$400,000	TIP
Susquehanna Regional Transportation Partnership (SRTP), LEBCO MPO "Fair Share"	LEBCO MPO portion of the SRTP Budget (CMAQ Funds) for FFY 2015	Programmed (TIP) Planning	\$87,116	TIP
Susquehanna Regional Transportation Partnership (SRTP), LEBCO MPO "Fair Share"	LEBCO MPO portion of the SRTP Budget (CMAQ Funds) for FFY 2016	Programmed (TIP) Planning	\$87,988	TIP
Susquehanna Regional Transportation Partnership (SRTP), LEBCO MPO "Fair Share"	LEBCO MPO portion of the SRTP Budget (CMAQ Funds) for FFY 2017	Programmed (TIP) Planning	\$88,867	TIP
Susquehanna Regional Transportation Partnership (SRTP), LEBCO MPO "Fair Share"	LEBCO MPO portion of the SRTP Budget (CMAQ Funds) for FFY 2018	Programmed (TIP) Planning	\$89,756	TIP
Allentown Blvd. over Kevins Run in Union Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$175,000	TIP
Allentown Blvd. East Bridge over Indiantown Run in East Hanover Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$250,000	TIP
Allentown Blvd. over Beech Run in Bethel Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$300,000	TIP
Elizabeth Run Bridge in Bethel Township	Final Design in FFY 2015	Programmed (TIP) Final Design	\$193,000	TIP
Elizabeth Run Bridge in Bethel Township	Utilities in FFY 2015	Programmed (TIP) Utilities	\$15,000	TIP
Elizabeth Run Bridge in Bethel Township	ROW in FFY 2015	Programmed (TIP) ROW	\$25,000	TIP
Elizabeth Run Bridge in Bethel Township	Construction in FFY 2017	Programmed (TIP) Construction	\$593,500	TIP
Elizabeth Run Bridge in Bethel Township	Construction in FFY 2018	Programmed (TIP) Construction	\$540,500	TIP



Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Allentown Blvd. Bridge over Raccoon Creek in East Hanover Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2015	Programmed (TIP) Pre. Eng.	\$200,000	TIP
Allentown Blvd. Bridge over Raccoon Creek in East Hanover Township	Final Design in FFY 2016	Programmed (TIP) Final Design	\$300,000	TIP
Allentown Blvd. Bridge over Raccoon Creek in East Hanover Township	Utilities in FFY 2016	Programmed (TIP) Utilities	\$20,000	TIP
Allentown Blvd. Bridge over Raccoon Creek in East Hanover Township	ROW in FFY 2016	Programmed (TIP) ROW	\$20,000	TIP
Allentown Blvd. Bridge over Raccoon Creek in East Hanover Township	Construction in FFY 2017	Programmed (TIP) Construction	\$800,000	TIP
Allentown Blvd. Bridge over Raccoon Creek in East Hanover Township	Construction in FFY 2018	Programmed (TIP) Construction	\$800,000	TIP
Ebenezer Road Bridge over a tributary of Swatara Creek in Union Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$200,000	TIP
PA Route 72 CCIP Study	CCIP Study on PA Route 72 and Cornwall Road (SR 2001) in FFY 2016	Programmed (TIP) Study	\$300,000	TIP
PA Route 72 over Snitz Creek in Cornwall Borough	Final Design in FFY 2015	Programmed (TIP) Final Design	\$205,000	TIP
PA Route 72 over Snitz Creek in Cornwall Borough	Utilities in FFY 2015	Programmed (TIP) Utilities	\$50,000	TIP
PA Route 72 over Snitz Creek in Cornwall Borough	ROW in FFY 2015	Programmed (TIP) ROW	\$50,000	TIP
PA Route 72 over Snitz Creek in Cornwall Borough	Construction in FFY 2016	Programmed (TIP) Construction	\$850,000	TIP
Rocherty Road / PA Route 72 Intersection Improvement P3 Project	Construction in FFY 2016	Programmed (TIP) Construction	\$3,275,000	TIP
Ebenezer Road Resurfacing Project	Construction in FFY 2015	Programmed (TIP) Construction	\$500,000	TIP
Colebrook Road Improvement Project	Preliminary Engineering to Determine Final Scope of Work in FFY 2015	Programmed (TIP) Pre. Eng.	\$300,000	TIP
Colebrook Road Improvement Project	Final Design in FFY 2017	Programmed (TIP) Final Design	\$350,000	TIP
Colebrook Road Improvement Project	Utilities in FFY 2017	Programmed (TIP) Utilities	\$100,000	TIP
Colebrook Road Improvement Project	ROW in FFY 2017	Programmed (TIP) ROW	\$150,000	TIP

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Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Colebrook Road Bridge over the Little Conewago Creek in S. Londonderry Township	Construction in FFY 2015	Programmed (TIP) Construction	\$321,700	TIP
Colebrook Road Bridge over the Little Conewago Creek in S. Londonderry Township	Construction in FFY 2015	Programmed (TIP) Construction	\$652,800	TIP
Colebrook Road Bridge over the Little Conewago Creek in S. Londonderry Township	Construction in FFY 2016	Programmed (TIP) Construction	\$325,500	TIP
PA Route 419 over Hammer Creek in S. Lebanon Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$125,000	TIP
US Route 422 Main Street Resurfacing	Construction in FFY 2017	Programmed (TIP) Construction	\$1,710,000	TIP
US Route 422 Main Street Resurfacing	Construction in FFY 2018	Programmed (TIP) Construction	\$1,819,000	TIP
Cumberland Street Bridge #3 over a tributary of the Tulpehocken Creek in Jackson Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$250,000	TIP
US Route 422 Bridge over a tributary of Owl Creek in Jackson Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$200,000	TIP
Cumberland Street Bridge over the Quittapahilla Creek in S. Lebanon Township and the City of Lebanon	Final Design in FFY 2015	Programmed (TIP) Final Design	\$200,000	TIP
Cumberland Street Bridge over the Quittapahilla Creek in S. Lebanon Township and the City of Lebanon	Utilities in FFY 2015	Programmed (TIP) Utilities	\$15,000	TIP
Cumberland Street Bridge over the Quittapahilla Creek in S. Lebanon Township and the City of Lebanon	ROW in FFY 2015	Programmed (TIP) ROW	\$25,000	TIP
Cumberland Street Bridge over the Quittapahilla Creek in S. Lebanon Township and the City of Lebanon	Construction in FFY 2016	Programmed (TIP) Construction	\$1,008,000	TIP
US Route 422 Safety Project	Final Design in FFY 2015	Programmed (TIP) Final Design	\$200,000	TIP
US Route 422 Safety Project	Utilities in FFY 2015	Programmed (TIP) Utilities	\$100,000	TIP

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
US Route 422 Safety Project	ROW in FFY 2015	Programmed (TIP) ROW	\$50,000	TIP
US Route 422 Safety Project	Construction in FFY 2016	Programmed (TIP) Construction	\$200,000	TIP
US Route 422 Safety Project	Construction in FFY 2016	Programmed (TIP) Construction	\$201,000	TIP
US Route 422 Safety Project	Construction in FFY 2017	Programmed (TIP) Construction	\$349,000	TIP
422 and Ramona Road Intersection Safety Project	Final Design in FFY 2015	Programmed (TIP) Final Design	\$150,000	TIP
422 and Ramona Road Intersection Safety Project	Utilities in FFY 2015	Programmed (TIP) Utilities	\$50,000	TIP
422 and Ramona Road Intersection Safety Project	ROW in FFY 2015	Programmed (TIP) ROW	\$100,000	TIP
422 and Ramona Road Intersection Safety Project	Construction in FFY 2015	Programmed (TIP) Construction	\$488,000	TIP
422 and Ramona Road Intersection Safety Project	Construction in FFY 2016	Programmed (TIP) Construction	\$547,000	TIP
Asher Miner Road Bridge over Indiantown Run in Union Township	Construction in FFY 2016	Programmed (TIP) Construction	\$512,000	TIP
Asher Miner Road Bridge over Indiantown Run in Union Township	Construction in FFY 2017	Programmed (TIP) Construction	\$1,270,000	TIP
Mountain Road Bridge over Indiantown Run in East Hanover Township	Construction in FFY 2016	Programmed (TIP) Construction	\$1,086,862	TIP
Mountain Road Bridge over Indiantown Run in East Hanover Township	Construction in FFY 2017	Programmed (TIP) Construction	\$820,138	TIP
PA Route 501 Resurfacing	Construction in FFY 2016	Programmed (TIP) Construction	\$1,672,439	TIP
PA Route 501 Resurfacing	Construction in FFY 2017	Programmed (TIP) Construction	\$827,561	TIP
PA Route 501 Bridge over Tulpehocken Creek in Myerstown Borough	Preliminary Engineering to Determine Final Scope of Work in FFY 2017	Programmed (TIP) Pre. Eng.	\$250,000	TIP
North College Street Resurfacing	Construction in FFY 2015	Programmed (TIP) Construction	\$612,439	TIP
North College Street Resurfacing	Construction in FFY 2016	Programmed (TIP) Construction	\$217,561	TIP

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Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
South 5 th Avenue Resurfacing	Construction in FFY 2015	Programmed (TIP) Construction	\$1,120,561	TIP
Fisher Avenue over Swatara Creek in East Hanover Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$300,000	TIP
Bellegrove Road Bridge over a tributary of Swatara Creek in N. Annville Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2017	Programmed (TIP) Pre. Eng.	\$175,000	TIP
White Oak Street Bridge over NS RR in Annville Township	Construction in FFY 2015	Programmed (TIP) Construction	\$1,200,000	TIP
White Oak Street Bridge over NS RR in Annville Township	Construction in FFY 2016	Programmed (TIP) Construction	\$928,000	TIP
White Oak Street #1 in East Hanover and N. Annville Townships	Construction in FFY 2015	Programmed (TIP) Construction	\$541,000	TIP
SR 1003 over Little Swatara Creek in Swatara Township and Jonestown Borough	Preliminary Engineering to Determine Final Scope of Work in FFY 2015	Programmed (TIP) Pre. Eng.	\$129,000	TIP
SR 1003 over Little Swatara Creek in Swatara Township and Jonestown Borough	Preliminary Engineering to Determine Final Scope of Work in FFY 2016	Programmed (TIP) Pre. Eng.	\$40,000	TIP
SR 1003 over Little Swatara Creek in Swatara Township and Jonestown Borough	Final Design in FFY 2018	Programmed (TIP) Final Design	\$200,000	TIP
SR 1003 over Little Swatara Creek in Swatara Township and Jonestown Borough	Utilities in FFY 2018	Programmed (TIP) Utilities	\$50,000	TIP
Mount Zion Road Bridge over a tributary of Swatara Creek in N. Lebanon Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2017	Programmed (TIP) Pre. Eng.	\$175,000	TIP
Mount Zion Road Bridge #2 over Deep Run in Bethel Township	Final Design in FFY 2015	Programmed (TIP) Final Design	\$131,000	TIP
Mount Zion Road Bridge #2 over Deep Run in N. Lebanon Township	Final Design in FFY 2016	Programmed (TIP) Final Design	\$44,000	TIP
Mount Zion Road Bridge #2 over Deep Run in Bethel Township	Utilities in FFY 2016	Programmed (TIP) Utilities	\$15,000	TIP
Mount Zion Road Bridge #2 over Deep Run in Bethel Township	ROW in FFY 2016	Programmed (TIP) ROW	\$25,000	TIP
Mount Zion Road Bridge #2 over Deep Run in Bethel Township	Construction in FFY 2018	Programmed (TIP) Construction	\$830,000	TIP

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Greble Road Bridge over Earlackill Run in Bethel Township	Construction in FFY 2016	Programmed (TIP) Construction	\$835,000	TIP
East Main Street Bridge over Beech Run in Bethel Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2017	Programmed (TIP) Pre. Eng.	\$75,000	TIP
Lickdale Road Bridge over Swatara Creek in Swatara and Union Townships	Construction in FFY 2015	Programmed (TIP) Construction	\$552,000	TIP
Bohns Lane over I-81 in Union Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$250,000	TIP
Cornwall Road and Wilhelm Avenue Intersection Improvement and Minor Road Realignment in North Cornwall Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2015	Programmed (TIP) Pre. Eng.	\$192,884	TIP
Cornwall Road and Wilhelm Avenue Intersection Improvement and Minor Road Realignment in North Cornwall Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2016	Programmed (TIP) Pre. Eng.	\$7,116	TIP
Cornwall Road and Wilhelm Avenue Intersection Improvement and Minor Road Realignment in North Cornwall Township	Final Design in FFY 2017	Programmed (TIP) Final Design	\$150,000	TIP
Cornwall Road and Wilhelm Avenue Intersection Improvement and Minor Road Realignment in North Cornwall Township	Utilities in FFY 2017	Programmed (TIP) Utilities	\$391,133	TIP
Cornwall Road and Wilhelm Avenue Intersection Improvement and Minor Road Realignment in North Cornwall Township	Utilities in FFY 2018	Programmed (TIP) Utilities	\$158,867	TIP
Cornwall Road and Wilhelm Avenue Intersection Improvement and Minor Road Realignment in North Cornwall Township	ROW in FFY 2018	Programmed (TIP) ROW	\$1,000	TIP

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Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Cornwall Road at Isabel Drive P3 Project in North Cornwall Township	Construction in FFY 2016	Programmed (TIP) Construction	\$1,725,000	TIP
Market Street Bridge over East Branch of Hammer Creek in Heidelberg Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2015	Programmed (TIP) Pre. Eng.	\$287,750	TIP
Market Street Bridge over East Branch of Hammer Creek in Heidelberg Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2016	Programmed (TIP) Pre. Eng.	\$12,250	TIP
Market Street Bridge over East Branch of Hammer Creek in Heidelberg Township	Final Design in FFY 2017	Programmed (TIP) Final Design	\$250,000	TIP
Market Street Bridge over East Branch of Hammer Creek in Heidelberg Township	Utilities in FFY 2017	Programmed (TIP) Utilities	\$20,000	TIP
Market Street Bridge over East Branch of Hammer Creek in Heidelberg Township	ROW in FFY 2017	Programmed (TIP) ROW	\$20,000	TIP
Market Street Bridge over East Branch of Hammer Creek in Heidelberg Township	Construction in FFY 2018	Programmed (TIP) Construction	\$500,000	TIP
Weaver Road over NS RR in Jackson Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$225,000	TIP
Thompson Avenue Bridge over Swatara Creek in Annville Township	Utilities in FFY 2015	Programmed (TIP) Utilities	\$20,000	TIP
Thompson Avenue Bridge over Swatara Creek in Annville Township	ROW in FFY 2015	Programmed (TIP) ROW	\$20,000	TIP
Thompson Avenue Bridge over Swatara Creek in Annville Township	Construction in FFY 2015	Programmed (TIP) Construction	\$186,500	TIP
Thompson Avenue Bridge over Swatara Creek in Annville Township	Construction in FFY 2016	Programmed (TIP) Construction	\$48,500	TIP
Thompson Avenue Bridge over Swatara Creek in Annville Township	Construction in FFY 2016	Programmed (TIP) Construction	\$165,000	TIP
Ono Road Bridge over Swatara Creek in E. Hanover Township	Final Design in FFY 2015	Programmed (TIP) Final Design	\$175,000	TIP



Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Ono Road Bridge over Swatara Creek in E. Hanover Township	Utilities in FFY 2015	Programmed (TIP) Utilities	\$15,000	TIP
Ono Road Bridge over Swatara Creek in E. Hanover Township	ROW in FFY 2015	Programmed (TIP) ROW	\$30,000	TIP
Ono Road Bridge over Swatara Creek in E. Hanover Township	Construction in FFY 2016	Programmed (TIP) Construction	\$134,751	TIP
Ono Road Bridge over Swatara Creek in E. Hanover Township	Construction in FFY 2016	Programmed (TIP) Construction	\$306,000	TIP
Ono Road Bridge over Swatara Creek in E. Hanover Township	Construction in FFY 2017	Programmed (TIP) Construction	\$1,250,000	TIP
Palmyra Bellegrove Road Bridge over Quittapahilla Creek in N. Annville and N. Londonderry Townships	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$200,000	TIP
Snyer Road Bridge over Quittapahilla Creek in N. Annville Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$200,000	TIP
Jonestown Road Bridge over tributary of Raccoon Creek in E. Hanover Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$225,000	TIP
Fisher Avenue Resurfacing in Union Township	Construction in FFY 2015	Programmed (TIP) Construction	\$1,014,000	TIP
South Spruce Street Bridge Project over Quittapahilla Creek in Annville Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2015	Programmed (TIP) Pre. Eng.	\$200,000	TIP
South Spruce Street Bridge Project over Quittapahilla Creek in Annville Township	Final Design in FFY 2016	Programmed (TIP) Final Design	\$200,000	TIP
South Spruce Street Bridge Project over Quittapahilla Creek in Annville Township	Utilities in FFY 2016	Programmed (TIP) Utilities	\$40,000	TIP
South Spruce Street Bridge Project over Quittapahilla Creek in Annville Township	ROW in FFY 2016	Programmed (TIP) ROW	\$50,000	TIP
South Spruce Street Bridge Project over Quittapahilla Creek in Annville Township	Construction in FFY 2017	Programmed (TIP) Construction	\$677,500	TIP
South Spruce Street Bridge Project over Quittapahilla Creek in Annville Township	Construction in FFY 2018	Programmed (TIP) Construction	\$728,500	TIP

