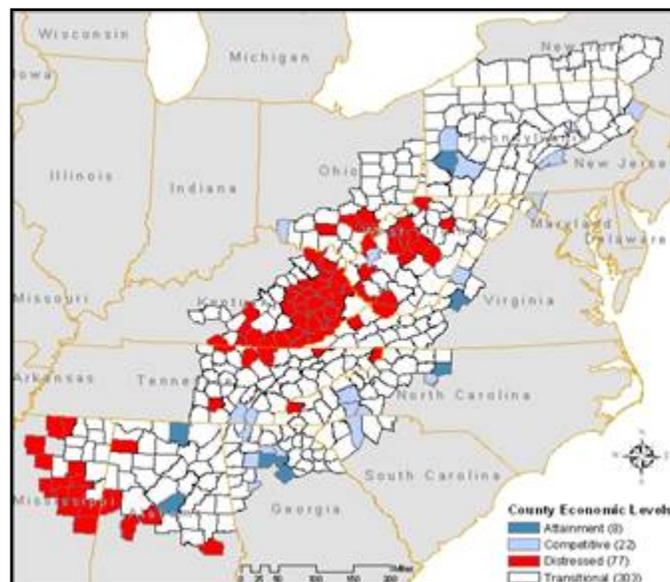


# Sources of Regional Growth in Non-Metro Appalachia

## *Vol. 4 Economic Development Assessment Tools and Study Conclusions for Identifying Sources of Growth*



Prepared for the Appalachian Regional Commission

Prepared by:

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# SOURCES OF GROWTH PROJECT

The *Sources of Growth* project is part of a series of research efforts funded by the Appalachian Regional Commission to improve our understanding of factors affecting economic growth in rural and distressed areas. As stated in the Volume 1 Introduction, “the starting premise of this project is that there can multiple paths that an area can pursue in successfully enhancing job and income creation. They may build on natural resources, cultural resources, human resources, local amenities, institutional facilities or location advantages. The resulting direction of economic growth may involve manufacturing or supply chain development, resource extraction or tourism development, educational development or trade center development.” This research is intended to provide a basis of information that can ultimately be useful for enhancing the effectiveness of policies and tools aimed at improving the region’s economic development.

This is Volume 4 in a series of reports prepared as part of this project:

- ***Executive Summary*** –synthesis of findings from all work products related to the study’s four main research components.
- ***Volume 1, Project Background and Prior Research on Economic Growth Paths*** – study objectives, characteristics of non-metro Appalachian counties, classification of economic development growth paths, and synopsis of white paper findings on theory relating to economic development growth paths.
- ***Volume 2, Case Studies of Local Economic Development Growth Processes*** – findings related to growth paths as observed for selected case studies covering manufacturing industry specialization clusters, supply chain-based development, tourism-based development, advanced technology development, and diversification from resource-based economies.
- ***Volume 3, Statistical Studies of Spatial Economic Relationships*** – findings from a series of econometric modeling and GIS-based analyses, focusing on roles of spatial adjacency, market access and transportation in determining economic growth and development of trade centers.
- ***Volume 4, Economic Development Assessment Tools & Study Conclusions*** – description of new and updated tools available to ARC and its Local Development Districts to assess economic development opportunities and potential directions for economic growth.
- ***Appendices*** – (A) Spatial Analysis of Economic Health, (B) Economic Analysis of Hub-Spoke Relationships, (C) White Papers on Economic Growth Theories, (D) Literature Review of Empirical Studies on Spatial Influences in Economic Development.

