

To the Graduate Council:

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DATA REQUIREMENTS AND DATA AVAILABILITY
FOR ECONOMIC DEVELOPMENT PLANNING
IN KNOXVILLE

A Thesis
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Dedicated to my mother
for her never-ending inspiration, faith and love.

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ABSTRACT

This study examines the data needs and data availability for economic development planning. Economic development planning is primarily concerned with the improvement of a community's economic base, providing employment opportunities, and increasing a community's tax base and income distribution. In a broad sense, economic development planning is meant to improve the quality of life and the standard of living of community residents.

The economic development planning process can be presented as a series of steps: local needs and goals identification, alternatives evaluation and strategy development, implementation, and evaluation. Though the process is here presented sequentially, it is actually a continuous process, and must be evaluated from time to time in light of changing economic conditions.

Comprehensive economic development planning requires the coordination of a community's development activities. Economic development planners should ensure the cooperation of a variety of public and private agencies and organizations. Neighborhood and community groups should also be provided access to the economic development planning process.

Making an assessment of a local economy is the first step in economic development planning. This need not be an extensive undertaking. The study indicates that only key

information needs to be collected. Such information includes data regarding the population, labor force, employment and unemployment, earnings and wages, income and poverty, housing and education. It is noted in the study that the character of economic development planning agencies appears to be very important in determining the extent of data needs. The availability of data seems to vary based on different geographical levels and time scales.

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CHAPTER I

INTRODUCTION

Strengthening the urban economic base and making maximum use of local economic resources are, in many cases, a matter of survival for local governments. Changes in the local economy have a profound influence on the functioning of local government and the well-being of a given community. The ability of the municipality to raise revenues to support desired and needed public improvements and services is, in many instances, tied to local economic activities. The cost and quality of life of each household in a community is also dependent, to some degree, on local economic conditions. The growth and stability of household income in general is linked to the labor consumption patterns of local enterprises. Economic instability or decline can cause lower wages, increased unemployment and greater expenditure by government for support of dependent populations.

The failure to meaningfully influence economic development suggests the inability of local governments to govern successfully. If local officials cannot improve the economic situation of their community by stabilizing and/or expanding the local tax base, their options are limited. The only options in a state of economic decline are to cut services, increase existing tax rates, impose new taxes, or apply for increased state and Federal financial assistance.

Because these actions are generally unacceptable, it is obvious why local governments are giving increasing attention to the promotion of fiscal stability and greater economic opportunity through economic development activities.

A stable and viable economy cannot be accomplished with public resources alone. It requires public and private cooperation in evaluating a comprehensive economic development strategy that makes effective use of public funds and maximizes private investment.

Recent developments in federal grant programs have encouraged adoption of a coordinated and comprehensive urban economic development approach. These grant programs have shifted the focus of decision making from federal to local officials. As a result, localities now have greater responsibility for the coordination and planning for local economic development.

Such grants also help to provide cities with resources to plan and implement a comprehensive economic development strategy. The Economic Development Administration's section 302 planning program, for example, provides support to cities for comprehensive economic planning and analysis, an important prerequisite to devising alternative strategies for public intervention in local economies.

The section 302 legislation, an amendment to the Public Works and Economic Development Act of 1965, was signed to

law in 1974. It stated that:

Any overall State economic development planning shall be a part of a comprehensive planning process that shall consider the provisions of public works to stimulate and channel development, economic opportunities and choices for individuals; to support sound land use, to enhance and protect the environment including the conservation and preservation of open spaces and environmental quality, to provide public services, and to balance physical and human resources through the management and control of physical development.

Any overall State economic development planning assisted under this section shall be conducted cooperatively by the State, cities and other political subdivisions, and economic development organizations, and such State planning shall incorporate the goals and objectives of local and economic development district planning.

Section 302 is not only significant for its support of economic development planning per se, but also for its recognition of the need for overall comprehensive resource planning. It emphasizes that economic development planning must be concerned with the totality of our physical, economic and social resources, and to be effective it must therefore be an integral component of an overall planning process.

I. NEED FOR STUDY

In 1977, the Department of Housing and Urban Department, the Economic Development Administration and the Department of Labor jointly funded a two-year Community Economic Development Demonstration Program in ten cities.

This demonstration stressed the development of staff capacity and planning capability, to plan, programme and manage public and private investments necessary for successful economic development.

In their efforts to build development capacity, cities were encountering four major problem areas. First, the fragmented structure of local government does not permit a quick or coordinated response to the needs of the private sector. Second, many of the tools and techniques of urban planning do not yield adequate data analysis or technical support for developing comprehensive economic strategies and making effective decisions. Third, traditional federal grants are not easy to integrate into a comprehensive economic development strategy. Finally, lack of communication and cooperation with the private sector hinders developing and implementing overall development strategies and programs (National Council for Urban Economic Development, 1978, p.2).

This research examines one of the issues in the economic development process. The information base and the technical capacity for comprehensive economic development planning, data collection, and analysis of economic information are the focus of this study. These elements are crucial in any economic development strategy. Comprehensive economic development planning implies an understanding of economic problems and opportunities which transcend a simple

intuitive feel for local economic conditions. An adequate information base provided by scientific and objective techniques is necessary for identifying local economic problems and opportunities. A wide spectrum of information which covers environmental, social, physical, economic and financial resources is required for planning and implementing a comprehensive development strategy.

The data problems generated by this new approach to economic development are diverse. The development of, access to and correct use of such diverse kinds of data, each having its conceptual, institutional and geographic peculiarities, has placed a great burden on local planners. Planners often feel that they face an incomprehensible system, with little hint of finding data regarding simple economic questions. Clearly, greater efficiency must be achieved in data collection and analysis than exists today.

II. PROBLEM STATEMENT

The purpose of this research is to alleviate this uncertainty of information gathering by determining data requirements, and identifying, describing and evaluating selected data series available for economic development planning in Knoxville, Tennessee. The study concentrates on socio-economic data that are available from Federal, State and regional sources, or are generated by local planning agencies and other relevant organizations. This study is

not intended to apply formal economic and statistical analysis to the data; it is rather a compilation and evaluation of existing data sources.

The evaluation of only socio-economic information, rather than the overall data and statistics analysis for comprehensive economic development planning, is justified by the fact that a fully articulated social and economic information base is essential in developing comprehensive economic development strategies, regardless of the analytical techniques employed. However, a great deal of confusion regarding the requirements and availability of economic data exists when local planners begin an economic development planning process.

Essentially, the study attempts to address the following issues:

1. What are the data requirements for a comprehensive economic development planning process?
2. How and in what form is information used in economic development planning?
3. What socio-economic data is available for Knoxville to aid in economic development planning?
4. What kind of data problems were encountered in Knoxville during the process of developing economic strategies?

5. What is the quality and scope of existing data and statistics for economic development planning in Knoxville?
6. How might existing data and sources be organized for greater utility, efficiency and accessibility for economic development planning?

The analysis of existing socio-economic data sources is intended to result in a structured set of elements and data requirements necessary in developing an information data base for comprehensive economic development planning. The study will also address future efforts regarding data collection and processing.

III. ORGANIZATION OF THE STUDY

This thesis examines the data requirements and data sources for economic development planning, and determines to what extent certain data are needed. First, the literature concerning economic development planning, economic planning techniques, and organizational structure is reviewed. Second, a descriptive survey of major data sources for economic development planning was conducted. The survey consisted of a review of federal, regional, state, and local data sources. Once this examination was accomplished, a framework for data needs and data sources for economic development planning was then developed in order to guide

the empirical evaluation which was conducted for the study (refer to the matrix questionnaire in the appendix). Planners from the East Tennessee Development District, Knoxville/Knox County Metropolitan Planning Commission, Tennessee State Planning Office, and Tennessee Valley Authority were then interviewed for their opinions regarding information needs and data uses in economic development planning. The interviews generally focused on data availability, significances, and data problems. The results were then compared to the suggested data requirements identified from the literature.

This thesis consists of six chapters. Chapter I, as an introduction, contains background information relating to the problem under study. In addition, the need for the study and its organization are presented. Chapter II begins with a brief discussion of the scope of economic development activities. Several alternatives for local development organizations and a generalized planning process that should be followed by a community for economic development planning are presented. In Chapter III, different techniques and tools for economic development planning are discussed in the context of planning and government requirements.

Chapter IV presents a standard set of data needs and data sources for economic development planning. Data required for economic development planning are discussed in three major frames of reference: time scale; geographical

scale; and social-economic profiles. Data published by federal, regional, state and local agencies are reviewed as data sources for economic development planning.

Chapter V is the empirical study of data usage by different planning agencies. Data needs and data sources in these agencies were determined through interviews. This chapter provides the background information, objectives and methodology of the study. The results of interviews with planners and some concluding comments are also presented.

Chapter VI is a summary of the study. Major findings from the literature and the empirical study are presented. Possible directions for future efforts and research regarding data bases for economic development planning are recommended.

CHAPTER II

ECONOMIC DEVELOPMENT PLANNING

It is difficult to describe all that economic development planning entails because it is an emerging area of public policy. Nevertheless, some generalizations can be made.

The Department of Housing and Urban Development (HUD) defines economic development planning as follows: "Economic Development involves the allocation of limited resources such as land, labor, capital and entrepreneurship in order to bring about desired public and private actions which have a positive effect on levels of the business activity, employment, income, the distribution of income and municipal fiscal solvency (HUD, 1976, p.12).

There has been some confusion regarding the distinction between economic development and community development since these programs sometimes overlap. Community development is a process which enhances the neighborhood environment for local residents. It deals primarily, though not exclusively, with the physical development of housing, public facilities, open space, and commercial areas in urban neighborhoods. Emphasis is on the treatment and prevention of blight and deterioration via rehabilitation, redevelopment and conservation programs. On the other hand, economic development focuses on the economic and fiscal

issues of the community through the improvement of a community's economic base.¹ Although a comprehensive approach to economic development may include physical development of the city's infrastructure and community development, the emphasis here is on employment, taxes and income. However, the coordination of economic development with community development programs is essential because these activities are obviously interdependent and should be integrated into a comprehensive local development program. The coordination of these programs and the allocation of resources for them are necessary to the successful revitalization of a city's economic base.

Implementation of economic development planning and programs encompasses a wide range of activities including assistance to small businesses, central business district revitalization and/or strip commercial development, as well as industrial retention and promotion programs, and tourism and convention promotion. Economic development also includes public works investments and the upgrading of municipal services, both designed to improve the urban economic environment. Employment and training programs, strategies for promoting rational and efficient land use patterns, and the redevelopment of blighted areas are also

¹ Economic base here meant the portion of local economy which produces goods and services for export and brings in money from the outside world. It is believed to have important bearing on the total health of the local economy.

included in economic development programs (National Council for Urban Economic Development, 1978, p.1).

