Coping with Growth

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

Neil R. Rimbey, Extension Rural Development Specialist, University of Idaho

The Center for Rural Assistance
Cooperative Extension
138 Aylesworth NW
Colorado State University
Fort Collins CO 80523
(303) 491-5579 or 491-6421

WREP 26 October 1979

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
on the outskirts, or will it be dispersed over a larger area? Generally, as development spreads out and sprawls across the community, each new community service will become much more expensive to provide. The following analysis of key variables for each service group provides reasonable ways to consider 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? The expansion considerations concern 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? Administration?

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

Will any new services be needed to serve the students [e.g., special programs for the handicapped, job training, courses for workers, 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 protection area?

What 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 protection system?

Will any new capital expenditures be necessary to provide fire protection for the added population? Will more pumper trucks, communication systems, or other fire station capacities be added 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 an additional police department or a new police department? How much would it cost to provide this service?

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 or sheriff's department? Where will they be located, and in whose (police or sheriff) primary area of jurisdiction?

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 personal service capabilities.

How many miles of new roads will need to be constructed? What will be the cost? 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, and land? If so, how much?

Will any special problems arise from the influx of population? Traffic lights and new arterials to reroute probe 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 traffic volumes affect traffic police costs?

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 group is entering, will there be an industry that has 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?

Will the new residents be higher or lower risk than existing residents?

Are there any new health care needs other than the basic needs of the population?

Will the new population or development present the unique waste disposal problems for the community? For example, in this waste-oriented community there may be hazardous waste problems concerning the disposal of manufactured wastes. Will the disposal facility have to be altered to handle these situations? How will it be done? Will it be added costs?

How will personnel and transportation costs be affected?

Will the new population be served by the existing pick-up system—or will a new system have to 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 the community, the county, or district offices should be able to provide information on existing costs, capacities of systems, numbers of employees, and the like. Public utilities and sanitation officers should be able to provide technical information on potential costs. Information on locations for expanding facilities, etc. City planners can also provide helpful information concerning many of the variables listed. In the case of new moves, as companies are moving into an area, they may be able to provide information on expected number and types of employees and the wages paid. State or federal agencies and organizations 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 services 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 decision-making process.
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.