

CHARLOTTESVILLE, VA

JEFFERSON AREA EASTERN PLANNING INITIATIVE



Courtesy University of Virginia
School of Architecture

East Market Street, Charlottesville: An urban mixed-use area.

The City of Charlottesville, Virginia lies amidst rolling hills near the base of the Blue Ridge Mountains. The region's natural beauty, cultural amenities, and rich history are attracting an influx of new residents. As a result, the city and the surrounding five-county region are growing rapidly.

This growth, however, is creating development patterns and congestion that many believe are diminishing the area's unique qualities. Responding to these concerns, the Sustainability Council of the Thomas Jefferson District Planning Commission led a regional visioning process that resulted in the 1998, "Sustainability Accords and a New Vision of Sustainability." The accords called for a new direction in regional development patterns and practices.

Meanwhile, in the transportation arena, residents were expressing particular concern about a proposed four-lane highway bypass around Charlottesville. Some feared that this type of highway would encourage sprawl, create more traffic, and blight an historic, rural landscape. Many expressed enthusiasm for regional transit, but worried that the current density of population in the region would not support it. Recognizing the need to plan for and evaluate future transportation and development patterns in light of the sustainability accords, the Commission undertook an innovative public process and modeling approach to develop a transportation and land use vision for the Charlottesville metropolitan region.

THE PROJECT

The Thomas Jefferson Planning District Commission (Commission) was awarded an FY 1999 Transportation and Community and System Preservation Pilot Program (TCSP) grant of \$518,000 to undertake the Jefferson Area Eastern Planning Initiative (EPI). The Initiative had two primary objectives:

- To develop a set of modeling tools capable of concurrently evaluating transportation and land use options; and
- To develop a 50-year transportation and land use vision for the five-county region surrounding Charlottesville.

A new tool known as the CorPlan model fulfilled the first objective. CorPlan is an innovative, geographic information systems-based model that estimates regional land development potential using prototypical "community elements" as building blocks. The CorPlan model was used in the EPI study to allocate future development by type throughout the region, for different land use alternatives. This allocation was then used as input to the region's travel demand model, TRANPLAN, to develop transportation forecasts for each alternative. The community elements were also represented through architectural drawings to show people what future development might look like.

To fulfill the second objective—developing a vision for the region—the Commission undertook an 18-month study that focused public input on three questions:

- How will we live?—What types of communities will we live and work in by the year 2050?
- Where will we live?—What areas in the region are suitable for urban development and what areas should be off limits?
- How will we get there?—What steps are needed to move the region from where it is now to the desired communities and urban growth areas?

Public workshops showed a strong preference among residents for a more compact, nodal form of development, and for transportation systems that would support this pattern. The Commission is now moving on to the challenge of implementing the 50-year vision through the revision of local comprehensive plans and capital improvement programs.



Courtesy University of Virginia
School of Architecture

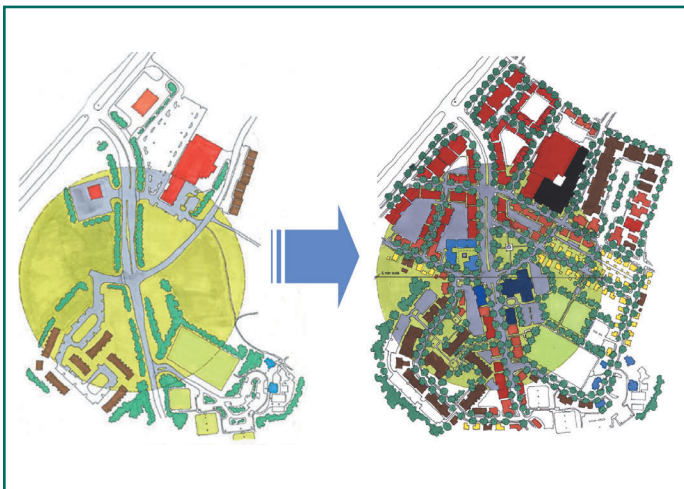
A rural landscape near Charlottesville.



PARTNERSHIPS AND PARTICIPATION

To help guide the Eastern Planning Initiative, the Commission created a 35-member Advisory Committee made up of elected officials, business leaders, representatives from environmental and community groups, and study area residents. The committee met nine times and hosted four public workshops during the course of the study. A team of planning consultants and the University of Virginia School of Architecture assisted the Commission with the project.

During the first workshop, participants reviewed the existing community elements and offered suggestions on how to improve livability. In this workshop, participants expressed a strong desire to “enhance” the standard suburban elements which included separate residential, retail, and office components. Enhancement concepts included a community focal point and distinguishable boundaries, greater pedestrian friendliness, a greater mix of activities, better use of open space, and building at a human scale.



