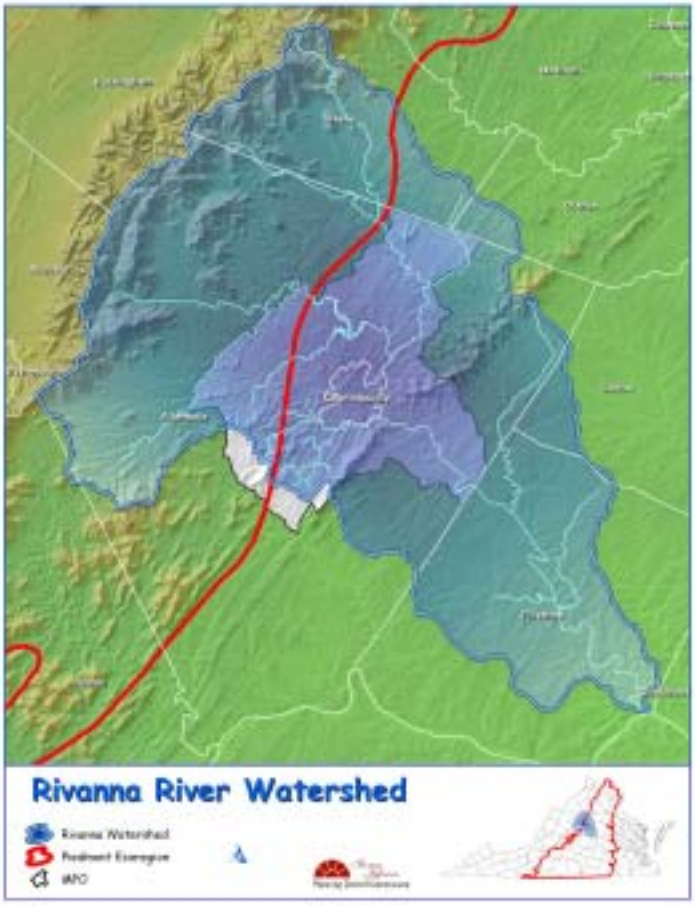
Charlottesville-Albemarle Metropolitan Planning Organization
of the Thomas Jefferson Planning District Commission
POB 1505, 401 E. Water St, Charlottesville, VA 22902 www.tjpdc.org
(434) 979-7310 phone • (434) 979-1597 fax • info@tjpdc.org email

Transportation 101: Bioregional Planning
Linking Conservation, Land Use and Transportation Planning

Bioregional planning has emerged as a concept and practice that addresses the need to incorporate the goals of ecology and conservation planning with those of regional land use and transportation planning. While regional governments in South Africa and Australia adopted bioregional planning models several years ago, the concept is still a new one in the United States. Bioregional planning addresses land use at the scale of a **bioregion**, which is defined by natural characteristics like watersheds and soil types, as well as cultural phenomena like a local knowledge of place.



Embedded in bioregional planning is the idea that our ecological or "green" infrastructure, the forests, pastures, rivers and streams that comprise our open space, are equally as important to the health of our communities as functional transportation networks and affordable housing. In the practice of bioregional planning, planning for water quality, open space and green infrastructure should be integrated into the planning process for the built environment. A bioregional planning approach to long range transportation planning might include:

- Green infrastructure planning integrated into the transportation, land development and park planning processes
- Planning for preservation of rural highways and towns
- Framing the process in the context of a warming planet

Visionary planning practitioners like Randall Arendt and Peter Calthorpe have successfully integrated elements of bioregional and green infrastructure planning into their rural area and regional planning work. Randall Arendt's focus in his books *Rural By Design* and *Growing Greener* is on local political processes and zoning codes that preserve rural highways and towns. Peter Calthorpe's approach in *The Regional City* and *The Next American Metropolis* is regional in scale and examines the interactions of more urbanized areas with the natural environment.

Randall Arendt's guiding principles for rural preservation and environmental protection include:

- Adopting comprehensive plans that contain clear conservation planning goals
- Amending local subdivision ordinances to include conservation design standards

- Committing to the preservation of small rural centers by limiting commercial strip development along highways.

