

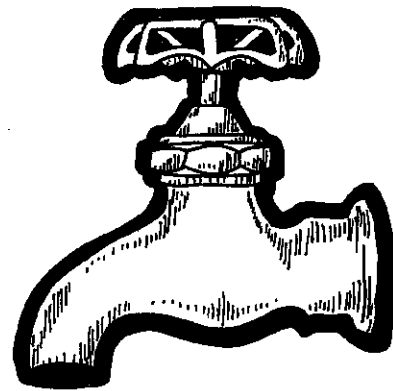
Coping with Growth

Minimizing Public Costs of Residential Growth

Bruce Weber,
Extension Economist, and
Richard Beck, Extension Community
Resource Development Agent,
Oregon State University

Rapid residential growth in rural areas or on the fringes of urban areas often creates problems for local governments. The additional revenues associated with development may not cover additional costs that governments incur to provide services to the new residents.

The fact that a residential development often does not pay its own way has led more than one community to ask whether any growth is desirable. However, most communities do not have the ability or desire to stop residential development. Instead they raise the question, "How can we minimize public costs of new residential developments?" The purpose of this publication is to provide an introduction to what local governments can do to minimize public costs associated with residential development—and the possible effects of local government policies on the community.

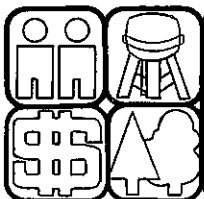


What effect does population growth have on the revenues and the costs of local governments? In some states, revenues are apportioned from liquor sales and cigarette and gasoline taxes to cities and counties on the basis of population estimates and motor vehicle registrations. When population and vehicle increases are recorded, such apportionments to cities and counties increase. State aid to school districts is usually based largely upon the number of students in the district. This source of revenue increases with population growth. User fees and hookup charge revenues for water and sewer service also increase with new residential development.

Depending on a state's tax laws, property taxes may or may not increase with new residential development. Because it generates new taxable assessed valuation, new residential development gives cities, counties and

WREP 17

March 1979



WRDC

Western Rural Development Center
Oregon State University
Corvallis, OR 97331
(503-754-3621)

A regional center for applied social science and community development
cooperating with Land Grant Universities in:
Alaska, Arizona, California, Colorado, Guam, Hawaii, Idaho, Montana,
Nevada, New Mexico, Oregon, Utah, Washington, Wyoming

school districts the potential to increase property tax revenues without increasing tax rate. Tax limitations, however, may prevent a government from increasing its tax levy or tax rate so as to increase tax revenues.

Local government costs also increase with population. Cities need to provide more water and sewer service, street maintenance, and police and fire protection. Counties may need to increase their law enforcement and health services as population grows. School districts may be required to hire more teachers and build new classrooms to accommodate an increased number of students.

Whether the revenues cover the additional expenditures for such services depends on a number of factors. Local governments can control some of these factors, thereby influencing the public costs of residential development.

Factors

There are seven factors which determine whether new homes and subdivisions generate more revenues than expenditures. Local governments can substantially influence four of these seven factors in order to reduce the public costs of residential growth.

The less controllable factors include:

- number of children in new homes
- assessed value of new homes
- excess capacity in public facilities.

Among the more controllable factors are:

- type and level of public services
- location, density, and design of residential developments
- subdivider-installed improvements
- connection and systems development charges.

Less controllable factors

Two factors affecting the local government expenditure/revenue balance, particularly in school districts, are the *number of children* in the new housing units and the



assessed value of the new homes. Because of the way school districts are financed in Oregon, for instance, only very expensive houses or dwelling units with no room for children can "pay their own way" in school district costs. Since school districts account for well over half of local government costs, these two factors are very important in the overall expenditure/revenue

balance. In a study of five residential developments in several small Oregon cities, the only development which paid its own way in local government costs was a 16-unit apartment complex with no children.¹

A third factor influencing the expenditure/revenue balance is the *capacity of existing facilities*. This factor is especially important in cities and school districts. If existing schools, for example, are crowded, an influx of population may require investments in new classrooms. If, on the other hand, there is unused classroom space, a similar increase in population would not require these investments.

