

## Corporate America Speaks

*Best Places and Best Practices in Economic Development Marketing*

## The Office/Industrial Land Dilemma

*A Study of the Blackstone River Corridor in Massachusetts*

## What Is the Local Wal-Mart Effect?

*An Analysis of the Research*

## Benchmarking the Creative Class at the Local Level

*A Case Study of the Washington, DC Metropolitan Area*

## Griffiss Business and Technology Park

*Successful Redevelopment of a Military Installation Supports a New Regional Vision*

## Growing Small and Medium-Size Enterprises Through Partnerships

*REI of Oklahoma*

# What's Your Professional Development Plan?

Register Online At  
**[www.iedconline.org](http://www.iedconline.org)**

More than 50 Education Courses at  
More Locations Near You!  
Visit our website for course dates &  
locations.



## Set Your Professional Development Goal

### Become a Certified Economic Developer (CEcD)

The Certified Economic Developer (CEcD) Program has become the "Gold Standard" for the profession. A network of more than 1,200 CEcDs have achieved this significant accomplishment by mastering the qualification and examination process. You have the experience, skills and knowledge of a great economic developer. Now get recognized for your achievements by starting on the path of becoming a Certified Economic Developer (CEcD). IEDC's education courses are the first step!

From **CORE COURSES** to **ELECTIVE COURSES** to **SPECIALIZED COURSES**, IEDC's education course offerings are the leading source of learning for economic development professionals at all levels.

Our carefully-selected instructors include some of today's top experts in economic development and represent both the public and private sectors. Courses are designed to be interactive and to provide a national perspective focusing on real-life experiences, best practices and tools you can use in your community.

### Core Courses

Certified Economic Developer (CEcD) candidates must complete all four (4) core courses.

- Introduction to Economic Development or Basic Economic Development Course
- Business Retention and Expansion
- Economic Development Credit Analysis
- Real Estate Development and Reuse

### Elective Courses

Certified Economic Developer (CEcD) candidates must complete a minimum of two (2) elective courses.

- Economic Development Finance Programs
- Economic Development

### Keep Current and Maintain my CEcD Certification!

As a current CEcD, you want to stay at the forefront of the profession and at the same time maintain your certification. Our series of new course offerings are specifically designed for CEcDs and anyone looking for a challenge. Education courses are just one of many ways to earn recertification credits with 3 credits for each course. Remember, you need to earn at least 12 recertification credits within 3 years to keep your CEcD designation active.

- Marketing and Attraction
  - Economic Development Strategic Planning
  - Entrepreneurial and Small Business Development Strategies
  - Managing Economic Development Organizations
  - Neighborhood Development Strategies
  - Technology-Led Economic Development
  - Workforce Development

### Specialized Courses

IEDC's new series of professional development education courses are designed for those who desire increasingly challenging coursework, and CEcDs can earn recertification points for participation.

- Advanced Workforce Development
- Economic Impact Analysis

### Boost my Knowledge of Specific Topics?

You are becoming involved in a new area of work for your community. Maybe it is the growth of technology industries or workforce issues. Maybe it is real estate development or neighborhood issues. Focus your professional development goal on boosting your knowledge in the specific subject areas where you have a need. We offer education courses on a wide range of general and specific topics.

### IEDC Accredited Programs

IEDC accredits over 20 Basic Economic Development Courses (BEDCs) throughout the U.S. and Mexico as well as the University of Oklahoma's Economic Development Institute (OU/EDI).



INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL

*The Power of  
Knowledge and Leadership*

# “ExecutivePulse was the clear choice for Dayton.”

**ERIK COLLINS**

Director, BusinessFirst!  
for a Greater Dayton



*Erik Collins and the economic development team in Montgomery County, Ohio were looking for the best business retention database system on the market. That's when they found ExecutivePulse™.*

*"We looked at every product out there," said Collins. "But once we took the online test drive with the folks at ExecutivePulse, we knew we found exactly what we wanted. Nothing else even compared."*

*Best of all, ExecutivePulse continues to grow and evolve. According to Collins, "The latest version of ExecutivePulse has more in-depth reports and graphing as well as expanded communication and management tools that enable us to better serve companies in Dayton and throughout the region. ExecutivePulse has grown with our needs and their management and technical support are second to none."*

*If your community is serious about business retention, register for an online test drive by calling 1-866-EXPULSE or visiting [www.executivepulse.com](http://www.executivepulse.com).*

**ExecutivePulse™**

11 EAST FOURTH STREET • ERIE, PENNSYLVANIA 16507 • 1-866-EXPULSE • [www.executivepulse.com](http://www.executivepulse.com)

## ABOUT IEDC

The International Economic Development Council (IEDC) is the premier international association dedicated to leadership and excellence in economic development. IEDC can equip you with the tools and resources that are helping to shape economic development throughout the country and around the world. Our services include:

- *ED Now*, a twice-monthly newsletter
- *Economic Development Journal*, a quarterly publication
- Improved access to resources and information
- Enhanced educational choices
- Stronger advocacy and access at the Federal level
- Expanded networks and alliances
- Industry-leader publications
- Expanded research and technical assistance
- An international presence

## THE IEDC Economic Development Journal

International Economic Development Council

734 15th Street, NW Suite 900 • Washington, DC 20005 • [www.iedconline.org](http://www.iedconline.org)

Chair: Joseph A. Marinucci, FM

President & CEO: Jeffrey A. Finkle, CECD

Editor: Jenny Murphy

Editorial Board: Ronnie Bryant, CECD, FM, chairman; William Beyers, Ph.D.; Janet Cypra; Donald Haider, Ph.D.; Mihalios Halkides, Ph.D.; Rick Loessberg; Phillip D. Phillips, Ph.D.; Ronald Swager, Ph.D.; Mark D. Waterhouse, CECD, FM; Ben Williams; and Charles H. Wood

Manuscripts are invited and should be addressed to the editor. Articles contained in *Economic Development Journal* represent the authors' views and not necessarily those of IEDC. No articles may be reproduced without permission from IEDC. Copyright © 2006, the International Economic Development Council (202) 223-7800.

Fax: (202) 223-4745. [mail@iedconline.org](mailto:mail@iedconline.org). ISSN 1539-1922. Subscriptions \$60 per year; for individual issues — \$20. Advertising is available. Contact IEDC for details.

### OFFICERS AND BOARD OF DIRECTORS

#### Officers

Joseph A. Marinucci, FM, Chair  
Ronnie L. Bryant, CECD, FM,  
Vice Chair  
Ian Bromley  
Thomas L. Harned, CECD  
Gail Lewis

#### Robin Roberts

Secretary/Treasurer  
Steven J. Budd, FM  
Immediate Past Chair  
Jeffrey A. Finkle, CECD  
President & CEO

#### Board of Directors

Charles S. Alvey, CECD  
Angelos G. Angelou  
Michael G. Barnes  
Fred Baughman  
Howard C. Benson  
William E. Best  
LaDene H. Bowen, CECD, FM  
Austin J. Burke  
Greg Clark  
Dennis G. Coleman, FM  
Hank Cunningham, CECD  
Gene DePrez  
Kenneth E. Dobson  
Brett Doney, CECD

Lynn Martin Haskin, Ph.D.  
Ted J. Hiding, CECD, FM  
Don A. Holbrook, CECD  
Clarence Hulse  
Donald E. Hunter, FM  
Donald E. Jakeway  
Barbara K. Johnson  
Joan Jorgenson  
Michele S. Keller, CECD, EDE, FM  
James R. Kinnett II, CECD, FM  
Mike Kirchhoff, CECD  
Paul Krutko  
Thomas A. Kucharski, CECD  
Diane C. Lupke, CECD  
Daniel A. Lynch, CECD, FM  
Bruce W. Lyon, CECD  
Frank T. Mancini, Jr., CECD  
William G. Mannix  
James E. Mills  
Jay C. Moon, CECD  
Ellen A. O'Connor  
Phillip D. Phillips, Ph.D., CECD  
Joy M. Pooler, CECD  
Lewis D. Rich  
Karin Richmond  
Wayne Schell, FM  
David L. Spaur, CECD, EDFP  
William C. Sproull  
Walter C. Sprouse, Jr., CECD, CCE  
Klaus Thiessen  
Robert W. Walsh

Richard C. Ward, CECD  
Charles E. Webb  
Holly Wiedman

#### PAST CHAIRS

Frank Birkhead, CECD, FM, HLM  
Thomas D. Blanchard, Jr., HLM  
M. Ross Boyle, CECD, FM, HLM  
Robert B. Cassell, CECD, FM, HLM  
Kurt Chilcott, CECD, FM, HLM  
John P. Claypool, HLM  
Gary Conley, HLM  
James A. Covell, CECD, FM, HLM  
George Gregg, Sr., CECD, FM, HLM  
Walter D'Alessio, HLM  
James A. Devine, CECD, FM, HLM  
Donald G. Dunshee, CECD, FM, HLM  
Murray A. Elder, HLM  
Harry G. Foden, CECD, FM, HLM  
Jay A. Garner, CECD, CCE, FM, HLM  
James A. Garver, CECD, FM, HLM  
Victor S. Grgas, HLM  
James W. Griffin, CECD, FM, HLM  
James H. Gullyes, HLM  
James C. Hankla, HLM  
Emery D. Hoenshell, FM, HLM  
Ronald C. Kysiak, HLM  
Robert E. Leak, Sr., CECD, HLM

Marilyn Swartz Lloyd, HLM  
William J. McDermott, CECD, FM, HLM  
Paul W. Miller, FM, HLM  
John D. Morand, CECD, FM, HLM  
Ioanna T. Morfessis, Ph.D., HLM  
Edward A. Nelson, Jr., CECD, FM, HLM  
D. Kenneth Patton, HLM  
James O. Roberson, CECD, FM, HLM  
Judie A. Scalise, CECD, FM, HLM  
Robert B. Seal, FM, HLM  
Bill R. Shelton, CECD, FM, HLM  
Wayne Sterling, CECD, FM, HLM  
David C. Sweet, Ph.D., FM, HLM  
Rick Thrasher, CECD, FM, HLM  
Mark D. Waterhouse, CECD, FM, HLM  
Rick L. Weddle, FM  
April Young, Ph.D., HLM

## IT PAYS TO BE A MEMBER

The savings that membership brings on conference attendance, publications and member services more than covers the cost of membership. Member dues are prorated according to the organization or company type. Don't miss out on the value and savings of becoming a IEDC member. Join the premier economic development association today.

Call IEDC TODAY to sign yourself up as a member or to receive further membership information: (202) 223-7800. Or visit our homepage at [www.iedconline.org](http://www.iedconline.org).



INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL





Joseph A. Marinucci, FM  
IEDC Chair

# dear colleague

IEDC is proud to have emerged as a leader in the economic recovery of the Gulf Coast. We immediately established several programs and initiatives to respond to hurricanes Katrina and Rita, and continue to meet the economic development challenges and needs of the Gulf Coast.

At the 2005 Annual Conference, held immediately after the hurricanes hit, IEDC hosted policy sessions to determine how our members and professional economic developers can most support a productive recovery effort. Many of you will remember the moving speech by Michael Olivier at one of our plenary sessions. Because of Michael's successful career and leadership in his state, he will receive the Lifetime Achievement Award in honor of Ed deLuca at our Annual Conference. The Board also passed – by unanimous resolution – the *IEDC Statement on Gulf Recovery*. The Statement intensely opposes the active targeting of companies in the Gulf Coast region for permanent relocation during the region's recovery and reconstruction process.

IEDC's concern for the creation of optimum recovery policies led to developing the Gulf Coast Business Reinvestment Forum held in November 2005 and co-sponsored by the US Chamber of Commerce. More than 125 economic development, business and policy leaders met to create strategies for strengthening business reinvestment in the Gulf Coast. These powerful initiatives have guided IEDC, other economic development organizations, and state and federal agencies to protect businesses and create effective policies and programs for rebuilding.

Shortly after the forum, we launched the *Economic Recovery Volunteer Program* in December through the support of an Economic Development Administration (EDA) grant. The program deploys skilled IEDC members to economic development organizations located in areas that suffered heavy damage from the hurricanes. The volunteer program's objective is to increase the post-disaster survival rate of small and medium sized businesses, provide professional assistance to economic development organizations, and support the long-term recovery and development of regional economies. Phase I went through June 2006.

Between December 2005 and June 2006, 52 volunteers from across the nation were sent to seven locations in southern Louisiana and Mississippi. Volunteers contributed a collective 313 days of service, and the program generated a total of \$164,450 in-kind funding through contributions from IEDC volunteers and IEDC staff time. Key volunteer activities and impacts included individual counseling to nearly 200 businesses; grant writing assistance resulting in grant proposals totaling \$680 million for reinvestment projects in the New Orleans region; economic recovery strategic plans, programs, and proposals for local economies; and an off-site resource database and communications systems to ensure project continuity.

IEDC has recently been awarded a second grant from EDA to continue this successful program. In this second phase, we aim to expand the Volunteer Program and send another 100 volunteers to the Gulf Coast. You too can participate in this renewed effort. Go to the IEDC website to learn more.

The organization's many initiatives have each served as a step towards Gulf Coast recovery. Today, IEDC continues to assist communities and organizations as they plan for and initiate the long-term rebuilding of their economies.

In my career, I have never been as proud of my profession as the way our members have responded to the needs of our colleagues and neighbors in the Gulf Coast.

Joseph A. Marinucci, FM  
IEDC Chair

# THE IEDC Economic Development Journal

## TABLE OF CONTENTS



PAGE 23

### Corporate America Speaks .....7 *Best Places and Best Practices in Economic Development Marketing*

by Andy Levine

The fourth in a series of surveys of U.S. business executives and their advisors conducted by Development Counsellors International offers insights into how Corporate America makes site selection decisions today.

### The Office/Industrial Land Dilemma .....16 *A Study of the Blackstone River Corridor in Massachusetts*

by Zenia Kotval and John Mullin

Analyzes the key factors that are influencing industrial land use decisions and provides recommendations to assist local officials throughout the country.

### What Is the Local Wal-Mart Effect? .....23 *An Analysis of the Research*

by Michael J. Hicks, Ph.D.

What does the best research say about Wal-Mart's impact on local economies? This article describes appropriate study designs and argues that there is need for more local evaluation of Wal-Mart, using a more sophisticated approach than is commonly employed for analyzing local impacts.



PAGE 34

### Benchmarking the Creative Class at the Local Level .....34

#### *A Case Study of the Washington, DC Metropolitan Area*

by Terry Holzheimer, Ph.D., CECd, AICP

Provides a simple methodology for comparing regions, counties, and cities across the nation, benchmarking them against the criteria that Richard Florida uses in his book, *The Rise of the Creative Class*.

### Griffiss Business and Technology Park .....40 *Successful Redevelopment of a Military Installation Supports a New Regional Vision*

by Rob Duchow

In 2000 and 2004, the work at Griffiss earned Developer of the Year awards from the National Association of Installation Developers, now called the Association of Defense Communities. New industrial development at Griffiss is leading a regional economic revival.

### Growing Small and Medium-Size Enterprises Through Partnerships .....47 *REI of Oklahoma*

by Patricia W. Pool, Tom Seth Smith, and Michael D. Woods

Describes the evolution of Rural Enterprises Incorporated of Oklahoma (REI) from a regional organization to a statewide economic development engine.

### News From IEDC .....32

### IEDC Calendar of Events.....33



INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL

# corporate america speaks

By Andy Levine

**P**onder this, if you will. Are economic developers at risk of suffering the same fate as travel agents? Could they become a dying breed, edged out by the information that can be collected lightning-fast through the Internet? Like consumers surfing for travel destinations, deals, and discounts on all manner of web sites, could Corporate America and its site selection advisors simply by-pass your economic development organization as an unnecessary "middleman?"

These are some of the provocative questions that could be posed by interpreting the results of the latest survey of U.S. corporate executives with site selection responsibilities conducted by Development Counsellors International (DCI), a New York City-based company that has specialized in economic development marketing since it was founded in 1960. The survey, "The Corporate View: Winning Strategies in Economic Development Marketing," is the fourth in a series of surveys of senior executives and their advisors. Similar surveys were conducted by DCI in 1996, 1999, and 2002.

Designed to measure trends in economic development marketing and identify the "customer's view," the study has tracked the following over the course of the last decade:

- Rating of information sources influencing perceptions of business climates,
- Most effective marketing techniques,
- The Internet's role in corporate site selection,
- Business climate rankings of U.S. states and European countries,



Well-known chef Emeril Lagasse headlined a Cincinnati USA Partnership event specially designed for site selection consultants. Face time with location advisors/influencers is an increasingly important strategy.

- Perceptions of economic development organizations, and
- Facilities most likely to be involved in site selection decisions.

One key difference between previous studies and the 2005 study was the addition of mid-size companies – organizations with annual gross revenues between \$25 million and \$100 million – to the survey audience. Based on feedback from economic development organizations, as well as its own experience in working with more than 350 communities, regions, states, and countries around the world, DCI concluded that these medium-size companies are the primary targets for the lion's share of economic developers and their feedback would be a

---

Andy Levine is president of Development Counsellors International. For a copy of the full report on "The Corporate View: Winning Strategies in Economic Development Marketing," e-mail him at [andy.levine@dc-intl.com](mailto:andy.levine@dc-intl.com) or download it at [www.aboutdci.com](http://www.aboutdci.com).

---

## BEST PLACES AND BEST PRACTICES IN ECONOMIC DEVELOPMENT MARKETING

"The Corporate View: Winning Strategies in Economic Development Marketing" – the fourth in a series of surveys of U.S. business executives and their advisors conducted by Development Counsellors International – offers fascinating insights into how Corporate America makes site selection decisions today. The tri-annual survey tracks how perceptions of business climates are shaped, which marketing techniques work and which do not, the rapidly rising role the Internet is playing, and vast differences in how economic development organizations are perceived by large and mid-sized companies, as well as by their location consultants. Most eagerly anticipated of all are rankings of the states perceived to have the best and worst business climates.

valuable addition to the findings. The report breaks out the responses from large and mid-size companies, as well as site consultants.

The 2005 survey also added several new questions. Perhaps most significant was the addition of an open-ended question aimed at discovering the reason why executives ranked business climates the way they did. These tri-annual perception rankings are always one of the most eagerly awaited outcomes of the survey. The results are either proudly

## How Did the States Stack Up?

How did the states rank in the DCI survey in terms of perceptions of the best and worst business climates? When presented with a map of the United States and asked to select the three states whose business climates they perceive as most favorable, the participants ranked Texas #1 for the third survey in a row, with 33 percent of the responses. North Carolina (26 percent) and South Carolina (20 percent) followed, and Georgia and Nevada rounded out the top five with 18 percent and 16 percent, respectively. Nevada was a newcomer to the most favorable business climate list, unseating Florida for the first time since 1999.

When the voting is broken down by groups, Texas and North Carolina are the only states that all three groups place in their top five. Interesting to note is that both mid-size and large companies ranked Texas at the top, while site selection consultants preferred both the Carolinas over the Lone Star State. Site consultants also ranked Alabama and Florida in their top five, while Nevada showed up on the mid-sized companies' list and both Tennessee and California made the most favorable list among executives at large companies.

For the first time ever, survey respondents were asked to provide a reason for rating a state's business climate as most favorable. This open-ended question elicited diverse and sometimes multiple responses. For Texas, the three factors mentioned most frequently were tax climate (34 percent), business friendly attitude (27 percent), and low costs overall (16 percent). For the Carolinas, labor stood out as decisive factors, with 37 percent citing the cost, availability, and attitudes of workers in North Carolina and an even higher percentage (41 percent) pointing to the cost, availability, and skill level of workers in South Carolina. Incentive offerings (25 percent) and low costs overall (22 percent) also ranked high in South Carolina.

Turning to the dreaded "least favorable business climate" ranking, negative perceptions of California's business climate continue among corporate executives. Some 66 percent of the respondents named California as having the least favorable business climate, up from 57 percent three years ago. High overall costs (38 percent), government regulations/law (36 percent), and tax climate (29 percent) were listed most frequently as the chief reasons why. New York (34 percent), Massachusetts (22 percent), and New Jersey (21 percent) also remained in the same positions held in 2002, although the percentage of respondents to name New York decreased in 2005. The tax climate and high overall costs were the two biggest black marks against both New York and Massachusetts.

Some surprises emerge when the data is analyzed by group. New York has a much more negative perception among mid-sized companies (46 percent) than it does with site selection consultants (26 percent) and even large companies (38 percent). New Jersey, on the other hand, drops from the top five list of mid-sized company executives, who have a more negative perception of Michigan. Notably, large companies add Ohio to their top five list of least favorable business climates, while site selection consultants add Illinois.

trumpeted or roundly decried by states, depending on how they rise or fall in the rankings. (See Sidebar.) The new survey also sought to shed light on executive preferences and practices regarding timing of contact with economic development organizations. Finally, the survey added a real estate-oriented question: are companies more interested in building new or finding existing facilities and is purchasing or leasing more attractive?

To conduct the survey, DCI selected a random group of U.S. companies and targeted senior executives with direct site selection responsibilities. The sample was augmented with a selection of members of CoreNet Global and the International Asset Management Council, two trade organizations that represent corporate real estate professionals. In addition, U.S.-based site selection consultants were included in the survey sample.

A four-page survey – which was designed to take less than five minutes to complete – was mailed or e-mailed to the survey audience with a personalized letter in the summer of 2005. A total of 207 completed surveys were received and tabulated, forming the basis of the survey results. Roughly half were from mid-sized companies and half from large companies, with a relatively balanced geographic mix.

## LEADING INFORMATION SOURCES

Just where do corporate executives get the low-down on a location's business climate and what is at the root of how they form their perceptions – right or wrong? All four studies asked the respondents to select the "three leading sources of information" influencing their perceptions of a state or region's business climate. The 1996 study listed 12 possible sources, ranging from "word of mouth" to "meetings with economic development organizations." Since 1999, "online sources" has been added to the list.

In the most recent study, "dialogue with industry peers" (54 percent), "articles in newspapers and magazines" (45 percent) and business travel (45 percent) were identified as the leading source of information. While these three have been perennial front-runners, there is an interesting shift going on. "Dialogue with industry peers" reached its high point in 1999 (71 percent) and has been declining ever since. Likewise, "articles in newspapers" saw a significant decline from 62 percent recorded three years ago. So what's taking up the slack? Online sources. Nearly one quarter (22 percent) of the respondents – a dramatic increase from 9 percent in 2002 – listed the web as a leading source of information. (See Table A.)