I. ECONOMIC DEVELOPMENT PLANNING PROCESS

Economic development planning should be a continuous process responding to changing local, regional, national and world economies. It should also be a long-term community process that guides change in the local economy. Economic development planning should provide a framework for decision-makers by providing them not only with knowledge and awareness of the alternatives available to them, but also the cost and benefits of those alternatives. Economic development planning should be a pro-active approach, rather than an unguided incremental muddle, so that decisions made by a city will be more consistent with community interests (Bendavid-Val, 1980).

The following process serves as a model for economic development planning efforts. This process should be undertaken by a city's economic development organization and then modified according to local circumstances.

Local Needs and Goals Identification

The first step in formulating an effective development strategy should be the identification of needs and the formulation of goals for economic development. Although these are two separate cognitive functions, they are so closely linked that they are difficult to separate into

discrete steps. Planners have to develop a general understanding of the local economy in order to formulate goals, therefore an initial investigation of problems and needs of a community should be undertaken. Once the problems and needs have been generally identified, more detailed data will be needed for formulating goals and developing an economic development strategy (NCUED, 1980).

Most data necessary for an initial assessment of the local economy may already be available. The purpose of this initial data collection is to define the structure and major trends of the local economy. The initial assessment of the local economy should include 1) the composition of the economic base, 2) the role of local economy in the larger economic context, 3) the comparative advantages and disadvantages of the local economy, and 4) the general business climate (NCUED, 1978). Basic economic information about the local situation can usually be obtained from census data, Department of Employment Security, Department of Labor Statistics, and other local sources. Local businessmen and public officials should also be contacted. Their knowledge of the locality's strengths and weaknesses will help to quickly identify areas needing action, and provide a groundwork for continuous and cooperative planning and management efforts.

Other background information about the local community should also be collected. Population characteristics,

natural resources, environmental data, and public services and facilities are all relevant to the local economy and any development strategy. Attention should also be given to institutional data, such as local government expenditure patterns, availability of public revenues, capital availability, and information about the organizational structure for economic development planning. Information about past development efforts is requisite.

Armed with this general knowledge of the local economy, economic development planners can then identify the economic problems and opportunities and are ready to establish goals and objectives for economic development. The goal setting process should involve local residents, local businessmen, and various interest group representatives. Depending on time and resources available, this process may include public meetings or it may be restricted to advisory group meetings where open discussion can take place. An interactive group process should be undertaken to reach a consensus on goals, refine specific objectives, and to set priorities for economic development planning (Bendavid-Val, 1980).

Strategy Development and Alternatives Evaluation

Once the economic development goals have been settled, the next step is to design a strategy. A proper strategy should link various programs into a coordinated and comprehensive approach to solving a city's economic

problems. Questions of who should benefit from the programs must first be answered when formulating a strategy. Decisions should be based on the initial assessment of local conditions. The strategy selected should target an economic sector, a particular geographic area, or special groups such as small businessmen. Other pertinent issues should also be considered when developing and evaluating alternative strategies. These include: availability of resources, the political climate, the attitude of the private sector, local government staff and management capacity, and any existing development organizations.

A work plan outlining the mix of activities that a city will undertake to achieve its objectives should be established. Such activities include physical improvements, direct business assistance, local business improvement, industrial retention, local government reorganization and infrastructure capacity improvements. The right mix of programs and activities depends largely on the physical and fiscal conditions, and the needs of the city. Decisions on selecting a specific action should be based on the costs and benefits of implementation.

Implementation and Evaluation

The implementation of an economic development strategy is a crucial link and the ultimate test of the planning process. It is at this step that "the stage of process where high priority, desirable and practicable economic

planning projects and action proposals fit into a working framework, constrained by both the direct and indirect resources available for administering the plan" (Bendavid-Val, 1980).

The implementation plan should contain much more information than a listing of priority projects. It must indicate the goals and objectives addressed by various projects, the scheduling of specific development actions, cost and funding of projects, and the intended outcomes of project activities. An impact assessment procedure should be used to determine each project's potential consequences for the community. By using an impact assessment procedure in implementation, local officials can better predict the effects new development will have on the community.

Continual monitoring and evaluation of the planning process is an essential component of economic development planning. The standard for evaluation should be the objectives established in the economic development planning process. Likewise, the performances of programs and projects should be measured and evaluated directly and indirectly against the intended goals and objectives. Changes and modifications of objectives, goals and the course of action for economic development planning should be made based on the evaluation and assessment. Another planning cycle should be instituted at this point based on these changes in the current programs and projects.

II. ORGANIZATIONAL STRUCTURE

Traditionally, local governments have approached development problems in a piecemeal fashion. Economic programs and projects have been administered through various agencies. This has led to the fragmentation of service delivery and economic development activities at the local level. However, as more and more communities recognize the need for economic development planning, a comprehensive approach is emphasized. Such an approach involves the formulation of a development policy to guide all development activities, as well as coordination of development activities. To achieve a more comprehensive and coordinated approach to economic development, local governments are increasingly realizing the need to reorganize the government structure for economic development (NCUED, 1978).

The type of organization implemented depends on the local situation, the political and economic environment, and the scope of economic development programs. Local governments should adopt an organizational structure that considers their individual resources, and fits their particular needs.

There are several principles which should be considered in developing an organizational structure for economic development planning. First, it is essential to involve key actors in local economic development organization. These often include bankers, labor leaders, politicians, realtors,

neighborhood representatives, merchants, mortgage brokers and public officials, as they control resources and/or have financial expertise to contribute. Second, as a local government intervenes in the private development process, it should act in a business-like manner, dealing directly and expeditiously with requests and being cost conscientious of cost.

Third, since economic development planning involves a wide variety of activities, the organization should maintain a multi-purpose approach. It should be flexible enough to undertake any activities for achieving the goals and objectives of economic development planning. Fourth, the city must also develop a capacity to assume the risks involved in development projects by having access to funds. Finally, it is desirable for the organizations to have cash on hand for investment, and the ability to provide incentives for development. It is important for the organization to maintain accountability: it should be responsive and open to the input of local officials, local citizens, and other community agencies.

With these considerations, local government can select from several different organizational approaches to economic development planning and management. Generally, the available options rest along a continuum from completely internal to completely external to the local government structure. The internal organizational approach is most

common. It designates an existing city department, with some modifications, to carry out economic development programs. The city may maintain a high degree of accountability and coordination with other city departments. However, key actors may be left out in such a structure, and the city department may be limited in its capacity to assume risks and is generally limited in development techniques it can employed (Bendavid-Val, 1980).

A second alternative would be the establishment of an entity independent of the city. Economic development efforts would be carried out external to the city's agencies. It may be the Chamber of Commerce. Such an organization generally can gain the support of the private sector and be allowed the flexibility to utilize various development tools. However, such organizations lack accountability, and in many cases do not maintain a multi-purpose approach in their economic development planning.

Because of the disadvantages of these extreme alternatives, a combined approach has been devised in many cities. A quasi-public organization is established in the form of an economic development committee, task force or commission. This mode permits the involvement of the private sector in the planning process, such as bankers and Chamber of Commerce officials. It can also integrate public and private efforts. However, many such organizations do

not have the ability to implement programs, and only serve as advisory groups. Therefore, policies recommended by such committees may never get implemented and a mismatch may occur between establishing policies and implementing programs (HUD, 1980).

To overcome these disadvantages, a non-profit development organization tied into the city may be used. This combines the advantages of both internal and external organizations while minimizing administrative problems and maximizing private sector participation. Such organizations operate with a board composed of city officials and key actors from the private sector, and are responsible for the coordination between public and private sector activities. The organization maintains financial and legal ties to the city. Usually the agency is created by the city, and the executive director is appointed by the mayor. It is financed initially by the city to use a variety of development tools and invest directly in development projects.

Such an organization can be used as a multi-purpose agency, coordinating industrial, commercial and residential development projects and other economic related programs. The main difficulty with such an organization is the problem of accountability should the agency depart from city policy. Care must be taken to resolve such problems by establishing contractual safeguards and maintaining the necessary balance

between public and private interests. With safeguards, such an organization is considered especially effective and practical for implementing local economic development planning. It meets most of the elements required for effective organization, and does not require extensive staff and resources for implementation. In some states, enabling legislation allows it to even transcend jurisdictional boundaries by serving as a joint effort between two or more jurisdictions (HUD, 1980).

III. SUMMARY

The basic objectives of economic development planning are to create a healthy, stable economy and plan the quality of growth by allocating local resources in a comprehensive and coordinated manner. Economic development planning should be a continuous and dynamic process allowing a local government to respond to changing needs for successful economic development.

The basic steps in the economic development planning process model include: problems and goals identification, strategy development, implementation, and evaluation. As a practical matter, work generally proceeds on many of the planning steps at the same time, and each step in the process is dependent on accurate and timely information. Data collection and analysis is conducted throughout the planning and management process in varying degrees of intensity.

For successful economic development planning, development organizations should involve key actors in the planning process and actively coordinate with other government departments. There is no universal approach for economic development planning. Each municipality should consider its unique character and needs when adopting its own organization structure and development strategy.

CHAPTER III

ECONOMIC DEVELOPMENT PLANNING TECHNIQUES

Data collection and analysis are essential planning activities in the economic development planning process. This continues through the problems and goals identification stage to the project evaluation and implementation stage with varying degrees of intensity. There are a number of techniques and approaches for collecting and analyzing data for economic development planning, ranging from the development of a basic statistical compendium to complicated quantitative statistical analysis. This chapter presents some common analytical techniques employed for economic development planning.

I. DEVELOPING A STATISTICAL COMPENDIUM

Avrom Bendavid-Val (1974) suggests a systematic approach to collecting and organizing data for regional economic analysis. A "regional statistical compendium", which provides a comprehensive regional data base of socio-economic characteristics and identifies regional resources as well as regional economic advantages and limitations, is recommended by him. An economic profile in the form of this statistical compendium, according to Bendavid-Val, should be organized into six divisions: population and social characteristics, location

characteristics, economic activities characteristics, population-location relationships and characteristics, population-activity relationships and characteristics, and location-activity relationships and characteristics. Time sequence and spatial comparisons should also be included to obtain a comprehensive understanding of the economy.

Bert E. Swanson (1979) proposes another approach to economic data analysis. He states that a study of the local economy is undertaken in order to understand how people choose to employ resources, to produce various commodities, and to distribute them for consumption. Thus, the local economy should be analyzed in four segments: 1) location analysis, 2) the economic base, 3) an employment analysis, and 4) labor market analysis.

