# Handbook: Assessing Local Economic Development Opportunities with ARC-LEAP

# Appalachian Regional Commission Local Economic Assessment Package



prepared for the Appalachian Regional Commission

prepared by
Economic Development Research Group, Inc.
Glen Weisbrod
Teresa Lynch
Margaret Collins

January, 2004

# Handbook: Assessing Local Economic Development Opportunities with ARC-LEAP

# Appalachian Regional Commission Local Economic Assessment Package

prepared for the Appalachian Regional Commission

prepared by
Economic Development Research Group, Inc.
2 Oliver Street, 9<sup>th</sup> Floor, Boston, MA 02109
Telephone 617.338.6775
Fax 617.338.1174
e-mail info@edrgroup.com
Website www.edrgroup.com

# **Table of Contents**

| 1. Introduction  |    |
|--|----|
| 1.1 Objective and Overview                                 |    |
| 1.2 Applicable Economic Development Situations             | 3  |
| 1.3 Limitations of Analysis                                |    |
| 1.3 Organization of the Handbook                           |    |
| 2. Define Study Areas                                      | 7  |
| 2.1 Identify the Study Target Area                         |    |
| 2.2 Identify Comparison Areas                              |    |
| 3. LOCAL ECONOMIC PERFORMANCE ANALYSIS                     | 9  |
| 3.1 Employment Data  |    |
| 3.2 Business Mix Analysis.                                 |    |
| 3.3 Business Trend Comparison                              |    |
| 3.4 Interpretation of Economic PerformanceAnalysis         |    |
| 4. QUANTITATIVE MEASUREMENT OF AREA CHARACTERISTICS        | 12 |
| 4.1 Cost Factors   |    |
| 4.2 Demographics: Labor and Customer Markets               |    |
| 4.3 Access: Transportation, Tourism and Telecommunications |    |
| 4.4 Interpretation of Cost, Demographic, & Access Factors  |    |
| 5. RATING LOCAL FACILITIES AND RESOURCES                   | 15 |
| 5.1 Business Support Programs (Worksheet 1)                |    |
| 5.2 Land Inventory (Worksheet 2)                           |    |
| 5.3 Building Inventory (Worksheet 3)                       |    |
| 5.4 Labor Force Assessment. (Worksheet 4)                  |    |
| 5.5 Tourism Assessment. (Worksheet 5)                      |    |
| 5.6 Interpretation and Use of Worksheet Results            |    |
| 6. EVALUATION OF RESULTS                                   |    |
| 6.1 Industry Performance Assessment Results                | 23 |
| 6.2 Diagnostic Analysis Results                            | 24 |
| 6.3 Policy Analysis Results                                |    |
| 7. DEVELOPING A STRATEGIC PLAN                             |    |
| 7.1 SWOT Review: Where are we now?                         | 26 |
| 7.2 Vision and Goal Formulation: Where are we going?       | 27 |
| 7.3 Strategy Development: How do we get there?             | 29 |
| 7.4 Monitoring & Evaluation                                | 31 |

# 1. Introduction

# 1.1 Objective and Overview

**Objective.** A central role of economic developers is to help increase job opportunities and income levels for area residents, by supporting economic growth – including the retention and expansion of existing business, as well as the development and attraction of new business. To effectively pursue these objectives, economic developers must focus and target their efforts towards those types of business that represent best prospects for local economic growth. By assessing the relative competitiveness of local facilities and resources for serving those types of business, it is also possible to identify priorities for local improvements that can best help to attract and grow these target industries.

This handbook sets out to define key concepts involved in evaluating an area's economic performance, identifying targets for further economic development, and defining priorities for improving local economic competitiveness. It may be of interest to any practitioner or student of economic development, as a source of information on factors that are most often considered in economic development evaluation and strategy development. However, it specifically defines concepts and terms used in a companion software tool called LEAP -- "Local Economic Assessment Package." LEAP was designed and developed by Economic Development Research Group, Inc. (www.edrgroup.com) as a tool for economic development practitioners, and it carries out all of the various types of analysis described in this handbook. ARC-LEAP is a version of this tool developed specifically for the Appalachian Regional Commission (ARC) and it's Local Development Districts (LDDs). Development of this handbook and accompanying user guide was funded by ARC as a companion to the ARC-LEAP analysis system.

**Overview.** The processes defined in this handbook and carried out in the ARC-LEAP analysis system serve three related purposes, each aimed at helping practitioners identify target industries for economic development.

- (1) *Economic Assessment* as an evaluation tool for local practitioners to assess current economic conditions and likely future trends.
- (2) *Targeting Diagnostics* as a diagnostic tool to aid practitioners in targeting industries that can provide the most appropriate basis for economic development.
- (3) *Policy Analysis* as an analysis tool for assessing potential economic development consequences of future policy initiatives which can affect local costs, labor force skills and/or infrastructure characteristics.

The <u>Economic Assessment</u> portion of the analysis system provides baseline economic profiles, trends and growth projections for 71 industries. In addition, each of these industries is evaluated in terms of the extent to which it currently has an economic performance gap and a

further potential for local business attraction. An area is classified as having an economic performance gap if either (a) that industry's share of local employment is significantly lower than its corresponding share in a comparable area, or (b) local employment change in that industry has lagged behind that industry's national average performance. This element of the economic assessment is sometimes referred to as "economic base analysis."

A second element of the *Economic Assessment* evaluates local business growth/attraction potential for each industry through ratings of local area advantages and disadvantages for supporting business growth and attraction. Advantages and disadvantages are defined on the basis of: (1) costs of labor, materials, utilities, transportation and taxes, and the sensitivity of each industry to those cost factors; (2) size and characteristics of the local area's workforce, and the sensitivity of each industry to these labor force qualities; (3) access, times and costs for different modes of transportation (i.e., highway, air, rail, and marine), and the sensitivity of each industry to these access factors; and (4) quality and supply of local infrastructure and facilities to serve economic growth. In other words, the ARC-LEAP model identifies sets of industries that are good targets for economic development by matching an area's labor and infrastructure characteristics (e.g., wage rates, education levels, airport access) with operating requirements of each industry.

The <u>Targeting Diagnostics</u> portion of the analysis system includes a set of area diagnostics that assess the local area's competitiveness (relative to a comparison area chosen by the user) for each industry. In addition, more detailed diagnostics are presented for each industry for which there is a potential for additional business attraction. This set of diagnostics identifies "critical" and "important" weaknesses that need to be addressed if the area is to fulfill some of the growth potential identified in the local area assessment. The diagnostics presented in ARC-LEAP are developed by looking at each industry's sensitivity to different factors and for the factors most important to an industry, the strength of the local area relative to the comparison area. Factors assessed in the diagnostic portion of the model include total production costs; labor costs; energy costs; tax burdens; availability of labor (i.e., "work base"); availability of skilled workers; water transportation; air transportation; rail transportation; highway transportation; and availability of broadband.

The <u>Policy Analysis</u> portion of the analysis system allows users to analyze the effects of alternative future policies and investments on the future business attraction potential of a local area. Users can estimate the likely business attraction impacts of changes in availability or quality of key labor and economic infrastructure factors, such as changes in labor force size and skill levels; broadband access; tax policy; availability of commercial land, industrial parks, office sites; access to airports, sea ports, and rail; and improvements to highways. Estimates of these presented as estimated new jobs associated with improved business attraction potential.

