Executive Summary

Counting the Costs and Benefits of Growth:

A Fiscal Impact Analysis of Growth in the City of Charlottesville and Albemarle County, Virginia

Prepared for
Advocates for a Sustainable Albemarle Population (ASAP)

December 2012

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It is widely assumed in the United States that community populations need to grow in order to maintain economic health. From a purely fiscal perspective, proponents of this view assume that growth pays for itself, underwriting bigger and better schools, roads, water and sewer facilities, and more effective public safety services.

But is this true? While economies of scale confer fiscal advantages to communities up to a point, and dense urban populations can be managed more efficiently than sprawling suburban settlements, is there a threshold size above which the benefits of growth for a locality no longer exceed the costs?

This analysis examines whether population growth in the City of Charlottesville, Virginia, and the surrounding County of Albemarle, pays for the additional services commanded by such growth—even if it is managed by "smart growth" strategies or the selection of "targeted" industries. This study, sponsored by Advocates for a Sustainable Albemarle Population (ASAP), has two objectives:

- To estimate the local fiscal costs and benefits of growth by specific land use category, and also by hybrid combinations of land-use categories that better reflect the way costs are connected to where citizens live, work, and play; and
- To illustrate how such cost-benefit ratios can help the localities make better land use decisions regarding potential future growth.

As a *fiscal* analysis (rather than a broader *economic* analysis), the research focuses exclusively on the revenues that are determined and controlled by local governments (including the state and federal revenues that they determine or control) and the costs that are incurred by these local governments through the public services they provide.

The study consists of five sets of calculations, each examining the city and the county independently using publicly available data sets from each locality for the fiscal years between 2006 and 2009 as well as from Virginia state sources. The primary analysis considers only *locally* generated revenues in each of ten land use categories (e.g., single family homes, commercial, agriculture). Secondary calculations:

- differentiate revenue by sub-types of commercial and industrial development;
- expand the local revenue stream to include state and federal sources; and
- estimate a new home's hypothetical value if its tax revenue were to fully offset the additional public services its residents incurred.

Among the most significant findings are the following:

1. As the table below illustrates, **most land uses do NOT pay their way: they do not generate sufficient government revenues to pay for the public services they require.** This is because new area residents require services that increase local government costs more than the additional local revenue they contribute. It also is because the deficits created by this growth cannot be offset by other more fiscally advantageous but far less predominant land uses.

For every $1 generated in revenue (based on 2008-2009 data), the services required by different land use categories in Albemarle County and the City of Charlottesville incur the following costs:

Land Use Categories	Albemarle County	Charlottesville
Single Family Homes	$1.28	$1.24
Multi-Family Homes	$1.96	$1.59
Mobile Homes	$2.16	N/A
All Residential Land Uses Combined	**$1.41**	**$1.37**
Commercial	$0.51	$0.47
Industrial	$0.44	$0.44
Institutional (e.g., hospitals, libraries, churches)	$1.53	$1.24
University of Virginia (UVA)	$1.03	$1.28
Agriculture	**$0.20**	N/A
Open Space/Recreation	$1.28	$1.64
Vacant Lands	not available	$0.19
All Land Uses Combined	**$1.24**	**$1.17**

2. **Even the three types of land use—commercial, industrial, and agricultural—that *appear* to pay their way cannot be expanded within Albemarle or Charlottesville to convey any marked fiscal advantage.** There are two reasons for this:

    a. New industrial and commercial enterprises characterized by positive revenue-to-cost ratios **cannot, in most cases, recruit workforces solely from among the unemployed and underemployed residents of Albemarle County and Charlottesville**. Because these businesses tend to have the greatest technological complexity and skilled labor requirements, they tend to recruit a significant part of their workforce from *outside* the region. This adds new residents and new per capita costs (e.g., for schools), which also tend to wash out the favorable revenue-to-cost ratios associated with these enterprises.

    b. **Agricultural land cannot be reclaimed from land now used for residential and commercial purposes**. To maintain its current benefits, farmland can be most wisely targeted only for preservation.

3. The "break-even" price of a new home—the price at which a residential unit will generate enough local revenue to offset the additional public service costs incurred as a result of that new household—is $668,761 in Albemarle County. This represents the average price at which all future homes must be sold to avoid an increase in the current locally generated fiscal deficit. **Thus, to offset the fiscal gaps caused by population growth, a strategy of recruiting new residents of significant wealth and income depends on unattainable targets.**

    Another concept is the "compensating" price. Reflecting the price of homes that must be sold to generate enough local revenue to pay for the services demanded by all residents and enterprises, this price represents an even less realistic target. This study calculated that to make up for current locally generated deficits, **the next 2,000 homes sold in Albemarle County must each be priced at an average of $2.7 million.** This price reflects the current cumulative cost of growth.

