



Lehigh Valley Planning Commission

Annual Report 2010

**To: County Executives, Lehigh and Northampton counties
County Commissioners, Lehigh County
County Council, Northampton County**

The Lehigh Valley Planning Commission is pleased to present our annual report for 2010. This annual report documents our activities during the past year and identifies future activities for 2011.

Over the past year, LVPC staff developed Conservation Subdivision model regulations that municipalities can adopt that will allow for development while protecting open space and sensitive environmental features. Further, staff prepared a guide that provides a variety of regulatory approaches for municipalities on protecting the Appalachian Trail and Blue Mountain. We plan to hold workshops during 2011 to promote the Conservation Subdivision model regulations, as well as other LVPC model ordinances related to smart growth and environmental protection, to the municipalities and others interested.

Work was completed on the stormwater management plans for the Perkiomen, Maiden and Sacony Creek headwaters under a bi-county grant contract with the PA Department of Environmental Protection (DEP). The plans were adopted by Lehigh County and approved by DEP. LVPC staff continued work on a contract with DEP to evaluate alternatives for restoring the impaired portions of the Saucon Creek. The work will be completed in early 2011.

LVPC staff completed an update to the Transportation Improvement Program (four year program) that identifies the high priority list of highway, bridge and transit projects in the Lehigh Valley. Due to financial constraints, the focus of the program is on the repair and maintenance of existing transportation infrastructure. The long range transportation plan (20 year plan) was also updated during 2010. The focus of this plan is also on maintenance type projects.

Work scheduled for 2011 includes developing alternatives for restoring water quality in the Coplay Creek, updating socio-economic data for the regional travel demand forecasting model, developing a GIS application to assess impacts of transportation projects on environmental resources, and much more.

We thank both counties for their continued support of our work program and look forward to another productive year in 2011.

Steven L. Glickman
Chair, 2010

DECEMBER 31, 2010

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Dean Browning, Chair
Board of Commissioners

NORTHAMPTON COUNTY

John Stoffa, County Executive
Ron Angle, President
County Council

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(See Commission photo on page 8)

LEHIGH VALLEY PLANNING COMMISSION STAFF

PLANNING STAFF

Michael N. Kaiser, AICP	Executive Director
Geoffrey A. Reese, P.E.	Assistant Director
Olev Taremäe, AICP	Chief Planner
Joseph L. Gurinko, AICP	Chief Transportation Planner
Thomas K. Edinger, AICP	GIS Manager/Transportation Planner
Lynette E. Romig	Senior GIS Analyst
Susan L. Rockwell, SEO	Senior Environmental Planner
Michael S. Donchez	Senior Transportation Planner
David P. Berryman	Senior Planner
Teresa Mackey	Senior Planner
David J. Totten, MPA*	Senior Planner
Travis I. Bartholomew, EIT	Stormwater Planner

TECHNICAL AND GRAPHICS

Wilmer R. Hunsicker, Jr.	Senior Planning Technician
Bonnie D. Sankovsky	GIS Technician

ADMINISTRATIVE AND CLERICAL

Anne L. Esser, MBA	Administrative Assistant
Alice J. Lipe	Senior Planning Technician
Kathleen M. Sauerzopf	Secretary

*Resigned from staff during 2010

Comprehensive Planning

The Comprehensive Planning section's 2010 work featured the creation of guides on techniques for promoting environmentally sensitive development and protecting environmentally sensitive features. These guides included *Conservation Subdivisions Guide/Model Regulations* and *Protect the Trail: A Guide to Protecting the Appalachian Trail for Lehigh Valley Municipalities*.

