

Understanding the Fiscal Implications of Development

The purpose of the Meeting in a Box exercise is to encourage groups of Lafayette Parish residents to work together in designing future development patterns that provide alternatives to the trend growth scenario (the way we are likely to grow based on present and anticipated conditions). In particular, the alternatives should address those factors in which the trend growth scenario differs from the Lafayette Parish 2035 Vision Statement. Which development types and patterns will best help us achieve that vision?

Making these decisions is not simple. Various types of land use patterns and the levels of operating and capital investment necessary to support those land use patterns affect taxation and government spending in different ways. An understanding of the cost impacts of growing in a certain way is necessary to making informed policy choices.

LCG and its Consultant team are assembling available tax and cost-of-services data for Lafayette Parish with the goal of devising a reasonable approach to compare the trend growth scenario and “alternative futures” which will be developed from the public input in this stage of the planning process.

Until this evaluation tool is developed, we offer the following general information as points of reference for the Meeting in a Box discussion.

Costs v. Revenues

Local governments have three basic revenue sources—property and sales taxes, state and federal aid, and miscellaneous taxes and fees such as those paid for municipal services. Typically, property tax revenues account for the large majority of municipal revenues. In Lafayette, where property taxes are comparatively quite low, LCG is significantly reliant on sales tax revenue as a source of revenue.

On the cost side, the three basic categories of costs are schools, services (such as roads, sewer, water, waste removal, police, fire protection, parks and recreation, libraries, jails, and government), and debt service. The long-term impacts of many of these expenditures are not always duly considered by local governments when making decisions about new development. In the case of schools and services, not only the initial construction, but also operating and maintenance costs must be considered.

Defining Development Types

Fiscal impact analyses (FIA) and cost-of-community service (COCS) studies usually compare the differences in costs impacts between “conventional” to “alternative” development practices.

Conventional development refers to the standard land development pattern in the United States since World War II. Predominant in most suburban communities, this development pattern tends to segregate land uses into distinct “zones” and has a discernible automobile-oriented emphasis. Elements that this type of development may feature include wide roads, large lot sizes, large building setbacks, curvilinear streets and cul-de-sacs in residential areas, shopping centers surrounded by parking lots or strip malls with frontage on major streets and orientation toward their parking lot, and single-use office parks.

Alternative development practices are reflected in what is known as traditional neighborhoods, built in the United States prior to World War II. Design features in these neighborhoods may include a prominent neighborhood center for commerce, culture or government, a mix of uses within a compact area, so that daily needs such as school, work and shopping are within walking distance, a grid of streets, buildings of many sizes, modest or no front yard setbacks and rear parking lots. Commercial areas may feature residences on the second floor and office or retail uses on the first floor of buildings.

One type of conventional development sometimes referenced in cost impact studies is defined as “sprawl”: low density development that typically has leapt over other, contiguous development to become established in the periphery of an urban area. This type of development often occurs on agricultural or otherwise relatively pristine land.

Fiscal Implications of Development: Predominant Findings

Numerous FIA and COCS studies have identified and quantified the factors that influence the public costs of supporting development. Among the factors that have been found to have a measurable effect on the costs of public facilities and services are:

1. Type of land use
2. Housing type and size
3. Density
4. Location and distance from central facilities

The following paragraphs summarize prevalent conclusions from a review of literature on this topic included as part of “Estimating the Fiscal Impact of Alternative Futures for the Capital Region,” a study prepared in 2007 by the Capital District Regional Planning Commission, Capital District Transportation Committee and the University at Albany Department of Geography & Planning, with funding assistance from the Center for Economic Growth.

1. Types of land use

A majority of past studies has concluded that non-residential development is generally more fiscally beneficial to local governments than residential development. This is because funding public schools is a major cost of local governments and additional residential development brings with it added numbers of school-aged children. Industrial and retail uses are generally more fiscally beneficial than residential, but business parks, office parks and high-tech research parks bring higher fiscal benefits than ordinary industrial or retail.

Leaving land in agricultural use or as open space has been found in many cases to be more economically beneficial to a community than having the land be developed. COCS studies conducted by the American Farmland Trust and numerous communities since the 1980s have concluded that although agricultural land pays relatively little in taxes, it routinely pays more in taxes than it costs the local government to service that land, whereas developed land often costs more in public services received than it generates in tax revenue (American Farmland Trust, 2002). Keeping land undeveloped and permanently preserved as open space can also be fiscally beneficial. Open space assets such as parks can significantly increase the value of adjoining private properties.