# 1.2 Applicable Economic Development Situations

This handbook can be relevant for cities, counties and multi-county districts that seek to critically evaluate their economic performance and develop targeted strategies for stimulating further economic development. There are five types of situations in which this type of evaluation and strategic targeting may be particularly useful. In each type of situation, the nature of the economic performance problem and potential corrective policy actions may differ. These situations can be broadly classified as follows:

- <u>High unemployment</u> and <u>low wages</u> are economic problems that affect local quality of life and opportunities for area residents. Such problems may be a result of low skill levels, a mature or declining economic base, a narrow economic base which is highly dependent on one or a few sectors, poor access to jobs, or competition from other regions. Targeted economic development efforts in areas with chronically high unemployment may focus on expanding the breadth of the economic base, through employment and training programs to increase labor force skills, and/or improvement in facilities and services to increase the business viability of the area.
- <u>Seasonal fluctuations in employment</u> also negatively affect income levels and job opportunities. Such fluctuations generally result when an area's economy is overly-dependent on seasonal tourism/ recreation or resource-based (e.g., agriculture) industries that experience high demand during some parts of the year and then a significant drop in demand in the "off-season". During the "off-season", unemployment increases, income levels decline, and ripple effects such as declining retail sales are felt throughout the local economy. Targeted economic development efforts in an area with seasonally fluctuating employment may focus on broadening the area's business base.
- <u>Isolation and lack of local opportunities</u> can limit economic growth in areas with a small population base and limited access to markets. As limited local options lead residents to travel elsewhere for shopping and services, there is an outflow of income. Isolation from labor and customer markets can also constrain the area's ability to retain and grow businesses and attract new activities. These factors can become even more problematic as changes in technologies and global trade further reduce local employment and access to goods and services, over time. Targeted economic development efforts for such areas may successfully focus on industries that are not sensitive to existing access constraints, or are most responsive to planned future improvements in transportation access.
- Over-dependence on a particular industry or a few large employers can make even economically strong areas at risk of future economic stagnation and decline. In these cases, an industry downturn caused by external factors (such as changes in the cost of production inputs, changes in technology, changes in consumer tastes or increased foreign competition) or by internal factors (such as poor management, or company restructuring) can have devastating impacts on a community. For areas that are highly dependent on single industry or a few large employers, targeted economic development efforts may focus on diversifying the base of business activities.

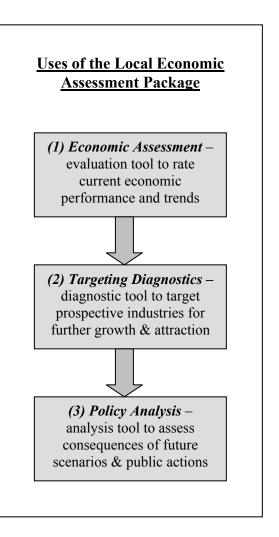
• <u>Competition for business locations</u> can be a continual risk and concern, even for areas with a strong economy. Frequently, the risk of competition is not identified until after a region begins to lose businesses to a competing area. A targeted economic development strategy aimed at sustaining a competitive business climate can offset this threat. Depending on the specific industries to be targeted, such a strategy could seek to improve local business operating costs, labor force training, local infrastructure and business support services, and/or transportation access.

All five types of situations illustrate how economic development efforts must be targeted to support specific types of business growth that address particular local problems or concerns. These situations also illustrate how business targeting efforts must be coordinated with efforts to improve local competitiveness factors. The targeting diagnostics element of ARC-LEAP is designed specifically to help match these business targeting and local competitiveness factors.

# 1.3 Limitations of Analysis

The techniques for critical economic assessment and targeting diagnostics described in this handbook (and contained in the ARC-LEAP system) are intended to be used and viewed as "tools" for economic development practitioners, planners and analysts. They do *not* replace the need for local understanding and professional judgment. Any analysis system can be abused, as inappropriate inputs can lead to unrealistic results. Some of the most critical factors affecting accuracy of this analysis system are identified below:

1. <u>Basis for Comparison</u>. By definition, any rating of business performance and area competitiveness has a reference basis for comparison. As discussed in Chapter 2, the basis for comparison may be an adjacent or surrounding area, the rest of the state or some other defined region that is comparable or representative of achievable goals. The comparison of areas can yield important insights, but care must be taken to avoid nonsense results from inappropriate comparisons (such as finding that a mountain region has a shortfall of seaport activity).



2. <u>Business Classification</u>. All currently-available measures of business concentration and trends are based on classification of businesses by industry. Analysis of business

concentration and trends can be very useful to help identify relative strengths and weaknesses of a region. However, all industry classification systems share the common limitation that they do not distinguish between a manufacturing company's administrative office and its factories. As a result of this limitation, the analysis may not recognize some specialized local strengths or weaknesses.

- 3. <u>Detail on Area Competitiveness</u>. The analysis relies on empirical data that is readily available, to the extent possible. The level of available detail is stronger for some economic development factors than for others. (For instance, the level of access to transport facilities can be measured in terms of minutes, but the level of access to broadband networks is less precisely measured.) As a result, some local advantages are better represented and recognized than others.
- 4. <u>Differences in Business Sales and Employment Trends</u>. The analysis framework is based on the concept of identifying local economic gaps and factors causing them. It is possible to define local economic gaps on the basis of either employment trends or business output trends. In reality, these two types of trends may diverge for some industries in some areas (as in the case of industries undergoing technological change, where there can be a decline of local employment while local business output expands). However, the analysis framework cannot consider a local industry to be both declining and growing at the same time, so it is necessary to choose just one measure. The current version of ARC-LEAP relies on employment statistics as the basis for measuring business gaps. This is also consistent with the primary focus of many economic developers on expanding employment opportunities for local residents.
- 5. <u>Interpretation of Industry Targets.</u> ARC-LEAP identifies economic development target industries and also estimates the magnitude of potential opportunities for business growth and attraction. However, it is important to understand the nature of these targets. Quite bluntly, if the local area was already sufficiently attractive to those industries, then those industries would have already located and/or expanded in the area. Viewed in this context, the industry targets should be seen as merely indicating likely opportunities for additional economic growth, though even they will require additional effort to be attracted to the area.

All of these types of limitations, discussed above, illustrate how findings on economic development analysis and targeting methods must be carefully interpreted to avoid oversimplification.

# 1.3 Organization of the Handbook

This handbook is organized into seven chapters, each representing a distinct element of local economic performance analysis. This introduction (Chapter 1) provided an overview of analysis system capabilities and limitations. Chapter 2 explains how to define the study area and a comparison area. The next three chapters then explain the types of information to be collected and considered in local economic performance analysis -- grouped in terms of (Chapter 3) business mix and trend statistics, (Chapter 4) quantitative measures of area characteristics, and (Chapter 5) qualitative, worksheet-based ratings of area facilities. All three types of information are considered together in developing findings on economic development opportunities and needs, as explained in Chapter 6. Finally, Chapter 7 discusses how to apply the findings in an economic development targeting strategy.

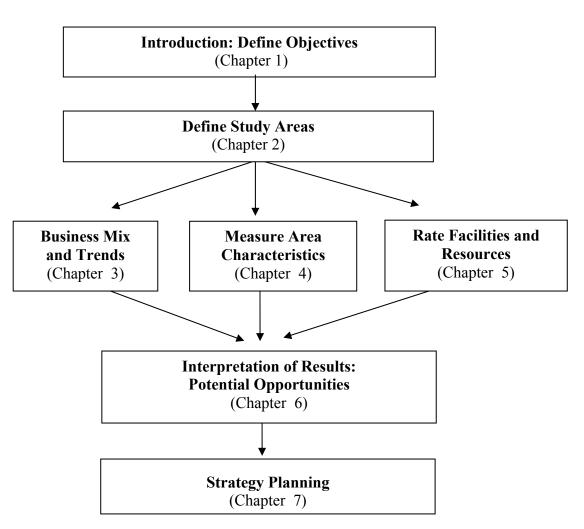


Figure 1-1. Flowchart: Logic of Handbook Organization

# 2. DEFINE STUDY AREAS

The first step in assessing economic performance and opportunities is to clearly define your area of analysis – to ensure that your analysis focuses on the area you care about, and to ensure that you collect appropriate data. The second step is to define your basis for comparison – so that relevant and meaningful conclusions can be drawn from the analysis. These decisions will affect the rest of the analysis, and can also determine the kinds of local and regional experts and stakeholders to be involved. This chapter describes factors to consider in making these study area decisions.

