

The Development and Use of EDR-LEAP

*Presentation to
ACCRA 2006 Annual Conference,*

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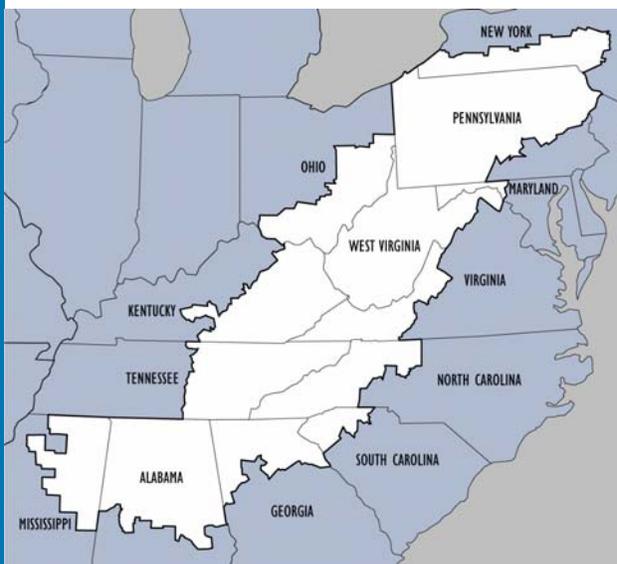
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Economic Development Research Group



The Appalachian Regional Commission

- The ARC is a federal-state partnership created in 1965 to promote the social and economic development of the 13-state Region.
- Funds a wide range of programs:
 - A 3,090 mile Appalachian Development High System;
 - Physical infrastructure projects;
 - Education and human resource development;
 - Entrepreneurial development
 - Health demonstration projects and initiatives

Appalachian Region



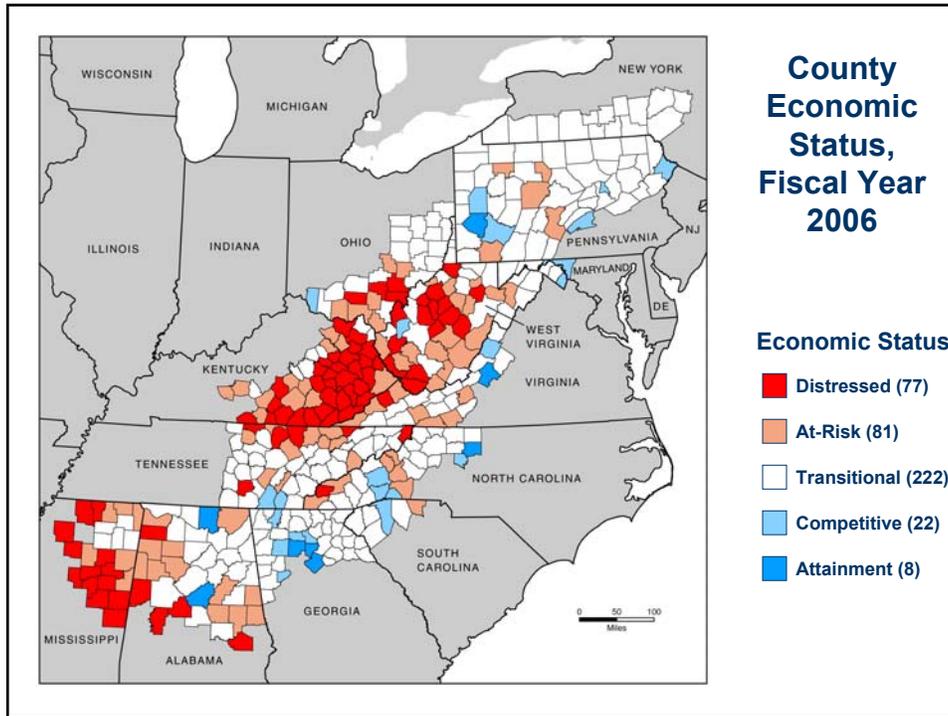
- 13 States
- 410 counties
- 200,471 sq. miles
- 23 million people
- \$680 billion GRP