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Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
South Spruce Street Bridge Project over Quittapahilla Creek in Annville Township	Construction in FFY 2018	Programmed (TIP) Construction	\$204,000	TIP
Yordy's Road bridge over Swatara Creek in North Annville Township	Preliminary Engineering to Determine Final Scope of Work in FFY 2018	Programmed (TIP) Pre. Eng.	\$200,000	TIP
Inwood Iron Bridge Rehabilitation Project over Swatara Creek in Swatara Township	Final Design in FFY 2015	Programmed (TIP) Final Design	\$236,000	TIP
Inwood Iron Bridge Rehabilitation Project over Swatara Creek in Swatara Township	Utilities in FFY 2015	Programmed (TIP) Utilities	\$28,000	TIP
Inwood Iron Bridge Rehabilitation Project over Swatara Creek in Swatara Township	ROW in FFY 2015	Programmed (TIP) ROW	\$55,000	TIP
Inwood Iron Bridge Rehabilitation Project over Swatara Creek in Swatara Township	Construction in FFY 2016	Programmed (TIP) Construction	\$190,249	TIP
Inwood Iron Bridge Rehabilitation Project over Swatara Creek in Swatara Township	Construction in FFY 2016	Programmed (TIP) Construction	\$542,000	TIP
Inwood Iron Bridge Rehabilitation Project over Swatara Creek in Swatara Township	Construction in FFY 2017	Programmed (TIP) Construction	\$790,249	TIP
		Subtotal	\$60,021,534	
ADDITIONAL LONG RANGE TRANSPORTATION PLAN ROAD & BRIDGE PROJECTS				
Intersection Improvements at PA Route 72 and Tunnel Hill Road (SR 4002), Old Ebenezer Road, Hill Street and 22 nd Street (SR 4001) in North Lebanon Township	Intersection improvements, new traffic signals, left-turn lanes and possible additional thru lane as part of a P3 with the LVEDC Rail Business Park and other nearby developers (possible roundabout location)	Plan Project All Phases	\$2,000,000	Short (if nearby development occurs in the next several years)



Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Intersection Improvements and new traffic signal at PA Route 72 and Isabel Drive in North Cornwall Township	Intersection improvements, possibly including left and right-turn lanes and a new traffic signal – a LEBCO MPO commitment in response to the \$5.0 million in PennDOT Economic Development Funds for the North Cornwall Commons off-site improvements	Plan Project All Phases	\$1,800,000	Short
PA Route 419 "Cornwall Center" Roadway and Intersections Improvement Project in Cornwall Borough	Various intersection and roadway improvements to address growing traffic congestion and safety issues on PA Route 419 and at the Cornwall Road and Burd Coleman Road intersections (possible roundabout location) (UPWP Special Study in 2015-2016)	Plan Project Study and All Phases	\$2,000,000	Short
South Lingle Avenue (SR 3017) Project in South Londonderry Township	Eliminate the flooding condition by elevating the roadway and/or new drainage, improve the roadway surface, realign a small portion of the road, and widen the shoulders for bike/ped use as a possible STU-funded project along with PennDOT County Maintenance funds	Plan Project All Phases	\$1,300,000	Short
Hiring a Consultant for Overall Management, Continuing Training and Operational Support for 422 CCIP Project Computerized Traffic Signal System	Possible PennDOT CCP funding to support the 422 CCIP Project between Cleona and Palmyra Borough over a 3-year period of time (FFY 2016 – FFY 2018)	Plan Project Consultant Contract	\$300,000	Short
City of Lebanon Traffic Signal Enhancements	Verify controller programming, revisit and possibly revise signal timing plans, revise rest in walk configurations and terminate spare fibers	Plan Project All Phases	\$100,000	Short
North Lincoln Avenue Bridge over Quitapahilla Creek in the City of Lebanon	Replace bridge with a pre-cast box culvert or rehabilitate superstructure	Plan Project All Phases	\$1,500,000	Short

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Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Intersection Improvements at "5 Points" in the City of Lebanon	Based upon the build out within the surrounding area, provide improvements at Lincoln Avenue/State Drive/Pershing Avenue, including but not limited to adjusting signal timing and phasing, roadway restriping, extending turning lanes, etc.	Plan Project All Phases	\$475,000	Short
Traffic Signal Battery Pack Installations	Install battery pack back-ups at key signalized intersections along NHS Routes and along CMP Corridors in Lebanon County	Plan Project All Phases	\$150,000	Short
Market Street Turnback and Roadway Improvement Project in Jonestown Borough	Turnback, streetscape, bike/ped and/or drainage improvements along portions or all of Market Street (possible roundabout location at the intersection of Market and Lancaster Streets)	Plan Project All Phases	\$2,600,000	Short
Intersection Improvements at Lehman Street (SR 4001) and 16 th Street in the City of Lebanon	Intersection improvements and turning lanes as part of a P3 with the LVEDC Rails Business Park	Plan Project All Phases	\$200,000	Short (if nearby development occurs in the next two years)
Relocate Killinger Road and new traffic signal and geometric improvements at the relocated Killinger Road with US Route 422 and Clear Spring Road in North and South Annville Townships	Road relocation, new traffic signal that is CCIP-project compatible and various geometric intersection improvements associated with the soon-to-be approved HOP	Plan Project All Phases	\$2,100,000 (Eastern Land and Resources Company-funded)	Short (100% developer funds)
Intersection Improvements at Carpenter Street (old PA Route 501) and PA Route 419 in Schaefferstown, Heidelberg Township	New traffic signal or remove traffic signal; geometric improvements; and ADA accommodations	Plan Project All Phases	\$1,700,000	Short
Replace traffic signals on PA Route 72 at Summit Street and York Street in North Cornwall Township	Remove the cable-hung signals; install new signals, posts and overhead mast arms; interconnect the signals; and add any appropriate pavement markings and signs for the turning movements	Plan Project All Phases	\$500,000	Short

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Improve and/or widen shoulders within existing rights-of-way on one or more segments of US Route 322 and/or PA Routes 72, 117, 241, 419, 501 and/or 934. A single contract will be bid and awarded for shoulder work at various locations to promote safe walking and bicycling for destination purposes.	The LCPD will work with PennDOT District 8-0, PennDOT Lebanon County Maintenance and Bike Lebanon to identify the most cost effective segments for shoulder improvements/widenings. The Bicycle Transportation Map will be used to identify the road segments to be screened and evaluated.	Plan Project All Phases	\$400,000	Short (FFY 2017 or later)
Yordy's Bridge Road Bridge Replacement over Swatara Creek in N. Annville Township	Bridge Replacement	Plan Project Remaining Phases	\$4,600,000	Short
Syner Road Bridge over Quittapahilla Creek in North Annville Township	Bridge Replacement	Plan Project Remaining Phases	\$2,000,000	Short
Allentown Blvd. over Kevins Run in Union Township	Remaining Phases of Work	Plan Project Remaining Phases	\$600,000	Short
Allentown Blvd. East Bridge over Indiantown Run in East Hanover Township	Remaining Phases of Work	Plan Project Remaining Phases	\$2,200,000	Short
Allentown Blvd. over Beech Run in Bethel Township	Remaining Phases of Work	Plan Project Remaining Phases	\$1,300,000	Short
Ebenezer Road Bridge over a tributary of Swatara Creek in Union Township	Remaining Phases of Work	Plan Project Remaining Phases	\$800,000	Short
Colebrook Road Improvement Project	Remaining Phases of Work	Plan Project Remaining Phases	\$3,200,000	Short
PA Route 419 over Hammer Creek in S. Lebanon Township	Remaining Phases of Work	Plan Project Remaining Phases	\$450,000	Short
Cumberland Street Bridge #3 over a tributary of Tulpehocken Creek in Jackson Township	Remaining Phases of Work	Plan Project Remaining Phases	\$700,000	Short
US Route 422 Bridge over a tributary of Owl Creek in Jackson Township	Remaining Phases of Work	Plan Project Remaining Phases	\$900,000	Short

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Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
PA Route 501 Bridge over Tulpehocken Creek in Myerstown Borough	Remaining Phases of Work	Plan Project Remaining Phases	\$800,000	Short
Fisher Avenue over Swatara Creek in East Hanover Township	Remaining Phases of Work	Plan Project Remaining Phases	\$1,100,000	Short
Bellegrove Road Bridge over a tributary of Swatara Creek in N. Annville Township	Remaining Phases of Work	Plan Project Remaining Phases	\$850,000	Short
SR 1003 over Little Swatara Creek in Swatara Township and Jonestown Borough	Remaining Phases of Work	Plan Project Remaining Phases	\$680,000	Short
Mount Zion Road Bridge over a tributary of Swatara Creek in N. Lebanon Township	Remaining Phases of Work	Plan Project Remaining Phases	\$1,200,000	Short
East Main Street Bridge over Beech Run in Bethel Township	Remaining Phases of Work	Plan Project Remaining Phases	\$500,000	Short
Bohns Lane over I-81 in Union Township	Remaining Phases of Work	Plan Project Remaining Phases	\$700,000	Short
Cornwall Road and Wilhelm Avenue Intersection Improvement and Minor Road Realignment in North Cornwall Township	Remaining Phase of Work	Plan Project Remaining Phase (Construction)	\$1,700,000	Short
Weaver Road over NS RR in Jackson Township	Remaining Phases of Work	Plan Project Remaining Phases	\$1,400,000	Short
Palmyra Bellegrove Road bridge over Quittapahilla Creek in N. Annville and N. Londonderry Townships	Remaining Phases of Work	Plan Project Remaining Phases	\$2,900,000	Short
Jonestown Road Bridge over a tributary of Raccoon Creek in E. Hanover Township	Remaining Phases of Work	Plan Project Remaining Phases	\$400,000	Short
TIP Financial Support for H&K HOP project on US Route 322 in Cornwall Borough	Construction Phase to be partially funded by the LEBCO MPO	Plan Project Construction	\$350,000	Short
New Traffic Signal at US Route 22 and Fredericksburg Road in Bethel Township	MTF Project from CFA to support new development along and near US Route 22	Plan Project All Phases	\$700,000	Short



Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
422 CCIP Project Modifications, Palmyra to Cleona	Make system-wide and isolated intersection improvements as needed and as warranted	Plan Project All Phases	\$650,000	Short
I-78/US Route 22 Point of Access Study in Bethel Township (could include partial interchange at Fredericksburg, PA Route 343, too)	Point of Access (POA) Study for potential full interchange between I-78 and US Route 22 in Bethel Township	Candidate Study	\$1,500,000	Medium
Install New Traffic Signal and Improve Intersection Sight Distance at State Drive (SR 2003) and Klein Avenue in South Lebanon Township	Intersection Improvement	Plan Project All Phases	\$350,000	Medium
Implement Appropriate Bicycle and Pedestrian Safety Improvements in Palmyra Borough, N. Londonderry Township and S. Londonderry Township	Based upon walking audits, completed studies, etc., put together a package of bike and ped safety enhancements in the 3 municipalities possibly using STU Funds	Plan Project All Phases	\$400,000	Medium
PA Route 241 Improvements in N. Cornwall Township	Further improve roadway alignment, widen roadway and shoulders and/or guiderail at key locations from the City of Lebanon to US Route 322	Plan Project All Phases	\$900,000	Medium (once the 241 RSA work on the TIP is completed)
PA Route 72 and Fisher Avenue (SR 4020) intersection improvements in Lickdale, Union Township	Widen intersection, improve turning lanes, upgrade traffic signals to accommodate increased traffic and high percentage of truck traffic	Plan Project All Phases	\$1,400,000	Medium
Install signal and left turn lanes at PA Route 343 (North 7th Street) and Kimmerlings Road/Kochenderfer Road in North Lebanon Township	Install new signal and other needed intersection improvements, possibly sight distance on 343 as a safety (HSIP-funded) project	Plan Project All Phases	\$1,400,000	Medium
Intersection Improvement at PA Route 934 and Old US Route 22 near Harper's Tavern in East Hanover Township	Improve channelization and possible new demand-actuated signal installation in East Hanover Township	Plan Project All Phases	\$750,000	Medium

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Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Intersection improvement at Narrows Drive and US Route 422 in North Lebanon Township	Improve channelization and new demand-actuated traffic signal in North Lebanon Township	Plan Project All Phases	\$850,000	Medium
Intersection improvement at Prescott Road (SR 2005) and US Route 422 in North Lebanon Township	Improve channelization and possible new demand-actuated signal installation in North Lebanon Township	Plan Project All Phases	\$725,000	Medium
US Route 422 Intersection improvements at PA Route 501 and PA Route 645 in Jackson Township	Improve channelization and turning movements at both locations; consider signal interconnection	Plan Project All Phases	\$2,300,000	Medium
Intersection improvements at PA Route 501 and Hergelrode Drive in Jackson Township	Reduce curve and improve sight distance at hard curve, south of Myerstown	Plan Project All Phases	\$1,900,000	Medium
Intersection Improvements at West Lehman Streets and 22 nd Street (SR 4001) in West Lebanon Township and roadway improvements on Lehman Street from 18 th Street to 25 th Street	Improve channelization and turning movements and consider traffic signal installation and roadway resurfacing	Plan Project All Phases	\$950,000	Medium
Intersection improvements including a new traffic signal at Mt. Pleasant Road and US Route 422 in South Annville Township	New traffic signal that is CCIP-project compatible and geometric improvements	Plan Project All Phases	\$450,000	Medium (100% developer funds)
Relocation of Mt. Pleasant Road from US Route 422 to north of Reigerts Lane	A PPP with developer, LEBCO MPO and DCED to improve access to a mixed use development and to improve traffic flow and safety in the area (could also serve as part of a mini-bypass of Annville) for PA Route 934)	Plan Project All Phases	\$1,800,000	Medium (developer, LEBCO MPO and DCED funded)
I-78/PA Route 72 Point of Access Study in Union Township	Point of Access (POA) Study for potential interchange between I-78 and PA Route 72 in Union Township	Candidate Study	\$1,500,000	Medium



Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Intersection Improvements at Cornwall Road (SR 2001) and Hauck Street in the City of Lebanon	Improve channelization and pedestrian safety in conjunction with any school district plans	Plan Project All Phases	\$200,000	Medium
Reilly Road Bridge Replacement over Tulpehocken Creek in Jackson Township	Bridge Replacement	Plan Project All Phases	\$1,600,000	Medium
Coon Creek Road Bridge replacement over Coon Creek in E. Hanover Township	Bridge Replacement (bridge closed from flood)	Plan Project All Phases	\$1,000,000	Medium
Replace Zinns Mill Road Bridge over abandoned RR line in Borough of Cornwall	Bridge Replacement east of Cornwall Road	Plan Project All Phases	\$1,500,000	Medium
Golf Road Bridge over Little Swatara Creek in Bethel Township	Bridge Rehabilitation of superstructure	Plan Project All Phases	\$4,200,000	Medium
Levan's Bridge over Little Swatara Creek in Swatara Township	Bridge Replacement	Plan Project All Phases	\$2,200,000	Medium
Greenpoint School Road Bridge Replacement over Trout Run in Union Township	Bridge Replacement	Plan Project All Phases	\$1,400,000	Medium
Shirksville Road Bridge replacement over Earlakill Run in Bethel Township	Bridge Replacement	Plan Project All Phases	\$1,300,000	Medium
Obie Road Bridge over Hammer Creek in Heidelberg Township	Bridge Rehabilitation of superstructure	Plan Project All Phases	\$1,200,000	Medium
Green Point School Road Bridge over Trout Run in Union Township	Bridge rehabilitation of superstructure	Plan Project All Phases	\$750,000	Medium
Shirksville Road Bridge over Earlakill Run in Bethel Township	Bridge rehabilitation of superstructure	Plan Project All Phases	\$600,000	Medium
Jonestown Road Bridge over Swatara Creek in Jonestown Borough	Rehabilitate sidewalk	Plan Project All Phases	\$1,800,000	Medium
Lawn Road (SR 3015) Bridge over Little Conewago Creek in South Londonderry Township	Replace one-lane bridge	Plan Project All Phases	\$300,000	Medium
Lawn Road (SR 3015) Bridge over Conewago Creek in South Londonderry Township	Replace one-lane bridge	Plan Project All Phases	\$300,000	Medium

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Construct full interchange between US Route 22 and I-78 in Bethel Township	Current half interchange needs to be upgraded to a full interchange for current and future traffic patterns	Plan Project All Phases	\$54,000,000	Long
Replace one-lane North 25 th Street Underpass of Norfolk Southern with a two-lane underpass and improve approaches and sight distance in West Lebanon Township (New underpass must also be able to safely handle bicycle and pedestrian traffic.)	Bridge underpass and roadway realignment	Plan Project All Phases	\$35,000,000	Long
		Subtotal	\$148,250,000	
		TOTAL	\$208,271,534	

Interstate Management Program Funding

For informational purposes only, the following projects for **\$3,640,000** are being listed in the plan. These and other PennDOT “3R” (resurfacing, rehabilitation and reconstruction) projects in Lebanon County and elsewhere in the Commonwealth will be funded from PennDOT’s Interstate Management Program Fund. As Interstate projects get included in the Statewide Transportation Improvement Program (STIP) from Lebanon County, they will be added to the LEBCO MPO LRTP for reference only, since the funding for these projects rests with PennDOT and the funding isn’t included in the TIP financial tables in the appendix. The following projects came from PennDOT.

