

Creating Economic Clusters *The Policy Challenge*

BRAC-onomic Development *Pursuing the “Art-of-the-Possible”*

Does Rural Land-Use Planning and Zoning Enhance Local Economic Development? *Yes, Based on a Case Study from Georgia*

Implementing Strategic Change at the Charlotte Regional Partnership *Making Powerful Use of a Governance Task Force*

Structuring a Successful Greenhouse Cluster in Northwest Ohio *Overcoming the Challenges*

Professional and Business Services in Regional Economies *Growth and Gaps*

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 an 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.



INTERNATIONAL ECONOMIC DEVELOPMENT COUNCIL

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

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.; Mihalis 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. 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, FM
Gail Lewis

Robin Roberts, FM

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
Dennis G. Coleman, CEcD, FM
Hank Cunningham, CEcD
Gene DePrez
Kenneth E. Dobson
Brett Doney, CEcD

Daniel C. Gundersen

Lynn Martin Haskin, Ph.D.
Ted J. Hidinger, 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, FM
William G. Mannix
James E. Mills
Jay C. Moon, CEcD
Ellen A. O'Connor
Phillip D. Phillips, Ph.D., CEcD
Joy M. Pooler, CEcD, FM
Lewis D. Rich
Karin Richmond
Wayne Schell, FM
David L. Spaar, 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, CED, FM, HLM
Kurt Chilcott, CEcD, FM, HLM
John P. Claypool, HLM
Gary Conley, HLM
James A. Covell, CEcD, FM, HLM
George Clegg, Sr., CEcD, FM, HLM
Walter D'Alessio, HLM
James A. Devine, CEcD, FM, HLM
Donald G. Dunshee, CED, 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. Morfesis, 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
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



Joseph A. Marinucci, FM
IEDC Chair

dear colleague

It has been a great honor to serve as chair of IEDC's Board of Directors. I am proud of our accomplishments and the progress we have made in helping to shape the organization and promote the profession. I have been especially enthusiastic about working with Jeff Finkle, his great staff, and all the Board members.

I am pleased to report that the Board is being left in excellent hands with *Ronnie Bryant, CEcD, FM*, as our new chair beginning January 1, along with *Robin Roberts* as vice chair and *Ian Bromley* as secretary/treasurer. In addition, the following officers will serve as committee chairs: *Gail Lewis*, External/Member Relations; *Denny Coleman, CEcD, FM*, Planning and Business Development; and *Michael Kirchhoff, CEcD*, Performance Oversight and Monitoring.

I am especially proud of our profession's response to lead in the economic recovery of the Gulf Coast. IEDC has sent over 50 volunteers from across the nation to seven locations in southern Louisiana and Mississippi to help our friends and colleagues rebuild their economies. Thank you to all of you who have given your time and expertise. IEDC has now been awarded a second EDA grant to continue this successful program, expanding it to another 100 volunteers. Please go to IEDC's website to learn how you can participate in this renewed effort.

We have worked very hard during my term towards achieving a high level of ongoing commitment to our profession. IEDC's Certified Economic Developer Program is the standard for excellence in the economic development industry. Our Certified Economic Developers are recognized around the world as having achieved a level of excellence in their understanding of the tools and programs of economic development.

IEDC's Advisory Services & Research has been very active during my term, responding to the ever-changing set of issues facing our profession. Its report on *Targeted Area Redevelopment* was featured in one of our web seminars.

In addition, the organization expanded its technical assistance and research services into international markets to provide members and the profession with information on current trends in this area.

With the publication of *Economic Development and Smart Growth*, IEDC highlighted the economic benefits of redevelopment projects that make efficient use of land. And through a grant from the Department of Justice, we are helping Weed and Seed sites initiate efforts to bring new investment and economic opportunities to their neighborhoods.

IEDC has also reached out to build an even stronger international base to better address the issues posed by globalization. To this end, I have represented the organization at meetings with such groups as the European Association of Regional Development Agencies, World Free Zone Convention, World Association of Investment Promotion Agencies, and the Economic Developers Association of Canada.

Although I am stepping down as chair, I am not leaving IEDC. As immediate past chair, I will continue to be an officer with the organization. I look forward to my continuing service to IEDC and the economic development profession.

A handwritten signature in black ink, appearing to read "J. Marinucci".

Joseph A. Marinucci, FM
IEDC Chair

2007 LEADERSHIP SUMMIT: The Power of Collaboration

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



The 2007 Leadership Summit is the premiere industry event for leaders of economic development organizations and those who have earned their CECd. This year's program focuses on successful collaborative initiatives and features thought-provoking roundtable discussions and networking opportunities with your economic development peers. Learn from colleagues and industry innovators:

- **Bill Strickland**, President and CEO, Manchester Bidwell Corporation
- **Mary Walshok, Ph.D.**, Associate Vice Chancellor for Public Programs, Adjunct Professor of

Sociology, Dean, University Extension, University of California

- **Doug Henton**, Founder and President Collaborative Economics
- **Mark Lautman, CECd**, Director of Economic Development, Forest City Enterprises
- **Duane Roth**, Executive Director, CONNECT

Network between sessions, at the reception, on the golf course, tennis court or on a tour of San Diego's Little Italy's BID. Improve your leadership skills in the professional development sessions.

FOR MORE INFORMATION and to REGISTER go to www.iedconline.org/LeadershipSummit

2007 FEDERAL ECONOMIC DEVELOPMENT FORUM:

The Future of the Innovation Economy: How Does America Remain Competitive?

MARCH 18-20, 2007 • HYATT CRYSTAL CITY • ARLINGTON, VIRGINIA



Join fellow economic developers from around the country for the only event that deals with **federal policy, innovation and U.S. competitiveness**. This year's Forum will provide an opportunity to learn about cutting edge issues and federal policy that impact your community. Leading speakers in the field will cover issues, including knowledge creation, Federal R&D, technology transfer, entrepreneurship and workforce development.

- Help frame future policy directions that will be included in the new IEDC Innovation Agenda: A Policy Statement on American Competitiveness;
- Learn about innovative techniques that will help your industry or community respond to new global challenges;
- Engage in interactive dialogue and learn about emerging innovation trends, and;
- Gain the essential building blocks to create innovative-based strategies and solutions for your community in this new-found marketplace.

FOR MORE INFORMATION and to REGISTER go to www.iedconline.org/FederalForum

2007 IF YOU BUILD IT, WILL THEY COME? CONFERENCE

MAY 20-22, 2007

WESTIN CROWN CENTER
KANSAS CITY, MO



- Is your community considering building a new sport facility, performing arts center, conference/convention center or entertainment district?
- Have an older facility you are considering revitalizing?
- How about developing around an existing audience facility?
- Is your community receiving a new museum or cultural center?

Join IEDC in Kansas City to learn the latest trends in audience facilities from industry experts. Kansas City is the Mecca for architectural design and home to the nation's top architectural firms. Are you a visual learner? Take advantage of the number of audience facilities Kansas City has to offer and view examples of projects in the works and those recently completed. When the conference is over, you will return home with the knowledge and the contacts you need to develop a new venue in your community.

FOR MORE INFORMATION and to REGISTER go to www.iedconline.org

THE IEDC Economic Development Journal

TABLE OF CONTENTS



PAGE 14



PAGE 24



PAGE 42

Creating Economic Clusters	6
<i>The Policy Challenge</i>	
by Athar Osama, Ph.D. and Steven W. Popper, Ph.D.	
Poses a series of challenges to the cluster analyst and practitioner communities that may comprehensively address the weaknesses and deliver on the promise of cluster policy.	
BRAC-onomic Development	14
<i>Pursuing the “Art-of-the-Possible”</i>	
by Tom Rumora	
Economic development professionals who become proficient in “art-of-the-possible” problem solving can help optimize the consequence of BRAC in conjunction with elected officials, city/county managers, utility companies, realtors, investor/developers, taxpayers, neighboring communities, business leaders, and expert advisors.	
Does Rural Land-Use Planning and Zoning Enhance Local Economic Development?	24
<i>Yes, Based on a Case Study from Georgia</i>	
by Joy Wilkins, B. William Riall, Ph.D., and Arthur C. Nelson, Ph.D., FAICP, with Paul Counts and Benjamin Sussman	
Does land-use planning implemented through zoning facilitate rural economic development? A review of the experiences of 57 rural communities across Georgia provides ample evidence that it does.	
Implementing Strategic Change at the Charlotte Regional Partnership	34
<i>Making Powerful Use of a Governance Task Force</i>	
by Ronnie Bryant, CEcD, FM, and Doug Eadie	
The Charlotte Regional Partnership successfully employed a Governance and Bylaws Task Force consisting of Board members and the CEO to fashion – and secure the Board’s approval of – a set of recommendations aimed at updating the Partnership’s governing structure and processes.	
Structuring a Successful Greenhouse Cluster in Northwest Ohio	42
<i>Overcoming the Challenges</i>	
by Neil Reid, Ph.D., and Michael C. Carroll, Ph.D.	
Faced with competitive challenges that threaten its economic viability, northwest Ohio’s greenhouse industry recently organized as an industrial cluster.	
Professional and Business Services in Regional Economies	50
<i>Growth and Gaps</i>	
by Ellen D. Harpel, Ph.D.	
Given its important role in job creation in many regions, understanding the dynamics of the professional and business services sector is an imperative for economic development and community leaders.	
IEDC News	40
IEDC Calendar of Events	41

creating ECONOMIC CLUSTERS

By Athar Osama, Ph.D. and Steven W. Popper, Ph.D.

In the 1980s and 1990s, the Silicon Valley propelled the world into the computer and internet age and, in the process, captivated the world's imagination as a model region for organizing economic and innovative activity. Since then, leaders around the world have tried to create economic clusters in an attempt to replicate the Silicon Valley phenomenon in their own regions, cities, and communities.

ECONOMIC CLUSTERS: AN AGE-OLD CONCEPT REVITALIZED

The phenomenon of economic and technology clusters is not new. Economic clusters date back at least to the great Hellenistic and Islamic centers of excellence such as Alexandria, Cordoba, and Baghdad, and more recently to the industrial agglomerations in the early modern United Kingdom and the Atlantic coast of the United States. What has changed as a result of the spectacular success of Silicon Valley – and later Cambridge, UK and Bangalore, India – is the renewed interest in creating clusters as an instrument of economic, science and technology, and innovation policy.

Dr. Michael E. Porter, a Harvard Business School professor, had a formative influence on the resurgence of the cluster concept when his book, "The Competitive Advantage of Nations", became an influential text for policymakers and political leaders around the world (Porter, 1990). He describes three mechanisms by which presence within an economic cluster may improve the competitiveness of its firms. First, a cluster increases productivity by providing firms access to shared best



Source: Dubai Internet City Website (www.dubaiinternetcity.com)

Dubai's Internet City is one of the several clusters planned in the Arab kingdom.

practices, a common labor and management pool, and training resources. Second, clustering drives the direction and pace of innovation within the cluster's boundaries which in turn leads to productivity enhancement in firms. Third, it speeds up the entrepreneurial process and new firm formation within clusters thus providing a positive feedback loop that feeds onto itself (Porter, 2000).