A location analysis, according to Swanson, should explain why certain industries choose one area over another, and the major factors which determine their locations. An economic base analysis should determine what portion of local economy produces goods and service for export (basic) as compared to local consumption (service). The ratio of basic to service goods can be derived from some common measures such as gross sales, payroll, employment or tax receipts. An employment study is conducted to understand the sources which generate income in a community. Such a study should determine the flow of money, income characteristics, employment location, and employment mix.

An employment and labor market analysis, according to Swanson, should take information on employment, occupation, and income, and examine it in three ways: industry mix, occupation mix and intra-area factors. Determining industry mix involves finding out what industries are operating in the local area, whether employment is concentrated in one or two major industries, or is mixed. It is also necessary in determining industry mix to examine the interrelationships between the various industries. (Are they closely interconnected or autonomous?) Finally, it should be determined if local industry is subject to market fluctuations, or if it have a stable demand for its goods. In determining occupational mix, an examination of the composition of the labor market, especially the skill levels of the local labor force, should be made. A more highly skilled labor force will probably adapt to technological changes more readily than a low-skilled labor force. Skill level reflects not only the economic flexibility, but also the income and earnings of the local community. An intra-area factors study should analyze what might happen to the labor market if it is faced with major changes. This involves the study of skill levels, wage rates, types of industry and reluctance of workers to move. In other words, it must consider how autonomous the labor market is as reflected by labor mobility. In a National Council for Urban Economic Deveopment study (1978) of the planning

techniques and methods for comprehensive economic development planning, three levels of analysis were discussed:

1. Regional and local data and analysis, which included: studies of local economic base, population characteristics, patterns of cause and effect among social and economic process, and tax policies. Projection and economic modeling were also employed at this level of analysis.
2. Subcity data and analysis, which included: the description and analysis of inner city areas and neighborhoods. Neighborhood classification techniques and parcel information systems were also employed at this level of analysis.
3. Sectorial analysis, which included: an analysis of specific sectors of the economy such as service, manufacturing and labor market.

The Economic Development Administration (EDA), in a Handbook for Community Economic Development (1979), presented an overview of the economic development analysis process. In its study EDA found that a community assessment is a necessary part of any planning process. That should include three different sectors:

1. The household or consumer sector, including analysis of population, education, labor force, types of occupations, income and poverty, and housing.
2. The business sector, including an analysis of types of business, sales volume, employment, and business trends, etc.
3. The government sector, including an analysis of types of services provided, tax policies, attitudes toward economic development, and government expenditures.

The EDA study noted that the social-economic profile of the area should include information regarding past trends, current status and future projections.

II. ECONOMIC BASE STUDY

The Committee for Economic Development (EDC) regards an understanding of the local economic base as essential to an efficient allocation of resources. EDC's policy statement, Guiding Metropolitan Growth (1960), stated the need for a metropolitan economic base study and suggested ten questions which economic base studies should address. The economic base study is viewed as essential toward providing information as a basis for better public policy decisions.

The questions fall into the following three groups:

A. The sources of current income and employment:

1. What have been the sources of employment, income and output in the past?
2. Which of these sources have served markets outside the metropolitan area and will be affected by external markets ?
3. Which have served markets within the metropolitan area?

B. The prospects for economic growth or decline:

4. What are the prospects for future growth, change or decline in those various economic activities?
What new industries may be expected to emerge within the next decade or two?
5. How does public policy influence the growth, change or decline of various economic activities?
6. What change may be expected in the size and mix of the labor force?
7. To what extent will labor services be supplied by residents of the region or by in-migrants?

C. Relationships of land use and community services to economic growth or decline:

8. What are the residential preferences of upper and middle-income families? and how and where are the housing needs of low-income people likely to be met?

9. What kinds of community and institutional facilities are required at current or anticipated level of services? and
10. In view of these factors, what are the likely uses of different districts and neighborhood within the region?

In response to the EDC's report, Tiebout (1962) in his study described what an economic base study is and provided guidelines to conduct this kind of study. He argued that the quality of the base study depends on how well the data actually measure the base, and the quality of the data developed. He identified income, employment, value added, tax, and sales as the best possible units of measurement of the economic base. Further, he stressed that additional local information could be most helpful if it was:

1. Gathered and reported at periodic intervals,
2. Related to national statistics on employment, income and industrial production, and
3. Organized around sound concepts, so that the interrelationships of various types of activities can be understood.

Tiebout and the EDC were certainly not unique recognizing the importance of the economic base study. Early in 1955, Edward Smith suggested a research outline for

the systematic collection of data for the understanding of the economic base. The suggested data bases to be covered, according to Smith, are: population, labor force, composition of industry, natural resources, power and transportation, taxation and expenditures, financial resources, community facilities and zoning. Smith also emphasized a continuous process and comparisons with nearby communities as being intergral to an economic base study.

III. ECONOMIC INDICATORS

In its broadest sense, economic development planning is meant to improve the general viability and comparative advantages of a local economy. In other words, the fundamental goal of economic development planning is to improve the quality of life and the standard of living. Since this is an abstract concept, some measurement on a multifaceted scale is needed to gauge a community's economic development. Selected economic indicators, compiled on a trend basis, should not only show the direction of development, but also serve for comparative analytical purposes.

Larry C. Ledebur (1977) identified possible components of a multifaceted approach measuring economic development. The componments suggested by Ledebur are:

1. Efficiency and rate of the growth, where "growth" refers to increase in the total value of goods and service products and the aggregate income generated within the region.
2. Per capita income, which describes the relationship between the performance of a regional economy and its population.
3. Equity and income distribution.
4. Stability of income and employment, which measures diversification or industrial mix.
5. Environmental quality.
6. Public service access.

Richard Andrews (1963a) discusses a method of economic analysis which puts special emphasis on small areas and applies them to the substate regions. He argues that a dynamic, continuous, in-depth analysis was desired in small area (urban) economic analysis. The objectives of the study, according to Andrews, were to determine the optimum size and character of the economy and to attain maximum efficiency of the dominant economic activities. The study is done with the assumption that the character of the economy of a small area should be understood and roughly predicted by means of continuous study and analysis of the

dominant economic groups of the area. The economic dominants were determined in terms of employment and other strategic factors. The economic dominants were then subjected to an analysis including macro- and micro-analyses. Macro-analysis should involve national, regional and state level analyses of dominant industry group economic trends and characteristics. On the other hand, micro-analysis examines in detail the background and trends of individual firm operations within those dominant industry groups.

The findings of macro- and micro- analyses were integrated to determine the nature and degree of deviation between local and regional trends of the same industry groups. Standard economic indicators such as private income, public income, employment, investment, consumption, and population were employed in this system of analysis. The indicators, compiled on a trend basis, show the direction and rate of movement of a total area economy. Andrews believes that the sensitivity of the total area economy could be measured by a comparison of industry group trends to area economic indicator trends. Andrews also indicates that the study of a local economy should include 10 to 15 years economic trend projections.

Andrews (1963b), in another paper, states that small area economic analysis should begin with simple historical research. However, he contends that at an advance planning

level, a more comprehensive history of the area and its neighbors are indispensable. He stresses that socio-economic and technological aspects of the economy with special emphases on cause and effect over time are essential parts of an economic base analysis.

Raymond H. Milkman (1972), in his discussion on how to alleviate economic distress, stresses three approaches to measuring EDA programs. The leading indicators approach, he states, utilizes as the primary measures of economic development gross product, per capital income, median family income, and unemployment. Secondary measures should utilize three general categories of indicators:

1. Economic indicators, including:
 - changes in employment,
 - indices of growth industries,
 - degrees of economic concentration,
 - changes in labor force participation,
 - loan potential of financial institutions, and
 - government fiscal effort.
2. Social indicators, including:
 - a regional class structure, and
 - a educational profile.
3. Political indicators, including:
 - measures of political participation.

In Milkman's project-oriented approach the focus is on the cost and benefits of the projects. In his study five general criteria were established to measure the cost and benefits of projects. The criteria are as follows:

1. Job location, which measures the number of local jobs created.
2. Economic structure, which analyzes the quality of the created job by looking at stability, potential growth, employment diversification, and head-of-household employment .
3. Private investment, which is determined by the amount of private capital investment.
4. The development process, which is evaluated by human factors that have an influence on economic development.
5. Service, which identifies the extent of provision of services to the poor.

Richard Winnie (1977) has also identified possible outcome measures for overall economic development programs. In his approach, either existing data were utilized or relatively simple data were collected, in order to achieve practical applications. Employment opportunities, income, detrimental effects of economic development and citizen

satisfaction with the quality of life were used as measures of overall economic development planning objectives . Some of the items suggested as outcome measures were unemployment rate, number and percent of households where there was no member employed, number and percent of the employed population whose wage rates were less than "sufficient", and per capita income. Also examined were number and percent of households with annual income below poverty level, number and percent of respondents who rate their household's standard of living as fair or poor, and net migration. Data on several of these measures are presently lacking in existing data sources. A household survey would be needed to correct these deficiencies.

IV. GOVERNMENT REQUIREMENTS

The Economic Development Administration (EDA) classified four different types of economic distress area that need federal aid: underdeveloped economies, distressed "mature" economies, chronic sub-area dislocations and impact/adjustment areas. The distress areas were defined by the following indicators: per capita income, median family income, population density, labor force participation, employment rate, unemployment rate, and standard of housing. It is emphasized that any single indicator is insufficient to identify the economic problems.

The eligibility of an area for EDA assistance is mainly measured by unemployment rates, median family income, population loss, and long term job losses as determined by the most recently available statistics. The fundamental criterion for all EDA aid is that it should contribute to the long term viability of an area's economy. It also requires that local strategies and individual projects be planned in the context of their functional economic relationships.

Some guidelines have been developed by EDA and HUD for cities preparing an economic development strategy in order to meet the planning requirements of the Overall Economic Development Program and for the Community Development Block Grant applications. The economic development strategy requires the city to present an overall description and assessment of the city's economy which includes its relationship to the region's economy, labor force characteristics, sector activities, economic base, population loss, unemployment, capital availability, and infrastructure (1979). In the EDA-HUD requirements it is noted that a comprehensive economic development planning process is required. The participation of public officials, the private sector, neighborhood, and community groups in the process is also encouraged.

V. SUMMARY

The initial step in economic development planning is to develop an assessment of local condition . It should include population characteristics, economic activities characteristics, social characteristics, living condition, and past development efforts. Standard economic indicators include population, income, employment, investment, consumption, public service access, education, and political participation.