2. Housing type and size

There is almost uniform agreement derived from fiscal impact studies that the type and size of housing can have a significant effect on the fiscal impact of residential development because of the correlation between housing type and size and the number of school aged children. As the number of bedrooms (and numbers of school-aged children) increase, residential development the cost burden increases. (Burchell et al., 1993).

Public costs have also been found to increase as lot size and lot frontages increase. The larger the lot and the longer the street frontage, the greater the public cost of water and sewer service, road repair, school bus routes, etc. For example, Speir and Stephenson studied how public water and sewer costs varied with changes in lot size, and found that smaller lots cost significantly less to serve than larger lots. “[W]hen lot size increases from 0.25 acre to 1 acre, costs nearly double.... Annual costs per household increase from \$204 to \$392... The higher costs are due to the longer distribution mains required for larger lots. Friction head losses are also higher with longer lengths of pipe, which increase pumping costs (Speir and Stephenson 2002, 60).”

3. Density

Fiscal impact studies have consistently found that per-unit public costs decrease as the density of development increases and development becomes more compact. One study found a 40% cost-per-unit differential between “rural sprawl” and medium-density residential development. Another study found that development of houses on two-acre lots in the outlying area cost 28% more per dwelling unit than suburban single-family homes and townhouses at six dwellings per acre, and 172% more per dwelling than 10-units-per-acre urban development.

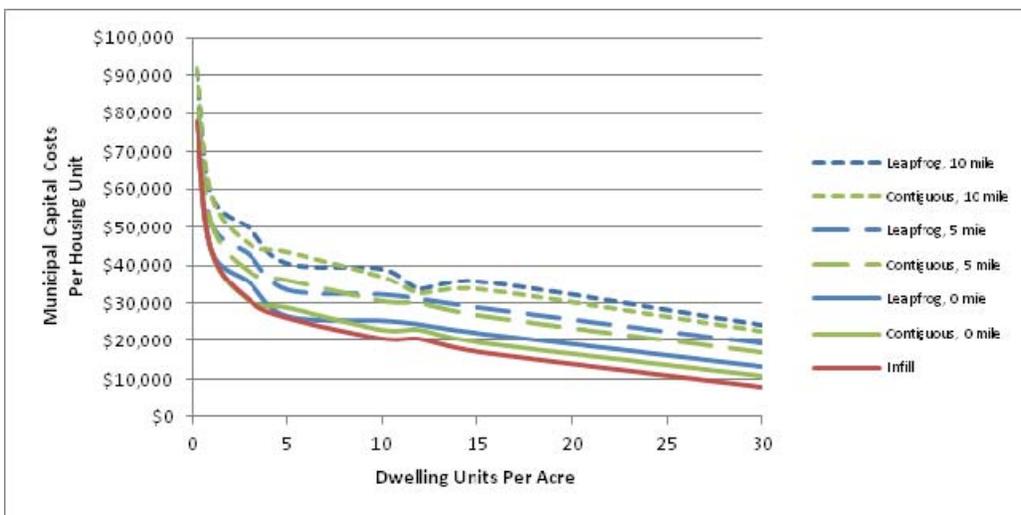
In some studies, costs found to drop with density included transportation and public facilities. In others, the cost of services that increased on a per unit basis as density decreased included school transportation costs, road maintenance costs and water and sewer operating costs.

4. Location and distance from central facilities

Over the years, studies have demonstrated that public costs related to development can vary depending on where that development is occurring. For example, a study conducted by Professor James Frank of Florida State University found that the total public cost of providing public infrastructure to a 3 unit per acre residential development located ten miles from central facilities was \$48,000 per house—whereas the per-unit costs in a 12 unit per acre development located closer in was 50% lower (Frank, 1989).

Similarly, in their 2002 study of the effects of housing patterns on public water and sewer costs, Speir and Stephenson measured the effect of tract dispersion and distance on public costs. They found that water and sewer infrastructure costs increased between 6% and 14% as tract dispersion increased. Costs also increased with distance from existing service centers. A development 0.25 mile from the service center cost 30% less per unit than one 4 miles from the service center. “Cost differences among scenarios are attributed to changes in the length of pipes, the diameter of water transmission and sewer interceptor pipes, the number and size of water pump stations, and energy costs” (Speir and Stephenson 2002, 60).

Cost of Services for Different Development Types (National Urban Land Institute Study).



Source: *The Costs of Alternative Development Patterns: A Review of the Literature*. Frank, James E. Washington, DC: The Urban Land Institute.

Conclusion

Land use, housing type and size, density and proximity to central facilities are factors that affect municipal budgets and need to be weighed in conjunction with the community’s vision for the future. The community and its decision makers need to be aware of the fiscal implications of the decisions they make regarding growth now and into the future.

Reading Material

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