Sharp differences also emerged by separating out the results of the three groups that participated in the survey. Executives from mid-sized companies ranked "articles in newspapers and magazines"



**TABLE A: COMPARATIVE INFORMATION SOURCES**

Sources	2005	2002	1999	1996
Dialogue with industry Peers	54%	56%	71%	68%
Articles in newspapers & magazines	45%	62%	61%	60%
Business travel	45%	47%	45%	52%
Meetings w/ economic development orgs.	33%	21%	27%	24%
On-line sources	22%	9%	9%	–
National surveys	17%	23%	31%	34%
Word of mouth	16%	29%	21%	24%
Other	14%	14%	8%	15%
Personal travel	13%	14%	8%	21%
TV/Radio newscasts/shows	5%	14%	7%	4%
Print advertising	2%	4%	3%	4%
Direct mail	2%	2%	3%	1%
TV/Radio advertising	1%	0%	1%	0%

**MOST FAVORABLE BUSINESS CLIMATE**

2005	2002	1999	1996
Texas (33%)	Texas (25%)	Texas (30%)	North Carolina (33%)
North Carolina (26%)	North Carolina (20%)	California (22%)	Texas (28%)
South Carolina (20%)	South Carolina (18%)	North Carolina (20%)	Georgia (27%)
Georgia (18%)	Florida (18%)	Georgia (17%)	South Carolina (21%)
Nevada (16%)	Georgia (15%)	Florida (14%)	Tennessee (20%)

**LEAST FAVORABLE BUSINESS CLIMATE**

2005	2002	1999	1996
California (66%)	California (57%)	New York (29%)	New York (55%)
New York (34%)	New York (36%)	California (25%)	California (47%)
Massachusetts (22%)	Massachusetts (18%)	Massachusetts (19%)	New Jersey (20%)
New Jersey (21%)	New Jersey (15%)	New Jersey (14%)	Massachusetts (19%)
		Connecticut (10%)	Connecticut (9%)

first, while executives from large companies and site selection consultants agreed that “dialogue with industry peers” is the most important source for them. What jumps out most clearly, however, is that site selection consultants rely heavily on meetings with economic development groups while the other respondents do not. More than half (52 percent) of the site selection consultants cited these meetings as one of their top three sources of information, while only 22 percent of large companies and a paltry 9 percent of mid-sized companies ranked them as one of their top three sources. More than twice as many mid-sized companies (20 percent) identified online sources as a go-to source versus meetings with economic development groups. This could be seen as further evidence of economic developers being squeezed out of the equation, especially since many mid-sized companies conduct site searches themselves rather than hiring consultants. (See Chart B.)

**WHAT WORKS AND WHAT DOESN'T IN MARKETING?**

Survey respondents were asked to rate the effectiveness of eight different marketing techniques commonly used by economic developers as a means of reaching corporate leaders considering a new site location. Techniques were rated on a scale of 1 to 5, where 1 equals “poor” and 5 equals “excellent.” When responses that received either a 4 or 5 rating were combined, 55 percent of the respondents cited “planned visits to corporate executives” as the most effective technique. Close behind at 53 percent was “Internet/web site” – a climb of 20 percentage points from 2002 to leap from the #4 to #2 spot. In sharp contrast, the Internet/web site was still a nascent marketing technique at the time of the 1996 survey and fell near the bottom of the list with only 18 percent of respondents.

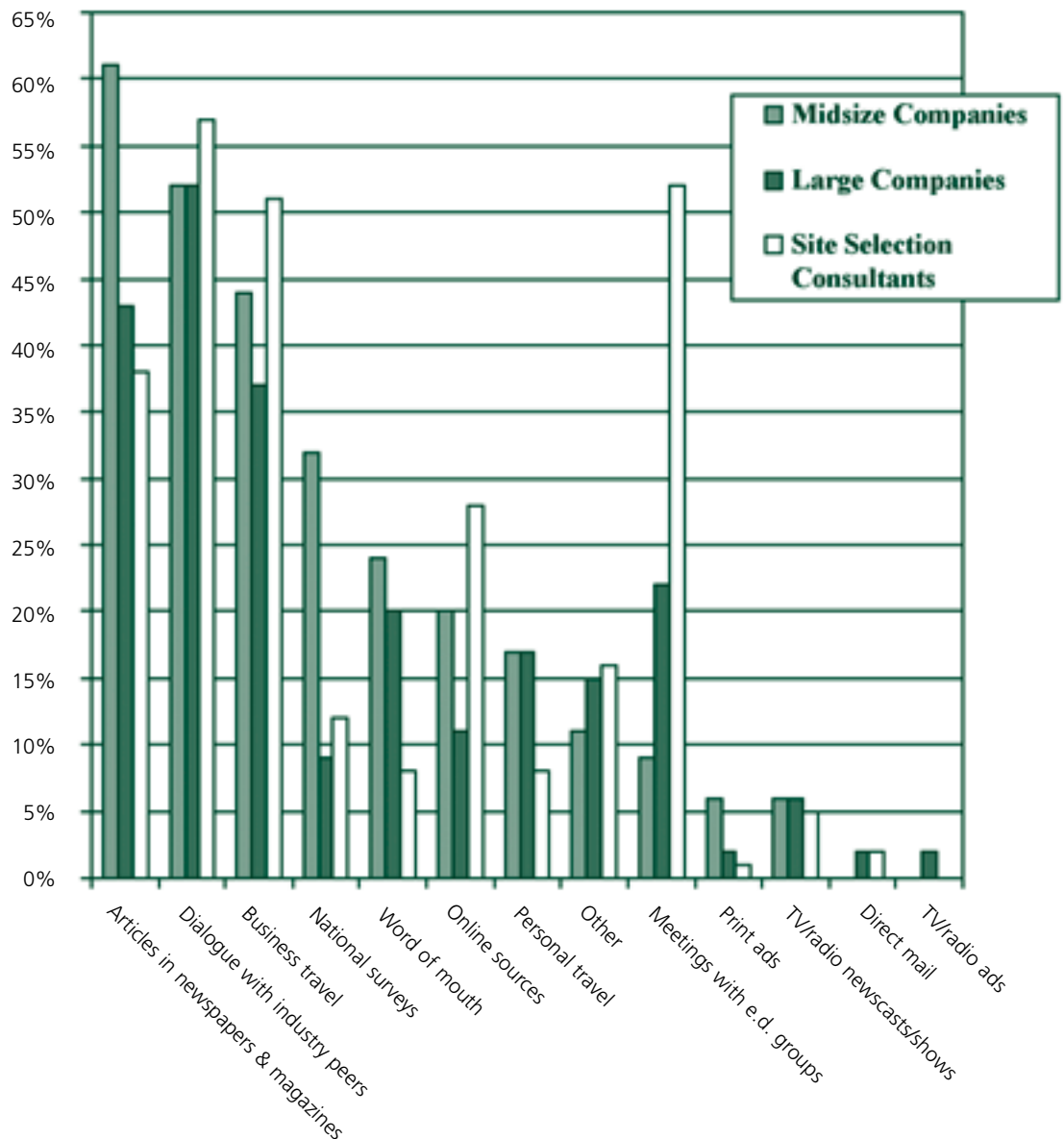
Public relations/publicity has also been climbing steadily as a marketing technique with half of all respondents rating it at the top of the 5-point scale in the most recent study – up 10 percent from the last survey. “Hosting special events” also saw a healthy bump up from 37 percent in 2002 to 49 percent in 2005. “Direct mail” was the only technique to lose significant ground since 2002, losing ten percentage points and falling to sixth place. (See Table C.)

Once again, analyzing the results from the individual perspectives of the three surveyed groups proves instructive. Site selection consultants view “planned visits to corporate executives” and “hosting special events” as the most effective marketing techniques used by economic development groups. In contrast, participants from mid-sized and large

companies ranked “Internet/web site” as most effective. Clearly, a pattern about the critical importance of the web is emerging here.

To further hammer home the point, the survey asked respondents a series of questions about the Internet’s role in corporate site selection. First, respondents were asked to define how often the Internet was used as a source for information in their last site search. On a scale of 1 to 5 where 1 equals “not at all” and 5 equals “often,” 55 percent indicated either a 4 or 5. That percentage soared from 2002, when 22 percent of the respondents circled 4 or 5. When broken out by group, site selection consultants used the Internet far more than corporate executives as a source of information. (See Chart D.)

**CHART B: COMPARATIVE INFORMATION SOURCES**  
(Midsize Companies v. Large Companies v. Site Selection Consultants) (2005)



A second question sought to pinpoint the likelihood of respondents visiting an economic development organization's web site during their next site location search. A whopping 65 percent answered 4 or 5 on the 1 to 5 scale, where 1 equals "low" and 5 equals "high." That percentage is up significantly from 2002, when only 39 percent indicated a high likelihood of visiting an economic development organization's web site. Reinforcing the results of the first question, site selection consultants registered a much higher likelihood than corporate executives of using an economic development organization's web site during their next site search.

The final Internet-related question sought to zero in on which features of an economic development organization's web site the survey participants find most useful. Overall, the top three responses were "information on available incentives" (72 percent), "demographic information" (67 percent) and "directory of available buildings and sites" (64 percent). This remained consistent with the 2002 responses. Areas that saw significant gains in importance were "information on the community's target industries," "news sections," and "site map." Although most economic development organization's web sites play up the location's quality of life – both through content and graphic imagery – the importance of this information continues to drop. Less than a quarter of the respondents (21 percent) cited "information on quality of life" as most useful, down from 28 percent in 2002. (See Table E.)

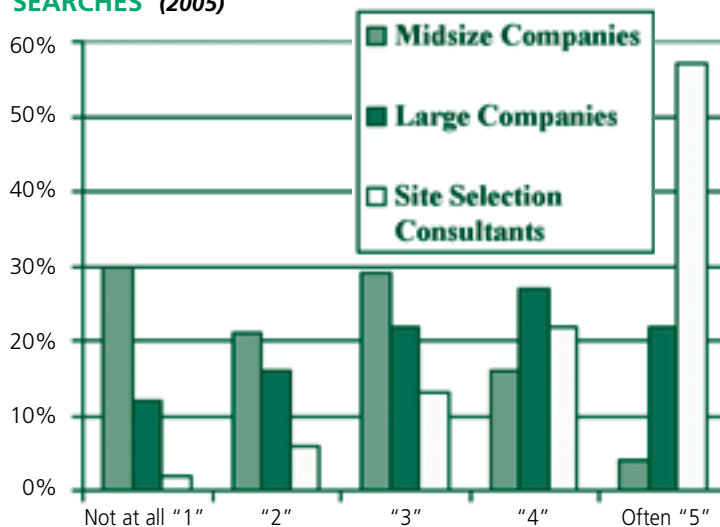
## PERCEPTION OF ED GROUPS ON THE RISE

The good news is that the perception of economic development organizations appears to be on the rise. When asked to rate their overall impression of economic development organizations with whom they have worked, 71 percent of the business leaders in the current study selected either a favorable or highly favorable rating. This percentage is up significantly from where it stood at 53 percent in 2002. Not surprising is that site selection consultants have a slightly more favorable impression of economic development groups than corporate respondents since the two more frequently work hand-in-hand. Remember, however, that the question specifi-

**TABLE C: COMPARATIVE RATING OF MARKETING TECHNIQUES**  
(% Rating 4 or 5 on a 5-point scale)

Techniques	2005	2002	1999	1996
Planned visits to corporate executives	55%	53%	46%	53%
Internet/web site	53%	34%	37%	18%
Public relations/publicity	50%	40%	38%	39%
Hosting special events	49%	37%	42%	39%
Trade shows	33%	32%	45%	39%
Direct mail	23%	33%	25%	25%
Advertising	20%	21%	19%	19%
Telemarketing	6%	4%	6%	7%

**CHART D: USE OF THE INTERNET DURING SITE LOCATION SEARCHES (2005)**



**TABLE E: MOST USEFUL FEATURES OF AN ECONOMIC DEVELOPMENT ORGANIZATION'S WEB SITE**  
(% of respondents who selected each feature)

Feature	2005	2002
Information on available incentives	72%	78%
Demographic information	67%	75%
Directory of available buildings & sites	64%	61%
List of leading local employers	47%	44%
Current comparisons to competitor locations	39%	45%
Information on the community's target industries	39%	30%
Information on local schools	26%	25%
Photos/maps of the community	25%	21%
News sections that describe current developments	25%	17%
Information on quality of life	21%	28%
Web site sitemap	15%	9%
Testimonials from local companies	10%	16%

cally asks about organizations with whom the respondents have previously worked and that less than one-quarter of all respondents identified meetings with economic development groups as an important source of information. Going forward, the crucial question remains whether or not economic developers can continue to play a vital role in the site location process.

To delve deeper into this question, the 2005 survey added a question to ascertain at what stage in a site selection search the participants would typically contact an economic development organization. The most common response, by a long shot, was “after we have developed a short list of potential communities, to request specific data or arrange site visits.” This garnered 48 percent of the votes, compared to just 27 percent who said “during the initial screening of all possible locations, to request preliminary data.”

Roughly 15 percent indicated that they would wait until “after the field has been narrowed to a few finalists, to negotiate incentive offers,” while 2 percent said they would only contact an economic development organization “after a location has already been selected, for assistance in identifying a suitable building/lot.” These last two results should raise a red flag for economic development professionals, but perhaps most disturbing is the 8 percent who said “we would not contact an economic development organization at any stage in the site location search.”

Particularly telling on this front is the breakdown of the three survey audiences. As one would expect, site selection consultants are more likely to contact economic development groups earlier in the site selection process. Approximately 35 percent identified the first contact as during initial screening, while 59 percent said it was after the short list

was in hand. In comparison, only 15 percent of mid-sized companies said they would contact economic developers during initial screening. More than one-third (35 percent) of those same companies said the contact would occur after they already have a short list and an alarming 20 percent said they would never contact an economic development organization. In general, large companies fell somewhere between the two other groups. (See Chart F.)

## MANUFACTURING ON THE MOVE

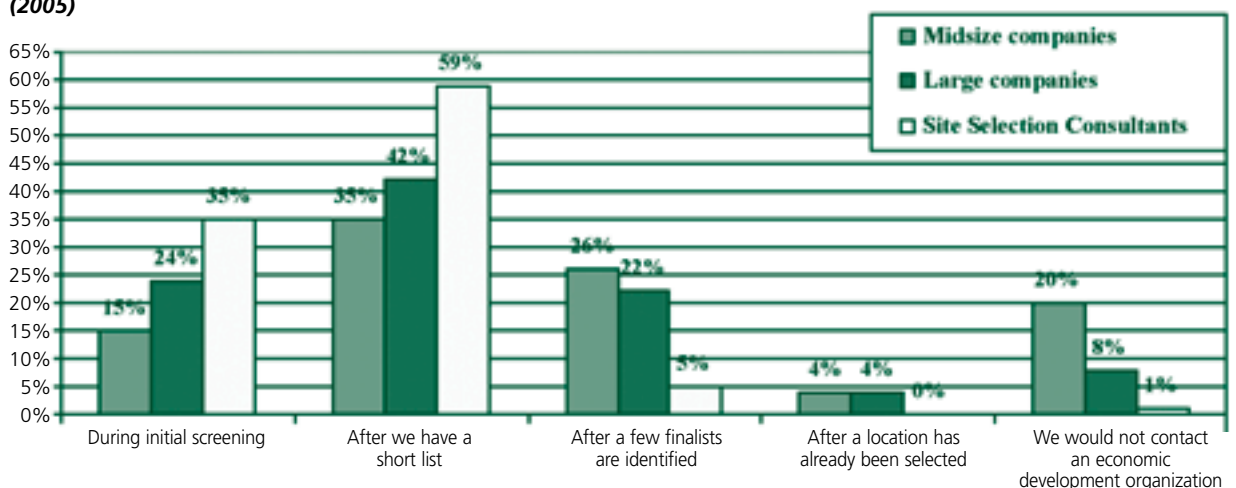
Last, but not least, the survey sought to provide insight on facility trends. The first question posed was: “The next time you move, expand, consolidate or add a new facility, which of the following would be the most likely candidate for such a change?” When asked to choose from a list of six options, 38 percent of the respondents in the 2005 survey selected manufacturing or production plant as the most likely candidate. (Mid-sized companies showed a striking proclivity for this option – selecting it 55 percent of the time.) Overall, however, the figure was down slightly from the 44 percent figure in 2002.

Distribution centers ranked the second most likely facility for change at 16 percent, a figure that has remained relatively flat. The current study also reflects a steady downward slide in headquarters searches since 1996, dropping from 22 percent to just 14 percent in 2005. Also noteworthy is that “back office facility” regained some of the ground it lost in 2002 when it was cited by only 8 percent compared to 13 percent of 2005 respondents. (See Table G.)

An added dimension of the 2005 survey was a question asking participants how they would acquire a facility the next time a facility was added. Selecting from a list of four options, respondents

### CHART F: TIMING OF CONTACT WITH ECONOMIC DEVELOPMENT ORGANIZATIONS

(Midsize companies v. Large Companies v. Site Selection Consultants)  
(2005)





**TABLE G: COMPARATIVE CHOICES FOR FACILITY CHANGES**

Facility	2005	2002	1999	1996
Manufacturing/production plant	38%	44%	20%	37%
Distribution center	16%	15%	10%	8%
Corporate, division, or regional headquarters	14%	19%	21%	22%
Regional sales office or service center	13%	14%	28%	17%
Back office facility	13%	8%	14%	13%
Other	6%	7%	8%	3%

reported 46 percent of the time that they would lease an existing building, while nearly a third (31 percent) said they would purchase land on which to build a facility. Only 12 percent of respondents said that they would either purchase an existing building or lease a facility built to their specifications. (See Chart H.) These results point to the importance of communities having a solid inventory of buildings and sites on hand in order to be in the site selection game.

### KEY TAKEAWAYS FROM THE SURVEY

So what can we learn from all this data? Identified below are five key findings for economic developers:

**1. Don't put all your marketing eggs in one basket.**

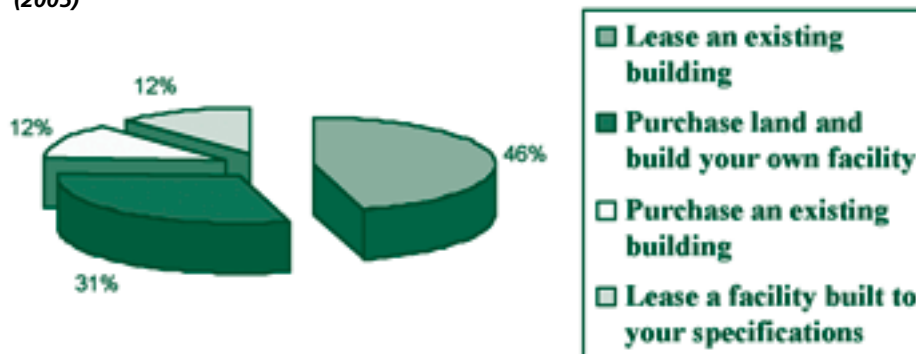
It is clear that site selection decision makers are forming their opinions about a location's business climate from a broader mix of media and sources than ever before. They're still talking to their peers, reading the news, and forming impressions during business travel, but more and more often they're gleaning information from the Internet. That finding was confirmed when more than half the respondents pointed to the web as one of the most effective marketing techniques for reaching them. The takeaway here seems to be that economic development organizations need to build a balanced program, but pay particular attention to their online presence.

**2. Move beyond your own web site and build a great web presence.**

Your own website is a good starting point. Is your site robust and up-to-date? Does it focus on the information site selectors find most valuable? The vast majority of economic development web sites don't have "real" information about incentives or available sites and buildings. This is a big problem. Don't frustrate your prospects or site selection consultants with unnecessary fluff about quality of life in your

community. Give them what they want: hard data, in-depth information about incentives, and a searchable database of available real estate.

Building a great web presence means making sure executives can easily find your site. Have you tested your web site lately through a variety of search engines? Experiment with a dozen or so key phrases that someone who is searching for information might type into a search engine. Let's say the name of your community is "AnyPlace." Try the following: "Doing business in AnyPlace," "AnyPlace real estate," "AnyPlace economic development," "AnyPlace business incentives," "Tax breaks in AnyPlace" or "AnyPlace commercial

**CHART H: COMPARATIVE CHOICES FOR FACILITY ACQUISITION (2005)**

buildings." If your site doesn't show up on the first page, the chances of someone finding you are pretty slim. Work with a professional web developer to revamp your site so that it is search engine optimized. You might also consider initiating or beefing up links to and from your site, another strategy that is important for search engine optimization. Possibilities to explore include chambers of commerce, convention and visitor bureaus and other tourism offices, local government, and commercial realtors.

Finally, economic development organizations would also be well-advised to pay close attention to how their communities are being portrayed on other organizations' web sites. More and more "third party" site selection sites are being developed. Visit them regularly to be sure the

Right:  
Over the past six months, the MetroDenver Economic Development Corporation's website has seen a 34% increase in visitor traffic. The organization has focused on building a strong web presence via search engine optimization.

Below: For Southwest Michigan First, a front-page article in *The Wall Street Journal* (March 6, 2006) helped raise the region's profile among corporate decision-makers.

Within the "Winning Strategies" survey, public relations/publicity has climbed steadily as an effective marketing technique.

## Kalamazoo, Mich., Pegs Revitalization On a Tuition Plan

### Promise of College Funding Stokes Housing Demand, But Will Jobs Come, Too?

**'Totally Awesome,' a Teen Says**

By NEAL E. BOUDETTE

KALAMAZOO, Mich.—Last year, Greg DeHaan and his partner built 189 homes in the leafy, middle-class suburbs ringing this downtrodden industrial city, but not one in Kalamazoo itself. "There was no demand," says Mr. DeHaan, whose company, Allen Edwin Homes, is one of the largest home builders in Michigan.

By early December, however, a market had suddenly materialized, prompting the developer to pay \$7 million for three separate tracts of land. Out-of-state investors began scouring the area for opportunities, too.

Mr. DeHaan and others in town trace this new interest in Kalamazoo to an unusual, anonymously funded plan. Beginning this June, college tuition will be free for any student who enters the Kalamazoo school system by the ninth grade—regardless of income or need. The program, unveiled in November by the city's superintendent of schools and underwritten by a group of local philanthropists, is to run for at least 13 years.



*Greg DeHaan*



**Metro Denver**  
Economic Development Corporation

Tuesday, August 1, 2006

Energetic Bodies. Energetic Minds.

