



## **ECONOMIST**

The Lehigh Valley Planning Commission (LVPC) and Lehigh Valley Transportation Study (LVTS) are seeking an individual with econometrics (inferential statistics) and modeling skills and an interest in applying them to metropolitan planning efforts.

The Economist will have significant responsibilities in comprehensive, long-range planning, data and spatial analytics, the travel demand model, regional economic modeling, population, workforce and employment projections and other predictive modeling. The Economist leads these operations within the LVPC/LVTS providing significance data collections, analysis, interpretation, forecasting and communication of key regional data. This position, which is a member of the Transportation Planning and Data Management and Analytics Section, involves conducting a variety of data analyses, development of predictive models, advanced application of planning, communication of information, management, and coordination skills, under little supervision. The position coordinates with a variety of public, private and non-profit agencies from the US Census Bureau to the Workforce Board Lehigh Valley. The position also requires the ability to write and effectively present technical information to diverse groups, ranging from professional conferences to the public generally. The LVPC's/LVTS's philosophy is always to begin with fact-based optimism, making the Economist roll particularly important to the organization and region. Reporting to the Director of Transportation Planning and Data, the Economist collaborates, coordinates, and facilitates discussions, projects, and presentations.

## **CURRENT PROJECTS**

The LVPC/LVTS 2023 work program is robust and includes the creation of the region's first Climate Action Plan, finalization of two multi-municipal comprehensive plans creating a collaborative community vision and future for 15 municipalities in Northampton and Lehigh counties, implementation of a \$54 million Riverside Drive combined road, trail, environmental management and equity project, mapping and development of community guidance on freight facility and industrial development, a new five-region Eastern Pennsylvania Freight Infrastructure Plan, and update of the region's Access to Opportunity Equity Portal, among many other projects and initiatives designed protect and advance the public health, safety and welfare regionwide.

## **ESSENTIAL DUTIES + RESPONSIBILITIES**

- Identify and use appropriate techniques and tools for acquiring, retrieving, analyzing, and making use of relevant data for answering planning questions.
- Create data visualizations and communicate data analytics results to a large audience and decision makers.
- Research public and private datasets that could be used to assist with planning efforts.
- Lead the internal data inventory effort and other data coordination activities.
- Assist in data sharing activities and filling data requests.
- Develop, manage, and refine a wide variety of model input data, including preparation of networks and simulation model inputs.

- Execute model runs, evaluate model results, and conduct model validation.
- Develop, apply, and troubleshoot customized planning and modeling applications.
- Assist in community-critical studies, including application of travel demand, population, employment and economic models at the sub-area and corridor levels.
- Prepare documentation of data collection, analytics and modeling methods and applications.
- Write highly technical Requests for Proposals, execute technical procurement processes, and manage projects when needed.
- Manage, review, and evaluate work methods and procedures, and suggest improved processes.
- Assist with developing technical aspects of the Regional and Long-Range Transportation Plan and Transportation Improvement Program including air quality conformity and environmental justice/equity analyses.
- Provide data and technical support for internal staff, constituents, and stakeholder organizations.
- Work cooperatively with the United States Department of Transportation, the Pennsylvania Department of Transportation, US Census Bureau, Workforce Board Lehigh Valley, local agencies and governments regarding modeling, data, and planning issues.
- Attend meetings and make public presentations.
- Prepare technical reports, informational products, conference papers, and/or grant proposals and contribute to plans as part of community, environmental, economic and transportation planning.
- Research new technologies and make recommendations to the Director of Transportation Planning and Data for software acquisition, implementation, and advancement in the fields of Data Science and Predictive Modeling.
- Perform other duties as assigned.

## **KNOWLEDGE, SKILLS + ABILITIES**

- Thorough experience researching, collecting, sorting, and manipulating data; understanding web API's is considered a plus.
- Experience using mathematical models to generate approximations and make future predictions.
- Experience with econometrics and inferential statistics for forecasting understanding REMI is considered a plus.
- Experience with or desire to learn transportation system forecasting utilizing Cube/Voyager or other travel forecasting software such as, but not limited to, TransCAD, VISUM, EMME, etc.
- Proficiency in the use of at least one computer/database programming such as, but not limited to, JAVA, C++, Python, R, VB, SQL, MS Access, Tableau/PowerBI, etc.
- Experience with or desire to learn and interpret micro-simulation models such as, but not limited to, DynasT, VISSIM, CORSIM, Synchro, etc. is considered a plus.
- Experience in the use of data platforms such as, but not limited to, Hadoop, Apache Spark, etc.
- Proficiency in Data Visualization along with the ability to communicate effectively both orally and in writing.
- Knowledge of and/or experience with ESRI GIS software.
- Knowledge of or desire to learn advanced practice models, such as activity-based and dynamic traffic assignment.