# 2.1 Identify the Study Target Area

The target area is the area for which you will be analyzing economic performance and competitiveness, and identifying potential future business targeting opportunities. The first step is to define the study target area. There are four factors to consider in the selection of the study target area:

- (1) The area of your agency focus. It makes sense to assess economic strengths and opportunities for the area in which your agency has direct interest and/or jurisdiction for taking action. If your agency is focused on local economic development, then this focus area may be just the city or else the city plus the rest of the surrounding county. If your agency is a regional agency, then the focus area may be a county or aggregation of multiple counties.
- (2) The economic market area. Businesses make some location and expansion decisions by considering characteristics of the labor market, shopper market and/or business market. These market areas are usually county or multi-county areas. For this reason, it can be misleading to evaluate the business performance and target opportunities of one town isolated from the larger market context. Thus, it is usually preferable to identify the study area as a county or multi-county area.
- (3) The area of most appropriate data availability. Another consideration in defining your study area is data availability and accuracy. More detailed and accurate economic data is often available at the county level than at the town or neighborhood level of geography. Also, the larger the area you choose for analysis, the more economic development resources may be available to aid in data collection and evaluation. However, unique aspects of local business mix and growth patterns and other business competitiveness factors can be diluted if too large of a multi-county area is selected for analysis.
- (4) *Project or policy impact area.* If you intend to use ARC-LEAP to assess the impact of proposed infrastructure or policy actions on economic development opportunities, then it may also be appropriate to consider the area directly affected by that proposed

action. For instance, if you are interested in assessing how a new highway connection or tax incentive may affect business targeting opportunities, then it is important to ensure that your definition of your study area and comparison area will serve to highlight and not obscure the impact. At a minimum, care must be taken to ensure that projects and policies to be assessed will be those that affect the study area but not the surrounding or adjacent comparison area. Care must also be taken in interpreting findings for different size study areas. For instance, it could also be inappropriate to make judgments about the overall magnitude of impact from a proposed future action if the selected study area is much smaller than the area actually affected by that action.

Normally, the study area will be a county or multiple-county region. ARC-LEAP requires that users make a single name for this study area and then provide all input data about area characteristics (defined in Chapters 3, 4 and 5) for this aggregate study area.

# 2.2 Identify Comparison Areas

To draw findings on a study area's business performance and competitiveness characteristics, it is necessary to relate those area characteristics to appropriate comparison areas. There are two kinds of appropriate comparison areas:

- (1) Local Comparison Area. The first kind of comparison area is the reference against which to compare local business mix, business cost and other business competitiveness factors. The local comparison base is usually an adjacent or other nearby area that can be construed as competing to attract and expand many of the same types of industries. This could be:
  - an area next to the study area
  - a region totally surrounding the study area
  - one or more similarly-sized *urban* regions, elsewhere in the state
  - one or more similarly-sized *rural* regions, elsewhere in the state

In general, the comparison area should be of a similar urban/rural density and share similar natural resources (such as terrain, coastal/lake/river accessibility, etc.) The advantage of selecting an adjacent or other nearby area is that this increases the likelihood of having similar terrain and natural resources, avoiding obviously bogus findings (such as the lack of mining in a maritime region or the lack of water transportation is a flat farming region).

(2) *Industry Trend Comparison Area*. The other kind of comparison area represents the reference against which to compare local business trends. The trend comparison area is most often the nation, continent or world. The reasoning behind this is that, regardless of why a given industry may be over- or under-represented in a local area, once there we can expect its local expansion or contraction trend over time to vary over time in a manner reflecting national or global growth or decline trends for that industry.

# 3. Local Economic Performance Analysis

The first data collection and analysis element of the ARC-LEAP model evaluates the mix and performance of industries in your study area by comparing your area with other local areas and with national averages. This is used to identify which are potential sources of future economic growth in the study area. This process can form the basis for identifying target industries for recruitment to the study area.

# 3.1 Employment Data

The ARC-LEAP model uses shift-share and location quotient techniques to help you analyze the performance of industries in your area compared with similar areas and with national averages. Data on the number of jobs in fifty-seven 2-digit SIC industries are used to measure the mix and trends within local industries in the study area. Employment data are used because job creation is the principal objective of local economic development policy. Because they are collected annually, they are some of the most current economic data available.

There are a limited number of national sources that report employment data by SIC. One source is the US Department of Census' County Business Patterns, which can be found online at a number of sites, including one maintained by the Department of Census and one by the University of Virginia. Both sites include SIC employment data for each county and state in the US, as well as national totals. Data on the Department of Census' site goes back to 1988; data on the University of Virginia's site go back to 1977. On both sites, the last year for which SIC-based employment data is available is 1997. After 1997, County Business Pattern data are reported by NAICS code. These are not comparable to the pre-1998 SIC classes.

The most current data for historic trend analysis is published by the Minnesota IMPLAN Group, Inc (MIG). MIG collects employment data for 528 detailed sectors, for each county and state in the US and converts them to SIC data. The latest data currently available is for 2000. The Appalachian Regional Commission (ARC) has licensed the use of MIG data by counties within the ARC region. Because it has current data by SIC code to compare with historic data, it is the recommended source of employment data for the ARC-LEAP model.

Unfortunately, in some rural or sparsely-populated industries with relatively few businesses, employment data are sometimes suppressed for confidentiality purposes. In cases where data are suppressed, a letter is usually provided that gives an indication of the range of jobs. If the user is using CBP data and encounters suppressed data, the user should replace the letter with the midpoint of the range (as detailed in the User Manual for the model).

Some individual state and local agencies also compile employment data by county and SIC. State and local data should only be used if the available data sets include data for both the study and the comparison areas. Under no circumstances should different sources be used for employment data for the study and the comparison areas. Mixing of data sources creates unreliable results, as the comparisons between areas will be skewed by the techniques used to gather and report data in each of the sources.

# 3.2 Business Mix Analysis

The ARC-LEAP model contrasts the performance of current and historic data of your study area's employment structure with that of your comparison area. Ideally, the comparison area will be one with a more highly-evolved economic structure that provides an illustration of where the study area would like to be in five to ten years. Based on what has been achieved in the comparison area, the potential for new jobs is assessed by detailed 2-digit SIC industry. The model first calculates the ratio of the concentration of each industry in the study area's economy to the concentration of the same industry in your comparison area's economy. For example, if 10% of employment in your local area is in food products and 30% of employment in the comparison area is food products, then the ratio of local to comparison area concentrations would be 10/30 or 0.33. This means that your area has one-third the concentration of jobs in food products that exist in the comparison area. This ratio is sometimes referred to as the Location Quotient (LQ), but we call it a "mix ratio".

To simplify the findings based on Location Quotients, a value of 1 to 3 is assigned to each industry, with 1 representing a low concentration and 3 being assigned to industries with a high concentration. The lower the value assigned to the industry, the greater it's potential for future job growth.

ARC-LEAP Mix Analysis estimates an "expected number" of jobs that would occur in your study area <u>if</u> it had an industry mix identical with that of your comparison area. The model uses this to estimate the potential number of jobs achievable in the study areas if it were to mirror the performance of the comparison area. Expected jobs are compared with actual jobs and a shortfall is calculated. This represents the potential jobs that could be achievable in the study area under the right conditions for growth of any given industry.

# 3.3 Business Trend Comparison

The business trend comparison uses Shift/Share Analysis techniques to compare the performance of industries within a local study area with national trends in the performance in the same sectors. This provides a way to identify the types of businesses that are particularly thriving or declining in your area and to compare their performance with the national average. Those local industries lagging in growth behind national averages may be seen as weaknesses, but they also represent potential future growth opportunities.

The ARC-LEAP model calculates the percent *change* in the number of employees in each sector for your local area and for the U.S. over the past five years. It then computes the ratio of these percentages, which tells you whether the local industry is growing or declining faster

or slower than the national industry, or if it is moving in an opposite direction from the national industry (e.g., declining while the national industry is growing or vice versa). This is sometimes referred to as the "Shift Share Ratio," though we call it the "trend ratio."