Home  
Data Center  
News Center  
Metro Denver EDC  
Denver Profiles  
Relocate & Expand  
Live & Work  
Contact Us

INDUSTRIES  
COMPANIES  
LEADERS  
REAL ESTATE  
TRANSPORTATION

Companies:  
Relocate and Expand  
in Metro Denver

Employees:  
Live and Work  
in Metro Denver

**DATA CENTER**  
Data Center Topics

Toward a More Competitive Colorado:  
Colorado's Position in Economic Growth

2006 Mid-Year Office Update - Equity  
Office

Five "Knowledge-Based" Industries are  
Charting Metro Denver's Economic  
Growth

Discover Metro Denver's Top Resource:  
Its Workforce

Metro Denver: A Place for Energetic  
Bodies and Minds

Search Database of 40,000+ Metro  
Denver Companies by industry, location,  
sales and other criteria

Demographics for Metro Denver's  
Communities

**NEWS CENTER**  
News Center Topics

Metro Denver's Economic Development  
Efforts Accelerate Ahead - Annual  
Report to Investors

Metro Denver Unemployment  
Outperforms Nation - July 2006 Monthly  
Economic Summary

Energy Efficiency: Bottom Line  
Opportunities for Metro Denver  
Companies - Download the full report

Health and Wellness Commission Debuts  
to Make Metro Denver America's  
Healthiest Region

DMCC Releases Business Agenda for  
Colorado's Future

Innovative M.A. Mortenson Company:  
Metro Denver EDC's Featured Investor

Colorado Gets \$26.5 Million Economic  
Development Boost

**METRO DENVER EDC**  
Metro Denver EDC Top

**Energetic Bodies.  
Energetic Minds.**

Metro Denver's young, active,  
educated workforce is among the  
nation's healthiest—in both mind  
and body, which makes it a great  
place to energize your business.

**Metro Denver**  
Economic Development Corporation

©2006 Metro Denver Economic Development Corporation  
www.metrodenver.org

303.620.8092 Phone 303.534.3200 Fax  
1445 Market Street, Denver, CO 80202

information on your location is as accurate and favorable as possible. Feed them updated statistics and news, so others are portraying your community accurately.

### 3. Face the truth about image advertising.

Many economic developers are still spending dearly on image advertising, no doubt pressured by public and private leaders who view selling a community in the same vein as

selling soap. This is the fourth survey in a row, however, that advertising has ranked very low as a source of information that influences perceptions about a business climate. Not once has print, TV or radio advertising climbed above a 4 percent response rate. Our advice is to use advertising selectively when you have something major to announce. A new company landing in your community, significant incentive legislation, or specific real estate opportunities that have recently become available would all qualify as "hard news" that may trigger advertising. But forget about image advertising. There is little evidence that the soft stuff works.

### 4. Companies and site location consultants are two distinct audiences – approach them differently.

They may have the same end in mind – finding the best location for a business relocation or

expansion – but companies and site selection consultants go about collecting information in a much different way. Economic developers would be well-advised to tailor their marketing approaches to each market accordingly. With site selectors placing such an emphasis on meetings with economic development organizations, for instance, communities should make it a high priority to schedule personal meetings – whether on your own turf or theirs. For corporate executives (particularly mid-sized companies), the news media remains a primary information source.

#### 5. *Be Proactive.*

The new economic development game focuses on “making the short list” – often when communities don’t know they are even competing. The lesson here is for economic development organizations to be proactive. Again, know the site selection consultants and reach out to them. Don’t wait for the phone to ring. Launch an aggressive but targeted campaign to market to the right companies – particularly those mid-sized companies that do not often use site selection consultants. The goal of the marketing and

Many economic developers are still spending dearly on image advertising, no doubt pressured by public and private leaders who view selling a community in the same vein as selling soap. This is the fourth survey in a row, however, that advertising has ranked very low as a source of information that influences perceptions about a business climate. Not once has print, TV or radio advertising climbed above a 4 percent response rate. Our advice is to use advertising selectively when you have something major to announce.

calling campaign should be to set up face-to-face meetings with company executives.

Don’t suffer the same demise as travel agents, who let consumers pass them by and make decisions without the benefit of their destination savvy. Above all, get out there – in person and on the web. As they say, you have to be in it to win it. 🌐





INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL

*The Power of Knowledge and Leadership*

**NEW! Specialized Professional  
Development Courses**

IEDC's new series of professional development education courses are designed for those who desire increasingly challenging coursework. These courses fit the needs of experienced professionals, Certified Economic Developers (CEcDs), and anyone in the field who is simply looking for a challenge. Courses are open to all, and CEcDs can earn recertification points for participation.

**Oct 19-20, 2006**

**Advanced Workforce Development**

Arlington, VA (Washington, DC Metro Area)

**Nov 30-Dec 1, 2006**

**Economic Impact Analysis**

Little Rock, AR & Phoenix, AZ

New! Two-way telecast course presented in two cities. Select the city most convenient for you.

**Register Online At**

**[www.iedconline.org](http://www.iedconline.org)**

# the office/industrial

## LAND DILEMMA

By Zenia Kotval and John Mullin



Newer industrial parks show less density.

Zenia Kotval is an associate professor of urban planning at Michigan State University and John Mullin is the dean of the graduate school at the University of Massachusetts.

### ■ INTRODUCTION

To encourage a balanced economy and make place for office/industrial activities in our regions, one needs to look at both retrofitting older buildings and brownfield sites as well as creating suitable space for modern industrial facilities. Modern office/industrial parks have a campus feel with the designated purpose of attracting office/industrial users. Densities are often less than those found in older industrial areas and larger tracts of land, with suitable access, are required.

Increasingly, planners and developers are becoming

aware of the mismatch between land zoned for industry and that which is *suitable* for industrial development. This is true for both brownfield and greenfield sites in the Blackstone Valley along the Rt. 146 corridor in Massachusetts.

Older areas are constrained by issues of compatibility, access, parking, and often environmental and flood plain issues. Greenfield sites are constrained by physical site characteristics such as wetlands and slope, access and transportation networks, development pressures from other land uses such as residential or commercial/retail users and public perceptions and concerns surrounding industrial uses. The premise of this article is that, unless these issues are addressed, there will be a shortage of developable office/industrial lands along the corridor. Communities need to do more than just designate or zone land for industrial purposes. They need to study the suitability of this land for industrial purposes.

The article begins with a brief overview of the Blackstone Valley and its Rt. 146 corridor. It then examines 1) current problems with industrial lands, 2) applies industrial land suitability criteria to six communities along the Rt. 146 corridor, and 3) discusses implications and recommendations to address these concerns.

### THE BLACKSTONE VALLEY AND ITS RT. 146 CORRIDOR

The Rt. 146 corridor is a well constructed divided highway that serves as a direct connector between Worcester and Providence through the Blackstone Valley. Upgraded in the 1980s, the highway was connected to I-90, the Massachusetts Turnpike in the 1990s. A final high-speed link to Worcester from the Pike is now under construction. The Valley is in the midst of a renaissance. The

### A STUDY OF THE BLACKSTONE RIVER CORRIDOR IN MASSACHUSETTS

Local planners have often neglected their industrial resources and are therefore jeopardizing their economic base. There is clearly a mismatch between land zoned for industry and that which is suitable for development. Older areas are constrained by issues of compatibility, access, and environmental and flood plain issues. Greenfield sites are constrained by physical site characteristics, such as wetlands and slope, transportation networks, development pressures from other land uses and public perceptions and concerns surrounding industrial uses. Through this case study, this article analyzes the key factors that are influencing industrial land use decisions and provides recommendations that may be of assistance to local officials throughout the country.



expansion of the highway, the creation of the Chafee National Heritage Corridor, and the westerly spread outward from Boston of jobs and people have stimulated extensive investment. In years past, one could hear references to the Blackstone as the “Lost Valley.” This is no longer the case.

The region is highly diverse in terms of demographic characteristics, labor characteristics, and educational attributes. It is the home of both blue-collar workers and high technology employees. The former will probably be far fewer in the future. At the same time, they are expected to be higher skilled, more computer literate, and more highly educated in a formal sense. Indeed, over time, the assembly line is likely to be increasingly populated by workers who have some post-secondary education. (There is anecdotal evidence which suggests that 10-20 percent of assembly line workers have at least one year of community college education). The criticality of this training can be perhaps best noted in Worcester County where the plastics industry is so prominent: The lack of skilled plastic mold operators is so severe that companies commonly provide extensive bonuses to older workers to keep them on the job.

In terms of demographics, the region is increasingly reliant on women and immigrants to fill jobs. Women, in fact, are increasingly close to an 80 percent participation in the workforce. This, according to the Census Bureau, is the maximum expected participation. The good news is that they have been able to enter the workforce. The less good news is that there is no longer a large scale, untapped workforce in the corridor. Concerning immigrants, it is clear that the corridor would have lost population without the entry of foreigners. The region is increasingly attracting Haitians, Brazilians, Portuguese, Russians, and Asians/Chinese. How they will be assimilated, educated, and trained is important to the corridor’s workforce.

The corridor still has affordable housing. It is still most apt to be found in the center cities. There are still “pockets” of such housing in mill villages such as Whitinsville. The positive news is that this housing exists. The less positive fact is that the housing is in increasing demand, prices are rising, and in most cases will be beyond the means of lower middle income workers in the years to come.

The corridor is still largely the home of traditional industries. Indeed, the direct legacy of the Slater stimulated (small village scale) industrial revolution can be found throughout both the Massachusetts and Rhode Island sides of the corridor. In these communities, people still “make things” from abrasives to high precision medical instruments. While the labor needs of such industries have been in decline, the majority of remaining firms are still profitable. Along with manufacturing, the corridor is attracting some warehousing, biotechnology, and a sprinkling of growth industries. It will become increasingly diverse over the next decade as companies move out from core cities and into the smaller towns.

The most striking points that emerge relate to transportation. The entire corridor, with the completion of the I-90 – Rt. 146 Connector, will have one of the best transportation networks in the

nation. With four interstates and three major state highways, truck traffic has quick, efficient access in all four directions. With fast passenger and increasingly efficient freight rail service, the corridor is well on its way to serving distant points. And with three increasingly popular commercial airports within 60 miles of each other, it is one of the best served regions in the nation. If there are transportation problems, they relate to “regional” east-west options. Still, on the whole, this corridor has tremendous transportation advantages.

In a final analysis, the corridor has several tremendous assets that will serve it well in the future. These include its quality of life, manufacturing legacy, highly trained workforce, location, and highway infrastructure. There are still major weaknesses.

The region has no regional strategic plan, the towns have been slow to invest in infrastructure, and there has been a propensity to accept any type of industrial development as being in the town’s best interests. These factors emerged as a result of a study of land suitability of all industrially zoned land along the corridor between Providence and Worcester. For this article, data are extracted for the six Massachusetts towns that touch the Rt. 146 corridor. They are Douglas, Grafton, Millbury, Northbridge, Sutton, and Uxbridge.



*Redevelopment at the Fisherville site in South Grafton is currently underway. The old mill burnt to the ground in 1999.*

Despite the historical and illustrious role of the Blackstone Valley in America's Industrial Revolution, it has slowly and steadily moved away from welcoming new industrial uses. This is noted through the towns' zoning regulations, perceptions toward industry and the emerging disconnection between local citizens and local jobs and an unwillingness to invest in local infrastructure.

Concerning zoning problems, towns still tend to place industrial land last in their typical pyramidal hierarchy of zoning uses. This typically means agricultural uses can be placed anywhere and that the majority of land is dedicated to residential activities. One then finds a small band of commercial land (where agricultural and residential activities could also be placed) and finally a very narrow band of industrial land – the space not suitable for anything else. That is, if land is unsuitable for agricultural, residential, and commercial use, then it could be used for industry – or so goes local logic. Given the deep fear concerning industry, this phenomenon is understandable. However, this “garbage land” is rarely prime for industrial uses. One Massachusetts community zoned 700 acres for industry. After wetlands, steep slopes, roads, and setbacks were subtracted, the town had 40 scattered acres that were usable. As will be noted in detail later in this article, a large amount of the Blackstone Valley towns have zoned land that is unsuitable for development.

The second key reason is that there has been growing distrust over industry of all types. This has occurred as a result of popular reaction to news coverage concerning incidents such as Love Canal, Three Mile Island, and General Electric's Pittsfield Plant. Moreover, the U.S. Environmental Protection Agency's Superfund list, coupled with state lists, has detailed more than 600,000 polluted industrial sites nationwide.

The third reason is that there is now a disconnect between the location of industry and the people who work in the mill, factory, or plant. In previous generations, one typically found local people working within their home communities. Today, we are more apt to travel to a distant job in another community or region. In Central Massachusetts, for example, 79 percent of all resident adults worked in the region in 1980. Today, it is approximately 72 percent. In Massachusetts, as a whole, the typical worker travels 27 minutes to work each day. As late as 10 years ago, we could promote industry as a means of expanding the local tax base and local job opportunities. We no longer can use the latter. There is little sense of connectedness between the mill and local residents. Moreover, the plants themselves are less likely to be a part of the local culture. The speed with which they come and go has only increased, so we are all subject to job churning. For example, one 1,000,000-square-foot facility in the region changed from being the home of a plastics

company to paper to electronics to computers to software service firms. (The plastics firm employed five percent of the town's workers while today's service firms employ only one percent).

Finally, there is the question of infrastructure. Throughout the 1990s and early 2000, reinvestment in infrastructure systems became a highly contentious issue. With declining federal and state assistance, many communities refused to upgrade or improve their systems. The net result is that systems are increasingly operating at capacity and are requiring major maintenance. Citizens are also being asked to fully fund water and sewer expenses. The electorate has not been inclined to provide special assistance to industrial users. Ironically, this is resulting in many places developing package treatment plants for sewage disposal. Such is the case in Uxbridge, Massachusetts, where a 40-acre parcel is now being developed with private septic and private water systems. In essence, such places are free of any necessity to tie into town systems. This is positive in communities where expansion of such systems would be costly. However, given the need to have ample space to place such systems, they can frequently contribute to sprawl.

## DETERMINING LAND SUITABILITY

When assessing the locational attributes of any industrial site, there are two distinct aspects that one would look at. The first set of criteria deals with the *physical locational suitability* of a site. These include topography, access, location, environmental, and natural features as well as site condition. The second set of criteria comes into effect when a site is deemed suitable in terms of the physical locational attributes. This set of criteria deals with the *amenities* provided on site such as landscaping, design, and architectural standards; use amenities such as on-site hotels, fitness and recreational facilities; utility amenities such as on site water, sewer, gas, telecommunication networks; and organizational management structure.

It is this second set of criteria that classifies an industrial, office and/or research park. A “Class A” Park would be one that has optimal amenities in place. A “Class B” Park is one that has the potential of being a Class A park with improvement to existing amenities and/or incorporating additional amenities. A “Class C” Park is a utilitarian park that serves a basic function well without indulging in “nice to have” amenities. The same classification system would apply to office or industrial space in existing buildings. Well designed and maintained space in close proximity to desired amenities would rank higher than inexpensive space for incubator or starter industries.

There is a need for different classes of space for successful economic development. Not all industry desires (or can afford) “Class A” space. A diversi-

fied economy is certainly a healthy economy. The region has a unique advantage of being able to offer a wide range of properties for industrial development. And yet, it has been slow to create spaces that would be attractive to high end users.

The most common site location factors that need to be addressed are as follows:

- **Fair Market Land and Construction Costs:** Estimating costs accurately is a vital element in the site selection process. The land acquisition, or base price, is the single largest element. Other costs would include site engineering, utilities and infrastructure, construction materials and labor, maintenance costs, and taxes.

There is a need for different classes of space for successful economic development. Not all industry desires (or can afford) "Class A" space. A diversified economy is certainly a healthy economy. The region has a unique advantage of being able to offer a wide range of properties for industrial development. And yet, it has been slow to create spaces that would be attractive to high end users.

- **Infrastructure, Transportation, and Utilities:** One of the key factors would be the proximity to acceptable transportation services. Quick and easy access to raw materials and suppliers is important. Other considerations would include highway frontage, accessibility, visibility, drainage capacity as well as power, sewer and water availability at reasonable rates.
- **Current Land Use and Compatibility with Adjacent Areas:** Evaluation of the suitability of specific park sites is influenced by the nature of the current use of the land and the compatibility of the prospective park activities with those in adjoining areas.
- **Environmental Issues:** Industrial/business sites must conform to a wide range of federally and locally mandated restrictions designed to maintain a healthy environment. Sites with few or no environmental constraints are at a distinct advantage.

Given the above factors and trends, it is clear that office, industrial, and commercial growth is likely to occur in communities that have the capacity to absorb new development either in existing brown-field sites or in areas slated for new development. In an effort to identify the communities within the

corridor with this growth capacity, Geographic Information Systems (GIS) were used to map and assess all lands available for industrial and commercial purposes and their potential environmental constraints represented by key factors such as steep slopes, wetlands, floodplains, protected open space, and prime agricultural lands.

The Central Massachusetts Regional Planning Commission created the following sets of maps for the corridor:

- Base Map: Political boundaries, highways, local roads, active rail lines, hydrography;
- Zoning Map 1: Actual zoning district designations, displayed on base map;



*Older industrial sites along the Blackstone River are very close to the water and difficult to reuse.*

- Zoning Map 2: Industrial and commercial districts that permit industrial and warehousing activities including table showing relevant dimensional requirements;
- Environmental Constraints Map: Wetlands, flood plains, slopes greater than 15 percent, rivers, river protection act buffers, protected open space, and adopted water supply protection districts;
- Readiness Map: Water lines, sewer lines, gas lines, and electric distribution lines with industrial and commercial zoning districts displayed; and
- Land Use Map: Developed lands and approved subdivisions.

The maps each show important pieces of the analyses of land suitability. The Base Maps show community boundaries, hydrology, major transportation routes, and the rail line. The Land Use



*Old mill converted to housing.*



maps show developed and undeveloped lands. Infrastructure maps show existing and potential water, sewer, and electricity lines. It should be noted that data on the availability of fiberoptic lines were not consistently available. The Environmental Constraints maps show floodplains, steep slopes or poor soils, wetlands, and protected open space as limits to industrial and office development. The Generalized Zoning map combines the zoning maps of the communities into categories with similar uses. Finally, the Readiness maps show the industrial and light industrial lands that could be developed based on suitable infrastructure and lack of significant environmental constraints.

### INTERPRETATION AND ANALYSIS

A minimum contiguous tract size of 50 developable acres is the standard for readiness used here. This size parcel would allow for development of adequate building space and the required area for parking and infrastructure.

Industrial land availability and capacity for each community along the corridor were determined through the use of Geographic Information System analysis and data available from the Central Massachusetts Regional Planning Commission.

These maps and data take into account environmental constraints, zoning, and land that has been previously developed.

The table on page 21 shows the number of industrially zoned acres in each community that are developable.

### IN SUMMARY

The industrial land suitability study highlights several important issues related to industrial land. Approximately 23 percent of the land zoned for

industry has already been developed. Perhaps more significantly, 32 percent of the land zoned for industry has significant physical constraints such as steep slopes, wetlands, and ledge. As such, only 45 percent of the zoned land is available for new industrial growth. This represents approximately 2,500 acres. Few communities offer over 200 acres of developable land. Even fewer communities have large contiguous tracts of land.

From a policy perspective, three key points emerge. First, given the increasing resistance to industrial development, those large parcels currently designated for industrial use must remain as such. This means that every effort must be taken to insure that residential or commercial incursions do not occur. Moreover, these areas should have primacy in terms of grants or capital improvement projects to provide or expand infrastructure improvements. The importance of protecting these lands cannot be understated: If the corridor is to attract first class industry, its few remaining large parcels must become first class lands.

Secondly, the corridor is becoming increasingly attractive for warehousing uses. Nowhere can this better be noted than in Sutton, where the South Sutton Commerce Park has attracted several warehouse and distribution companies within sight of Rt. 146. Among these companies are Carquest, Champion Container, and Ross Express. In the same town, Burnap Industrial Park is advertising for warehouse condo users. While these uses pay full property taxes, they are not large employment generators. As well, they typically do not require skilled labor. For this reason, they should be excluded, as much as possible, from prime industrial parks. Such uses should be placed on smaller, free standing parcels near interstate or major state highways where there is minimal need to upgrade infrastructure systems. This will not be an easy task.



Thirdly, the lack of regional cooperation will only hurt the six towns in the coming years. All of the indicators point toward a need for high-end industrial/office facilities. And yet, most of the towns appear to be bent on attracting low-end occupants for their vacant spaces. The irony is that there is a concentration of high end users, including EMC and Waters Inc less than 15 miles from the corridor. The communities need to come together and develop a common plan to develop the corridor. Otherwise, the region's ability to become more prosperous in the coming years will not happen.

## OBSERVATIONS AND RECOMMENDATIONS

At the most fundamental level, communities need to address both industrialization (office, research, and manufacturing on new sites) and reindustrialization (the revitalization of existing industrial sites) in their master plans. By so doing, the public will know that this is a direction that the community desires and will not be surprised, and the various agencies (planning, conservation, public works) can also begin to focus their actions in a coordinated manner. Moreover, the plan will (or should) have a series of recommendations for general areas where industry can and should be located. It cannot be emphasized more strongly that, if the placing of industry is a surprise to the public, it is likely to be the subject of citizen protest.

Planners typically face four choices in industrial zoning. The first starts with a definition of industry. Harvey Moskowitz and Carl Lindbloom, in their *New Illustrated Book of Development Definitions* (New Brunswick, N.J.: Center for Urban Policy Research, 1993), describe industry as "Those fields of economic activity including forestry, fishing, hunting, and trapping; mining; construction; manufacturing; transportation; communication; electric, gas, and sanitary services; and wholesale trade". The problem is not with this basic definition but with what happens when we try to break industry into light and heavy categories. These categories overlap and are confusing. Communities need to stay with a basic definition and to use performance standards to control what actually occurs.

There can sometimes be a problem in selling this idea at first with people asking: "You mean anything can be sited if it meets these standards"? However, once people see that performance standards are quite controlling, they more readily accept them.

The second choice is whether to have industrial districts by right or special permit. It is best to create districts by right if there are clear areas where it can work. Doing so sends a message to the community that industry will come and is wanted. It also tells industrial developers that they are wanted and tells abutters that they must expect industry in their backyards. However, many communities will want the safety net provided by the special permit process, whereby the developer must defend a project in terms of environmental, fiscal, traffic, infrastructure, and character impacts. When there is any doubt about a site or when a community desires some room to maneuver (for example, a choice between industry or commercial uses), the use of special permitting is appropriate. But remember the use of special permitting does slow down the building process, tends to cost the developer more money, and frequently creates heated political environments where decisions are based upon emotion and political considerations rather than sound planning.

The third centers upon the location of various types of industry. There needs to be room for traditional manufacturing (that is, brownfields), industrial subdivisions, and even industrial parks. Interestingly, there can be more success in revising zoning for brownfields (typically the highest density) and industrial parks (the lowest density) than for the mid-range industrial subdivision.