More controllable factors

With growth there is often pressure to increase the *types and levels of services*. For example, residents may request more police patrol or longer hours of service at the public library. One way governments can reduce average costs in the face of residential growth is simply by making existing services stretch to serve the new residents instead of adding new services. Local governments can, however, maintain the same services at existing levels and yet reduce public costs by keeping other controllable factors in mind when developing growth-related policies.

Location, density, and site design of residential developments: The location of a subdivision has a direct effect on the cost of installing facilities and providing services. A city which permits a subdivision to leapfrog over a large undeveloped area may have to connect the new development to the city at great expense. As illustrated in Figure 1, proposed Subdivision A would

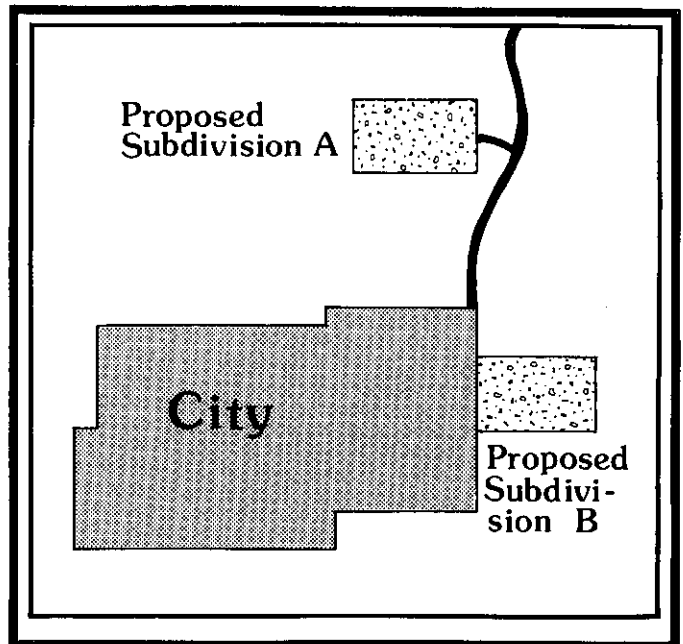


Figure 1. The cost of installing facilities and providing services depends on subdivision location. A (noncontiguous) would result in higher costs than B (contiguous)

¹ Pattie, Preston S., *Impacts of Urban Growth on Local Government Costs and Revenues*, Special Report 423, Oregon State University Extension Service, Corvallis, Oregon, November 1974.

require a considerable length of sewer and water pipe across vacant land and consequently would result in higher costs than Subdivision B.

Figures 2 and 3 show that density and site design can also significantly affect the number of miles of road and pipe required to serve a development—and hence affect development costs.

Almost every study on the subject concludes that sprawl (noncontiguous, low-density development) results in higher public costs than compact development contiguous to developed areas. Whether this is true in any particular instance depends in part on the topography and soil characteristics of alternative sites and on the existing pattern of development relative to the public service network. For example, it would depend on whether new development at a particular location could utilize existing excess capacity in streets and sewers, or whether old streets and sewers would have to be rebuilt to accommodate a new development.

Whether sprawl results in higher public costs also depends on subdivision improvements made by the developer and payments to the government by the developer.

