

Coping with Growth

Growth Impacts on Public Service Expenditures: some questions for the community

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Many areas of the West are currently experiencing rapid population increases. One of the most intriguing questions facing residents and community leaders in growth areas is, *What are the impacts of these population changes on our community services?*

Answers to this question will vary considerably with the type of development that is inducing the change, topography of the area, and service quality demands of the residents. Therefore, it is difficult to make one blanket statement to explain the impacts on services in all cases. It is possible, however, to list certain key variables which should be analyzed in all growth situations in order to determine the impacts of growth on basic public services.

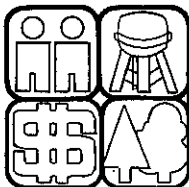
Public services are defined as the basic community/regional services which are provided to residents through tax receipts and service charges. These would include such services as education, fire and police protection, roads and streets, health care, sewage collection and treatment, water, and solid waste collection and disposal.

Each of these service groups has key variables that will indicate the effects of population changes on the service costs. This publication identifies variables for each service group, and presents them in the form of questions that communities should find useful in their decisionmaking process.

Public Services: key variables

The number of new people coming into the community or area is the most obvious factor affecting all service groups. This is usually not a figure that can be pinpointed exactly, but rather must be estimated by looking at other factors. For example, will the development bring in a large construction work force for several years, and then rely on a smaller operating force? Will the normal population growth of the community be adequate to offset the effect of the construction force leaving? Will population be permanent or transient? Will temporary facilities (classrooms, waste disposal units, etc.) be used if the long-term population trend is not expected to maintain the construction-phase population level? Will it be composed primarily of older or younger people? Will further population increases result from the original increase (secondary population effects in the service sector)?

Location of the new population is also a very important consideration in the provision of public services. Will the population be housed within the existing community boundaries, or is new development planned



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on the outskirts, or will it be dispersed over a larger area? Generally, as development spreads out and leapfrogs over under-developed parcels, community services become much more expensive to provide. The following analysis of key variables for each service group will point out more considerations concerning community services under growth conditions.

Education

In addition to population, a number of other variables should be considered when analyzing the impact of growth on education:

..... How many new students will be added to the local school system? This will be determined by the population composition of the new residents.

..... What is the capacity of existing school buildings? Will capital expenditures for new buildings be needed in order to serve the new students? If so, when?

..... How will present teaching, administrative, and support staffs be affected? Will new teachers need to be hired? Administrators?

..... What will be the effect on school transportation? Will more buses be needed? What will happen to transportation costs? Who pays transportation costs?

..... Will any new services be needed to serve the students (e.g. special programs for the handicapped, job-training programs, sports, and other activities not presently provided)? What are the costs of providing these new services?

Fire and police protection

..... What is the estimated number of new households in the fire service area?

..... Is the new development in an existing fire district?

..... What is the location of the new households, and how will their location affect the response time of the fire department?

..... Will any new capital expenditures be necessary to provide fire protection for the added population? Will more pumper trucks, communication systems, or other fire stations have to be purchased or built? If so, what is the expected cost of these capital expenditures, and when will they be needed?

..... What will be the effect on fire personnel? Will new firemen need to be hired?

..... Will more volunteers be needed? Will the population growth necessitate a switch from a volunteer department to a paid department? How much would personnel costs rise?

..... How will operating and maintenance costs of the equipment and buildings be affected?

..... Will there be added expenditures for training and uniforms for the fire personnel?

..... What will happen to the community's fire rating?

..... What is the estimated number of new people to be served by the police and sheriff's department? Where will they be located, and in whose (police or sheriff) primary area of jurisdiction?

..... Will the new residents be a higher crime-risk group than existing residents?

..... How many new officers and other staff will need to be hired? What is the capacity of the jail/office complex and will the necessary standards of construction and confinement be met?

..... If a new jail/office is needed, what will be the cost?

..... What will be the costs of a communication system, new autos, uniforms, and other equipment?

..... Will the new population create any law enforcement problems that would require special personnel? An example of this would be influx of a younger or transient population, which would require specially trained officers for drug violations, counseling, or bad check investigations.

Roads and streets

Population and location will determine the traffic flows, which will in turn determine needs for construction of new roads, alterations on existing roads, equipment needs, and personnel needs:

..... How many miles of new roads will need to be constructed? What will the cost be? Who will pay for extensions of roads and future maintenance of roads?

..... What will be the effect of the expansion on maintenance costs?

..... Will capital expenditures be needed for new equipment, buildings, materials, and land? If so, how much?