The Commission approved the *Conservation Subdivisions Guide/Model Regulations* in November. Conservation subdivisions provide an approach to development useful for sites with sensitive environmental features. They also allow open space preservation in the midst of development. Conservation subdivisions accomplish these objectives by setting aside a significant portion of overall acreage as undivided, permanently protected open space with housing clustered on the remaining property. The flexibility inherent to the conservation design approach permits development to be sensitive to a site's environmental features. The model regulations provide guidance to municipalities interested in encouraging conservation subdivisions. The regulations outline a basic approach to conserving natural resources and open space on a site proposed for development that may be an attractive alternative for rural townships that may have an interest in conservation design, but do not have the resources to administer a complex, lengthy ordinance.



In October, the Commission released the *Protect the Trail* guide. The guide provides municipalities with an extensive menu of regulatory approaches that can be used to protect the Appalachian Trail and the Blue Mountain environment. These approaches can be used by municipalities in complying with the 2008 legislation that amended Pennsylvania's Appalachian Trail Act. Fifty-four (54) miles of the Appalachian Trail run along the border of Lehigh, Northampton, Schuylkill, Carbon and Monroe counties. The Blue Mountain is recognized as an exceptional natural resource. As background, the guide includes detailed mapping of natural features and property ownership on Blue Mountain. The guide also provides an analysis of threats to the Trail including encroaching residential development, wind turbines, communication/cellular towers and quarries. Land preservation tools described in the guide include natural resources plans, official maps, zoning regulations, fee simple acquisitions and conservation easements. Zoning techniques include LVPC model environmental regulations, net out zoning, specific Appalachian Trail regulations, conservation subdivisions, wind turbine regulations, cellular tower regulations, quarry regulations and revising the existing zoning district regulations.

In 2010, the Commission distributed and compiled the results of the *Lehigh Valley Land Use Public Opinion Survey*. The survey allows the Commission to learn

Other activities for 2010

- Completed *Subdivision and Building Activity Report – 2009*
- Prepared annual report and conducted reviews for consistency with multimunicipal plan for Nazareth Area Council of Governments (NAZCOG). Assisted NAZCOG municipalities in implementing multimunicipal comprehensive plan.
- Completed *Lehigh Valley Profile and Trends – 2010 Edition*
- Completed *2010 Municipal Profiles* report
- Published LVPC Newsletter – four editions
- Conducted 74 reviews of municipal zoning ordinances, SALDOs, comprehensive plans, grant applications, official maps and other ordinances and plans; conducted 403 reviews of subdivision and land development applications for municipalities with adopted SALDOs; administered the Lehigh and Northampton County SALDOs for 4 applications.
- Completed the *Comprehensive Economic Development Strategy – 2010*
- Updated the annual parks inventory
- Updated data and maps for the *Comprehensive Plan The Lehigh Valley ... 2030*
- Completed the *Lehigh Valley Trails Inventory – 2009*
- Updated the LVPC publications list

Projects scheduled for 2011

- Energy policy development
- *Subdivision and Building Activity Report* update
- *Municipal Profiles* report update
- *Lehigh Valley Profiles and Trends* report update
- Quarterly newsletters

Projects scheduled (cont. on p. 4)

what people are thinking about life in the area. This method involving a mail-out mail-back survey was used successfully by the Commission in 1974, 1988 and 1999. In January 2010, the survey was mailed to a 1.25% sample of active registered voters in Lehigh and Northampton counties. Of these surveys, 1,205 were returned for a 25% return rate. Comments were received in many topic areas including open space preservation, affordable housing, new development concepts, jobs, transportation, Route 22, growth, and home buying features. Respondents strongly supported preservation of farmland and important environmental areas. They also favor development of more trails and parks. There is considerable interest in design concepts such as Traditional Neighborhood Development (TND), Transit Oriented Development (TOD) and mixed use development. There is interest in inter-city commuter transit and support for adding more lanes to Route 22. The top three things people like least about living in the Lehigh Valley are traffic congestion; perception of crime and drug problems; and too much development and sprawl.