**By the mid 20th century, Appalachia had become
“a region apart—geographically and statistically.”**

— PARC report, 1964

- One of three Appalachians lived in poverty, 50 percent higher than the national average.
- Unemployment was 40 percent higher than the national average.
- Between 1950 and 1960, net migration data showed a population loss in the region of more than two million people.
- The high school dropout rate in Appalachia exceeded 50 percent.





ARC Regional Economic Needs

- To identify regional economic development strengths/weaknesses and appropriate targets.
- To ascertain critical factors holding back regional economic growth.
- To develop priorities and action plans to maximize success in achieving economic growth.

History of EDR-LEAP

- Original model, ACR-LEAP, was funded by ARC and consisted of:
 - **HANDBOOK** – *model evaluation process.*
 - **EVALUATION TOOL** – *to assess your region's economic performance.*
 - **POLICY ANALYSIS SYSTEM** – *to aid business targeting by identifying priorities for improvement.*
- Subsequent improvements resulted in the creation of EDR-LEAP

What is LEAP ?

LEAP is an online system designed to:

- (a) Help economic developers assess area strengths and weaknesses
- (b) Identify critical factors holding back economic growth
- (c) Prioritize targets for economic development

EDR-LEAP can also be viewed as a tightly-integrated bundle of tools that provides an unprecedented ability to diagnose local competitive position and design strategies that build on strengths and minimize weaknesses.

LEAP Dataset

- Customer Market (45 min.)
- Labor Market (45 min.)
- Supplier Market (3 hrs)
- Population and Population Density

Market Access

- Commercial Airport
- River / Sea Ports
- Rail Loading Facilities
- Average Highway Speed (MPH)

Transportation Quality

- Labor
- Electricity
- Housing/Land
- Taxes

Cost of Doing Business

User Input Data

Development Constraints and Incentives

- Availability of Highway-Related Commercial Land
- Availability of Industrial Park Sites w/Full Infrastructure
- Availability of Office/Commercial Development Sites



User Evaluates:
Vacant Land
Paved Access
Building Capacity
Loading Facilities
Electricity, Gas Available
Sewer / Septic

LEAP Can Help Local Development Districts...

- Diversify their economic base
- Develop strategies to improve job quality
- Prioritize investments and policies

Take a Look At LEAP



EDR-LEAPSM Version 2.0.1

EDR-LEAP (Local Economic Assessment Package) is a web-based system designed to help economic developers to: (a) assess area strengths and weaknesses, (b) diagnose critical factors affecting economic growth and identify feasible business targets, and (c) evaluate impacts of potential policy actions for enhancing economic development. It is also designed to help planners to: (d) identify economic development opportunities associated with transportation improvements.

Existing Users:

User Name: [User Login](#)
Password: [Forgot My Password](#)

Take a Test Drive: [GO](#)

More Information: [LEAP - Econ](#) LEAP for Economic Development analysis
[LEAP - Trans](#) LEAP for Transportation Impact analysis

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Optimized and verified for Internet Explorer 6.0 and above and Firefox 1.0 and above

*Web-Based
and User
Friendly*

Build Custom Study and Comparison Areas

HOME • 1-BASE • 2-DIAGNOSE • 3-POLICY • LOGOFF
 SETUP • PATTERNS • ASSESSMENT • REPORTS

Instructions

Analysis Case: NY_PA

Years for Trends: Earliest: 1997 Latest: 2002

Economic Performance Measure (select one):
 Employment (default) Income Value Added Output