The fourth relates to what should be allowed in an industrial district. The simple answer is that it depends. In all cases, a community should allow manufacturing that is governed by performance standards. Beyond this, the range of options runs the whole gamut of land-use categories. As a rule of thumb, arguments can be made against allowing housing in industrial districts because residential uses are more apt to be built first and take away

	Industrially Zoned Land in Acres	Developed	Vacant	Constrained	Vacant High Potential for Development
Douglas	1,778	356	1,422	637	785
Grafton	1009	182	827	286	541
Millbury	470	69	401	166	235
Northbridge	622	129	493	241	252
Sutton	920	322	598	305	293
Uxbridge	755	207	548	157	391
<b>Totals</b>	<b>5,554</b>	<b>1,265</b>	<b>4,289</b>	<b>1,792</b>	<b>2,497</b>

This data has been compiled from the 2000 Statewide Buildouts in Massachusetts

prime industrial land and, later, there are often issues of compatibility. Having said this, residential uses can work where there are specific master-planned districts with strict controls and large areas of land between uses. Artist lofts, apartments, shops, offices, and even light manufacturing have intermingled nicely in such areas. On the whole, however, planners should keep residential uses out of prime industrial districts.

Elements of this case study can be seen throughout older industrialized areas. This corridor, like many other similar areas, is literally at a crossroads. It can continue as it is and become little more than a center for warehousing and distribution. Corridors such as these can be improved by careful planning, investing in infrastructure, improving amenities and being patient. These places are too special to continue as it is. They must embrace a new tomorrow.

There are no problems with mingling office, finance, research and development, and industrial uses. However, caution should be used when considering the placing of commercial uses in industrial districts. Commercial uses can be land eaters, the traffic flow can be disruptive, and they tend to move into newly designated districts more rapidly than industry.

Elements of this case study can be seen throughout older industrialized areas. This corridor, like many other similar areas, is literally at a crossroads. It can continue as it is and become little more than a center for warehousing and distribution. Corridors such as these can be improved by careful planning, investing in infrastructure, improving amenities, and being patient. These places are too special to continue as it is. They must embrace a new tomorrow.

## CONCLUSION

As one travels across the country and notes the plethora of real estate signs advertising, "industrially zoned land for sale," one might question the premise of this article. However, it is important to take a closer look and carefully evaluate the land in question. Most lands zoned for industrial uses will never be suitable as such. A single flaw (e.g., wetlands, surrounding residential uses, lack of water or sewer systems) can virtually eliminate a parcel from consideration for industrial development. It is clear that planners must reevaluate the lands designated for industrial use in their communities to ensure that there is high-quality space available for the long term. 🌐



## GET RECOGNIZED!

IEDC's Accredited Economic Development Organization (AEDO) Program is a means of recognizing the professional excellence of economic development organizations.

The application process provides organizations with critical evaluation and peer mentoring by certified professionals concerning internal and external operations. AEDO status signifies a distinguished achievement for an economic development organization.

The Benefits of Accreditation include:

- Heightened visibility of economic development organizations and economic development efforts in the community and region
- Independent feedback to organizations on operations, structure, and procedures
- An excellent marketing tool.

"A DESIGNATION BY IEDC AS AN AEDO HAS GREATLY ASSISTED OUR ORGANIZATION IN ITS FUND RAISING EFFORTS. THE RECOGNITION OF EXCELLENCE SERVES AS A SOURCE OF PRIDE TO OUR ECONOMIC DEVELOPMENT PROGRAM, CONTRIBUTORS, AND COMMUNITY."

Terry Murphy Ec.D, CED Vice President, Economic Development Muncie-Delaware County Indiana Economic Development Alliance



INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL

The Power of  
Knowledge and Leadership

**Become one of the premiere economic development organizations recognized nationwide!**

See a list of accredited organizations and learn more about the program at [www.iedconline.org](http://www.iedconline.org), or e-mail [Rmoudry@iedconline.org](mailto:Rmoudry@iedconline.org)

# what is the local

## WAL-MART EFFECT?

By Michael J. Hicks, Ph.D.



Wal-Mart's ubiquitous presence has subjected the retailer to considerable attention over its effect on local economic activity. Wal-Mart's home office (pictured here) is located in Bentonville, Arkansas, the home of the first store in 1962.

### ■ INTRODUCTION

In March 2004, as a debate raged in the Chicago City Council over the permitting of a Wal-Mart on the West Side, three researchers at the University of Illinois – Chicago's Center for Urban Economic Development released a study predicting a negative economic impact of Wal-Mart in the region. Almost two years later,

the store finally opened (after a 32 to 15 vote on the City Council) and was swamped by almost 4,000 applicants for its 300 jobs. This followed closely on the heels of the opening of a Southside Chicago store (in Evergreen Park), which saw roughly 25,000 applicants for 325 jobs. As former Clinton Administration economist Jason Furman has noted, this makes Wal-Mart more selective than the most elite universities in the nation. It also raises questions about Wal-Mart focused research and its impact on policy.

Clearly, Wal-Mart could be an attractive employment location and still reduce net employment in Chicago, as the UIC study essentially assumed. However, the UIC study is notable in that its estimates of job losses are just about the opposite of the only two available econometric studies at the time, which each estimated short run net employment gains of roughly 50 and 55 jobs each.<sup>1</sup> How much this UIC study informed local decision makers is unnecessary speculation, but it is certain that these types of studies are often the only mechanism for policy makers to assess objectively the potential impacts of development options. Further, it is clear that whatever economic models say about working conditions at Wal-Mart, potential workers view these conditions as an improvement over existing options. And, no self respecting economic developer would summarily oppose an employer which attracts such employee interest.

As this vignette illustrates, understanding Wal-Mart's impact is difficult. The ubiquitous nature of Wal-Mart stores – either the traditional big-box or the newer super centers – raises considerable questions over what Wal-Mart's presence means to local communities. Unfortunately, it is difficult for even

---

Michael J. Hicks, Ph.D., is an associate professor of economics at the Air Force Institute of Technology, Dayton, Ohio, and a research professor at Marshall University, Huntington, West Virginia.

*The views expressed in this article are those of the author and do not reflect the official policy or position of the United States Air Force, Department of Defense or the United States government.*

### AN ANALYSIS OF THE RESEARCH

This article reviews the existing research on Wal-Mart's local impact on overall employment, wages, retail structure, prices, sprawl, and local taxes and expenditures. In these areas there are few impacts that are common to all communities. Instead, the impact is likely to vary dramatically based upon local wage structure, retail productivity, and clustering. The article describes what are appropriate study designs and argues that there is need for more local evaluation of Wal-Mart, with a more sophisticated approach to the analysis of local impacts than is commonly employed.

an earnest observer to cut through the rhetoric and claims to understand what Wal-Mart's impact is likely to mean to a community. The reason is simple. There is little focused empirical research (there are two peer reviewed empirical economic papers and three more forthcoming), and a rash of consultant studies, reports from advocacy groups, and even an engaging suite of books designed to inform, persuade or just plain entertain the reader.

*Wal-Mart's distribution system is a major source of its productivity growth. In addition to its innovative use of information technology, the strategic positioning of distribution centers and the advantages of scale at the individual stores make Wal-Mart the 'low cost' leader in retail.*

(Picture courtesy of Wal-Mart, Inc.)



*Wal-Mart's famous claim of 'low prices' extends to competing retailers. This provides benefits to both Wal-Mart shoppers and consumers who shop exclusively at other competing stores.*

This article explains clearly what the best research says about Wal-Mart's impact on local economies. It focuses on jobs, wages, retail and wholesale structure, prices, poverty, entrepreneurship, sprawl, and public finance. The article

focuses on local impacts, leaving national and global issues for another day. It begins by describing some of the common errors that occur in analyzing Wal-Mart's impact and how any study of similar design is likely to misinform the reader. The studies were selected from the relatively small set of papers that are peer reviewed or undergoing peer review. This type of work is almost exclusively performed by university affiliated researchers (economists and geographers) who are judged by the quality of their research, not their findings. The article also provides some hints on what to watch for when reading a study on Wal-Mart and ends with a summary of findings.

## MEASUREMENT AND MIS-MEASUREMENT OF WAL-MART'S IMPACT

Ken Stone of Iowa State University conducted the earliest of the Wal-Mart studies in the late 1980's. This study (and several other subsequent analyses) examined retail flows on small towns before and after Wal-Mart's entrance. This early research was largely responsible for the widespread belief that Wal-Mart entrance into a community led

to a loss of "mom and pop" stores and a reduction in retail employment. Unfortunately, this study suffered from a major flaw. It simply failed to account for the factors affecting the retail sector in Iowa that were unrelated to Wal-Mart. For example, from 1983 to 1989 Iowa's population declined a whopping 3.4 percent, a drop equaled only by a few states during the Great Depression. While this study found that Wal-Mart had remarkable impacts on retail employment in Iowa, the poor study design simply makes its conclusions on Wal-Mart's impacts, in the word of one leading economist today "not useful." However, Ken Stone's research on Wal-Mart did three very important things that must be acknowledged.

First, Stone focuses attention on market wide impacts of individual firms. This was, at the time, an uncommon feature of economic analysis that is growing in importance. Second, Stone recognized that much of Wal-Mart's impact is likely to be very localized changes in the location of retail firms (such as location just outside a small town). Finally, Stone offered advice to competing retail firms, which provided all the truly relevant insights that have since emerged in a rash of books and such lofty publications as the *Harvard Business Review*. Stone suggested that when faced with a new local Wal-Mart, incumbent firms should provide differing goods or services, to include more specialized product lines and more personalized service. Despite the inability of Stone's work to speak forcefully about Wal-Mart's impact, his early research set the stage for many following studies.

The 1990's saw a spate of management and business journal articles on Wal-Mart. Most followed Ken Stone's lead in examining gross flows of workers, firms, and retail sales, but many did take into account existing trends or other factors which might affect the estimate of Wal-Mart's impacts on the local economy. These studies offered split findings. While a modest majority of the peer reviewed studies find positive impacts of Wal-Mart on employment and sales, more than a few find that Wal-Mart reduces employment, wages, and retail sales.<sup>ii</sup>

Unfortunately, a second technical concern materialized during the 1990's – the possibility that Wal-Mart was not choosing its locations without regard to potential retail growth. This condition suffers the unfortunate handle of 'endogeneity', which in essence means that any estimate of Wal-Mart's impact that does not take into account the possibility that it is making location and timing decisions without regard to potential retail growth will bias the findings. For example, if Wal-Mart enters a retail market it expects to grow, and it is right, then Wal-Mart will be seen to have a positive impact. If Wal-Mart is choosing a county in which it expects



lagging retail sales or wages (say a rural area), then it will be correlated with economic declines.

Thus, by the turn of the century, all studies of Wal-Mart were plagued by two potential problems: failure to account for other factors that might influence a region's economy and the possibility that Wal-Mart was choosing its locations that would bias a subsequent study. Thus, it is the research since 2000 which addresses these problems that really speaks to Wal-Mart's impact. Researchers have taken two different approaches to the problem, which more or less emerged within just a few years of each other.

One approach is to specifically test whether or not Wal-Mart's entrance within a county is correlated with predicted economic growth (in retail, wage, etc.). Several researchers, including this author and the largest economic study of Wal-Mart, used this method and were able to forcefully reject statistical 'endogeneity' in Wal-Mart's entrance decision.<sup>iii</sup>

A second approach is to construct a statistical model which corrects for 'endogeneity' in Wal-Mart's entrance decision. This is a challenging prospect, as the researcher has to find data that might be correlated with Wal-Mart's entrance decision but which displays other statistical properties that cannot always be confirmed. Thus, this is not a simple statistical test but also one in which the qualitative aspects of the model matter deeply. Not surprisingly, these types of studies are highly contentious. Three main methods of correcting for this problem have been used. The first method was the use of the announced entrance date, which accounts for possible 'interim' economic changes to the local economy that materialize between Wal-Mart's announced opening and actual opening. The second method uses the timing and distance from Bentonville, Arkansas (the first Wal-Mart location), to isolate Wal-Mart's impact. The third method, recently introduced by this author, uses a measurement of local market size to explain Wal-Mart's entrance decision. This method is used to account for a prime location decision criterion.

Each of these methods has some potential drawbacks and has suffered some criticism. However, in a recent paper, this author compared all three methods in a single state (Maryland) and found all three methods provided nearly identical results. However, for Maryland there was some weak evidence that Wal-Mart was systematically making entrance decisions. This argues for the use of the more sophisticated but unfortunately more contentious statistical techniques.

Sadly, with the exception of the comparative study, there is nothing like a consensus of the impact of Wal-Mart. However, it is useful to understand what economic theory would argue are the potential impacts of Wal-Mart entering a market.

**Income Effect:** Economists call the income effect the impact on the quantity of goods purchased (holding constant the mix of goods) when the price for one good drops. The substitution effect measures the change in the quantity of goods when we permit the mix of goods to adjust, holding constant the real income changes that accompany a price change.

**Clustering Effect:** Economists have long noted that firms often locate proximally to benefit from some available natural resource or access to common labor markets, transportation or technologies. This happens in retail, but may also be caused by lowering consumers' search costs. On the manufacturing side, think carpets in north Georgia, autos in Detroit, and furniture in western North Carolina. For retail, think malls and automobile dealer clusters.

**Productivity Effect:** The overall economy grows through two mechanisms. The first is access to more inputs (more workers, new natural resources, more machinery). The second is growth in the intensity of the production process, so workers produce more goods and services with the same number of inputs. Increasing productivity of labor is often achieved by worker training, better and more available machinery, and more recently the widespread adoption of information technology. Worker productivity is really the sole source of per capita economic growth or standards of living. The first type of economic growth just increases the overall size of a region's economy, not individual standards of living.

## WHAT DOES THEORY SAY?

The theoretical treatment of Wal-Mart by all of these studies has been simple. The reason is that the potential impacts are fairly run-of-the-mill economics. Economic theory can speak to both general retail trends (such as the declining share of retail as a share of the total economy since the Great Depression) and to the differences in local economies that may be spawned by Wal-Mart. These trends are likely to occur whether or not Wal-Mart enters a market. What is of interest here is the difference between what would have happened if Wal-Mart entered a market as compared to its absence. For reasons of space it is better to leave general retail trends for another day.

What has been notably absent is the acknowledgement that the way markets respond to Wal-Mart might vary dramatically by location. This doesn't mean that economists haven't recognized such facets as urban and rural differences, merely that in most instances the geography of the studies has included several states and rural and urban areas, and largely different time periods over all of which Wal-Mart's entrance decision and impact may vary.<sup>iv</sup> Understanding how the change in consumer demand follows Wal-Mart's entrance may help explain some of the divergent results. There are three stylized descriptions of Wal-Mart effects that may occur during retail market adjustment periods.

First, if Wal-Mart enters a market and significantly lowers prices, both for goods sold directly from the store and across competitors (one area in which the research is in agreement), consumers will experience an income effect for retail goods.<sup>v</sup> This means that the reduction in overall prices acts as a *de facto* income boost. Under this scenario, it is indeed plausible that consumer demand for retail

goods would rise, leading to higher net employment and incomes in the retail sectors. This is the ‘income effect’.

Second, if Wal-Mart enters a market attracting clusters of retail firms, then there could be considerable cross-county shopping and an observed increase in net employment, wages, and firms in a Wal-Mart county. This effect would likely dominate among early Wal-Marts with a dissipating impact as the retailer becomes more saturated (in adjoining counties). A prediction in this case would be that surrounding counties lose retail employment as the migration to clusters occurs. This is the ‘clustering effect’.<sup>vi</sup>

Third, Wal-Mart’s much noted increase in labor productivity should lead to lower retail employment (as fewer workers produce more goods and service). However, theory strongly suggests the effect of increased productivity is higher wages. Indeed, the positive link between productivity and wages is a largely settled matter among economists. This is the ‘productivity effect’.

The result of these three potential theories is that researchers looking at different times and locations may well find different results due not to methodological discrepancies but through actual variations in the adjustment mechanism to Wal-Mart. Thus

the choice of location and timing of the sample period may play a critical role in the estimation results of Wal-Mart’s impact on labor markets. Further, the decision criterion for opening a new store (the endogeneity question) almost certainly varies across regions and time; hence it is useful to isolate analysis to smaller geographic periods.

Thus, economists studying Wal-Mart’s impact on labor markets in particular have not arrived at a consensus. This should be troubling for policy-makers who often struggle to make sense of research that is written primarily for other researchers (meaning it is filled with what Paul Krugman calls upside down Greek letter economics). There are reviews of these studies that purport to offer a review of these studies. Some, like those prepared by the Ohio State University extension service and the Brennan Center for Justice selectively review scholarship, while those prepared for a recent conference at the Center for American Progress are more balanced (or at least sufficiently narrow as to avoid contradictory arguments).

In truth, serious research reports evidence, in different places and times, that Wal-Mart either increases or decreases retail employment, either increases or decreases retail wages or increases or decreases other retail firms. Indeed, the only study

**Table 1. Modern Studies of Wal-Mart’s Impact on Labor Markets**

Author	Study Design	Findings
Hicks and Wilburn, 2001	Time space recursive panel model of 55 WV counties, 1988-2000, annual data	Increase in employment by roughly 54 retail jobs, small increase in number of firms, no wage impact.
Basker, 2005	IV panel of 1700 larger US counties, 1977-2000	Increase in employment by roughly 50 retail jobs, partially offset by loss of 10 wholesale jobs, and small (1-3) reduction in retail firms.
Hicks, 2005c	A panel of 8 Pennsylvania counties with a Wal-Mart entrance in 2002. Estimate of labor market impacts using Quarterly Workforce indicators	A roughly 50 worker net increase in retail sector and a \$0.50 per hour increase in new hire wages.
Global Insight, 2005	Structural model of all US counties, 1969-2003	Increase in employment, decrease in nominal wages.
Neumark, Zhang and Ciccarella, 2005	IV Panel of all US counties, 1977-1995. Estimate of retail wage and employment, and total earnings and employment at the county level	Decline in retail employment of 2-4%, evidence of retail wage decrease, increase in overall employment, but decrease in overall real wages.
Dube, Eidlin and Lester [2005]	IV of selected US counties, 1992-2000	Finds wage decrease in Urban retail markets following Wal-Mart entrance, and possible wage increase in rural areas.
Hicks [2006]	Compares each method on data from Maryland, 1988-2003	Finds no difference across instrumental variable methods, retail employment declines of between 0 and 414 jobs and retail wage increases as high as \$1.95 per hour.

which suggests any agreement in method across these is the comparative study of methods on Maryland. This study (which has not yet been subjected to peer review) is evidence that among the modern studies, it is location and timing, not methodology which generates differences in the results. (See Table 1.)

The sum of all these findings may be a suggestion which would be unsurprising to local economic developers: There is no 'nationwide' impact of Wal-Mart. The local labor market impacts are going to be affected by the existing competitiveness of the retail sector and whether or not there are changes to local retail clusters. The same is true in grocery store markets when a Super Center opens. This means that, at the county level, Wal-Mart's impact will be heavily influenced by the existing economic conditions, and studies that fail to account for these factors and treat smaller geographic regions will yield different results.

What might a local community expect to happen to labor markets when Wal-Mart comes to town? The short answer is that unless there's a single easily measurable impact (like a productivity increase) then there's no single answer. What's likely to occur is some combination of factors such as a retail productivity increase (meaning fewer, but modestly higher paid workers) combined with some retail clustering (meaning more, but likely modestly lower paid workers). The net effect employment effect will be determined by which of these effects dominates.

This suggests that economic developers and other policy makers interested in understanding Wal-Mart's impact should think hard about how academic studies influence their decision making. What might be the impact of Wal-Mart in areas other than local labor markets? Happily, researchers have not isolated their analyses to labor markets only. They have also focused on retail prices, entrepreneurship, sprawl, and fiscal effects.

### **LOWER PRICES (THROUGH PRODUCTIVITY AND COMPETITIVE PRESSURE)**

One area in which even Wal-Mart's severest critics agree is that Wal-Mart's prices are indeed lower. Ironically, the earliest critics of Wal-Mart contended that the low price claim was a fallacy, that Wal-Mart simply advertised loss leaders. Since that claim has been dropped, it is indeed interesting to see what the research says about actual retail prices.

Two sets of researchers, one at MIT and the USDA (Jerry Hausman and Ephraim Leibtag) the other Emek Basker (from the University of Missouri), used two different data sources to estimate the role Wal-Mart played on influencing local prices. Interestingly, the MIT researchers were targeting the Bureau of Labor Statistics for over estimating inflation, going so far as to offer the

provocative title of "CPI Bias from Supercenters: Does the BLS Know that Wal-Mart Exists?" What these authors found, using retail scanner data, was that in a number of product areas, Wal-Mart's prices were dramatically lower than other retail stores. This was attributed by some critics as simply the result of lower quality goods. To this response, the authors produced a second study that identified identical goods (primarily food) which were substantially lower cost (as much as 25 percent lower). In all, these two economists concluded that due to failure to account for Wal-Mart, the BLS is consistently overstating inflation by as much as 15 percent a year.

Emek Basker looked at a smaller set of prices from the well known ACCRA local price data, finding that Wal-Mart produced as much as a 6 percent long run price reduction on selected goods. Interestingly, the impact is not just on Wal-Mart stores, but almost certainly (based on the study design) more widespread than just at Wal-Mart – arguing that Wal-Mart is causing competitors to cut prices. Happily, at least in one area, Wal-Mart's impact is pretty conclusive. It not only charges lower prices, but causes competitors to do so as well.

### **ENTREPRENEURSHIP**

No economic developer has failed to hear the claim that Wal-Mart affects local firms. Yet, research on this matter largely suggests little impact. Two previously mentioned studies (Hicks and Wilburn, 2001 and Basker, 2005) find either very modest two to three business increases or losses respectively, and that is over several years. Both find positive impacts on retail sub-sectors not competing directly with Wal-Mart. So the overall impact is uncertain and subject to the same caveats as the labor market studies. By far the most extensive study is by two economists at West Virginia University's Entrepreneurship Center. Using a carefully crafted analysis of Wal-Mart's impact on small businesses (including entrepreneurial type firms), they find the entrance and presence of a Wal-Mart has no statistically significant effect on small business growth, or the relative size and profitability of the small business sector in the US (Sobel and Dean, 2006).

### **WAL-MART, EQUITY AND SPRAWL**

Despite considerable popular rhetoric about Wal-Mart's impact on individuals, little research (except perhaps the evidence of lower prices) speaks directly to the effect of Wal-Mart on the distribution of income across racial or gender lines. Of course, the pay disparity between Wal-Mart's managers and its lowest paid employees has received plenty of attention (if not useful analysis).