More generally, firms within a particular cluster benefit from shared resources, mobilization and concentration of specialized labor, and the creation of supporting and ancillary industry. For example, since Silicon Valley is known as a cluster of information and biotechnology firms, it also attracts a disproportionate amount of federal research dollars to its universities; trained workforce from all across the United States and the rest of the world; and law-firms, accounting firms, executive search firms, and investment banking firms specializing

Dr. Athar Osama is a Senior Executive at ANGLE Technology Group in Santa Monica, CA. (athar.osama@gmail.com)

Dr. Steven W. Popper is a Senior Economist at the RAND Corporation in Santa Monica, CA. (swpopper@rand.org)

THE POLICY CHALLENGE

For years now, political leaders and policy-makers have attempted to replicate the silicon valleys in their own regions, albeit with little success. The entire enterprise of cluster advice is ridden with faulty and incomplete understanding of how clusters form and what promotes them, a lack of rigorous policy impact evaluations, and "cookie cutter" prescriptions that do not deliver. This article calls for putting in place a plan of action to bring sound theory and practice to bear and to resurrect the credibility of the cluster concept as a useful pillar of regional economic planning. It poses a series of challenges to the cluster analyst and practitioner communities that may comprehensively address the weaknesses and deliver on the promise of cluster policy.

in information and biotechnology industries. The result is reduced overall cost of doing business, enhanced access to cutting-edge research and innovation from the region's universities and other firms, and better access to shared infrastructure and a talent pool from across the world. Despite high costs of labor and real-estate, firms continue to locate in the Silicon Valley to benefit from these advantages that seem to outweigh the associated costs.

ECONOMIC CLUSTERS AS INSTRUMENTS OF ECONOMIC POLICY

With these potential benefits – and self perpetuating competitive advantage – to be gained, many governments and regions around the world have attempted to create economic (and technology) clusters patterned on the Silicon Valley model. A 2003 study identified hundreds of cluster initiatives of varying sizes and scope including, among others, 112 in Northern Europe, 82 in Australia and New Zealand, 107 in Western Europe, and 92 in North America (Solvell et al., 2003). Another major attempt to document economic clusters around the world, led by the Institute of Strategy and Competitiveness at the Harvard Business School, has identified 838 clusters so far (van der Linde, 2004).

Many states across the United States such as Texas, Connecticut, Arizona, Rhode Island, Wisconsin, Utah, Oregon, and California have active, on-going initiatives to promote industry clustering. These clusters vary in their characteristics, such as the type of industries they include, the expectations from the cluster initiative itself, and the level of maturity of the industry cluster. Consequently, these cluster initiatives also represent a diverse mix of features, such as the size and timeframe of the initiative, the degree of government involvement, and its interaction with other instruments of economic policy.

Governments around the world have tried to use a number of policy instruments to jumpstart economic clustering including, but not limited to, development of cluster strategies and a cluster identity in regions; liberal taxation policies to promote clustering of firms; creation of science, technology, and research parks; strengthening of university-based research programs; investment in human resources development; creating branding and marketing programs to market the region's competitiveness; steps to improve the entrepreneurial environment; creation of public and private venture capital programs; and creation of institutions of collaboration.

CLUSTER POLICIES AND INTERVENTIONS: AN UNQUALIFIED SUCCESS STORY?

While the use of these policy instruments has been pervasive, they are not equally effective in encouraging cluster formation. The appropriate choice may be determined by the unique characteristics and the initial con-

ditions of the region in question. In fact, the empirical evidence on the efficacy of these policy instruments leaves important questions unanswered.

A host of practical and methodological problems work against establishing the effectiveness of cluster interventions unambiguously. These include the long gestation periods (10-15 years, generally) before a new cluster could emerge in a particular region and the difficulty of measuring the strength of particular cluster outcomes as well as the inability to see through, assess, and monitor the micro-determinants of economic clusters.

The practice of employing cluster policy is clearly a fast moving target, rapidly evolving through "learning by doing" yet far from being an unqualified success. Proponents point to the several contributions that cluster policy has already made to the theory and practice of

Many states across the United States such as Texas, Connecticut, Arizona, Rhode Island, Wisconsin, Utah, Oregon, and California have active, on-going initiatives to promote industry clustering. These clusters vary in their characteristics, such as the type of industries they include, the expectations from the cluster initiative itself, and the level of maturity of the industry cluster. Consequently, these cluster initiatives also represent a diverse mix of features, such as the size and timeframe of the initiative, the degree of government involvement, and its interaction with other instruments of economic policy.

regional economic development, namely, 1) providing a new way of looking at the regional economy, 2) shifting the focus of policy from industrial targeting to enhancing the competitiveness of all the regions' industries, 3) providing micro- (firm-level) foundations to macroeconomic policy, 4) providing a distinct focus and a practical orientation to regional economic policy-making, and 5) providing a framework for structuring new public-private partnerships within the regions. Critics are equally vocal in highlighting the many lingering questions about the cause-and-effect results from cluster intervention policy.

At least two underlying arguments fuel much of the criticism of cluster thinking and policies. First, more often than not, cluster policies tend to have a faddish rather than substantive character. The majority of the planned cluster initiatives that we looked at as a part of our research are based on weak empirical analysis, an unconvincing rationale for policy intervention, and a kitchen-sink approach to the choice of policy instruments (Osama and Popper, forthcoming). They are also, as we would argue later, often marred by weak institutional forms, inadequate attention to the process, and are grossly under-funded and under-evaluated.

Second, there is a dearth of evidence on the effectiveness of cluster policy interventions and their impact on actual economic clustering itself. Martin and Sunley (2003) point out that “even cluster enthusiasts find it enormously difficult to point to any examples of deliberate cluster promotion programs that have been unambiguously successful.” Simply stated, despite two decades of attempts around the world to create the next Silicon Valley, no other region of the world has clearly achieved the same level of stature – especially not through a deliberate and active cluster policy intervention.

We do not know enough to say what works and what does not in cluster policy. While practitioner and best practice manuals have been written by consulting and research firms, none have actually presented conclusive evidence in support of the policy instruments and interventions. The latter, however, continue to be recommended and accepted if not on faith, then in the promise of the potential rewards rather than concrete evidence of efficacy. Meyer-Stamer (2003) explains the continued popularity of cluster policies by highlighting the political economy of such programs. In short, cluster policies remain popular because, for politicians and policy-makers, the desire to do something about their constituents’ problems outweighs concerns about demonstrating results. Cluster policies, with their vast popularity and brand recognition, provide the means to evince control even if the reality may be somewhat less than the perception.

DELIVERING ON THE PROMISE OF ECONOMIC CLUSTERS

The doubts surrounding cluster policy need not persist. The clouds of uncertain utility and efficacy that bedevil cluster theory and practice can be challenged by putting in place a plan of action to bring sound theory to bear and to establish the credibility of the cluster concept as a useful pillar of regional economic planning. This would require looking forward by making significant advances at the cutting edge of cluster theory and practice (e.g., through the development of a theory of cluster implementation and better understanding of the inner workings of clusters.) It would also require looking back by reviving and applying some of the more established themes in the economics, public policy, and organization literature to clusters (e.g. the rationale for policy interventions, market and government failures, and the importance of evaluation, replication, and validation).

This ambitious undertaking would require cooperation by the analyst and practitioner communities to target concurrent development and validation of new ideas, foster their cross-fertilization across disciplines and between research and policy, and perform subsequent integration into what could be a “useful theory of eco-

nomic clusters”. The rest of this article outlines a 10-point agenda that, we believe, provides a comprehensive response to the weaknesses outlined here.

We present these as a challenge to ourselves as well as to our colleagues in both the analyst (the providers of cluster advice) and the practitioner (consultants and implementers of cluster initiatives) communities. This is an ambitious agenda but one that not only is necessary but also pragmatic and eminently doable.

THE ANALYSTS’ CHALLENGE: IMPROVING THE QUALITY OF POLICY ADVICE IN SUPPORT OF CLUSTERS

The first element of the two-pronged strategy to improve the conduct of cluster policy is to enhance the quality of policy advice that is delivered to regional economic leaders and planners. This requires improving the quality and relevance of the research and analysis from which the policy advice is ultimately derived. The following points highlight the cluster analysts’ challenge:

1. Define a rationale for public policy interventions in support of creating economic clusters. The case for public policy intervention is often not clearly thought through. “Broadly speaking, the arguments for cluster policy, i.e.

interventions by government or other public actors in regard to development of clusters, are not yet fully established. A host of approaches are nevertheless pursued by various policy institutions but motives vary and are often vaguely formulated” (Andersson et al.,2004).

There are several reasons for the absence of well articulated criteria. First, the case for public policy intervention in clusters has only received marginal attention in the literature. Second, more often than not, the decision to intervene has already been made even before the region’s economy

The doubts surrounding cluster policy need not persist. The clouds of uncertain utility and efficacy that bedevil cluster theory and practice can be challenged by putting in place a plan of action to bring sound theory to bear and to establish the credibility of the cluster concept as a useful pillar of regional economic planning.

is subjected to a rigorous analysis aimed at identifying economic clusters and cluster trends. The type of analysis then conducted often does not provide enough insight to inform policy. Third, the eagerness to (appear to) do something and the subsequent rush to intervene, often before a valid and unambiguous case for such an intervention has been made, results in a loss of high-level perspective on policy. The field as a whole would be well served by rediscovering some of the long established economic and policy science lessons and principles often ignored in the cluster literature.

There is also need to further develop and refine existing principles and rationales for public policy intervention. For example, under what circumstances, initial conditions, and applying what tests



Source: QSTP Website (www.qstp.org.qa)

The Qatar Science and Technology Park at Doha's New Education City.

may market-failure-based, competitiveness-based, and equity-based interventions be justified? What policy instruments (or interventions) make more (or less) sense within the context of each of the above-mentioned rationales for intervention? How should the rationale for intervention or the choice of instrument be affected by the life-cycle stage of the cluster, its make-up, and internal dynamics? Addressing these issues would require extensive theory building and validation through systematic analysis of successful and unsuccessful clusters of various circumstances and forms.

2. Improve the quality of linkage between cluster analysis and assessment and the subsequent policy prescriptions. More often than not, the policy advice rendered in support of economic clusters is based more on stereotypes about what clusters are (and ought to be) than the specifics of a particular cluster in question. This advice often takes a kitchen sink approach that calls for undertaking a laundry list of policy actions rather than being data-driven and strategic in choosing the right kinds of policy interventions. This approach is not only arbitrary but also goes against the well-established wisdom that all clusters are unique in their histories and make up and therefore require carefully designed interventions rather than a one-size-fits-all approach. Paying inadequate attention to the findings of the cluster analysis or doing a substandard job of analyzing the cluster(s) itself is one of the leading factors causing a disconnect between analysis and prescription.

3. As a corollary, there is need to improve the practical relevance and value of methodologies employed in cluster analysis and assessment. The art and science of cluster analysis continues to evolve with new methodologies being proposed and others refined. There is a need to consolidate some of this learning by critically evaluating and comparing the various methodologies in use and being proposed. Studying the various properties (e.g., informational value, analytical and predictive accuracy, and practical relevance) of a selected set of more commonly used clus-

ter methods (such as shift-share analysis, location quotients, and qualitative analysis) in a comparative setting could bring substantial benefits.