To simplify in interpreting trend ratios, the model assigns each sector into a trend category (from 1 to 6) depending on the relative growth rate of the local area to that of the industry nationwide. The following categories are used:

- 1. Industry growing "faster" locally than nationally\*
- 2. Industry declining locally while growing nationally
- 3. Industry growing locally while declining nationally
- 4. Industry declining locally "slower" than nationally\*
- 5. Industry growing locally "slower" than nationally \*
- 6. Industry declining locally "faster" than nationally\*
- 7. Industry growing or declining locally at a rate "similar" to national trend\* (Or industry not present locally)

# 3.4 Interpretation of Economic Performance Analysis

The table below is provided to help in interpretation of the Mix and Trend Ratios generated by the ARC-LEAP model.

| Mix   | Trend | Interpretation   |
|-------|-------|--|
| Ratio | Ratio |  |
| 3     | 1,7   | Local industry is strong   |
| 3     | 2,5   | Local industry is threatened locally, may need attention                 |
| 3     | 3,4,6 | Local industry is in national decline, should diversify                  |
| 2     | 1,7   | Local strength, should be supported                                      |
| 2     | 2,5   | Possible opportunity for more growth                                     |
| 2     | 3,4,6 | Unstable industry, focus efforts elsewhere                               |
| 1     | 1,7   | New emerging local industry, should be nurtured                          |
| 1     | 2,5   | Weak local sector, should be investigated as possible growth opportunity |
| 1     | 3,4,6 | Weak local sector in national decline, focus efforts elsewhere           |

<sup>\*</sup> Note: "Faster" denotes local growth or decline trend that is more than 20% greater than the national trend. "Slower" denotes local growth or decline trend that is more than 20% less than the national trend. "Similar rate" denotes trends that are less than 20% different.

# 4. QUANTITATIVE MEASUREMENT OF AREA CHARACTERISTICS

Key factors affecting the location of business include costs of doing business, size of labor and customer markets, and access to air, sea, railroad and highway facilities as well as broadband telecom networks. These are factors that can be quantified, using readily-available data sources. There are additional business location factors that are also important but require local field assessment. This latter group includes availability of appropriate land and buildings, education and skill training, business support climate and tourism attractions. We discuss the quantitatively measured factors in this chapter and the qualitatively assessed factors in the next chapter.

The ARC-LEAP model uses quantitative factors to evaluate the study area's strengths, weaknesses and potential for growth in each of 71 industries. Moreover, the model identifies the changes that are needed to overcome weaknesses in order to realize this growth potential.

#### 4.1 Cost Factors

An important consideration in business location decisions is costs. When all other things are equal, businesses tend to locate where they can minimize costs. Costs of labor, housing, electric power and taxes are foremost in this locational calculus. Data regarding these factors are entered into the ARC-LEAP model, which both identifies the types of businesses that are most sensitive to each cost factor and estimates the employment impact of building on strengths and addressing weaknesses with new policy initiatives.

The ARC-LEAP model evaluates where an area's total production costs are advantageous or disadvantageous for each of 71 detailed industries based on the following detailed cost data for the study area:

- *Labor costs*. The average manufacturing wage per hour can be the number one factor for labor-intensive industries evaluating locations for new production facilities.
- *Electricity costs* vary widely by region. Power costs can be paramount in determining the location for heavy industries, such as primary metals, which use a lot of power. Costs of other utilities (e.g., natural gas) are also important for some industries.
- State and local taxes. Taxes appear to be minor elements of total business cost, though they can still be an important consideration for businesses seeking to minimize total costs, and they can also be an indicator of the business climate of the area. While the importance of state and local taxes is reduced by their deductibility from federal taxes, taxes are still an important factor influencing some investment decisions.

Housing costs. Costs of both owning and renting residences is a cost factor that most
businesses look at before finalizing decisions about new locations. Housing costs are
particularly important for businesses that relocate staff and pick up the tab for
excessive housing costs incurred by transferees into a new, higher cost area.

Most importantly, the importance of each of these cost factors differs systematically by type of industry. The ARC-LEAP model makes use of this information to identify how these local factors can provide advantages or disadvantages for growing various industries.

# 4.2 Demographics: Labor and Customer Markets

The availability of suitable labor in any given area is a crucial consideration for both manufacturing and service industries. The model considers the availability of *skilled labor* as well as the *unemployment rate*, as key measures of appropriate labor availability. Given a sufficient base of skilled labor, areas with a higher unemployment rate may be more attractive to some businesses.

The model also considers size of the labor market as a factor affecting the ability of a business to sustain growth. It considers the population within 60 and 180 minutes drive time of the middle of the study area. The population base residing within a maximum 60 minutes of the study area is an indicator of the relative labor market catchment area. On the other hand, the population base residing within a 180 minutes of the study area is a rough indicator of the relative amount of residential and business customer base that can be served within a one-day (round trip) drive from the study area.

# 4.3 Access: Transportation, Tourism and Telecommunications

Business efficiency is highly dependent on the transportation accessibility of a local area. Transportation conditions and improvements to them have the potential to significantly affect business access to customer markets and suppliers. We can measure external transportation access in terms of the average travel time to airports, marine ports, and rail facilities (including both passenger and truck/rail intermodal terminals. We can also measure internal transportation access in terms of average speed of highway congestion levels.

The type of transportation access that is important to businesses differs systematically, depending on the industry. For instance:

- Highway Access. Retailers and personal service businesses often seek strong highway
  access for customer visits, while and wholesale and distribution activities usually seek
  strong highway access for truck deliveries to their customer markets. Road congestion
  can serve to effectively reduce market access for some businesses.
- *Rail.* Industries producing commodity products (e.g., grains, coal, minerals) often seek rail access for shipping raw materials. Other industries that process those commodities (e.g. metal fabrication, food processing and electric power plants) often seek rail access for obtaining raw materials.

- *Air*. Industries with high value products and broad markets (e.g., electronic and medical products) often seek good airport access for rapid shipment of products to distant customer markets.
- *Marine ports*. Some industries that rely on natural resources (such as wood and grains) depend on access to access to inland river and lake ports as well as seaports, while other industries that ship overseas depend on access to seaports.
- *Inter-Modalism*. Intermodal facilities can allow seamless transfers among modes of air, sea, river, and ground transportation like rail, bus, taxi, and auto. For freight operations, inter-modal facilities link between trucking and rail, air and sea shipping, and can result in cost-saving time reductions in shipping cargos.

Tourism is another important source of economic growth for some areas. That is directly affected by both the strength of local attractions and the availability of access to them via highway, rail and/or air travel.

Finally, it is important to note that the availability of broadband data packet networks and services differs among areas, but can also affect business location decisions for an increasing number of industries. Bandwidth, redundancy, access prices and availability of integrated business data services can all be factors for various industries.

# 4.4 Interpretation of Cost, Demographic, & Access Factors

The impact of cost, demographic, and access issues are different for different types of businesses. The ARC-LEAP model considers the sensitivity of each of 71 industries to these factors, using a variety of sources<sup>1</sup>. The ARC-LEAP model compares data on these critical factors in the study area with the same data set for a comparison area. This provides a basis for identifying how current access conditions serve to affect existing business mix and growth

All of these transportation and broadband network access factors can also be improved by public policy initiatives and by private investment. The model evaluates scenarios related to the improvement of trends the transportation and broadband network access and then estimates the employment impact of proposed improvements for all 71 different industries.

\_

<sup>&</sup>lt;sup>1</sup> This data on industry sensitivity was derived from the technology matrix of the US Dept. of Commerce inputoutput tables, US Satellite Accounts for transportation and tourism activities, IRS data on business investment, US DOT's Freight Analysis Framework and Commodity Flow Surveys, US Dept. of Labor occupational statistics, propriety surveys on broadband activity uses, proprietary studies of just-in-time production processes and International Trade Administration data on export modes and ports.

# 5. RATING LOCAL FACILITIES AND RESOURCES

The previous chapter showed how local conditions relating to costs, worker skills, and access can be represented by quantitative data, and then used to assess their impact on the potential for economic growth in the study area. Other important factors affecting the study area's prospects for economic development include the conditions of industrial sites and buildings, availability of business support programs, and level of local labor force skills and education training. This second set of factors are discussed separately in this chapter because they need to be measured though a worksheet assessment process that relies on local field observations (rather than downloading available public data).

A series of six worksheets is used to assess additional business facilities and supporting resources that affect the study area's attractiveness for business. These worksheets serve to identify and assess the study area's strengths and weaknesses in terms of business support programs, industrial land and buildings, labor force, and other key considerations. These worksheets provide criteria for developing ratings that are entered into the ARC-LEAP model. The Software Instructions for the model have directions for assigning ratings.