Table 6-4 Interstate Management Improvements

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
LONG RANGE TRANSPORTATION PLAN PROJECTS				



I-78 Preventative Maintenance, Diamond Grinding	Preventative maintenance on I-78 in Lebanon County from I-81/I-78 split to Berks County line in Swatara and Bethel Townships	Plan Project All Phases	\$1,820,000	Medium
I-81 Preventative Maintenance, Diamond Grinding	Preventative maintenance on I-81 in Lebanon County from I-78/I-81 split to Schuylkill County line in Swatara and Bethel Townships	Plan Project All Phases	\$1,820,000	Medium
		Subtotal	\$3,640,000	
		TOTAL	\$3,640,000	

Transit

The LEBCO MPO LRTP identifies **\$19,692,080** in Table 6-5 in transit-related improvements over the 25 year span of the Long Range Transportation Plan which includes programmed projects, new projects and proposed studies. With the completion of the Lebanon Transit Business Plan in June of 2008, the list of candidate transit projects in the LRTP has increased. With PennDOT approving the new Lebanon Transit Park-and-Ride Lot off of PA Route 934 at Mill Road in East Hanover Township, the plan/TIP in the recent past has benefitted from a new funding source ... the Pennsylvania Community Transportation Initiative (PCTI). Future projects could be added to the plan from the Commuter Services of PA's 9-County Regional Transit Coordination Study and the ongoing Lebanon Transit New Service / Route Study in 2014-2015. And the ongoing PennDOT SC PA Public Transportation Regionalization Study may yield future projects for the plan/TIP. The Corridor 2 Premium Transit Operations Plan and the advancement of express bus service to and from Lebanon-Hershey-Harrisburg will continue to be promoted by Lebanon Transit, Capital Area Transit (CAT) and the two MPOs (Harrisburg and Lebanon).

Listed in Table 6-11 are several studies or initiatives that may become a future task or tasks in future Unified Planning Work Programs.

Table 6-5 Transit Improvements

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Purchase Hybrid Bus Battery	Purchase one (1) battery in FFY 2015	Programmed (TIP) Construction	\$45,000	TIP
Purchase 2 Paratransit Vans	Purchase two (2) vans in FFY 2015	Programmed (TIP) Construction	\$120,000	TIP
FFY 2015 Operating Assistance	Federal Fiscal Year 2015 operating assistance for Lebanon Transit	Programmed (TIP) Construction	\$3,052,081	TIP

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Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
FFY 2016 Operating Assistance	Federal Fiscal Year 2016 operating assistance for Lebanon Transit	Programmed (TIP) Construction	\$3,056,935	TIP
FFY 2017 Operating Assistance	Federal Fiscal Year 2017 operating assistance for Lebanon Transit	Programmed (TIP) Construction	\$3,062,032	TIP
FFY 2018 Operating Assistance	Federal Fiscal Year 2018 operating assistance for Lebanon Transit	Programmed (TIP) Construction	\$3,062,032	TIP
Capital Improvements Line Item	Line Item for FFY 2015	Programmed (TIP) Construction	\$195,000	TIP
Capital Improvements Line Item	Line Item for FFY 2016	Programmed (TIP) Construction	\$45,000	TIP
Bus Purchase	Purchase one (1) replacement bus in FFY 2017	Programmed (TIP) Construction	\$100,000	TIP (\$400,000 in CMAQ Funds also listed in highway portion of the TIP)
Bus Purchase	Purchase one (1) replacement bus in FFY 2018	Programmed (TIP) Construction	\$100,000	TIP (\$400,000 in CMAQ Funds also listed in highway portion of the TIP)
Capital Improvements Line Item	Line Item for FFY 2017	Programmed (TIP) Construction	\$47,000	TIP
Capital Improvements Line Item	Line Item for FFY 2018	Programmed (TIP) Construction	\$47,000	TIP
		Subtotal	\$12,932,080	
	ADDITIONAL LONG RANGE TRANSPORTATION PLAN PROJECTS			
Continue Marketing Plan for Lebanon Transit Park-and-Ride Lot at PA Route 934 and Mill Road	Secure necessary planning funds or other funds for this effort	Plan Marketing Implementation	\$25,000	Short
Implement Marketing Recommendations from Lebanon Transit Business Plan	Hire a consultant to continue to implement the Lebanon Transit Business Plan's marketing recommendations	Plan Project Construction	\$50,000	Short
Add a second floor to the Lebanon Transit Building	Seek a federal earmark for this project	Plan Project Construction	\$1,500,000	Short
Implement Security Improvements at Lebanon Transit Building	Seek a federal earmark for this project	Plan Project Construction	\$250,000	Short

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
Purchase and Install New Security System	Install new system at Schneider Drive facility	Plan Project Construction	\$160,000	Medium
Repair Fuel Tank Cover	Repair cover at Willow Street facility	Plan Project Construction	\$100,000	Medium
Pavement Sealing	Seal pavement at Willow Street facility	Plan Project Construction	\$210,000	Medium
Replace Two Roofs	Replace roofs at Willow Street facility	Plan Project Construction	\$700,000	Medium
Install New Air Conditioning Unit	Install AC at Willow Street facility	Plan Project Construction	\$195,000	Medium
Purchase Shop Maintenance Equipment	Purchase maintenance equipment	Plan Project Construction	\$340,000	Medium
Implement Homeland Security Measures	Implement measures	Plan Project Construction	\$945,000	Medium
Purchase Lift Equipment	Purchase equipment for Schneider Drive facility	Plan Project Construction	\$390,000	Medium
Purchase and Install Bus Announcing System	Install system at key Lebanon Transit facilities in the region	Plan Project Construction	\$770,000	Medium
Purchase Wrecking/Towing Equipment	Purchase equipment	Plan Project Construction	\$1,100,000	Medium
Purchase and install sheltered bike parking at key Lebanon Transit facilities	Purchase and install equipment	Plan Project Construction	\$25,000	Medium
		Subtotal	\$6,760,000	
		TOTAL	\$19,692,080	

Non-Motorized

The LEBCO MPO LRTP identifies **\$5,260,000** in Table 6-6 in non-motorized-related improvements over the 25 year span of the Long Range Transportation Plan which includes new projects. Two LVRT, Inc. projects (LVRT Phase 9 and LVRT Trailhead in Cornwall Borough) are listed in the highway and bridge portion of the TIP/plan since they are using regular highway (STP and CMAQ) funds for implementation. Projects in this category include bicycle and pedestrian improvements either as stand alone projects or features within other road, bridge and/or transit projects, possibly including the Transportation Alternatives Program/Home Town Streets/Safe Routes to School federal reimbursement programs. The LEBCO MPO no longer receives its own allocation of funds for these types of improvements; it must now seek funding from PennDOT (statewide Transportation Alternatives Program (TAP)) or from



long-standing DCNR grant programs. As future candidate TAP-funded or DCNR-funded projects are identified, they will be placed on an auxiliary list off of the 2015-2018 Transportation Improvement Program (TIP). When these projects are ready to proceed into project development, the MPO will seek the appropriate federal and state grants.

Table 6-6 Non-Motorized Improvements

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
See highway and bridge TIP for carryover rail-trail projects				
Lebanon Valley Rail-Trail, Phase 7	1.7 miles from 25 th Street to Long Lane in North Lebanon Township	Programmed Project All Phases	\$1,365,000	TIP (funded with DCNR, LEBCO MPO CMAQ and statewide TAP Funds)
		Subtotal	\$000	
ADDITIONAL LONG RANGE TRANSPORTATION PLAN PROJECTS				
Lebanon Valley Rail-Trail, Phase 6	Secure the needed ROW for the preferred alignment and construct from Chestnut Street north to Lebanon Valley Mall / Union Canal Tunnel Park in the City of Lebanon, West Lebanon Township and North Lebanon Township	Plan Project Construction	\$800,000	Short
Lebanon Valley Rail-Trail, Phases 8 and 10	Complete the two remaining sections (5.8 miles) of LVRT as the preferred alignments are identified, ROW secured and funds obtained	Plan Projects Construction	\$2,100,000	Short
County-wide Program for Bike Rack Installation and/or Purchase of Special Event Bike Racks	Work with the Lebanon Valley Bicycle Coalition, municipalities, public agencies, and private organizations to secure public and private funds for the non-federal match for bike racks	Plan Project Construction	\$40,000	Short
Bike Safety Public Service Announcements (PSAs) in English and Spanish	Work with the Lebanon Valley Bicycle Coalition and others to fund, develop and implement bike safety PSAs	Plan Project Construction	\$5,000	Short UPWP Task (possibly funded in 2014-2016 UPWP)
Lickdale Streetscape Project	Sidewalk and intersection improvements in Lickdale – pre-construction phases were started but the project was stopped by Union Township due to ROW and cost concerns	Plan Project Construction	\$350,000	Short

Improvement	Description	Status	Estimated Total Cost	Time Frame of Improvement
South Lebanon Township Trail Project, Phase 2	Phase 2 is the eastern section	Plan Project Construction	\$400,000	Medium
Various Extensions and Connections to the Lebanon Valley Rail Trail	Spur and feeder routes	Plan Project Construction	\$2,000,000	Medium
		Subtotal	\$5,260,000	
		TOTAL	\$5,260,000	

Other bike/ped improvements that have not been fully evaluated or implemented but appear to have significant merit are (1) making Cherry Street in Palmyra Borough a Complete Street even though borough council recently rejected this concept; (2) developing financial packages to make shoulder improvements on state roads (SRs) and local streets based upon recommendations from Bike Lebanon (Lebanon Valley Bicycle Coalition) and others; (3) creating on-road and off-road bike/ped networks in developing areas like South Lebanon Township, North Cornwall Township, N. and S. Londonderry Townships, N. and S. Annville Townships, etc. in association with the new residential, commercial and mixed use development. The ongoing Regional Bicycle Connectivity Study in Dauphin and Lebanon Counties will yield new candidate projects as well. The various “downtowns” of Jonestown, Myerstown, Palmyra, Annville, etc; are also prime areas for bike/ped enhancements. As LVRT, Inc., municipalities, agencies, Bike Lebanon and other advocates identify additional candidate projects for the plan, they will receive consideration for possible TAP Fund statewide grant applications or other Act 89 of 2013 statewide funding sources (Multimodal Transportation Fund) or from other TIP highway funding sources like STP and CMAQ. As the PA Route 419 Byway Modified Corridor Management Plan is implemented over time, additional projects could also be added to the plan. Future safe routes to school audits may also lead to additional ped/bike projects in our existing communities.

Listed in Table 6-11 are several studies or initiatives that may become a future task or tasks in future Unified Planning Work Programs.

And as USDOT provides more guidance through its strategic plan (“Transportation for a New Generation”) and as future federal (MAP-21) transportation rulemaking and legislation becomes a reality, the LEBCO MPO will address any new planning mandates to be bike/ped compliant and to be compliant with all of the modes of surface transportation.

Aviation

The LEBCO MPO LRTP identifies **\$800,000** in Table 6-7 in aviation-related improvements over the 25 year span of the Long Range Transportation Plan. Funding for these projects falls outside of the TIP but is included in PennDOT’s Twelve Year Program (TYP). It is possible that additional projects may be identified in future years to help municipalities comply with PennDOT Clear Hazard Zoning rules, which require compatible land uses adjacent to airports and heliports.

Table 6-7 Aviation Improvements



<i>Improvement</i>	<i>Description</i>	<i>Status</i>	<i>Estimated Total Cost</i>	<i>Time Frame of Improvement</i>
Acquire airfield maintenance equipment for Farmer's Pride Airport	Acquire equipment	Programmed (12 Year Program) All Phases	\$50,000	12 Year Program (TYP)
		Subtotal	\$50,000	
ADDITIONAL LONG RANGE TRANSPORTATION PLAN PROJECT				
Conduct aviation study	Conduct countywide aviation study	Plan Study	\$750,000	Medium
		Subtotal	\$750,000	
			TOTAL	\$800,000

Rail Freight

The LEBCO MPO LRTP identifies **\$8,650,000** in Table 6-8 in rail freight-related studies and improvements over the 25 year span of the Long Range Transportation Plan. Funding for these projects falls outside of the TIP but is included in PennDOT's Twelve Year Program (TYP). In future years, this will be an emphasis area since more data and information will be available from the PennDOT Long Range Transportation Plan and Comprehensive Freight Movement Study.

Table 6-8 Rail Freight Improvements

<i>Improvement</i>	<i>Description</i>	<i>Status</i>	<i>Estimated Total Cost</i>	<i>Time Frame of Improvement</i>
ADDITIONAL LONG RANGE TRANSPORTATION PLAN PROJECTS				
Conduct countywide automated horn system study	Work with all key partners and stakeholders to perform an automated horn feasibility study	Plan Study	\$650,000	Medium
Install automated horn system for all City of Lebanon RR/highway grade crossings	Work with Norfolk Southern to install automated horn system in the City of Lebanon	Plan Project All Phases	\$4,000,000	Medium
Install automated horn system for the remainder of Lebanon County's RR/highway grade crossings	Work with Norfolk Southern to install automated horn system across the remainder of Lebanon County	Plan Project All Phases	\$4,000,000	Medium
		Subtotal	\$8,650,000	
			TOTAL	\$8,650,000

Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) encompasses a broad range of technologies that help monitor and manage traffic flow, reduce congestion, enhance safety, provide alternative routes for travelers and/or notify transit riders of bus availability in key corridors. Examples include on-board navigation systems; automated rail crossing safety enhancements; electronic toll payment systems (EZ-Pass); integrated signal systems; traffic video/control technologies; variable message signs; ITS boards at park-and-ride lots, roadway weather information systems (RWIS), etc.

The LEBCO MPO LRTP identifies **\$10,000,000** in Table 6-9 in ITS-related studies and improvements over the 25 year span of the Long Range Transportation Plan. As TIP funding becomes available, the LEBCO MPO desires to implement key recommendations from the PennDOT District 8-0 Regional Operations Plan (ROP). In the future, additional coordination will also be taking place with PennDOT District 8-0 and local and county emergency management services to determine if ITS solutions are needed in this arena.

Listed in Table 6-11 are several studies or initiatives that may become a future task or tasks in future Unified Planning Work Programs.

