The term costs of community services (COCS), usually refers to a growing body of literature that focuses on how various types of land use affect local government taxation and spending. In general, this body of literature summarizes studies that use fiscal impact analysis to determine whether various forms of land use contribute to or detract from local government budgets.

During the period immediately following World War II, many communities sought to attract business, industrial, and residential growth for a number of reasons. Among these was that economic growth would raise the property tax base and generate increased revenues for local infrastructure, including schools, roads, and fire/police protection. During the 1980s, however, many skeptics began to question whether economic development in rural areas “paid its own way” in terms of local taxation. For example, when farmland, open space, and woodlands are converted to residential development, local tax revenues increase substantially because property values increase. But the local government and the school district are also required to provide added services to the new residents. Does the increased revenue cover the costs of the new services? That is the question the COCS studies set out to answer.

The COCS Ratio

It has become conventional in COCS studies to divide land use into three categories: residential, commercial/industrial, and farmland/open space. One of the most common procedures for analyzing fiscal impact is to calculate a COCS ratio for each land use category. The ratio compares how many dollars worth of local government services are demanded for each dollar collected. A ratio greater than 1.0 suggests that for every dollar of revenue collected from a given category of land, more than one dollar is spent.

Many of the early studies providing estimates of COCS ratios were either sponsored or conducted by the American Farmland Trust. But in recent years researchers from a variety of backgrounds have undertaken such studies. Regardless of who conducted the research, the results have been consistent. Virtually all of the studies show that the COCS ratio is substantially above 1 for residential land, demonstrating that residential land is a net drain on local government budgets. The average estimate ranges from about 1.15 to 1.50, which means that for every dollar collected in taxes and non-tax revenue, between $1.15 and $1.50 gets returned in the form of local government and school district services. On the other hand, the COCS ratios for the other two land use categories are both substantially below 1. For commercial/industrial, the ratio usually ranges from 0.35 to 0.65, indicating that for every dollar collected, the local government provides only about 35 to 65 cents worth of services. For agriculture and open space, the ratios are only slightly smaller, usually ranging from 0.30 to 0.50.

According to the COCS studies, the largest single expenditure category for communities is the public school system, accounting for 61.4 percent of spending. Since open space and commercial development in themselves do not place any burden on the schools, it should not be surprising that their ratios are lower than those for the residential category.

Several questions emerge from these results, including (1) are these studies reliable, and (2) why do the numbers vary?

The studies appear to be reliable because of the way in which taxes and service expenditures are calculated and imputed. The methods used in the studies have been laid out clearly, and the variation in the COCS ratios is relatively small. The studies are unanimous in showing that residential land use ratios are above 1 and that the other types of land uses are below 1. The primary reason that the ratios vary somewhat is that not all communities are identical. If many homes in a community are in an extremely high price range and occupied by “empty nesters,” for example, the COCS ratio should be expected to be relatively low. On the other hand, low- or middle-income property occupied by families with numerous children would produce a higher ratio. Some communities have gone beyond simply calculating a COCS ratio and have actually calculated the “break even” home value for
their community. Not surprisingly, these values tend to be substantially higher than the median (average) home value.

**Another Approach**

Other researchers have attempted to measure the costs of growth simply by measuring the statistical relationship between population growth rates and per capita local government spending. Most of these results have shown that in areas with very small growth rates (in the range of 1 to 2 percent per year), costs do not escalate rapidly. For communities with higher growth rates (above 3 percent per year), however, per capita spending begins to increase very dramatically.

The findings of the various types of studies on costs of services seem to support the conclusion that local public per capita spending increases when farmland and open space are converted to residential development.

**Criticisms of the COCS Literature**

Initially, critics of the COCS studies argued that it may be difficult to generalize from these studies. This criticism has lost some credibility, however, because many studies have been conducted in a wide range of communities nationally. The results seem to be unambiguous.

More recently, critics have developed the argument that looking only at the fiscal impacts on local governments and school districts is too limited in scope. They maintain that new residents do much more than simply pay taxes and demand services. Residents work, earn money, and spend much of it locally, thus contributing to the economic base of the community in a substantial way that is not captured in the COCS studies. The critics argue that future work should include these impacts.

But if COCS studies do not include these “multiplier” effects, it also must be said that they do not include non-economic costs to the community, such as loss of scenic landscape, increased traffic congestion, and other variables associated with quality of life.

Another argument against COCS studies is that they are based on a “cost theory of taxation” and do not consider how growth, even with increased taxation, increases the values of properties. The rival “benefit theory of taxation” states that as new taxes pay for better infrastructure such as roads and schools, property values (and thus the net worth of property owners) increase. Such considerations have not been measured within the context of COCS.

**Implications**

One of the most important implications of the COCS literature is that proponents of farmland and open space preservation now have an important economic argument on their side. Some proponents of economic development have argued that a system that allows land to go to the highest bidder provides the most efficient economic results. The COCS findings, however, indicate that residential development often brings costs to the community that are not fully borne by the new residents but are instead distributed throughout the community. Local leaders should be aware that efforts to “promote growth” in their communities will have substantial impacts on revenues and expenditures. They should be able to estimate these impacts when planning for the future.

Two conclusions emerge when reflecting on the COCS issue. The first is that residential development in any area invariably leads to increased per capita demand for publicly provided services, placing increased burdens on local infrastructure and public agencies. As a result, increases in local tax rates to fund additional services tend to follow growth. Second is that it is important for members of any community to ask themselves the broader question, “How do we manage growth in our community, along with all of the impacts (both positive and negative) that it brings?”

**References**


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