# 5.1 Business Support Programs (Worksheet 1)

It is important to know what economic development programs exist in your area. Worksheet 1 lists various categories of business support programs by program type and services offered. For each type of program, list the names of specific programs related to economic development along with information about eligibility and levels of financial support available. You should then rate the quality and coverage of your business development programs on a scale of one to ten for input into the ARC-LEAP model.

# 5.2 Land Inventory (Worksheet 2)

A prerequisite for economic development is maintenance of a suitable inventory of sites for incoming and expanding industries. Worksheet 2 rates industrial and commercial (office, and retail) sites available for new businesses locating or expanding in your study area. Good sources for this information are real estate brokers, industrial property developers, and utility economic development staff.

# **Worksheet 1. Economic Development Program Inventory**

| Program Type                       | Check if it Exists | Name of Program           | Eligibility Rules /<br>Target | Potential Funding<br>to Applicant (\$) | Importance<br>(High, Medium,<br>Low) |
|------------------------------------|--------------------|---------------------------|-------------------------------|--|--------------------------------------|
| <b>Support for Existing Busine</b> |                    |                           |                               |  |                                      |
| Counseling                         |                    |                           |                               |  |                                      |
| Financing                          | X                  | State loan programs       | Manufacturing only            | \$10-100 million                       | High                                 |
| Support for New Start-Up B         | Businesses         |                           |                               |  |                                      |
| Counseling                         | X                  | Small Business Center     | counseling program            | NA                                     | Medium                               |
| Financing                          | X                  | Revolving Loan Fund       | business <\$1m revenue,       | \$-5 million                           | High                                 |
| Incubator Space                    | X                  | Tech College<br>Incubator | startups only, 2 years        | \$10 – 100k                            | Medium                               |
| <b>Investment Incentive Progra</b> | ams                |                           |                               |  |                                      |
| Land                               | X                  | brownfields program       | existing buildings            | variable                               | Medium                               |
| Buildings                          |                    |                           |                               |  |                                      |
| Equipment                          |                    |                           |                               |  |                                      |
| Promotion & Marketing of           | the Area           |                           |                               |  |                                      |
| Tourism                            | X                  | State Tourism Office      | not applicable                | NA                                     | medium                               |
| Industrial                         |                    |                           |                               |  |                                      |
| Downtown/Center                    |                    |                           |                               |  |                                      |
| Training Programs                  |                    |                           |                               |  |                                      |
| Vocation Education                 |                    |                           |                               |  |                                      |
| College                            | X                  | entrepreneurship progr    | am start-ups                  | NA                                     | High                                 |

#### **Worksheet 2 Land Inventory**

| Names & locations of           | Best       | D                                      |   |
|--------------------------------|------------|--|---|
| <b>Major Development Sites</b> | Reuse      | Deficiencies                           | Advantages  |
| County Wood Products           | Industrial | Access roads not paved, no sewer, no   | 20 acres available, electricity service, rail siding, |
| Industrial Park                |            | high speed telecom available           | 2.5 miles from interstate                             |
| Olsen Glass Factory            | Retail     | Brownfield site, contamination unknown | 400 acres .025 mi from interstate highways            |
|                                |            |  |   |
| McAlister Farm                 | Office     | Needs water & sewer                    | 300 acre greenfield site, 0.5 mi from interstate,     |

#### Steps and Criteria for Completing the Industrial & Commercial Land Inventory (Worksheet 5-2)

Step 1: Identify industrial land parcels in your area. A supply of vacant land zoned for industrial and commercial development is critical for attracting new businesses into your community. Maintaining a detailed, current inventory of available development sites for business is a fundamental for successful economic development. Therefore, it is necessary to identify and record parcels suitable for industrial uses. Enter the name and location of industrially zoned parcels in Column 1.

Step 2: Assess the best reuse prospects for the site. In tandem with other economic developers and real estate sources, mark the appropriate (re)use for each site in column 2 – categorizing it as industrial, retail, office, hotel, institutional, or other.

Step 3. In column 3, identify site deficiencies, in terms of failure to meet the most common requirements for business use, including:

- Poor Access
- Brownfield or contaminated status
- Lack of utilities
- Distance from interstate highways
- Low visibility
- wetlands, floodplain, or other environmental designations limiting development
- Existence of outmoded buildings with no viable reuse potential

Step 3: In column 4, identify site advantages, in terms of features above and beyond the basic requirements such as:

- Access to an active rail line with a siding
- Within 40 minutes from airport with scheduled passenger service.
- In-place sewer, septic, natural gas and/or fiber optic cabling.
- Greenfield or cleaned 21E condition
- Space for at least three industrial buildings of 20,000 sq. ft. each.
- Paved roads into the park and to sites within the park

- Within 5 minutes drive time to an interstate highway.
- Vacant building or shell structures already constructed.
- Potential for reuse as an incubator for small businesses.
- Three or more acres zoned for industrial uses.
- At least one vacant lot or building.
- Access to electricity, telephone, water, sewer/ wastewater facilities

# 5.3 Building Inventory (Worksheet 3)

Having available development sites for industry is crucial, but having the right building for a given business looking to locate in the area can seal the deal immediately. Worksheet 3 rates vacant and available buildings for industrial and commercial uses in you community. In today's fast-paced economy, many businesses do not have the time or commitment to build their own buildings. Businesses interested in renting or buying buildings look for areas with a choice of competitively priced vacant properties. It is necessary to conduct a thorough inventory of all major available buildings offering reuse prospects for new and expanding businesses in the study area.

The building inventory should cover all vacant rental and sale properties with good potential for commercial reuse. They can contain a mix of industrial, office, retail, or warehousing space. All major available commercial buildings in your area should be listed. Note any advantages they offer in size, condition, location, or price in Column 2. Note any drawbacks under deficiencies in Column 3. Some key criteria are:

- 10,000+ sq. ft. in one unit
- loading docks
- divisible into incubator units for small businesses, with shared services
- 15+ foot ceilings
- easy access to a 4-lane highway
- municipal sewer

- elevators if multi-floor
- basic utility services
- single-story building
- adequate loading bays
- sprinkler systems
- fiber optic wiring
- construction or renovation in last decade

# 5.4 Labor Force Assessment. (Worksheet 4)

One of the key reasons why many businesses choose to move into a new community is because there is a good supply of workers with the right skills for their industry. Worksheet 4 will help you to assess the perceived strengths and weaknesses of your local labor force. The main sources of information for this are likely to be major employers and the local offices of the state departments of employment and training. Key criteria to be evaluated are:

- Worker Skills Are the skills of the labor force appropriate for new businesses coming into the community? Be specific about types of skills and industries utilizing them.
- *Educational Levels* Are there [enough] workers with high school diplomas, 2- and 4-year college degrees, and technical training?
- Education System Are there programs available to train workers for new jobs brought into the community? If so, for what kind of training?
- Availability of Workers- Although high unemployment is counter to your economic
  development objectives, it does indicate that there is a good supply of workers available.
  Most businesses will be discouraged from opening new locations in an area with tight labor
  markets.
- Wage rates Are wages in the local area competitive with other similar places?