Study Area: NY
 Cattaraugus County, NY
 Chautauqua County, NY

Comparison Area: NY & PA
 Erie County, PA
 Steuben County, NY

Choose an Economic Performance Measure

Build Your Study Area

Build a Comparison Area

Analyze Trends for Potential Growth

Economic Development RESEARCH GROUP

EDR-LEAPSM
 Version 2.0.1

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Economic Base Assessment
 Trend Analysis
 Performance Measurement = Employment

Mix Analysis
 Trend Analysis
 Largest Sector Growth
 Largest Performance Gap
 Int'l Trade & Tourism

NY_PA	NAICS	Sector	Percent Growth Study Area	Percent Growth United States	Trend Ratio (Shift-Share)	Expected Growth (Study Area)	Actual Growth (Study Area)	Potentially Achievable Growth	Shrinking Negative Growth
	111	Crop Production	-13.4%	1.9%	4.7	-418	-1,576	0	1,158
	112	Animal Production	2.1%	-2.1%	2.6	402	1,353	0	0
	113	Forestry & Logging	-4.9%	0.8%	0.8	-47	-37	0	0
	114	Fishing, Hunting & Trapping	12.3%	0.0%	0.0	7	-9	0	0
	115	Support for Agriculture & Forestry	1.1%	-24.1%	-24.1	22	-306	328	0
					-7.6%	-72	1,441	0	0
					1.0	28	27	0	0
					4.6%	-286	-935	0	649
					-44.9%	53	-1,968	2,020	0
					8.9%	55	529	0	0
					-13.4%	-3	45	0	0
					0.0%	0	-1	0	1
	314	Textile Product Mills	-13.0%	-4.4%	3.0	-15	-37	0	22
	315	Apparel Manufacturing	-46.9%	-13.6%	3.4	-163	-302	0	138
	316	Leather & Allied Products	0.8%	-11.5%	-0.1	-3	0	0	0
	321	Wood Products	-7.2%	-3.8%	1.9	-229	-409	0	180
	322	Paper Manufacturing	-7.1%	-3.6%	2.0	-41	-76	0	35
	323	Printing & Related Support Activities	2.6%	-3.6%	-0.7	-44	36	0	0

Growth Trends and Shift Share Provide More Insight on Potential Growth

Diagnose Competitiveness

HOME • 1-BASE • **2-DIAGNOSE** • 3-POLICY • LOGOFF
 SETUP • FACTORS • OPPORTUNITIES • BARRIERS BY INDUSTRY • REPORTS

Summary Comparison of Factors

NY_PA	Study Area	Comparison Area
	NY	NY & PA
Cost Factors (as labeled)		
Average Labor Cost (per year in RETAIL)	\$16,674	\$16,480
Average Electricity Cost (\$/kWh)	\$0.10	\$0.08
Average Total Tax Burden per Person (\$ per year)	\$1,362.87	\$561.62
Average Housing Cost (\$ for a single family home)	\$62,799	\$80,332
Average Rental Cost (\$ per month)	\$334.87	\$363.38
Market Factors (as labeled)		
Population	223,705	379,569
Population Density (population per square mile)	106.3	277.6
Skilled Workers (% with bachelor's degree or higher)	16.15%	20.12%
Labor Force Participation Rate (%)	62.04%	62.70%
Population Within 40 Minutes	16,867	52,905
Transportation (avg. minutes, peak period)		
Access to Commercial Airport	38	26
Access to Freight Marine Port	85	54
Access to Rail Intermodal Loading	84	112
Travel on Key Corridor (Average MPH, peak period)	69	20

