

APPENDIX E

HOUSING DEVELOPMENT AND FISCAL IMPACT

Many scholarly and practical studies¹ have supported the belief that there is a predictable linkage between residential development density and local property tax rates. Generally, agricultural and higher-density urban housing development tend to generate more revenue than they demand in public services, thus maintaining or lowering local tax rates. Conversely, suburban and semi-rural housing tend to cost more than they generate in revenues and, thus, increase local tax rates.

In addition, single-family houses on urban-sized lots in a location with services nearby tend to be less of a public financial burden than the same number of single-family houses on semi-rural (1- to 5-acre) lots.

These generalizations do not apply in every case and may be affected by the value of the development, the services delivered and the remaining capacity in a particular system.

Commercial or industrial development usually tend to generate a strong surplus for the city, county and school district. However, even this assumption was disputed by a study in DuPage County, Illinois.²

Not only are local property taxes affected, but state and regional costs are also higher for low-density sprawl as highway and sewer costs increase. Thus, the tax impact goes beyond the local community, raising the question of social fairness.

Private costs are likewise greater for low-density growth. A New Jersey study³ suggested that if 500,000 new residents arrive in that state in the next two decades, each house would cost \$12,000 to \$15,000 more because of sprawl development than it would if patterns were more compact.

Not all land use decisions can or should be on the basis of their fiscal impact. However, it may be wise to consider these implications and at least be willing to accept subsidizing certain patterns of settlement if the decision is so made.

RECENT RELATED STUDIES

The findings of several recent studies addressing land development and public financial impact are summarized below to support the preceding assertions.

Density-Related Public Costs
(American Farmland Trust, 1987)

- Over a wide range of densities (0.2 units per acre up to 4.5 units per acre), the ongoing public costs of new housing development will exceed the revenues from such development in Loudoun County, Virginia, where the study was conducted.
- Relatively low-density housing development (one- to five- or more acres per dwelling unit) generates higher public costs primarily because it requires inefficient expenditures for public school operating, instructional and transportation services, and also because it creates potentially higher public liabilities for road maintenance and future provision of public water and sewer services.
- Relatively high-density housing development (two- to five- or more dwelling units per acre) is almost certain to be located in areas served by or adjacent to existing public water and sewer systems.
- Very-low-density housing subdivisions, usually located in rural areas, remove relatively large amounts of land from farming while requiring public services (education, health and welfare, public safety, etc.) which are similar on a per-dwelling or per-capita basis to those required by high-density subdivisions that convert far less land from existing agricultural or other economic uses.
- Specific estimates of annual public costs and public revenues were made for each major fiscal category and for each community type. The four major types of public costs were found to vary significantly (and inversely) with the density of housing:

<u>Types of Public Cost</u>	<u>Cost Ratio</u>	
	<u>Rural</u> <u>Sprawl</u>	<u>High</u> <u>Density</u>
School operating and instruction	1.35	: 1
School transportation	5.59	: 1
Road maintenance and construction	4.30	: 1
Water and sewer services	2.95	: 1

- For every dollar in tax revenue received by Loudoun County, \$1.28 in services are demanded by residential land uses.
- For every dollar in tax revenue received by Loudoun County, \$0.11 in services are demanded by open farmland.

Development in Wright County: The Revenue/Cost Relationship
(Gray and Dann, Resource Management Consultants, Inc., 1989)

Three residential development scenarios were chosen for the study:

City of Buffalo: Fifty units of rental apartments, condominiums and single-family houses averaging just under **ten units per acre**

Otsego Township: Fifty units of single-family, two-, three- and four-bedroom houses, each on **one-acre lots**

Silver Creek Township: Fifty units of two- three- and four-bedroom houses, each on **7.5-acre lots**.

- The average per-unit revenue/cost deficit for Otsego Township would be \$485 per dwelling unit; for Silver Creek Township, \$499.
- The average per-unit revenue/cost deficit for the project in Buffalo would be \$114.
- The differences would be even higher in a few years, as the two townships face costs for improved sewage treatment, water, schools and roads. Buffalo's infrastructure would be adequate for the next decade.
- It is fiscally sound to concentrate growth around areas with existing infrastructure and to discourage growth on large lots in farming areas.
- This study was conducted in Minnesota, where the State pays a substantial portion of the per-pupil cost of education. Were it not for these State contributions to the local school district, the cost differences between the rural and the urban development scenarios would be greater.

Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan
(Rutgers University, 1992)

By containing population and jobs in already developed areas and by creating or expanding urban centers in newly developing areas, the State Plan (compared to the current trend) would offer an annual \$112 million fiscal advantage to cities and a \$400 million annual advantage to school districts. These advantages would occur under the State Plan because of government's ability to draw on usable excess operating capacity in already developed areas as well as efficiencies of service delivery. However, an estimated \$350 million would be foregone in land sales to developers.

Does Farmland Protection Pay?
(American Farmland Trust, 1992)

The American Farmland Trust published a study that concluded that farmland more than pays its own way in property taxes. The final report was a summary of three cost of community services (CCS) in Agawam, Deerfield and Gill, Massachusetts. The studies provided evidence that, while private farm and open lands do not generate as much gross income as do developed lands, their need for public services is so minimal that their net effect on the tax base is a surplus.

Consistent with other research, this report also discovered in the three locations that housing development cost more than it brought in.

1. American Farmland Trust, 1986. *Density-Related Public Costs*. Washington, D.C.

Downing, Paul B. and Richard D. Gustely, 1977. "The Public Service Costs of Alternative Development Patterns: A Review of the Evidence." In *Local Service Pricing Policies and Their Effect on Urban Spatial Structure*, edited by Paul B. Downing, Vancouver, University of British Columbia.

DuPage County Regional Planning Commission, 1992. *Impacts of Development on DuPage County Property Taxes*. Wheaton, Illinois.

Frank, James E., 1989. *The Costs of Alternative Development Patterns: A Review of the Literature*. The Urban Land Institute. Washington, D.C.

Hinds, David G., "The Cost of Growth: Who Pays?" Paper presented at the 16th Regional Planning Conference of the Southeastern Wisconsin Regional Planning Commission, 1992.

"Is Land Conservation Bad for the Tax Base?" *Landlines*, September 1993.

Kasowski, Kevin, "The Costs of Sprawl Revisited," *Developments*, Vol. 3, No. 2, September 1992.

Rutgers University, *Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan*, 1992.

Isard, Walter and Robert E. Coughlin, 1957. *Municipal Costs and Revenues Resulting from Growth*. Wellesly, Mass.: Chandler-Davis.

Real Estate Research Corporation, 1974. *The Costs of Sprawl: Detailed Cost Analysis*. Washington, D.C., U.S. Government Printing Office.

Resource Management Consultant, 1989. *Development in Wright County: The Revenue/Cost Relationship*. Rockford, Minnesota.

Stone, P.A., 1973. *The Structure, Size and Costs of Urban Settlements*. Cambridge, England: Cambridge University Press.

- Urban Land Institute, 1958. "Effects of Large Lot Sizes on Residential Development." Technical Bulletin No. 32. Washington, D.C.
2. DuPage County Regional Planning Commission, *Impacts of Development on DuPage County Property Taxes*, Wheaton, Illinois, 1991.
 3. Rutgers University, "Impact Assessment of the New Jersey Interim State Development and Redevelopment Plan," February 1992.