Several issues are worth a careful examination:

- Which of the cluster methodologies seem to provide better understanding and prescriptions and under what circumstance (e.g., type of clusters, life-cycle stage of cluster);
- How do the policy prescriptions derived from application of cluster analysis differ across different types of methodologies used;
- How large are these differences, what sort of errors and biases are introduced into the analysis, and how might the analyst safeguard against such errors;
- What sort of policy prescriptions may legitimately be derived from each of the various types of cluster methodologies; and
- How much time, effort, and money should be invested in analysis vs. strategic planning and implementation in framing a cluster-led development agenda.

Developing a better insight about the use (and abuse) of the various cluster methodologies is critical to deploying these appropriately.

4. While we desire to derive policy prescriptions from analysis of the specific cluster in question, there is a need to ensure that the resultant policy advice is also adequately grounded in the empirical evidence in general. There is often a significant gap between what is popular, and hence often prescribed, and what can be supported with well-established empirical evidence. Several examples help support this thesis.

One example is the often emphasized importance of institutions for collaboration (IFCs) for cluster formation. Yet, there is little solid empirical evidence to support that such interventions actually have an impact on cluster formation, whether independently or in addition to other interventions. In fact, some observers have even questioned the underlying phe-

nomenon that forms the basis for such advice and have presented alternative theories that may lead to considerably different policy prescriptions. Also, we know from the empirical literature that different types of industrial clusters may be subject to different dynamics and hence policy prescriptions (e.g., those promoting specialization or diversity of industrial activity) depending upon factors such as stage of cluster lifecycle and type of firms in the cluster. These considerations, however, rarely find expression in the discussions on cluster policy.

5. Finally, there is clear need to seek and develop evidence in support of cluster interventions often prescribed in the literature. The literature on economic clusters is unequivocal in its concern for the lack of conclusive evidence on many specific policy instruments as well as cluster development policy in general. These include, among others, venture capital development programs; business and technology incubators; science, technology, and research parks; workforce development initiatives; business networking programs; university-industry and inter- or intra-industry collaboration programs; special technology funding programs; and special processing zones. Many of these programs derive their legitimacy from a popular conception of their usefulness or prevalence rather than concrete empirical evidence of their efficacy. With inadequate attention paid to systematic and methodologically rigorous evaluations of cluster policy interventions, it is also impossible to fine-tune these policy instruments to respond to the particular context and circumstances of a targeted cluster.

For example, knowing that science, technology, and research parks or public sector venture capital funds tend to do better in one set of circumstances than others is a valuable piece of information for those considering policy recommendations. This kind of information, however, cannot become available unless the policy instrument is studied and its efficacy determined under a variety of contexts. A systematic effort to develop such evidence is likely to be valuable to the conduct of cluster policy in the future.

THE PRACTITIONERS' CHALLENGE: IMPROVING THE QUALITY OF IMPLEMENTATION OF CLUSTER POLICY

While the above steps are critical for improving the quality of cluster policy advice that reaches a cluster practitioner, there would always be gaps in this advice that may be filled only through more relevant research and the passage of time. Due consideration must be paid to factors that will improve the quality of implementation of whatever advice is currently available.

6. Careful attention to the choice of an implementation plan can be both a critical test of one's understanding of the cluster and an important factor in successful implementation. Should the cluster policy be implemented in a top-down or a bottom-up manner? Should the cluster policy implementation be extensive or intensive? Should implementation be well-

integrated with a region's economic policy or be a localized add-on? There are several possibilities for implementing a cluster initiative and the final choice not only depends on objectives and goals of the planners but also the type and maturity of the cluster and the political climate of the region. The key to success is not wholesale adoption of any generic implementation scenario but careful and thoughtful deliberation on what cluster policy implementation might entail in the unique circumstances of a particular cluster and how it might unfold over time. Too often cluster studies and policy documents fail to consider adequately this important aspect of the overall cluster policy.

Choice of an appropriate implementation scenario would require paying careful attention to a host of different factors:

- The make-up and dynamics of the cluster,
- The assessment of its likely evolution and the time-frame associated with it,
- A sense of the external (competitive) environment that might necessitate early action or afford a wait-and-see approach,
- The relationship between public and private actors within the region,
- The private sector's notion and expectations of what might constitute legitimate reasons for public policy intervention,
- A deep understanding of the overall economic and social policy framework in the region and the policy-making process itself, and
- A clear idea of the place of cluster policy within the overall policy environment

These are complex factors and each must shape the manner in which cluster policy is implemented. A careful consideration of these (and other) factors must determine the optimal implementation scenario that has the highest chance of delivering a successful cluster.

7. Institutional aspects of cluster policy implementation may be of critical importance to our ability to deliver on its promise. Several cluster studies and policy documents we have surveyed confirm this point. More often than not, cluster policy falls short of delving into the issues and challenges associated with the actual implementation of the policy. The most important of these issues must deal with the institutional capacity to implement a set of policy objectives in support of clusters. Many cluster studies we have reviewed present little discussion on how, from an institutional standpoint, the cluster policies might actually be implemented.

Prior to selecting an appropriate institutional form to maximize the chances of success, several issues must be addressed:

- Does the public sector organization championing the case for a cluster strategy or charged with creating clusters have the analytic and implementation capacity to undertake cluster development on its own;

- What kind of institutional arrangement does the choice of the implementation scenario dictate for the subsequent implementation of the cluster policy;
- What skills (e.g., domain expertise, analytic and implementation capability, networks, ability to form consensus, or the ability to enforce policy) does the potential implementer require;
- What kinds of alternate institutional arrangements (e.g., prime/sub, public-private partnership, joint venture, and so forth) could be best suited to the implementation envisioned; and
- How to avoid the various kinds of conflicts of interest that might arise from particular choices of institutional forms etc.

Careful attention to these considerations would ensure that the cluster initiative is provided with the institutional capacity needed to implement the policy.

8. Inadequately resourced cluster initiatives do serious injustice to the aspirations of a specific cluster/region's champions and harm to the broader practice of cluster policy. Under-funded and inadequately resourced cluster initiatives are more com-

While clusters may be championed by specific individuals or triggered by an interested public sector entity, they must be implemented by multiple actors, not the least important being the firms within the cluster. This bottom-up implementation necessitates a broad based ownership early in the life of a proposed cluster.

mon than is generally perceived. In fact, the entire issue of what it must take to develop a (set of) cluster(s) is conspicuous by its absence from the cluster debate. This is because cluster initiatives have often been used as a convenient and (currently) fashionable political slogan without much actual financial commitment behind them. Further, cluster initiatives have often been funded through existing policy instruments and/or budgets of state and local economic development agencies. It is difficult to distinguish the cluster component of these agencies' development budgets from other programs aimed at broader economic development efforts. In addition, the cost of implementing cluster strategies – an important operational issue as it is – has not attracted sufficient attention from researchers. Finally, the implementers – consulting companies, generally – also have a vested interest in non-disclosure of such proprietary financial information with the result that cluster initiatives often grossly underestimate the amount of financial resources it might take to implement a cluster policy (or strategy).

The optimal level of resources required to execute a cluster strategy successfully might vary depending

upon the circumstances of a particular cluster, the choice of implementation scenario, and institutional form. The literature on the subject provides only rough pointers, at best. The wide range of the few estimates that can be gleaned from the literature vary from a billion dollars (for Ohio's Third Frontier Program) to hundreds of millions of dollars (for the Canadian Cluster Initiative) to a few million dollars (for Basque Country, Spain). Inadequately resourced initiatives could result in seriously diminished capacity to deliver and hence dashed expectations and loss of a potentially lucrative strategic opportunity to enhance the competitiveness of regions.

9. Implementation is a process-intensive exercise that requires developing a cluster identity, coalition-building to support a clear vision, and action based on collaboration. While clusters may be championed by specific individuals or triggered by an interested public sector entity, they must be implemented by multiple actors, not the least important being the firms within the cluster. This bottom-up implementation necessitates a broad based ownership early in the life of a proposed cluster. The process of developing a cluster vision, a strategy, and an action plan provides the first and most important opportunity not only to benefit from the ideas and perspectives of a large number of actors but also get the necessary buy-in to the strategy itself. There is a growing realization, if not a clear consensus, in the practitioner community that cluster policy represents a definite shift in regional economic development planning away from top-down centralized planning and implementation to a more bottom-up, localized, and process-intensive one. Paying inadequate attention to the process element of a cluster policy (or strategy) is a fundamental mistake unfortunately all too often committed by regional government and business leaders.

The pendulum is beginning to swing in the right direction with the growing realization of the importance of process (Rosenfeld, 2001). Cluster development, in practice, implies an intensive process of community or identity-building. This forges new mental maps of a region's industrial structure within the region and outside it engendering a sense of ownership among members of the clusters and encouraging new patterns and characters of interaction among their constituents (Taylor and Raines, 2001). Waits (2000), for example, represents this growing consensus as it highlights the process-intensive character of the cluster strategy-making and implementation process in Arizona which involved sustained community interactions through nine industry advisory groups, six foundation working groups, 18 regional town halls, six public forums, and a statewide town hall meeting. The result of such extensive deliberations is, quite predictably, a clearer common vision of the region's existing and emerging clusters and com-

mitment to the strategy for enhancing their competitiveness. Cluster initiatives that do not fully incorporate and internalize this process dimension and instead cut corners in investing in the process and process-based legitimacy are less likely to succeed than those that do not.

10. Implementation approaches must focus on continuously measuring progress, adaptively fine-tuning policy, and actively managing expectations of various stakeholders. Given the considerable uncertainty and ambiguity in picking the right set of cluster policy interventions, especially at the very launch of a cluster initiative, flexibility and adaptability can be important considerations for cluster planners and regional economic and political leaders. Adaptability, however, only makes sense when appropriate measures are taken to ensure that the quality of information about the cluster and the effect of policy interventions on cluster outcomes would gradually improve over time.

Implementation and evaluation are opposite sides of the same coin with implementation providing the experience that evaluation interrogates and evaluation providing the intelligence to make sense of what is happening (Pressman and Wildavsky, 1973). Judicious use of information provided by extensive and well-developed evaluation processes that continually feed back into the implementation effort can lend support to gradually improving policy prescription and better cluster outcomes.

Performance measurement of on-going cluster initiatives has, however, not moved beyond the use of a few summary measures to justify ongoing investment. Post-implementation evaluation is even more uncommon. Only recently has there been some effort to develop evaluative frameworks for analyzing complex cluster policy interventions (e.g., Solvell et al., 2003; Diez, 2001; Osama, 2006). These preliminary frameworks must evolve and mature considerably and be validated for usefulness before they could provide the kind of information required to support an adaptive cluster policy paradigm. For example, Pickernell et al. (2005) highlight the fact that in order to better understand the clusters, there is a need not only to examine them from a structural perspective, but also examine, in more detail, the processes at work within the clusters. Achieving this kind of resolution ability cannot be farther from the reality of existing practice. It is, however, critical to the vitality and future health of the enterprise.