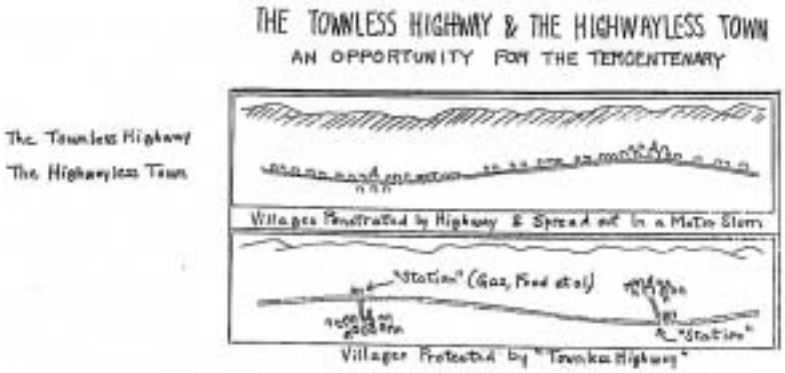
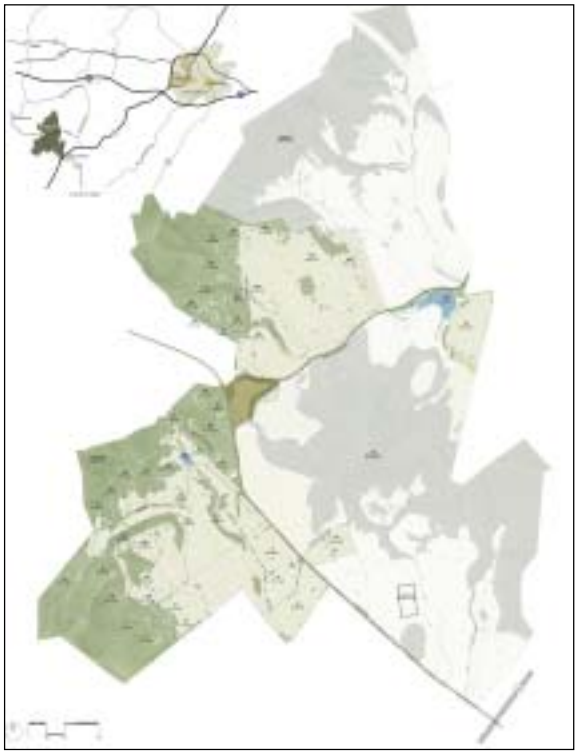


Figure 9-15. Benton MacKaye's 1929 sketch of the "Townless Highway" and the "Highwayless Town," two of the earliest planning diagrams making the case for keeping major traffic corridors uncluttered with roadside commercial uses. *Source:* Dartmouth College Archives.

dall Arendt's Growing Greener

Bundoran Farm is an excellent local example of a development using conservation design standards



Peter Calthorpe's concept of how regions and metropolitan areas should function and be planned include:

- Planning efforts that are responsive to the fact that economies and ecosystems function at a regional scale, not within political jurisdictions
- Regional boundaries that align with urban growth boundaries, greenlines, (distinct edges between urban areas and important wildlife habitats or agrarian areas), and urban service boundaries
- A land use and transportation feedback loop that encourages walkable neighborhoods and transit investments.

Resources:

Arendt, Randall. *Growing Greener*. Washington DC, Island Press, 1999.
Rural By Design. Chicago, IL. American Planning Association Press, 1994.

Calthorpe, Peter and William Fulton. *The Regional City*. Washington, DC. Island Press, 2001.
The Next American Metropolis. Princeton. The Princeton Architectural Press, 1993.

Australia Department of Environment and Water Resources
http://www.environment.gov.au/biodiversity/publications/series/paper10

Bundoran Farm http://www.bundoranfarm.com/

The Nature Conservancy in Virginia http://www.nature.org/wherewework/northamerica/states/virginia/