Enhancement of the suburban community element. Each element is one-quarter mile in diameter, or a five-minute walk. The enhanced element includes buildings along the street and additional pedestrian connections, creating a more pedestrian-friendly and transit-supportive environment.

Courtesy University of Virginia Design Resources Center/
School of Architecture

In the second workshop, participants were asked to allocate future development within the region using the “community elements.” This workshop resulted in a general consensus that growth should be concentrated in the region’s core and/or nodes of development, primarily utilizing urban and “enhanced suburban” elements.

Based on the workshop results, the study team constructed three land use scenarios—a “nodal” and two “core” scenarios—for comparison with a “dispersed” or trend scenario. The study team also constructed transportation scenarios, made up of various patterns of highways, transit, and non-motorized facilities, to support each land use scenario. The CorPlan and TRANPLAN models were used to test the

transportation impacts of each scenario. The four scenarios were then presented to the public at the third workshop for feedback, and participants were asked to suggest and agree upon transportation and land use goals.

During the remainder of the study, the study team focused on the steps needed to implement the public’s expressed desire for some form of the “nodal” or “core” scenarios.

RESULTS

The primary outcome of the EPI study was a set of “key success factors” to support the public’s preference for a clustered development pattern. The recommendations identify specific locations for development areas, but leave the question of magnitude of development for localities to refine.

The EPI recommendations also address future transportation investment. Transportation recommendations are based on two concepts:

- **The urban transportation network**, a system of paths that connect designated development areas. These paths support a balance of transit, pedestrian, bicycling and auto travel within and among developed areas. They are no more than four lanes wide and designed for speeds of 35-mph or less. The study identifies extensions to existing roads to create a “skeleton” for future development.
- **Priority transit**, such as busways or light rail in which transit vehicles operate in their own right-of-way. Study participants did not anticipate that population and development patterns would support such a transit investment in the near term. However, they recommended preserving rights-of-way for potential future investment, based on a regional vision for creating transit-supportive development patterns along these rights-of-ways.

Traffic modeling by the study team using the TRANPLAN model confirmed the benefits of a more clustered, compact development pattern. Compared to the dispersed land use/transportation scenario, which included a northern freeway bypass as well as adding lanes to arterial and rural roads, travel demand forecasts for the urban network and clustered development showed lower congestion levels. At the same time, the capital investment cost of the urban network was estimated at roughly half the cost of the dispersed highway system.

Implementation of the EPI recommendations will largely rely on the initiative of local jurisdictions to revise comprehensive plans and capital improvement programs. Regional highway and transit investment decisions by the MPO and state DOT will also play a significant role.



REACTIONS

Hannah Twaddell, Assistant Director of the Commission, notes that even in an “involved” community such as Charlottesville, it is “chronically difficult” to engage people in planning. The Commission did have success, however, with a game-playing exercise. In this exercise, each player selected a different alternative future theme for the area. The themes, named after old television shows, represented overarching descriptions of how the region could look and function in the future. Groups of participants then decided what type of land use patterns would maximize their theme and put them on a laminated map. These maps formed the basis for developing the scenarios.

Local government staff and elected officials were key participants in the EPI. Ms. Twaddell reports that reactions among jurisdictions to the study and its recommendations have been generally favorable, although sometimes mixed. The urban governments appear ready to embrace EPI concepts for use in their long-range planning. The MPO is enthusiastic about planning a new urban street network and transit facilities. Local governments in rural areas have been more cautious about embracing study recommendations. The next major step following the EPI study will be a “regional summit” at which local governments are invited to present their reactions to the study. Ms. Twaddell hopes that the governments will form a task force to address success factors and agree on implementation steps.

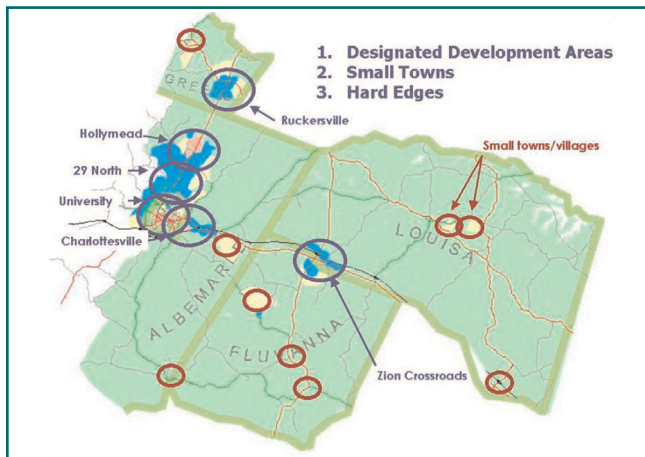
Key Success Factors Identified in the Eastern Planning Initiative