One interesting study, which is soon to be published in the *Review of Regional Studies*, estimated

Wal-Mart's impact on the black/white wage and unemployment gap in Alabama's counties. Using 1980 and 1990 Census data matched to Wal-Mart opening dates, the study found that while there was no income convergence between the two groups, black workers experienced significantly lower unemployment rates relative to whites. The authors attribute this to increased labor market competition within the Wal-Mart counties.<sup>vii</sup>

Another study at Pennsylvania State University estimated the impact of Wal-Mart on local poverty rates, finding that counties with Wal-Marts actually experienced a smaller poverty reduction than those without Wal-Marts. Using Basker's data, this study performed a similar statistical correction for endogeneity. Two concerns about this study emerge. First, the sample was limited to only about half of US counties (the bigger and more affluent ones) and second, the presence of significant data errors in Wal-Mart's entrance dates weakens the conclusions. However, the conclusions themselves (that Wal-Mart kept a half dozen individuals below the poverty line in each of the urban counties it enters) are thought provoking, even at such a small impact.

Complaints about Wal-Mart's contribution to urban sprawl have been continual, even spawning a couple of anti-Wal-Mart books. Sadly, here too the rhetoric has not much matched the research findings. One researcher has found that local fiscal structure plays an important role in big box retail location decisions. In a 2002 study, Wassmer reports that locations which depend heavily upon local tax instruments to finance government services are more likely to accept a big-box retailer. One other study (as yet unpublished) finds little evidence of Wal-Mart's contribution to sprawl across about a dozen different measures in Colorado. Other than these efforts, there appears to be no empirical analyses of Wal-Mart's impact on urban sprawl. Hopefully, more work on equity impacts and sprawl are in the future for economic researchers.

## WAL-MART AND PUBLIC FINANCE

When any new store comes to town, one eagerly awaited bit of information is its impact on local taxes and expenditures. Given the uncertainty about employment impacts (and obviously then,

the impact on net retail sales), tax studies are likely to be equally uncertain. Obviously, in counties where retail sales rise, so too will tax receipts. In a study of Ohio counties from 1988 through 2003, local commercial property values are positively affected by a local Wal-Mart, and this can potentially increase local property tax collections by a little over 1 million annually per county. This is the only type of study that takes into account the problems with Wal-Mart's entrance decision (endogeneity) described earlier.

Also, there are typically public sector infrastructure costs associated with Wal-Mart, including cutting curbs, installing traffic lights, etc. These may also be accompanied by increased local services costs for such locally provided goods as fire and police protection. The local impact naturally depends on the net revenue and cost effect.

Another local impact is a relatively high number of tax incentives provided to Wal-Mart. An organization critical of these incentives, Good Jobs First, is highly critical of these programs to retail (or in Wal-Mart's case mostly wholesale or warehousing facilities). Economists are almost entirely unified in their assessment of tax incentives, and there are no peer reviewed empirical studies to suggest they actually influence location decisions much less meet the minimum efficacy requirements of a benefit cost analysis. At least one recent study of wholesale tax incentives (which included similar distribution centers to Wal-Marts), found no impact in Michigan.

As with Wal-Mart's impact on labor markets, there's little to suggest agreement on its net impact on local public finance. However, a number of estimates of Wal-Mart's expenditures have been offered, which are taken from state level reports of Medicaid participation by workers. There are also econometric studies of Ohio and nationwide that estimate Medicaid costs. The one national study found that Wal-Mart was associated with a roughly \$900 per worker increase in total Medicaid costs (with as much as one-third of this borne by state taxes). Though the Medicaid issue is not strictly local, it does warrant discussion due to its intense debate. While Wal-Mart does appear to be correlated with higher levels of Medicaid enrollment, it is not clear whether or not this is due to a proliferation of low wage jobs. Indeed, among the possible explanations is that since Wal-Mart relies heavily upon local employment services for pre-employment screening, the increased access to information about Medicaid eligibility may well lead to higher levels of use. Whatever the cause, it is clear that Wal-Mart employees account for high levels of Medicaid use in several states. However, at least one study finds that the variability in usage across states closely tracks overall usage. Table 2 provides a roundup of Medicaid use by Wal-Mart employees in a few states

The state of the research today offers only a tantalizing clue as to Wal-Mart's potential impact on local communities. The structure and design of the dozens of existing studies render the vast majority simply unable to speak clearly to Wal-Mart's impact. The few that have attempted to address the problems inherent in estimating Wal-Mart's impact have yet to reach a consensus. However, economists are beginning to agree on a few issues.



**Table 2. Estimates of Wal-Mart Employees and Medicaid Expenditures**

State	Wal-Mart Employees Receiving Medicaid	Medicaid Costs (per worker)	Source
Arizona	9.6%		Arizona Daily Star (confirmed by author's calculations)
Arkansas	8.8%		AFL-CIO (reporting data from Arkansas Human Services Department)
Connecticut	8.9% (Huskey A-B)	\$586 per worker*	AFL-CIO reporting data from state
Florida	13.25%		Orlando Business Journal, April 2005
Iowa	4.78%		Associated Press, Aug 2005
Massachusetts	6.9%	\$246 per worker*	AFL-CIO reporting data from state
Ohio		\$651 per workert	Hicks, 2005
Oregon		\$311 per workert	Carlson, 2005
Tennessee	24.9% (TennCare)		Memphis Commercial Appeal and author's calculations
Washington	2.3%		AFL-CIO reporting data from Washington Health Care Authority
West Virginia	3.6%		AFL-CIO reporting data from state
Wisconsin	4.31(BadgerCare)	\$174 per worker*	AFL-CIO reporting data from state

\*Data reported from direct expenditures, † Data estimated from study

that have directly collected data, or had estimates performed.

### WHAT TO LOOK FOR IN WAL-MART RESEARCH

Local policymakers interested in honestly evaluating Wal-Mart should carefully weigh studies on the subject. As most studies have some informational content, it is not typically what is included in a study that's a problem, but rather what is left out that generates the bias. Also, study design in general ought to be carefully weighed. Here are some suggestions about plausible courses of action.

First, studies that present unambiguous findings are a fiction. There are no clear national impacts, and local studies should carefully explain their methodology and make their data and statistics publicly available. Any study purported to be local should explain which of the effects are likely to occur: income, productivity or clustering (though they need not use these terms). These studies should be rigorous in admitting what may be uncertain (especially when describing other studies). Also, some care as to the credentials and affiliation of the authors is needed. There are fine researchers without Ph.D.s and unaffiliated with universities, but careful examination of their earlier studies might be helpful. A researcher who has always found Wal-Mart effects to be the same, without regard to local conditions, ought to be questioned.

Second, the study design ought to avoid some of the more common models used in economic development. The favored input-output model especially is sensitive to the initial assumptions. So, while it might be part of a study design, it should be supplemented with additional research. Also, in a case

study approach (or a heavily non-statistical study), examples of other local impacts drawn from similar types of locations (same retail characteristics, per capita income and degree of urbanness) probably provide some of the best evidence.

Finally, willingness to submit a study to peer review is a necessary element of a good research project. The reviewers need not be Wal-Mart experts but could be on economics and finance faculty of almost any college or university. In the end, these types of processes insure a better understanding of Wal-Mart's impact.

### CONCLUSION

The state of the research today offers only a tantalizing clue as to Wal-Mart's potential impact on local communities. The structure and design of the dozens of existing studies render the vast majority simply unable to speak clearly to Wal-Mart's impact. The few that have attempted to address the problems inherent in estimating Wal-Mart's impact have yet to reach a consensus. However, economists are beginning to agree on a few issues.

First, Wal-Mart's entrance in a larger urban center will have something between no impact to a perhaps small positive impact on total employment, though it might cause some job shifting between sectors. Some of this will be real while some will be simply due to the higher degree of vertical integration of Wal-Mart resulting in transition of wholesale to retail jobs in the NAICS code.

Second, rural areas could see net employment increases due to the entrance of a Wal-Mart. While this is the weakest of the consensus arguments, it is an emerging consensus (which is likely due to a reduction in retail leakages or a small local retail cluster).

Third, the evidence is pretty strong that Wal-Mart pays lower nominal wages than unionized grocery stores. Here the difference is probably not made up by the lower prices experienced by these workers due to the presence of a Wal-Mart.

Fourth, the net impact on the number of retail and related firms will be very modest (with estimates of zero, to plus or minus two to four firms). This extends across both rural and urban areas.

Lastly, retail and, in the case of Super Center, food prices drop significantly and across the county. This is pretty clear evidence that the ills of local monopoly power are being eased, not exacerbated, by Wal-Mart.

There are also a number of things about Wal-Mart that economists don't know or have not arrived at a consensus on. These are where the consensus is absent. Though individual researchers (including myself) might feel that they know the answers to some of these questions, they have not yet convinced their colleagues.

First, we don't agree on the impact of nominal wages in the retail sectors. Studies find starkly different answers in different regions, times, and model structures. Notably, even the estimates of the largest nominal retail wage reductions attributed to Wal-Mart are still offset by price reductions attributed to Wal-Mart, thus leaving retail workers actually better off in terms of purchasing power.

Second, we don't know if Wal-Mart's benefits are different (meaning worse) than other similar employers (though the emerging consensus is that there's little difference, even before Wal-Mart's recent improvement in health coverage).

Third, economists don't yet agree that Wal-Mart is causing an increase in poverty. There are some tantalizing clues (one paper and strong evidence of increased Medicaid expenditures). However, weaknesses with the paper and very plausible alternative explanations for the Medicaid expenditure increases make this an unresolved question.

Fourth, there's not much research suggesting Wal-Mart contributes to, much less causes, urban sprawl.

Finally, whether or not local governments are net fiscal beneficiaries of Wal-Mart is such a highly localized outcome (dependent on both tax and expenditure structure and incentives) that no generalized answer is possible.

Economic developers at the state and local level will inevitably be faced with questions about Wal-Mart and its local impact. And, the increased national scrutiny the company has received has generated a wellspring of popular books claiming to understand Wal-Mart. These books and the debate surrounding Wal-Mart follow closely any rumor that a new store will be opening. In the end, the only true answer on the efficacy of Wal-Mart is that the benefits and gains are largely local, and vary across locations. There is no single Wal-Mart effect.



# 2007

## LEADERSHIP SUMMIT

JANUARY 28-30, 2007  
RANCHO BERNARDO INN  
SAN DIEGO, CA



The Leadership Summit is an opportunity for leaders and future leaders in the economic development profession to gather together to discuss policy issues, the latest trends in professional and personal development and network with peers. Attendance is limited to individuals holding a senior management position in an operating economic development organization or those holding the CECd certification.

### Rancho Bernardo Inn

An award winning resort in sunny southern California featuring:

- 18-hole Championship Resort Course
- 12 Tennis Courts
- 2 Heated Outdoor Pools
- Award Winning Dining
- And much more!



INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL

*The Power of  
Knowledge and Leadership*

**For more information and to register please visit the  
conference website at [www.iedconline.org](http://www.iedconline.org)**

## REFERENCES

- Basker, Emek (2005) "Job Creation or Destruction? Labor Market Effects of Wal-Mart Expansion" *Review of Economics and Statistics* February 87(1) 174-183.
- (2005b) "Selling a Cheaper Mousetrap: Wal-Mart's Effect on Retail Prices" *Journal of Urban Economics* 13:52 4-27.
- Boyd, David W. (1997) "From 'mom and pop' to Wal-Mart: The impact of the Consumer Goods Pricing Act of 1975 on the Retail Sector of the United States" *Journal of Economic Issues*; Mar 1997; 31, 1; pg. 223
- Buss, Terry F. "The Effect of State Tax Incentives on Economic Growth and Firm Location Decisions: An Overview of the Literature," *Economic Development Quarterly*, Vol. 15, No. 1, Feb. 2001: p. 99.
- Chandra, A. and E. Thompson (2000) "Does Public Infrastructure Affect Economic Activity? Evidence from the Rural Interstate Highway System" *Regional Science and Urban Economics*, v30,n4: pp457-90.
- Curs, Bradley, Mark State and Michael Visser (2004) "How Much Will Sam Pay For Land? The Locations of Big-Box Retailers and Local Land Values" mimeo.
- (2005a) "Always High Land Rents? The Effect of Big Box Retail Development on a Productive Spatial Economy." Mimeo.
- Dube, Arindrajit and Jacobs, Ken (2004) "Hidden Cost of Wal-Mart Jobs Use of Safety Net Programs by Wal-Mart Workers in California" *Center for Labor Research and Education, Institute of Industrial Relations, University of California, Berkeley*.
- Dube, Arindrajit, Barry Eidlin and Bill Lester (2006) "Impact of Wal-Mart Growth on Earnings throughout the Retail Sector in Urban and Rural Counties" *Center for Labor Research and Education, Institute of Industrial Relations, University of California, Berkeley*.
- Eppli, Mark J. and John D. Benjamin (1994) "The Evolution of Shopping Center Research" *The Journal of Real Estate Research*, 9(1) pp 5-32.
- Franklin, Andrew W. (2001) "The Impact of Wal-Mart Supercenters on Supermarket Concentration in U.S. Metropolitan Areas." *Agribusiness* 17(1). Winter.
- Gabe, Todd M. and Kraybill, David S. "The Effect of State Economic Development Incentives on Employment Growth of Establishments," *Journal of Regional Science*, Vol. 42, No. 4, 2002, p. 703
- Goetz, Stephan J. and Hema Swaminathan (2004) "Wal-Mart and County-Wide Poverty" *Social Science Quarterly* 87(2), pp 211. (previously published as AERS Staff Paper No 371. pp. 1-16.)
- Hicks, Michael J. and Kristy Wilburn (2001) "The Regional Impact of Wal-Mart Entrance: A Panel Study of the Retail Trade Sector in West Virginia", *Review of Regional Studies*, 31(3). pp 305-313.
- Hicks, Michael J. (2005) "Does Wal-Mart Cause and Increase in Medicaid Expenditures?" *Regional Economic Review*, Center for Business and Economic Research, Marshall University, Fall 2005.
- (2006) Estimating Wal-Mart's Impacts in Maryland: a Test of Identification Strategies and Endogeneity Tests, mimeo
- (2007) "Wal-Mart's Impact of Local Revenue and Expenditure Instruments in Ohio, 1998-2003" *Atlantic Economic Journal*, Volume 35, No. 1, March 2007
- LeFavre, Michael and Michael Hicks (2005) MEGA: A Retrospective Assessment. Mackinac Center for Public Policy, pp 1-141. ISBN 1-890624-43-8.
- Neumark, Richard, Junfu Zhang and Stephan Ciccarella (2005) "The Effects of Wal-Mart on Local Labor Markets" mimeo, November, 2005.
- Peters, Alan and Fisher, Peter (2004) "The Failures of Economic Development Incentives," American Planning Association, *Journal of the American Planning Association*; Winter 2004; 70, p. 27.
- Stone, K. E. *Competing With the Retail Giants*, John Wiley and Sons, New York, February, 1995.
- "Impact of The Wal-Mart Phenomenon on Rural Communities" Increasing Understanding of Public Problems and Policies, 1997.
- S.C. Deller and J.C. McConnon, Jr. "The New Retail Environment in Maine," *The Maine Business Research Report* 3:1 Sept. 1992.
- Stone, K.E., G. Artz and K. Myles (2002) "The Economic Impact of Wal-Mart Supercenters on Existing Businesses in Mississippi" mimeo.
- Wassmer, Robert W. (2004) "The Influence of Local Fiscal Structure and Growth Control Choices on "Big-Box" Urban Sprawl in the American West" mimeo

## FOOTNOTES

- i These studies were Hicks and Wilburn, 2001, which had appeared in a peer reviewed journal in 2001, and Emek Basker, 2001/5, a doctoral dissertation from MIT which was undergoing peer review (the working paper which was available from a number of sources from about early 2003.) See Villareal, 2005 for a review of these studies.
- ii For earlier studies see Artz [1999], Artz and McConnon [2001], Barnes and Connell [1996], Franz and Robb [1989], Hornbeck [1994], Ketchum and Hughes [1997], McGee and Gresham [1995], Stone [1988, 1995, 1995a, 1997], Stone, Deller and McConnon [1992].
- iii See Hicks and Wilburn, 2001; Franklin, 2001 and Global Insight, 2005.
- iv For example, a very interesting technical paper by Dube, Eidlin and Lester (2005) found different rural/urban impacts.
- v See Hausman and Leibtag, 2004 and Basker, 2005b.
- vi The real estate research literature describes this as demand externalities. See Eppli and Benjamin [1994] "The Evolution of Shopping Center Research: A Review and Analysis, *The Journal of Real Estate Research*, 9(1). Pp 5-32. This is also highly consistent with the findings of Hicks and Wilburn, 2001 and Basker, 2005.
- vii See Keil and Spector, 2006.

# NEWS FROM IEDC

## OVER 1,500 EXPECTED AT IEDC'S ANNUAL CONFERENCE IN NEW YORK CITY



This year's Annual Conference in New York City is on track to be one of IEDC's largest and most comprehensive economic development conferences ever—with an expected attendance of over 1,500 participants, exhibitors, sponsors, and speakers. Speakers include New York City Mayor Michael Bloomberg, noted economic developer Albert Ratner, Pennsylvania Governor Edward Rendell, and David Neeleman, founder and CEO of JetBlue Airlines. This will also be the most international Annual Conference ever with delegates expected from over 20 countries.

## IEDC DELEGATION VISITS CHINA

Jeff Finkle CECD, Luke Rich, Ian Bromley, and Ed Gilliland CECD traveled recently to China where they visited the Shan Dong Provincial Vice Governor and Taian City regional government. IEDC then participated in the signing of a four party MOU that also included the United Nations Industrial Development Organization Investment and Technology Promotion Office—China; China Railway Erju Group Corporation; and Feicheng Municipal Government, Shandong Province. The delegation also visited Feicheng and Shiheng for interviews.

The Chinese parties to the agreement will visit the U.S. to learn about practices and experiences similar to what they are trying to accomplish in Feicheng: large-scale development/redevelopment, eco-industrial projects, workforce development, and industrial development.

## ADC HEADS TO NEWPORT BEACH, CA, FOR 2007 WINTER FORUM



The Association of Defense Communities (ADC) heads to Newport Beach, CA, for its 2007 Winter Forum on February 4-6 at the Marriott

Newport Beach & Spa, recently reopened after a \$70 million renovation. Co-sponsored by the cities of Tustin and Irvine, the Forum features two nationally recognized redevelopment projects—the former Tustin Marine Corps Air Station and El Toro Marine Corps Air Station. Mobile workshops to both projects are planned.

## IEDC ESTABLISHES NEW TERMS FOR OFFICERS AND BOARD MEMBERS

### Change Requires Special Election

New IEDC officers will begin their one-year terms effective January 1 instead of October 1, beginning with this year's elections. The Board elects the chair, vice-chair, and secretary-treasurer for one-year terms. Up until this change, officers served from October to September. The change was made to bring officers' terms in line with the fiscal year, which had been moved from an October/September cycle to a January/December cycle.

A special election is being held to choose officers for the three-month transition period from Oct. 1, 2006 through Dec. 31, 2006. The Nominating Committee has proposed that existing officers serve during the transition period. Board members automatically continue their service until replacements are made. No special election is needed for these seats as relevant law addresses this transition.

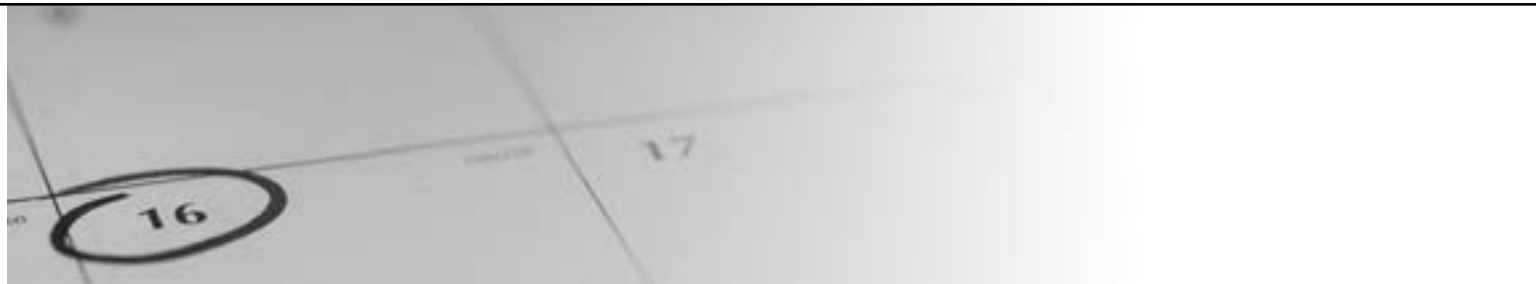
## STRATEGIC PLANNING INITIATIVE TAKES HOLD

The 2005-06 effort to revise IEDC's strategic planning process is taking hold. IEDC's Board has now worked through a strategic planning process, identifying four broad strategic initiatives: Globalization, Entrepreneurial Economic Development, Market Segmentation, and Tools & Training. These were converted to a series of plans to implement the initiative over the next few years.

This marks an important shift in Board focus. The Board is now switching to a strategic focus, following a period using a more tactical approach to address issues related to a merger and existing services. IEDC utilized consultant Doug Eadie to make this shift to a new approach.



# CALENDAR OF EVENTS



IEDC sponsors an annual conference and a series of technical conferences each year to bring economic development professionals together to network with their peers and learn about the latest tools and trends from public and private experts. IEDC also provides training courses throughout the year for professional development, a core value of the IEDC. It is essential for enhancing your leadership skills, advancing your career, and, most importantly, plays an invaluable role in furthering your efforts in your community.

For more information about these upcoming conferences and professional development training courses, please visit our website at [www.iedconline.org](http://www.iedconline.org).

## CONFERENCES

### 2006 Annual Conference

September 17-20, 2006  
New York, NY

### 2007 Leadership Summit

January 28-30, 2007  
San Diego, CA

### If You Build It, Will They Come?

May 20-22, 2007  
Kansas City, MO

### 2007 Annual Conference

September 16-19, 2007  
Phoenix, AZ

## PROFESSIONAL DEVELOPMENT

### Real Estate Development & Reuse

(a pre-conference course at the IEDC Annual Conference)  
September 14-15, 2006  
New York, NY

### Specialized Course: Real Estate Financing

(a post-conference course at the IEDC Annual Conference)  
September 21-22, 2006  
New York, NY

### Business Retention and Expansion

October 11-12, 2006  
Halifax, NS, Canada

### Specialized Course:

### Advanced Workforce Development

October 19-20, 2006  
Arlington, VA

### Managing Economic Development Organizations

October 24-25, 2006  
East Syracuse, NY

### Economic Development Strategic Planning

November 1-2, 2006  
Atlanta, GA

### Introduction to Economic Development

November 7-9, 2006  
Oklahoma City, OK

### Economic Development Marketing and Attraction

November 13-14, 2006  
Baltimore, MD

### IEDC Certified Economic Developer Exam

November 18-19, 2006  
Austin, TX

### Specialized Course:

### Economic Impact Analysis

November 30-December 1, 2006  
Little Rock, AR and Phoenix, AZ

**New!** Two-way telecast course presented in two cities. Select the city most convenient to you.

## RECERTIFICATION FOR CERTIFIED ECONOMIC DEVELOPERS

Fulfill a recertification requirement without tapping into your budget! Earn two credits towards your next recertification by having an article published in the Economic Development Journal, IEDC's quarterly publication.