..... Will any special problems arise from the influx of population? Traffic lights and new arterials to reroute traffic are examples requiring special consideration. Will there be added costs of construction and maintenance to existing streets because of heavier traffic? Will there be higher expenditures for snow removal, street cleaning, and other special programs? Will large truck traffic (e.g. mining operation) create a need for larger maintenance and construction expenditures? Will the usable life of roads be affected by the increased traffic? Will minimum construction standards need to be increased, thus increasing cost?

Health care

The number of new residents and the composition of the population must again be considered for this service group:

..... Is the new population dominated by younger or older people? Will the new population have a higher incidence of illness or need for hospitalization? If a new industry has induced the growth, is it an industry with high risk of injury? Will the number of persons of child-bearing age increase?

..... What is the present ratio of population to hospital/clinic bed? What is the ratio of population to physician or other provider of health care? Will these ratios change with the population growth?

..... If new providers are needed, can the community attract them? Can the community support them?

..... If more beds will be needed or other hospital/clinic expansion is necessary, what will it cost and can the community support it?

..... Will ambulance services be affected by the population growth? Are additional vehicles needed? What will be the cost to the community? How will the community growth affect ambulance response time?

Sewage collection and treatment

The population variable in this instance should be converted to estimated number of new households:

..... What is the estimated number of new sewage connections?

..... Where will the new connections be located? This is a very important variable when considering the cost of a sewage system. A noncontiguous development will have much higher costs than a development within the existing community. This is primarily because of the cost of laying sewage lines to an outlying area.

..... Will existing sewage lines serve the new population? If not, what expansion is necessary, and at what cost? Also, who pays the cost of extending sewage lines—the new residents, the developer, the existing residents, or some form of cost-sharing?

..... What is the capacity of the existing treatment facility? Will it be able to handle the increased use without major capital expenditures for expansion? If not, what will be necessary (modifications, expansion) for the plant to serve the new population, and how much will it cost? Should alterations be made for expected future population increases? Who will pay for the modifications to the plant?

..... What is the current hook-up charge for sewage services? Do new users pay the cost of acquiring the service and future expansion?

..... Can the community set up a systems development fund for future expansion?

Water

..... How many new households are expected, and where will they be located?

..... Is expansion of existing water lines necessary? If so, how far, what will it cost, and who will pay?

..... What is the capacity of the water system? Will capital expenditures be needed to drill new wells or to construct storage tanks? If so, what will the costs be of these new ventures?

..... What is the ultimate capacity of the water system?

..... What are the current hook-up fees, and do they pay for line extensions as well as operation of wells and lines?

..... Who will pay for water system expansion?

Solid waste collection and disposal

Again, the added population and location of new residents is important in this service area:

..... What is the capacity of the existing collection and disposal system?

..... How much additional refuse will be generated by the new population?

..... Will there be any capital expenditures necessary for equipment such as trucks or tractors, or for land? If so, what will the cost be?

..... Will the new population or development present any unique waste disposal problems for the community? Examples of this would include nuclear wastes, pesticide containers, and manufacturing wastes. Will the disposal facility have to be altered to handle these situations? If so, what will be the added costs?

..... How will personnel and transportation costs be affected?

..... Will the new population be served by the existing pick-up system—or must personal hauling be initiated?

..... Would recycling help pay for the solid waste system?

..... Should alternative methods of disposal such as incineration be considered?

Sources of information

Where can you find information on the key variables associated with community growth? There are many possible sources within your community: county, city, or district offices should be able to provide information on existing costs, capacities of systems, numbers of employees, and so on. City/county engineers and sanitation officers should be able to provide technical information on capacities of systems, feasible locations for expanding facilities, etc. City planners can also provide helpful information concerning many of the variables listed in this publication. If new businesses are moving into an area, they may be able to provide information on expected number and types of employees and expected wage rates. State or federal census figures will provide information on family sizes and age breakdowns of the population at the last census date. State universities, the Extension Service, and other state agencies should be able to provide technical assistance on many of the questions that growing communities face.

This publication has attempted to present some of the variables and questions to consider when analyzing the impacts of growth on public service costs. You may find that some of these issues do not apply to your community—and that others have been omitted. Decisions concerning the provision of public services can and should be made by the local population. These decisions will have impacts on the future of the area; therefore, careful analysis of all important variables must be included in the decisionmaking process.

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
- Minimizing Public Costs of Residential Growth
- Coping with Rapid Growth: A Community Perspective
- Citizen Involvement Strategies in Community Growth Issues
- Interagency 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
- Programming Capital Improvements
- Rapid Growth: Impacts on County Governments

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