Cost
Labor Market
Transportation

Additional Key Comparison Factors

Diagnose Opportunities

HOME • 1-BASE • **2-DIAGNOSE** • 3-POLICY • LOGOFF
 SETUP • FACTORS • **OPPORTUNITIES** • BARRIERS BY INDUSTRY • REPORTS

Diagnose Opportunities

Performance Measurement = Employment

NY_PA	NAICS	Sector	Potential Attraction	Secondary Growth	New Opps	10 Year Baseline Growth	Total Potential Growth	Low Range	High Range
	115	Support for Agriculture & Forestry	73	18	91	5	95	91	100
	230	Construction	2,265	1,078	3,344	33	3,377	3,344	3,410
	322	Paper Manufacturing	22	0	22	0	22	22	27
	326	Plastics & Rubber Products	348	196	544	0	544	544	544
	327	Nonmetallic Mineral Products	214	0	214	0	214	214	257
	331	Primary Metal Manufacturing	219	96	315	0	315	315	315
	334	Computer & Electronic Products	432	175	607	0	607	607	607
	335	Electric Equipment, Appliances, etc.	147	0	147	0	147	147	181
	336	Transportation Equipment	1,259	333	1,592	51	1,643	1,592	1,781
	339	Miscellaneous Manufacturing	246	112	357	0	357	357	357
	491-493	Mail, package delivery & warehousing	869	0	869	247	1,116	869	1,474
	513	Broadcasting	178	0	178	224	402	392	439
	514	Internet & data process svcs	24	12	36	6	42	36	48
	521-523	Monetary, Financial, & Credit Activity	2,580	652	3,232	128	3,360	3,232	3,502
	524	Insurance Carriers & Related Activities	1,078	487	1,565	0	1,565	1,565	1,573
	531	Real Estate	299	75	374	378	751	374	1,129
	532	Rental & Leasing Services	64	0	64	514	578	563	607
	541-551	Professional Scientific, Technical, Services	3,028	0	3,028	1,979	5,008	4,194	6,247
	561	Administrative & Support Services	3,244	335	3,580	0	3,580	3,580	3,945
	611	Educational Services	1,225	0	1,225	5	1,231	1,225	1,485
	621-624	Health Care & Social Services	9,150	0	9,150	1,757	10,907	9,150	14,393
	721-722	Accommodations, Eating & Drinking	2,057	0	2,057	1,097	3,154	2,064	4,748
	811-812	Repair, Maintenance, & Personal Services	851	0	851	618	1,468	982	2,143
		TOTAL	29,873	3,569	33,442	7,042	40,483	35,459	49,312

Identify Barriers



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Logged in as brett

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Barriers Factors by Industry (1=Critical, 2=Important)

Performance Measurement = Employment

NY_PA	NAICS	Sector	Perform Gap	Prod Cost	Labor Cost	Land Cost	Energy Cost	Tax Cost	Work Force	Labor Skill	Water Trans	Air Trans	Rail Trans	Hwy Trans	Broad Band
	115	Support for Agriculture & Forestry	656	1	-	-	-	-	-	-	-	2	-	-	-
	230	Construction	4,040	1	-	-	-	-	-	-	-	-	-	-	-
	322	Paper Manufacturing	22	1	-	-	-	1	-	-	2	-	1	-	-
	326	Plastics & Rubber Products	2,168	1	-	-	-	-	-	-	-	-	-	-	-
	327	Nonmetallic Mineral Products	214	1	-	-	-	1	-	-	-	1	-	-	-
	331	Primary Metal Manufacturing	389	1	-	-	-	1	-	-	2	1	-	-	-
	334	Computer & Electronic Products	666	1	-	-	-	-	-	-	2	-	-	-	-
	335	Electric Equipment, Appliances, etc.	147	1	-	-	-	-	-	-	2	-	-	-	-
	336	Transportation Equipment	1,592	1	-	-	-	-	-	-	2	-	-	-	-
	339	Miscellaneous Manufacturing	654	1	-	-	-	-	-	-	2	-	-	-	-
	491-493	Mail, package delivery & warehousing	869	2	-	-	-	-	2	-	-	-	-	-	-
	513	Broadcasting	178	-	-	-	-	-	-	-	-	-	-	-	-
	514	Internet & data process svcs	61	1	-	-	-	-	2	-	-	-	-	-	-
	521-523	Monetary, Financial, & Credit Activity	3,232	1	-	-	-	-	-	2	-	-	-	-	-
	524	Insurance Carriers & Related Activities	1,565	1	-	-	-	-	1	2	-	-	-	-	1
	531	Real Estate	2,195	2	-	-	-	-	-	-	-	-	-	-	-
	532	Rental & Leasing Services	64	1	-	-	-	-	-	-	-	2	-	1	-
	541-551	Professional Scientific, Technical, Services	3,028	1	-	-	-	-	2	2	-	-	2	-	-
	561	Administrative & Support Services	3,580	1	-	-	-	-	2	-	-	1	-	-	-
	611	Educational Services	1,225	1	-	-	-	-	1	-	-	-	-	1	-
	621-624	Health Care & Social Services	9,150	1	-	-	-	-	1	-	-	2	-	-	-
	721-723	Accommodation & Food Services	1,000	1	-	-	-	-	-	-	-	-	-	-	-

