

# Appendix B5

Future Land Use Methodology

## Memo

To: Brodhead Road Corridor Planning Study Steering Committee

From: Jenni Easton, Pashek+MTR

cc: Josh Spano, SPC; Domenic D'Andrea, SPC; Scott Thompson-Graves, WRA;  
John Buerkle, Pashek+MTR

Subject: Future Land Use Assumptions

Developing sound transportation system investments requires a solid understanding of the type and intensity of expected population growth and economic development. The Brodhead Road Corridor Planning Study will involve an assessment of future (2045) land use growth that takes into account local and regional plans, the land use regulations of study area communities and the known development pipeline, in addition to broader system-level connections to major river bridge crossings, I-376 access points and potentially developable tracts of industrial property that could yield significant influence on the study corridor.

After exploring alternatives for anticipating future land use and development, the consultant team proposes the following:

- Adjust the baseline SPC Cycle 11 Forecast to update employment projections for projects of significant impact (increase Shell Appalachia Petrochemical Plant from 600 to 800, reduce Ohio River Industrial Site from 900 to 300).
- Apply a more aggressive 5% rate of growth in both households and jobs across study area communities between 2020 and 2045, which will account for housing production expected to exceed the Cycle 11 figures and ensure that recommendations consider the possibility of increased volume associated with this growth level.
- Travel demand modeling will consider the future vehicle mix, anticipating that an increase in commercial truck traffic in the area could represent a significant impact. For instance, the Aliquippa Industrial Park site alone could see an increase of 200 to 500 trucks per day.
- Josh Spano has reached out to the Airport Authority to see if they have updated projections for the development proposed around the Airport. If they provide

updated numbers, SPC can re-run the Cycle 11 Forecast to incorporate them. The team would use these revised projections.

The team will explore available model resources, including SPC's regional travel demand model. A project-specific sub-area model will be developed in VISUM to provide the appropriate level of resolution and network coverage to estimate future travel demands and any anticipated shifts in travel patterns that may be influenced by future growth or infrastructure modifications. The completed model will be used to support an assessment of future traffic projections, changes in travel patterns, capacity needs and other corridor or highway-segment applications in conjunction with the development of future needs and improvement recommendations.

This approach was developed during a May 20, 2021 meeting of the project team with Lew Villotti of Beaver County Corporation for Economic Development (BCCED) and Joe West of the Beaver County Office of Planning and Redevelopment, who agreed that it would be a reasonable means of anticipating future travel demand for the Brodhead Road corridor area.

**Please provide any additional feedback on this approach to Josh by Friday, May 28.**

On another note, John asked Lew to confirm the project being funded by PA DCED in Aliquippa. Lew indicated that DCED has provided a \$7 million grant to BCCED to study potential improvements to the Franklin Avenue interchange in Aliquippa. The project will be managed by PennDOT. The goal of the study is to identify projects to improve the connections between the Aliquippa Riverfront, Franklin Avenue, and SR 51. Lew said that the goal is to identify projects that can be implemented in a series of phases.