Extension Program Suggestions
for the Ohio Economic Growth
Impact Model

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EXTENSION PROGRAM SUGGESTIONS FOR THE OHIO
ECONOMIC GROWTH IMPACT MODEL

Economic decision models derive their value from helping decision-makers evaluate alternative choices. The traditional role of the Cooperative Extension Service has been to extend to local audiences the research results developed at Land Grant Universities. Whether this can be achieved with community economic issues is still being tested. This paper outlines some extension program suggestions for using the Ohio Economic Growth Impact Model.

The suggestions outlined are based on the experience of the author and colleagues working on these types of models. Work in this area, however, is in its infancy and well developed extension programs do not yet exist. An extension program using a technical model needs a good dialogue between researchers and extension workers. This paper is a step toward this dialogue.

The first section of this paper describes objectives of extension programs which include a use of the growth impact model. The second section suggests delivery approaches for achieving these objectives. The third section describes several suggested roles for county agents, area agents, state specialists, and research personnel.

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1/ The technical aspects of the model and descriptions of the types of local community policies which can be studied are covered in other papers. (Morse and Gerard, 1980 and Morse, 1980).
I. Objectives of Extension Programs

There should not be extension programs on the growth impact model per se. Rather, the focus of the program should be on community growth policies which can be used to encourage growth; or in areas of experiencing rapid growth, the program should be on community growth management policies. For example, a program on community growth policies ought to be providing information on the tax abatement program, financing alternatives, industrial parks, industrial development teams, or annexation. Then the growth impact model can be used as one aspect of this overall program. Some of the specific objectives for using the impact model are the following:

1. To describe the probable range of impacts on local units of government of the proposed development policy;

2. To assist local decision makers in understanding relationships between growth and local public finance impacts;

3. To assist communities in evaluating the impact studies done by consultants or special interest groups; and

4. To provide an identifiable service or product to local communities.

Objective 1: Providing Answers

One objective is to answer questions about the impacts of local growth policies such as tax abatements, investments in industrial sites and parks, annexation, and promotional campaigns. Extension workers frequently say that you must "start where the people are." Most local groups want answers and not more questions. So, an initial objective of
extension work with an impact model is to provide some answers to questions about the net fiscal impacts of various local policies.

Objective 2: Understanding Public Finance Impacts

Traditionally it has been assumed that growth benefited local governments and local taxpayers. While this is frequently true, research has found many exceptions. New state laws on property taxes and state aids are changing the traditional public finance relationships.

The impact model can be used to illustrate these relationships to a local group using local data.

Objective 3: Evaluating Impact Studies

In areas with large-scale projects or with rapid growth, impact studies may be required by local government. In many cases these studies are done by private developers or outside consultants. The Ohio economic growth impact model provides a tool for raising questions which local leaders should consider when evaluating the work done by private consultants.

Objective 4: Providing a Service

One of the important roles which extension can play on any community problem is that of putting community leaders in touch with the appropriate agencies or resource people. However, there are frequently problems with this role. First, clientele sometimes do not understand the time required to do this role well, leading to weak support for extension programs. Second, many of the resource people in economic development have special perspectives. The job performance of some development agencies is measured in terms of the number of new firms
which they attract to the state or area. This can lead to biases in the discussion of programs such as tax abatements or community-owned industrial parks.

Each of these agencies provide a clearly identifiable service to local communities. Some have contacts with new firms; others have engineering services available; and others have available funds. All of them also have educational programs to offer, many of which are similar to those offered by Cooperative Extension Service.

The impact model provides Extension with an identifiable service or product for local communities. Currently, no other Ohio agency has this capability or can provide information on both the benefits and costs of local growth policies. However, information and services on nearly every aspect of economic development can be provided best by agencies other than the Cooperative Extension Service.

II. Suggested Extension Programs

The activities outlined below attempt to work a group from objective one through to objective three. It is assumed that most groups are more interested in knowing what the impacts of policies that they are considering will be than either learning about public finance relationships or learning how to evaluate impact studies. In fact, all three of these objectives are complimentary and a local group cannot fully understand the impacts without a better understanding gained in objective two and three. However, it is necessary to "start where the people are."

Prior to conducting case studies, local officials or firms must be aware of the issues and the model. First, elements of an awareness program are presented. Then, three types of case studies are described.
**Awareness - Community Growth Policies**

What can local government do to encourage economic development? What are the benefits and costs of these programs? Who receives the benefits? Who pays the costs? These are the questions which should be emphasized in an awareness program.

**Slide-Tape Set**

A slide set entitled "The Benefits and Costs of Rural Growth" describes these issues and how the Ohio economic growth impact model can be used to answer them. The slide set, 12 minutes long, is aimed at local government officials, service clubs, and general lay audiences.

**Regional Workshops on Community Growth Policies**

The focus of these workshops should be much broader than the growth impact model. They might focus on the use of tax abatements and other inducements to attract firms and include speakers from other agencies. Naturally, a short segment should be included on the benefits and costs of the use of these policies; i.e., the impact model.