This is one of a number of ways that you can pursue recertification credits. Submissions are accepted throughout the year. The Journal Editorial Board reviews all articles and determines which articles are accepted for publication.

For more information contact Jenny Murphy, editor, at [murp@derols.com](mailto:murp@derols.com) (703-715-0147).

# benchmarking

## THE CREATIVE CLASS AT THE LOCAL LEVEL

By Terry Holzheimer, Ph.D., CEcD, AICP



In Rosslyn, Virginia, public art exemplifies the integration between traditional creativity and new technology.

Terry Holzheimer, Ph.D., CEcD, AICP, is the director of Arlington Economic Development in Arlington, Virginia.

### INTRODUCTION

Richard Florida's book, *The Rise of the Creative Class*, has gained substantial attention among the economic development community as a new paradigm for economic growth.<sup>1</sup> Building on regional growth theories focused on knowledge-based, cluster-oriented, and technology-led job growth, Florida correlates job growth in technology centers

with specific demographic characteristics. He theorizes that communities with a high degree of diversity attract young, educated, and creative people that contribute directly to economic growth. Conversely, the lack of diversity, tolerance, and a knowledge-based business base leads to a "brain drain" of this population to more attractive Creative Class communities. Such seemingly unrelated cities as Tampa, Providence, Memphis, and Pittsburgh have based their economic development strategies, at least partly, on building amenity-rich communities attractive to the Creative Class worker.

The Washington, DC Metropolitan Area is ranked first by Florida among metros of one million or more in the percentage of Creative Class population and eighth on his Creativity Index.<sup>2</sup> This article benchmarks the jurisdictions within the Washington region as Creative Class communities as a case study. The purpose of this case study is to provide a simplified methodology to benchmark sub-regional localities against those attributes associated with the Creative Class. The methodology is easily replicable and provides a relatively quick and simple basis of comparison since the data is derived from readily available federal online sources.

### ECONOMIC GROWTH THEORIES

Michael Porter popularized the cluster-based theory of economic growth a decade ago, and the economic development community has nearly universally embraced his approach.<sup>3</sup> Porter suggested that innovation is derived from specialization and dense networks of interrelated firms and workers.

### A CASE STUDY OF THE WASHINGTON, DC METROPOLITAN AREA

A case study of the creative economy of the Washington, DC region provides a simple methodology for comparing regions, counties, and cities across the nation, benchmarking them against the criteria that Richard Florida uses in his book, *The Rise of the Creative Class*. Florida's complex indices are condensed into eight easily calculable measures that use readily accessible secondary data available at the local level. Economic developers can compute how their community stacks up against competitors and national exemplars on the characteristics of the Creative Class and the ideal creative economies.

The workers may be related by industry, occupation, age or education. Economists suggest that agglomeration economies, essentially efficiencies of scale and comparative advantage, occur when firms cluster in geographic space. Saxenian and Fukuyama advance a cultural element to the theory to explain the dissemination or dispersion of innovation within clusters.<sup>4</sup> Clusters build on their increasing specialization and rapid and constant innovation to increase their global competitiveness.

Richard Florida adds to this the notion that job growth in the new information economy is strongly correlated with labor force characteristics that match up to the requirements of technology-based employment. Education is especially important as the second of his three “T”s of economic growth – technology, talent, and tolerance. The third “T”, tolerance, is a reflection of high levels of acceptance of ethnic and lifestyle differences. These, in turn, are a function of diversity, age, and education among other factors. Florida’s analysis correlates these factors with economic growth and suggests that communities that have these demographic, community, and economic characteristics are more likely to be economically successful.

Florida has used statistical techniques to create a series of indexes that are highly correlated with economic growth. He then combines these into an overall Creativity Index to describe a new social class – the Creative Class. He writes that “as with other classes, the defining basis of this class is economic. Because creativity is the driving force of economic growth, in terms of influence, the Creative Class has become the dominant class in society.”<sup>5</sup> What, more precisely, is the Creative Class?

Florida’s indexes that describe the Creative Class are somewhat complex to explain and replicate. Essentially, his overall Creativity Index is based on four factors:

1. The Creative Class share of the workforce, based largely on occupational characteristics;
2. Innovation, as measured by patent activity;
3. The high technology share of the economic base; and
4. Diversity, based on indexes related to sexual orientation, bohemianism (counter culture or cutting edge arts and culture), and diversity (foreign born population).

In combination, the component indexes add up to an overall index and ranking.

## METHODOLOGY

This article does not purely replicate all of the measures used by Florida, but substitutes some relatively simple measures that are consistent with the premises of the Creative Class theory. Eight measures are selected to reflect the attributes of the Creative Class. Mobility and affordability have been added to Florida’s construct since they can affect

policies directed at change. No overall composite index is derived. Each of the individual measures reflects an important attribute of the Creative Class:

1. The proportion of the population aged 25 to 34 represents the mobile, educated, and creative heart of the Creative Class;
2. The foreign born proportion of the population reflects cultural and ethnic diversity;
3. The proportion of the adult population with a bachelors degree or higher level of education is the source of innovation and creativity;
4. The proportion of the population in “super creative core” occupations – scientists, artists, designers, architects, engineers, writers, etc. – are the Creative Class as defined by their work;
5. The concentration of employment in technology sectors measures high tech economic activity;
6. Patent activity per capita over a ten-year period measures innovation;
7. The percentage of the population moving within the past five years measures mobility; and
8. The percentage of renters spending less than 35 percent of their income for housing costs indicates relative housing affordability.

Data is drawn from the Bureau of the Census ([www.census.gov](http://www.census.gov)) and the U.S. Patent and Trademark Office ([www.uspto.gov](http://www.uspto.gov)). All indicators are expressed as location quotients, which are generally used to measure economic specialization, but are equally suitable as a measure of concentrations of all sorts.<sup>6</sup>

### Age 25-34 Population

The proportion of the population aged 25 to 34 is of primary importance in any analysis of the Creative Class. A study prepared for Tampa, FL, found that “statistically, 25-34 year-olds are the hardest working segment of the population. In their mid-20s, they are also at the peak of their mobility and more likely to move across state lines than at any times in their lives. In the time between their 25th and 34th birthdays, these young adults not only start careers, but find mates, start families, and put down roots. Once rooted in place, the likelihood of their moving to another state or metropolitan area will decline precipitously.”<sup>7</sup> The Tampa study describes this group as “the gold standard in the knowledge-based economy” because they are critical to long term economic health of their communities.

Over the past decade, the nation lost some 3 million 25-34 year-olds as the size of this cohort diminished. In many communities, out-migration resulted in a further loss of this young, educated, and talented population, representing a “brain drain” as this highly mobile group relocated. To many economic developers, the recruitment or capture of mobile 25-34 year-olds is as important as corporate recruitment was a decade ago.

Alexandria City and Arlington County have the highest proportions of 25-34 year-olds within the metropolitan area with location quotients of 1.79 and 1.78 respectively (see Table). Within the region, young people are more likely to live in the most urban environments. These two communities, plus Loudoun County, are the only ones to experience an increase in this age group, in spite of the substantial increase of the overall population in most suburban jurisdictions. The increases in Loudoun County were largely due to the rapid and substantial growth of population overall. Unfortunately, in spite of an above average percentage of young adults, the Washington Metropolitan Area lost more than 60,000 persons in the 25 to 34 age group in the 1990s even with an overall population increase of 536,000.

### Foreign-Born Population

Florida places a great deal of importance on diversity. He points out that "diversity is something that they (the Creative Class) value in all its manifestations...I take it to be a fundamental marker of Creative Class values."<sup>8</sup> Nationwide, about 40 percent of population growth has been the result of international

immigration. The proportion of foreign born population is a simple, but important, measure of cultural diversity.

According to the Census Bureau, Arlington County has the highest percentage of foreign-born population among local jurisdictions. Arlington has a location quotient of 2.52, with some 27.8 percent of all Arlingtonians born outside of the United States, more than twice the national average. Several other area jurisdictions also have relatively high percentages of foreign-born population, including Montgomery County, Alexandria City, and Fairfax County. Each of these communities had percentages of foreign-born population significantly above the District of Columbia, which was about 16 percent above the national average.

According to Audrey Singer of the Brookings Institution, Washington's foreign-born population itself is highly diverse, with no one country comprising more than 10 percent of the total.<sup>9</sup> Singer also found that, if not for the foreign-born immigrants, the Washington region would have lost population over the past decade, as both domestic migration and natural population growth was negative over that period. Further, the foreign-born are dispersed, with 90 percent of the new immigrants locating in the



*Diversity and quality of life are two significant attributes of the Creative Class.*

suburbs, especially Fairfax County. While the inner suburbs of Arlington County, Montgomery County, and Alexandria City have the highest percentage of foreign-born population, the outer suburban jurisdictions of Loudoun and Prince William Counties are experiencing the greatest percentage growth in this population segment.

### Educational Levels

Educational levels are generally highly correlated with creativity, innovation, and economic growth. While Florida did not use education as a single variable, it is however, imbedded in a number of his indexes. Education is fundamental to the human capital theory on which the Creative Class is based. The highest ranking Creative Class communities all have levels of educational attainment well above the national average.

Arlington County has the highest education level in the region, with more than 60 percent of the adult population holding a Bachelors or advanced degree, yielding a location quotient of 2.47. All Metropolitan Washington area jurisdictions,

**Table 1**

### High Tech Sector Location Quotients 2001 Washington, D.C. Metropolitan Area

Jurisdictions	NAICS Codes (4-digit)					
	5112	5415	5416	5417	5413	5142
Alexandria	0.05	5.24	4.86	8.54	4.32	0.05
Arlington County	1.85	6.58	5.64	10.58	6.06	1.85
District of Columbia	0.68	1.48	4.11	7.04	1.27	0.68
Fairfax County	3.39	11.84	6.46	8.36	3.34	3.39
Loudoun County	0.05	5.06	1.31	2.46	1.72	0.05
Montgomery County	1.57	5.45	2.99	7.35	2.72	1.57
Prince George's County	1.43	3.91	1.40	3.02	2.14	1.43
Prince William County	0.29	1.24	0.62	0.38	1.27	0.29

5112 Software Publishing

5415 Computer Systems Design and Related Services

5416 Management, Scientific, and Technical Services

5417 Scientific Research and Development Services

5413 Architectural, Engineering, and Related Services

5142 Data Processing Services

Source: [www.census.gov](http://www.census.gov) Quick Tables-American FactFinder



including the District of Columbia, rank above the national average in educational attainment. This is especially significant in that Arlington County, and the region as a whole, has a high level of foreign immigrant population which is often associated with lower levels of education. The presence of the international diplomatic corps and H1B visa-holders could be reasons why Washington's foreign-born population may have higher levels of education than those nationwide.

The Washington region ranks highest in educational attainment among the top nine Creative Class large regions, with a location quotient of 1.71. Somewhat surprisingly, Washington scores well above such major educational centers as Boston, Austin, and San Francisco.

### ***Creative Occupations***

Florida uses the percentage of the employed population in those occupations considered part of the "super creative core," such as scientists, writers, artists, educators, architects, engineers, athletes, entertainers, etc., as the principal measure of the Creative Class.<sup>10</sup> Florida credits Jane Jacobs with making the connection between a city's ability to attract creative people and economic growth.<sup>11</sup>

Arlington County leads the region on this measure with a location quotient nearly four times the national average. All of the Washington region jurisdictions have location quotients of 2.46 or higher, well over twice the percentage nationally. The regional economy is largely service based and is dominated by the federal government as both an employer and purchaser of services. This high concentration of "super creative core" workers led to Florida's ranking of the Washington, DC Metropolitan Area as the top large Creative Class region. Approximately 25 percent of those employed in the Washington area are in "super creative core" occupations.

### ***Technology Base***

Much of Florida's thesis involves the emergence of the information age, the increase in the number of knowledge workers, and the growth of technology clusters. Technology is one of four indexes he used to compute an overall Creativity Index. This article measures the technology base with location quotients for an aggregate of six specific technology industry clusters as shown in Table 1.

Within the Washington Metropolitan Area, Fairfax County ranks first and Arlington County second for the aggregate of six technology sectors used in the comparison, with location quotients of 6.8 and 5.9 respectively. Within the individual technologies, Fairfax County has the greatest concentration in computer systems design with a location quotient of 11.8, while Arlington has a location quotient of 10.6 in scientific research. Both Fairfax and Alexandria also had high concentrations of



*Performing artists are only one of many occupations in the Creative Class.*

employment in scientific research. The region as a whole has a location quotient for technology-based employment of 4.1. If government employment were excluded from the base (there are many scientists and technology workers in government agencies which are not counted using this particular measure), this overall technology concentration would be much higher.

### ***Innovation***

Florida used patents per capita over the 1990-1999 period as his measure of innovation. This measure was one of four (along with the Creative Class share of the workforce, high-tech industry, and diversity) that he used to develop his "Creativity Index" which was itself a measure of the ability of regions to "translate that underlying advantage into creative economic outcomes in the form of new ideas, high-tech businesses and regional growth."<sup>12</sup>

Using the same measure as Florida, only Montgomery County and Alexandria City have location quotients significantly above the national average. The biotechnology sector represents most of the patent activity in Montgomery County, most of which results from National Institute of Health funded research.

Much of the \$4.5 billion spent by federal agencies on research and development in the region, especially the Department of Defense, led to local patent filings which were not reported publicly for security reasons. Therefore, the Washington Metropolitan Area has an artificially low location quotient for innovation of only 0.91 and significantly trails tech centers such as Austin, Minneapolis, Boston, and Raleigh-Durham, each of which exceeds 2.0 on this measure.

### ***Mobility***

Much of the interest in the Creative Class is focused on the potential for "brain drain" due to the relatively high mobility of the 25 to 34 year old

demographic cohort. Florida found that “the migratory patterns of the Creative Class cut across the lines of race, nationality and sexual orientation. People of varied backgrounds are all migrating to the same kinds of cities. Members of the Creative Class are moving away from places that ... do not reflect their interests in favor of those that validate their identities in the very structure of daily life.”<sup>13</sup> The Creative Class is highly mobile.

Mobility, as defined here, is the percentage of the population over the age of five that moved from another county within the 1995 to 2000 period. It does not measure intra-county moves, but does count moves from within the metro area. High levels of mobility can be associated with either high levels of population growth or rapid population

## Housing Affordability

While *The Rise of the Creative Class* did not address the cost and affordability of housing, it is a significant issue for the highly mobile Creative Class population. Housing costs clearly affect the attractiveness of a community, especially for those in their early earning years.

This measure is a composite of both rental costs and the income of the renter household. It measures the percentage of all households paying less than 35 percent of their income on rent. The focus is on rent, since many in the 25 – 34 year old cohort are renters and housing affordability is less of an issue for those that have already purchased a home.

Alexandria City and Arlington and Fairfax Counties all have similar location quotients of 1.12

**Table 2**

### Location Quotient of Creative Class Attributes Washington, D.C. Metropolitan Area

Jurisdiction	Population 25-34	Foreign- Born Population	Education	Super Creative Core	Mobility	Tech- Based Economy	Innovation	Housing Affordability
Alexandria City	1.79	2.30	2.23	3.41	2.28	4.47	1.91	1.12
Arlington County	1.78	2.52	2.47	3.85	2.08	5.93	0.67	1.12
District of Columbia	1.25	1.16	1.60	3.20	1.27	2.24	0.40	1.02
Fairfax County	1.09	2.22	2.25	3.63	1.53	6.77	0.71	1.12
Loudoun County	1.25	1.02	1.93	3.46	2.08	2.52	0.71	1.11
Montgomery County	1.02	2.41	2.24	3.78	1.15	3.83	2.17	1.06
Prince George's County	1.11	1.25	1.11	2.46	1.10	2.42	0.48	1.08
Prince William County	1.14	1.04	1.29	2.68	1.72	0.92	0.27	1.10

Source: U.S. Bureau of the Census; U.S. Patent & Trademark Office

turnover. Areas with greater proportions of rental housing tend to have higher population turnover.

The communities of Alexandria City, Loudoun, and Arlington Counties each have high levels of mobility. All three have location quotients above 2.0 on this measure. In each of these communities, more than 43 percent of the 2000 population lived elsewhere in 1995. Every community in the Washington area has a level of mobility above the national average.

Both population growth and turnover affect mobility rates. While Loudoun County's mobility is largely due to growth (90 percent), Arlington County's mobility rate is reflective of a much more transient population, one where only about 11 percent of the population mobility is attributable to population increases. Arlington County's population mobility is more than twice the national average and its population turnover is well above that of any other community in the Washington region.

as affordable communities, meaning that they are relatively more affordable than housing nationwide. Housing affordability actually increased over the past decade, with the percentage of renters paying less than 35 percent of their incomes for rent increasing by 8.7 percent overall. All of the Washington area jurisdictions have location quotients above 1.0 on this factor, meaning that they are more affordable than the national average. Washington is, in fact, the most affordable of the top large Creative Class metro areas, with a location quotient of 1.06. Again, this is not indicative of low housing costs, but of the balance between rents and incomes.

## CONCLUSIONS

Washington area communities have location quotients well above the national average for most Creative Class attributes, as might be expected from the region's high ranking by Florida as shown in Table 2. Measures of the “super creative core” population, educational attainment, and foreign born

population and technology-based employment are especially high.

There is an intra-regional geographic differentiation among the local jurisdictions. The inner-ring suburbs – Alexandria City and Arlington and Montgomery Counties – have the highest scores on Creative Class attributes. The next ring comprised of Fairfax and Loudoun Counties has slightly lower scores followed by the central city – the District of Columbia. Prince William and Prince George's Counties scored slightly lower, but still above the national average on most measures.

The District of Columbia would have fared slightly better using Florida's more complex Creativity Index, with its emphasis on bohemianism and tolerance for differences in sexual orientation. The central city is still the cultural and entertainment center of the region and contains many of the "edgier" neighborhoods.

The methodology used in this analysis provides a simple and highly comparative basis for looking at differences in Creative Class attributes within a metro area. Most of this data is aggregated by city or county, making clear sub-regional distinctions possible.



## ENDNOTES

- 1 Florida, Richard. *The Rise of the Creative Class*. Basic Books. New York, NY. 2002. All references to the "Creative Class" are derived from this text.
- 2 Florida, p.237.
- 3 Porter, Michael. 1990. *The Competitive Advantage of Nations*. The Free Press. New York, NY.
- 4 Saxenian, Annalee. 1996. *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Harvard University Press, and Fukuyama, Francis. 1996. Trust. Simon & Schuster.
- 5 Florida, p. ix.
- 6 The location quotient measures relative concentration. It is the ratio of a variable in one geographic area, expressed as a percentage, to the percentage of that variable nationwide.
- 7 *The Young and the Restless: How Tampa Bay Competes for Talent*. 2003. p.5.
- 8 Florida, p. 79.
- 9 Singer, Audrey. 2003. *At Home in the Nation's Capital: Immigrant Trends in Metropolitan Washington*. The Brookings Institution Center on Urban and Metropolitan Policy.
- 10 Occupational categories comprising the "super creative core" include computer and mathematical occupations; architecture and engineering occupations; life, physical and social science occupations; education, training and library occupations; and arts, design, entertainment, sports and media occupations.
- 11 Jacobs, Jane. 1984. *Cities and the Wealth of Nations*.
- 12 Florida, p.244.
- 13 Florida, p.242-3.



### Economic Development and Smart Growth

8 Case Studies on the Connections Between Smart Growth Development and Jobs, Wealth, and Quality of Life in Communities



INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL

*The Power of  
Knowledge and Leadership*

## NEW STUDY RELEASED

# Economic Development and Smart Growth: 8 Case Studies on the Connections Between Smart Growth Development and Jobs, Wealth and Quality of Life in Communities

Economic development success and smart growth can go hand-in-hand. IEDC's Economic Development and Smart Growth presents eight case studies on communities that incorporated smart growth principles in their development projects and have experienced economic development improvements. Including identified measures of economic growth, IEDC's case-based research provides direction for local government officials, economic development professionals, and all those concerned with the future of their communities.

**Free download available at [www.iedconline.org](http://www.iedconline.org)**

# griffiss business and TECHNOLOGY PARK

By Rob Duchow



*The entrance to Griffiss Business and Technology Park.*

Rob Duchow is vice president of Marketing and Communications for Mohawk Valley EDGE.

eleven years ago, Griffiss Business and Technology Park in Rome, N.Y., consisted of a lot of real estate and a four-inch-thick plan.

The former Griffiss Air Force Base sat as a mostly-abandoned military installation. Sure, about 1,700 people went to work there each day, nearly all still employed by the military in one function or another. But the lifeblood of the base – the heavy aircraft which had flown over

Central New York for decades, with deployments to Southeast Asia, the Arabian Gulf and other hot spots around the world – was gone. Gone, too, were more than 4,500 military personnel and civilian employees who just two years earlier had worked at the base, and 750 families who had lived there, making it a center of activity around the clock.

Steven J. DiMeo had been hired two years earlier, just weeks after the Base Realignment and Closure Commission made its final recommendation to realign Griffiss. His job was to oversee redevelopment of the land the Air Force would abandon – essentially to put together a redevelopment plan and then execute it. By the time Griffiss Air Force Base was realigned – officially it was not a closure because some military units remained, even though it was no longer an operating base – the plan was in place.

Today, Griffiss Business and Technology Park is a vibrant center for public and private enterprise in Rome, N.Y., in the heart of the Mohawk Valley. Nearly 5,000 people go to work at the park each day for some 60 employers. Hundreds more jobs have been announced and are on the way. The loss of 1,191 civilian jobs at Griffiss when the Air Force left have been more than replaced, and the worker population is steadily approaching the approximately 6,400 it was when the Griffiss realignment was announced in 1993. Along with the jobs has come significant investment – more than \$265 million in public and private funds have been devoted to infrastructure improvements, construction of new buildings, and demolition of obsolete Air Force facilities to make way for new development since 1995. Griffiss is home to a heavy maintenance aviation company, high-tech information

## SUCCESSFUL REDEVELOPMENT OF A MILITARY INSTALLATION SUPPORTS A NEW REGIONAL VISION

*In 1993, residents of Rome, New York, fought to keep open Griffiss Air Force Base, the community's largest employer for a half century. They lost, but immediately started planning what to do with the 3,500-acre white elephant they would inherit from Uncle Sam. Today, 5,000 people work at the thriving Griffiss Business and Technology Park, and the base redevelopment has twice been named "Developer of the Year" by its peers. The former "city within a city" is no longer an enclave separated from the city around it, but is an integrated part of the community, and new industrial development at Griffiss is leading a regional economic revival.*



technology firms, aerospace and equipment manufacturers, human services providers, a distribution center, commercial uses such as banking and medical offices, and much more.