Table 6-9 Intelligent Transportation Systems Improvements

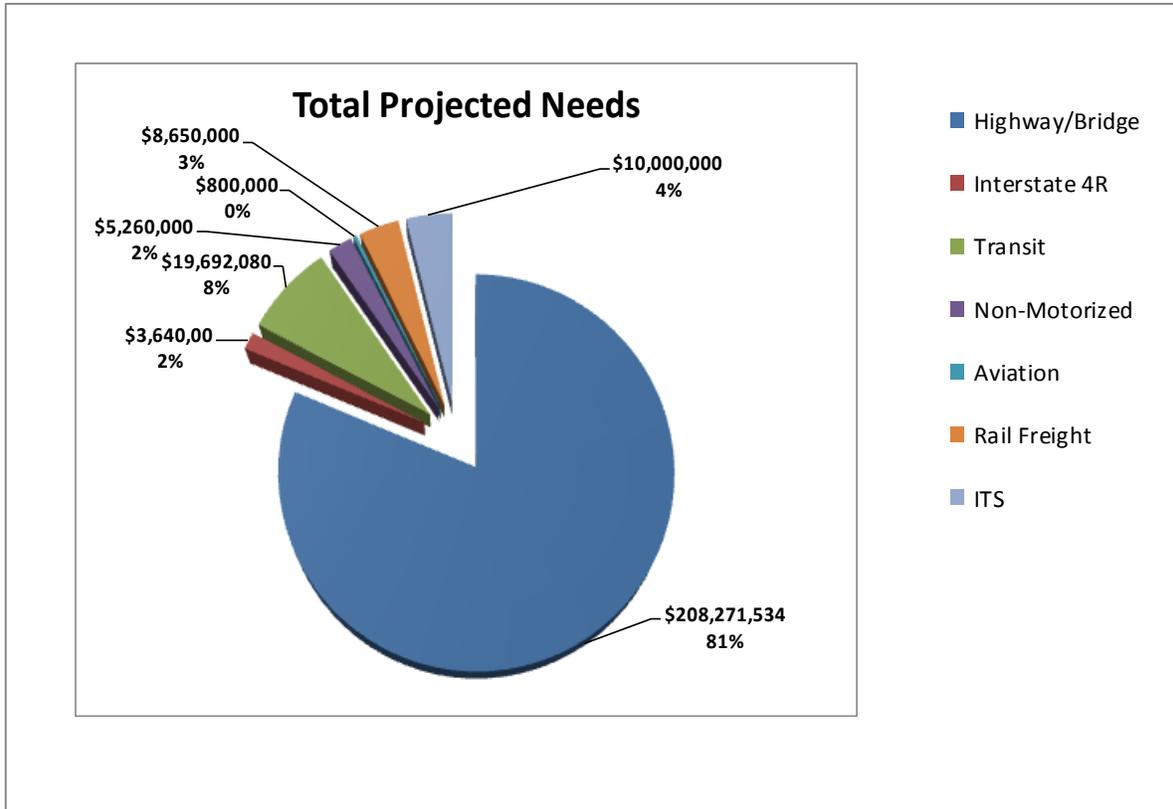
<i>Improvement</i>	<i>Description</i>	<i>Status</i>	<i>Estimated Total Cost</i>	<i>Time Frame of Improvement</i>
LONG RANGE TRANSPORTATION PLAN PROJECTS				
		Subtotal		
Implement small-scale ROP projects within Lebanon County	As defined in ROP for District 8-0	Plan Project All Phases	\$2,000,000	Medium
Incident management system on Interstate highways in Lebanon County	Detour and advanced warning systems on interstate highways in Lebanon County	Plan Project All Phases	\$4,500,000	Medium
Incident management system on other major routes in Lebanon County	Detour and advanced warning system on other major highways in Lebanon County	Plan Project All Phases	\$3,500,000	Medium
		Subtotal	\$10,000,000	
TOTAL			\$10,000,000	

Total Projected Needs

The LEBCO MPO LRTP identifies **\$256,313,614** in transportation improvements over the 25 year span of the plan. The estimated project costs of **\$243,223,614** that are the responsibility of the LEBCO MPO are far below the projected revenue (**\$445,110,000**) for this same time period. Again, line items or place holders for groupings of projects (e.g., highways, bridges, bike/ped projects, transit operating assistance, etc.) beyond the TIP have not been added to the plan. It was also decided that adding projects without solid justification would be inappropriate, knowing the nature of the LEBCO MPO and the future studies that will follow that will better define the listing of long range projects. **It is important to remember that the Long Range Transportation Plan is not a funding program in and of itself. It sets the framework for the MPO to establish project priorities and make difficult funding decisions when developing the biennial update of the Transportation Improvement Program.**

Table 6-10 Total Projected Needs

Mode	Estimated Total Need
Highway/Bridge	\$208,271,534
Interstate 4R	(\$3,640,000)*
Transit	\$19,692,080
Non-Motorized	\$5,260,000
Aviation	(\$800,000)*
Rail Freight	(\$8,650,000)*
ITS	\$10,000,000
TOTAL	\$256,313,614
* Interstate maintenance, aviation and rail freight projects and funds are shown for information purposes only. Funding is outside of the LEBCO MPO financial envelope and is not included in the above total. See earlier discussion.	



Ongoing and Future Studies/Initiatives

In addition to the studies noted above as part of the modal sections, additional ongoing and future studies/initiatives will identify proposed improvements to enhance mobility and the economic health of Lebanon County. Table 6-11 identifies current and possible future efforts that are likely to produce projects to be included in future updates of the LEBCO MPO Long Range Transportation Plan.

Every other year as the 2-year unified planning work program (UPWP) is developed, the MPO decides which, if any, studies or initiatives will be submitted to PennDOT for consideration for additional planning funds. The activities listed in Table 6-11 along with any “new comers” are shared with the Technical Committee and Policy Board for prioritization, future scope development and submittal to PennDOT with the draft UPWP.

Table 6-11 Ongoing and Future Studies/Technical Analysis/Initiatives to Support the Inclusion of Future Projects in the LEBCO MPO Long Range Transportation Plan*

<i>Name</i>	<i>Status</i>
Susquehanna Regional Transportation Partnership / Commuter Services of PA Initiatives	Ongoing in conjunction with SC and SE PA MPOs

Name	Status
Corridor 2 Rail Transit Service Feasibility Study	Initial study completed in late 2009; future short-term efforts will focus on express bus service and then the maximum bus option for the 422/322/I-83 corridor (known as Corridor 2 or C2). C2 Study on Premium Transit Operations Plan was completed in late 2012 and implementation is underway by Lebanon Transit.
PA On Track Statewide Long Range Transportation Plan and Comprehensive Freight Movement Plan	Ongoing by PennDOT in conjunction with MPOs, RPOs and numerous other key stakeholders
Congestion Management Processes (CMP) Planning	Completed in June of 2008; will be updated by July of 2014
Regional Transit Coordination Study	Initial study completed by Commuter Services of PA ... future efforts have focused on improvements between Reading, Lebanon, Hershey and Harrisburg
PennDOT SC PA Public Transportation Regionalization Study	Phase 2 of the study is now underway and the LEBCO MPO and Lebanon Transit are actively involved in this PennDOT study.
Lebanon Transit Study of Additional Service to NE Lebanon County and NW Berks County, possibly including one or two small park-and-ride lots	Study to begin in July of 2014 and be completed by late June of 2015
Highway Regional Operations Planning (ROP)	Recently approved the North Cornwall Commons TIS as the ROP for the southern portion of Lebanon County
Congested Corridor Improvement Program (CCIP) Studies	The next CCIP Study will focus on PA Route 72 and Cornwall Road (SR 2001) and will begin after development (North Cornwall Commons, for example) occurs in the corridor.
Lebanon County Transit Support and Groundwork Study	Gannett Fleming has proposed a study for Lebanon Transit that keys on future transit service to major new developments within the county.
Prepare a Working Map of Roads and Adjacent Land Uses to Assist with Future Project Development	No map currently exists, but neighboring MPOs like Lancaster use such a map for coordination with PennDOT and others to integrate bike/ped, transit, safety improvements or cultural/historic site preservation into scheduled projects
Highway Safety (HSIP) Planning	Initiated in the FY 2007-2008 Unified Planning Work Program and ongoing ever since. Incorporate safety performance measures in all future L RTPs as per USDOT guidance issued in the September 2009 report entitled A Primer on Safety Performance Measures for the Transportation Planning Process. Recently completed the Road Safety Audit for PA Route 241 between US Route 322 and PA Route 72. Future RSAs will be conducted as staffing and funding permits from PennDOT and the LEVCO MPO.
Lebanon County Traffic Signal Initiative	Phase 1 was completed in June of 2009 (development of a database format for all Lebanon County traffic signals). Phase 2 involves the detailed inventory of all Lebanon County traffic signals, which is a short-term endeavor.

Name	Status
PA Route 419 Intersection/Area Study in Cornwall Borough in the vicinity of "Cornwall Center"	Conduct a study with some preliminary engineering with TIP Funds for PA Route 419 and the key intersections (Cornwall Road, Boyd Street, Burd Coleman Road, the entrance to Cornwall Manor, etc.) in Cornwall Borough and ensure that the safe and efficient movement of vehicles, people and goods is balanced with this historic setting (This is a possible location for a roundabout.) A special study has been added to the UPWP for 2014-2016; it is called the Cornwall Center Multi-Modal Transportation Study. It will be done in 2015-2016.
Bike/Ped Low Cost Improvement Study	Work with interested municipalities, agencies, the Lebanon Valley Bicycle Coalition and others on a study that identifies and prioritizes low cost improvements county-wide that will enhance destination and recreational bicycling.
Airport/Heliport Hazard Zoning	Work with all adjacent municipalities on airport and heliport hazard zoning in the short term
Short-Span Bridges	Conduct a study in the short term to evaluate all structures under 20 feet in length to better prioritize local, state and federal funding
County Transportation Impact Study (TIS) Guidance	Updated the county's TIS guidance in 2012 to be more consistent with PennDOT's TIS guidance
Access Management Training and Access Management Study/Ordinances in Key Congested Corridors	Initial training took place in May of 2007; a second round of training occurred on April of 2009. Access management ordinances were developed for the County, N. Cornwall Twp., N. Lebanon Twp. and S. Lebanon Township. An ordinance is now being developed for Jackson Township. Develop new ordinances as municipal interest is generated
PennDOT HOP Training	LTAP-related training may take place in May of 2014.
Bicycle Master Plan	Undertake a comprehensive planning process for bike accommodations
Rail-Trail Detailed Planning	Rail-Trail North Planning Study was completed in June of 2009 as was the Phase 6 Study in the City of Lebanon; future studies may be required for phases (like Phases 7 or 8) where an appropriate alignment has not been identified.
FEMA/PEMA Funding for Projects	Seek PEMA and/or FEMA funding for transportation projects listed in the Lebanon County Hazard Mitigation Plan; additional study may be needed to clarify projects scopes and costs.
Work jointly with PennDOT on Interstate Management Program projects to be included in future LEBCO MPO LRTPs	Ongoing with TIP development and implementation (FFY 2015 thru FFY 2018)
Pedestrian Master Plan	Undertake a comprehensive planning process for pedestrian accommodations
Transportation Planning for the Amish	If there is interest, support and involvement from the Amish community and/or representatives of the Amish, conduct a study of their transportation issues, needs and opportunities.

Name	Status
Transportation System Operations Planning (TSOP) and Regional Operations Planning (ROP) Studies	Future studies may result from CMP planning or from PennDOT District 8-0 ROP; medium-term initiatives may relate to traveler information along the interstates and major expressways caused by incidents, weather-related conditions, etc.
Student Drivers' Safety Programs	Programs occurred in May of 2006, 2007 and 2008. The status of future programs will depend upon the needs and interests of the various Lebanon County school districts and future funding from outside sources. It was hoped that the next program would occur in the fall of 2012 but that did not happen.
Lebanon County Developed and Sponsored LTAP Training	Work with PennDOT LTAP and Municipal Services staff to develop, sponsor and conduct Lebanon County "home grown" training courses
Rail Accessibility	Conduct a study that identifies, proposes needed improvements and markets rail accessible sites in Lebanon County
Bridge and Structural Safety Seminar with PennDOT and Local Municipalities	Based upon PennDOT's Strike-Off Letter, conduct training in the next two years on a plan of action (POA) for all inspected structures
LEBCO MPO-hired engineers to help with pre-construction phases of project development (local bridges and TAP/SRTS projects)	Possible short-term endeavor (FFY 2015 thru FFY 2018) tied to TIP-funded projects and PennDOT support that would be listed in future UPWPs. LCPD has hired Gannett Fleming to assist with traffic signal analysis.
Reprint Existing Materials (or Prepare New Materials) and Distribute Bike and/or Ped Safety Materials in English and Spanish	Continue to work with the Lebanon Valley Bicycle Coalition, interested municipal officials and local community leaders to print and distribute safety materials.
Truck Parking Study	Conduct a study of potential overnight parking areas near the interstates in coordination with other commercial/industrial developments
Lebanon Transit Land Use Toolkit	Conduct a study to prepare SALDO language for the county and municipalities to insure that major developments are designed and constructed to be "transit friendly"
Conduct a Study to make the LEBCO MPO LRTP Compliant based upon USDOT's Strategic Plan ("Transportation for a New Generation") and MAP-21	Once USDOT issues more detailed planning and programming guidance for MPOs, update the LEBCO MPO LRTP to be fully compliant.
PA Route 934 Relocation Study	Consider doing a study of 934 to relocate a portion of the roadway around Annville using Clear Spring Road and Mount Pleasant Road as a "mini-bypass" of Annville and evaluate the potential impacts to local historic sites, Annville's historic district and the community
Point of Access (POA) Studies for New/Expanded Interstate Interchanges	Not a short-term endeavor (If the POA is funded with a federal earmark, the study could begin sooner.)
County-wide Highway/Rail Grade Crossing Feasibility Study for Automated Horn System	Medium to long-term endeavor due to the study's cost and depending upon the interest from local elected officials
Others as needed, possibly including a Bridge Asset Management Study or an Aviation Needs Study	Possible medium-term endeavors

Name	Status
Feasibility Study of Route 422/322/72 Mini-Bypasses	Long term endeavor
Develop overlay mapping to identify public utilities (water, sewer, etc.) to understand where developable land is located and where future transportation improvements may be needed	Short-term GIS initiative

* The above studies and initiatives came from a variety of sources over a number of years. A few of them are somewhat duplicative. However, it is the practice of the MPO to keep an active list of such recommendations for future planning considerations.

Liquid Fuels Funding

The Lebanon County Commissioners with assistance from the Lebanon County Planning Department annually re-distribute some of the county Liquid Fuels Funds to municipalities that need additional funds to undertake projects beyond their base allocation of Liquid Fuels Funds. This re-distribution usually takes place in February and March. The program has become a source of funding outside of the federal and state funds in the LEBCO MPO's Transportation Improvement Program (TIP). Local roads get repaired; drainage is improved; bridges are rehabilitated with these funds. This program will be restructured in calendar years 2015 and 2016, and the details will be incorporated into the next LEBCO MPO Long Range Transportation Plan.

PA On Track

The consultant team that is presently working on the Commonwealth's new Long Range Transportation Plan and its first-ever Comprehensive Freight Movement Plan will be providing key data, findings, conclusions and recommendations to all MPOs and RPOs in 2014 and 2015 for use as appropriate. When completed, the LEBCO MPO intends to "marry" these new statewide visions, goals, objectives, projects and action items into its plan. Both plans will support improved transportation planning, better linkages to land use planning, the implementation of "smart" transportation projects, promoting institutional change, and developing strategic approaches to transportation project financing. The LEBCO MPO also will continue to utilize the outputs from PennDOT's statewide transportation model for various projections and analyses.

Transportation Systems Operations Plan Coordination

PennDOT's Transportation Systems Operations Plan (TSOP) and Regional Operations Planning (ROP) are efforts aimed at developing statewide and regional (District 8-0) operations programs respectively to look at and to develop projects through communication and exchange between PennDOT, its planning partners, and other key stakeholders.

PennDOT's guidance maintains that MPO Long Range Transportation Plans should look at projects that use or incorporate goals of these programs which include strategies such as ITS (Intelligent Transportation Systems), Smart Transportation initiatives, and Project Right Sizing efforts.

The Lebanon County Long Range Transportation Plan has been developed to ensure compatibility with PennDOT's near-term and long-term directions.

Financing the Future

Introduction

Federal regulations require that Long Range Transportation Plans include a financial plan to demonstrate that proposed investments are reasonable in the context of anticipated future revenues over the life of the plan. The finances for any Long Range Transportation Plan, therefore, should use past and current revenue streams to make future revenue projections, as detailed in the previous Project Prioritization section.

The Lebanon County Long Range Transportation Plan is fiscally constrained. The transportation investments proposed to meet the vision, goals and policy statements are well below the revenue projections for the next 25 years.

The following information summarizes the methods for projecting future revenues, calculating future project/line item costs and reconciling the plan with future revenue projections.

Financial Assumptions

The revenue forecasts that follow are based upon a number of financial assumptions, as outlined in the PennDOT reports entitled, Pennsylvania's 2015 Transportation Program Financial Guidance, dated November 8, 9 & 11, 2013 and January 10, 2014. There are still uncertainties regarding the Highway Trust Fund and future reauthorization of federal transportation legislation, but that is no different than in the recent past. These assumptions have been developed by evaluating previous federal, state and local expenditures and the most recent relevant federal and state financial guidance.

Revenue Forecasts

Revenue forecasts were developed after a review of previous federal, state and local expenditures and likely future funding levels. Figures, as shown in Table 6-12, are presented in current 2014 dollars.

Table 6-12 Lebanon County MPO 2015-2040 Revenue Forecasts

<i>Mode</i>	<i>Estimated Funding Short-Term (2015 – 2018)</i>	<i>Estimated Funding Medium-Term (2019 – 2026)</i>	<i>Estimated Funding Long-Term (2027 – 2040)</i>	<i>Total</i>
Highway and Bridge	\$62,330,000*	\$105,564,000	\$183,737,000	\$351,631,000
Transit	\$14,483,000	\$28,726,000	\$50,270,000	\$93,479,000
TOTAL	\$76,813,000	\$134,290,000	\$234,007,000	\$445,110,000

* Includes \$5.0 million in “Economic Development Funds” (now called Transportation Infrastructure Investment)

The four years of the short range element of the Financial Plan coincide with the FFY 2015-2018 Transportation Improvement Program (TIP) and the financial guidance for FFYs 2015, 2016, 2017 and 2018. The mid-range element coincides with the remainder of the Commonwealth’s Twelve Year Transportation Program. The balance of the financial plan covers the long range element or the “out years.”