These workshops could be a general awareness program for local public officials or an in-depth day-long seminar for regional planners wishing to become intimately familiar with each of these.

**Newsletters and Publications**

A number of publications on the impacts of growth are listed in Appendix A. Newsletters provide a low cost means of disseminating this information while testing the degree of interest in specific aspects.

**Case Studies**

Case studies are useful teaching tools for two reasons: (1) the case study catches attention due to the local data and (2) the case
study can handle the unique circumstances frequently found in community development issues. Since the case study can be costly it is best to start with the simplest form -- the typical firm case study.

**Typical Firm Case Study**

This is similar to the case studies for Newton Falls, Athens, and Perry Township.² It consists of a one to two-page summary of the results of studying one firm. The firm is a hypothetical firm based on the typical firm in a given industry. Only census data and secondary data from the state or local level are used. This type of case study should only be used to provide a concrete example of the types of impacts which can be considered with the growth impact model.

**Specific Firm Case Study**

A specific firm case study includes data on a specific firm. Consequently, much of the uncertainty involved in the previous case is now removed. For example, we know the number of workers for the firm, the average wages, the amount of real property, and the amount of tangible property. Results of the specific firm case study can be used to determine the maximum amount of investment which a community can make in order to attract this type of firm. However, a range of values should be used for those variables for which uncertainty still exists.

**In-depth Case Study**

This differs from the previous option only by the degree of detail put into each of the variables. Considerable detail is put into the expenditure estimates of public services rather than simply using the average expenditure per capita times the number of expected new

²/ Morse and Gerard.
residents in the community. Again, a range of values and approaches (called sensitivity analysis) should be used if there is uncertainty about some of the input variables.

A Local Research Advisory Committee

If the model is to be used in a situation where decisions will be made based on the results obtained, a local research advisory committee is essential. This group can serve as a source of information on some of the local variables. In addition, it provides a nucleus of local leaders that can be shown how the model can be used on their problems. This committee also provides a check against the model being used inappropriately. It also facilitates the dissemination of results when the project is completed.

The group should meet at least three times. At the first meeting they should receive a general introduction to growth impact models and a description of what might be done on this specific case. At the second meeting they should receive the preliminary results, and be given an opportunity to offer criticisms and suggestions. The extension and research team should particularly have them focus on those variables which are critical to the results for which it is difficult to obtain objective data.

Either the remote terminal model or the TI-59 programmable calculator model can be used to allow the local groups to explore the results of alternative assumptions for those variables that they are uncertain about.

The third meeting should provide the final results. In some projects it may be necessary to hold several working meetings to cover preliminary results.
III. Role of the State Extension Specialists and Area Agents

The role which state specialists and area agents should play in the use of the growth impact model depends on the stage of development of the model and its acceptance by local leaders. The following discussion will be divided into a public testing stage and regular extension stage. The following discussion is based on Ohio's institutional arrangements in 1980.

Public Testing Stage

This is a stage during which the model is being used for the first time on specific problem areas such as annexation, investment, industrial parks, and promotional campaigns.

Extension Specialist's Role:

1. Develop and conduct an awareness program on local growth policies and the model.
2. Provide training and information on the model to area and county agents.
3. Conduct local case studies and present the results to local groups.

Area Agent's Role:

1. Identify situations where case studies are needed.
2. Help identify the local groups with which the state extension specialist might work on given case studies.
3. Participate on the local research advisory committee.
4. Provide feedback to the extension specialist on local reactions to the model, to the results, and to the methods of disseminating information.
Joint Roles:

The following roles would be a joint effort between the extension specialist and the area agent:

1. Presentation of the slide-tape set entitled "The Benefits and Costs of Rural Growth."
2. Organizing regional workshops on community growth policies.

Regular Extension Stage

After adequate training and public testing, either the area agents or regional planning district personnel could conduct most of the case studies. This role is similar to that of the Farm Management Area Extension Agents. The state specialists should be available to work closely with the area agents on each project.
APPENDIX A

ECONOMIC GROWTH IMPACTS:
RESOURCE MATERIALS FOR EXTENSION AGENTS

Concepts and Principles for Local Growth Policies

CHOOSING ECONOMIC GOALS FOR YOUR COMMUNITY by David Darling, Cooperative Extension Service, Purdue University Factsheet.

A brief (4 page) discussion of eleven economic goals and their implications for development programs.

SOME CHARACTERISTICS OF AN IDEAL INDUSTRY by David Darling, Cooperative Extension Service, Purdue University, 1977.

A brief factsheet outlining 12 important characteristics of firms.


This bulletin describes the impacts of growth on employment and income and also public sector costs and revenues. It also examines several alternative growth policies which communities can use to control or guide growth.

Extension Publications on Growth Impact Models

ECONOMIC GROWTH IMPACT MODEL FOR RURAL OHIO by George Morse, Department of Agricultural Economics and Rural Sociology, ESO 656, Ohio Agricultural Research and Development Center and the Ohio State University, September 1979.

Four pages on the model with examples of how it can be used by local groups.


Two pages on the models and the results of Alan Osman's research on the impacts of eleven firms in Southeast Ohio.