Somewhat related but also distinct from the above is the need to manage expectations prior to and during the implementation of the cluster initiative. Developing

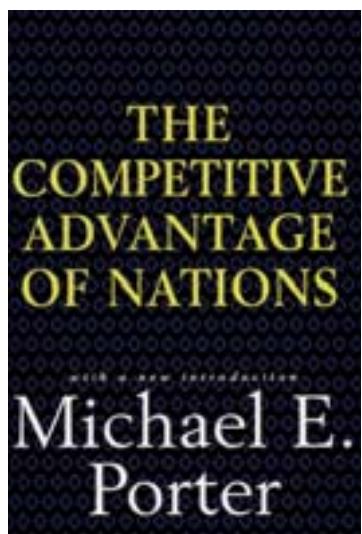
successful economic clusters requires a series of interventions at multiple levels in the socioeconomic and political systems of a region or a country for sustained periods of time. Clusters can take anywhere from one to three decades before they could achieve the aspirations of their champions. Link (1995, 2002), for example, found that the genesis of the Research Triangle cluster in North Carolina was predicated on 70 years of patient local government intervention.

When dealing with disparate stakeholders – many having time horizons considerably shorter than when the cluster could reasonably provide full return on their investment in time and resources – it is important that the right set of expectations be developed and communicated at critical instances during the life of the cluster initiative. The failure to do so could result in dashed expectations, impatience with results, and a premature perception of failure. Any of these outcomes can result in the loss of political or business support and legitimacy and can ultimately lead to the demise of the initiative itself.

These last five points, while only a preliminary attempt, define a practitioners' agenda that focuses on key features likely to differentiate the more successful cluster policy interventions and initiatives from the less successful ones. They, along with the first five points, also have significant implications for the cluster theorist and researcher. Implementation is one of most neglected aspects of cluster theory and is only now begin-

ning to receive some attention from the research and policy communities. This is broadly in line with the trends in policy research and design, more generally, where systematic study of implementation remains an area much less professionalized than either analysis or evaluation (Pressman and Wildavsky, 1973).

It is indeed our expectation that the trend towards more systematic study of implementation will grow stronger with the passage of time. Implementation may well become the centerpiece of a new and more pragmatic research agenda on economic clusters. Dramatically improving our ability to navigate the complex and confusing terrain of cluster policies and delivering on the promise of policy-supported, if not policy-induced, economic clusters would require nothing short of a theory of cluster policy implementation. This preliminary agenda merely identifies the broad outline and scope of the intellectual challenge that we face in making the concept of economic clusters meaningful, relevant, and actionable to the regional economic development community. Systematic and methodologically sound research on implementation of cluster policies is clearly a work-in-progress. 



Porter's book ushered a new era of cluster strategies.

REFERENCES

Andersson, Thomas, Serger, Sylvia S., Sorvik, Jens, and Hansson, Emily W., 2004, The Cluster Policies Whitebook, International Organization for Knowledge Economy and Enterprise Development (IKED), Sweden.

Diez, M. A., 2001, The Evaluation of Regional Innovation and Cluster Policies: Towards a Participatory Approach, In European Planning Studies, v.9, n.7, pp. 907-923

Link, A. N., 1995, A Generosity of Spirit: The Early History of the Research Triangle Park, Raleigh-Durham: Research Triangle Foundation of North Carolina

Link, A. N., 2002, From Seed to Harvest: The History of the Growth of Research Triangle Park, Chapel-Hill, University of North Carolina Press

Martin, Ron, Sunley, Peter, 2002, "Deconstructing Clusters: Chaotic Concept or Policy Panacea", In Journal of Economic Geography, v.3, n.1

Meyer-Stamer, Jorg, 2003, Why is Local Economic Development so Difficult, and What Can We Do to Make it More Effective?, Working Paper # 4, Mesopartner, Germany.

Osama, Athar, 2006, Use the Balanced Scorecard to Measure Your Economic Development Strategy, White Paper, ANGLE Technology Group, Charlottesville, VA

Osama, Athar, and Popper, Steven W., forthcoming, Linking Cluster Theory, Empirics, and Practice: Towards a New Agenda for Cluster Theorists and Practitioners, The RAND Corporation, Santa Monica: CA

Osama, Athar, and Popper, Steven W., forthcoming, What Do We Know about Economic Clusters: A Critical Review of Theory, Evidence, and Practice, The RAND Corporation, Santa Monica: CA

Porter, Michael E., 1990, Competitive Advantage of Nations, Free Press

Porter, Michael E., 2000, "Location, Competition, and Economic Development: Local Clusters in a Global Economy", In Economic Development Quarterly, v.14, n.1, pp. 15-34

Pressman, Jeffrey L., Wildavsky, Aaron, 1973, Implementation: How Great Expectations in Washington Are Dashed in Oakland; Or, Why It's Amazing that Federal Programs Work at All, This Being the Saga of the Economic Development Administration as Told by Two Sympathetic Observers Who Seek to Build Morals on a Foundation of Ruined Hopes, University of California Press, Berkeley: California.

Rosenfeld, Stuart A., 2001, Backing into Clusters: Retrofitting Public Policies, presented at Integration Pressures: Lessons from Around the World Seminar at John F. Kennedy School of Government, Regional Technology Strategies Inc.

Solvell, Orjan, Lindquist, Goran, and Ketels, Christian, 2003, The Cluster Initiatives Greenbook, Ivory Tower A.B., Sweden

Taylor, Sandra, and Raines, Philip, 2001, Learning to Let Go: The Role of the Public Sector in Cluster Building in the Basque Country and Scotland, Regional and Industrial Policy Research Paper # 48, European Policies Research Center, University of Strathclyde, Glasgow, United Kingdom.

Waits, Mary J., 2000, "The Added Value of the Industry Cluster Approach to Economic Analysis, Strategy Development, and Service Delivery", In Economic Development Quarterly, v. 14, n.1, pp. 35-50

Van der Linde, Claas, 2004, Finding from Cluster Meta-Study, Institute of Strategy and Competitiveness, Harvard Business School, Cambridge: MA

For an extended bibliography of cluster studies and academic/practitioner articles, please visit author's blog at: <http://techno-economics.blogspot.com>

LOOKING FOR THE BEST AND MOST EFFECTIVE FUNDRAISING COUNSEL?

you NEED THE STELLAR APPROACH

BUT DON'T JUST TAKE OUT WORD FOR IT...

"Dear STELLAR Team,

Your team approach to tackling the challenges of fundraising in today's crowded and competitive field is generating winning results for our organization. STELLAR's senior campaign counsel and advice has been spot on, and your field staff top-flight.

Accessing your expertise has helped to revitalize and transform our thirty-five year old economic development partnership into one of the best in the West. The pre-campaign due diligence work delivered before moving into the campaign phase has proven invaluable in giving us insights critical to successfully making the "right ask" at the "right time" with the "right people."

Keep up the good work. And thanks again for contributing exceptional value to enterpriseSeattle as we deliver solid results to our investor partners and grow from good to great!"

Regards,

John Powers
President and CEO
enterpriseSeattle



STELLAR has expertise with:

- Large metro areas
- Multi-county regional efforts
- Public-private partnerships
- Population centers as small as 15,000
- Joint organization campaigns
- Establishing and capitalizing new organization
- Building and facility campaigns

Our team has helped hundreds of organizations raise the financial resources they need to better their communities. Call today and we will discuss how STELLAR can help you raise big money too!



888/897-4667
info@stellarfundraising.com
www.stellarfundraising.com

BRAC-onomic

DEVELOPMENT

By Tom Rumora

CONTEXT

the Congressionally devised "BRAC" (base realignment and closure) process, which began in 1988, has affected hundreds of military installations across the country, and will affect hundreds more in the coming decades. Military agencies admit that real estate management is not their core competency.

Economic development professionals who become proficient in "art-of-the-possible" problem solving can help optimize the consequence of BRAC in conjunction with elected officials, city / county managers, utility companies, realtors, investor / developers, taxpayers, neighboring communities, business leaders, and expert advisors. The blending of traditional economic development tools for retention, expansion, and recruitment of major employers as well as small businesses with the unique and complex nature of military installation expansion / disposal processes requires specialized training, diligent attention to detail, awareness of prior and emerging case studies, and broad collaboration among multiple stakeholders.

COSTS

Military installations require local public investment and services. Whether the community is a net gainer or loser of jobs and military missions, the "cost" of expanding, preserving, or redeveloping a military installation – and its positive economic and patriotic impacts – can be an ongoing challenge during its active stages, mission changes, and even beyond its closure.

"Cost" can be defined in terms of infrastructure elements such as roads, water, sanitary sewer, nat-



The first-of-its-kind conveyance of an active military installation to a local development entity was at Brooks City-Base in San Antonio, Texas. The Air Force became the anchor tenant, while all real estate, utilities, roads, housing, and operating responsibility were transferred to the community.

ural gas, electricity, storm drainage, and security systems, as well as support functions such as daycare, housing, police / fire / EMS, schools, public transportation, medical services, waste disposal, recreation programs, and social services. These "costs" are part of the price paid for the jobs and economic multiplier effect created by the military presence. "Cost" can also be defined to include the time and other resources which must be diverted toward integration and management of these issues into the full spectrum of public / private activities that comprise the fabric of a community's economy and quality of life – especially during periods of significant growth or decline in military missions.

In some cases, a military installation is one of the largest economic generators in the community or region. Military growth or cuts can dramatically alter public organizational structures, decision

Tom Rumora has been involved in acquiring, operating, and developing military installations at three national award-winning locations in Ohio, Michigan, and Texas over the past 15 years. He recently left the public sector to help found a small consulting / development firm. He can be reached at trumora@reactusa.com.

PURSUING THE "ART-OF-THE-POSSIBLE"

The size, location, purpose, and operation of our nation's military ports, airfields, schools, field training areas, research centers, storage / staging / mobilization facilities, and other assets – including personnel and related real estate – are constantly changing to meet the demands of world and domestic events, budgets, and technology. These ongoing changes impact the economy of virtually every community in the country, in one way or another. This will be particularly true in the next few years, when hundreds of changes occur simultaneously. Each community must develop its own strategy, tools, and trained professionals to anticipate and react to these changes.

making processes, priorities, master plans and regulatory controls, capital project budgets, schools, traffic, allocation of time and energy, and the attitude / image of the area. City and county managers, governors, and elected officials at every level can become directly involved in a complex multi-level process that spans many decades.

MULTI JURISDICTIONS

Planning and executing BRAC changes can be complicated by numerous factors: funding gaps, weather, location, inadequate infrastructure, deferred maintenance, market forces, legal constraints, environmental issues, historic preservation, multiple competing interests, political rivalries, short-sighted actions or inactions, inexperienced leadership, plus the potential impact of future BRAC decisions.

In communities where military bases cross jurisdictional boundaries, and in communities where bond levies, tax increases, capital improvement plans, zoning, raises for teachers and police/fire employees, and jointly funded economic development programs are not commonly supported, collaborative and efficient base closure or realignment initiatives may not be feasible. In these cases, communities should consider opting for disposal by military agencies to private developers who will risk their own resources and run the gauntlet of public approval while trying to reach the highest and best use for the property.

In communities where there is a proud tradition of genuine collaboration, respectful inclusiveness, shared leadership, joint funding, and civilized discourse, multi-jurisdictional installations can accomplish great success. Constant communication, training, recognition, and empowerment are key to ensuring teamwork, trust, and performance.

DEFINING SUCCESS

Cities, counties, states, private companies, non-profits, and military organizations share the common challenge of defining what they consider to be "success". Definitions can be genuinely elusive among even the most collaborative and skillful participants.