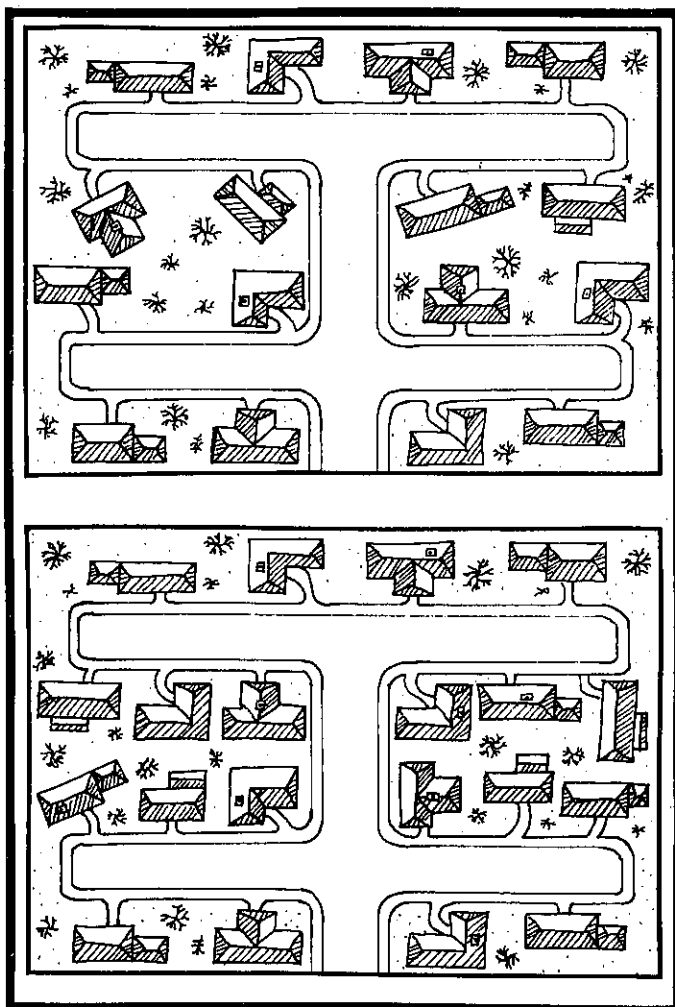


Figure 2. High-density development generally involves lower costs per unit for installing public facilities.

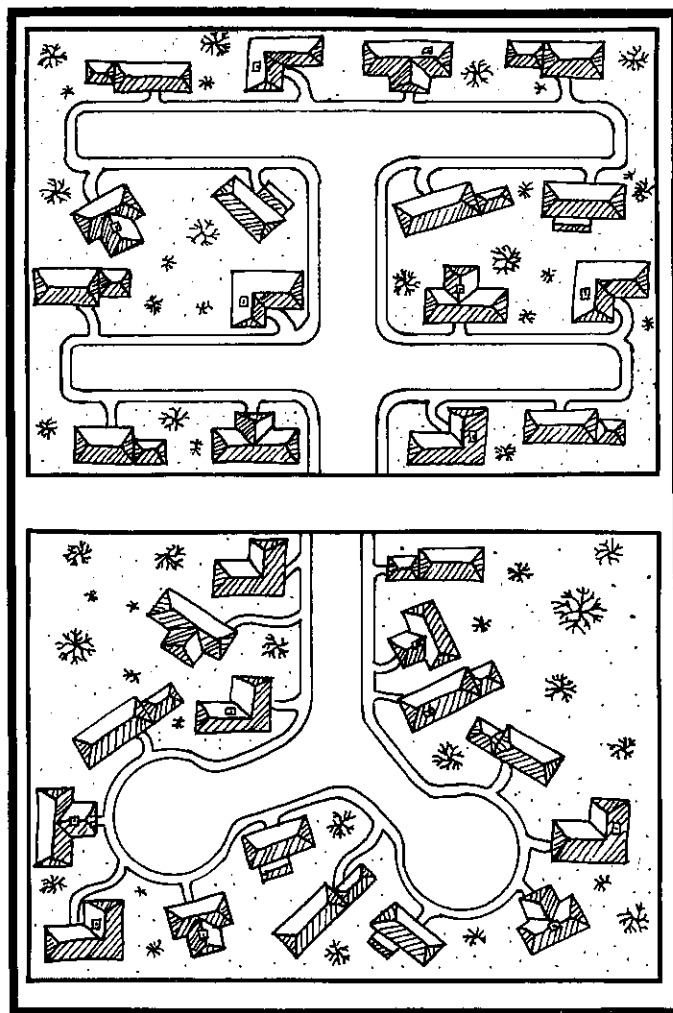
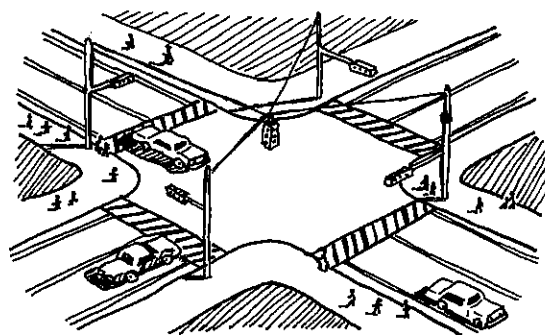


