

## 2023 Research Problem Statement: Land Use Planning

The South Mountain Research Corps will support academic and student-focused research in the South Mountain region of southcentral Pennsylvania in Adams, Cumberland, Franklin, and York counties. The topography, climate, soils, geology, and society and culture of the South Mountain region supports a unique confluence of forests, plant communities, wildlife, and agricultural landscapes and practices. The South Mountain Landscape is one of the fastest growing regions in the Commonwealth, and new land use patterns and practices are evolving that are profoundly affecting traditional practices, regional infrastructure, water and air quality, public lands, recreation, quality of life, and other critical resources. Rapid land conversion from forestland or agriculture to developed buildings and infrastructure, and high visitation and use of public lands are challenges to the preservation and promotion of the region's economy, resident health, and overall quality of life.

The following is a list of potential research and monitoring priorities provided by local partners that could be conducted on public or private lands within the South Mountain region.

- Synthetic research and compilation of successful and innovative municipal sample ordinances and zoning regulations
- The gathering, compilation and analysis of public input on comprehensive land use planning at the county and municipal level.
- Data gathering, modeling and analysis of the effects of warehousing, logistics and distribution networks on regional, county and municipal transportation infrastructure, air and water quality, traditional land uses, open space preservation, and economies.
- Identifying BMP's and models for residential development.
- Research and design of storm water BMPs that are effective in poorly drained soils in the region, and summary and distribution of these BMPs to county and municipal planners.

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