There are many techniques and approaches for economic development analysis. Generally, it should include the following: macro-analysis, micro-analysis (regional, local and subcity analysis), historical research and future development projections of the local economy.

CHAPTER IV

DATA NEEDS AND DATA SOURCES FOR ECONOMIC DEVELOPMENT PLANNING

In this chapter, propositions concerning the dimensions of data needed for economic development planning are presented. These propositions are based upon the findings discussed in the review of the economic development planning literature, planning techniques employed and governmental requirements. A review of major data sources for economic development planning is also presented.

I. DIMENSIONS OF DATA NEEDED

The data required for developing an information base for economic development planning is variable. However, generally the data can be separated into three major frames of reference: time scale, geographic scale and socio-economic profiles.

1. Time scale, involves data regarding past trends, current status, and future projections.
2. Geographical scale, involves data for region-wide, metropolitan, city and subcity concerns.
3. Socio-economic profiles, consists of data for population, economic, housing and education.

Given this frame of reference, a three dimensional matrix may be devised (figure 1). This matrix can also be used to develop a design for data collection which includes types of data to be collected, as well as ways to organize and present the data.

Time Scale of Data

Data for economic development planning should include three types of information in terms of the time dimension. A brief review of past trends should be conducted so that the present situation can be understood through a historical perspective. An assessment of the present state of the community and the projections for future growth and development is also important in conducting an economic analysis.

It is difficult to decide just how far the past trend should be traced and how far the future should be projected. Such decisions will depend on the extent of the plan, the availability of data, and time and budgetary considerations. Usually, five to ten years is acceptable for a study of recent trends. Wherever possible a uniform common time base should be established for all data collection and analysis.

Geographical Scale of Data

Since local economic activities are affected by the other economic centers in its immediate region, and are linked to the national economy as a whole, a basic

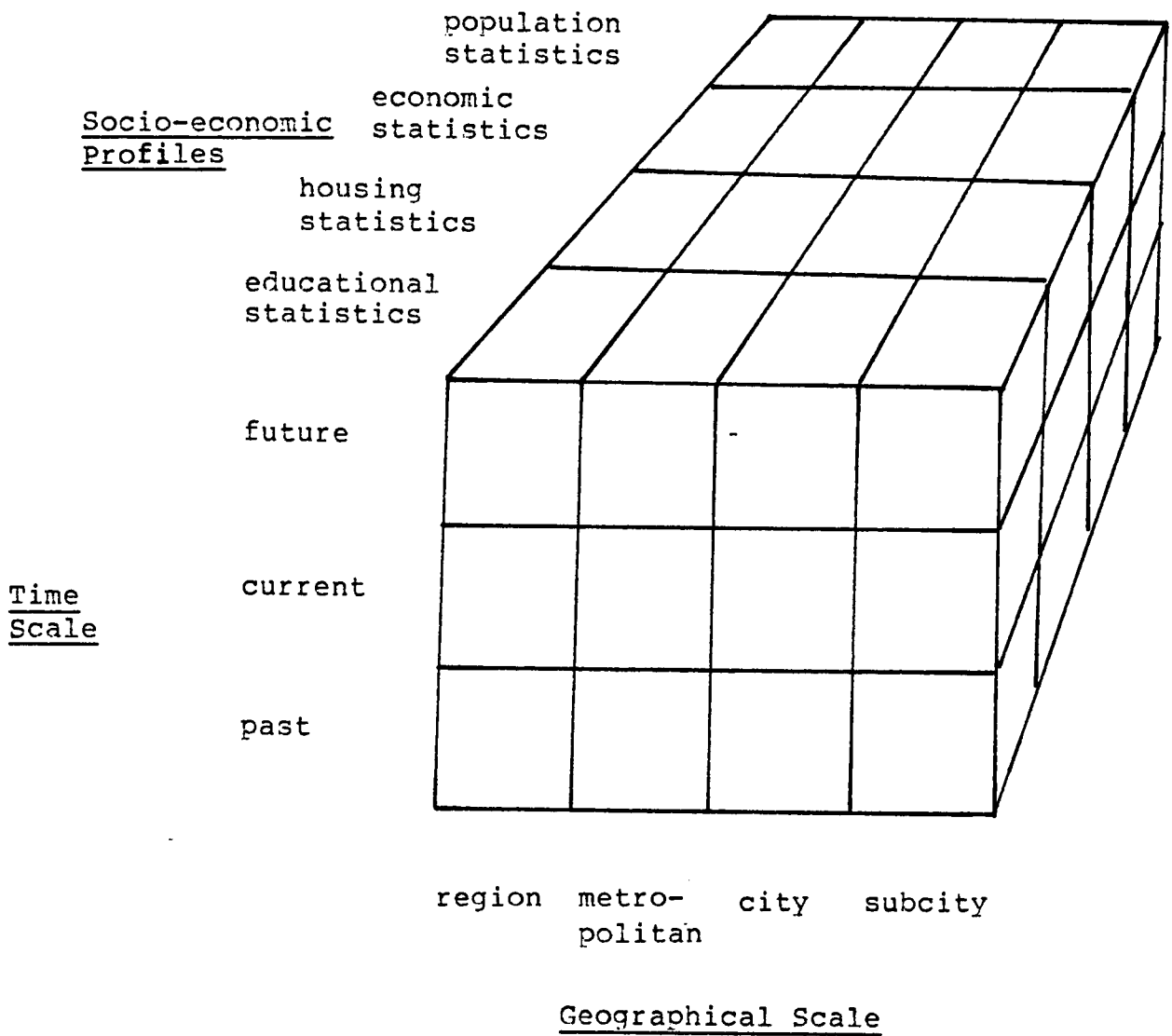


Figure 1. Dimensions of Data Needs

understanding of related regional as well as national, economic phenomena is essential for general trend analysis. The usual definition of a region for economic analysis is a metropolitan area. Metropolitan data is a convenient geographic scale for comparisons. The comparisons should include the following questions at a minimum. What are the comparative advantages and disadvantages of the city's economy and the region's economy? How does the city compare to surrounding areas with respect to factors such as transportation access, market potential, labor force characteristic, and living conditions? What are the underlying causes of business leaving or coming into the city? What is the role of the local economy with respect to the region?

Subcity data are also used by economic development planners for a variety of purposes including:

1. At the policy level, subcity data can be used to compare characteristics and conditions of different neighborhoods.
2. At the program or project level, subcity data can provide overall descriptive material concerning the characteristics of neighborhoods in question and in the process of selecting target area.

3. During implementation, subcity data, particularly parcel-level data, provides the basis for specific design and resources allocation decisions. (NCUED, 1978, p.4)

However, some questions have been raised about the application of subcity data. The reliability of micro level data is doubtful. Most data needed at this level is unavailable from published data sources such as the Census, and the time and effort involved in collecting and maintaining an adequate micro-data set are tremendous. Moreover, problems of data aggregation and disaggregation will be encountered during different forms of analysis. Problems of collecting and organizing data at the subcity level should be resolved early in the planning process.

Socio-economic Profiles

The selection of the appropriate variables for profiles required in economic development planning should be guided by economic theory and findings from past studies. An appropriate profile should at a minimum include:

1. Population size,
2. Population characteristics and movements,
3. Labor force characteristics,
4. Employment and unemployment,
5. Income and poverty,
6. Consumption patterns,

7. Characteristics of economic activities,
8. Education and training characteristics, and
9. Housing and living conditions.

Population Statistics. Various forms of population data are always required in economic development planning. Adequate population information will be a major factor in determining economic impacts. The characteristics of present and future populations of the community determine the type and amount of the development in the community. Therefore, every economic assessment must begin with a clear understanding of the community's population size, composition, distribution and growth rate. Not only must present population characteristics be known, but also future population trends are important. The economic growth potential of an area is usually a direct function of the population in the area. Detailed knowledge of the demographics is therefore essential for the determination of space needs and distribution among industrial, commercial and residential land uses.

A suggested list of population data requirements for economic development planning is given below.

1. Population size
 - a. number of persons
 - b. number of households
 - c. average size of household

2. Population change

a. rates of natural increase

.deaths and death rates by sex, age and race

.births and birth rates by sex, age and race

b. migration

.in migration

.out migration

.net migration

3. Composition and characteristics of population

a. age

b. sex

c. race

d. marital status

e. nativity

f. educational attainment

g. income

h. occupation

i. industrial composition

j. labor force status

k. suitable cross-sections of above characteristics

.by age and sex

.occupations by sex etc.

4. Spatial distribution

a. urban population

b. rural population

c. density per square mile

- d. "holding capacity" of land
- 5. Characteristics of migrant population
 - a. age
 - b. sex
 - c. race
 - d. marital status
 - e. nativity
 - f. educational attainment
 - g. income
 - h. occupation
 - i. reasons for migration
 - j. suitable cross-sections of above characteristics

It is inaccurate to assert that population is an independent variable determining the economic development of the area. Population trends are to some extent related to the employment opportunities in the area. People tend to move to areas which have job opportunities and leave areas which lack job opportunities. There is thus a positive interdependence between levels and types of economic activity and the population in the area.

Economic Statistics. Statistics measuring the performance of the local economy are extensive. However, five minimum dimensions of local economic performance are essential to any economic analysis. These dimensions are its levels, structure, growth, stability (sensitivity to

cyclical fluctuations), and the patterns of income distribution. In addition, the spatial dimensions and locations of economic activities are of prime interest (Holleb, 1969, p.98). Several measures of economic performance regarding these dimensions are available.