PROJECTED ECONOMIC IMPACTS OF A MACHINE TOOL FIRM ON NEWTON FALLS, OHIO by George Morse and John David Gerard, Department of Agricultural Economics and Rural Sociology, Ohio Agricultural Research and Development Center and the Ohio State University.

Two-page summary and the computer printouts of an impact study done for Newton Falls, Ohio. This is the type of report developed for areas outside GROW-South region.
TEST YOURSELF - BENEFITS AND COSTS OF ECONOMIC DEVELOPMENT by George Morse.

A 15-item agree-disagree quiz used to introduce this topic to lay audiences. A flip chart presentation is used to explain the issues covered by the quiz.

Slide Sets

THE ECONOMIC BENEFITS AND COSTS OF GROWTH by George Morse, Sam Crawford, David Gerard, Gary Haynes, Denise Lorbach and Donna Gillespie.

A 15-minute slide-tape set that describes the economic benefits and costs of growth and how the impact model can be used locally.

Available for loan from the GROW-South Project.

MINIMIZING THE CITY COSTS OF RESIDENTIAL DEVELOPMENT by Extension Community Development Project, Oregon State University.

This is a 15-minute slide-tape set which describes the ways in which growth affects city costs and revenues and describes a number of ways of minimizing these costs. The GROW-South Project has a copy of this slide-tape set.

User's Manuals

USER'S MANUAL FOR THE OHIO ECONOMIC GROWTH IMPACT MODEL by George Morse, John David Gerard and Sam Crawford, mimeograph.

This manual describes how to collect the data for locally conducted in-depth case studies. Generally this is only used as follow-up after initial studies are done with the User's Data Form 1. Data is recorded on Form 2.

User's Data Form 1

This form requires 3 pieces of data from the local user with 6 additional optional pieces. Outside the GROW-South region this is the form to use in requesting an impact study.

User's Data Form 2

This form is used to record all of the data needed to do an impact study. Additional training is required to use this form.

Case Studies Using Growth Impact Models


This bulletin presents the results of a case study of eleven manufacturing plants in the GROW-South Region. The Ohio Economic Growth Impact Model is very similar to the approach used in this research project.
FISCAL AND EMPLOYMENT IMPACTS OF ATHENS' PROPOSED ROUTE 56 ANNEXATION
by George Morse, Department of Agricultural Economics and Rural Sociology, Ohio Agricultural Research and Development Center and the Ohio State University, ESO 529, October 1978.

This paper reports the results of an applied research and extension project to apply the growth impact model to an annexation issue in Athens County.

ESTIMATES OF THE CITY OF ATHENS' ADDITIONAL ANNUAL EXPENDITURES WITH THE PROPOSED ROUTE 56 ANNEXATION by George Morse, Department of Agricultural Economics and Rural Sociology, ESO 530, October 1978.

This paper provides a detailed discussion of the alternative expenditure estimation procedures for city services and applies these to the Athens' annexation issue. The procedures described in this bulletin are similar to those used in the growth impact model.


This study found that the probability of coal miners moving to growth centers is very low. They are quite satisfied with their present locations and see no advantage in moving.

ADDITIONAL REFERENCE MATERIALS

Fiscal Impacts


A 480-page reference manual which provides detailed instructions on calculating additional costs. The suggestions on calculating additional revenues are not well adapted for Ohio.


A 60-page publication reviewing procedures in fiscal impact analysis.

Private Sector Economic Impacts


Social and Environmental Impacts


Summary of Economic and Sociological Research


Tools for Stimulating Development


Designed as a problem-solving reference, this 219-page book is a guide for communities who want to expand their economic base. The first part of the book describes the concepts of economic growth and industrial location theory. The second part of the book focuses on practicing industrial development. The appendices provide examples of labor surveys, community inventories, industrial site methodologies, and impact study procedures.

Chapter 13, co-authored by Ron E. Shaffer, describes a procedure which can be used by local groups to measure the benefits and costs of new industries on a community.


This 116-page book and the accompanying slide tape set are designed for use in presenting principles of industrial development to the staffs of industrial development agencies, local leadership and the public. It covers principles of facility planning, industrial sites, speculative buildings, project financing, prospecting, promotion, transportation and existing industry.


A 456-page reference book which covers a broad range of development issues in rural areas and cities of 50,000 or smaller. In addition to industrialization, the book reviews research findings on feasibility studies, financing development, the labor force, economics of community services, education and poverty. One chapter discusses local participation in community development efforts.

Most chapters can be understood without formal training in economics while others require considerable background.

2. Morse, George W. "Targeting Development Programs on the Most Beneficial Industries: A Case Study for Athens, Ohio," ESO 733. Department of Agricultural Economics and Rural Sociology, the Ohio Agricultural Research and Development Center and the Ohio State University, August 1980.

3. Morse, George and John David Gerard. "Projected Economic Impacts of a Farm Machinery Manufacturing Firm on Athens, Ohio," ESO 672. Department of Agricultural Economics and Rural Sociology, the Ohio Agricultural Research and Development Center and the Ohio State University, November 1979.