Comprehensive Highway Corridor Study
Land Use, Transportation, and Economic Development in a High Growth Area

Location: US Highway 521/SC 9 Corridor, Lancaster County, South Carolina
Partners: Lancaster County; City of Lancaster; Lancaster County Economic Development Commission; South Carolina Department of Commerce; Catawba Regional Council of Governments; Kimley-Horn & Associates, Inc.; Arnett Muldrow and Associates, Inc.; Warren & Associates, LLC

Context: The region surrounding Charlotte, North Carolina grew tremendously over the last decade, influenced by strong job growth, vast amounts of developable land, and the influx of new residents from outside the region. Lancaster County’s location within the region significantly influenced its recent development boom, especially in the panhandle of the county near the North Carolina/South Carolina border. The US Highway 521 corridor forms a spine to this high growth area and connects local residents and businesses with employment, shopping, and entertainment opportunities in the larger metropolitan region.

Without a clear vision for the corridor and its surrounding area, much of the recent growth in Lancaster County has been haphazard, leading to congestion on roadways and missed economic development opportunities. As one plan participant said, “US 521 has the potential to become a parking lot during peak periods, leaving the county essentially cut off from the rest of the region.” Local leaders saw the need for a study to ensure that new growth and development occurs in a predictable manner, while protecting overall community character and opening up opportunities for economic development. The county hired a consultant team led by Kimley-Horn and Associates, Inc. to develop and coordinate recommendations for land use, transportation, urban design, and economic development in the study area.

Ultimately, the study completed for this area would become a blueprint for responsible long-term growth.

Project Description: The US 521/SC 9 Corridor Study combined detailed data inventory and analysis with a comprehensive public outreach strategy to build support for the study and its recommendations. General topics addressed in the study include market conditions, land use, transportation, placemaking, economic vitality, and detailed design studies for several identified catalyst development sites. A land use scenario planning component was included in the study to contemplate alternative development scenarios and the trade-offs among

"CommunityViz allowed residents and the steering committee to better visualize the impacts of growth in the study area."
- Wendy Bell, Senior Planner, Catawba Regional Council of Governments

"CommunityViz allowed us to measure and evaluate multiple scenarios for the study area, which empowered plan participants with the information needed to make sound decisions and build widespread support for a common vision."
them. Short feedback loops between the scenario planning work and other key aspects of the planning process ensured continuity as the team addressed the range of topics.

The consultant team married advanced scenario planning tools with a public participation strategy focused on engaging the project steering committee in a development “chip game.” The game is a hands-on, interactive tool to increase participants’ understanding of land consumption patterns associated with various development scenarios. It lets participants manipulate key policy components, deal with trade-offs as they would in the real world, and achieve results that are the beginnings of a more sustainable general development map for the study area. Following the chip game event, the game maps were digitized using CommunityViz software to measure trade-offs among the different development scenarios. A development scenario report card was used to compare and communicate the trade-offs associated with the different development scenarios. Its topics included development footprint, mixed-use percentage, population density, employment density, cost of transportation, percentage of multifamily housing, and transportation mode choices.

Using the results, the consultant team and project steering committee created a preferred development map for the study area, which was coordinated with other topics addressed by the consultant team to become the blueprint for a coordinated growth strategy in Lancaster County.

**Technology and Tools:** CommunityViz 3.1, including the Suitability Wizard; public outreach activities and tools used in support of the study included a project steering committee; a development ‘chip game;’ public workshops; stakeholder meetings; a visual preference survey; a questionnaire; and a project website.

**Outcomes:** The final report is being implemented incrementally by area agencies responsible for transportation, land use, and economic development matters. The Lancaster County Economic Development Corporation uses the study for attracting new businesses to the county as part of the larger Charlotte Metropolitan Region. The South Carolina Department of Transportation, Lancaster County, and a private developer have come together to implement recommendations for access management improvements in the corridor. Other planning initiatives born out of recommendations in the final report include a new trails and greenways committee, and amendments to the county’s Comprehensive Plan and Zoning Ordinance.