1. Labor Force

a. total labor force

b. characteristics

- .age

- .sex

- .race

- .military status

- .marital status

- .education and training

- .skill classification

- .working experience

- .expected years of working life

- .geographical distribution

c. participation rates by characteristics

2. Employment

a. total employment

b. characteristics

- .age

- .sex

- .race

- .military status

- .marital status

- .by occupations

- .by industries

- .by class of work

- .by geographic location

- c. monthly variations, seasonal and cyclical
fluctuations

- d. employment rates, by characteristics

3. Unemployment

- a. total unemployment

- b. characteristics

- .age

- .sex

- .race

- .military status

- .marital status

- .by occupations

- .by industries

- .by geographic location

- .duration of unemployment

- c.unemployment rates, by characteristics

4. Labor Mobility

- a. total mobility

- b. characteristics

- .age

- .sex

- .race
- .industry
- .occupational group
- .localities
- c. reasons, by characteristics
- d. frequency, by characteristics
- 5. Labor Market Information
 - a. condition of employment
 - .earnings and wages
 - .fringe benefits
 - .working hours
 - .turnover rates
 - b. extent of unionization
 - c. work stoppages
 - d. job vacancies
 - .geographic distribution
 - .occupational distribution
 - .industrial distribution
 - e. commuting pattern information
- 6. Income and Poverty
 - a. personal income
 - .total
 - .per capita
 - .per household
 - .by industrial source
 - b. disposable personal income

.per capita

.per household

c. income less than poverty level

7. Consumption Information

a. retail sales

.total

.per capita

.per household

b. service receipts

.total

.per capita

.per household

c. personal consumption expenditures

.total

.per capita

.per household

.by major type

8. Economic Activities

a. number of establishments

b. gross product

c. productivity

.per labor

.per capital

d. characteristics

.industrial classification

.employment size

- .value of fixed capital assests
- .value added
- .sales volume
- .total receipts
- .payroll, total and by industry
- .taxes paid, total and by industry
- .spatial distribution
- e. new establishments
 - .number
 - .characteristics
 - .employment size
- f. expanding establishments
 - .number
 - .characteristics
 - .job created

Housing Statistics. Housing is a primary component of an area's physical infrastructure. Both the availability and quality of residential housing are important considerations in economic development planning. The quality of housing and housing conditions are closely related to income and income distributions. Traditional housing data for economic development planning include:

1. Housing
 - a. total
 - b. characteristics

- .tenure
- .type
- .age
- .size
- .person per room
- .condition and equipments
- c. changes of supply
 - .new construction, housing permit
 - .losses
 - .vacancy rate
- d. values and cost
 - .housing price
 - .values
 - .rent

Education Statistics. The educational level of the population is a significant consideration in economic development. Education can lead to technological change and innovation, and consequently to increase in output and income. Education can also improve the quality of business management which strongly influences business expansions. In short, investment in education almost certainly influences economic development activity.

Educational data needed for economic development planning includes:

1. Education

a. years of school completed, total and median

.by age

.by sex

.by occupation

.by income

b. level of school completed

c. enrollment

.regular education

.adult education

.vocational education

.technical education

d. facilities and programs provided

II. REVIEW OF DATA SOURCES

An essential ingredient in establishing data requirements is the extent of data availability. One of the easiest ways to collect data is to examine existing records and published data of governmental agencies. Tables 1 through 4 list the geographic coverage, frequency, and sources of principal statistical series on population, employment, income, sales, education, and housing which are generally considered useful in economic development planning. Statistical series published by the Federal government, such as the population census, and current population reports, are more accessible and useful than other sources. However, data which are more timely and more

Table 1. Major Sources of Population Data

Publication	Geographic Coverage	Frequency	Publisher
Census of Population	Nation, regions, states, SMSAs, counties, cities and census tracts.	Decennial	Bureau of Census
Current Population Reports	Nation, regions, states, SMSAs, and counties.	Annual	Bureau of Census
County and City Data Book	Regions, states, SMSAs, counties and cities.	Quinnical	Bureau of Census
Tennessee Statistical Abstract	State, SMSAs, counties and cities.	Triannual	CBER, UT
Tennessee Vital Statistics	State, counties and cities.	Annual	Dept. of Public Health
Estimates of the Population in Tennessee	States, counties and cities.	Annual	TSPO

CBER = Center for Business and Economic Research
 TSPO = Tennessee State Planning Office

Table 2. Major Sources of Economic Data

Publication	Geographic Coverage	Frequency	Publisher
Census of Business	Nation, states, SMSAS and Counties.	Every 5 years	Bureau of Census
Census of Manufactures	Nation, States, SMSAS and counties.	Every 5 Years	Bureau of Census
Annual Surveys of Manufactures	Nation, states, SMSAS and counties.	Annual	Bureau of Census
Current Business Reports	Nation, states and SMSAS.	Annual	Bureau of Census
Counties Business Pattern	Nation, states, SMSAS and counties.	Annual	Bureau of Census
Employment and Earning	Nation, states, SMSAS, and other selected areas.	Monthly	Bureau of Labor Statistics
Monthly Labor Review	Nation.	Monthly	Bureau of Labor Statistics
Surveys of Current Business	Nation, states, SMSAS and cities.	Monthly	Bureau of Economic Analysis

Table 3. Major Sources of Housing Statistics

Publication	Geographic Coverage	Frequency	Publisher
Census of Housing	Nation, states, SMSAs, counties and cities.	Decennial	Bureau of Census
Current Housing Reports	Nation, region, SMSAs and cities.	Annual	Bureau of Census
Construction Reports	Nation, region, states, SMSAs and counties.	Annual	Bureau of Census
Housing Statistics	Nation, states and SMSAs	Monthly	HUD

HUD = Department of Housing and Urban Development

Table 4. Major Sources of Educational Statistics

Publication	Geographic Coverage	Frequency	Publisher
Census of Population	Nation, region, SMSAs, states, counties, cities, and census tracts.	Decennial	Bureau of Census
Education Directory	Counties.	Annual	Office of Education
Annual Statistical	State and School district	Annual	Dept. of Education
Projections of Educational Statistics	Nation, states and region	Annual	Office of Education

are usually available from state and other non-federal sources.

Population Statistics

The primary source of population data is the Bureau of the Census which conducts a population census every ten years. The decennial census is published in several volumes, including data for state, counties, SMSAs, cities and towns. The reports not only provide a vast amount of detailed information on the characteristics of current population, it also serves as statistical reference points for future estimates and projections. In addition, the Bureau of the Census conducts annual population estimates, which are published in Current Population Reports. However, these current population estimates are for the nation and regional areas, not local communities and metropolitan areas.

Population data for small economic areas can be obtained from the County and City Data Book which presents detailed socioeconomic data for every county and metropolitan area of 25,000 or more in the United States.

Annual Bulletins of Vital Statistics published by State Departments of Public Health also provide detailed demographic data on a quarterly basis. However, such data is only published every three years.

More up-to-date information on population is available from local governmental agencies. Recent population estimates are prepared in Knoxville by the Metropolitan Planning Commission, and the East Tennessee Development District, based on the Federal Census of Population.

Economic Statistics

Table 2 shows the major sources of economic statistics including employment and labor, income and earning, and sale data. Most published data comes from either the Bureau of the Census, the Bureau of Labor Statistics, the Bureau of Employment Security, the Bureau of Economic Analysis, or the Internal Revenue Service.

The decennial census provides detailed statistics regarding labor force, employment and unemployment for areas as small as a census tract. The Bureau of Labor Statistics provides monthly information on the sizes and composition of the labor force for the nation, the states and metropolitan areas. The Bureau of Employment Security presents monthly estimates of volume and characteristics of payroll employment. It also maintains files regarding job markets, unemployment compensation claims and training programs. Special reports prepared at irregular intervals by State Employment Services typically include job vacancy surveys, commuting pattern studies, surveys of the characteristics of the unemployment and employment changes by postal zones.

The Bureau of Economic Analysis also prepares annual estimates of employment by type and industry as well as detailed income information for states, counties, and cities.

The most detailed sales data published by the federal government is the quadrennial Census of manufacturing, wholesale, and retail trades. These benchmark censuses are supplemented, on a sample basis, by annual, quarterly, and monthly surveys. Frequently overlooked as a source of sales data are statistical reports provided by the Internal Revenue Service.

Economic statistics from local sources are often more adequate for local planning since they are most current and sufficiently detailed for small geographic areas. The major local sources for Knoxville economic statistics are the Metropolitan Planning Commission, The East Tennessee Development District, the local state planning office, and the Tennessee Department of Economic and Community Development. Information regarding new and expanded businesses are largely derived from statistics compiled by the Chamber of Commerce.

Housing Statistics

The major statistical source for housing is the Census of Population and Housing. It contains data on more than one hundred variables for geographic units as small as a city block. Special surveys of housing are also conducted

occasionally by the Bureau of the Census and reported in Current Housing Reports. Moreover, the Construction Report of the Bureau presents monthly data on the housing market and new housing starts.

Municipal sources of housing information are mainly building permits, water billing records and tax assessment records. Housing data collected for special federal programs such as community development programs and public housing projects can also be utilized.

Utility companies are also a useful source of information about small area housing and population changes. They provide data for smaller geographic areas and in some cities even include areas as small as block fronts.

Education Statistics

Besides the Census of Population, education statistics can be obtained through Office of Education, the National Center for Educational Statistics and State Board of Education. The data assembled by the Office of Education are recorded in its annual publication, Digest of Educational Statistics. Most published educational data must be used with care because there is a lack of a uniform reporting system which restricts the usefulness and accuracy of most published educational statistics.

III. SUMMARY

Data required for economic development planning can be separated into three major frames of reference: time scale, consisting of past trends, current status, and future projections; geographical scale, consisting of regional, metropolitan, city and subcity data; and social economic profile, consisting of population, economic, housing, and educational statistics. The major data sources for economic development planning usually are statistics published by federal, state and local governments. Generally, statistics published by state and local government are more adequate for local economic planning since they are more up-to-date and in sufficient detail for small geographic areas.

CHAPTER V

THE EMPIRICAL STUDY

In chapter IV, a data base, including population, employment, unemployment, labor force, labor mobility, labor market, income and poverty, economic activities, housing , and education, was suggested for economic development planning. Also, data sources were reviewed. In this chapter, an empirical study of the data usage of different planning agencies is presented. Planners in East Tennessee Development District, Knoxville/Knox County Metropolitan Planning Commission, Tennessee State Planning Office, and Tennessee Vally Authority were interviewed to determine their needs for data for economic development planning. This chapter provides background data, the objectives and methodology, the results of interviews with planners, and some concluding comments.

I. THE SETTING

The primary sources of technical assistance for local economic development planning are the Tennessee State Planning Office, local planning staffs, and regional agencies such as The Tennessee Valley Authority, and The East Tennessee Development District. Some technical assistance also comes from private consultants. However, the use of private consultants for long-range economic development planning work has been rather limited.

East Tennessee Development District (ETDD)

A 1965 Amendment to the planning law of Tennessee stated that the Tennessee State Planning Commission, after programming its planning to a stage where economically viable economic regions have been designated, may establish economic development districts. The economic development district is a means for cities and counties to organize themselves on a regional basis for the purpose of carrying on general and comprehensive planning and development activities.

In the area of economic development, ETDD provides assistance to its member units of local government in various ways. The first way is in preparing regional overall economic development strategies, and a development district economic base study. The second way is to advise and help communities in planning development, in financing and implementing public works, and in related economic and community development projects in accordance with regional plans. This includes providing assistance on request to local governments in preparation and submission of applications for grants or loans. And third, assistance is provided by collection and publication of regional social and economic data. Development districts provide and maintain a great deal of necessary information and data base for planning activities. They also maintain up-to-date

information regarding economic development program available to ETDD communities. Economic base studies are conducted by ETDD for a sixteen county area. Updated data sheets are published annually on selected social-economic data.