By most accounts, redevelopment of Griffiss has been a success. In 2000 and 2004 the work at Griffiss earned the Developer of the Year award from the National Association of Installation Developers, now called the Association of Defense

priority, and their funding made the redevelopment at Griffiss affordable to the local community.

As indicated by the term realignment, the Air Force wasn't giving up all of the property at Griffiss. The realignment called for Griffiss to lose its host flying mission, the 416<sup>th</sup> Bomb Wing, and a support unit, the 485<sup>th</sup> Engineering Installation Group. Another unit, Rome Laboratory, was left in place in a "cantonment" area, as was the Northeast Air Defense Sector, which as part of the realignment was transferred from the Air Force to the New York State Air National Guard. In addition, the airfield – which occupied about half of the



Communities; it is the only two-time winner. Visitors to the property no longer ask what the vision is for the property – they see it unfolding before their eyes as they look around the park – and they no longer comment that it looks like a closed Air Force Base. The removal of guard houses, incorporation of new signs, repainting of drab yellow buildings, and other aesthetic and structural changes give Griffiss Park the feel of being an integral part of the region.

While successful, the redevelopment at Griffiss is also a work in progress. A good portion of the land is still owned by the Air Force, including some which is occupied by private sector tenants. Hundreds of acres are still available for development. The middle mile of a three-mile, four-lane state highway through the park, originally planned for construction in 2002-03, may still be years from completion. Airmen's dormitories remain unused. But these issues are not holding back development, and will be worked through in coming years

### DEVELOPING A MASTER PLAN FOR REUSE

Griffiss Air Force Base was more than 3,500 acres – about six square miles – and there was infrastructure such as roads, water, sewer and electric lines already in place, providing a jump start to redeveloping the property. Also in place were many buildings and a 2.23-mile-long runway with a plethora of viable re-use options. If the property being given up was farmland, it simply would have been returned to nature. But it was a fully developed city within a city in need of a well thought out reuse plan which rationalized infrastructure and road systems for public ownership, and identified ways to leverage remaining assets for new economic development opportunities for the Mohawk Valley. This work required significant capital; the federal Economic Development Administration (EDA) and New York State made the redevelopment of former military installations a key economic development

Today, Griffiss Business and Technology Park is a vibrant center for public and private enterprise in Rome, N.Y., in the heart of the Mohawk Valley. Nearly 5,000 people go to work at the park each day for some 60 employers. Hundreds more jobs have been announced and are on the way. The loss of 1,191 civilian jobs at Griffiss when the Air Force left have been more than replaced, and the worker population is steadily approaching the approximately 6,400 it was when the Griffiss realignment was announced in 1993.

base acreage – was kept open, to be operated by the New York State Air National Guard, to support deployment of troops from the Army's Fort Drum, about 60 miles away.

In 1994, Griffiss was one of several closed or closing military installations selected to receive a Defense Finance and Accounting Service (DFAS) center, to help ameliorate the economic impact of the base closing. This provided a user for a major facility along with jobs and a welcome early boost to the redevelopment effort. As a result of the 2005 BRAC round, the Rome DFAS office is expanding from 380 to 1,000 jobs.

The effort to redevelop the approximately 1,500 acres of Griffiss which the Air Force would relinquish began almost immediately in 1993. Oneida County and the city of Rome formed the Griffiss Redevelopment Planning Council, and DiMeo, then commissioner of urban and economic development for the nearby city of Utica, was hired to run it. He hired a planner, Mark W. Reynolds, along with a communications person and an office manager.

With funding from the Department of Defense Office of Economic Adjustment, top-caliber consultants were hired to help put together a master plan to redevelop Griffiss Air Force Base into Griffiss Business and Technology Park. The process

took nearly a year and included a series of community meetings and public hearings in 1994. With the far-reaching impact of Griffiss Air Force Base well-known, public consensus on the master plan for redevelopment was sought. Input was solicited from a wide assortment of elected officials, public planners, community leaders, and the public to gain a breadth of opinions. City and county planners were included in the master plan creation to ensure development plans were consistent with the surroundings. With multiple hearings in various locations around the area and a well-advertised period for public comment, anyone with a suggestion was afforded the opportunity to be heard.

The result was a master plan which had widespread public support and allowed for multiple uses in various areas of Griffiss. Seven distinct development districts were established in the master plan, each allowing specific uses such as residential, educational enterprises, office buildings, high-tech research, heavy industry, aviation, and public recreation. The development districts discussed in the master plan later became part of the city of Rome zoning code, and development at Griffiss has followed this zoning since.

### RETAINED MILITARY PROPERTY

The fact that Griffiss was a realignment raised issues and challenges which would not have existed if the base was fully closed.

The military's continued operation of the airfield meant Griffiss' most dominant physical feature, and perhaps the most attractive feature to some potential users, was essentially off limits. The Air Force was amenable to a joint use with the private sector, as long as it retained the right to close the airfield to others for any reason at any time. This condition made a joint use unfeasible.

The idea of a cantonment area was ill-defined by the Air Force. It was stated during the BRAC hearings that by leaving behind the lab – a center of Air Force research in command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) – the community had an anchor around which it could build not just a re-use plan for the property, but a recovery plan for the region's economy. At the time, the lab employed

about 900 people, with about 500 contractors working on site. The 1,400 jobs were high-paying, and the brain power of engineers and scientists with advanced degrees provided the region with a jumpstart on building a knowledge-based economy. In fact, the spin off of technologies and creation of companies through the years had already resulted in such a cluster in the Mohawk Valley.

Other challenges were more typical to base redevelopment – gathering public input, reaching consensus on the best use of property, convincing local government to participate in the upkeep of what for 50 years was “not their problem,” learning the ins and outs of bureaucracy connected to base closings, and other typical tasks. The most significant challenge to redevelopment, however, came in 1995 when the Pentagon proposed closing Rome Lab, before the 1993 realignment was even complete.

“In 1995, they came back to shut down the whole place, to finish the job they started in 1993,” according to DiMeo.

In unison, community leaders cried foul. “They told us to build a redevelopment plan around the lab, and we did. Then before the plan could even be implemented, they tried to jerk it out from under us,” DiMeo said. The community fought the recommendation and won, as the BRAC Commission reversed the Pentagon's proposal, and the lab remained at Rome to become the lynchpin and centerpiece for future high tech private sector development at Griffiss and throughout the Mohawk Valley. Today Griffiss Park is the center of a growing regional niche of key technology companies which are leveraging the capability of the Air Force Research Laboratory Rome Research Site, as Rome Laboratory was renamed in 1997.

The 1995 BRAC also built a new runway at Fort Drum, closing the Griffiss Airfield and making it available for private development, effective September 30, 1998.

### COMMUNITY ISSUES

Like most military installations, Griffiss was a city within a city. Many airmen never had to leave the base. Of course they worked there. But they



*Goodrich Corporation opened this 110,000-square-foot plant at Griffiss Park in 2002. It is built on property where Griffiss Local Development Corporation razed some 700,000 square feet of “temporary” former Air Force depot buildings, to prepare the site for new development.*

also lived, shopped, and bought gas on base, went to church, the movies and bowling on base, and ate at restaurants there, too. They could even go golfing and camping on base. If they had children, their kids went to school in the city of Rome public schools, but when they got home they could play ball in their own Little League on base. Adult recreational sports leagues thrived on base as well. This city within a city existed for some 50 years, during which time most of the residents of Rome did not have access to Griffiss.

When the time came to develop a plan to reuse the buildings and property, several questions and suggestions naturally arose. Some people thought buildings should be used for the same purpose for which the Air Force used them. For example, the officers' club could become a restaurant, the movie theater could remain a movie theater, the hospital could become a hospital, and the homes could be used for housing. In some instances, this happened. The golf course is leased to a private sector company and operated as a public golf course. The

The housing was an especially polarizing issue in the public. One school of thought said the housing – despite being built by the Air Force and not meeting local building or fire codes – should be sold or rented, particularly to low-income residents who were already living in sub-standard housing in worse condition. Another opinion said that the exodus of Air Force jobs and people left a glut in both the home-buying and rental markets in Rome, and adding the Air Force housing developments

### Griffiss History

Construction of the Rome Army Air Depot began February 1, 1942, less than eight weeks after the United States entered World War II. In the late 1940s, the facility was renamed Griffiss Air Force Base, in honor of Townsend Griffiss, the first American Airman to die in the European Theater during World War II. In the late 1950s, a new 11,820-foot runway was constructed to accommodate B-52s and other large military aircraft.

A major realignment of Griffiss Air Force Base essentially closed the facility September 30, 1995, when the 416th Bomb Wing and 485th Engineering Installation Group were deactivated, based on a decision made by the Base Realignment and Closure Commission in 1993. The military discontinued operating the Griffiss Airfield on September 30, 1998, based on a decision made by the Base Realignment and Closure Commission in 1995.



*An Atlas Air Boeing 747 is pulled into Empire Aero Center's hangar at Griffiss Business and Technology Park on January 19, 2004. It was the first 747 to arrive at Empire's new facility for maintenance. In the right corner of the hangar is a Capital Cargo International Boeing 737, giving some magnitude of the size of the hangar bay. The hangar, which includes this bay, one just like it, and a third a little smaller along with shop space (a total of about 375,000 square feet) under went a \$17 million renovation and expansion to accommodate Empire Aero Center's move to Griffiss Park from Miami, Florida. Empire is a third party aviation maintenance repair and overhaul facility.*

day care center is leased and operated as a day care center. The base hospital is now a Veterans Administration outpatient clinic. And the vehicle maintenance facility is now used by a bus company to maintain its fleet. But other buildings found brand new uses: the former officers' club is now a medical center; the commissary is now a printing and fulfillment center; the shoppette has become office space; the bowling alley is a vehicle maintenance garage; and the former base chapel is now the cafeteria of the local public high school, a \$44 million investment which opened in 2002. Alas, the movie theater was torn down.

entrance to Griffiss would be demolished to make way for new business development, while a second housing area comprised of 270 units located outside the base's perimeter would remain residential.

### HOW TO USE BUILDINGS

Debate also took place on what to do with the 4 million square feet of excess buildings. The fact was, most were not usable for economic development purposes and would require significant investment to occupy for commercial uses. Yes, someone could have used them for something, but it would not necessarily have added to the regional

to the mix would only exacerbate an already bad situation. In the end, the master plan recommended a compromise. One housing area of 460 units at the front



economy. Thus, the master plan called for demolition of many buildings. More than 2 million square feet of space has been torn down, including more than 700,000 square feet of “T” depot buildings constructed during World War II; the “T” was for temporary – yet the wooden structures stood for more than 50 years!

By the time the Bomb Wing went away in the fall of 1995, DiMeo, Reynolds and the team at the Griffiss Redevelopment Planning Council – by then reconstituted as the Griffiss Local Development Corporation or GLDC – had been through two



*The new Rome Free Academy, the public high school serving the city of Rome and surrounding areas, opened in the fall of 2002. The 320,000-square-foot, \$44 million facility was designed to accommodate 2,200 students in grades 9 through 12. Visible at the top of the photo is a Veterans Administration Outpatient Clinic, which was previously the Griffiss Air Force Base Hospital.*

years of planning, and were ready to get the redevelopment ball rolling. Implementing the master plan however, did not mean simply filling up real estate with the first interested party.

“Many people thought Griffiss would provide cheap buildings and cheap land for whatever they wanted to do,” said Reynolds, “but we told them no.” The master plan established a zoning map for what could be done where, and the GLDC set as its mission finding the best and highest use for properties, not the quickest and easiest use. This meant many proposals to use particular buildings or parcels, especially in the first few years, never moved forward.

One such proposal was from a group of local residents who were also NASCAR fans. They saw the concrete runway and immediately thought it was a great start to a major NASCAR speedway. But there is more that goes into developing a NASCAR track than land and concrete – two essential ingredients are investors’ money and NASCAR’s backing. This group had neither, and the proposal never gained traction, although the proposal received its share of attention, and most NASCAR fans in the region thought it was a great idea.

## IMPLEMENTATION

While many people hoped for a quick fix to bring in hundreds or thousands of jobs to Griffiss, implementing the master plan was a time-consuming process requiring patience. This is because most of the early work did not involve bringing private investment and jobs to Griffiss, but investing public monies from EDA and New York State to prepare the property for private investment and job growth later. In addition to the demolition of buildings, other issues included:

- Police and fire protection. For half a century, the Air Force had its own police and fire units, and the professionals who protected the surrounding area were not responsible for Griffiss. With the Air Force gone and the area again open to the public, providing these public services had to be negotiated.
- Rationalizing the road network. While the Air Force maintained 59 lane miles of roads, the need to support public usage was much less. Today, Griffiss has an organized network of 18 lane miles of public roads.
- Care of infrastructure. The Air Force was one large customer for the city of Rome municipal water and sewer systems. Once inside the base, the Air Force maintained all of the lines. As the property was redeveloped, parceled off, and tracts sold, a different system was needed. Takeover of the mains was negotiated with the city of Rome, while lines to and from buildings would belong with those buildings, as is done in the rest of the city. This was not as simple as it may seem however, as the Air Force did not always put mains along roads in what would be considered the right of way – instead they were placed in a straight line to get where they needed to go. After all, the Air Force owned everything.
- Likewise, the Air Force owned and operated the electric distribution system and substations at Griffiss, buying wholesale power off the grid. The Air Force also had a steam heat plant which served most of the base. GLDC created a private utility company to serve only Griffiss Park; Griffiss Utility Services Corporation now owns and maintains the steam plant and all of the power lines at Griffiss, and makes use of a similar wholesale power purchase to keep electric costs low to foster growth. In their cantonment areas, the Air Force Research Laboratory and Northeast Air Defense Sector are now customers for steam and electric, and do not have the responsibility to pay for owning, operating, and maintaining these utility systems, or the roads, water lines, and other infrastructure which are now municipally maintained.



## BRINGING IN JOBS

Replacing the jobs lost with the base closing was and is foremost on the minds of most residents in the area. The jobs came slowly. The first private sector tenant to locate at Griffiss was General Electric, which established an equipment testing center in 1995, even before the base was closed. Most of the early businesses to locate at Griffiss were lured by facilities in which GLDC had invested significant monies from state and federal grants to renovate. Just like many projects, as time goes on, success breeds success. As more buildings and property are developed, more businesses want to be at Griffiss. This is seen also in a shift in the last few years to the private sector leading the development investment.

Today, few vacant buildings remain at Griffiss, meaning future development – and most recent development – will be private sector construction of new buildings. In 2005, Family Dollar invested \$64 million in a new distribution center, a local credit union spent \$7 million to build a new office and branch, a local human services agency invested \$7 million in a new campus, a local dentist built a new building, and a local ophthalmologist-turned-developer constructed a third office building for lease. In 2006, one of North America's largest olive oil distributors is constructing a new plant, a local bank is building a new office, the human services agency is expanding and the ophthalmologist-turned-developer will construct a fourth office building.

## MORE THAN JOBS

It is not just the jobs at Griffiss which have had a profound and positive effect on the community. A 78-acre tract was donated by GLDC to the Rome City School District to construct a new public high school. This saved more than \$1 million for local property taxpayers in land acquisition costs. More importantly, like many schools, this new high school is part of the fabric of the community, a meeting place and social center for not just teen-agers but for all ages, as the school facilities accommodate community groups of all kinds.

The opening of Griffiss to the public after 50-plus years of military control has also changed the habits of many people. The state highway has become a popular artery for motorists heading east from Rome, or coming into Rome from the east, thereby changing other patterns.

Griffiss has become a center of community activity and recreation. In addition to the

high school, there is a golf course, soccer fields, softball fields and baseball fields, and runners, walkers, bikers, and rollerbladers use a multi-purpose trail along the new state highway. Griffiss Air Force Base was off-limits to local residents for five decades, but Griffiss Business and Technology Park welcomes all, and provides for many needs as an integrated part of the community.

## FUNDING

While private sector investment is leading new development, public investments helped prime the pump. New York State provided grant funds for infrastructure improvements, and has assisted many businesses with specific projects to expand at Griffiss. The state has also made Griffiss an Empire Zone, which offers attractive tax incentives for companies investing and creating jobs. The federal government, through the EDA, has also provided significant funding. As properties have been sold to the private sector, capital funds have been invested in further improvements.

Rental proceeds from leases to companies provide ongoing operating funds and help leverage further development at Griffiss. This will continue into the future, as property is sold and leased, and more parcels are improved and prepared for sale and lease.

## PARTNERSHIPS

Along the way, several creative partnerships have helped to spur development efforts at Griffiss.



An aerial view of the 907,000-square-foot Family Dollar Distribution Center. This photo was taken November 1, 2005, as construction was winding down.



The Family Dollar Distribution Center began shipping product to some 500 stores in the Northeast in April 2006. Dozens of trailers are staged shipping in the parking lot of the massive warehouse.


It was recognized early on that the remaining Air Force function, Rome Laboratory, would be an anchor for attracting other high tech research and development activities to Griffiss. Thus, in 1995 GLDC spent considerable resources to work with the local community in a successful fight to save the lab from closure by BRAC. Then, GLDC worked with the federal government and New York State for a unique partnership where each committed \$12 million to construct a new facility for the lab. This new building allowed the lab to vacate expensive, older, operationally obsolete space, consolidate its footprint, reduce its operating costs, and produce a savings to federal taxpayers.

This "Rome Partnership" has become a model for how military-state-local partnerships can allow the military to eliminate base operating costs, while communities retain key military missions and the associated economic benefits. In 2005, GLDC again expended significant time and money to successfully fight a Pentagon recommendation to BRAC which would have impacted the Air Force Research Laboratory. GLDC also partnered with New York State Department of Transportation to speed construction of the first phase of the state highway through the park, by paying for the design a year earlier than DOT planned for it.

Unique deals with developers have also spurred development. By trading land for services such as building demolition or road construction, GLDC has been able to secure needed projects and developers have been able to acquire property, without having to secure immediate capital.

### THE MASTER PLAN

The successes at Griffiss all go back to that four-inch-thick master plan, and its faithful execution over the last decade. This means not cutting corners when it would have been easier, following development standards by planting vegetation and placing berms as required, not selling property below market value just because someone had an idea to use a building, and working with the state and local governments to secure funding, cooperation, and buy-in to the vision.

Some people think Griffiss has been more successful in the last few years than in the first several after the Air Force left. Measured by private sector investment and job growth, this would appear to be true. But it was the work going on in those years – not so glamorous things like razing buildings, constructing roads, rationalizing infrastructure, and negotiating municipal agreements – which set the stage for the success now being experienced. Without laying the groundwork, the investments and jobs would not necessarily be coming now. 

MAY 20 - 22, 2007  
WESTIN CROWN CENTER  
KANSAS CITY, MO

## 2007 IF YOU BUILD IT, WILL THEY COME? CONFERENCE

We're not in Kansas City any more Dorothy and Toto...or at least not the Kansas City you thought you knew! Visual arts and internationally known museums, comedy clubs, casinos, and legendary barbecue are synonymous with Kansas City. When it comes to sports arenas, stadiums and convention centers Kansas City is the Mecca for architectural design and home to the nation's top architectural firms. So, if your community is considering or about to start developing a new venue, you can't afford to miss IEDC's If You Build It...!

Learn the latest trends from industry experts and practitioners and return home with the knowledge you need to undertake your community's long awaited projects. Conference topics include:

- Conference/Convention Centers
- Performing Arts Centers
- Sports Facilities
- Revitalization of Older Facilities
- Development around Audience Facilities



INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL

**For more information go to  
[www.iedconline.org](http://www.iedconline.org)**

# growing small and MEDIUM-SIZE ENTERPRISES THROUGH PARTNERSHIPS

By Patricia W. Pool, Tom Seth Smith, and Michael D. Woods

## ■ INTRODUCTION

Rural Enterprises Incorporated of Oklahoma (REI) is the place where government, public, and private partnerships come together to develop businesses across Oklahoma. Coming of age in its 21st year of incorporation, REI has developed programs that respond to the needs of small to medium-size enterprises (SMEs).

Increasing jobs and new business ventures in the southeastern quadrant of Oklahoma may have seemed like an idealistic challenge in the late 1970s coming from Wes Watkins, then U.S. Representative from the Third Congressional District. He believed a significant portion of his constituents were eager to find prosperity at home given the existence of more local job opportunities, a cause he had worked toward since he was elected. With his help, Rural Enterprises Incorporated of Oklahoma Inc. (REI) was established.

The original goal was to improve the economic welfare of local communities by helping entrepreneurs and small business owners locate funding, grow their businesses, and create and retain jobs. Success breeds success. REI now functions as a non-profit economic development organization impacting growth of SMEs in southeast Oklahoma and across the state.

This article provides a brief history of how REI was established, how it has changed over time, how it operates, and how it is staffed. Also discussed are examples of programs that have experienced rapid growth in the recent past, REI's entrepreneurial venture, and lessons learned from building partnerships for SME growth.

## REI OF OKLAHOMA

Rural Enterprises Incorporated of Oklahoma (REI) was incorporated as a private nonprofit industrial development corporation in 1984 headquartered in Durant, Oklahoma. This article describes the evolution of REI from a regional organization to a statewide economic development engine. Activities supported include business finance, incubator management, micro-enterprise loans, entrepreneurship assistance, housing, and partnerships for international trade. Cooperative efforts and initiatives combined with a strong Board of Directors and program flexibility have led to REI's substantial success.



*Trim Rite Moulding: This business graduated from REI's business incubator program and located into its own facility.*

## A LOOK BACK

REI was incorporated as a private nonprofit industrial development corporation in 1984, headquartered in Durant, Oklahoma. The original mission was to develop new private-sector jobs in its service area. While REI represented a new beginning, it was the result of the culmination of 20 years of economic development efforts in southeast Oklahoma to stem the out migration of jobs.

### **Evolution of Economic Development Yields REI in Southeast Oklahoma**

Early 1960s economic development programs in southeast Oklahoma included the Technology

Patricia W. Pool, MBA, Ph.D. is executive director of the Center for Workplace Learning at Grayson County College, Denison, Texas. Formerly, she was a professor of marketing and leadership at the John Massey School of Business, Southeastern Oklahoma State University, Durant.

Tom Seth Smith, CERD, is president and CEO of Rural Enterprises Incorporated of Oklahoma, Durant, Oklahoma.

Mike D. Woods, Ph.D., teaches, conducts research, and provides community outreach programs through Oklahoma State University, and is a professor in the Department of Agricultural Economics, Oklahoma State University, Stillwater, Oklahoma.

The original goal was to improve the economic welfare of local communities by helping entrepreneurs and small business owners locate funding, grow their businesses, and create and retain jobs.