- Ability to function independently in developing and maintaining a transportation model, regional economic model and development pattern monitoring and prediction.
- Experience with researching and acquiring geospatial, census, demographic, economic, workforce and/or other data.
- Understanding of principles, methods, and tools used to perform data analysis.
- Strong strategic thinking, active listening, and problem-solving skills.
- Knowledge of project management techniques.
- Ability to efficiently coordinate multiple projects.
- Capability to independently conduct research, write technical reports and incorporate analysis into planning documents and presentations.
- Desire and ability to continuously learn new software and systems.
- Skill in establishing and maintaining effective working relationships with the LVPC Team, Commissioners, Study Members, consultants and the public.
- Strong desire to want to contribute to the betterment of the Lehigh Valley, community and society.
- Other duties as assigned.

## **QUALIFICATIONS**

- Degree from an accredited four-year college or university in economics, mathematics, statistics, computer science, urban planning, engineering, data science, data analytics, geospatial science or closely related field. A Master's degree or equivalent experience is preferred but not required.
  - Five years of experience.
  - Any equivalent combination of education, experience, and training that provides the required knowledge, skills, and abilities.
- Demonstrable experience with Microsoft Teams, Office; knowledge of Access preferred.
- Ability to use computers, tablets, smart phones, plotters, scanners, printers, and copiers.
- Knowledge of fundamental planning issues and concepts, including basic planning and/or economic theory, urban design, subdivision, environmental issues, growth management, economic development, housing, and transportation.
- Excellent verbal, written and graphic communication skills.
- Refined organizational skills, including time-management abilities.
- Demonstrated ability to work within and contribute to a team structure, work with diverse groups of people and in diverse environments.

## **OTHER REQUIREMENTS**

This position requires participation at some early morning, evening and weekend meetings and events. Valid driver's license required. Must be eligible to work in the United States of America.

## **SALARY AND BENEFITS**

- Grade 10 - \$77,506 - \$112,383 per annum; plus, excellent benefits, including but not limited to: paid time off, health, dental, and retirement.
- The Lehigh Valley Planning Commission also, budgets for training and professional membership(s). The LVPC is active in the American Planning Association (national, state and regional,) National Association of Regional Councils, Urban Land Institute, Green Building United/US Green Building Council, Lincoln Institute of Land Policy, ESRI, REMI, Greater Lehigh Valley Chamber of Commerce, among other local, regional, state and national allied organizations and initiatives. Team members are encouraged to participate with partner entities.

## **APPLY**

Only e-mail submissions to [jobs@lvpc.org](mailto:jobs@lvpc.org) will be accepted and must include:

- a. Current resume detailing your education and experience.
- b. Letter of interest describing how you meet the qualifications for this position and why you would like to be considered. Please address this letter to, Becky Bradley, AICP, Executive Director, Lehigh Valley Planning Commission, 961 Marcon Blvd, Suite 310, Allentown, PA 18109.
- c. Minimum of three (3) professional references with contact information.

Position open until filled. Review of applications and interviews will begin immediately.

## **TEAM COMMITMENT**

The Lehigh Valley Planning Commission is committed to creating a diverse environment and is proud to be an equal opportunity employer. The LVPC provides equal employment opportunities to all employees and applicants for employment without regard to race, color, religion, sex, sexual orientation or identity, national origin, age, disability, or genetics. In addition to federal law requirements, the Lehigh Valley Planning Commission complies with applicable state and local laws governing nondiscrimination in employment. This policy applies to all terms and conditions of employment.

Persons with a disability who need assistance with their application or that need this announcement in an alternative format may call (610) 264-4544.

## **FURTHER INFORMATION**

In Compliance with the Immigration Reform and Control Act of 1986, applicants hired by LVPC must show acceptable proof of identity and evidence of authorization to work in the United States.

Visit [www.lvpc.org](http://www.lvpc.org) for more information on the Lehigh Valley Planning Commission, our work program, products and services.