Figure 3. Some site designs require lower public facility investments than others.

Subdivider-installed improvements: The extent to which a subdivider or developer installs improvements for streets, sewers, water, curbs, etc. affects the public costs of development. If the subdivider makes these improvements and passes the costs on to new homebuyers, the costs of installing these urban improvements are borne by the new property owner—not current residents in the jurisdiction.

Development-related payments: The level of payments made by developers and new homeowners to offset development-related public costs also directly affects public costs. The higher the charges, the lower the public costs.



Policies

Policies affecting location, density, and design

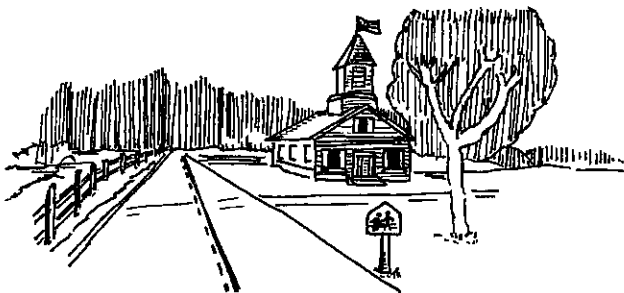
Communities can reduce public costs of residential development through municipal and county ordinances and planning.

The location of residential development in a community is influenced by local governments in several important ways—including comprehensive planning, zoning, capital improvement programming, and urban growth boundaries.

A *comprehensive plan* is a document which identifies long range community goals and establishes policies for achieving these goals. Usually consisting of a map and accompanying text, the plan indicates the general types of uses considered appropriate for each area. It is the controlling land use planning instrument for a community.

Zoning is the most common implementation technique for the comprehensive plan. Under zoning, local governments designate zones on a map and indicate the specific use and standards to be allowed in each zone. A text which accompanies the zoning map indicates restrictions on development within each zone.

A *capital improvement program* is another technique local governments can use to influence development location through placement of public facilities (roads, sewer and water mains, and schools). In a capital improvement program, a community usually projects its capital needs for 3-5 years, associated costs, and proposed financing of the improvements; it may also identify a proposed location of facilities. The impact of a capital improvement program on residential location is indirect—primarily through its effect on the costs of developing a parcel of land. Other things being equal, land adjacent to a road and water and sewer main is less costly to develop than similar land located farther from such facilities, and therefore is more likely to be developed.



The siting of new schools by school districts can also influence development patterns. The placement of schools makes adjacent land more desirable for residential development and can affect the location of future development.

Urban service boundaries are established by some local governments who recognize the importance of public facilities in determining development location. These boundaries define areas where urban services

such as domestic water, sanitary sewer, and city streets are either presently available or planned for the future.