Success breeds success. REI now functions as a non-profit economic development organization impacting growth of SMEs in southeast Oklahoma and across the state.



*Atoka business incubator tenant – C & C Services, a plastics products and design firm.*

Utilization and Study Center (TUSC) which was funded by the National Aeronautics and Space Administration (NASA) and the organization of the Kiamichi Economic Development District of Oklahoma (KEDDO), a sub-state 21-county (seven counties currently) planning and development district.

In 1977, Congressman Watkins initiated the partnering of TUSC and Southeastern Oklahoma State University located in Durant. This effort was to foster industrial and economic development in the economically depressed 24-county area of southeast Oklahoma. NASA again provided the original funding. The program was designed to provide the means for applying NASA technological innovations to private industry.

The Industrial Technological Research and Development Center (ITRAD) was formed as a private non-profit in 1980 to stimulate industrial and economic growth through the practical application of technological innovation. Inventors and entrepreneurs were sought to utilize funding from a combination of government, public corporation, and private grants. Staff was put in place to help evaluate new products and to encourage growth of new enterprises in the service area. Rural Enterprises Development Corporation (REDC) was established in 1982 as a Certified Development Company of the U.S. Small Business Administration. ITRAD and REDC merged to bring about commercialization and marketing aspects of product development. The merger resulted in the incorporation of Rural Enterprises, Inc. in 1984.

With this merger, REI moved from an academic setting on the Southeastern Oklahoma State University campus to a location near the Durant industrial park. It was then that Congressman Watkins established the first three of REI's business incubators in Oklahoma. These incubators were in partnership with the Kiamichi Area Vocational and Technical campuses. The incubator concept was patterned after a private venture by Control Data of St. Paul, Minnesota. Professional oversight was provided to promote the growth of fledgling companies. Today, REI business incubators experience an 80 percent success rate.

### ***Responsiveness to Market Needs Mandated Change***

Organization directives in the early years of REI addressed needs for technological innovations in manufacturing and new product development. In 1988, REI established the Central Industrial Applications Center (CIAC) at its headquarters. The Center was a contractor with the National Aeronautics and Space Administration to provide literature searches and corresponding document retrieval to assist entrepreneurs in obtaining the latest data for technical and business needs. Since space exploration had produced a vast storehouse of technology, the Center's mission was to make this information available to U.S. business and industry. A Technology Applications Team served as an intermediary between research scientists and private businesses. This assistance was essential to small businesses oriented toward production and marketing but lacking in research and development capabilities.

The mission of job creation and retention during REI's early years was carried out by applying a combination of five innovative industrial development tools: innovation evaluation, new products and processes evaluations, technology transfer to small businesses, incubation of small businesses, and financial services assistance.

The emphasis of organizational directives shifted in the late 1980s. The focus changed from economic development based upon technological transfers and research and development within manufacturing to a service orientation centered on the most critical need of SMEs and entrepreneurs: securing sources of funding. By the early 1990s, REI programming reflected the mission of an organization with clear vision and purpose.

### **STRUCTURE SUITED FOR STATE-WIDE SERVICE**

Today, Rural Enterprises Incorporated of Oklahoma is structured to function as an umbrella organization to cover the entire state with its line of



economic development services. REI's current staff of 34 economic development professionals and REI's statewide partnership base allow the organization to provide services in all four quadrants of the state. Recently, REI opened branch offices in Oklahoma City and Tulsa to allow for even better facilitation of its services and a branch office in western Oklahoma is forthcoming. Funding sources for the organization are divided into four categories: 73 percent are internally generated; 15 percent are federal funds; 11 percent are state funds and 1 percent are from other sources. Oversight of both nonprofit and for-profit operations is under the leadership of the president and CEO who serves at the pleasure of the 13-member Board of Directors. The leadership team consists of five executives who represent three distinct divisions: administrative services, business and community development, and financial services. The headquarters is located in Durant, OK. The facility has been expanded in the past six years to include additional incubators, international trade offices, and the Rural Women's Business Center which houses conference facilities complete with videoconferencing technology. A 320-acre International Business Park is adjacent to headquarters and includes a 30-acre foreign trade zone (FTZ #227) designation. Satellite offices are located in Oklahoma City, Tulsa and Stillwater.

The Administrative Services Division of REI provides internal support for the organization. The accounting and contract management division monitors nine internal loan programs and more than 12 federal and state contracts or grants. The marketing and communications division publishes bi-monthly newsletters with circulations in excess of 4,100. This division maintains media packets and develops all organizational collateral materials. It also maintains a schedule of internal and external marketing research projects that are utilized by the leadership team in strategic planning.

### PROGRAMS THAT IMPACT SMEs

Business incubators have long been an effective program at REI. The organization currently manages incubators in 11 Oklahoma communities across the southern half of the state. Some facilities accommodate light manufacturing businesses while others are designed for technology-related and service industries; others are targeted to warehouse and distribution. The current focus is to encourage

more technology-related and service start-ups or expanding industries. Facilities range from 3,000 to 42,000 square feet. They are designed to house technology, start-up, or expanding businesses. Most facilities allow entrepreneurs the advantage of high speed Internet services, computing equipment, video conferencing, loading docks, and storage spaces. REI's technology-based incubators include computing equipment, video conferencing and other technology needs. Below-market rent and tax incentives combined with consistent business assistance, financing, equipment programs, and training and technical assistance have kept the incubator program growing steadily.

Since 1982, REI has been a Certified Development Company of the U.S. Small Business Administration (SBA). It provides two types of SBA loan packages for qualifying small businesses statewide. The first is the SBA-504 loan. With a fixed rate for 10 or 20 years, loans are available for up to \$1 million plus bank participation for fixed assets. The SBA-7A loan is the



REI assisted Valero Energy Corporation with a sub-zone through Foreign Trade Zone #227.



Employer-Assisted Housing Incentive provides families with down payment assistance to achieve homeownership.

second type of loan package. Loans are available for up to \$1.5 million guaranteed with a maximum loan amount of \$2 million. Besides construction, real estate, and equipment, the SBA-7A loans can also be used for furniture or fixtures, working capital, and inventory. From 1981 to the present, total financing secured for Oklahoma businesses is \$289,827,951. In 2005, 63 businesses in 29 Oklahoma counties were assisted with business financing totaling \$23,871,961. This assistance created/retained 529 jobs in the state.

Experiences gained from managing SBA loans positioned REI to expand its product offerings to include: the Lease/Purchase Equipment Program, the Microloan Program, the Intermediary Relending Program (IRP), and the Business and Industry Program.

### ***Relending Programs for Capital Acquisitions***

The Lease/Purchase Equipment Program has been in place since 1993 to assist manufacturers with fewer than 25 employees. Customized payment plans are established for equipment amounts under \$30,000 that waive loan down payments. Borrowers receive below market interest rates on equipment under the maximum loan value of \$75,000. Between 1994 and 2004, REI assisted manufacturers in 16 counties with \$1,447,339 with various equipment leases or purchases. The Microloan Program was also developed to assist other SMEs with the purchase of machinery, equipment, inventory, furniture, fixtures, or with working capital. There is no stipulation on the number of persons employed. Loans of up to \$35,000 are available for a maximum of six years. REI's current portfolio of 20 microloans totals \$280,881,



*Direct mail business in Durant business incubator.*

including such businesses as day care centers, Internet-service based businesses, manufacturers, retailers, educational software providers and others. These microloans can make a real difference for low income families and individuals attempting to pull themselves out of poverty.

The Intermediary Relending Program is available to SMEs located in communities with populations under 25,000. Loan limits for machinery, equipment, inventory, furniture, fixtures, working capital, real estate, construction, or refinancing are set at a maximum of \$150,000. The program offers a sliding amortization schedule depending upon how the money will be used: real estate loans can be made for 20 years, equipment for 10 years, and working capital and inventory for five years.

The purpose of the Business and Industry Program is similar to that of the SBA-7A loans.

Borrowers may use financing for the purchase of machinery, equipment, furniture, fixtures, real estate, or for construction and working capital. However, the maximum loan value is up to \$20 million as compared to \$2 million with the SBA-7A. The amortization schedule allows for maximum loan terms and is available as follows: seven years for working capital, 15 years for machinery, and 30 years for real estate. From 1994 to 2004, REI secured over \$181 million in business financing through these programs. The loans assisted businesses in 57 Oklahoma counties.



*REI assisted Durant automotive shop through its lease/purchase equipment program.*

### ***Women Entrepreneurs***

The Rural Women's Business Center (WBC) began in 2001. This thriving program resulted from the partnership of REI and the Small Business Administration. Training programs and one-on-one counseling have seen women-owned business ventures flourish. One of the most popular activities is the Biz Connection. These quarterly meetings are held in different locations around the service area. The meetings feature a motivational speaker and provide networking opportunities for those attending. In 2003, a DHHS Office of Community Services grant was awarded to construct a 5,973-square-foot facility. Located at the REI headquarters in Durant, the facility has space for five incubators, the WBC administrative offices, and their Enterprise Center which consists of a conference room with teleconferencing capabilities and the reception area. Since the Center's inception in 2001, there have been nearly 3,000 entrepreneurs counseled or trained.

### ***Housing the Workforce***

REI has established two programs that have further utilized organizational economic development expertise. The first program met a desire to help

rural communities attract SME investment by making affordable housing available through REI's down payment and closing cost assistance program. This program serves 76 counties across the state. It targets families earning under \$71,000 annually. Assistance with down payments and closing costs is provided on 30-year fixed rate loans. The second program is the Employer Assisted Housing (EAH) Incentive. This program partners with employers to provide an employment benefit to their workforce. REI matches employer assistance of up to \$2,500 per employee to be used in purchasing a home. Research has shown that employers who demonstrate such a level of commitment to their employees have lower turnover. The employer investment is recaptured over time and a loyal employee has a home. Since the inception of the first bond issue to launch these programs in 1998, over 1,400 rural Oklahoma families have become homeowners.

REI has also issued approximately \$37.7 million in bond issues to assist with student housing at three Oklahoma universities.

#### **Partnerships for International Trade**

The industrial park, in which REI headquarters was built, is located on Highway 69/75 just 70 miles north of Dallas, Texas, an international port of entry and major cargo distribution center. Durant is 45 miles east of Interstate 35, known as the North American Free-Trade Agreement (NAFTA) Superhighway, which connects Mexico to the U.S. at Laredo, Texas. It continues through San Antonio, Dallas, Oklahoma City, Kansas City, and then northeast to Des Moines, and the Twin Cities area of Minneapolis/St. Paul. The 30-acre FTZ was in partnership with the city of Durant.

REI and the city of Durant received the Foreign Trade Zone designation in 1998, just four years after NAFTA was signed. REI located to its new headquarters within the zone in the same year. In 2000, construction was completed on REI's Rural Service International Trade & Incubation Center with 3,300 square feet of space available for new or existing technology-related businesses. In 2002, the 30,000-square-foot Wes Watkins Global Distribution Complex warehouse facility was completed. The warehouse is targeted to companies involved with international trade and is currently occupied by a marble and granite company.

Through the leadership of the president and CEO, the REI Board of Directors made a strategic decision to seize an entrepreneurial opportunity in 2003 with the establishment of New Markets Tax Credit, LLC. The mission is to bring needed capital into eligible, low-income Oklahoma communities. This venture represented the first for-profit endeavor by REI.



*REI and Oklahoma State University applications engineer program partnership assists rural manufacturers.*

One of only four foreign trade zones in Oklahoma, Durant's FTZ #227 continues to experience steady growth. Recently, the Valero refinery in Ardmore, Oklahoma, attained sub-zone status through FTZ #227.

#### **Entrepreneurial Venture**

Through the leadership of the president and CEO, the REI Board of Directors made a strategic decision to seize an entrepreneurial opportunity in 2003 with the establishment of New Markets Tax Credit, LLC. The mission is to bring needed capital into eligible, low-income Oklahoma communities. This venture represented the first for-profit endeavor by REI.

The LLC received its first \$80 million allocation for tax credits in 2003. A second allocation of \$56 million in tax credits was received in 2005. The program is designed to help underserved low-income communities by offering investors an attractive tax benefit through a 39 percent federal income tax credit for new investments in economically blighted areas.

The term of the tax credit is seven years. Investors will be able to claim a tax credit of 5 percent for each of the first three years of credit and 6 percent for each of the last four years, for a total of 39 percent over seven years. As of July 2005, total investments in the LLC stand at \$59,358,923, affecting well over 1,000 jobs in Oklahoma.

#### **PARTNERSHIPS ACCELERATE GROWTH**

REI is a partnership-based economic development organization which enables it to conduct pro-



*Academic software company utilizes training facility in REI's Women's Business Center.*

grams statewide. The organization's diverse partnership base includes the private sector, such as Oklahoma banks, utilities and cooperatives, technology centers and higher education, and numerous state and federal organizations. Partners located at REI corporate headquarters include the Oklahoma Department of Commerce, Oklahoma State University, and the Oklahoma Alliance for Manufacturing Excellence, Inc.

As REI expands its services and establishes satellite offices, the partnership base will continue to diversify and increase in number. Over the years, REI has learned that no one organization can stand alone in the complex field of economic development. Cooperative efforts and initiatives that can be carried out regionally with a diverse partnership base are assets any organization must have in order to be successful. Therefore, REI will continue to expand and diversify its statewide network of partnerships.

### LESSONS LEARNED

REI has been in existence for over two decades. There have been notable successes and many lessons learned. The role of the Board of Directors has been one key to success over the years. Notable Board considerations include:

- Provide the Board of Directors with adequate information to make informed decisions.
- Utilize the diverse expertise of those serving on the Board.
- Build trust and a strong working relationship between the Board and the president/CEO.
- Nurture a culture of moderate risk taking to fulfill the organizational mission and to be able to adapt to the needs of those served.

Throughout the years, serving small to medium-size businesses has been the impetus for continued improvement. Staying abreast of the changing needs within the client base has resulted in a dynamic structure that has evolved as opportunities and challenges have arisen. The overall structure of REI allows it to respond to the needs of business at the speed of business. Structural considerations include:

- Flexibility based on identified needs of existing and emerging enterprises.
- Programming that has evolved from a regional to a statewide focus.
- Developed expertise in re-lending and responded to other opportunities such as affordable housing programs.
- Utilized relationships developed through the Women's Center to foster potential lending clients.

Overall, REI has built a program and mindset with the focus on job creation and enterprise development. Partnerships and aggressive networking have led to an even stronger organization. The coming years should see even more impact for this model of local economic development. 🌐

### REFERENCES

- Foreign Trade Zones and Boards Retrieved September 17, 2005. Available online: <http://ia.ita.doc.gov/ftzpage/>
- High Priority Corridor Retrieved September 17, 2005. Available online: <http://www.aaroads.com/high-priority/corr23.html>
- Watkins, Wesley W. (personal communication, September 26, 2005).
- Woods, Mike D. and Smith, Tom Seth (1997). Rural Enterprises Incorporated of Oklahoma: A case study of rural innovation and finance center. *Economic Development Review*, Volume 15, Number 3, pp. 52-57.





INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL

*The Power of  
Knowledge and Leadership*

LATE OCTOBER/EARLY NOVEMBER

## Developing and Nurturing Entrepreneurs: How to start a program and a discussion of the most important elements

What every economic developer needs to know about developing and supporting entrepreneurs in today's economy. Learn about successful approaches to Economic Development.

**Check the website for upcoming information and date for this informative seminar your community can not afford for you to miss.**

Sandusky, MI • Sandusky, OH • Rome, GA • Roanoke, VA • Port St. Lucie, FL • Phoenix, AZ • Paducah, KY • Orlando, FL •  
 Ocala, FL • Ocala, FL • Leesville, MI • Kalamazoo, MI • Jackson, FL • Jacksonville, FL • Iowa City, IA •  
 Watertown, SD • Waterloo, IA • Twin Falls, ID • Timonium, PA • Seattle, WA • Scottsdale, AZ

Sandusky, MI • Sandusky, OH • Rome, GA • Roanoke, VA • Port St. Lucie, FL • Phoenix, AZ • Paducah, KY • Orlando, FL •  
 Ocala, FL • Ocala, FL • Leesville, MI • Kalamazoo, MI • Jackson, FL • Jacksonville, FL • Iowa City, IA •  
 Watertown, SD • Waterloo, IA • Twin Falls, ID • Timonium, PA • Seattle, WA • Scottsdale, AZ

# Looking for the Best and most Effective fundraising Counsel?

## You need the STELLAR approach

*It takes more than rehashing old tactics to raise the funds critical to your community. You need the STELLAR approach:*

*Holistic. Bold. Ambitious. Client focused. Rethinking everything.*

*It's the effectiveness of that approach that has prompted our clients to exclaim things like, "Fresh-thinking," "Innovative approach,"*

*"Impressive talent," "A extraordinary commitment," and "Exceeded our wildest dreams!"*

**But don't just take our word for it...**

**"Dear STELLAR Team,**

On behalf of the Greater Erie County Marketing Group (GEM), I want to take this opportunity to thank the STELLAR team for making our "Grow Erie Now" campaign an unqualified success! After a dismal 1990's campaign conducted by another firm, your solid, experienced, and professional team worked extremely hard to help us EXCEED our campaign goals and objectives,

to focus on "our" needs and not on a "saturated" process. For that, we are deeply grateful and I would recommend STELLAR without hesitation. Without your team's assistance, Erie County, Ohio would not be enjoying our recent economic development success stories!"

Thank you and we look forward to working with you in the future.

Sincerely,  
  
Mark D. Litton  
Executive Director

**www.stellarfundraising.com**  
*Working in great communities...just like yours.*

**STELLAR**  
FUNDRAISING EXECUTIVES, A.C.  
800.477.1111  
info@stellarfundraising.com

Albany, GA • Augusta, GA • Bellingham, WA • Bonifay, FL • Dubson, NC • Ft. Wayne, IN • Gainesville, GA • Greensboro, NC

Sandusky, MI • Sandusky, OH • Rome, GA • Roanoke, VA • Port St. Lucie, FL • Phoenix, AZ • Paducah, KY • Orlando, FL •  
 Ocala, FL • Ocala, FL • Leesville, MI • Kalamazoo, MI • Jackson, FL • Jacksonville, FL • Iowa City, IA •  
 Watertown, SD • Waterloo, IA • Twin Falls, ID • Timonium, PA • Seattle, WA • Scottsdale, AZ



INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL

*The Power of  
Knowledge and Leadership*

# THE ED PARTNERS PROGRAM

By making an investment in the Economic Development Partners Program, you are ensuring IEDC's mission to encourage the ongoing professionalism of the economic development practitioner. We have developed a program that may be custom tailored to meet your goals and the mission of IEDC.

All Partners will be:

- Recognized by level in all IEDC publications, journals, literature and manuals;
- Provided a direct link to their organization from the IEDC web site;
- Receive a plaque acknowledging your significant contribution to the betterment of economic development.

## PARTNER LEVELS

There are four levels of support.

Donor Partners	<b>\$2,500</b> Receive all Partner benefits
Contributing Partners	<b>\$5,000</b> Receive all Partner benefits and distribution of your organization's profile to all members. Receive a complimentary registration to a professional development education course of your choice and additional recognition will be offered at IEDC events.
Supporting Partners	<b>\$10,000</b> Receive all Contributing Partner benefits plus four (4) complimentary registrations to the IEDC Leadership Conference or four (4) complimentary registrations to any professional development education course.
Leadership Partners	<b>\$25,000</b> Receive all Supporting Partner benefits plus 10 complimentary registrations to the IEDC Annual Conference or 10 complimentary registrations to any professional development education course. Recognized as a sole supporter of an IEDC research project or a professional development education course.

**To become a Partner, please contact Mary Helen Cobb,  
Membership Development Specialist, at  
202-942-9460 or email [mcobb@iedconline.org](mailto:mcobb@iedconline.org)**

*“Business retention and expansion in Islip is our number one priority. IEDC helped us develop a professional marketing strategy that refocused our efforts and brought us closer to our goal.”*

*William Mannix, Executive Director, Town of Islip Economic Development Authority, NY*

*“The high quality work IEDC did on the re-use of the former Rhodia Chemical plant changed the way Metro Government was thinking of the site and led to a more constructive channel with potential for greater impact on our community. The excellent report IEDC prepared has become the foundation for future planning efforts.”*

*Bonnie Biemer, Assistant Director, Environmental Division, Metro Development Authority, Louisville, KY*

*“IEDC’s case studies, scenario alternatives, and sample RFQ helped us plan for the redevelopment of a key property in our downtown.”*

*Vern Morgan, Senior Planner and Brownfields Coordinator, Springfield, MO*

## ADVISORY SERVICES AND RESEARCH

For over 20 years, IEDC Advisory Services & Research (ASR) has delivered sound economic development solutions and advice to its clients. An experienced membership and in-house library complement a dedicated and forward-looking staff, on-call to bring customized reports and research to your community. Our services are responsive to the ever-changing set of issues facing the economic development profession. Local and state economic development organizations, federal agencies, and many others rely on ASR for help in:

- Strategic planning
- Organizational development and program analysis
- Real estate development
- Finance and funding
- Technology-led development
- Business attraction, retention, and expansion

### HOW CAN ASR HELP YOUR COMMUNITY?

ASR is a cost effective way to bring valuable resources directly to your community. IEDC maintains an unparalleled body of technical information for quick access by ASR team members. With a membership base of 4,300 economic development professionals, we can easily research best practices and bring nationally recognized member experts to your community.

IEDC clients include regions seeking to fine-tune their existing portfolio of economic development services, at-risk urban neighborhoods, rural areas, and cities seeking to redevelop their central business district, inner suburbs, or transit corridors. IEDC also works with federal agencies, corporations, and foundations to provide research for education and policy development.

**For more information, call Ed Gilliland at 202-942-9461 or visit [www.iedconline.org](http://www.iedconline.org) and click on “Advisory Services” in the left hand column.**



INTERNATIONAL  
ECONOMIC DEVELOPMENT  
COUNCIL



# Get Hot!

A well-funded economic development program is the spark that can put your community on the "hot list."

*If your community is not hot, why not?*

NCDS can help your organization stoke the development fire with new, aggressive and innovative economic stimulation programs. Our proven funding strategies have fired up the hottest communities—those that consistently make the "best places" lists.

The kindling you'll need to start building a hot community:

- Smart People
- Great quality of life
- Solid infrastructure
- Top-notch marketing
- A well-capitalized development organization on fire to meet and beat the competition.

We'll help you light a fire in your community. Give us a call or visit our Web site.



*Fueling the fire of economic development for 28 years*

National Community Development Services, Inc. • 3155 Roswell Rd NE, Ste 250 • Atlanta, GA 30305 • 800.635.4071 • [ncdsinc.net](http://ncdsinc.net)