Commonly named elements of success in BRAC impacted communities (as well as in cities, counties, and states) include jobs, economic stability, revenue, compatible uses, target industries, environmental excellence, safety, appearance, speed, risk avoidance, quality of life, and pride. All of these are noble and worthy elements of a healthy and positive approach to "visioning," and setting goals, objectives, and decision making criteria. Anything or anyone at odds with these values and prior-

Military leaders are instinctively proficient at strategy, tactics, and confidentiality. Civic leaders who expect win-win negotiations, patient inclusiveness, open public deliberation, full disclosure, and attention to job creation, land use studies, noise ordinances, long-term revenue generation, or real estate management principles may be disappointed by military processes.

Base realignment or closure can be the single biggest challenge in the lives of many economic development professionals. The complexities and sophistication of this emerging career field are already spawning discussions about creation of new college degree programs which would combine elements of economic development, political science, engineering, law, city planning, environmental safety, historic preservation, data and communication systems, public administration, property and facility maintenance, housing, transportation / logistics, public relations, construction, marketing, finance, and business management.

The author was involved in an experimental college-level class in 1998, and is currently in discussions with other institutions considering BRAC-related courses or degree programs.

ties may cause delays, diminished efficiency, and dysfunctional paralysis.

Practically, however, it is unrealistic to rank each of these elements as equally important. Attempts to do so will frustrate implementers who have to allocate time and resources to schedules and complex issues.

One measure of success can be the day-to-day attitude of media, civic leaders, and average citizens. If the answer to questions like "How are things going at the base?" includes any of the following comments, then there must be a general interpretation of progress and success:

- We have great people in charge, and we trust them.
- BRAC is complicated, but progress has been steady.
- We have faith in our enthusiastic team to do what is right.
- We are focused on turning challenges into opportunities.
- We aren't wasting time and resources on negativism.
- Our community loves the military, no matter what happens to our base.

COLOSSAL CULTURE CLASH

Note that a military organization's definition of success is much different than that of a community. This is one of the fundamental paradoxes of BRAC – the colossal culture clash. It is simply not the goal of the military organization to help accomplish the community's definition of success, or the community's goal to help accomplish the military organization's definition of success.

Military organizations strive to avoid predicaments, leverage advantages, and overwhelm or outmaneuver foes. Thankfully, our nation is safe and strong because military members excel at their jobs, and excel at their definition of success.

Military leaders are instinctively proficient at strategy, tactics, and confidentiality. Civic leaders who expect win-win negotiations, patient inclusiveness, open public

deliberation, full disclosure, and attention to job creation, land use studies, noise ordinances, long-term revenue generation, or real estate management principles may be disappointed by military processes.

In some ways, military real estate might simply be described as an expendable short-term resource, like fuel and bullets, rather than a long-term balance sheet asset used to leverage investment and return. This analogy helps to explain why hundreds of bases have become inefficient, outdated, and unneeded, and why the condition of active and disposed property does not meet commercial standards. It also explains why a new platform must be found for military installations – one which avoids the shortcomings of the past and offers dramatically enhanced flexibility, efficiency, security, durability, and quality of life.

Perhaps a topic for a future article, or a national focus group, might be “The military base of the future”. It would be valuable to develop some generic characteristics of such an ideal facility, which could then be compared to today’s active installations and thereby guide decision makers regarding infrastructure improvements, encroachment, mission relocations, privatization, and innovative methods by which a community-military partnership might develop and operate efficient facilities and services for national defense and homeland security purposes.

Individual military installations could be impacted by multiple BRAC actions over many decades. This happens as a complex balance of military force structure, recruiting, retention, contracting, weapons systems, training, housing, environmental issues, construction programs, budgets, and encroachment problems create the need for more or less or different kinds of operational assets and services.

A community might avoid BRAC for decades, then enjoy substantial growth, then suffer total closure. An installation that “closed” years ago might be proposed as a potential site for a relocated mission with thousands of jobs, as occurred in Jacksonville, FL, where months of legal wrangling have not yet concluded regarding potential relocation of flying missions from Oceana Naval Air Station in Virginia to the former Cecil Field – a plan opposed by many community leaders. A community could lose thousands of military related jobs due to concerns about security/safety in leased space, as is occurring in some Washington DC suburbs.

A rural community initially identified as a “closure” site might miraculously find a whole new mission, as happened at Cannon Air Force Base in Curry County, NM, where Air Force Special Operations are now headed from Florida and other locations, thus avoiding sudden and severe economic impact on the cities of Portales and Clovis, and also the County of Roosevelt. Missions designated to relocate to other installations might become stranded at a “closed” base for a decade or more, awaiting funding for construction / renovation of new facilities at the “gaining” location.

WHO PAYS?

Base realignment and closure (BRAC) actions can create a tsunami of short-term and long-term impacts on economic development plans, community priorities, and budgets for roads, utilities, schools, public safety, parks, labor negotiations, environmental clean-up, and the structure and process of decision making.

Three universally crucial economic development questions will often be the focus of public debate, as they are for most typical recruitment, retention, incentive, and marketing efforts.

- Who creates the plans and makes the decisions?
- Who takes the risks and pays for the costs?
- Who gets any proceeds that are generated?

Sensitivities over control, risk, and money increase in times of stress, even if the stress is brought on by the apparent opportunity of massive influx of missions and population, as in the case of BRAC 2005 “gainers” such as Manhattan, Kansas; El Paso, Texas; Lawton, Oklahoma; and even more so if the community stands to lose thousands of jobs, as in the case of Brunswick, Maine; Monmouth County, New Jersey; or Forest Park, Georgia.

PRIORITIES

BRAC simply doesn’t fit into the normal day-to-day, year-to-year planning/budgeting process for cities, counties, and states. It is difficult to insert unexpected BRAC impacts into prioritized workplans and funding patterns that have evolved over many years. There is no easy way to quickly re-prioritize and divert funding to or from stormwater projects, fire stations, highway overpasses, airports, sewage treatment plants, or other major projects in order to accommodate BRAC impacts.

But military bases are often one of the largest employers in the community and act as significant catalysts for education, housing, infrastructure, and business recruitment. They require massive attention and resources. Converting the “challenges” of BRAC into “opportunities” will keep economic development professionals busy for decades.

Some of the key issues for integration into planning and implementation efforts are briefly explained in the remainder of this article.

UTILITIES

Electricity, natural gas, storm drainage, telecommunications, central heating/cooling plants, sanitary sewers, and water systems on military installations differ in many ways from commercial or municipal systems. There are often no easements, rights-of-way, individual meters, accurate drawings, loop connections, pressure tests, capacity studies, leak detection methods, or overall planning. Systems frequently run diagonally across parcels, under buildings, and through the woods. This makes recruitment, retention, or expansion of tenants or developers difficult at a military installation.



At Rickenbacker Air Industrial Park, a combination of County subsidies, lease and sale revenue, a joint cargo/military airport, a foreign trade zone, and other creative mechanisms resulted in a "base-of-the-year" award in 1994.

ORGANIZATIONAL IMPACTS

BRAC often results in changes to the organizational structure of economic development agencies. Chambers of commerce, cities, counties, states, school districts, regional area councils of government (ACOG's) and clearinghouses, utilities, growth foundations, politically powerful "committees-of-fifty," and others accustomed to leading or collaborating on major recruitment/retention / expansion issues may have to rearrange their roles and responsibilities when a BRAC impact occurs.

BRAC FUNDING

As an example of the impact of war and emergency relief costs, the Air Force is \$1.8 billion short on funding to accomplish its BRAC objectives under the law. While senior officials pledge compliance with the law, they also admit that shortfalls like this create a massive problem, and an opportunity for innovative exchanges and other creative collaboration.

Economic development agencies may be wise to approach military departments with suggestions on accelerating BRAC actions, avoiding costs, sharing space, and enhancing missions. One idea to explore involves privatizing some of the operational aspects of base activities.

Fire stations are a good example of the kind of creative thinking that is needed. Most cities and counties already have fire departments within required distances of the inhabited portions of military installations which could cover the base if an agreement could be reached to do so. This action was taken at Brooks City-Base in San Antonio, Texas, and saved \$2 million in military operating expenses (largely salaries) without any significant cost to the community.

Exploring this approach further can disclose other methods of cutting military costs and may lead to even larger ideas for mutual benefit.

DEFERRED MAINTENANCE

Military facilities are often not maintained to commercial standards. At Brooks City-Base in San Antonio, Texas, a survey of 50 out of 200 total facilities (conducted by ISES Corp. of Atlanta) disclosed approximately



\$90 million in deferred maintenance which if not scheduled and budgeted for attention over the next few years could jeopardize the useful life of these assets. This could potentially result in premature expenses for demolition as well as the loss of rental revenue and functional space for tenants that are vital to the redevelopment agency.

This predicament is common to many public entities such as schools, libraries, parks, cities, counties, and states across the country. These entities will eventually reach the point of no return when the maintenance and renovation costs for aging structures exceed their value, at which time some form of tax or innovative public-private partnership will be needed for replacement facilities. Failing to find some creative financing solution, the next logical option may be consolidation with other cities, school districts, etc. This is not normally a desirable option.

DEAL MAKING HANDBOOK

In addition to the typical contents of a generic economic development "toolkit" of incentives, grants, etc., BRAC involves its own laws, policies, acronyms, and challenging complexities.

Economic development professionals who have not compiled a "dealbook" of BRAC-related techniques and mechanisms could benefit from doing so at the earliest convenience, engaging outside expertise as necessary.

Knowing about innovative mechanisms such as Partnership Intermediary Agreements (PIAs), Cooperative Research And Development Agreements (CRADAs), Joint Operating Agreements (JOAs), Facility Use Agreements (FUAs), Enhanced Use Leases (EULs), caretaker agreements, Military Construction (MilCon) exchanges, and

the broad “city-base” concept can be the difference between rapid economic adjustment to BRAC impacts or a painful struggle.

Communities’ leaders generally know how to recruit, retain, and expand employers, but when it comes to military installations, things are somewhat different. First of all, the Army, Navy, and Air Force are not typical prospects. They don’t even follow the same policies and practices, and wield enormous power through a network of contractors and retirees who have almost immediate and unlimited access (through so-called “committees-of-fifty”) to federal, state, and local decision makers.

Second, the BRAC process can be diabolically complex, beginning with the Surplus Personal Property Act of 1949 and then adding over 50 years of other related (and sometimes conflicting) laws, guidelines, and precedents.

Third, it is important to note that Congress rarely gets involved in traditional local economic development. In BRAC, Congress creates the laws, approves the list, empowers the Services to execute the plan, and then gets barraged by both sides when negotiations don’t go smoothly.

The following examples depict the spectrum of innovation that may be helpful to evaluate as part of an overall strategic economic development plan at each military base community.

- **A Partnership Intermediary Agreement (PIA)** can facilitate transfer of funds and information among military/civilian/governmental/academic agencies. This technique was used at Brooks City-Base to enable Air Force scientists to participate with teams from three universities in a study of disease characteristics in South Texas.
- **A Cooperative Research And Development Agreement (CRADA)** facilitates the exchange of research-related activities and materials. This mechanism has been used at the Indiana Army Ammunition Plant, Brooks City-Base, and many other installations where military missions have received services, shared expertise, scientific data, access to technology, or other benefits by collaborating with academic or private entities.
- **A Joint Operating Agreement (JOA)** approximates what private entities would call a “joint venture.” This device was used at Brooks City-Base in place of a standard commercial lease.
- **Facility Use Agreements (FUA)** enable non-military entities to use military space and equipment, and in some cases personnel. This mechanism has been used by the Army to attract commercial contractors to ammunition plants.
- **Enhanced Use Leases (EUL)** enable private developers and tenants to use military facilities. This mechanism was piloted by the Veterans Administration over 15 years ago, and is just gaining traction in the Dept. of Defense in the past three to four years.