Projects scheduled (from p. 3)

- Appalachian Trail/Blue Mountain Preservation implementation
- Review county park and open space projects
- Official map guide
- *Riparian and Wetland Buffers Guide/Model Regulations* update

Environmental Planning

The LVPC staff continued work on a contract to evaluate **Total Maximum Daily Load (TMDL) alternatives for the Saucon Creek watershed.** A TMDL is a strategy for restoring the water quality of the Saucon Creek to support designated uses as defined by DEP. This contract will assist DEP, which has the responsibility to create the final TMDL. The LVPC staff tailored a GIS based water



*Sampling/monitoring on the Saucon Creek by LCCD staff.
Photo courtesy of Jim Wilson,
Northampton County Conservation District*

quality model to the Saucon Creek to evaluate sediment loadings at various points in the watershed and relate this data to macroinvertebrate (mayflies, caddisflies, worms, etc.) and water quality data. The LVPC staff is coordinating this work with the Lehigh County Conservation District (LCCD), which is collecting water quality monitoring data in the watershed under a separate contract. The project will result in recommendations for a TMDL strategy for the watershed. The contract runs through February 2011.

The LVPC staff continued work on a **bi-county Act 167 grant contract** with DEP. The Perkiomen Creek Headwaters Act 167 Plan was reviewed by DEP and approved in June 2010. This plan affects nearly 30 square miles primarily in Upper and Lower Milford townships in Lehigh County, with small sections of Upper Saucon and Lower Macungie townships also included. Under Act 167, the affected municipalities needed to adopt ordinance provisions consistent with those specified by the plan by December 23, 2010. Act 167 Plans for the Maiden and Sacony Creek headwaters have also been adopted by Lehigh County (August) and approved by

Other activities for 2010

- Reviewed 207 projects involving Act 537 plan updates and planning modules, solid waste, Act 67/68, Delaware River Basin Commission, Lehigh County Authority, Public Utility Commission, and H2O PA Grant applications
- Reviewed stormwater management portions of approximately 76 subdivision and land development plans
- Completed modeling and release rates for Saucon Creek Act 167 Plan update

Projects scheduled for 2011

- Development of alternatives for the Saucon Creek Total Maximum Daily Load (TMDL) and Coplay Creek TMDL
- Natural Heritage Inventory Update

GIS activities for 2010

- Stormwater Act 167 data analysis and mapping for the Saucon, Monocacy and Bushkill Creek watersheds
- Mapping and analysis of roadway corridors with safety issues for safety review reports

GIS activities (cont. on p. 5)

DEP (December). These plans cover approximately 45 square miles in northwestern Lehigh County in Lynn and Weisenberg townships, as well as a small section of Heidelberg Township. These municipalities have until June 1, 2011 to adopt ordinance provisions consistent with those specified by the plans. Another part of the DEP contract involved updating watershed models previously created by the LVPC in the late 1980's and early 1990's. These watersheds were the Saucon, Bushkill and Monocacy creeks. Stormwater management plans and model ordinances for these watersheds were also to be updated as part of the contract. However, due to lack of funding, DEP terminated all Act 167 contracts as of June 30, 2010. LVPC work on these plan updates is deferred until funding is restored by DEP.

In 2009, the LVPC entered into a contract with the **Nazareth Area Council of Governments** (NAZCOG) for additional planning services toward implementation of the *Nazareth Area ... 2030 Multimunicipal Comprehensive Plan*. During 2010, services under the contract included a workshop on environmental protection model regulations; creation of model regulations regarding Appalachian Trail protection, conservation subdivision design and traditional neighborhood development; and an assessment of possible redevelopment sites within the municipalities involved. An example of traditional neighborhood development regulations was found in Cranberry Township, Butler County, Pennsylvania for use in the NAZCOG project. Workshops to explain the model regulations regarding conservation subdivision design and traditional neighborhood development were conducted during 2010. A steering committee of municipal representatives has provided direction for the project. The work program is scheduled to be completed in early 2011.

