



Smart Growth America
Making Neighborhoods Great Together

RCLCO



The Fiscal Implications of Development Patterns

A MODEL FOR MUNICIPAL ANALYSIS

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How could a smart growth approach improve your municipality's bottom line?

Every town, city, and county makes decisions about how to grow and what kind of development to build. These decisions shape entire neighborhoods and form the foundation of communities as we know them. These decisions can also have enormous implications for a municipality's finances.

Over the past 40 years research has shown that low-density, unconnected, development is more costly to the public sector than compact, urban development. Every municipality considering new development should understand the financial implications of these options. How much will it cost to support that new development in coming years? Would the development bring more net revenue if designed differently? These are potentially multi-million dollar questions that no municipality can afford to ignore.

Smart Growth America, a national non-profit, and RCLCO, a national real estate advisory firm, have created a new model designed to help municipalities understand the financial performance of development patterns, and what strategies could generate better returns in the future. We look at a variety of public costs and revenues to help municipal leaders understand how a smart growth approach to development could help improve their bottom line.

About this model

Typical fiscal impact models are based on an “average cost” assumption. That is, they assume each new resident and/or employee associated with new development generates an increase in municipal operating costs equal to the average cost per resident and/or employee—regardless of the pattern or location of the new development.

The main innovation in this new model is that we identify specific governmental functions as sensitive to geographic dispersion, and we allow the cost per capita for these cost categories to vary based on the density of the development scenario. As in typical fiscal models, a cost is assigned to each new resident and employee associated with a given development scenario. The main cost categories that vary by density, and the conceptual methodology behind each, are described below. The relationship of density to other sources of costs and revenues, such as police or sales tax, could also be analyzed for cities able to provide detailed data for their jurisdiction.

Municipal costs

This model varies six categories of municipal costs based on development density. The cost per capita of these services tends to decline as density increases, although not necessarily in a linear fashion. For all cost categories that do not vary by density, the “average cost” approach is used. The end result is an estimate of the annualized costs at build-out of the given development scenario.

Roads

Through analysis of existing conditions in the metropolitan area, this model develops a formula for estimating the length and width of roads needed in the scenario based on the number of its residents, employees, and land area. Analyses in all cities so far have shown that the quantity of roads per capita declines as density increases following a similar pattern. Maintenance costs are assumed to be proportional to square footage of roads.

Water/Wastewater

Using a similar approach to that for roads, the length of water and wastewater pipes for the development is estimated. The annual cost of maintaining those pipes relative to the projected rate revenue generated by the development is then compared to the same metric for the whole jurisdiction. This approach accounts for the fact that, all else being equal, low-density developments will have more water and sewer pipes to maintain per capita, and therefore higher maintenance expenses.

Stormwater

The quantity of stormwater that must be addressed by pipes or other means is typically a function of the quantity of roads and impervious surface in the development. The formulas developed for estimating the quantity of roads needed are a useful basis for estimating this need.

Fire Protection

The annualized capital cost of a fire station and engines/ladders, as well as the operations and maintenance cost, are averaged over the population and employees within the response shed. The key variables are the density of the response shed (determined by the development scenario) and the size of the response shed, determined primarily by response times. As density increases, the population in the response shed increases, and the fire costs can be spread over more people, reducing the average cost per capita.

School Transportation

Most schools have a “walk zone,” within which students are expected to walk to school. All else being equal, if density increases, the number of students in the walk zone will increase and the need for buses decreases. This model estimates the number of students who would fall within and outside the walk zone of each school type based on the density of the development program. School transportation costs are based on the number of bus-eligible students outside the walk zone.

Solid Waste Collection

As density decreases, the distance between homes tends to increase. Trucks must travel farther between pickups, which not only burns more fuel, but also takes more time. Both factors have an implication on the costs of serving residents with solid waste pickup service.

Municipal revenues

Residential and commercial property values per square foot are often higher in walkable urban areas than in low-density areas. These value premiums come with associated increases in municipal tax revenue. With this model, the potential impact of these value premiums on tax revenue generation can be tested.

Net impact

Annual costs are subtracted from estimates of annual revenue generation potential at build-out to estimate the total annual net fiscal impact.

Taken as a whole, this model can help municipal leaders understand the fiscal performance of current and future development patterns, and what strategies could generate better returns in the future.

Smart Growth America and RCLCO are available to model this analysis for your city, county, or town.

We work with local staff to understand their goals and challenges, run custom analysis of development patterns, and suggest strategies that can help your city grow in ways that support long term fiscal health. We have already successfully worked with several cities, and samples of our work are available upon request. For more information contact Chris Zimmerman, Smart Growth America Vice President of Economic Development, at czimmerman@smartgrowthamerica.org, or Lee Sobel, RCLCO Director of Public Strategies Group, at lsobel@rclco.com.



Smart Growth America

Making Neighborhoods Great Together

Smart Growth America is the only national organization dedicated to researching, advocating for, and leading coalitions to bring better development to more communities nationwide. From providing more sidewalks to ensuring more homes are built near public transportation or that productive farms remain a part of our communities, smart growth helps make sure people across the nation can live in great neighborhoods. Learn more at smartgrowthamerica.org.

RCLCO

For over 45 years, **RCLCO** (Robert Charles Lesser & Co., LLC) has been the “first call” for real estate developers, financial institutions, public sector entities, private investors, anchor institutions, and Fortune 500 companies seeking strategic and tactical advice regarding property investment, planning, and development. As the largest independent real estate advisory firm in the nation—with experience in international markets—we provide end-to-end advisory and implementation solutions at an entity, portfolio, or project level. Learn more at www.rclco.com.