Tables that provide the year-by-year details on the various highway, bridge and transit revenue projections are included in the references section at the end of the transportation plan. The first table contains the **highway and bridge revenue forecast** and the second table contains the **transit revenue forecast**. **These two tables comply with the procedures included in Mr. Larry S. Shifflet’s 2013 and 2014 e-mails and attached financial guidance and year of expenditure (YOE) requirements.** The FFY 2015-2018 LEBCO MPO Transportation Improvement Program as of late April of 2014 is also included in the appendix.

Other Term-Related Assumptions

Short-Term Element

The short-term element of the plan coincides with the FFY 2015-2018 Transportation Improvement Program (TIP) and the financial guidance for FFYs 2015, 2016, 2017 and 2018. The federal highway and bridge figures are based upon the prorated share of Pennsylvania’s allocations that were included in MAP-21. The same applies to the federal transit funds for Lebanon Transit. Act 89 of 2013 state revenue streams are also included in these financial estimates.

Funding allocations for highway, bridge, safety, air quality, urban, rail and/or transportation enhancement projects to the LEBCO MPO and all other MPOs and rural planning organizations (RPOs) for TIP development are done via formulas agreed to by all parties (MPOs, RPOs and PennDOT).

Funding for transit projects in Pennsylvania comes from a combination of federal, state, local and/or private sources. Federal funding for Lebanon Transit is provided from MAP-21. State funds are provided from formulas included in Act 44 of 2007, Act 26 of 1991, amendments included in Act 3 of 1997, and in Act 89 of 2013. In addition, state capital budget funding is released annually for capital improvements.

Medium-Term Element

The mid-range element of the plan coincides with the remainder of the Commonwealth's Twelve Year Transportation Program. It includes FFYs 2019 through 2026. Many of the assumptions previously mentioned have been applied to estimate revenue projections. Knowing that the LEBCO MPO's Transportation Improvement Program (TIP) is updated every two years, including the financial projections, these new revenue estimates (when available) will be used to periodically update the plan's financial assumptions. In doing so, the plan's estimated revenue stream will be refreshed and updated.

Long-Term Element

The long-term element of the plan covers the remaining years of the plan (2027 through 2040). Many factors will influence these revenue projections over time, including the above mentioned TIP update cycles and new state and federal transportation legislation. Again, as new developments in these areas happen, the plan's revenue estimates will be updated.

Public Involvement, Stakeholder Review and Environmental Justice

Introduction

The Lebanon County LRTP effort has emphasized the inclusion of public and stakeholder input throughout its creation and continuing with all major plan updates. For this update, outreach started with letters and e-mails to 25 of the 26 municipalities within Lebanon County in the summer of 2013 (not including Cold Spring Township, since it's largely state forest and game lands and has no governing body) to solicit candidate projects for the plan. Municipalities were told that adding any new projects to the TIP at this time will be very difficult.

Public Involvement

Meaningful public involvement ensures that the communities, businesses, public and private operators of transportation services, various interest groups and the general public most affected by the Long Range Transportation Plan have the opportunity to provide input at critical junctures throughout plan development and refinement. Community participation is critical to making the Lebanon County LRTP a successful document.

The Lebanon County MPO has solicited public input in numerous settings throughout the development of the plan. Public outreach efforts have included:

- LEBCO MPO's Congestion Update social media web page
- Individual municipal meetings
- Special meetings with key organizations like the Chamber of Commerce, Bike Lebanon (also called the Lebanon Valley Bicycle Coalition), Coleman Memorial Park Board of Directors, etc.
- Newspaper, radio and television stories about the plan/TIP and various ways to provide input
- LEBCO MPO's web page
- Draft LRTP/TIP Public Outreach sessions on June 02, 2014
- Numerous special interest group sessions took place in 2013 and early 2014 to "fine tune" the draft final LRTP before the formal 30+-day comment period began.

The initial draft plan and the 2015-2018 Transportation Improvement Program (TIP) were also presented at the Lebanon County MPO Technical Planning Committee and Policy Board meetings held on two (2) separate occasions in 2014. The new year of expenditure information and financial projections were also shared with and approved by both committees.

Stakeholder and Affected Party Reviews

In addition to input from the general public, the Lebanon County LRTP development process afforded the opportunity for local agencies, organizations, government officials and others affected to participate in identifying needs and determine the best future transportation improvements for Lebanon County. Many one-on-one meetings took place over the last two years.

In 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law. In 2012 Moving Ahead for Progress in the 21st Century (MAP-21) was signed into law. This legislation expands the organizations to be consulted as part of the long range transportation planning process. The groups specifically identified for Long Range Transportation Plan consultation include entities responsible for planned growth; economic development; environmental protection; natural resources; historic preservation; airport operations; freight movement; bicycle and pedestrian advocacy; land use management; and Native American Indian Tribes. We also added PennDOT to this list to fully address safety issues, crash clusters and road departure accidents at key locations and within key corridors.

Planned Growth

With the objective to manage the effects of past growth and strengthen guidance for future community development and resource protection in mind, the LRTP was updated in conjunction with the 2007 Lebanon County Comprehensive Plan.

The Lebanon County Comprehensive Plan, including the LEBCO MPO Long Range Transportation Plan, was one of the first county plans in Pennsylvania to take advantage of the tools listed below in crafting a vision and action plan that directs local, county, and state activities toward objectives that distinguish and benefit the county as a whole.

- Amendments to the [Municipalities Planning Code \(MPC\)](#) in 2000 gave new tools, authority and responsibility to local and county governments.
- More effective communication and coordination between state agencies and local government is being fostered.
- New investment and revitalization programs, resulting in part from prior administrations, provided new tools and financial resources to both the public and private sectors.

Planned and well managed (“smart”) growth is the focus of both plans. This will take many forms, including but not limited to:

- Creating a range of housing opportunities and choices
- Promoting walkable and bike-friendly communities
- Encouraging community and stakeholder collaboration
- Fostering distinctive areas with a strong sense of place

- Mixing land uses
- Making development decisions predictable, fair and cost-effective and coordinating land use and transportation decision-making early on
- Preserving open space, farmland, natural beauty and critical environmental features
- Providing a variety of transportation choices over time
- Directing development toward existing communities and where proper infrastructure exists
- And taking advantage of compact building design.

Both the LRTP and the County Comprehensive Plan were developed with significant consultation from local, regional and statewide entities. Key stakeholders consulted from the planned growth community include:

- Lebanon County Builders Association
- Lebanon County Housing and Redevelopment Authority
- Lebanon County Association of Realtors

Economic Development

The Lebanon County Comprehensive Plan and the LEBCO MPO Long Range Transportation Plan, as part of the joint development process, shared local economy and employment trends as part of the initial data collection effort several years ago. An Economic Development Plan may result now that the comprehensive plan has been adopted and is being implemented.

A goal for the Comprehensive Plan is to retain and expand existing businesses and attract new businesses that enhance the overall quality of life of county residents. Many of the comprehensive plan efforts to outreach to the economic development community included discussion on transportation strategies necessary to support and enhance the economic viability of Lebanon County.

Both plans were developed with significant consultation from local, regional and statewide entities. Key stakeholders consulted from the economic development community included:

- Lebanon County Expo Center and Tourist Promotion Agency
- Lebanon Valley Economic Development Corporation
- Lebanon Valley Chamber of Commerce
- Lebanon's Main Street and Elm Street Programs.

Environmental Protection, Natural Resources and Historic Preservation

As part of the data collection effort for the Lebanon County Comprehensive Plan, profiles were developed for natural resources (water, agriculture and open spaces/greenways), cultural/historic resources, and other key county features. A Natural Resource Conservation Plan, a Cultural/Historic Preservation Plan and a Recreation, Open Space and Greenways Plan resulted. Lebanon County's goals, objectives, key recommendations and action items that were prepared for natural resources, recreation and cultural/historic preservation are very supportive of and consistent with the goals, objectives and action steps in Pennsylvania's Statewide Historic Preservation Plan. Common themes are (1) to increase preservation planning at the local level; (2) to strengthen federal, state and local partnerships; (3) to assist preservation advocates and partners; (4) to reach out to new partners; and (5) to administer an effective and proactive preservation program locally and statewide.

The goal is to identify significant historic resources and areas of archaeological sensitivity within Lebanon County, especially along key transportation corridors and in critical areas where historic resources may be potentially affected by economic decline, urban/suburban growth, proposed or ongoing transportation projects, etc.

Lebanon County is rich in history and natural/cultural amenities which distinguishes it from others in the region. As transportation projects are advanced from the plan to the Transportation Improvement Program (TIP) for implementation, the staff of the Lebanon County Planning Department (LCPD) will continue to (1) utilize the resources listed in the Lebanon County Comprehensive Plan and (2) to work with key local groups and the Pennsylvania Historical and Museum Commission (PHMC) to insure that these resources are protected and preserved. Key local preservation partners will include but are not limited to Cornwall Historic Alliance, Cornwall Iron Furnace Associates, Friends of Old Annville, Historic Schaefferstown, Mt. Gretna Area Historical Society, Lebanon County Historical Society, Historic Preservation Trust of Lebanon County and the Lebanon County Conservancy.

For example, Appendix I of the County Comprehensive Plan includes an entire chapter (Chapter 7) on historic and cultural amenities. The LCPD staff will continue to use these inventories and the data provided by the Pennsylvania Historical and Museum Commission (PHMC) as a "first step" in evaluating the potential impacts that future transportation projects may have on these resources. Potential future urban and rural historic districts, as well as view sheds along key transportation corridors and other "character-defining" landscapes have also been identified and mapped. PHMC recently completed an analysis of the MPO's six congested corridors of concern, and it is included in the appendix to this plan. The LEBCO MPO will also be receiving input from the various federal and state resource agencies at the June 25, 2014 Agency Coordination Meeting (ACM) sponsored by PennDOT.

The PennDOT-required Linking Planning and NEPA (LPN) Level 2 Forms will be populated with this and other key information as new transportation projects are identified and constructed over time.

The initial LRTP, subsequent updates to the LRTP (including this one) and the 2007 County Comprehensive Plan were developed with meaningful consultation from local, regional and statewide entities. Related to environmental protection, natural resources, historic preservation and recreation, key stakeholders at those times and now were/are:

- Preservation Trust of Lebanon County
- Lebanon Valley Rails-to-Trails (LVRT) Corporation
- Lebanon County Historical Society/Friends of the Union Canal
- Lebanon County Conservation District
- Penn State Cooperative Extension
- Pennsylvania Historical and Museum Commission (PHMC)
- Lebanon County Federation of Sportsmen
- Appalachian Trail Staff
- The Nature Conservancy
- Watershed Association of Lebanon County
- Lebanon Valley Conservancy
- Audubon Society – Kittatinny Ridge
- PA Highlands

The LEBCO MPO utilized the PHMC-developed and PennDOT-approved “streamlined approach for incorporating historic and archaeological resources into long range transportation plans”. In 2012 and 2013, the LCPD staff worked with PHMC staff to identify high-priority significant places, character-defining corridors and bridges, historic districts, areas with a high probability for archaeological sites and to compare these locations with TIP projects. PHMC staff also facilitated a half-day session on March 20, 2013 with all municipalities in the county to further pin-point other important sites that should be preserves and/or protected. By having all of this information now in the city/county Geographic Information System (GIS), the LEBCO MPO can get an early start on the practicality and costs of alternative alignments and context-sensitive solutions to avoid or minimize or mitigate the impacts to these important resources. And if mitigation strategies are required, the MPO and PennDOT can begin to explore them in the planning and programming development processes. And as mentioned above, the PHMC’s recent analysis of the MPO’s six congested corridors of concern is attached as an appendix to this plan and will be used extensively as projects are proposed in those key corridors.

This is considered a major update of the plan, so the LEBCO MPO will present this version to the federal and state resource agencies at an Agency Coordination Meeting (ACM) on June 25, 2014. At that meeting, the LEBCO MPO staff will also discuss their approach to how the Linking Planning and NEPA forms will be used in Lebanon County to address all concerns received from state and federal agencies and from the public. In the future, probably four years from now, this will be done again (1) for the required consultation process and (2) for the identification of new initiatives from the state and federal resource agencies.

Airport Operations

The Lebanon County Transportation Profile, which was last updated several years ago, was developed as a companion/support document to the Long Range Transportation Plan, inventoried the county's four privately-owned public use airports and one heliport. They include Deck, Farmer's Pride, Keller Brothers and Reigle Airports. Lebanon Valley Aviation or Millard Airport just west of Annville became a private airport solely for private use in the summer of 2007. The Central PA Heliport just east of Reigle Airport began operations in April of 2012 offering tourist rides and various services for business customers.

Key persons at these operations were interviewed. Data and information on Muir Field at the Indiantown Gap Military Reservation was obtained from the January 2002 report Airport Flexibility Study and Master Plan for Lebanon County; from a tour of the facilities on September 27, 2005; and from PennDOT in 2009.

Related to airport operations, key stakeholders were the owners of the above-mentioned private airports, Indiantown Gap Military Reservation, PennDOT's Bureau of Aviation and the municipalities where these facilities are located.

Airport Hazard Zoning (AHZ) exists in the following municipalities ... Heidelberg Township, South Londonderry Township, North Lebanon Township, Jackson Township and Swatara Township. AHZs are still needed in two other municipalities, and the Lebanon County Planning Department staff will continue to encourage the development and adoption of these very important ordinances.

Listed in Table 6-12 are studies or initiatives that may become a future task or tasks in future Unified Planning Work Programs.

Freight Movement

As part of the data collection effort for the Transportation Profile, Norfolk Southern (NS) was interviewed and information was provided on its Reading to Harrisburg Main Line. Freight information was also collected from the Pennsylvania State Transportation Advisory Committee's 2004 report, entitled The Economic Impact of Rail Freight. Information on the movement of freight in the region was also shared with the LEBCO MPO since it was a member of the ongoing 8-county goods movement planning activities that were directed by the Harrisburg MPO.

The Pennsylvania Turnpike Commission shared trend information on the comings and goings of heavy trucks at the Lebanon/Lancaster Interchange at PA Route 72.

The December 2009 Pennsylvania Intercity Passenger and Freight Rail Plan provided much valuable information for the LEBCO MPO's use. Key businesses were also interviewed during 2012 and 2013. And as the ongoing PennDOT Comprehensive Freight Movement Plan is completed in late 2014, valuable new information will be shared with the LEBCO MPO for use in future updates of this plan.

Listed in Table 6-12 are studies or initiatives that may become a future task or tasks in future Unified Planning Work Programs.

Bicycle and Pedestrian

As part of the past data collection effort for the Transportation System Profile, hiking, bicycling and pedestrian facilities were documented. Cities, towns and villages that are considered walkable by municipal officials have also been noted.

Individuals from urban, suburban and rural communities have spoken to the need to make our cities, towns and villages more livable by improving opportunities for walking and bicycling. Bike Lebanon members have provided significant input into the kinds of plans and projects that are needed to promote destination and recreational bicycling. Based upon this input, there needs to be a clearer focus on incorporating “bike/ped friendly” features wherever practical into projects currently being planned, designed and/or constructed, and this will be done through the PennDOT Linking Planning and NEPA Level #2 forms for each TIP project, just as it is for all other project-related issues (threatened and endangered species, prime soils, high quality streams, etc.).

PennDOT’s Lebanon County Maintenance Office has been very supportive of “bike/ped friendly” features with its Betterment projects (e.g., Cornwall Road and PA Route 117 resurfacing projects) with improved shoulders for walking, jogging and bicycling. In fact in 2008-2009, the MPO provided over \$1.2 million in LEBCO MPO TIP funds to PennDOT Lebanon County Maintenance to “enhance” the previously-mentioned 117 corridor betterment project to stabilize and widen where possible the shoulders for the non-motoring public. County Maintenance staff have improved shoulders on sections of PennDOT roads like Rocherty and Evergreen Roads and the Palmyra Campbelltown Road. They have also responded to requests for replacing dangerous grates.

In 2011-12, LEBCO MPO partnered with the Lebanon Valley Bicycle Coalition (LVBC) (also called Bike Lebanon) to improve bicycling safety. A county-wide session was held and included police departments, school districts, recreation programs, Safe Kids Lebanon County, FASP and others.

Walking audits have been completed for the Annville and Cleona Elementary Schools.