# **Worksheet 3. Industrial & Commercial Buildings Inventory**

Please complete this sheet for all major vacant industrial and commercial buildings in the study area.

| Names & Locations of<br>Major Buildings | Best Reuse               | Deficiencies                            | Advantages   |
|---|--------------------------|---|--|
| American Twine Building                 | Office                   | Slow elevators, insufficient parking    | high ceilings, loading docks   |
| Tech incubator                          | Incubator                | limited space available, no rail access | close to interstate highway, fiber optic line available, fee-<br>based shared services |
| Moldavian Mills                         | Mixed use retail & apts. | Contamination issues,                   | Good architectural features for reuse, ample parking, established                      |

#### **Worksheet 4. Labor Force Assessment**

| Factor  | Strengths   | Weaknesses (3)  |
|---|---|---|
| Worker Skills                                     | precision machine service skills (from closed plant), good work ethic   |   |
| <b>Education Levels</b>                           | 85% of the workforce are high school graduates. Two-thirds of workers have some college   | Only 20% of workers are college graduates   |
| Education System &<br>Skills Training<br>Programs | Training program at community college for basic office skills and computer / electronics; Community college has a new, proactive director who wants to work closely with businesses | no four-year college in the region<br>No employer-based training programs to date |
| Availability of<br>Workers                        | High unemployment, available workforce for 1000 job plant<br>Signif. skilled manual workers due to major plant closures   | Most of the unemployed area over 45 years of age                                  |
| Wage Rates  | 20% less than state average, attractive to businesses   |   |

#### 5.5 Tourism Assessment. (Worksheet 5)

Tourism can be a factor in economic development if your area has special attractions that draw a significant number of visitors coming from outside of the region and bringing their spending to the region. The ability to develop jobs and income from tourism can be affected by three types of actions: (1) improvements in transportation access, as rated in the prior chapter, (2) improvements in promotional activities and (3) improvements in the quality of visitor experience. The first step, though is to assess existing and potential tourist attractions in terms of their attraction and capacity to bring in more tourism, using Worksheet 6. This involves three steps

Step 1: List visitor attractions. Visitor attractions include cultural and historic buildings and landmarks, birthplaces of famous local people, museums, and memorials. Scenic or natural resource attractions include parks and trails, visitor and interpretive centers, and destination recreational sites. Other tourist attractions include sports facilities, theaters or amusement parks. List these historic, scenic and special attractions in your area on Part A, Column 1.

Step 2: Obtain basic descriptors of the visitor attractions. For each of the major visitor attractions, obtain information about their primary market draw (local, regional, statewide, multi-state, or national). Also obtain information about the volume of visitors to each attraction and their "strengths" (opportunities for growth in visitors) or "weaknesses" (factors limiting their appeal). Enter this information in part B, Columns 2 – 6.

Step 3: Assess your area's capacity for supporting more visitors. Obtain information on the number of hotels/motels, campgrounds and restaurants, and their capacity. Enter this information in to the worksheet.

# 5.6 Interpretation and Use of Worksheet Results

Rating of Advantage/Disadvantage. Based on these worksheets, you can rate your area's resources for economic development in terms of business support programs, land, buildings, labor skills, and capacity for tourism. The rating for each of these factors should be rolled up into a single rating on a scale of 1 to 10, where 5 is average or similar to comparison areas), above 5 is a relative advantage and below 5 is a relative disadvantage. The results should be input to the ARC-LEAP model.

The ARC-LEAP model has information on the relative sensitivity of each industry to each of these factors, and combines that information with your ratings to assess the whether your area is in a position of strength or weakness for attracting or growing various types of businesses. These results can be of particular interest because they can help to explain your area's economic performance; particularly why some industries have been attracted to the area and have grown more than others.

#### **Worksheet 5. Tourism Resources**

# A. Attractions

| Visitor   | Market   | Visitors      | Strengths                                | Weaknesses                                | Planned                                    |
|---|----------|---------------|--|---|--|
| Attractions   | Area     | per Yr        |  |   | Investments                                |
| Historic Attractions  |          |               |  |   |  |
| birthplace of famous country music star                                 | National | 30,000        | national name                            | no good access road,<br>limited promotion |  |
| Scenic Attractions  |          |               |  | ·   |  |
| federally-designated "Wild & Scenic<br>Rover", with nearby Crystal Lake | State    | 20,000        | beauty, recognized by<br>Audubon Society | no signage for boat<br>ramp or parking    | proposal for resort<br>and canoeing center |
| Other Visitor Attractions   |          |               |  |   |  |
| general store and antique center  | Regional | not available |  | seasonal opening only                     |  |
| County historical museum  | Local    |               |  |   |  |

# **B.** Facilities for Visitors

| <b>Local Services for Visitors</b> | Number of<br>Establishments | Total<br>Capacity | Strengths                                    | Weaknesses         | Planned<br>Investments |
|------------------------------------|-----------------------------|-------------------|--|--------------------|------------------------|
| Hotels/Motels                      | 2                           | 80                | Clean, good facilities                       | seasonal operation |                        |
| Campgrounds                        | 1                           | 36                | near national forest,<br>hookups and showers | seasonal operation |                        |
| Restaurants                        | 3                           | 60                |  | two are lunch only |                        |
| Other                              | 1                           | 15                | Historic Bed &                               | Low visibility     | Expansion planned      |
|                                    |                             |                   | Breakfast                                    |                    |                        |

*Use of Ratings Analysis Results*. The information in the worksheets can be used to identify competitive disadvantages that are currently holding back your area's economic growth, and that might be addressed as part of a future economic development strategy. You can also use the analysis results to identify target industries that are good prospects for future economic development, given your area's current constraints.

The nature of future strategy actions will depend on the potential business targets which the model's outputs will help you to identify. For instance, if the model identifies a possible opportunity for financial services, then it may be particularly useful for you to consider the availability of first class office space with broad band or fiber optic telecommunications access. If the model pinpoints an opportunity for machinery assembly plants, then availability of industrial park tracts with space for large, one-story buildings may need to be evaluated. If the model indicates opportunities for electronics manufacturing, then the appropriate labor force skills might be the paramount consideration.

Policy Actions. Critical weaknesses in your economic development resource base should be addressed by policy initiatives. Some deficiencies can be remedied more quickly and comprehensively by public policy changes than others. Problems that might be addressed within a couple of years might include expansion of job training programs, upgrading of broadband telecommunications facilities, and/or improving access to intermodal freight facilities. On the other hand, problems that may be more difficult to address in the short run may include cost of electricity, distance of existing industrial parks to an interstate highway, shortages of skilled labor, and limited airline service.

You can also use the ARC-LEAP model to evaluate potential future policy scenarios. The model has a section that allows comparison of current conditions against future scenarios in which rating levels have changed. For instance, you might take actions to address current constraints by improving labor skills training, quality of available sites and buildings, tourism capacity and/or business support programs. In that case, the local ratings for one of more of these factors can be changed from deficient to average or better. The ARC-LEAP will then identify how changes in these ratings would change the magnitude and mix of business targeting opportunities. Through side-by-side comparison of targeting opportunities associated with current conditions and a future scenario, you can identify which types of policy actions can be most effective in increasing your overall business attraction opportunities or your competitiveness for attracting growth in certain key, desired industries. These applications are discussed further in the next chapter.

# 6. EVALUATION OF RESULTS

This chapter describes the different types of findings that emerge from analyzing information assembled in the preceding chapters, and it also discusses their interpretation.

# 6.1 Industry Performance Assessment Results

The starting basis for the ARC-LEAP model is known as the industry performance assessment, and it builds upon a technique known as "Economic Base Analysis." The economic base analysis compares the relative mix and growth/decline trends in study area economic activity against comparison areas, in terms of 71 industries. The portion of this analysis that compares differences in employment mix is known as "location quotient" analysis. The ARC-LEAP model location quotients to identify where the local area appears to have a shortfall in its representation of certain industries. The other portion of the analysis compares differences in employment growth trends and is known as "shift share" analysis.

The ARC-LEAP model uses two different bases for comparison. It applies business mix (location quotient) analysis to compare study area business mix against a *nearby comparison area* that has been chosen because of rough similarities in locational and natural resource characteristics. It applies business trend (shift-share) analysis to compares study area business growth for each industry against *national average* growth in that same industry to identify industries that are outperforming or underperforming against their counterparts elsewhere in the nation. All differences in mix and trend are measured in terms of jobs, because jobs are a constant that is not affected by inflation in the valuation of products over time. In addition, local economic developers tend to be particularly interested in pursuing economic development that leads to further job creation.

The analysis process has three steps:

- 1. By analyzing differences in business mix and trends against regional patterns and national trends, the ARC-LEAP classifies local business performance in terms of mix and growth trends. For local development personnel who are interested in developing employment growth policies, ARC-LEAP provides an "Industrial Trend Rating" to identify the types of businesses that are particularly thriving or faltering in the local area, compared to performance elsewhere. (The definition of these mix and trend categories was defined in Sections 3.4, 3.5 and 3.6.)
- 2. The model then identifies industries that appear to be locally under-represented in terms of mix and/or locally under-performing in terms of trend, and identifies them as possible *candidates for improvement*. (Note: an under-performing industry is one that is growing slower than nationally, declining faster than nationally, or locally declining while growing nationally.) For each, there is a measure of the potential for additional job growth over a ten year period.