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- Economic Development Research Group, Inc. (EDRG) – Lisa Petraglia (Project Director), Glen Weisbrod (Principal-in-Charge) and Teresa Lynch, with research support from Tyler Comings, Brett Piercy and Susan Moses;
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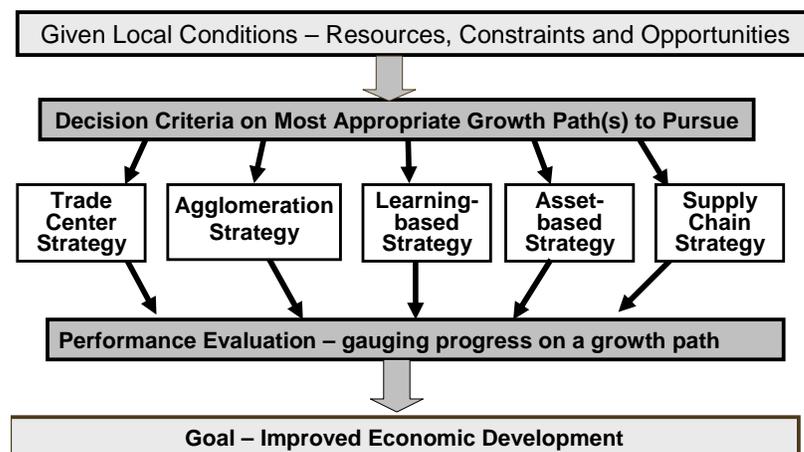
# 1 INTRODUCTION

## 1.1 Overview: From Research to Action

The Appalachian Regional Commission (ARC) is recognized in the field of economic development, not only for its program investments that have been shown to create jobs, but also for its research aimed at improving the effectiveness of its economic development efforts. The *Sources of Growth* project is part of that research effort aimed at improving our understanding of factors affecting economic distress and identifying strategies that can enhance economic growth in the region.

One of the most important elements of the Sources of Growth project is that it aims to illuminate the range of potential *economic growth paths* that can be relevant for rural areas (Exhibit 1-1). It avoids the “urban bias” that exists when people focus just on in-vogue concepts such as technology-driven clusters. Instead, it lays out multiple paths that areas can potentially pursue to create jobs and income. For any specific area, though, some growth paths are more likely to succeed than others. Hence, successful economic development requires analysis to identify the relevant growth paths.

### Exhibit 1-1 Alternative Growth Paths



The prior three volumes describe theory, prior research, case studies and empirical analysis of economic growth factors -- all generating insight and implications for local policy initiatives in Appalachia’s non-metro counties, where economic distress is greatest. This volume discusses our ability to use those findings to improve tools that can be used by ARC’s Local Development Districts (LDDs) for assessing their economic development opportunities and developing growth path strategies.

## 1.2 ARC Role in Developing Economic Tools

**ARC-Opps Spreadsheet Tools.** The ARC started providing tools for enhancing economic development targeting and strategy when it released the highway opportunities model: *ARC-OPPS* in March 2001.<sup>1</sup> That system of analysis tools was designed to help ARC's Local Development Districts identify the type of business growth opportunities that come along when areas gain new or improved highway access. It was motivated by concern that local economic development agencies were often not fully prepared to identify or pursue new opportunities created when segments of the Appalachian Development Highway System (ADHS) were completed. ARC-OPPS was successfully used for various ADHS links such as Appalachian Corridor "V" in Mississippi and Appalachian Corridor "T" in New York State. However, this system also created interest in expansion of developing broader tools to assess economic development targeting opportunities for regions that did not have new highway openings.

**ARC-LEAP Spreadsheet Tools.** In January 2004 the Appalachian Regional Commission (ARC) issued the report and software tool known as *ARC-LEAP, the Local Economic Assessment Package*.<sup>2</sup> Building on the demands of the ARC's Local Development Districts (LDDs), this product provided the LDDs with a robust package of economic development assessment tools that could assist development practitioners in their local economic planning efforts. This package superseded ARC-OPPS by covering the economic and employment impacts of other types of development projects, including water and sewer projects, industrial site development, workforce development, and transportation improvements.

ARC-LEAP was widely distributed among Appalachian state and local government economic development programs. The Southern Tier West Regional Planning Council in New York was an early adopter of the LEAP package to evaluate how transportation accessibility affected economic development opportunities in his region, and to assess development options for distribution centers and the lodging sector. Another example was the First Development District of Tennessee, which engaged in a strategic planning process utilizing the capabilities of LEAP to identify key development opportunities for the region. The Middle Georgia Regional Development Center used LEAP as the foundation for a larger effort to develop a regional economic diversification strategy plan. It was also used for Tennessee DOT's evaluation of the potential economic development benefits of completing Appalachian Corridor "J".