Success Factor	Implementation Actions
1. Grow only in designated development areas	<ul style="list-style-type: none"> Each locality will prepare a sub-area plan for agreed-upon designated area(s) within its boundaries. The subarea plans will become part of the adopted local comprehensive plans.
2. Maintain small towns and villages	<ul style="list-style-type: none"> Localities will designate small town/village areas, with development guidelines based on the patterns illustrated in the small town and rural residential community elements of the EPI.
3. Define and maintain hard edges	<ul style="list-style-type: none"> Each locality will define the development area boundaries in its comprehensive plan and zoning ordinance.
4. Create urban and enhanced suburban communities	<ul style="list-style-type: none"> The “urban” and “enhanced suburban” community elements will set the context for buildings and street/open space patterns. The development patterns shown in the EPI diagrams and the ratios in the inventories will be used in local comprehensive plans, zoning ordinances and development site reviews.
5. Invest in supportive infrastructure	<ul style="list-style-type: none"> The transportation system identified by the EPI will be refined in the transportation plans of the MPO and the commission as well as in local comprehensive plans. Regional water and sewer and public open space plans will be prepared that support the agreed-upon development patterns, and will be incorporated into local comprehensive plans.
6. Preserve rural areas	<ul style="list-style-type: none"> Localities must evaluate and adopt strategies to protect adjacent farms and forests from spreading development. The region and each of the localities should prepare a rural conservation plan.
7. Regional equity	<ul style="list-style-type: none"> The region should conduct an economic development study that builds consensus among localities on the desired amount and type of economic growth given the fiscal impacts and the agreed-upon development area concept.
8. Ensure affordability	<ul style="list-style-type: none"> The designated development areas envisioned by the EPI must not restrict land supply to the point where escalating land prices create a financial burden on households in the region. The recommended economic development/fiscal impact study must address this potential problem.



The Virginia Department of Transportation (VDOT) was also an important participant. While reluctant to engage directly in land use policy issues, VDOT supported efforts by local jurisdictions to develop alternative land use policies that may influence transportation forecasts and investment needs. VDOT's primary concern was that the model system be credible and provide reasonable results. To monitor this, a VDOT engineer was involved in the Advisory Committee throughout the project.

With respect to the CorPlan model in particular, at least one and possibly two counties anticipate using the model to support future planning. Some staff within the VDOT planning division have also expressed interest in CorPlan as a tool for statewide transportation planning.



Courtesy Renaissance Planning Group

Proposed designated development areas.

LESSONS LEARNED

The Eastern Planning Initiative in Charlottesville provides a number of insights into how planning agencies can assist citizens in developing a transportation and land use vision for a region.

Use “community elements” as a framework for regional land use. The community element concept was successfully used in the EPI to allocate population and employment associated with different development patterns, without knowing the exact details of future development. Furthermore, the community elements were an easily-understandable way of describing different development patterns.

Use “visioning” as a starting point for planning. Planning simply with numbers and words does not give people a sense of what their community will “look” and “feel” like in the future. Visual representations of alternative development patterns and transportation infrastructure provide people with a more thorough understanding of the choices they are making when adopting planning concepts.

Take the long view. Communities were concerned at the outset of the study that recommendations might contradict recently-adopted comprehensive plans. The Commission addressed this concern in part by specifying a 50-year rather than 20-year time horizon. The 50-year timeframe allows jurisdictions time to plan for revisions in the next update of the comprehensive plan, rather than rushing them through this process or (alternatively) maintaining a local plan that directly contradicts the regional plan. It also allowed localities to consider the long-term effects of decisions such as creating transit-oriented development.

Plan for transit in advance. Study participants realized that fixed-guideway transit was not currently cost-effective for the region, yet they wanted to ensure that it remain a viable option in the future in case the region continued to experience rapid growth. Participants agreed that creating transit-oriented development patterns and preserving rights-of-ways were fundamental strategies to ensure the feasibility of future transit systems.

Consider fiscal and economic equity impacts. One unanticipated outcome of the study process was a significant concern over the equity impacts of the proposed land use patterns. Participants were concerned about impacts on local government revenue and expenditures as well as on the affordability of housing in the region. A future study will investigate these fiscal and economic impacts in more detail.

The results of the Eastern Planning Initiative represents only the start of a long process, and much implementation work remains. The study, however, clearly demonstrates how creative approaches to modeling and public involvement can help a region plan for its future and maintain the quality of life that its residents value.

For further information:

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CorPlan Model

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