3. Among the candidates for improvement, the model isolates the subset that are in industries expected to be growing in the future, and labels then as "strong candidates for future growth" through targeted economic development efforts. These are sectors that meet two criteria: there is positive additional growth potential in the study area and national employment in the sector is expected to grow over the next decade. (The model also identifies industries that appear to be already strong in local concentration and growth, and identifies them as industries that are already performing well without need for further economic development intervention.)

The findings from this local industry performance assessment are but a first start in the analysis process. In the next section, ARC-LEAP evaluates local strengths and weaknesses in terms of factors affecting business site location and investment decisions. That information is then used to further hone in on best prospects for economic development, and the types of efforts needed to best pursue them.

# 6.2 Diagnostic Analysis Results

The diagnostic portion of ARC-LEAP includes a broad set of area diagnostics about business advantages and disadvantages for each industry in which there is a potential for further business growth and attraction, as identified in the assessment portion of the model. This set of diagnostics identifies "critical" and "important" weaknesses that need to be addressed if the area is to fulfill some of the growth potential identified in the local area assessment. The diagnostics presented in ARC-LEAP are developed by looking at each industry's sensitivity to different factors and for those factors most important to an industry, their relative competitiveness in the local area. Factors assessed in the diagnostic portion of the model include total production costs; labor costs; land/office costs, energy costs; taxes; availability of labor (i.e., "work base"); availability of skilled workers; water transportation; air transportation; rail transportation; highway transportation; and availability of broadband telecommunications access.

In other words, the ARC-LEAP model identifies sets of industries that are good targets for economic development by matching an area's labor and infrastructure characteristics (e.g., wage rates, education levels, airport access) with operating requirements of each industry. For those industries that are currently lagging locally but could offer future growth opportunities, it identifies the nature of current disadvantages that need to be overcome in order to effectively promote more local business activity.

Two types of disadvantages are identified: "critical" and "important" local disadvantages.

- A factor is categorized as causing a "critical" local disadvantage if that factor is very important to the competitiveness of a specific industry (e.g., labor costs in laborintensive industries) and the study area's disadvantage is very large relative to the comparison area.
- A factor is categorized as causing a "important" local disadvantage if: 1) that factor is very important to the competitiveness of a specific industry (e.g., labor costs in labor-

intensive industries) and 2) the Study Area's disadvantage is significant but not huge relative to the Comparison Area; or if: 1) that factor is relatively important to the competitiveness of a specific industry (e.g., labor costs in labor-intensive industries) and 2) the Study Area's disadvantage is significant or even large relative to the Comparison Area.

For each business factor, ARC-LEAP identifies industries that are critically or importantly disadvantaged by the current quality or cost of infrastructure. In addition, it estimates the number of jobs that could be created if the impediment were removed (i.e., if the quality and cost of the factor were the same in the study area as in the comparison area).

#### 6.3 Policy Analysis Results

Direct Impacts. The policy portion of ARC-LEAP allows users to analyze the effects of future economic development policies and actions on the business growth and attraction potential of a local area. Users can estimate the likely business growth and attraction impacts of changes in availability or quality of key inputs (labor and economic infrastructure), including labor force size and skill levels; broadband access; tax policy; availability of commercial land, industrial parks, office sites; access to airports, sea ports, and rail; and improvements to highways. Estimates of these presented as estimated new jobs directly associated with improved business attraction potential.

Complementary Industries and Cluster Development. It is important to also consider opportunities for building upon inter-industry linkages – in other words, sets of industries that build on common needs and buyer-supplier relationships. Complementary industries are types of business which are not primary target industries, but which may nevertheless represent growth opportunities because they are suppliers of goods and services to the primary target industries or otherwise interact with them. In this case, any direct opportunities for business growth may also indirectly create opportunities for growth in complementary industries that do not directly depend on highway access.

Making Future Scenarios Occur. None of these potentials, either the direct ones or the indirect ones, will automatically come to your area. Rather, a strategy plan is necessary to address remaining needs and to actively entice such business growth and attraction. The next chapter discusses ways to identify what you need to do to facilitate and encourage the potential growth to occur, and how to develop an action plan and strategy to make that happen.

# 7. DEVELOPING A STRATEGIC PLAN

In the previous three chapters, we have discussed how to gather data to assess your area's economic performance, identify potential opportunities for targeting future business growth and attraction, and evaluate policy options to enhance local economic development. In this final chapter, we lay out a general <u>process</u> for you to work with other area agencies and leaders in forging a strategy plan for pursuing greater economic growth.

The strategic planning process consists of three basic steps:

- *Part 1: SWOT Review: Where are we now?* Discuss the area's <u>Strengths</u>, <u>Weaknesses</u>, <u>Opportunities and <u>Threats</u> (SWOT) with other interested parties. You can do this through a review of findings from the analyses described in previous chapters -- local economic performance, quantitative competitiveness analysis, and qualitative facility/resource assessment.</u>
- Part 2: Mission Statement: Where are we going? Discuss how the SWOT findings and your community values combine to determine a vision of feasible and desirable future directions for the area. This serves as a foundation for developing long-term goals and objectives. Finally, stakeholders should agree on measurable milestones and specific targets for economic development.
- Part 3: Strategic Plan Development: How do we get there? Develop a program of action steps to work toward achievement of the vision and goals. You must agree on organizational, staffing and financing plans to pursue the goals, as well as some form of monitoring and evaluation to assure their effectiveness.

#### 7.1 SWOT Review: Where are we now?

A fundamental step in assessing where your area now stands for encouraging economic growth and development is the identification of strengths, weaknesses, opportunities, and threats (SWOT) facing your area. The strategy and program that you develop will build upon your area's strengths, pursue opportunities, and consider how to improve upon areas that are currently weaknesses or threats. You will not be able to "fix" all weaknesses. Those that cannot be fixed should nevertheless be noted, as they will influence your decisions about the types of businesses your strategy will pursue.

**Preliminary Summary of Findings.** The first step in the SWOT Review is to draw together the information gathered in the previous chapters:

- summarize findings on the business mix and performance trends (Chapter 3);
- summarize findings on local *competitiveness factors* (Chapter 4);
- summarize findings on the *facilities and resources* (Chapter 5); and
- summarize findings on *current opportunities and policy alternatives* (Chapter 6).

**SWOT Analysis Strategy Meeting.** The second step is to convene a strategy meeting of stakeholders to develop a common understanding of your area's economic situation, prospects and needs. The group should use the summary of information to: (1) identify the *types of business* that are currently the largest sources of jobs in the area, and the types of business that offer the largest potential for future job growth in the area; (2) rate their relative *importance* as either sources of current jobs or potential sources of future jobs; and (3) assess strengths and weaknesses of the area's *internal resources* (e.g., facilities, programs and labor force) for promoting those types of business. The group should also discuss: (4) opportunities and threats posed by *external factors* (e.g., technology change, global economic change or government regulations) affecting the area's prospects for those types of business. Put this information into a concise statement such as the SWOT form that is shown in Table 7-1.

# 7.2 Vision and Goal Formulation: Where are we going?

Once you have assessed your strengths, weaknesses, opportunities, and threats, a separate series of meetings of key stakeholders in the community should be conducted to achieve agreement on: (1) a strategic focus and mission; (2) overall goals for economic development; and (3) measurable milestones and targets along the way.

Formulate a Strategy Focus and Mission Statement. It is important to discuss the major trends (opportunities and threats) facing the area, and the values of area residents and businesses relative to economic change and quality of life. From that discussion, there should be some general agreement on how the community or area wants to see economic growth evolve over the next five to ten years. This represents the strategy direction. The mission statement should include: a statement of the strategy direction and its reasons, as well as a specific time frame, target area and focus on target industries to be pursued.