Sporadic bike safety events are held for youth by Bike Lebanon and several local police departments. To date, there is no county-wide effort to educate youth on how to bicycle safely and to know the traffic laws and “rules of the road”. Bike Lebanon has recommended that a County Bicycle Safety Committee be formed.

The completed PA Route 419 Scenic Byway Modified Corridor Management Plan, the Market Street Feasibility Study in Jonestown Borough and the Main Street (US Route 422) Corridor Study in Palmyra Borough have provided additional bike/ped projects for future consideration. The Rail-Trail North Planning Study focused on the feasibility of extending the Lebanon Valley Rail-Trail (LVRT) north from the City of Lebanon to Swatara State Park, and the recently completed LVRT Phase 6 Planning Study focused on the alignment between Chestnut Street in the City of Lebanon and 25th Street behind the mall in West Lebanon Township and North Lebanon Township. Listed in Table 6-12 are several studies or initiatives that may become a future task or tasks in future Unified Planning Work Programs.

Excellent bicycle reference material can be obtained from www.saferoutespa.org and www.bikelebanon.org.

The Lebanon County Bicycle Transportation and Priorities Maps of key roads/streets that need wider shoulders and other facilities will help PennDOT, the LEBCO MPO and municipalities as road and bridge projects are advanced to determine if, when, and where more improvements can be made for bicyclists and pedestrians. It must also be noted that an additional and critical purpose of the Bicycle Transportation Map is to prevent good roads already identified for bicycling from becoming worse due to designs and reconstruction that may not support all modes of transportation.

On September 26, 2013, Lebanon County Planning Department staff members attended an all-day training session at the Fort Hunter Conference Center, north of Harrisburg, PA on the 2012 AASHTO Bike Guide.

Land Use Management

The staff from the Lebanon County Planning Department and the LEBCO MPO Technical Planning Committee/Policy Board understand the need to link land use and transportation decisions. That's why a request was made to PennDOT, DCED, DEP and DCNR to jointly fund and develop both plans several years ago.

This Long Range Transportation Plan is recommending future access management initiatives in the two most heavily developing corridors, US Route 422 and PA Route 72. PennDOT's model access management is being used to support this vital work in North Cornwall Township and North Lebanon Township, as well as in other municipalities. On the land use side, sound land use planning concepts are already taking hold in Lebanon County, and an early warning system is in place within County Planning to insure that the transportation planners know about significant development and redevelopment plans in order to provide "just in time" transportation facilities and services. Transportation Impact Studies (TISs) and Highway Occupancy Permits (HOPs) that are coordinated with local municipalities and PennDOT are also being coordinated with county planning department staff, via scoping meetings early in the process. The county is presently working with Jackson Township on an access management ordinance.

Proper land use management has been a discussion at every event where the comprehensive plan and/or the Long Range Transportation Plan have been discussed. The previous planned growth discussion also speaks to this subject. Both plans were developed with significant consultation from local, regional and statewide parties, especially as it relates to this topic. A future new initiative may be the development of transit overlay districts in key corridors as past of the County's Subdivision and Land Development Ordinance (SALDO) to promote transit friendly development.

Native American Indian Tribes

Consultation with Native American Indian Tribes that once lived in Lebanon County or southcentral Pennsylvania was initiated in March of 2014. The LRTP/TIP was e-mailed/mailed to the Shawnee Tribe of Oklahoma, the Delaware Nation living in Oklahoma, the Eastern Shawnee Tribe of Oklahoma, the Oneida Nation of Wisconsin, the Onondaga Nation in New York, the Seneca-Cayuga Tribe of Oklahoma, the St. Regis Mohawk Tribe living in New York, and the Shawnee Tribe of Oklahoma.

Tribes that once prospered in the region were the Leni-Lenape (Delaware), the Shawnee, the Mengwe, the Allegewi and the Iroquois. The Leni-Lenape (or Lenni Lenapi) were members of the Algonquin family and had three separate tribes that once lived in the Lebanon Valley ... the Unamis (turtle), the Unalachtgo (turkey) and the Minsi (wolf).

To date, none of the tribes/nations provided any comments or concerns about any of the projects on the FFY 2015-2018 Transportation Improvement Program (TIP) or in the plan. Some of this correspondence is attached to the back of this document.

Safety Planning

The Lebanon County Planning Department (LCPD) staff receives accident and fatality data and crash cluster data from PennDOT on a routine basis to better determine how, when and where to spend federal safety funds. Several conference calls and meetings were held in 2012, 2013 and 2014 to identify corridors and isolated locations where crash and fatality data appear to be higher than the current statewide averages for accidents/fatalities on similar types of facilities. The July 2012 and July 2013 reports entitled, LEBCO MPO Highway Safety Guidance Report, from PennDOT's Highway Safety Section in the Bureau of Maintenance and Operations and the top 25 crash locations (including roadway departure accidents) from PennDOT District 8-0 served as the starting point for these discussions.

US Route 422 east and west of the City of Lebanon, US Route 422 in Palmyra Borough, PA Route 72 north and south of the City of Lebanon, US Route 322 in the Canpbelltown area, PA Route 934 north and south of Annville, PA Route 897 south of the City of Lebanon, and a few other state routes are candidates for mitigation with federal Highway Safety Improvement Program (HSIP) Funds.

Via a legal agreement with PennDOT, the LCPD does receive detailed accident and fatality reports, but we are not permitted to share this information with the general public. With assistance from PennDOT, it is the LEBCO MPO's objective to reduce fatalities and major injuries in Lebanon County by 50% over the next two decades.

Roadway Safety Audits (RSAs) are an excellent way to bring together all concerned parties to study and implement safety improvements in corridors of concern. An RSA was done on US Route 422 in the Myerstown area, and now two safety projects are being funded through the LEBCO MPO's Transportation Improvement Program (TIP). The PA Route 241 RSA from US Route 322 to PA Route 72, a distance of 3.55 miles, was just completed, and several low and moderate cost projects were completed or will soon be completed with PennDOT Lebanon County Maintenance Funds and statewide safety funds, including the high friction surface on the travel lanes at the "S" curve. Future projects will be added to the MPO's plan and TIP in the near future that will be completed over the next several years.

The LEBCO MPO anticipates doing another RSA in 2015, possibly on the PA Route 72 corridor north and south of the City of Lebanon.

Environmental Justice Compliance

Environmental Justice has its roots in a Warren County, North Carolina dispute over the transport and storage of hazardous waste materials in a landfill in a minority and low-income community that was not responsible for the generation of the waste.

In 1994, Executive Order 12898 mandated that recipients of federal funding make achieving environmental justice part of their mission by identifying as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low income populations. This requires outreach to stakeholders who have traditionally tended to not become involved through the regular informational or public involvement process and evaluate the impact of the plan on minority and low-income populations.

The Lebanon County Planning Department developed a Title VI / Environmental Justice Implementation Plan and Status Report. The document is intended to insure that “every voice counts” and that transportation decision making does not adversely affect targeted low income and minority populations. And the plan clearly spells out how the LEBCO MPO has reached out and will continue to reach out to everyone in the county for input into all transportation planning and programming matters.

Consultation with low income and minority populations is being done in a variety of ways, including:

- Preparing and distributing key documents in Spanish
- Having a Spanish interpreter at key events
- Operating a booth with an interpreter at past Unity Day celebrations
- Posting materials at the Hispanic Outreach Center and the Salvation Army in the City of Lebanon
- Working with Habitat for Humanity
- Coordinating with the Community Action Partnership (CAP) on various human service initiatives.

The staff from the Lebanon County Planning Department (LCPD) has also analyzed the American Community Survey (ACS) 2012 data on non-institutionalized persons with vision and hearing difficulties in Lebanon County. The total estimated numbers range from 15,000 to 17,000, and if they request better MPO services to be more participatory, the LCPD staff will do whatever is required to get them fully engaged.

A number of years ago, the Lebanon County Planning Department participated in its first Radio Omega talk show program, focusing on community issues and opportunities that need to be addressed in the comprehensive plan and/or the transportation plan. Radio Omega was Lebanon’s only Hispanic radio station. Again, two interpreters were used and some basic information was provided to the listeners and then the talk show answered questions and responded to concerns “on the air”. The program was deemed very successful by Radio Omega, such that City and County staff members returned for other programs dealing with (1) the Lebanon Transit Business Plan Study and (2) the impacts of the 9th and 10th Streets Bridges project on the residents in the northwest

portion of the City, which is largely Hispanic. Unfortunately, this radio station went off the air in mid-2009, leaving the area without any continuous radio programming for Latinos and Hispanics. The local AM station, WLBR 1270, does a Spanish radio broadcast every Sunday afternoon to provide news, information and music in Spanish, and the LEBCO MPO does use this broadcasting to “get the word out” regarding transportation planning and programming matters.

“Keyperson” interviews included individuals in Lebanon County from all walks of life, including low income and minority populations. The Lebanon Transit Business Plan public outreach effort also included one-on-one interviews with Hispanic leaders in Lebanon County and a transit survey in Spanish.

The LEBCO MPO Long Range Transportation Plan was developed with modest, but very effective input, from local persons and groups who either fall within this grouping or who represent such groups via their place of employment or their volunteer efforts. As the successes build, the Title VI / Environmental Justice Implementation Plan and Status Report will be amended and further outreach efforts will be conducted.

The LEBCO MPO has also done an EJ benefits and burdens analyses for TIP projects. Since most of the funding (over 90%) for TIP projects and most of the funding (over 80%) for plan projects covers maintenance and operation of the existing system, these projects were deemed to be “EJ neutral”. However, several ridesharing and transit projects on the TIP will benefit Lebanon County’s EJ community. No TIP projects were identified that would negatively impact the EJ community.

Obviously, the enhanced transit service in the City of Lebanon and the expanded transit service to key destinations within and outside of the county have also improved travel options for low income and minority populations.

The 9th and 10th Streets Bridges project in the NW section of the City of Lebanon improved walking with one sidewalk on the 9th Street overpass and one sidewalk on the 10th Street overpass which has resulted in new housing and business opportunities in this key corridor (PA Route 72) as excess ROW was used to redevelop the area. The safe sidewalks to school project around the NW Elementary School also improved walking in this section of the City of Lebanon. Phase 5 of the Lebanon Valley Rail-Trail (LVRT) was also in the City of Lebanon from 9th Street to just beyond Chestnut Street. All of these projects are in high concentration areas of low income and minority populations and were just completed using funds from previous TIPs.

Action Plan

The Transportation Action Plan presents a summary list of actions to address the maintenance and planned improvement of the county’s transportation system. The Transportation Action Plan recognizes that the Lebanon County MPO is a young organization that is steadily building its technical capacity, its partnerships, and its level of awareness in the community. Several action items recommend continued efforts in these areas. The action plan also recognizes the importance of coordinating transportation maintenance and improvements with comprehensive planning goals, particularly land use, utility infrastructure, and natural and cultural resource protection, in order to sustain the economic vitality and quality of life found in Lebanon County. The action plan follows the goals outlined earlier in the plan. For each action, an intended outcome, a proposed time horizon, lead and support partners, and funding sources are included to foster clear implementation of each item.

Recommendations

Objective A: *Provide a safe and secure transportation system.*

Action 1:	<i>Implement Highway Safety Improvement Program (HSIP) projects from current and future Transportation Improvement Programs (TIPs).</i>
Intended Outcome:	Reduce accidents and fatalities at high crash occurrence locations
Time Horizon:	2014/2015 and ongoing
Lead Partners:	PennDOT, FHWA, LEBCO MPO Committees and staff
Support Partners:	Municipalities, local police departments, State Police, etc.
Funding Sources:	HSIP Line Items in current and future TIPs
Action 2:	<i>Insure that the operations of the Lebanon Transit are addressing security issues in the post 9/11 era.</i>
Intended Outcome:	Prevent and/or be prepared to deal with security issues throughout the transit system
Time Horizon:	20014/2015 and ongoing
Lead Partners:	Lebanon Transit, local police departments and State Police, South Central Regional Counter-Terrorism Task Force, other first responders
Support Partners:	FTA, LEBCO MPO Committees and staff, municipalities and users of the Lebanon Transit system, PennDOT’s transit staff
Funding Sources:	Current and future TIPs, South Central Regional Counter-Terrorism Task Force



Action 3:	<i>Conduct Student Drivers Safety Symposiums annually.</i>
Intended Outcome:	Reduce accidents and fatalities involving Lebanon County's young (under 21 years of age) drivers
Time Horizon:	Ongoing when the school districts re-start the Student Drivers' Safety Symposiums
Lead Partners:	Lebanon County Planning Department, Center for Highway Safety, school districts, local police, State Police, Norfolk Southern, DUI Associations and other symposium participants
Support Partners:	Local financial supporters
Funding Sources:	Current and future Unified Planning Work Programs (UPWPs) and private contributions

Action 4:	<i>Improve Shoulders for Safe Walking, Bicycling, Jogging, etc..</i>
Intended Outcome:	Stabilize, resurface, reconstruct and/or widen shoulders on key roads for a variety of non-motorized uses
Time Horizon:	2014-2015 and ongoing
Lead Partners:	Lebanon County Planning Department, LEBCO MPO, PennDOT, municipalities, Bike Lebanon, etc. (Bike Lebanon's County Bicycle Transportation Map and Priorities Map are two resources that can be used in this effort.)
Support Partners:	Lebanon County, LEBCO MPO, PennDOT, municipalities, Bike Lebanon, etc.
Funding Sources:	Current and future TIPs, county/municipal budgets, PennDOT County Maintenance Funds, advocates like Bike Lebanon, etc.

Action 5:	<i>Establish a County Bicycle Safety Committee.</i>
Intended Outcome:	Work with all key parties and stakeholders to establish a County Bicycle Safety Committee and to implement programs
Time Horizon:	2015-2016 and ongoing
Lead Partners:	Bike Lebanon, area school districts, municipalities, police departments, parks and recreation commissions and other advocates
Support Partners:	Lebanon County, Lebanon County Planning Department, LEBCO MPO, PennDOT, DCNR, hospitals, insurance companies, etc.
Funding Sources:	Private funds, municipal/school district funds, Bike Lebanon funds, County funds, LEBCO MPO planning funds, etc.



Objective B: *Provide a multi-modal system that is efficient, interconnected and accessible*

Action 1:	<i>Implement Long Range Transportation Plan (LRTP) projects via current and future Transportation Improvement Programs (TIPs)</i>
Intended Outcome:	Provide a balanced transportation system that provides real travel options to its users
Time Horizon:	2015 – 2018 TIP and beyond
Lead Partners:	PennDOT, FHWA, FTA, LEBCO MPO Committees and staff
Support Partners:	Municipalities, SC PA Goods Movement Task Force, Susquehanna Regional Transportation Partnership, Bike Lebanon, etc.
Funding Sources:	Current and future TIPs

Action 2:	<i>Continue to update and refine the LRTP transportation profile</i>
Intended Outcome:	Maintain current datasets and transportation benchmarks to facilitate better decisions through the LEBCO MPO
Time Horizon:	2016/2017 and beyond as funding permits
Lead Partners:	LEBCO MPO Committees and staff, TE project sponsors, local police departments, State Police
Support Partners:	PennDOT (PA On Track information, PennDOT safety data, etc.), FHWA, FTA, FRA, FAA, Lebanon Transit, aviation sponsors, Norfolk Southern, municipalities, non-profit groups that own and maintain transportation enhancement, users of the various modes of transportation, planning and engineering firms
Funding Sources:	Current and future Unified Planning Work Programs (UPWPs)

Action 3:	<i>Develop bridge and pavement asset management systems for the LEBCO MPO.</i>
Intended Outcome:	Attain a working database of bridge and roadway rehabilitation or replacement priorities
Time Horizon:	2012/2013 and ongoing for local roads and bridges
Lead Partners:	PennDOT, LEBCO MPO Committees and staff, FHWA
Support Partners:	Planning and engineering firms
Funding Sources:	Special studies funding from PennDOT via the annual Unified Planning Work Programs (UPWPs) and/or future TIP funding



Action 4: <i>Conduct Traffic Signal Inventory Study.</i>	
Intended Outcome:	Establish a traffic signal data base to make better, more informed decision on funding for these infrastructure items
Time Horizon:	2016/2017 and ongoing
Lead Partners:	LEBCO MPO Committees and staff
Support Partners:	PennDOT, FHWA, municipalities, planning and engineering firms
Funding Sources:	Current and future Unified Planning Work Programs (UPWPs) and/or TIPs
Action 5: <i>Monitor and Update the congestion management processes (CMP) plan.</i>	
Intended Outcome:	Develop and implement an ongoing and proactive approach to all forms of congestion in Lebanon County, including speed and delay monitoring in key corridors
Time Horizon:	2013/2014 via a special study (called Lebanon County Moves) approved by PennDOT
Lead Partners:	LEBCO MPO Committees and staff, planning and engineering firm, PennDOT, FHWA
Support Partners:	FTA, municipalities, elected officials, Harrisburg MPO, general public
Funding Sources:	Past (2005-2006) and current/future UPWPs
Action 6: <i>Implement the US Route 422 Congested Corridor Improvement Program (CCIP) Study short-term recommendations.</i>	
Intended Outcome:	Complete the environmental phase, preliminary engineering, final design, ROW/utility relocations and construction of the short-term improvements as a package (one bid letting)
Time Horizon:	Underway with 1-year maintenance period for the 422 CCIP adaptive traffic signal system project
Lead Partners:	PennDOT, planning and engineering firm, LEBCO MPO Committees and staff
Support Partners:	Municipalities, FHWA, developers along the corridor
Funding Sources:	current and future TIPs