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<sup>1</sup> *Handbook for Assessing Economic Opportunities from the Completion of Appalachian Development Highways*, by Economic Development Research Group with the assistance of Cambridge Systematics, March 2001. Available at <http://www.arc.gov/index.do?nodeId=709>

<sup>2</sup> *Handbook: Assessing Local Economic Development Opportunities with ARC-LEAP, Appalachian Regional Commission Local Economic Assessment Package*, by Economic Development Research Group, January 2004. Available at <http://www.arc.gov/index.do?nodeId=2203>

**Recognition Awards.** During the 2005-2006 period, LEAP began earning national recognition and awards from the IEDC - International Economic Development Council and ACCRA – the Council for Community and Economic Research. Both of these recognition awards noted the unique capabilities of LEAP in enabling local economic development agencies to effectively assess their targeting strategy options, and both were given jointly to ARC and Economic Development Research Group (EDRG) in recognition of their partnership in its development.

**Web-Tools: EDR-LEAP<sup>®</sup>.** While the LEAP spreadsheet-based toolbox was gaining critical success, its use was limited to agencies that had the staff time and resources to collect all of the information required to use it. In response to this need, EDRG developed a new system that overcame this problem by having: (a) essentially all of the data already collected and immediately available via a dynamic database and geographic information system, and (b) the entire system available on-line and directly usable through any web browser, with help screens for new users. ARC made the system available to Appalachian Local Development Districts and Appalachian State Economic Development Departments. (It is available to other users through EDRG.<sup>3</sup>)

The initial version of EDR-LEAP<sup>®</sup> assessed local economic performance gaps, barriers holding back further development, business attraction target opportunities and effects of program or policy initiatives. It also included some evaluation of business cluster opportunities. However, it did not fully distinguish the alternative growth paths that can be important for any region, but particularly for rural districts where there is not necessarily a critical mass of population and employment to support business clusters. Findings from the *Sources of Growth* project -- including literature review, case studies and empirical studies – now provide a base for further enhancing the breadth of analysis and use of this tool.

### 1.3 Need for Economic Assessment Tools

The concept of local economic assessment is not new. It goes back at least forty years, with “*economic base analysis*” and its set of ratio calculations to identify their economic performance strengths and weaknesses.<sup>4</sup> These methods started appearing in guides for economic development agencies in the 1970s.

In the later 1980s and most of the 1990s, there was also a flurry of research ranking business *site location factors*. Today, there is now a strong consensus on the nature of the key business location factors, which represent local competitiveness factors for economic developers. Those factors are shown in Exhibit 1-2.

Together, the evaluation of economic performance (via economic base analysis) and the evaluation of economic competitiveness factors (via analysis of site location

<sup>3</sup> See [www.edrgroup.com/leap](http://www.edrgroup.com/leap) for further information and links to contact information.

<sup>4</sup> This includes LQ (Location Quotient), S (Shift-Share) and VAMP (value added minus payroll per employee).

factors) provided a foundation for guides such as *Economic Development Planning*, International Economic Development Council (2002).

#### **Exhibit 1-2. Business Site Location Factors**<sup>5</sup>

- Suitability of Business Parks, Land and Buildings
- Scale and Skills of the Labor Market --Workforce
- Scale and Socioeconomic Characteristics of the Consumer Base
- Availability and Quality of Infrastructure -- roads, power, water/sewer, broadband telecom, intermodal transportation terminals and connections
- Access to Markets, as well as to airports, marine ports and intermodal rail terminals
- Business Support services & business climate – job training, regulations, business organizations
- Quality of life -- including climate, arts and culture, recreation, and school quality
- Cost of doing business – including labor, utilities, infrastructure and taxes