Key GIS projects completed this year include acquisition of 2010 digital imagery, layer updates for GIS data disc 4.4, public land reviews, stormwater Act 167 mapping, transportation and comprehensive plan mapping, and traffic safety mapping and analysis. GIS was used to develop various LVPC plans and reports including Lehigh Valley Profile and Trends, Subdivision Building Activity, and other transportation and stormwater Act 167 plans. GIS layers on the Pennsylvania Spatial Data Access (PASDA) Internet site were reviewed by LVPC staff to incorporate into the LVPC GIS. The PASDA site is the primary public access site in the state for geospatial information. A checklist document was created that includes over 50 potential layers to add to the GIS including base mapping, environmental and transportation layers. A summary of information was reported for each of the layers in the checklist including layer name, description, source and coordinate system. This checklist will be reviewed in 2011 to determine what layers to add to the LVPC GIS.

GIS Activities (from p. 4)

- Appalachian Trail mapping
- Mapping for *Lehigh Valley Surface Transportation Plan 2011-2030* and *Transportation Improvement Program 2011-2014*
- Mapping updates for the *Comprehensive Plan The Lehigh Valley ... 2030*
- Mapping and data updates for parks, open space inventory and park trails
- Acquisition of 2010 digital aerial photography and update into LVPC GIS

GIS projects for 2011

- GIS data disc release 4.4
- Deliver 2010 imagery to counties
- Develop 2010 land cover layer including identifying urban and non-urban uses and comparing to 2000 database
- Develop 2010 zoned vacant developable land layer by Traffic Analysis Zone including build-out potential
- Develop existing land use updates for 2010 based on county parcel databases
- Review Traffic Analysis Zone geography using 2010 Census data
- Geocode and validate employment data and aggregate by Traffic Analysis Zone
- Update woodlands layer to 2010 imagery

Transportation Planning

The Transportation Planning staff worked on a variety of projects this past year. Four major projects were completed, including the adoption of the *2011 - 2014 Transportation Improvement Program*, *Lehigh Valley Surface Transportation Plan 2011 - 2030*, technical involvement in the Pennsylvania component of the *Central New Jersey/Raritan Valley Transit Study* and continued advocacy on the Route 22 Section 400 project.

The *2011 - 2014 Transportation Improvement Program (TIP)* is the locally-endorsed high priority list of highway, bridge, and transit projects to be implemented

Other Activities for 2010

- Developed FY 2011 Unified Planning Work Program
- Performed air quality analyses to document that the TIP and long range transportation plan met requirements under the Clean Air Act

Other Activities (cont. on p. 6)

with federal assistance in the next four years. It was adopted by the Lehigh Valley Transportation Study (LVTS), the Metropolitan Planning Organization (MPO) for the Lehigh Valley, in July. The four-year program is updated every two years. The LVPC staff worked closely with PennDOT in putting together a draft list of priority projects that was constrained by the amount of funding estimated to be available, as required by federal law. Major Lehigh County highway and bridge projects in the TIP include the construction of Route 22 Section 400 Phase I (interchange improvements at Route 145), the construction of Route 22 Section 400 Phase II (reconstruction of the Fullerton Avenue interchange and major rehabilitation/widening of the Lehigh River Bridge), the construction of American Parkway to increase access to downtown Allentown, the replacement of the 15th Street/Ward Street Bridges in Allentown, rehabilitation of the Tilghman Street Viaduct over the Lehigh River and railroad, rehabilitation of the Coplay-Northampton Bridge, and the Lehigh Street Tri-Bridges in Whitehall Township (two bridge replacements and one removal). Major Northampton County highway and bridge projects include the construction of the Route 412 Improvements in south Bethlehem, construction of the Route 412 Second Street Ramp relocation/realignment to Route 378, the replacement of the Route 611 Bushkill Creek Bridge in Easton, the replacement of the Messinger Street Bridge in Bangor, and the replacement of the Lynn Avenue Bridge in Bethlehem. Major transit investments included heavy duty bus purchases, continued funding for preventative maintenance, and the purchase of Metro Plus vans and minibuses. This update to the TIP focused on the repair and maintenance of the existing transportation infrastructure. The TIP lists 34 Lehigh Valley bridges for repair over the life of the program. An air quality analysis was also conducted for all major construction projects listed in the TIP that were deemed to be air quality significant in status. The analysis demonstrated that the TIP meets the requirements of the Clean Air Act.