Barrier Rating
1 = Critical
2 = Important

Policy Simulation



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 POLICY INPUTS • SCENARIO ASSUMPTIONS • SCENARIO RESULTS

Policy Analysis Inputs

NY_PA	Study Area	Proposed for Study Area
	NY	
Cost Factors (as labeled)		
Average Labor Cost (per year in KETAL)	\$16,674	\$16,674
Average Electricity Cost (\$/kwh)	\$0.10	\$0.10
Average Total Tax Burden per Person (\$ per year)	\$1,362.87	\$1,362.87
Average Housing Cost (\$ for a single family home)	\$42,799	\$42,799
Average Rental Cost (\$ per month)	\$324.87	\$324.87
Market Factors (as labeled)		
Population	223,709	223,709
Population Density (population per square mile)	106.3	106.268
Skilled Workers (% with bachelor's degree or higher)	16.15%	16.15%
Labor Force Participation Rate (%)	62.04%	62.04%
Transportation (avg. minutes, peak period)		
Access to Commercial Airport	38	38
Access to Freight Marine Port	85	85
Access to Rail Intermodal Loading	84	84
Key Access Corridor (Avg MPH, peak period)	69	69
Technology & Education Quality (1-10)		
Labor: Advanced Skills Training	5	5
Broadband Access	5.4	5.4
Development Constrains & Incentives (1-10)		
Availability of Highway-Related Commercial Land	5	5
Availability of Industrial Park Sites with Full Infrastructure	5	5
Availability of Office/Commercial Development Sites	5	5

User Enters Proposed Changes in:

Costs

Labor Market

Transportation

Technology and Education

Land and Bldgs

Policy Analysis – Results

1-BASE • 2-DIAGNOSE • 3-SCENARIO

INPUTS • ASSUMPTIONS • RESULTS

Scenario Results

Performance Measurement = Employment

NY/PA		Estimate Policy Effect	Low Range Policy Effect	High Range Policy Effect
115	Support for Agriculture & Forestry	3	3	4
230	Construction	10	9	10
322	Paper Manufacturing	1	1	1
326	Plastics & Rubber Products	3	3	3
327	Nonmetallic Mineral Products	8	8	9
331	Primary Metal Manufacturing	2	2	2
334	Computer & Electronic Products	2	2	2
335	Electric Equipment, Appliances, etc.	5	5	6
336	Transportation Equipment	11	10	12
339	Miscellaneous Manufacturing	1	1	1
491-493	Mail, package delivery & warehousing	30	17	44
513	Broadcasting	4	3	4
521-523	Monetary, Financial, & Credit Activity	5	4	5
524	Insurance Carriers & Related Activities	1	1	1
531	Real Estate	2	1	4
532	Rental & Leasing Services	3	3	3
541-551	Professional, Scientific, Technical Services	16	13	19

Surgeon General's Warning: This is guidance for prioritizing efforts; there is no guarantee of automatic business attraction !

Contact Information



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