Communities’ leaders generally know how to recruit, retain, and expand employers, but when it comes to military installations, things are somewhat different. First of all, the Army, Navy, and Air Force are not typical prospects. They don’t even follow the same policies and practices, and wield enormous power through a network of contractors and retirees who have almost immediate and unlimited access (through so-called “committees-of-fifty”) to federal, state, and local decision makers.

- **Caretaker agreements** allow military agencies to reimburse local communities for property management activities during the transition of military missions. K.I.Sawyer AFB in Michigan and Loring AFB in Maine received five years of caretaker funding at \$2-\$3 million per year due in part to the severity of winter weather impacts and remote locations.
- **Military Construction Program (“MilCon”)** exchanges are a new concept whereby public or private entities fund and build facilities and infrastructure in exchange for land and buildings which can be used for profitable commercial purposes. An example might be a military daycare center built and operated by a private sector developer inside a base, in exchange for highway frontage property along the edge of the base which is developed for a shopping center. The base gets a much-needed facility without “paying” directly or waiting for Congressional processes.
- **Special “efficient facilities initiative” legislation** enabled Brooks Air Force Base in San Antonio, to be completely “privatized” in one combined action – including utilities, streets, buildings, land, houses, and operating responsibility for an “active” military base. This legislation also allowed each Service Branch to have two more “city-bases,” but none volunteered due to complexity and fear of the unknown. Initially, Air Force officials thought they might “go to jail” for even trying such a sweeping and unprecedented approach, but after a year of Friday afternoon negotiations, the transaction closed in mid-2002, giving the Brooks Development Authority several years head start in preparing for BRAC impacts.

ENVIRONMENTAL

Environmental issues are some of the strongest forces in the base realignment and closure business. They affect timelines for all other actions, as well as reuse of land and structures, public perceptions, and an extensive list of legal and financial matters.

Some of the key environmental concepts with which economic development professionals should be familiar when dealing with BRAC actions include:

- Nature and extent of environmental issues at the base that are related to physical planning, infrastructure, cost, risk, disclosure, and perception of potential impact on tenants/users. Records about testing, accidents, and alleged incidents or conditions are often lacking.
- “Indemnification,” particularly what is called “Section 330” which assures military responsibility for environmental impacts. Note: “responsibility” may not actually ensure adequate funding or timely clean-up to desired standards.
- “Early transfer” is an innovative process by which the military conveys contaminated property and clean-up funding to the local community. Advantages can include speed for the community and potential cost savings for the military. Disadvantages can involve liability, insufficient funding, and potential future surprises. This crucial topic should be well understood by all stakeholders before promoting projects inside or outside the fence.



At K.I. Sawyer Air Force Base, “art-of-the-possible” attitudes resulted in a commercial airport, reuse of 1,600 housing units, several years of “caretaker” funding, multiple grants from the Economic Development Administration, and “base-of-the-year” honors in 1999.

MARKETING

Promoting a BRAC site, or a BRAC-impacted community, involves the same activities as a typical real estate parcel, but in a more detailed scope. Since military installations have typically been “off limits” to the general public, and since many codes and regulations do not apply, it is understandable that tenants, investors, utility companies, and other stakeholders have heightened concerns about environmental issues, military timetables, property ownership issues, insurance, infrastructure capacity, facility condition, etc.

The job of the economic development agency is to disclose pertinent data, dispel fears, and bridge the communication gap between military and civilian entities. A

variety of methods for telling the positive story include how-to-do-business-at-the-base handbooks, site and floorplan drawings, websites, environmental reports, disclosures, utility information, incentives, zoning, surveys, and other information are essential elements in economic development.

Obtaining and converting this information to standard formats should be a priority activity, particularly for closing or downsizing installations that have underutilized property. It should even be a priority activity for active bases where innovative public/private collaboration may involve shared use of facilities with academic, business, scientific, medical, emergency management, law enforcement, public health, recreation, or other entities for mutually supportive purposes.

Promoting a BRAC site, or a BRAC-impacted community, involves the same activities as a typical real estate parcel, but in a more detailed scope. Since military installations have typically been “off limits” to the general public, and since many codes and regulations do not apply, it is understandable that tenants, investors, utility companies, and other stakeholders have heightened concerns about environmental issues, military timetables, property ownership issues, insurance, infrastructure capacity, facility condition, etc.

DECISION MAKING CRITERIA

The quest for jobs, revenue, speed, and pride is a challenging activity that requires strong leadership, clear objectives, constant vigilance, massive resources, and solid criteria for decision making. If political expediency, media attacks, threats by opponents, personal rivalries, or other adversarial forces become the reasons for action or inaction, then the chances for success diminish exponentially. Carefully calculated and documented decision making guidelines, as well as communication processes that emphasize integrity, accuracy, full disclosure, shared risk and rewards, trust, and timely performance will help communities accomplish their BRAC goals.

Favorable leasing concessions for a host of special categories such as entrepreneurs, local start-ups, incubator tenants, non-profits, social service agencies, and large corporations, should be weighed against real-world requirements for sustaining revenue. One way of avoiding “give-aways” is to require that fair market value be paid by and to the public agencies involved.

At Brooks City-Base, both the Air Force and city of San Antonio (Brooks Development Authority wasn’t

formed until later) agreed to hire and accept the work of one appraiser, instead of the traditional adversarial approach where each party gets its own appraisal and then battles for years over discrepancies. By a joint decision to accept the work of one trusted Master Appraisal Institute-certified firm (Dugger Canaday of San Antonio), the process avoided protracted debate and potential lawsuits.

As is true in most economic development deals, decisions to emphasize cheap rent, speed, and unrealistic job creation goals at a BRAC base will almost certainly lead toward financial distress. Note: The term "rent" can be defined as the sum of all expenses including normal and reasonable costs, profit, and reserves. A public entity may decide to waive "profit," but should establish policies and decision making criteria that ensure funding for all actual costs and reserves. This sounds logical, but is considerably elusive in practice, particularly under intense political and media pressure to "do the deal" and worry about paying the bills later!

JOBS

Economic development professionals understand the importance of accurate job projections. One of the classic challenges of BRAC involves promises and expectations about jobs – jobs to be added inside the fence, jobs to be indirectly generated outside the fence, jobs to be lost, jobs to be replaced, and of course the perception of "family sustaining" military related jobs vs "less desirable" service-sector jobs.

Public perceptions and media attention establish high expectations for employment opportunities, starting when the first BRAC lists are prepared. Elected officials often respond by escalating these numbers to even higher levels, without a thorough understanding of the financial and technical issues that must be addressed in order to reach even a fraction of the projections.

The result is a self-inflicted paradox of overzealous promises and underwhelming performance, which then adds stress and urgency to every step thereafter. If the community expects 5,000 new high-paying jobs in a year or two, and all the elected officials say that's what will happen (or don't deny that it will happen), then the stage is set for decades of media reminders that the community "failed" to accomplish its goals.

As is true in all economic development scenarios, it is wise to refrain from exaggerating or making premature promises about job numbers, salaries, benefits, and timing in BRAC situations.

CONSULTANTS AND DEVELOPERS

After more than 15 years of BRAC history, military and community leaders can find many experienced and innovative advisors who can help save time, cut costs, increase efficiency, improve quality of life, reduce risk, overcome obstacles, and capitalize on opportunities. The cost, while not insignificant, can often be easily justified by performance-based compensation formulas.

One creative option is to pay development related advisors in whole or in part with property rather than money. This would encourage actions which raise property value, integrate plans, solve infrastructure challenges, attract further investment, and avoid distractions and delays.

BUSINESS PLAN

One of the most important elements in BRAC planning and execution is a solid business plan that identifies all sources and uses of funds, by quarter for five to six years, or by month for two to three years. If this task proves too difficult to accomplish, decision makers should re-evaluate their roles and resources, and perhaps seek outside partners and advisors. Without the confidence and efficiency that comes from stable structure, measurable goals, defined resources, specific timelines, written decision criteria, and diligent monitoring systems, the chances of succeeding in a major BRAC action are dramatically reduced.

One of the most important elements in BRAC planning and execution is a solid business plan that identifies all sources and uses of funds, by quarter for five to six years, or by month for two to three years. If this task proves too difficult to accomplish, decision makers should re-evaluate their roles and resources, and perhaps seek outside partners and advisors.

helped the County Board of Commissioners to see the effects of changing various assumptions and theories which were displayed instantaneously on a video screen. This enhanced the awareness of the challenges ahead.

By linking cells on a spreadsheet to coordinates on a map, and vice versa, decision makers can perform endless what-if analyses as conditions and forces evolve over many months and years.

In BRAC or in other large scale development projects, sophisticated interactive spreadsheets and a geographic information system are essential for anticipating and reacting to a variety of potential forces, both positive and negative!

HEADLINES

BRAC is one of the most complex, long-term, and intensive experiences a community may face in 50 years. Positive media attention is crucial. Reporters who use sensational, misleading, and unclear wording in headlines and stories to attract more attention, do a great disservice to their communities. While demeaning and accusatory techniques may entertain a variety of chronic skeptics, well-intentioned critics, uninformed gossipers, and recreational obstructionists, they can also damage the credibility, image, and success of BRAC actions.

Business travelers, elected officials, and prospective employers/investors/developers see and hear these stories. The frequency, tone, and cumulative effect of media stories, and particularly headlines, can create a positive force in a community, or an embarrassing cloud of ridicule and self-destructive perceptions. This is especially true of BRAC actions, which unlike a normal economic development deal, garner more frequent and sustained attention due to the high-stakes long-term process.

In some cases it may be appropriate to utilize informal media "background" briefings, coaching, assignment of specific reporters/headline writers, regular editorial board meetings, and other methods of ensuring balanced, unemotional, and proud coverage of the exceedingly demanding process of BRAC.

SUMMARY

Military bases rival almost any other economic development activity for technical complexity, demands on resources, and high-visibility impact on the community over many decades. Whether the community gains or loses jobs as a result, BRAC involves extraordinary challenges and a whole new acronym-filled process.

Communities that combine a sophisticated business plan, a creative art-of-the-possible deal making attitude, intensive networking with peers, careful selection of boards and staffs and consultants, and support from elected officials and the media will be well on the path to efficiency and success. 

BRAC is one of the most complex, long-term, and intensive experiences a community may face in 50 years.

Positive media attention is crucial. Reporters who use sensational, misleading, and unclear wording in headlines and stories to attract more attention, do a great disservice to their communities. While demeaning and accusatory techniques may entertain a variety of chronic skeptics, well-intentioned critics, uninformed gossipers, and recreational obstructionists, they can also damage the credibility, image, and success of BRAC actions.



**Proven Results
Fresh Ideas
Talented People**

Over 500 Communities
Over 100 Multiple Campaign Clients
Over \$1.5 Billion Raised for:

Marketing & Industry Attraction
Business Retention Programs
Workforce Improvement
Government Affairs

Incubators & Small Biz Support
Infrastructure
Regional Partnerships
Tourism & Sports Councils

New Facilities
"Opportunity Funds"
Arts & Cultural Projects
Youth & Education
And Many Others!