The *Lehigh Valley Surface Transportation Plan 2011 – 2030*, prepared by LVPC staff, documents the current status of transportation projects in the Lehigh Valley and recommends solutions to solve long-term problems. The plan contains information on highways, bridges, transit, rail, bicycles and pedestrians, and the relationship between land use and transportation. The plan, as mandated by federal regulations, is intermodal in scope, covers a 20-year period, addresses seven analysis factors, like the TIP is financially constrained, includes both short and long-range elements, and provides for public involvement. The plan focuses on investments in future transportation infrastructure that will be implemented by PennDOT, LANTA, and local governments over the next 20 years as well as practical solutions to problems of transportation safety, maintenance, congestion, and mobility. Due to significant financial constraints, the mid and long-range elements of the plan contain primarily maintenance-type projects. An unmet needs section was added to the plan in light of these constraints. A total of \$1,603,977,000 was estimated to be available for highway and bridge funding while the total cost of highway and bridge needs was estimated to be \$3,296,270,000. This translated to a 20 year funding shortfall of \$1,692,293,000.

The *Pennsylvania Component of the Central New Jersey/Raritan Valley Transit Study* was released on April 19, 2010 by the Lehigh Valley Economic Development Corporation, Lehigh County and Northampton County. SYSTRA Consulting Inc., an international consulting firm that does transit studies, evaluated two bus alternatives and one rail alternative for providing transit service to central New Jersey and New York City. The first bus alternative would provide express bus service to New

Other Activities (from p. 5)

- Provided Access Management Program assistance to selected municipalities
- Completed 93 traffic counts for the Highway Performance Monitoring System (HPMS) program and 42 traffic counts for the regional travel demand forecasting model
- Inventoried 168 highway segments under the HPMS program to update physical characteristics of the roadways
- Developed the 2009 Traffic Trends report
- Performed travel model runs to determine funding eligibility for certain highway projects
- Participated on various committees to promote transportation planning and projects in the Lehigh Valley, including:
 1. Statewide Air Quality Conformity Working Group
 2. PennDOT's Linking Planning and NEPA committees
 3. Greater Lehigh Valley Chamber of Commerce Transportation Committee
 4. Allentown and Bethlehem Citizens Traffic Advisory Committees
- Coordinated with PennDOT on providing the following Local Technical Assistance Program training courses for Lehigh Valley municipalities:
 1. Work Zone Traffic Control
 2. Equipment and Worker Safety
 3. Stormwater Management
 4. Winter Maintenance
 5. Traffic Signs
 6. Drainage – The Key to Roads That Last

Projects Scheduled for 2011

- Lehigh Valley safety report update
- Conduct corridor studies for traffic signal upgrades
- Socio-economic data update for the regional travel demand forecasting model

Projects Scheduled (cont. on p. 7)

York City from each of the Lehigh Valley's three cities and proceed to Midtown Manhattan. It was estimated that this alternative would generate an average of 484 riders daily in 2030. The second bus option would provide new express service from the William Penn/Route 33 park and ride and the Easton Intermodal Terminal to employer sites in Bridgewater, Raritan and Somerville, New Jersey. The 2030 ridership for this option is projected to be 100 daily riders. The commuter rail service would connect with the current terminus of rail at High Bridge, New Jersey and then proceed to New York City. In Pennsylvania, the service would follow the Norfolk Southern alignment south of the Lehigh River with station stops in Allentown, Bethlehem, and Easton. Rail ridership from the Lehigh Valley in 2030 is projected to be 800 riders, plus 395 riders from Phillipsburg, Bloomsbury and Hampton, New Jersey. Capital costs are estimated to be nearly \$660 million and operating costs \$14.9 million annually with a 22% farebox recovery. The study concludes that the rail alternative's high cost and low farebox recovery will be a challenge in the competition for federal and local funding. At this time, neither Pennsylvania nor New Jersey have committed to this project.