Project development is a primary thrust of ETDD activities, particularly regarding job creation. The staff works with local officials to identify needs, develop projects to fulfill these needs, and provides technical assistance in obtaining funding for development projects. This assistance includes: aiding local governments in organizing for economic development, developing industrial parks, and developing a community's facility and capital improvement plans.

Tennessee State Planning Office (TSPO)

The State Planning Commission, later renamed The Tennessee State Planning Office (TSPO), was created in the 1935. It has the responsibility of making and adopting a state plan and is empowered to create planning regions, to appoint regional and community planning commissions, to cooperate with municipal, regional and other local planning commissions within and adjacent to the state, and to create economic development districts.

The ability of TSPO to provide local planning assistance was improved in 1945 when a local planning division was established. However, local planning assistance to small communities in the state was generally

conducted on a 'small scale' until the 1950's, when Federal "701" funds became available to the State Planning Office for small city planning programs. In addition, the Federal government began requiring comprehensive community planning and an approved 'workable program' as a prerequisite for such activities as public housing and urban renewal. Later, these comprehensive planning requirements were extended to such Federal aids as open space assistance, water and sewer grants, urban beautification and neighborhood facilities.

The assistance provided by TSPO to local governments and communities primarily involves developing comprehensive and land use plans, administering subdivision regulations and zoning ordinances, preparing base maps as needed, and supplying other planning services. TSPO also provides in-house training programs to educate local officials and citizens about all aspects of local planning programs. In general, daily planning and management assistance are the major strengths of TSPO's programs.

Metropolitan Planning Commission (MPC)

In Knoxville, the Metropolitan Planning Commission serves the community in an advisory capacity. It recommends to city and county government the policies and courses of action needed to achieve the goals of the community.

Economic development activities at MPC are directed at compiling a comprehensive analysis of Knoxville's and Knox county's current situation, and making recommendations

regarding more coordinated economic development for the future. The major economic development activities include: development of economic data and analysis; preparation of economic development strategies; analysis of municipal finances; analysis of industrial sites and the provision of economic assistance to city and county government. In addition MPC provides assistance to ad hoc committees and organizations related to economic development such as the Central City Redevelopment Task Force and Lower Second Creek Redevelopment Project.

Tennessee Valley Authority (TVA)

TVA was established to improve the quality of life in the Tennessee Valley. TVA deals with question of energy use and conservation, economic vitality, environmental protection and the enhancement of social opportunity as essential ingredients for a better quality of life. In the past, it has concentrated on the central objective of economic growth --- getting better paying jobs. TVA offers technical assistance to local planning programs usually through the Tennessee State Planning Office or local planning staffs.

A variety of tools have been provided by TVA to help the region build a stronger economy. TVA has created the Special Opportunities Counties and Cities Program (SOCC) to serve as a catalyst for local self-help effort. This program creates long range plans which focus on community

involvement and self-help. TVA's main role in this program is to provide technical assistance and help identify viable options for economic growth. Projects are developed to meet the community's need by using the area's resources to stimulate economic growth. The Townlift program is also administered by TVA to improve a community's image and its functions through physical improvement projects. Such activities are aimed at stabilizing the local tax base, providing the kind of environment necessary for quality commercial establishments, and attracting industries and families to the town.

TVA also provides assistance to local communities for industrial recruitment by dispensing information on industrial siting, energy planning and environmental compliance, commercialization, industrial park planning, industrial and commercial training, waterfront development, as well as research that entails marketing studies and economic analyses.

II. OBJECTIVES AND METHODOLOGY

The staffs of different planning organizations in Knoxville, including ETDD, MPC, TSPO, and TVA, were interviewed to collect information on the data needs and sources for economic development planning, according to the propositions developed in the foregoing chapters. The objectives of the interviews were to determine the

dimensions and intensity of data needs, as well as the major data sources employed in economic development planning. An additional objective was to determine if commonly experienced data problems were encountered by economic planners.

In the initial contacts, a list of close-ended questions, derived from the propositions presented earlier, was used with the agencies staffs. Seven planners from ETDD, MPC, TSPO, and TVA were selected to be interviewed because of the relevance of their activities to economic development planning. A letter was sent to each planner and was followed by a telephone call to arrange an interview during May of 1981. Each interview lasted approximately 45 minutes to one hour. It was soon discovered, however, that in order to obtain the most information from each planner, the closed-ended questions had to be partially modified. For this reason, only a few comparisons can be made between the responses of separate planners from different planning agencies.

Further information was obtained from a variety of sources. These included: written materials obtained from ETDD, MPC, TVA and TSPO, discussion with other TVA staff members other than planners, and discussions with other individuals.

III. Results

In this section, the results of interviews with the economic planners are presented. Responses to most of the survey questions are discussed. Some questions, however, are combined, reworded, or even deleted in order to facilitate the discussion and avoid repetition. In addition, the information gathered from other sources is presented.

Data Availability and Dimensions of Data needed

During the interviews, the planners were asked to indicate the availability and significance of various data items for economic development planning. This included population, labor force, employment and unemployment, labor mobility, labor market information, income and poverty, economic activities, personal consumption expenditure information, housing and education. Time scales included past, present and future projections; geographical levels encompassed regional, metropolitan, city and subcity data.

It was difficult to obtain definite and concrete answers from the planners. Each observed that the dimensions of data needs depend mainly on the nature of the projects. In general, the TVA and ETDD staff members were more concerned with data at the regional level than at other scales. On the other hands, the MPC staff members indicated that they needed more data on the city level and looked at the regional context for comparisons and general trends.

With regard to data availability, they all indicated difficulties in collecting current and future data. The TSPO Director mentioned that if the past and current data were available, then there should be no problems making future projections. The ETDD staff member commented that the projections needed for economic development planning were basically population and labor force. Projections of other data items, he contented, would be of little value.

Population. All the planners interviewed agreed that population data generally was important, but, they responded differently concerning the extent to which the data was necessary. One MPC staff member stated that the birth and death rates were not important, but that the migration information and the population size were very important. This response agreed with all the others, excepting the director of TSPO. He believed that migration rate as well as death and birth rates should tie together in order to understand the population change.

Concerning population characteristics, the ETDD staff indicated that the age, sex, race, marital status, nativity, education, income, and occupation were very important for economic development planning. One TVA staff member expressed that only income, occupation and labor force information was very important, and all other population characteristics data were less important. The director of

TSPO explained that race, marital status and nativity information was important only for some specific projects regarding economic development planning, and that income by age was necessary for determining dependent population.

Only the director of TSPO and one MPC staff member considered the spatial distribution of data as extremely important. The other planners considered it either as not important or were not sure of its importance.

Characteristics of migrant population were considered to be of less importance, although one planner noted the importance of the age, education, income and occupation of migrant population, if the migration rate was high.

All the planners gave the same response to the availability of population data: it was in the census, but data between censuses --- especially important subcity data --- was limited.

Labor force. Labor force information, in terms of total size, characteristics and participation rates by characteristics, was believed to be very important. The chief of the Economic Development staff of TVA thought that the age, sex, race and marital status statistics of labor force was less important.

Labor market information. This category includes information on earnings and wages, fringe benefits, working hours, extent of unionization, work stoppages, job vacancy

and commuting patterns. The ETDD staff member noted that earnings and wages as well as commuting patterns were the most important factors, followed by the extent of unionization and work stoppage, whereas fringe benefits, working hours and job vacancies were less important. One MPC staff member gave job vacancy information as a very important item for economic development planning. The TVA staff member believed that only the earnings and wages information was very important on a regional planning basis, and other data items were less important. The director of TSPO agreed with him. He stated that the labor market information was mainly for regional and SMSA level planning.

Income and poverty. All of the planners interviewed believed that income and poverty information was very important in economic development planning. The director of TSPO mentioned that this category of data, especially the current data, was needed on all geographical levels. The TVA staff member felt that the regional data was more significant than the other data, followed by metropolitan data, and that city and subcity level data were less important. He also mentioned the importance of data regarding personal income, disposable personal income, and income below the poverty level. The ETDD staff member also believed that the past and current data on personal income was more important than both the disposable personal income, and income below the poverty level data. On the other hand, the MPC staff member ranked all these items very important.

Economic activities. This category included data for a number of establishments, including their gross product, productivity, capital value, value added, sales volume, taxes paid, as well as new and/or expanding establishments. The MPC staff member believed all these were very important for economic development planning. The TVA staff member believed only that gross product and number of establishments by industry were very important, followed by payroll statistics. He was more concerned with regional and metropolitan data than city and subcity data. The director of TSPO stated that while local data was more important, only regional and metropolitan data was available. He suggested that data for new establishments may be collected by reviewing building permits and sales receipts.

Consumption information. This category includes retail sales, service receipts, and personal consumption expenditure information. The TVA staff member thought this category was less important and only past data was available in regional, metropolitan, and city levels. The ETDD staff member believed that past and present data were very important. The director of TSPO believed that the consumption information was only needed for certain projects, and usually per capita data was more helpful. Even though city-wide data was required for planning

purposes, only regional and metropolitan data was available. The MPC staff members considered retail sales as very important and doubted the importance of service receipts and personal consumption expenditures.

Housing data. The director of TSPO pointed out that the definition for housing data has changed for the past two censuses, thus creating some difficulties. He observed that most housing data is important for all geographical levels and is generally available in current form. He further noted that subcity data is extremely important, yet in many cases current data is not available. Moreover, comparable data were lacking. The ETDD staff member was more concerned with the data on total current housing stocks and vacancy rates. He believed most of the housing data were available. The MPC staff member said that the total housing stock, new construction, housing permits, and vacancies were very important. The TVA staff member indicated that the total housing stock and its characteristics were important, while the other housing data items were less important.

Education. In terms of educational information for economic development planning, the MPC staff members considered vocational and technical facilities and programs to be very important. The ETDD staff member was concerned with the median years of school completed, and the TVA staff member agreed with the ETDD viewpoint.

Data Sources

All of the planners interviewed claimed that they collected most of their own data, especially TVA and MPC staffs. TVA maintains its own computer data files and provides data to local agencies. It serves as a major data source for the TVA region. The TVA staff member who was interviewed indicated that TVA receives information from the Bureau of Census, the Bureau of Labor Statistics, and the Bureau of Economic Analysis quite frequently. The director of TSPO stated that their information sources were mainly the Bureau of Census, ETDD, TVA, and some other local sources. They have their name on the other agencies' correspondance lists and receive reports from them. The MPC staff member mentioned that they collected most of their own data to update the Census. Their major data sources were the Bureau of Census, and the Bureau of Labor Statistics. They also contacted the Chamber of Commerce monthly for information. The ETDD staff members stated that most of their data was dependent on federal and state agencies, especially the Department of Employment Security and TVA. They also use local sources to update data. Federal data sources were only used for general assessments.