Action 7: <i>Conduct the PA Route 72 and Cornwall Road CCIP Study.</i>	
Intended Outcome:	Undertake the study when the area begins to build out
Time Horizon:	Possibly in 2017/2018
Lead Partners:	LEBCO MPO Committees and staff, PennDOT, planning and engineering firm
Support Partners:	Municipalities, developers along these roadways, FHWA , general public
Funding Sources:	Subsequent CCIP funding from PennDOT or LEBCO MPO TIP Funds
Action 8: <i>Assist PennDOT with implementation of Interstate Maintenance (IM) projects.</i>	
Intended Outcome:	Be partner to PennDOT on IM Planning and project development in Lebanon County
Time Horizon:	Ongoing, as needed
Lead Partners:	LEBCO MPO Committees and staff, PennDOT
Support Partners:	FHWA, planning and engineering firms
Funding Sources:	Current and future TIPs
Action 9: <i>Conduct Point of Access (POA) Studies, as required.</i>	
Intended Outcome:	Following PennDOT/FHWA requirements, do POA Study for a full interchange at I-78 and US Route 22 in Bethel Township, Lebanon County
Time Horizon:	2019/2020 to 2022/2023
Lead Partners:	LEBCO MPO Committees and staff, PennDOT, FHWA
Support Partners:	Planning and engineering firms, Bethel and Swatara Townships
Funding Sources:	Future Unified Planning Work Programs (UPWPs) and/or TIPs

Action 10: *Conduct and/or participate in local and regional transportation planning initiatives and project implementation, including but not limited to the Lebanon Transit Studies, Rail-Trail North implementation, Corridor 2 Studies, Regional Operations Planning, Regional Goods and Freight Movement, etc.*

Intended Outcome: Identify projects, programs and services for future implementation
Time Horizon: Ongoing
Lead Partners: PennDOT, FHWA, FTA, LEBCO MPO Committees and staff, Harrisburg MPO, York MPO
Support Partners: Lebanon Transit, aviation sponsors, municipalities, planning and engineering firms
Funding Sources: Base funding or special studies funding from PennDOT via the annual Unified Planning Work Programs (UPWPs)

Action 11: *On average, spend a minimum of 90% of TIP funds on maintenance and improvement of the existing transportation system.*

Intended Outcome: Carry out a "Maintenance First" philosophy
Time Horizon: FFY 2015 to FFY 2018
Lead Partners: LEBCO MPO Committees and staff, Lebanon Transit, PennDOT, FHWA, FTA
Support Partners: Elected officials
Funding Sources: Current and future TIPs

Objective C: *Coordinate transportation improvements with land use, infrastructure and other community development decisions*

Action 1: *Conduct and/or participate in integrated planning activities and their implementation, including but not limited to congestion management processes, congested corridor improvement program, access management ordinance development, Traffic Impact Study/Highway Occupancy Permit training, airport hazard and clear zoning, scenic byways planning, etc.*

Intended Outcome: Identify projects, programs and services for future implementation
Time Horizon: 2014/2015 and ongoing
Lead Partners: PennDOT, FHWA, FTA, FFA, aviation sponsors, LEBCO MPO Committees and staff
Support Partners: Municipalities, planning and engineering firms
Funding Sources: Base funding or special studies funding from PennDOT via the annual Unified Planning Work Programs (UPWPs)



Action 2:	<i>Coordinate with municipalities and developers on major traffic impact studies and the implementation of recommended transportation projects.</i>
Intended Outcome:	Establish partnerships with the private sector and municipalities to guide the development and fund the construction of timely transportation improvements
Time Horizon:	Ongoing
Lead Partners:	Municipalities, developers, PennDOT, LEBCO MPO Committees and staff
Support Partners:	Planning and engineering firms
Funding Sources:	Current and future TIPs, Pennsylvania Infrastructure Bank (PIB) Loans, formal and informal partnerships, County Liquid Fuels Funds, etc.
Action 3:	<i>Work with municipalities and developers via formal and informal partnerships to support LEBCO MPO TIP projects.</i>
Intended Outcome:	Leverage more funding and advance projects to construction in a more expedited fashion
Time Horizon:	Ongoing
Lead Partners:	LEBCO MPO Committees and staff, municipal managers, developers, PennDOT, Lebanon Transit, etc
Support Partners:	Local elected officials
Funding Sources:	Current and future TIPs, private funds, PIB Loans, Liquid Fuels Funds, etc.
Action 4:	<i>Assist with the administration of the County Liquid Fuels Program.</i>
Intended Outcome:	Manage the day-to-day activities and recommend funding priorities to the County Commissioners
Time Horizon:	2014/2015 when a new approach is approved and implemented and ongoing thereafter
Lead Partners:	Lebanon County Planning Department, PennDOT, County Commissioners
Support Partners:	Municipalities
Funding Sources:	County Liquid Fuels Program, current and future TIPs, PIB Loans, etc.

Action 5:	<i>Petition the Harrisburg MPO, PennDOT, FHWA and FTA to bring Palmyra Borough and outstanding portions of N. & S. Londonderry Townships into the LEBCO MPO.</i>
Intended Outcome:	Have the ability to do countywide transportation planning and programming
Time Horizon:	Completed in April of 2009 and now using STU Funds for local projects in the three municipalities and within Lebanon County
Lead Partners:	Lebanon County Planning Department, LEBCO MPO Committees and staff
Support Partners:	PennDOT, FHWA/FTA, the municipalities and the Harrisburg MPO
Funding Sources:	Funds not needed

Action 6:	<i>Participate in community revitalization projects with related streetscape, sidewalk and/or cartway improvements.</i>
Intended Outcome:	Coordinate comprehensive community improvements with multiple funding sources and provide direct transportation planning input
Time Horizon:	Ongoing
Lead Partners:	Lebanon County Planning Department staff, LEBCO MPO, FHWA/FTA, DCNR, DCED, DEP
Support Partners:	Public/private partnerships
Funding Sources:	LEBCO MPO TIP, PennDOT, FHWA/FTA, DCNR, DCED, DEP and private funds

Action 7:	<i>Integrate "consistency with the county's growth management strategy" into the evaluation and rating criteria for candidate transportation projects.</i>
Intended Outcome:	Prioritize transportation maintenance and improvements within designated growth areas per the county's land use plan
Time Horizon:	Ongoing
Lead Partners:	LEBCO MPO Committees and staff, Lebanon County Planning Department
Support Partners:	Municipalities
Funding Sources:	Funds not needed



Objective D: *Protect and enhance the environment and support energy conservation*

Action 1:	<i>Conduct wetlands banking planning, air quality analyses for the LRTP/TIP projects, etc.</i>
Intended Outcome:	Identify projects, programs and services for future implementation
Time Horizon:	2008/2009 and ongoing ... first wetland at Snitz Creek Park under reconstruction in 2014
Lead Partners:	PennDOT, FHWA, FTA, LEBCO MPO Committees and staff, Harrisburg MPO, York MPO
Support Partners:	Municipalities, planning and engineering firms
Funding Sources:	Base funding or special studies funding from PennDOT via the annual Unified Planning Work Programs (UPWPs) and current and future TIPs
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Action 2:	<i>Continue to use CMAQ Funds in innovative ways to improve the environment.</i>
Intended Outcome:	Manage these funds effectively so that congestion is reduced and air quality is improved via LRTP/TIP projects
Time Horizon:	Ongoing
Lead Partners:	LEBCO MPO Committees and staff, PennDOT, FHWA, FTA
Support Partners:	Municipalities, developers, LVRT, Inc., Bike Lebanon, etc.
Funding Sources:	Current and future TIPs, public/private partnerships, etc.
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Action 3:	<i>Use federal and state laws, rules and regulations to address key environmental, cultural and historic issues.</i>
Intended Outcome:	Insure that transportation planning, programming and project delivery fully satisfy federal laws like National Environmental Policy Act (NEPA) and use new processes like context sensitive solutions and right sizing to preserve/protect the natural and manmade environment
Time Horizon:	2014/2015 with new data from PHMC for 6 CMP Corridors of Concern and ongoing
Lead Partners:	LEBCO MPO Committees and staff, PennDOT, PHMC, FHWA, FTA
Support Partners:	Project sponsors
Funding Sources:	Current and future UPWPs, current and future TIPs, public/private partnerships, etc.

Objective E: *Promote community and neighborhood livability; improve the quality of life; and encourage a healthy lifestyle*

Action 1:	<i>Conduct a feasibility study to implement an automated horn system and "quiet crossings" at the Norfolk Southern Railroad at-grade crossings in the City of Lebanon; implement, if feasible.</i>
Intended Outcome:	Minimize audible warning without comprising safety at neighborhood rail crossings
Time Horizon:	If and when federal rules make this cost-effective and feasible
Lead Partners:	City of Lebanon, LEBCO MPO Committees and staff, Norfolk Southern, PennDOT, FHWA, FRA
Support Partners:	Planning and engineering firms
Funding Sources:	Special studies funding from PennDOT via the annual Unified Planning Work Programs (UPWPs)
Action 2:	<i>Solicit candidate transportation enhancement (now called TAP) projects.</i>
Intended Outcome:	Identify, evaluate and program TAP projects that enhance livability within Lebanon County
Time Horizon:	Submit TAP grant applications to PennDOT beginning in 2014 and thereafter
Lead Partners:	Lebanon County Planning Department, LEBCO MPO Committees and staff
Support Partners:	Municipalities, non-profit groups like LVRT, Inc. and Bike Lebanon, school districts, PennDOT, FHWA
Funding Sources:	Current and future TIPs, public/private partnerships, DCNR Recreational Trails Funding, etc.
Action 3:	<i>Obtain training from PennDOT, Penn State Hershey PRO Wellness Center, LTAP and other bicycle/pedestrian planning experts on how to promote biking and walking and how to develop and implement related projects, programs and/or services.</i>
Intended Outcome:	Learn about and implement best practices related to bike/ped projects, programs, services, on-road riding skills, etc.
Time Horizon:	Ongoing
Lead Partners:	Lebanon County Planning Department, PennDOT, Penn State Hershey PRO Wellness Center, Bike Lebanon, other health and wellness advocates, etc.
Support Partners:	Municipalities, planning and engineering firms
Funding Sources:	Current and future UPWPs, public/private partnerships, DCNR grants, private funding from organizations like Bike Lebanon, etc.



Action 4:	<i>Determine how best to partner with agencies like Grace@Home, Lebanon County Age-Wave Initiative and iTNAmerica to address the growing transportation needs of the elderly.</i>
Intended Outcome:	Learn more about and help to implement best practices related to new transportation options for the elderly
Time Horizon:	2014-2015 and beyond
Lead Partners:	Lebanon County Planning Department, PennDOT, Penn State Hershey PRO Wellness Center, Grace@Home, Lebanon County Age-Wave Initiative, iTNAmerica, and other health and wellness advocates
Support Partners:	Municipalities, social service agencies, religious institutions, etc.
Funding Sources:	Current and future TIPs or UPWPs, public/private partnerships, etc.

Objective F: *Lead transportation planning with trained staff, current data, modern technology, and effective outreach.*

Action 1:	<i>Provide continuing education and technology training for LEBCO MPO and LCPD staff and for municipalities.</i>
Intended Outcome:	Improve the ability to provide effective transportation planning leadership
Time Horizon:	Ongoing
Lead Partners:	Lebanon County Planning Department
Support Partners:	Lebanon City/County GIS
Funding Sources:	Current and future Unified Planning Work Programs (UPWPs) via the LTAP Task

Action 2:	<i>Maintain the City/County Geographic Information System, (GIS) database with up-to-date software and current data sets.</i>
Intended Outcome:	Utilize current data and modern technology to make better, more informed decisions
Time Horizon:	Ongoing
Lead Partners:	LEBCO MPO Committees and staff, City/County GIS staff
Support Partners:	PennDOT, PHMC, FHWA, FTA, Lebanon Transit, airport providers, municipalities
Funding Sources:	Current and future UPWPs



Action 3:	<i>Continue to update and implement the Public Participation Plan and the Title VI/Environmental Justice Implementation Plan and follow the soon-to-be-developed process for coordination with Indian Tribal Governments.</i>
Intended Outcome:	Have a proactive, cost-effective public involvement process that is of value to decision-making
Time Horizon:	Ongoing
Lead Partners:	LEBCO MPO Committees and staff
Support Partners:	PennDOT, FHWA, FTA, Lebanon Transit, airport providers, municipalities
Funding Sources:	Current and future UPWPs

Action 4:	<i>Utilize a wide range of accessible media to educate and inform the public on LEBCO MPO and Other Key Activities in the County</i>
Intended Outcome:	Have a more informed and involved citizenry, with positive and constructive community input to transportation decision-making
Time Horizon:	Ongoing
Lead Partners:	Lebanon County Planning Department, LEBCO MPO Committees and staff, Bike Lebanon, Lebanon Transit, Commuter Services of PA, etc.
Support Partners:	Municipalities, local radio stations, newspapers, television stations, county website/webmaster
Funding Sources:	Current and future UPWPs, advocates like Bike Lebanon, Commuter Services of PA, etc.

Implementation Plan

Introduction

The Lebanon County Long Range Transportation Plan is built on a foundation of cooperation between the Lebanon County MPO, local, regional, state and federal agencies, the county's municipalities, the county's residents and employers, and other stakeholders. This cooperation and coordination is essential to ensure that the Plan is implemented. With a very limited (small) transportation improvement program (TIP) "budget", it is critical that the LEBCO MPO develop and implement plans and programs that are "on par" with the available federal, state, local and private resources.

The Long Range Transportation Plan will be implemented through the Transportation Improvement Program (TIP) and the day-to-day activities of the staff of the Lebanon County Planning Department and the Lebanon City Authority / Lebanon County GIS Department. The various State and Federal agencies that approve the expenditure of state and federal transportation funds will use this LRTP as part of the basis for their decisions.

Municipal and private sector partnerships will play a growing role in the implementation of plan/TIP projects. The Lebanon County Planning Department staff will continue to work with local elected officials and business leaders that have an interest in and a willingness to fund studies, programs and/or projects that will improve the transportation network in Lebanon County and beyond. Diversity in funding sources will obviously lessen the dependency on public funding. Project development is often slowed by the lack of federal and state funding in any given federal fiscal year. By infusing local/private funds into the mix, project delivery has been and will continue to be enhanced. The LEBCO MPO's efforts to use taxpayer dollars better by leveraging them with private funding will enable more projects to advance sooner.

Businesses involved in shipping and heavy truck movements could be great allies in supporting and financing roadway and/or bridge improvements. Some may choose to supply materials to be used in a project's construction. These companies and industries will be recognized for their leadership.

Staging the Improvements

The recommended improvements are presented as Transportation Improvement Program (TIP) items, short-term (1-4 years), medium-term (5-12 years) and long-term (13-25 years), in order to match the estimated project cost to available funding. Future LRTP updates should see projects rise to the shorter term and eventually placed on the TIP.

The TIP projects and the short-term projects and strategies represent LEBCO MPO's current priorities.

Coordination with Other Ongoing Planning Efforts

The LEBCO MPO LRTP will reflect the MPO's coordination with other regional ongoing planning efforts and, when practical, include the studies and projects in LRTP updates. For example, the LEBCO MPO and the Harrisburg MPO both have Congestion Management Processes (CMP) Plans; therefore, coordination is required in key corridors like US Route 422. A few of the ongoing regional or statewide planning

studies that will produce projects to be included in future LRTP updates are listed below. The LEBCO MPO also has existing agreements in place with the Harrisburg, Reading and Lancaster MPOs to coordinate more closely on key transportation matters as the overall region grows more dense and there are less distinctions between these urbanized areas.

PA On Track ... the 2040 Statewide Plan

The state's ongoing Statewide Long Range Transportation Plan and the Comprehensive Freight Movement Plan will be completed in late 2014, producing data, analysis and project/program recommendations that will be included in future LRTPs and TIP updates.