Advocacy on the **Route 22 Section 400** project continued throughout the year. Improvements to Section 400, from 15th Street to Airport Road, were to consist of reconstruction and widening to six lanes. Due to state budgetary issues, PennDOT downsized the project to address only safety improvements to the MacArthur Road and Fullerton Avenue interchanges, replacement of the Lehigh River Bridge, and the conversion of the 5th Street overpass to pedestrian-only traffic. The LVPC filed a request for information from PennDOT under Pennsylvania's "Right-To-Know" law in December 2009. The request was subsequently denied in early 2010. Staff work during the year included a review of the MacArthur Road Interchange Point of Access Study and coordination with Whitehall Township and PennDOT on the design of the 5th Street Bridge. Staff has continued to advocate for a Lehigh River Bridge replacement that would accommodate future widening of the roadway.

Projects Scheduled (from p. 6)

- Continue to provide access management assistance to municipalities
- Federal certification review of the transportation planning process
- Develop a GIS application to assess impacts of transportation projects on known environmental resources
- Environmental Justice benefits and burdens checklist and interviews
- Identify transit oriented development opportunities in the Lehigh Valley
- Continue to provide Local Technical Assistance Program training courses
- Evaluate the best practices to increase roadway connectivity in the Lehigh Valley
- Continue to enhance the GIS by developing additional transportation data coverages and applications
- Continue work with LANTA on the promotion of their regional transit development plan

Local Government Academy

The Local Government Academy was created in 1993 to promote intergovernmental cooperation and educational opportunities for municipal officials and others interested in government planning. During 2010, the Local Government Academy sponsored a workshop on subdivision and land development review. The Local Government Academy will sponsor a variety of training courses in 2011. These courses include zoning, official maps, and model ordinances prepared by the LVPC related to smart growth topics (conservation subdivisions, density bonuses, mixed uses, cottage housing and inclusionary zoning) and environmental features (floodplains, riparian buffers, steep slopes and woodlands).

Administration

In 2010, the LVPC prepared an Action Plan for the year. The Action Plan is the staff work schedule for the year. Also, the LVPC adopted a Budget for the year. The LVPC budget is prepared by the Executive Director and was approved by the Commission at its January 2010 meeting. There was one staff change during 2010. David Totten, Senior Planner, resigned in January from the LVPC staff. During the year, the LVPC purchased three GIS computer workstations to support the latest GIS software and transportation modeling software. The LVPC purchased a plotter/printer that prints GIS-based maps and replaces a plotter purchased in 1999. Also, the LVPC purchased six traffic counters to assist with volume and class traffic counts.

For 2011, the LVPC will continue researching the availability of funding from various sources (state and federal) to support the LVPC work program. An audit report is being prepared by Buckno, Lisicky and Company and will be available by June 2011.

Lehigh Valley Planning Commission
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Lehigh Valley Planning Commission Members



Seated left-to-right: Cindy Feinberg; Charles Fraust; Liesel Dreisbach; Robert Lammi (Vice Chair); Steven Glickman (Chair); Kent Herman (Treasurer); Stephen Repasch; Benjamin Howells, Jr.

Standing left-to-right: Armand Greco; Kenneth McClain; Edward Hozza, Jr.; Jeffrey Manzi; Norman Blatt, Jr.; Ron Angle; Matthew Glennon; Ronald Stahley; Andrew Twigg; John Diacogiannis; John Stoffa; Donna Wright; Percy Dougherty; Earl Lynn; Brian Gish; Michael Hefe; Terry Lee.