3155 Roswell Rd NE, Ste 250 Atlanta, GA 30305 | 800.635.4071 | <http://www.ncdsinc.net>

would like to give special thanks to sponsors of the 2006 Annual Conference in New York City.

With your generous support, IEDC was able to offer more sessions, attract world-renowned speakers, and bring representatives from around the world to create a conference dialogue between economic developers unmatched in the industry. The 2006 Annual Conference described by many as IEDC's most successful conference to date would not have been possible without the contributions of our valued sponsors.

2006 ANNUAL CONFERENCE SPONSORS

CO-SPONSORS



www.nyc.gov/sbs



www.nycedc.com

SIGNATURE SPONSORS



www.citibank.com



www.ShovelReady.com



www.newmarkkf.com



www.nylovesbiz.com



www.nypa.gov



www.verizon.com

CHAIRMAN'S CLUB SPONSORS



www.developmentstrategies.com



www.executivepulse.com



www.ncdsinc.net

DIAMOND SPONSORS



www.mapinfo.com

PLATINUM SPONSORS



www.AngelouEconomics.com



www.esri.com



www.joneslanglasalle.com



www.bankofamerica.com



www.forbes.com



www.chase.com



www.berkeleycollege.edu



www.mesadelsolnm.com and
www.forestcity.net



www.panynj.gov



www.charlotteusa.com



www.greateroklahomacity.com



www.qlbs.com



www.rdgusa.net

GOLD SPONSORS


www.coned.com

www.crowechezek.com

 Climate is everything.
www.keyspanenergy.com

www.tipstrategies.com

SILVER SPONSORS


 310 Global Economic Development Institute
www.310marketing.com

www.icsc.org

www.portfol.com

 Every day is an opportunity to do more.
www.pncbank.com

www.dc-intl.com

www.uedi.org

BRONZE SPONSORS



A & R Global Consulting, LLC


www.gisplanning.com

 Information System
 An Economic Development Service from Applied

www.stellarfundraising.com

www.berc.org

www.hra-inc.com

www.merrimackvalleychamber.com

www.wadley-donovan.com

www.claritas.com

www.ibm.com/bcs/pli

www.remi.com

AWARDS SPONSORS


www.AngelouEconomics.com

www.econres.com

MEDIA SPONSORS


www.BusinessFacilities.com

www.bxjonline.com

www.fdimagazine.com

OTHER PARTNERS


www.hunterinterests.com

www.ococonsulting.com

does rural land-use

PLANNING AND ZONING ENHANCE LOCAL ECONOMIC DEVELOPMENT?

By Joy Wilkins, B. William Riall, Ph.D., and Arthur C. Nelson, Ph.D., FAICP
with Paul Counts and Benjamin Sussman

INTRODUCTION

Community leaders in rural areas without zoning often find it challenging to convince their citizens of the benefits of zoning. Opponents often consider such regulation an unnecessary governmental intrusion on their property rights. Zoning advocates often cite quality-of-life advantages, such as protecting homeowners from unwanted uses next door as well as protecting economic development from opposition by residents.

This article reports research into the economic development benefits of zoning in rural areas. While the research, which included a variety of statistical and qualitative analyses, was completed in 2001, the findings and implications continue to be quite relevant. The statistical analyses involved a descriptive assessment, multi-variate regression, and matched-pair analysis between roughly comparable rural counties with and without zoning. The qualitative assessment includes a focus-group survey of economic development leaders divided evenly between rural counties with and without zoning. The study area was of rural counties in Georgia, which outside of Texas has the largest number of counties (159) in the nation. At the time of this research, nearly three-quarters of these counties were considered "rural" in that they were located outside of the boundaries of metropolitan statistical areas that had been defined by the U.S. Census Bureau.



The city of Madison is one of Georgia's finer examples of quality growth within a rural setting. The city is located in Morgan County, which adopted its first zoning ordinance in 1973.

Is there a need for land-use planning and zoning implementation in rural areas? A review of the experiences of 57 rural communities across Georgia, including 14 that had more than 20 years experience with zoning at the time of this research, confirmed the need. As reported here, a comparison of all rural counties with a zoning policy to all counties without one revealed that zoned counties have the tendency to have greater economic positioning than non-zoned counties. To them, land-use planning and subsequent zoning has a significant and positive impact on changes in employment and assessed property values.

Joy Wilkins is manager of Community Innovation Services at Georgia Tech's Enterprise Innovation Institute in Atlanta, Georgia.

B. William Riall, Ph.D., is a research consultant to Georgia Tech's Enterprise Innovation Institute in Atlanta.

Arthur C. Nelson, Ph.D., FAICP, is co-director of the Metropolitan Institute at Virginia Tech's Alexandria Center.

Paul Counts and Benjamin Sussman were graduate research assistants for the study.

YES, BASED ON A CASE STUDY FROM GEORGIA

To some, land-use planning and implementation through zoning to regulate land-uses in rural areas may appear to be anathema to rural economic development. This view would be shared by those who are concerned that any land-use regulation in weak rural economies could dissuade economic development investment. This article addresses such concerns head-on through statistical analysis combined with focus-group interviews. It is based on the first comprehensive study of its kind to address rural economic development issues related to land-use planning and zoning. The finding is that land-use planning and zoning implementation protects industrial and commercial development from conflicts with residential land uses and thus facilitates rural economic development, rather than impedes it. For rural communities seeking economic development, the implication is that planning and zoning supportive of industrial development may improve economic development prospects relative to its lack.

To officials, economic development benefits are numerous, including, but not limited to (1) business and citizen preference for the kind of land-use predictability zoning uniquely provides, (2) assurance for prospects that their investment will be protected, (3) the ability to guide future development and prevent haphazard, (e.g., patch-work), harmful or unwanted development, and (4) the minimization of potential conflict between industry and residents.

Findings from the investigation reported here suggest that land-use planning and zoning makes a difference in facilitating economic development, and, specifically, that the presence of land-use planning and zoning generally helps a rural community's economy grow. The findings also suggest that zoning appears to improve a rural community's competitive advantage for economic development. The extent to which zoning can make a difference is affected by several considerations including, but not limited to (1) leadership and citizen support and understanding, (2) quality of the zoning code, (3) integration with a well-conceived comprehensive plan, (4) applicability and enforcement, (5) the zoning process itself, and (6) the merits of the existing economic development program.

CONTEXT

Georgia is composed of 159 counties, the most of any state other than Texas. More than 60 percent of the counties had zoning ordinances in place at the time of the study. Although every jurisdiction in Georgia must have a land-use plan in order to qualify for state grants and most do, 63 mostly rural counties had not implemented the plans through zoning. Surveys indicated the following general concerns about zoning in those counties:

- An unnecessary governmental interference with private property,
- Too restrictive on what property owners can do,
- Compliance burdens (e.g., cost, effort),
- Complexity of the code (e.g., difficult to understand),
- Outdated, inflexible, or inappropriate zoning that is incapable of addressing changing development needs (e.g., unsuitable for mixed-use development),
- “Loopholes” in zoning code,
- Residential sprawl permitted,
- Automobile dependence (e.g., designation of commercial zoning),
- Lot size requirements and impact on land prices,
- Restrictions resulting in lack of affordable housing,
- Citizens lack understanding about zoning and need education,
- Citizen complaints (e.g., ‘not in my backyard’ residents),
- Conflicts with landowners,

Table 1. Self-sufficiency Tendencies Within Zoned and Non-Zoned Counties

	Per Capita Income, 1999	Average Weekly Manufacturing Wage, 1999	Food Stamp Participation Rate, 1999 ^a
With Zoning - Mean	\$19,431	\$475	107.3
Without Zoning - Mean	\$18,364	\$414	126.9
With Zoning - Median	\$18,948	\$500	90.2
Without Zoning - Median	\$18,101	\$456	124.8

Source: Author's analysis of U.S. Bureau of Economic Analysis and County Business Pattern 1999 data for rural Georgia counties. Food stamp participation rate is the number of food stamp recipients per 1,000 residents derived from analysis by the authors of Georgia Department of Human Resources - Division of Family & Children Services data.

- Red tape – bureaucratic, time-consuming process,
- Politics,
- Updating and modifying efforts,
- Lack of enforcement,
- Nonconforming uses permitted, and
- Leadership lacks understanding about zoning.

These are likely concerns raised in numerous rural counties throughout the nation. They all may be credible, but in terms of overall economic development the overriding question is whether land-use planning and zoning implementation advances or impedes rural economic development. That issue was addressed first through statistical analysis based on descriptive, regression, and matched-pair analysis and qualitative survey research based on economic development officials representing equally counties with and without zoning implementation of land-use plans.

DESCRIPTIVE ANALYSIS

This section describes historical economic development indicators among all Georgia counties considered rural at the time of this research – prior to the release of the findings from the 2000 Census – in that they were located outside of a metropolitan statistical area. There were in all 120 rural counties in Georgia, including 57 with county-level zoning and 63 without. Comparisons are made with respect to earnings, employment, and assessed property values.

Earnings

Per capita income is the average income earned per resident in a community. It is calculated by dividing the community's total income by total population. It can be inferred that the higher the per capita income, the higher the buying power of the average resident. In this assessment, average manufacturing weekly wage rate reflects the earning potential available in what continues to be a significant industry sector for rural areas. It is calculated by dividing total annual wages in manufacturing by total employment in manufacturing, then dividing this total by 52. In 1999 (based on data from the U.S. Bureau of Economic Analysis), per capita income ranged from \$14,838 to \$26,129 among counties with

Table 2. Employment Tendencies of Zoned and Non-Zoned Counties

	Employment, 1999	Unemployment Rate, 1999	Labor Force Participation Rate, 1999
With Zoning - Average	13,717	5.4	64.0%
Without Zoning – Average	6,144	6.3	60.0%
With Zoning - Median	8,442	4.9	63.4%
Without Zoning - Median	4,649	5.7	59.8%

Source: Author's analysis of Georgia Department of Labor, Tourism and Trade data for rural Georgia counties.

zoning and from \$13,245 to \$22,197 among counties without zoning. The data revealed that rural counties with zoning tend to have a higher per capita income and average manufacturing wage rate. (See Table 1.)

The food stamp participation rate is a useful measure of self-sufficiency within a community such that the higher the rate, the lower the ability to provide for basic food needs without outside assistance. Corresponding with the findings regarding earning potential, the food stamp participation rate tends to be lower for counties with zoning, signaling a higher level of self-sufficiency among residents living within such communities.

Employment

Employment represents the number of people working (not living) within a community. The unemployment rate reflects the percentage of the civilian labor force that is not employed. It is calculated by dividing the number of unemployed persons by the number of people comprising the civilian labor force (number of employed and unemployed persons 16 years and older) and multiplying by 100.

Labor force participation rate represents the percentage of the working-age residents (that is, population 16 years and older) who are either employed or are actively seeking employment. It can be inferred that the higher the labor force participation rate, the higher the willingness to work among those legally able.

The average employment for counties with a zoning policy was more than double that for counties without such a policy, or approximately 123.3 percent greater in 1999. However, given the wide range in employment among counties with zoning (2,140 to 69,170) and those without (650 to 20,842), a second measure of central tendency should be observed. Looking at the median, it appears that the tendency for counties with zoning to have a larger employment base than counties without remains but to a lesser, though still significant, degree (81.6 percent). Counties with zoning tend to post lower unemployment rates and higher labor force participation rates. Communities with zoning tend to have larger employment bases than communities without such a policy. (See Table 2.)