Corridor 2

The Corridor 2 commuter rail project is a proposed long term investment for express bus and/or regional rail service between the City of Lebanon and Harrisburg using the Norfolk Southern Harrisburg Line. The completed Corridor 2 Feasibility and Alternative Alignment Study was sponsored by private interests (Hershey Corporation), Capital Area Transit, the public transit provider for the Harrisburg area, and the Modern Transit Partnership, a nonprofit transit advocacy organization that was created by the Capital Area Transit Board in 1997. The LEBCO MPO had several of its Technical Committee and Policy Board members on the 40-member Steering Committee for this study.

Susquehanna Regional Transportation Partnership (SRTP) or Commuter Services of PA

The SRTP is a multi-county, nonprofit corporation dedicated to identifying and implementing transportation options beyond the single occupancy vehicle (SOV) to help reduce SOV trip making in South Central Pennsylvania and to improve air quality. The SRTP advocates numerous programs to increase transit service and availability and provides a variety of transportation options, including ridesharing and emergency/guaranteed ride home. The LEBCO MPO participates actively in the SRTP and will accommodate any SRTP projects or programs in future LRTP updates. SRTP's new name is Commuter Services of PA.

Plan Update Schedule

Federal regulations require that the Long Range Transportation Plan be updated every four years. The term of this LRTP is 2015-2040. The next minor LRTP update would logically begin in calendar year 2015 and conclude in late June of 2016. However, the LEBCO MPO has agreed to make appropriate small changes to the plan as needed, especially with the updates of the TIP ever two years.

Air Quality Conformity

The US Department of Transportation (USDOT) and the US Environmental Protection Agency (EPA) require that metropolitan planning organizations in metropolitan areas that are designated nonattainment for the 8-hour ozone and/or PM_{2.5}

standard must determine conformity of metropolitan transportation plans and TIPs.³ For the LEBCO MPO, air quality evaluations for this LRTP will be conducted by PennDOT and its consultant to ensure compliance with the Clean Air Act. The LEBCO MPO will also continue to coordinate air quality analyses with the Harrisburg and York MPOs. The LEBCO MPO will work with PennDOT and its consultant, the Harrisburg MPO and the York MPO as analyses are performed with current or future (MOVES2010) mobile source emission models.

In the future, the LEBCO MPO will continue to rely on PennDOT and its air quality consultant to undertake plan/TIP conformity determinations since the Lebanon County Planning Department will not have the staff or expertise (transportation model) to ensure compliance with USDOT and EPA ambient air quality mandates.

³ 69 FR 40008-40014

REFERENCE ITEMS

I. LEBCO MPO Long Range Transportation Plan Highway and Bridge Financial Forecast Table

II. LEBCO MPO Long Range Transportation Plan Transit Financial Forecast Table

III. Correspondence from Native American Tribes – no responses as of June 19, 2014

IV. LEBCO MPO FFY 2015 – 2018 Transportation Improvement Program (Highways and Bridges)

V. LEBCO MPO FFY 2015 – 2018 Transportation Improvement Program (Interstate Maintenance) – no projects during this update cycle

VI. LEBCO MPO FFY 2015 – 2018 Transportation Improvement Program (Transit)

VII. PHMC's Analysis of the LEBCO MPO's Corridors of Concern

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*I. LEBCO MPO Long Range Transportation Plan Highway and Bridge
Financial Forecast Table (\$000)*

*II. LEBCO MPO Long Range Transportation Plan Transit Financial
Forecast Table (\$000)*



III. Correspondence from Native American Tribes

NONE RECEIVED TO DATE

*IV. LEBCO MPO FFY 2015 – 2018 Transportation Improvement Program
(TIP) (Highways and Bridges)*

VI. LEBCO MPO FFY 2015 – 2018 TIP (Transit)

VII. PHMC's Analysis of the LEBCO MPO's Corridors of Concern

**CORRIDORS ADDRESSED IN THE 2011 ANNUAL REPORT
ON CONGESTION PHMC (SHPO) COMMENTS – 2014**

US ROUTE 422

Even though this is a historic transportation route, there are relatively few resources outside of the City of Lebanon that have already been identified in this corridor.

Palmyra – New construction and open lots within the borough may make a potential historic district unlikely, but one should be documented and evaluated if any work is proposed on Main Street. It appears that our office has never identified a district in Palmyra, however CRGIS shows a number of buildings at the corner of Lingle Avenue that are *not* eligible for the National Register of Historic Places (NR). The 1860 map shows several hotels along Main Street. Churches, storefront buildings, mills, and pre-1965 highway commercial properties should be individually evaluated if there is no historic district.

Annville – West of the core community are several facilities, homes, and quarries apparently associated with the local limestone industry. (Lime kilns first appear in this area on the 1875 map.) Some of these may need to be individually documented and evaluated, particularly the large Victorian period mansion on the north side of the road. The National Register-listed Annville Historic District (Key # 000784) includes the Route 422 corridor roughly from the Quittapahilla Creek east to Saylor Street. There may also be properties beyond the district boundaries that should be individually evaluated.

Cleona – Route 422 through the borough is lined with older houses between Grant St. and Rosemont Ave., however current aerial photos suggest that the community lacks the architectural significance and integrity to be eligible as a NR historic district. Some properties may need to be documented depending on the proposed project(s). Sunnyside Church (Key # 028245) and several 19th century houses around it were identified but not evaluated. The former school which houses the borough offices is *not* eligible for listing (Key # 089219).

West and North Lebanon Townships - Between 22nd and 16th Streets are brick semi-detached houses on the south side, a long row of frame semi-detached houses on the north side, and a stone chapel. These were likely built by the Coleman family for workers in the adjacent limestone quarries. These resources are not yet recorded in CRGIS but have the potential to be eligible for the Register. The 1956 aerial photo shows a number of buildings between the worker housing and the former railroad crossing to the east. It is likely that these represent early automobile related businesses and should be evaluated if they are in a project's area of potential effect (APE).

Lebanon - In the city, the west bound alignment runs downtown through the NR-eligible Cumberland Street Historic District (Key # 086478), and several blocks of the east bound alignment are in the NR-eligible Chestnut Street/Hathaway Park Historic District (Key # 106197). Individually listed properties in the corridors include the Josiah Funck Mansion (Key # 000775) at 450 Cumberland Street and Tabor Reformed Church (Key # 000764) at the corner of Tenth and Walnut Streets. In addition, there are dozens of identified, yet unevaluated, properties outside of the districts on both streets. In short, any improvement projects in the city will likely affect one or more resources or potential resources.

East Lebanon (North and South Lebanon Townships) – The 1860 map of the county shows a small cluster of houses and the Farmers & Drovers Inn near the intersection of Old Cumberland Street, the railroad, and King Street (labeled Avon P.O. on the 1875 map), and a 1940 aerial photo shows houses on nearby Lehman Street. Improvements to the overpass could potentially affect this area and will likely involve a survey of some of these properties. East of there, near the intersection of East Street, the highway crossed the Union Canal. While there is little if anything left of this historic structure, improvements in this area have the potential to disturb archaeological evidence of the canal and the limekilns shown on the 1875 map.

A small village at the intersection of Prescott Road appears on the 1860 Lebanon County map. The 19th century houses in this village may need to be evaluated for historical significance. West of the village is a large brick house on the north side of the highway that should be documented if it is in a project area.

Jackson Township/Myerstown area – Route 422 borders the northern edge of the NR-listed Tulpehocken Manor Plantation (Key # 000763), just west of Myerstown. Although there are a number of potential resources along the historic Main Avenue/Tulpehocken Road corridor through Myerstown, the postwar bypass that runs north of the borough to the Berks County border was built on open agricultural land. So nearly everything along the highway dates to the mid-20th century: The 1958 aerial photo shows a row of houses on the south side of the bypass and a cluster of houses on N. Railroad Street and Oak Court, and there are several small postwar commercial buildings on the north side of the bypass, west of Locust Street. Because these properties are over 50 years old, they should be evaluated if there is a project that might affect any of them.

A GENERAL NOTE ABOUT BRIDGES: There are 9 bridges in Lebanon County that are listed in, or eligible for listing in, the National Register. However it appears that none of them are on the congested highways identified in the 2011 report. Unless a pre-1964 bridge is located in a potential historic district, then all other PennDOT-owned bridges in these corridors have been individually evaluated and are not considered to be eligible for the Register.

A GENERAL NOTE ABOUT AGRICULTURAL AREAS AND RURAL HISTORIC DISTRICTS: Several of the corridors pass through areas that are notable as intact, traditional agricultural landscapes, and there is the potential for one or more rural historic districts in the county. US Route 322 (east of Campbelltown), PA Route 72 (north of Lebanon), and PA Routes 934 and 501 (south of Myerstown) in particular retain this historic character.

To expedite the planning process for highway improvements in these corridors, our staff recommends that the MPO outline the potential rural historic districts and submit a PA Historic Resource Survey Form for each one, evaluating its agricultural significance using the context defined for the Great Valley region in the *Historic Agricultural Resources of Pennsylvania, 1700-1960* (Pennsylvania's statewide agricultural context). This approach will be more efficient than waiting until the project design phase to evaluate every farm separately as a unique resource, each with its own character-defining features and mitigation considerations. If our office instead finds an area to be a NR-eligible historic district, then transportation improvements can be planned and reviewed to minimize their effects on the historic district as a whole. Likewise, when the proposed work will have an adverse effect on the historic district, then PennDOT and the MPO can consider mitigation alternatives with the goal of preserving and enhancing the historic character of the overall landscape

US ROUTE 322

The community of Campbelltown was evaluated in 2003, and the BHP concluded that most of it is part of a NR-eligible historic district (Key # 126313). As a matter of policy, this district needs to be re-evaluated by our office, but the County should assume that any work along Route 322 will likely have an effect on the district or individual resources. For instance, the Dr. B. Stauffer House (Key # 000765) is independently listed in the Register, and just east of the district, on the east side of PA Route 117, is the Bowman Farm (Key # 026800), which is individually eligible.

As mentioned above, South Annville Township between Campbelltown and Fontana is largely an intact agricultural landscape. It should be evaluated as a potential rural historic district. CRGIS maps a church and at least one historic schoolhouse in this corridor, and there are a number of unevaluated farmsteads. So even if this area is not eligible as a rural district, then individual properties may need to be evaluated using the agricultural context. Because this was a major transportation route, historic maps of this area show a variety of stores, hotels, blacksmith shops, and lime kilns along this

corridor. It appears that most of those buildings that are still standing have been converted to farmhouses or sheds over the years.

There are also unevaluated farms east of Fontana, however current aerial photos suggest that many of the properties along the corridor between PA Route 934 and Quentin are larger commercial enterprises. So it is less likely that this area would be included in a rural historic district. The original highway ran through Quentin to Cornwall, so the Route 322 corridor east of its intersection with PA Route 419 is on a new alignment through forested land that historically was cleared to produce charcoal for the Cornwall area iron furnaces. CRGIS shows no historic resources between that intersection and the Lancaster County line. There are only two or three properties shown in this area on the historic maps or the mid-20th century aerial photos, but if any of these houses are still standing they should be evaluated to determine if they were associated with the Coleman Family and/or the local iron industry.

PA ROUTE 72

For most of the route between Lickdale and Lebanon, there are very few properties identified in CRGIS. The highway crosses the historic Union Canal trace just south of the Swatara Creek Bridge, but since the road alignment is modern, there should be no canal era buildings there. Aerial photos of the corridor show concentrations of older buildings at the villages of Bunker Hill, Ebenezer, and North Lebanon. As noted above, churches, cemeteries, and former school buildings in this corridor should be documented if they are in an APE. Likewise farms should be evaluated using the statewide agricultural context, however it does not appear that there are any potential rural historic districts in this area.

In the city, West Maple Street runs alongside the former Coleman Estate and follows the course of the Union Canal east of Jonestown Road, however there appears to be little physical evidence of either of these sites in the highway corridor. Christ Presbyterian Church is documented in the PHMC files, but a final NR evaluation was never made. It may be eligible for listing. Surprisingly, it seems that the former Webster School at the corner of Maple and Jonestown Road has never been documented; however it should definitely be evaluated if there are any improvements to that intersection. "Light's Fort" is *not* considered to be eligible for listing. Some of the properties on the north side of Maple Street between Ninth and Tenth Streets appear on CRGIS (one of which is identified as the Exchange Hotel), but none of them has been evaluated. Further documentation will be needed if any improvements are made to the highway in this block of Route 72 North.

The blocks of Route 72 between Guilford and Lehman Streets are included in the NR-eligible North Lebanon Historic District (Key # 106196), and the eligible Cumberland Street Historic District (Key # 086478) covers the blocks from the Quittapahilla Creek to the Chestnut Street corridor. Tabor Reformed Church (Key # 000764) at the corner of Tenth and Walnut Streets is individually listed in the Register. South of Chestnut

Street are a number of individual buildings that have been identified but never evaluated. To be efficient, this area should first be documented and reviewed as a potential historic district. Blocks that are not eligible should be surveyed to identify any properties that may be individually significant.

Much of the development along Route 72 south of Oak Street occurred in the postwar period, but there is a cluster of streetcar-era houses at the south end of the city near the intersection with PA Route 241. Nothing is recorded in CRGIS in this area. In addition, between the city and Quentin there may be roadside commercial properties, architecturally significant homes, or residential subdivisions that are more than 50 years old. Any of these may need to be documented prior to improvement projects in these sections of the corridor. In North Cornwall Township between Rocherty Road and Quentin there are several farms and a stone meetinghouse that are identified in CRGIS and need to be further evaluated. Because of the level of new development in this part of the township, there does *not* appear to be the potential for a rural historic district. The section of the highway below Zinn's Mill Road is on a modern alignment, so nearly all of the buildings along it are from the postwar period. Our staff re-evaluated the Quentin Riding Club in 2011 and determined that it is no longer eligible for the National Register.

There are a few older buildings below the interchange with US Route 322. They may need to be documented if there is a project in that segment of the highway. The Farmers Hope Inn is the only one shown in CRGIS, and it is eligible for the Register.

PA ROUTE 501

Only a few scattered properties are identified along the southern end of the Route 501 corridor, but none of them have been evaluated. Farms in this area should be individually evaluated using the statewide agricultural context. Near Schaefferstown are three resources: Old Mill Road Historic District (Key # 097828 – NR eligible rural district), Brendle Farms (Key # 000780 – NR listed), and the Schaefferstown Historic District (Key # 050912 – NR eligible district). As part of the recent Route 501 realignment here, the houses at 700 and 705 West Main Street were found to be not eligible.

Between Schaefferstown and Myerstown is an agricultural landscape that should be evaluated as a potential rural historic district. A number of individual farms are mapped in CRGIS. National Register eligible resources in this stretch include the W. Iba/ Moses LappFarmstead (Key # 119881) and the Reistville Historic District (Key # 095293). Both of these were evaluated more than 5 years ago and will need to be re-evaluated.

The Isaac Meier Homestead (Key # 000771) in Myerstown is listed in the National Register. It appears that our office has no information on a historic district in Myerstown, however there are dozens of properties in the borough that are recorded in CRGIS. Evaluating the core of the borough as a potential district would be the most efficient approach if any improvement projects are anticipated there. If Myerstown

lacks integrity as a historic district, then individual resources such as school buildings, churches, commercial and industrial properties, and architecturally significant houses will need to be documented for evaluation. Any older farms that remain north of Myerstown along Route 501 will need to be evaluated using the agricultural context.

PA ROUTE 934

The Annville Historic District (Key # 000784) is the only National Register-listed or eligible resource already identified along Route 934. CRGIS maps 13 additional properties along the corridor or near its intersections; however none of these have been evaluated. If no rural historic district is identified around the project area, then the individual farms will need to be evaluated using the statewide agricultural context. Other than the farms, potential resources include former school buildings, churches and cemeteries, and commercial properties. The Union Canal crossed Route 934 a short distance southeast of the Swatara Creek bridge. The historic trace appears to be visible in aerial photos, so there may be archaeological evidence of the canal prism along the highway corridor.

ROCHERTY/EVERGREEN ROADS

There are a number of properties mapped along this route in CRGIS, however none of them have been evaluated. Aerial photos show several historic farms, but the overall landscape includes too much modern residential and commercial development to be included in a rural historic district. Individual farms that may be affected by road improvements will need to be documented using the statewide agricultural context.

Acronyms

PHMC -- Pennsylvania Historical and Museum Commission – This agency is designated as Pennsylvania’s State Historic Preservation Office (SHPO) under the provisions of the National Historic Preservation Act.

BHP -- Bureau for Historic Preservation – This bureau of the PHMC is responsible for all of the required SHPO duties, including evaluating properties and providing recommendations on their eligibility for listing in the National Register.

NR -- National Register of Historic Places

CRGIS -- Cultural Resources Geographic Information System (<http://crgis.state.pa.us>).

Comments provided by Bryan Van Sweden, Central PA Community Preservation Coordinator, PHMC BHP
February 2014

