**Introduction**

EDR Group’s Local Economic Assessment Package (EDR-LEAP) is 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. EDR-LEAP is designed to:

- Help economic developers assess local strengths and weaknesses,
- Identify critical factors affecting local economic growth, and
- Prioritize business attraction targets and needed investments for economic development.

LEAP is a tightly-integrated bundle of tools which provide economic developers with an unprecedented ability to diagnose their local competitive position and design strategies that build on strengths and minimize weaknesses. LEAP is designed to support the basic process for Economic Development that is outlined in the IEDC publication *Economic Development Planning*, a textbook for IEDC certification.

**Background**

The steps in the process of economic development planning are intended to be cyclical such that the final phase, revise and adjust implementation, leads right back into an assessment of the local economy (Figure 1 on next page). When done properly, the process requires a tremendous amount of time and effort, which is burdensome for even the most sophisticated, well staffed and adequately funded organizations. In reality, many practitioners find themselves slogging through with significant staffing and budgetary constraints.

In recognition of these difficulties, Economic Development Research Group, Inc. has developed the first comprehensive, web-based economic development tool called LEAP, “Local Economic Assessment Package”. LEAP was originally created by EDR Group (www.edrgroup.com) as ARC-LEAP, developed specifically for the Appalachian Regional Commission and its Local Development Districts. Since then, the tool has been refined for use in communities nationwide. LEAP brings together and coordinates many of the otherwise most time consuming techniques in the economic development process, and is an expert assessment system.
LEAP Structure

The processes carried out in the EDR-LEAP analysis system serve three related purposes (Figure 2) each aimed at helping practitioners identify target industries for economic development.

The Economic Assessment portion of the analysis system provides baseline economic profiles, trends and growth projections for 55 industries. In addition, each of these industries is evaluated in terms of the extent 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 in a specific industry 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

Figure 2 - Uses of the Local Economic Assessment Package

(1) Economic Assessment – evaluation tool to rate current economic performance and trends

(2) Targeting Diagnostics – diagnostic tool to target prospective industries for further growth & attraction

(3) Policy Analysis – analysis tool to assess consequences of future scenarios & public actions
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 EDR-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, broadband, airport access) with operating requirements of each industry.

The **Targeting Diagnostics** 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 EDR-LEAP are developed by looking at each industry’s sensitivity to different factors as well as the factors most important to an industry, and 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 **Policy Analysis** portion of LEAP allows users to gauge 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. Affects of these changes are presented as estimated new jobs associated with improved business attraction potential.

**Applicable Economic Development Situations**

EDR-LEAP is 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:

- High unemployment and low wages
- Seasonal fluctuations in employment
- Isolation and lack of local opportunities
- Over-dependence on a particular industry or a few large employers
- Competition for business locations

All five types of situations exemplify how economic development efforts must be targeted to support specific types of business growth that address particular local problems or concerns. The targeting diagnostics element of EDR-LEAP is designed specifically to help match business targeting and local competitiveness factors.

The first step in assessing economic performance and opportunities is to clearly define the area of analysis – to ensure that the analysis focuses on the area of concern, and to ensure that appropriate data are collected. The second step is to define the basis for comparison – so that relevant and meaningful
conclusions can be drawn from the analysis. EDR-LEAP allows users to create study and comparison areas comprised of one county, or an aggregate of several user-selected counties. LEAP also allows users to quickly compare their study area to state and national benchmarks.

**Figure 3 - Flowchart: Using EDR-LEAP**

**Local Economic Performance Analysis**

Once the user has defined the study and comparison areas, EDR-LEAP applies shift-share and location quotient techniques to data on the number of jobs in fifty-seven 3-digit NAICS industries to measure the mix and trends within local industries in the study area. This allows the user to evaluate the mix and performance of industries in the study area in relation to the comparison area and national averages.

The EDR-LEAP model contrasts the performance of current and historic data of a 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 3-digit NAICS industry.
EDR-LEAP Mix Analysis estimates an “expected number” of jobs that would occur in your study area if 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.

The EDR-LEAP model takes the "Shift Share Ratio," (called “trend ratio in EDR-LEAP) and simplifies analysis by assigning each sector into a trend category (from 1 to 7) 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)

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 first discuss quantitatively measured factors, then qualitatively assessed factors.

The EDR-LEAP model uses quantitative factors to evaluate the study area’s strengths, weaknesses and potential for growth in each of 55 industries. Moreover, the model identifies the changes that are needed to overcome weaknesses in order to realize this growth potential.

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. EDR-LEAP has fields for each of these factors, allowing users to enter values for each

The EDR-LEAP model evaluates where an area’s total production costs are advantageous or disadvantageous for each of 55 detailed industries based on the following detailed cost data for the study area:

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

Demographics: Labor and Customer Markets

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 a key measure of appropriate labor availability. Given a sufficient base of skilled labor, areas with a higher skill level 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 40 minutes drive time of the middle of the study area as an indicator of the relative labor market catchment area.

Access: Transportation 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. EDR-LEAP 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 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.

**Interpretation of Cost, Demographic, & Access Factors**

The impact of cost, demographic, and access issues are different for different types of businesses. The EDR-LEAP model considers the sensitivity of each of 55 industries to these factors, using a variety of sources. The EDR-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 55 different industries.

**Rating Local Facilities and Resources**

The steps described above show how LEAP streamlines the evaluation of local conditions relating to costs, worker skills, and access using quantitative data 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.

EDR-Leap utilizes six worksheets to aid the practitioner in assessing and quantifying additional business facilities and supporting resources that affect the study area’s attractiveness for business.

These worksheets are a guide for assessing a study area’s economic development strengths and weaknesses in terms of business support programs, industrial land and buildings, labor force, capacity for tourism and other key considerations and provide criteria for developing ratings that are entered into the EDR-LEAP model. The EDR-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.

**Policy Analysis**

You can also use the EDR-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 EDR-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

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1 This data on industry sensitivity was derived from the technology matrix of the US Dept. of Commerce input-output 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.
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.

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.