In completing this step, it is often helpful for the group to develop: (1) a probable future scenario for the area based on no intervention; and (2) a preferred scenario based on intervention to pursue economic development targets. The preferred scenario will serve as a basis for the vision statement. This can be agreed upon before the end of the meeting or it can be drafted afterwards and circulated among participants for comment and refinement.

**Table 7-1. Sample Form for SWOT Review** 

| Type of Business                                    | Coal mining                          | Automotive parts suppliers   |  |
|---|--------------------------------------|--|--|
|   |                                      |  |  |
| Current Importance in your Area                     | Largest employer                     | Small but growing  |  |
| Competitive Position of your Area                   | Weak, relative to surrounding areas  | Previously weak, made stronger due to highway connection                                   |  |
| Area Strengths<br>(Supporting Growth)               | Labor force is well skilled          | Well positioned location relative to two auto assembly plants                              |  |
| Area Weaknesses<br>(Threatening or<br>Constraining) | None                                 | Limited labor force skills, no suitable industrial park properties                         |  |
| Potential Opportunities for Growth                  | None                                 | Could double in our county due to expansion of nearby auto plants                          |  |
| Potential Threats<br>to Retention or Growth         | The industry is shrinking nationally | Strong competition from adjacent surrounding counties, uncertainty about the auto industry |  |

It is also important to achieve consensus among stakeholders about priorities for the types of economic development intervention to be considered. These can include some or all of the four major types of economic development: (1) *retention* of existing industries that are threatening to leave your area; (2) promoting *expansion* of existing industries already in your area; (3) *attraction* of new industries and recruiting new businesses to relocate to your area; and (4) promoting *startups* of new business within your area.

**Formulate Goals.** In a subsequent meeting, the vision statement should then be translated into one or more specific goals. Goals provide initial direction to the economic development strategy and they also provide a yardstick against which to measure progress. The goals may include economic, physical or organizational changes, such as:

- Retain or increase employment in the area (reducing unemployment)
- Retain or increase the area's population base (reducing the outflow of young people)
- Increase average income levels (reducing poverty)
- Improve the quality of jobs (reducing under-employment)
- Diversify the area's economic base
- Stabilize or augment the local tax base
- Improve local infrastructure, assets, and facilities
- Improve the capacity of local organizations for promoting economic development
- Increase funding mechanisms to promote economic development

**Designate Measurable Milestones and Specific Targets**. General goals for the strategy should be translated into specific targets in terms of the types of businesses to be recruited, retained, supported, or encouraged. Targets should be types of business that represent local strengths, as well as those presenting new opportunities for growth in your area. They should be screened from the list of potential targets in the technical analysis (analysis in Chapters 3 - 6), based on your community's ability to support them by offering the relevant access to markets and suppliers, labor pool, infrastructure, and growth support programs. Secondary screening criteria might also include community values regarding environmental considerations, quality of jobs, and nature of required land development.

# 7.3 Strategy Development: How do we get there?

The next phase of strategic planning is to determine the way that the community's goals will be achieved. There are six basic elements in the implementation of a typical economic development strategy aimed at business growth and attraction:

- 1. *Community Information:* Create and distribute a package of basic information about the area and what it offers to businesses. This is often known as a "fact book".
- 2. Sales Representation: Meet with other allies, such as state economic development agencies.
- 3. *Business Visitation*: Work with existing businesses in the area to assure them that they are wanted and appreciated. Help them to stay and grow in the community.

- 4. *Ambassadors*: Establish a point of contact for firms interested in starting up, expanding or moving to communities in the area.
- 5. *Business Support:* Implement supportive programs to help meet business needs for location and expansion in the area (such as financing, job training, and infrastructure development).
- 6. Ongoing Effort: Maintain your program of effort (items 1-5, above) over time.

Who to Involve. Discussions with politicians, other local stakeholders and other allied organizations are needed to fund and implement such a strategy. No economic development program can work without political support. By building consensus among political leaders, you will facilitate the allocation of sufficient public resources and the approval of local regulations that help rather than hinder economic growth (such as business zoning and tax rates). Politicians, like other stakeholders, need to be involved in the strategic planning process from the start. It is particularly helpful if the political leadership can initiate the planning process. Involvement of both the private and public sectors in planning usually improves the ability to successfully implement an economic development strategy.

**Turning a General Strategy into an Action Plan.** Your strategy should be translated into specific annual goals and milestones for the next three to five years. Table 7-2 shows an example of an action plan for regional economic development that is implemented by a new voluntary partnership with no full time staff or real funding sources. Table 7-3 shows an example of a funding plan with potential revenue sources and fundraising goals.

Table 7-2: Sample Action Plan for a New Regional Economic Development Partnership

| <b>Strategy Element</b> | Year One                 | Year Two               | Year Three               |
|-------------------------|--------------------------|------------------------|--------------------------|
| Business                | Research target industry | Step up downtown       | New training             |
| Attraction              | needs                    | renewal                | programs for target      |
|                         |                          |                        | industries               |
|                         | Develop regional         | Develop internet web   | Identify related cluster |
|                         | brochure                 | site materials         | industries               |
| Business                | Form business            | Launch business        | Launch regional          |
| Retention               | networking groups        | opportunity initiative | image-building           |
| Recention               |                          |                        | campaign                 |
|                         | Annual postcard survey   | Develop incubators &   | Promote private          |
|                         | of business              | managed workshops      | industrial development   |
| Training                | Work with local college  | Begin school-to-work   | Tailored training to     |
|                         | to offer computer        | programs               | meet new businesses'     |
|                         | training                 |                        | needs                    |
| Financing               | Sponsor business         | Small business tax &   | Revolving loan fund      |
|                         | banking fair             | accounting seminars    | for business startups    |
|                         | Business accounting      | Promote SBA loan       | Work with Chamber        |
|                         | course offered by        | programs               | to identify future       |
|                         | community college        |                        | needs                    |

Table 7-3: Sample Economic Development Funding Plan

| Source                                    | Year 1    | Year 2    | Year 3    |
|---|-----------|-----------|-----------|
| <b>Existing Funding</b>                   |           |           |           |
| State Office of Economic Development      | \$ xx,xxx | \$ xx,xxx | \$ xx,xxx |
| Community Development Block Grant Funds   | \$ xx,xxx | \$ xx,xxx | \$ xx,xxx |
| Working Capital (Bank Donations)          | \$ xx,xxx | \$ xx,xxx | \$ xx,xxx |
| New Sources of Funds                      |           |           |           |
| Federal Welfare-to-Work Grant             | \$ xx,xxx | \$ xx,xxx | \$ xx,xxx |
| City Planning Funds                       | \$ xx,xxx | \$ xx,xxx | \$ xx,xxx |
| Sponsoring Business Memberships/Donations | \$ xx,xxx | \$ xx,xxx | \$ xx,xxx |
| State Dislocated Worker Program           | \$ xx,xxx | \$ xx,xxx | \$ xx,xxx |
| Private Foundations                       | \$ xx,xxx | \$ xx,xxx | \$ xx,xxx |
| Total Funds in Place                      | \$ xx,xxx | \$ xx,xxx | \$ xx,xxx |
| <b>Total Fundraising Goal</b>             | \$ xx,xxx | \$ xx,xxx | \$ xx,xxx |

# 7.4 Monitoring & Evaluation

Once the action plan is in operation, periodic monitoring and evaluation of the program is critical to keep it on target while maintaining enough flexibility to respond to new challenges. The monitoring and evaluation process should assess the extent to which immediate action items (as discussed in Section 7.4) have been implemented, and it should also assess the extent to which there is movement towards achieving longer-term goals (as discussed in Section 7.2).

There are three main purposes for monitoring and evaluating on-going programs. First, evaluation serves as an *internal feedback* system that identifies how efficiently and effectively a program is achieving its goals. Secondly, it serves as an external tool of *accountability and justification*. The evaluation process provides useful information to community residents and leaders who want evidence that the program is accomplishing its goals. Use of a periodic summary of accomplishments is helpful in maintaining support. Finally, evaluations can help increase the effectiveness of the plan, by showing when *adjustments* should to be made as new opportunities and circumstances arise.