Time Period

Most of the planners interviewed indicated that they generally retrieved or projected data from one to ten years for economic development planning. The exception was one

TVA staff member, who said that the time period usually was 11 to 20 years. The ETDD staff member said that they represented past data 20 years or more years back, and used projections generally for 20 years.

Data Problems

All of the planners interviewed experienced difficulties in getting current data, especially for small areas. For economic development planning, local data for metropolitan, county, city and subcity levels is most important, but generally does not exist in a detailed form. The ETDD staff member mentioned that they keep their data general and basic because of their dependence on local governments.

One planner explained that there is accurate data for general plans, but for specific projects such as tourism, labor training, market study etc., data is lacking. Most of the data for industrial use is available. He indicated that the flexibility of data is low. Data for special projects either could not apply to another project or else would require time consuming translation of the format for other project use. Also, it was noted, data is expensive to update.

Another respondent mentioned the lack of communication between the data collectors and the data users. Because they did not know how the data was collected, there was no way for them to make judgments regarding disaggregating or

aggregating the data, updating it, and comparing it with other sources.

A data clearing house, the use of computer, frequent communications between data collectors and data users were all suggested for alleviating the above data problems. One respondent emphasized the importance of the knowledge of the data networks and data sources, and more selection in generation of data. He was skeptical that the situation would improve when budget cutting was occurring.

None of the planners interviewed considered fulfilling federal requirements for data as a problem. Usually, the data requirements were quite general and tended to be oriented to the availability of data. One planner noted that some requirements were too general and therefore not suitable for small area economic development planning.

IV. ANALYSIS OF FINDINGS

An analysis of the interviews with planners led to some preliminary conclusions about the role of data in economic development planning, and data requirements. Theoretically, economic development planning is a continuous process. Strategies and programs must be refined periodically to reflect changing economic conditions. Although the planning process consists of a series of steps, these steps do not necessarily occur in chronological order. Data collection and analysis do not end when problems and goals have been

identified. They should be continuous as subsequent strategies and programs are formulated, and evaluated. However, in the real world, with limited time and resources, this is quite difficult.

Problems and goals are generally identified through discussion with the local officials and citizens. One planner emphasized that planning should be people-oriented. He noted that plans have to be accepted by the people and secondary data does not have a great deal of meaning to them. The ETDD staff member mentioned that when they dealt with the local officials, they had to keep everything to the point and only general data are needed. Also, the MPC staff member said that his agency mailed questionnaires to the public sector, public officials and citizens for their input on problem identification, rather than analyzing secondary data to identify problems.

Because of human nature, the accuracy of data, especially for future projections, is always a problem. As long as the data is based on logical and reasonable assumptions, it is generally acceptable. Good judgement is therefore essential for data selection and interpretation. Since there is a lack of communication between data collectors and data users, it is difficult for the user to make reasonable judgements regarding interpretation of the data. This problem is especially apparent with secondary data. The planners interviewed also pointed out that most

federal data either overestimated or underestimated the local situation, and thus did not accurately reflect it.

The nature of the economic development planning agencies appeared to be very important in determining the extent of data needs. The service area of the agency was particularly an important factor. Regional agencies such as EDTT and TVA tended to be more concerned with the regional data. They needed local data only when they were providing technical assistance to local governments. MPC and TSPO, however, needed detailed local data for developing economic strategies. Regional data was used mainly for comparisons or general trends.

The availability of data seems to vary based on different spatial and temporal scales. Most of the current and future data needed were apparently lacking. The smaller the geographical unit, the less available the data. This seems to apply even to past data. Most data is available for the past at the regional and metropolitan level.

A comparison of data needs with their availability for economic development planning will give a clear picture of data usage. Eight data items which are believed to be important for economic development planning in the study, are derived for the evaluation. This includes data regarding population size, population change, labor force, employment and unemployment, earnings and wages, income and poverty, housing, and education. Table 5 shows that all of

Table 5. Data Needs Versus Data Availability

	Regional Ava. Imp.	Metropolitan Ava. Imp.	city Ava. Imp.	subcity Ava. Imp.
Population size	X	X	X	X
Population change	X	X	O	O
Labor force	X	X	X	?
Employment and unemployment	X	X	O	X
Earnings and wages	X	X	O	O
Income and Poverty	X	X	X	X
Housing	X	X	X	X
Education	X	X	X	X

X = Positive Ava. = Availability

O = Negative Imp. = Importance

? = Not sure

the eight data items were believed to be important for economic development planning and were available at the regional and metropolitan levels. At the city level, except for earnings and wages, all the data are believed to be significant, and data for population change, employment and unemployment, earnings and wages is not available. The gap between data needs and data availability becomes more serious at the subcity level. Although less data items are needed for economic development planning --- such as population size, employment and unemployment, income and poverty, housing, and education --- only data regarding population size and education is available. At worst, those data are generally not up-dated. It is concluded that basically there are enough data for regional and metropolitan economic development planning. There appears to be data deficiency at city and subcity levels for economic development planning.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

Economic development planning is a new and expanding field. It is concerned with improving a community's economic base, providing employment opportunities, and increasing a community's tax base and income distribution. In a broad sense, economic development planning is meant to enhance the quality of life and the standard of living of community residents.

The economic development planning process can be presented in a series of steps: local needs and goals identification, evaluation of alternatives and strategy development, implementation, and evaluation. Though the process is presented sequentially, it should be continuous, and evaluated periodically to accomodate shifting economic conditions.

Comprehensive economic development planning requires the coordination of a community's development activities. Economic development planners should ensure the cooperation of various public and private agencies and organizations. Where practical, neighborhood and community groups should also have access to the economic development planning process.

Making an assessment of local conditions is the first step in economic development planning. According to the

literature, the data base for economic development planning should include population data, economic characteristics, social characteristics, living conditions, and information on past development efforts. Standard economic indicators are usually employed for economic development analyses. Economic development indicators should include the following items: income, employment, investment, consumption, public service, education, and political participation.

The data base for economic development planning should be related to three major frames of reference: 1) time scale: past trends, current status, and future projections; 2) geographical scale: regional, metropolitan, city and subcity; and 3) socio-economic profiles: population, economic, housing and education statistics. The major data sources for economic development planning are descriptive statistics published by federal, state and local government and organizations. Usually, statistics from non-federal sources are more timely and more detailed.

I. CONCLUSIONS

A study of the data usage in different planning agencies in Knoxville was conducted. Economic development planners from The East Tennessee Development District (ETDD), The Metropolitan Planning Commission (MPC), The Tennessee State Planning Office (TSPO), and The Tennessee Valley Authority (TVA) were interviewed to determine their

data needs, data sources, and data problems for economic development planning. Several conclusions can be drawn from this study.

The findings of the study agreed with the literature. Planners do need to have a general knowledge of the local economic condition in order to identify problems and formulate goals. The initial assessment of a local economy need not be an extensive undertaking. However, the planners interviewed indicated that basic socio-economic data is needed in order to develop an economic development strategy. Collecting detailed data on the local economy may not be necessary until it is time to select individual programs and projects. The level of detail of the data depends on the nature of individual projects and programs. In addition, the nature of the planning agency is very important in determining the extent of data needs. Because of the different service areas, the four planning agencies interviewed needed different geographical data. However, they were unanimous as to the importance for economic development planning of data regarding population, labor force, employment and unemployment, earnings and wages, income and poverty, housing, and education.

The most common data problems encountered by economic development planners is the deficiency of published data regarding education, income, poverty, and personal consumption information. Lack of good, reliable data for

small geographical areas is also vexatious. The exception to this problem is population data. However, population data are usually not up-to-date, and the validity of current estimates is questionable. Migration data is generally non-existent, except as furnished by the census every 10 years.

The planning agencies interviewed usually collect and maintain their own data files. In the interviews, agency personnel indicated that most of the federal data which exists does not reflect current conditions in the community.

II. RECOMMENDATIONS

At this time, appropriate small area social-economic data is lacking and is believed to be important by local planners for most economic development planning and projects. Additional analyses and studies are needed for estimation and projection techniques for small areas. Increased efforts and resources should be devoted to collecting current data for present and extrapolative purposes, especially regarding the population and labor force.

To improve data usage for economic development planning, there must be a close working relationship between data collectors and data users. Data users need to know how data is collected and the basic assumption employed in the collection in order to make judgements regarding data

validity and reliability. Data collectors need to know what kind of data are needed and in what form in order to develop appropriate data collection procedures. Communication between data collectors and data users needs to be a two way channel.

On the other hand, economic development planners, as data users, should increase their knowledge of data availability and data sources in order to make better judgements on data selection and interpretation. Data also should be standardized in order to promote a better understanding of the data, and improve its reliability, flexibility and efficiency.

Each individual agency spends a great deal of money and time in collecting, processing and disseminating data. However, in the absence of a coordinated effort, much of this information cannot be fully used. A network or clearing-house is recommended for developing a repository of information and encouraging communication between data users and collectors. The promotion and standardization of data gathering, processing and dissemination to meet the data needs of economic development planning should be a function of the repository. The feasibility of developing a repository in Knoxville should be studied.

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APPENDIX

QUESTIONNAIRE

This questionnaire is intended to provide information and insights from economic planners. Its purpose is to identify the socio-economic data requirements and availability for economic development planning. Your views on the subjects contained in this questionnaire are very important to the successful completion of the research. Please answer each question as completely as possible. There are no right or wrong answers, only your opinion. Thank you.

1. Name of Agency _____
spokesperson _____
position/title _____

2. Would you list the various type of economic development planning activities your agency is engaged in?

3. Please rank the following data items that you would look for in economic development planning and indicate whether or not it is available.