## **1.4 Pitfalls in Using Economic Tools**

*Note: Most of this part 1.4 text is drawn from a separate article, “New Tools for Economic Development Targeting and Strategy: Applying a Local Economic Assessment Package” by Glen Weisbrod and Brett Piercy, 2006. publication pending.*

The full value of an integrated evaluation and targeting system such as LEAP comes from its ability to offer a coordinated toolkit that effectively support economic development targeting and strategy development. As a coordinated toolkit, it avoids the common limitations and pitfalls that come from reliance on simpler methods or bundles of separate tools. Examples of these problems include the following:

- While area-wide industry mix patterns and trends are easy to assess, most economic developers understand that such information is of limited value unless it can be compared to relevant neighbor and competitor areas to identify performance gaps, and then linked to business competitiveness factors to help explain those results.

The problem of over-reliance on industry patterns and trends is that they can lead to a naïve conclusion that already strong industries represent clusters that

<sup>5</sup> Industrial site location factors are widely recognized in the field of economic development today, though most of the research to identify them took place over the prior decade. Sources include: (1) *Portland 2002: Strategy for Economic Vitality*, Appendix 2-3: “Location Factors,” 2002, (2) Sloagett, Gordon and Mike Woods. “Critical Factors in Attracting New Business and Industry in Oklahoma. Oklahoma Cooperative Extension Service; (3) Kotler, Philip et al. *Marketing Places*. The Free Press, 1993; (4) Lyne, Jack, “Quality of Life Factors Dominate Many Facility Location Decisions,” *Site Selection Handbook*, August 1988, and (5) Finkle, Jeffrey. “Developing Strategies for Economic Stability and Growth,” Council for Urban Economic Development, 1997. For quality of life, also see (6) Segedy, James. “How Important is Quality of Life in Location Decisions and Local Economic Development” in Bingham and Mier (Eds.) *Dilemmas of Urban Economic Development*, Sage, 1997.

should be the top priorities for further recruitment. More appropriately, economic development strategies should focus on identifying existing gaps and missed opportunities, desired growth paths and the steps needed to overcome barriers now holding back achievement of those opportunities.

- Measuring cost differences among regions is a straightforward process, and the nature of those differences forms a core of economic simulation and forecasting models. Those models focus on estimating dollar flows and cost differences to explain how industry growth and investment moves among areas. However, most economic developers understand that business location requirements also depend on various non-cost (size, quality and access) factors that are at least as important as cost in determining competitiveness and resulting industry growth and investment shifts.

The problem of over-reliance on cost comparisons is that they can lead to a naïve conclusion that local economic development strategy should focus just on cost incentives to attract economic growth. Often, economic development strategies need to focus more on identifying opportunities to overcome gaps in transportation facilities, job training, industrial park facilities and/or business support services as ways to enhance quality.

- Economic forecasting and impact models can show how a given type of new business will generate additional flows of dollars to suppliers. However, most economic developers understand that *part of their job is to make economic forecasting and impact models be wrong*. That is because economic forecasting models usually assume no change in competitiveness factors aside from costs, while economic developers may be working hard to make quality improvements in local facilities, job training or support services. In addition, economic impact calculations assume that dollars will “leak” out of the area if there are currently no local suppliers to serve a major new industry, while economic developers may be working hard to develop local supply chains that can keep those dollars in the local economy.<sup>6</sup>

The problem of reliance on economic forecasts and impact models is that they

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<sup>6</sup> An economic impact model applied before the opening of the BMW assembly plant in South Carolina would normally have calculated that the flow of dollars to auto parts suppliers would go mostly out of state, since there was no major auto parts industry in the state at that time. It would not have known that the cooperative efforts of BMW and the state would subsequently lead to the attraction of 49 new auto parts suppliers, creating thousands of additional jobs.

can lead to a pessimistic view of future prospects for local economic development, and wrong priorities for industry growth and attraction targets. More appropriately, economic developers need to take advantage of opportunities to enhance local supplier networks as a way of enlarging the indirect benefits of business expansion and attraction efforts.