LVPC Develops Community Guide to Prepare the Region for the Tall Warehouse Boom

Warehouses the height of downtown skyscrapers are being proposed for the Lehigh Valley, so the LVPC has worked for more than two months to create a community guide to help municipalities handle them.

With high cube warehousing emerging worldwide as a new land use, the LVPC’s High Cube and Automated Warehousing Community Guide is the first in the nation designed to help our 62 municipalities capitalize on their potential advantages, while mitigating the negative impacts, by controlling where these massive structures are built and how they look.

“This is an emerging trend that we want to help our municipalities get out ahead of because we know it’s going to have a tremendous impact on the character of our communities, from their viewsheds to their transportation networks to their local economies,” said LVPC Executive Director Becky Bradley. “If we prepare, and do it soon, we can bring about the best possible outcome. We’re committed to supporting our municipal partners in managing our growth and development.”

As an epicenter for freight movement caused by increasing e-commerce demand, the Lehigh Valley now has more than 100 million square feet of warehouse space run by some of the world’s largest companies, from Amazon to Walmart to Zulily to Nestle.

High cube and automated warehouses are different than all of those because of their height. Reaching as tall as 140 feet, variations of high cube warehouses have been proposed in recent months in Upper Macungie and Hanover Township, Lehigh County, and industrial developers are working with Upper Mount Bethel Township to alter zoning and development regulations to accommodate this type of use. That height is comparable to the nine-story Lehigh County Courthouse in downtown Allentown and the 10-story Alpha Building in downtown Easton. Some nationwide have been built up to 180 feet tall.

In addition, these warehouses are typically highly automated, consisting of intricate racking systems that serve as the building’s structure and are wrapped in a metal skin that acts as the building walls. The racks where products are stored extend several stories to the top of the building, with robotic forklifts moving about the building to move products, and the trucks that transport them, through the complex quickly. It’s efficient but has the potential to intensify the traffic into and out of the facility.

If put in the wrong place, such a complex could dominate a neighborhood, changing the visual character of a community and overwhelming the transportation network. But in the right place, with the right regulations in place, it could generate tax base and jobs.

“Careful consideration is necessary to develop policies regarding what is essentially a warehouse built on top of a warehouse,” said Senior Community Planner Jill Seitz.
The 28-page Draft High Cube and Automated Warehouse Community Guide was created to give municipal leaders the knowledge, know-how and choices they need to be ready if this land use type is proposed in their community.

The Community Guide was authored by Bradley, Seitz, Chief Community Planner Samantha Smith, Director of Transportation and Data Management Charlie Doyle and Senior Planning Technician Brian Hite.

The document, in pdf or interactive online form, is available at https://lvpc.org/c-guides---model-regs.html. It gives recommendations of how communities can manage this new development type as new construction, redevelopment of an existing site or retrofit of an existing building for a different use.

Some of the dozens of recommendations laid out in the Community Guide include:

- **Defining these as different** – Municipal planners should clearly differentiate high cube and automated warehousing in their building, land use and zoning codes as something different than the traditional warehousing we have now, enabling communities to apply the type of specific regulations necessary.

- **Determining where they should, and should not, go** – Because this type of land use has the potential to put increased pressure on the infrastructure system, it’s vital to make sure they’re located near major arteries and water, sewer and transportation networks.

- **Directing Compatibility** – This includes not only matching it with existing infrastructure, but making sure that the height and look of the buildings match the surrounding community. What may fit well in an industrial park with other tall buildings could overwhelm a neighborhood where most buildings are four stories or less.

  “Communities should amend subdivision and land development and zoning ordinances to require viewshed information and analyses to assess the potential impacts, both positive and negative, where high cube and automated warehousing is proposed,” Smith said. “There are locations where these facilities won’t interrupt the viewshed and where their scale doesn’t pose negative impacts.”

- **Crafting Oversight** – Municipalities should consider allowing these as special exceptions or conditional uses, rather than by right, to allow a thorough understanding of each project specific, and to allow greater scrutiny in the review process.

- **Considering Emergency Services** – Are local police, fire and ambulance services equipped to handle buildings reaching 10, 12 or even 14 stories tall? Answering this question is key during the review process.

- **Estimating Total Community Costs** – The use of cost-benefit analysis is important to quantifying the impacts. For example, does the potential tax revenue justify the infrastructure, public safety and emergency services costs?

- **Engaging the Community** – Establishing a process that encourages community feedback on proposals builds trust and results in projects that are more suitable to community needs.
The first draft of the Community Guide was unveiled during a special public meeting November 9, attended by more than 70 planners, public officials, community leaders, private industry official and private citizens.

The guide was distributed to all 62 Lehigh Valley communities and is being revised based on feedback from the special meeting and municipal leaders.

“The only way we will continue to be successful is if we plan for the responsible management, growth, development, redevelopment and preservation of communities and the region together,” Bradley said. “Never in our lifetime has planning mattered so much.”