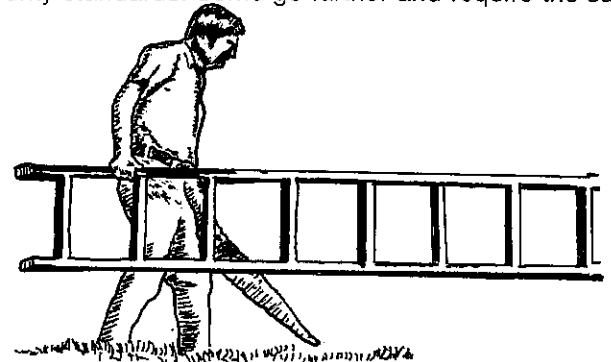
An *urban growth boundary*, which identifies land regarded as "urbanizable" within a 15-20 year horizon, is another technique for influencing the location of urban development. Urban growth boundaries are to include land able to be served by urban services, suitable for urban development, and needed for urban growth.

The density of development (the number of dwelling units per acre of land) in any given location is usually controlled by local governments through the land use plan and zoning ordinances. The zoning text will generally indicate a minimum lot size for each zone or each type of housing in a residential zone.

Site design review standards, while not common practice, have been established by some communities concerned with the spatial arrangement of buildings, open space, and other site characteristics. Other communities have built incentives into their ordinances, encouraging site designs which more closely conform to community goals.

Subdivision improvement requirements

Many local governments require a developer to put in paved streets, curbs, and sidewalks that meet city or county standards. Some go farther and require the sub-



divider to install water lines, sanitary and storm sewers, underground utilities, street lights, and signs. If the facilities must be oversized to accommodate future growth, developers are often required to pay the share of these improvements needed by the subdivision. In these situations, the improvement costs are generally passed on directly to the homebuyer. If the subdivider does not put in improvements, a local government may have to do so at a later date, and these costs may be borne by all taxpayers rather than the users exclusively. Once public improvements are turned over to a local government, maintenance is provided by the government and not directly by the homeowner.

Subdivision improvement requirements are usually integrated into a jurisdiction's subdivision regulations. As they represent policy, they are adopted through an ordinance process.

Systems development and connection charges

The location, design, and density of a subdivision determine how many miles of sewer and water pipe are laid and serviced, and how many miles of road must

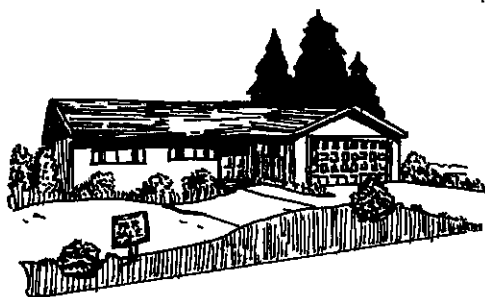
be built and patrolled. The subdivision improvement requirements determine how much of this road and pipe must be put in by local government. How much of the cost of public investments is borne by the community at large depends on how much new residents must pay for hook-up to the system. Most municipalities require connection charges for sewer and water to cover the publicly-provided capital outlay. When charges do not cover the cost of the public investment, the entire community shares the remaining costs.

For a number of years, cities have collected a one-time connection charge for hooking up new construction to city water and sewer systems. This charge is usually set at a level which approximates the cost of inspecting and installing the connection, and is intended to offset these costs. Systems development charges have more recently replaced connection charges in a number of cities at levels above city costs for inspection and installation. These revenues are intended for general water, sewer, and other system development or expansion, rather than for facilities specifically serving the new construction. Revenues are often segregated in special funds to be used only for such purposes.

Some cities also impose a systems charge for parks and recreation facilities. Its purpose is to finance the acquisition, development, and expansion of recreational spaces and facilities. In lieu of fees, developers may dedicate open space, provided this space can be used for recreational purposes consistent with the park and recreation elements of the city comprehensive plan.

Effects on housing costs

The policy decisions of local government which reduce public costs of residential development directly and indirectly increase private housing costs. Connection charges and subdivision improvement requirements directly increase the costs of new housing. Furthermore, increased charges and the value of new required im-



provements may be capitalized into the value of existing homes, which has the effect of generally raising housing costs in a community. The result may be the pricing of some lower income families out of the opportunity for home ownership.