- 1 = is presently available and very important
 2 = is presently available and important
 3 = is presently available and less important
 4 = is not presently available and would be very important
 5 = is not presently available and would be important
 6 = is not presently available and would be less important
 7 = not sure

Data items	regional		metropolitan-wide		city-wide		subcity	
	past	pres.	projection	past	pres.	projection	past	pres.
POPULATION								
Population size								
total								
population in households								
population per households								
Population changes								
rate of natural change								
deaths & death rates								
by sex								
by age								
births & birth rates								
by sex								
by age								
migration								
in								
out								
net								

Data items	regional		metropolitan-wide		city-wide		subcity	
	past	pres. projection	past	pres. projection	past	pres. projection	past	pres. projection
Characteristics								
age								
sex								
race								
marital status								
nativity								
education								
by age								
by sex								
income								
by age								
by sex								
occupation								
by age								
by sex								
labor force								
by age								
by sex								
Spatial distribution								
density								
holding capacity of land								
Characteristics of migrant population								
age								
sex								
race								
marital status								
education								
income								
occupation								

Data items	regional		metropolitan-wide		city-wide		subcity	
	past	pres. projection	past	pres. projection	past	pres. projection	past	pres. projection
UNEMPLOYMENT								
Total								
Characteristics								
age								
sex								
race								
marital status								
education & training								
by occupation								
by industry								
duration of unemployment								
Unemployment rates								
by characteristics								
LABOR MOBILITY								
Total								
Characteristics								
age								
sex								
race								
education & training								
industry								
occupation								
Reasons, by characteristics								
Frequencies, by characteristics								

Data items	regional		metropolitan-wide		city-wide		subcity	
	past	pres. projection	past	pres. projection	past	pres. projection	past	pres. projection
LABOR MARKET INFORMATION								
Employment condition								
earnings & wages								
by industry								
by occupation								
fringe benefits								
working hours								
turnover rates								
Extent of unionization								
work stoppages								
Job vacancies								
by industry								
by occupation								
Commuting pattern								
place of residence								
place of work								
journey to work								
INCOME & POVERTY								
Personal income								
total								
per capita								
per household								
by industrial source								
Disposable personal income								
total								
per capita								
per household								
Income below poverty level								

Data items	regional		metropolitan-wide		city-wide		subcity	
	past	pres. projection	past	pres. projection	past	pres. projection	past	pres. projection
CONSUMPTION INFORMATION								
Retail sales								
total								
per capita								
per household								
Service receipts								
total								
per capita								
per household								
personal consumption expenditure								
total								
per capita								
per household								
HOUSING								
Total								
Characteristics								
tenure								
type								
age								
size								
person per room								
condition & equipments								
Changes of supply								
new construction								
housing permit								
losses								
vacancy rate								
Value & cost								
housing price								
values								
rent								

Data items	regional		metropolitan-wide		city-wide		subcity	
	past	pres. projection	past	pres. projection	past	pres. projection	past	pres. projection
ECONOMIC ACTIVITIES								
Number of establishments								
Gross product								
Productivities								
per labor								
per capita								
Characteristics								
industry								
employment size								
value of fix capital assets								
value added								
sales volume								
total receipts								
payroll								
total								
by industry								
taxes paid								
total								
by industry								
New establishment								
total								
characteristics								
job created								
Expanding establishment								
total								
characteristics								
job created								

4. For how far do you generally project data for economic development planning?

_____ 1 - 10 years
 _____ 11 - 20 years
 _____ more than 20 years

5. For how far do you generally trace back data for economic development planning?

_____ 1 - 10 years
 _____ 11 - 20 years
 _____ more than 20 years

6. How often do you use the following major data sources for economic development planning?

Federal Source	very frequently	frequently	less frequently	unaware of
BUREAU OF CENSUS				
Census of Population				
Census of Housing				
Census of Population & Housing				
Census of Agriculture				
Census of Construction Industries				
Census of Governments				
Census of Manufactures				
Census of Mineral Industries				
Census of Retail Trade				
Census of Wholesale Trade				
Census of Service Industries				
Census of Business				
Current Population Reports				
Characteristics				
Population Estimates & Projections				
Special Studies				
Federal/State Estimates				
Farm Population				
Consumer Income				

6. (continued)

	very frequently	frequently	less frequently	unaware of
BUREAU OF CENSUS				
Current Housing Reports				
House Vacancies				
Market Absorption of Apartments				
Characteristics of Apts. Completed				
Current Retail Trade Reports				
Current Wholesale Trade Reports				
Current Selected Services Reports				
Current Construction Surveys				
Housing Starts				
Housing Completions				
New One-family Houses Sold & For Sale				
Price Index Of New One-families Houses Sold				
Housing Units Authorized By Building Permits & Public Contracts				
Housing Units Authorized For Demolition in Permit - Issuing Places				
Annual Housing Survey : United States & Regions				
Annual Housing Survey : Housing Characteristics				
Annual Surveys of Manufactures				
County Business Patterns				
County & City Data Book				
City Employment				
Public Employment				
Statistics Abstract of The United States				
BUREAU OF LABOR STATISTICS				
Employment & Earnings, States & Areas				
Employment & Earnings, The United States				
Employment & Wages				
Geographic Profiles of Employment & Unemployment				
Area Trends in Employment & Unemployment				
Consumer Expenditure Survey Series				
Consumer Price Index				
Handbook of Labor Statistics				
Monthly Labor Review				
Occupational Employment Statistics 1960 - 1970				
Industry Wage Surveys				

6. (continued)		very frequently	frequently	less frequently	unaware of
BUREAU OF LABOR STATISTICS					
Unemployment Insurance Statistics					
Union Wages & Hours					
Regional Office Report					
BUREAU OF DOMESTIC COMMERCE					
Construction Review					
BUREAU OF ECONOMIC ANALYSIS					
Area Economic Projections					
Local Area Personal Income					
Surveys of Current Business					
DEPARTMENT OF LABOR					
Patterns of U.S. Economic Growth					
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT					
Comprehensive Housing Market Analysis					
Housing and Urban Development Trends					
Housing Statistics					
INTERNAL REVENUE SERVICE					
Statistics of Income					
OFFICE OF EDUCATION					
Digest of Educational Statistics					
Estimates of School Statistics					
Projections of Educational Statistics					
Statistics of Public Elementary & Secondary Schools					
Statistics of State School Systems					
State Vocational Education Statistics					

6. (continued)		very frequently	frequently	less frequently	unaware of
State Sources					
TN. DEPARTMENT OF ECONOMIC & COMMUNITY DEVELOPMENT					
Economic Statistics in TN.					
TN. Directory of Manufacturers					
TN. Community Data					
The Migration Process in TN. 1965-70					
TN. DEPARTMENT OF EDUCATION					
Directory of Public Schools					
TN Educational Bulletin					
TN. DEPARTMENT OF EMPLOYMENT SECURITY					
Annual CPS Labor Forces Summaries					
Annual Planning Information					
Annual Workforce Summary					
Basic Employment Security Data					
Covered Employment & Wages by Industry, Statewide & by County					
Population & Labor Force Characteristics of TN. Counties					
TN. & SMSAs Employment Estimates					
TN. Annual Average Labor Force					
TN. Employment Outlook					
TN. Youth Report					
TN. Hours & Earning Estimates					
TN. Data for Affirmation Action Plans					
TN. Civilian Workforce Estimates					
The Labor Market Report					
Total Workforce, Employment, Unemployment & Employment Rates					
TN. DEPARTMENT OF LABOR					
Annual Report					
TN. DEPARTMENT OF REVENUE					
Comparative Statement of Collected Revenue					
Retailing in Tennessee					
TN. DEPARTMENT OF PUBLIC HEALTH					
TN. Vital Health					

6. (continued)	very frequently	frequently	less frequently	unaware of
TN. HOUSING DEVELOPMENT AGENCY				
Household & Household Income Estimates & Projections 1975-1990				
TN. INDUSTRIAL DEVELOPMENT DIVISION				
Wages, Salaries & Fringe Benefits Survey				
TN. STATE PLANNING DIVISION				
Population in TN.				
Estimates of the Population in TN. Counties & Metropolitan Areas				
Housing in TN.				
Income & Employment in TN.				
The Migration, Population, Families, Income and Manpower				
Demand Project to 1990				
Region Sources				
EAST TENNESSEE DEVELOPMENT DISTRICT (ETDD)				
County Census Summaries				
Economic Statistics				
Elementary & Secondary Education in the ETDD				
Employment & Vocational Service in the ETDD				
Existing and Forecasted Employment in Selected Service Occupation in the ETDD				
Housing Element				
Housing Inventory and Needs				
Housing in the ETDD				
Industrial Inventory of the ETDD				
Population, Economic Base & Potential				
Population Forecasts for Planning Purpose in the ETDD				
Population Projections				
Socio-economic Summary Report				
TENNESSEE VALLEY AUTHORITY				
Population Projection for the TN. Valley Region				
The District and Its Economy				
The Tennessee Valley Region: Highlight of Growth & Changes				
Industrial Development in IVA area During 1978				

6. (continued)	very frequently	frequently	less frequently	unaware of
CENTER FOR BUSINESS AND ECONOMIC RESEARCH, UT				
Tennessee Econometric Model				
Tennessee Pocket Data Book				
Tennessee Statistical Abstract				
Metropolitan Area Economic Report				
Local Sources				
KNOX COUNTY BOARD OF EDUCATION				
Knox County Schools Building Program Project Information				
KNOXVILLE BOARD OF EDUCATION				
Superintendent's Annual Report				
KNOXVILLE APARTMENT COUNCIL				
Market Survey				
METROPOLITAN PLANNING COMMISSION				
Average Household Size & Age Distribution				
Building Permit Activity in Knoxville-Knox County				
Education File				
Housing : Knoxville-Knox County 1978				
Population				
Poverty 1970				
Knoxville's Community Development Data Base				
Technical Information Reports 1979				
The Economic Base of Knoxville-Knox County				
School Enrollment Projection 1973				
Others (Please Specify)				

7. How often do you contact the following agencies for data?

	weekly	monthly	2 or 3 times or more/yearly
Center For Business And Economic Research, UT			
Chamber of Commerce			
Department of Employment Security			
East Tennessee Development District			
Metropolitan Planning Commission			
Tennessee State Planning Office			
Tennessee Valley Authority			
Others (please specify)			

8. What are some of your major data problems you have encountered while engaged in economic development planning?

9. Do you think there is a gap between federal planning requirements and availability of economic information in Knoxville?

(b) (if yes) In what way can the situation be improved?

10. Any other comments, explanations, suggestions etc. ?

VITA

Yuen Lee was born in Kwang Tung, China. When she was one year old, her family moved to Hong Kong. Upon completion of her primary and secondary education, she enrolled at Hong Kong Baptist College. After three years at Baptist and one year at The University of Georgia, Athens, she received a Bachelor of Arts degree in Geography.

In the following fall, she entered the Graduate School of planning at The University of Tennessee, and was awarded the degree of Master of Science in Planning in 1981. While attending the Graduate School of Planning, she received valuable working experience at the Knoxville-Knox County Planning Commission, and the City Planning Office in Gatlinburg, Tennessee.