Resiliency Planning in the Lehigh Valley (for Community Leaders)

What Hazards Affect Our Region?

Communities in the Lehigh Valley are most at risk or vulnerable to droughts, earthquakes, extreme temperatures, flooding/flash flooding, hailstorms, landslides, lightning strikes, subsidence/sinkholes, wildfires, windstorms/tornados, and winter storms, and may need to combat invasive species, a pandemic and/or infectious diseases, and radon exposure. **To decrease risk/vulnerability and potential harm from these hazards, communities should participate in resiliency planning**.

What is Resiliency Planning?

Resiliency planning focuses on actions that ensure communities have access to critical lifeline services and resources after a disaster and on actions that reduce risk and vulnerability to hazards over the long-term. Actions relate to emergency response and disaster recovery, along with longer-term actions that ensure that communities recover and prosper.

Who Should Complete Resiliency Planning?

You! **Local governments** have the specific resources to make infrastructure improvements to their communities, and have the best expertise to improve social welfare and keep natural hazards as least socioeconomically impactful as possible. **As such, local governments should take a leading role in resiliency planning activities.**

Why Is Resiliency Planning Important?*

The Lehigh Valley is one of the fastest growing regions in Pennsylvania. By 2050, population is expected to grow by 14.4%, the equivalent of nearly 100,000 people, causing employment to grow by 19.1% (74,108 new jobs) in the same time frame. Unfortunately, this population growth is expected to exacerbate the region's current housing crisis and cost-burden, as well as deteriorate roadway infrastructure due to an increase in traffic volume.

Presently, an influx in housing and industrial construction, including its related activities, have positively contributed to the Lehigh Valley's population and job growth, but creates greenhouse gas emissions that contribute to climate change. Currently, the region is responsible for 3.7% of Pennsylvania's total gross greenhouse gas emissions, an amount that is projected to grow. Climate change is a factor in the recent warmer and snowless winters, more severe and frequent storms/flooding, and poor air quality due to smoke from Canadian wildfires, and impacts like these are expected to continue and potentially worsen. Resiliency planning is designed to sustainably protect towns and cities from such impacts.

* Data from the 2022 Lehigh Valley Planning Commission Annual Report, published online on February 21, 2023

What Does Resiliency Planning Entail?

Under perfect circumstances, which include adequate and available access to resources, time, and staff, **resiliency planning can be thought of as a five-step process.** The steps, in order, are: **Understand Exposure, Assess Vulnerability & Risks, Investigate Options, Prioritize & Plan, and Take Action**. For more information on this process, visit the U.S. Climate Resilience Toolkit here.

1. Understand Exposure - in this step, communities identify hazards present in their community, and the places and things it values (assets). One way to do this is through asset mapping, a spreadsheet activity that tasks the community to name communal places that promote social health, identify their benefits and strengths, and understand how a community's hazards and assets affect one another.
2. Assess Vulnerability & Risks - in this step, communities consider the sensitivity and adaptive capacity, or the ability to adjust to new situations, of their assets to determine community vulnerability. While there are many ways to do this, NNC recommends consulting hazard/vulnerability assessments for this step. Vulnerability assessments describe the environmental and socioeconomic hazards that an individual or community faces and rates the ability to handle these challenges.
3. Investigate Options - in this step, communities consider possible solutions for the community assets that have the highest risk (most vulnerable) to relevant hazards. To do this, action statements are drafted that address the feasibility of combatting a certain hazard and its effect on an asset.
4. Prioritize & Plan - in this step, communities select a solution or solutions to complete and gather the resources necessary to start work on their resilience plans.
5. Take Action - in this step, communities secure funding and officially begin to implement community resiliency.

How To Start Resiliency Planning…

The first step in resiliency planning is to fill out this template curated by NNC. This question guide allows community leaders to understand their constituent demographics, the hazards that affect their constituency, and identify relevant assets, all while locating existing plans or proposals that could contribute to resiliency planning efforts. The questionnaire also guides leaders in thinking about short and long term goals, and actions that can be taken to achieve resiliency.

Things To Remember!

Resiliency planning is a highly individualized and often situation-unique process, with the kinds, order, and number of steps taken being reliant on the environmental, economic, and social factors that impact a community. With this understanding, NNC has compiled a list of resilience planning resources in their CREATE Resilience Community and Learning Hub to help communities in whichever step of the resiliency planning process they are at.

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