4. **Albemarle County's proffer calculations greatly underestimate the real costs of additional new developments.** This is true even after projected tax revenues from the new enterprises are added, and even after the marginal environmental and infrastructure costs are ignored. The county's current proffer formula does not count all the costs of new development, understates others, and overstates anticipated revenues.

5. **Continued population growth in the city or county will generate even less favorable ratios of revenues-to-public-service-costs than the current ratios reported in this study.** This will happen because increased population density eventually requires increasingly complex public service structures, which carry rising per capita costs. Even without accounting for this complexity, and due to the rising share of residential public service costs in the overall land use mix, the fiscal deficits connected to local revenues and local costs only will worsen with additional population growth. For example, at a hypothetical population of 200,000 (the city and county together now have about 140,000 residents), the prevailing 2008-2009 ratio of public service costs to revenues generated for all land uses in Albemarle County would rise by approximately 16 percent, from $1.24 in costs per revenue dollar to $1.45.

6. In devising the calculations for the analyses in this study, it became clear that **the revenue-to-cost ratios generated here underestimate the real costs of growth.** This is because these analyses cannot include two prominent *cost* factors:

    a. Expenses for **deferred infrastructure improvements and maintenance** are not available from Charlottesville or Albemarle local governments, and appear to be ignored by the localities until accumulating deficits produce obvious failures or crises; only priority capital needs are acknowledged and counted.

    b. Despite advances in environmental economics, most costs of **environmental degradation** cannot yet be reliably quantified in dollars. This component of the revenue-to-cost formula is therefore excluded. (For an example of a successful effort to monetize such impacts, see the 2009 ASAP research report **"**Estimating Impacts of Population Growth on Ecosystem Services" by Jantz and Manuel.)

    Moreover, this analysis—like other research with similar goals—makes no attempt to assign a dollar value to changes in the character of a community or the quality of life of its residents.

These results are generally consistent with fiscal analyses in growing communities around the USA, including those in this region and other Virginia localities.

For policymakers and planners in Albemarle County and Charlottesville, **the findings of this study have several clear public policy implications**:

- **Planners and decision makers at city and county levels should abandon the discredited belief that fiscal benefits of growth exceed the costs.** Since population growth cannot pay for itself in all but the most unrealistically controlled circumstances, **economic development (e.g., the encouragement of new businesses and the population growth that accompanies them) should not be pursued as a remedy for fiscal shortfalls.**
- As local government bows to outside forces exerting pressure to increase local population (e.g., targeted "economic development," or state demands for expansion of the University of Virginia mission and scope), per capita costs for services and infrastructure also will increase. **To avoid an erosion of services and the decline of the area's quality of life in the face of population growth, local (or local and state) tax structures must be made more progressive and responsive.** Without such structural change, tax rates must rise or local government-provided services and infrastructure must decline.
- **In local decisions about land use and population growth** (e.g., reviews of permit requests, comprehensive plan decisions about zoning densities, calculations regarding appropriate proffers) **the costs of environmental degradation—though difficult to quantify—must be recognized.** Because the potential for remediation (through urban forestry, conservation, etc.) is limited, ultimately no effort, no matter how expensive, will be able to offset or undo the degradation connected to population growth.
- **The number and percentage of workers that are likely to be recruited from outside** of current city and county populations **must be taken into account when permits for new industries are considered**, and when the overall fiscal benefits and costs of these industries are calculated. (This is neglected in the county's *Target Industries Study*.)

- Because the county's proffer program is inadequate as a means of filling the gap between the true costs of new development and its local revenue-generating potential, **the calculation of proffers needs to be revisited.** To close the increasingly large fiscal gap between revenue from new homes and businesses and the costs they impose on county government, consideration should be given to implementing full-cost proffer calculations, increasing general taxes, instituting stricter approval criteria of new developments, or some combination of these.
- "Smart growth" principles (aimed at improving human settlement patterns in ways that slow human expansion into natural areas, foster a sense of community, reduce the need to drive, and facilitate public transportation) can, as growth continues, help slow ecological impacts and delay infrastructure costs. **Decision-makers at the community level should recognize, however, that "smart growth" alone will do little to improve their community's fiscal standing in the face of such growth.**
- Because population growth has critical fiscal and quality of life implications for the community, **both the City of Charlottesville and the County of Albemarle—preferably working together—need to develop informed population policies** focused on realistic costs and benefits of growth. Such policies should help guide deliberations regarding—among other things—zoning regulations, transportation, schools, water and sewers, and public safety.