A study by the Bureau of Governmental Research and Service at the University of Oregon examined the effect of systems charges on housing costs.² The aver-

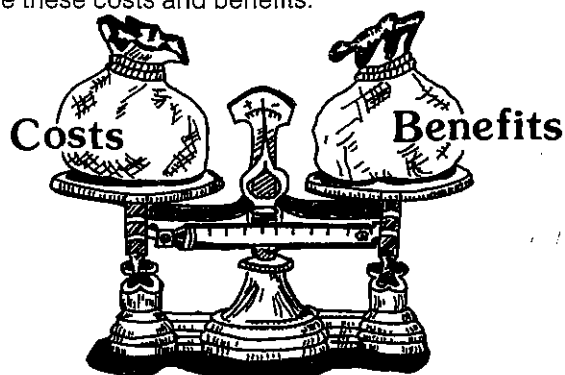
² Bureau of Governmental Research and Service, *The Impact of Systems Charges*, Eugene, Oregon, December 1976.

age systems charge (systems development charge plus connection charge) for the ten Oregon cities examined was \$940. This charge would raise the cost of an average (\$39,500) house by 2.4 percent, assuming this charge is passed on to the homebuyer.

The imposition of urban service boundaries and other land use control techniques may also restrict the supply of land. To the extent that such policies restrict the supply of residential land, they would tend to drive up land and housing prices in the community.

Conclusion

Residential growth brings with it both costs and benefits. Local government efforts to minimize public costs of residential growth also have some positive and negative effects. In making choices about residential growth and local policies to influence growth, communities must balance these costs and benefits.



Each community is unique, of course. The impacts of growth will differ from community to community. Accordingly, the policy alternatives described above may not be appropriate in any particular instance. However, by adopting policies which address the various factors identified above, communities may be able to keep the public costs of residential growth to a minimum.

The authors appreciate the review and comments of: Ron Canham, University of Arizona; Judith Cichowicz, Executive Department, State of Oregon; Ronald Faas, Washington State University; Frederick Obermiller, James Pease, Oregon State University; Neil Rimbey, University of Idaho; Gregory Tillson, Oregon State University.

This publication is part of the "Coping with Growth" series produced by the Western Rural Development Center. Other titles in the series include:

- Evaluating Fiscal Impact Studies: Community Guidelines
- Coping with Rapid Growth: A Community Perspective
- Citizen Involvement Strategies in Community Growth Issues
- Agency Coordination and Rapid Community Growth
- The Public Policy Process: Its Role in Community Growth
- Economic Multipliers: Can a Rural Community Use Them?
- Incoming Population: Where Will the People Live?
- Social and Cultural Impact Assessment
- Assessing Fiscal Impact of Rural Growth
- Growth Impacts on Public Service Expenditures
- Programming Capital Improvements
- Rapid Growth: Impacts on County Governments

Copies may be obtained from the Extension Service at cooperating institutions or from the Western Rural Development Center in Corvallis, Oregon.



A Western Regional Extension Publication

Issued in furtherance of Cooperative Extension work, Acts of May 8- and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Henry Wadsworth, director, Oregon State University Extension Service. Other western states Extension directors include James W. Matthews, University of Alaska; Darrel Metcalfe, University of Arizona; J. B. Kendrick, Jr., University of California; Lowell H. Watts, Colorado State University; William R. Furtick, University of Hawaii; James L. Graves, University of Idaho; Carl J. Hoffman, Montana State University; Dale W. Bohmont, University of Nevada; L. S. Pope, New Mexico State University; Clark Ballard, Utah State University; J. O. Young, Washington State University; and Harold J. Tuma, University of Wyoming. The University of Guam Extension Service, Wilfred P. Leon Guerrero, director, also participates. Extension invites participation in its programs and offers them to all people without discrimination.