Assessed Property Values

In Georgia, assessed property values represent 40 percent of the fair market value as determined by the local tax appraiser. The average property value for counties with a zoning policy is more than double than that for counties without such a policy. Given the wide range in assessed property values among counties with zoning (\$94.9 million to \$3.7 billion) and those without (\$43.1 million to \$1.6 billion), a second measure of central tendency should be observed. Looking at the median, it appears that the tendency for counties with zoning to have higher assessed property value than counties without remains to a lesser, but still significant, degree. (See Table 3.)

It would appear that data indicate there is a relationship showing that rural counties with zoning implementation of land-use plans may be economically better off, in general, than those without. Counties with zoning tend to have higher per capita incomes and average manufacturing wage rates and lower food stamp participation rates. They also tend to have a lower unemployment rate and higher labor force participation rate. However, it is difficult with these data alone to ascertain the cause-and-effect relationship that may or may not exist. The next two statistical investigations helped clarify this.

Table 3. Assessed Property Value Tendencies of Zoned and Non-Zoned Counties

	Assessed Property Value, 2000 (\$)
With Zoning - Average	684,986,865
Without Zoning - Average	312,252,290
With Zoning – Median	442,702,720
Without Zoning - Median	254,611,586

Source: Author's analysis of Georgia Department of Revenue and Taxation data for rural Georgia counties.

MULTI-VARIATE ANALYSIS

This section provides the results of statistical analyses to determine whether there are any significant changes that occur from adopting a zoning policy. The analysis reviewed the relationship between years of zoning and selected economic indicators. For example, an increase in property values is one such indicator that is often cited by proponents of zoning legislation as a key benefit of zoning. Is there a significant change in property values among communities that have adopted a zoning ordinance? Other indicators analyzed include changes in per capita income and employment. Similar data was analyzed for over two-dozen matched pairs of counties, comparing counties with zoning to similar counties

without zoning to determine if there are any significant differences in their economic performance.

The statistical relationship between zoning and economic development is not well covered in the existing literature, and the results have been sometimes ambiguous. This lack of universal agreement on how zoning interacts with local economic development progress is, in part, attributable to measurement problems on significant explanatory factors and the complexity of this interaction. But some insights can be gained from a brief review of previous results.

Pogodzinski and Sass completed a comprehensive review of research relating to zoning in 1991. One of the first observations to be made about the existing literature is the relative lack of research that includes, much less focuses on, rural areas. Of the 28 papers reviewed by Pogodzinski and Sass, only two contained any rural components (1991, p. 599) at all. The other 26 studies dealt only with urban and/or suburban environments.

Another observation is that most studies focus almost exclusively on the relationship between the value of residential housing and zoning. This is an important relationship, but it does not consider other measures of economic development that most communities find significant. The value of the existing literature to this analysis is therefore largely in providing likely candidates for other variables that can affect local economic performance other than zoning.

Nelson, et al. (1992) found that improved transportation access to major cities (especially via interstate highway systems) helps encourage the establishment of industry outside the immediate metropolitan area and thus increases employment. Higher levels of both education and agricultural population are also correlated with economic development in rural counties, the former may relate to the availability of a local labor market (either for the industry in question, or its supporting industries), while the latter tends to be correlated with the availability of inexpensive land.

The literature also suggests additional dependent variables, as well as related control variables. Erickson and Wasylenko (1980) analyzed the change in employment and found that the distance to major highways was a significant factor. Carlino and Mills (1982) associated the change in county population with education level (also a proxy for family income) and the density of interstate highways among other factors.

Identifying these other variables (often called control variables) is important because we do not want the measures of zoning to be influenced by other factors. This would lead to a bias in the results.

Because this statistical analysis breaks some new ground, two approaches were chosen and results com-



Rural Georgia offers an open canvas for smart, environmentally sensitive, and strategic economic development with the proper land use protections in place.

pared. The first approach uses observations on all rural counties in a regression analysis. The second uses a comparison-of-means test on a subset of counties consisting of matched pairs.

In both approaches, each variable included can be assessed by three measures. The one generally considered primary is the level of statistical significance. This measure is based on the level of influence a variable has relative to the amount of variation around that value.

The second measure of a variable is the degree to which it explains either the variation or the level of a dependent variable. A common measure of this is called the standardized beta. This value, which can range from one to zero, is highest when the influence of a variable is larger.

Variables are frequently classified either as explanatory, control, dependent, or independent. Explanatory and control variables together make up the independent variables, i.e., those that influence something – with that “something” being the dependent variable. Control variables are the factors that correct for some differences in the dependent variable so that further differences can be tested for influence by the explanatory variables. The explanatory variables in this analysis are related to the presence or duration of zoning; dependent variables are things such as income, employment, and property values. Examples of control variables would be the percentage of the population with a high school or higher level of education, or the distance from either a city or interstate highway.

The analysis examined the economic development performance of 70 rural counties, where “rural” counties are defined by Nelson, et al., for the Economic Development Administration (EDA). The EDA classification scheme includes six categories: large urban, suburban, small urban, inner exurban, outer exurban, and rural. The definition of rural depends largely on a county’s relationship to the boundaries of Metropolitan Statistical Areas (MSA). The U.S. Census Bureau considers those communities located outside an MSA to be

rural. Nelson, et al. define rural counties as those that (1) fall entirely outside of any MSA and (2) are beyond reasonable commuting and trucking ranges. These counties have greater rural attributes and are less affected by the ripple effect of a metro area's economic growth than counties in closer proximity to an MSA. This definition of "rural" was employed in this analysis to determine whether there are economic benefits to zoning. The counties included in this analysis are shown in Figure 1.

The dependent variables were (1) change in assessed value and (2) change in employment over the period 1994 to 2000 and 1999, respectively. This was a time when Georgia saw unprecedented growth. It is also the period of time during which Georgia's counties elevated the accuracy of their local assessment practices and when nearly all local governments had comprehensive land use plans prepared pursuant to the Georgia Planning Act of 1989.

Consistent with independent variables found to be important predictors of economic development in the literature, we considered (1) the percentage of the population living in poverty, (2) the percentage of population with a high school education or higher, (3) the size of the local economy measured as the number of non-resource workers (those not in mining or agriculture) in the base year 1994, and (4) accessibility to major transportation principally being the nearest interstate freeway. Table 4 lists the dependent, experimental, and control variables. Specification and sources of data for the variables follows.

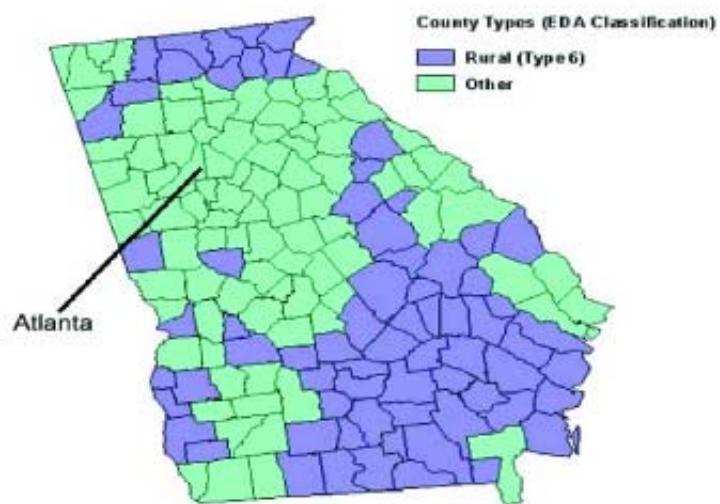
Dependent Variables

The dependent variables were (1) change in countywide assessed value and (2) change in countywide employment.

- *Change in Countywide Assessed Value*

This variable is a measure of the assessed value of all privately owned property (including personal property) in a given county. It is a reasonable estimate of aggregate county wealth. Data for this variable were obtained from the Georgia Department of Revenue, which tracked the total countywide assessed value from 1994 through 2000. This variable was logged so researchers could estimate the percentage change in assessed value with relation to years of zoning.

Figure 1. Rural Counties



In Georgia, there are six county classifications ranging from 1 being the most populated to 6 being the least. Analysis based on data from the Georgia Department of Community Affairs.

- *Change in Countywide Employment*

Logic follows that economic development will necessarily bring with it increased employment from the new industries, as well as complementary jobs that arise to serve those new employees. Countywide employment data were retrieved from the Bureau of Economic Analysis' Regional Economic Information System (REIS). This variable was also logged for an estimate of the percentage change in employment with relation to years of zoning.

Experimental Variable

Characterizing the presence of zoning is not as straightforward as it would seem. At its most basic level, it could be characterized as simply whether it exists or not – but this ignores the practice followed by some counties of having zoning, but not enforcing it. Also, it takes time for zoning effects to be felt, and those effects are not likely to be evenly distributed over time or geography. All of these factors made this statistical analysis a difficult one. Its results suggested that the most appropriate experimental variable to use would be years of zoning.

Table 4. Regression Variables

Dependent Variables	Experimental Variables	Control Variables
Change in Per Capita	Presence of zoning	Population in Poverty
Assessed Land Value	Number of years of zoning	Population with High School or Higher Level of Education
Change in county employment		Non-Farm, Non-Mining Employment
Change in county population		Distance to Atlanta
		Distance to Other Major City
		Distance to Nearest Interstate

This variable calculates the number of years that comprehensive zoning was in place in the county, from its inception through 2001. Data came from the Georgia Department of Community Affairs and staff of the Economic Development Institute. A positive association between this variable and the dependent variables was hypothesized.

Control Variables

The control variables in this equation isolated the effects of zoning, eliminating potential biases from factors related to the county's existing population and geography.

- *Percent Population in Poverty 1990*

A number of socioeconomic variables were considered, such as minority population, population of specific races and ethnicities, income levels, and so forth. As poverty levels are an economic development concern and a reasonably reliable proxy for minority populations, we used the percentage of county population living in poverty in 1990. These data came from the U.S. Census for 1990. (This year is used because it helps to detect cause-and-effect relationships over the study period.) It is expected that this variable would have a negative relationship to economic development measures used as dependent variables.

- *Percent Population with High School or Better Education in 1990*

Economic development is attracted in part to skilled labor. Nelson, et al. found a reasonable proxy for this is percentage of the population that has a high school education or higher. Data came from the 1990 Census. (The year is also selected to help establish cause-and-effect relationships.) A positive association between this variable and the dependent variables was expected.

- *Non-Farm, Non-Mining Employment*

This variable addresses the presence of existing industry in rural counties, and the possibility that such existing basic industries help make further industrialization more feasible. Data were obtained through the Regional Economic Information System published by the Bureau of Economic Analysis. A positive association between this variable and the dependent variables was expected.

- *Perpendicular Distance to Nearest Interstate*

Accessibility appears to be another important determinant of industrial location. Therefore, consistent with Nelson, et al. and other researchers the location control variable was defined as the perpendicular distance from the county centroid to the nearest interstate-quality highway (including Georgia 400, for example). This definition included all multi-lane, controlled-access, divided highways. Distance was measured using ARC-VIEW Geographic Information Systems (GIS) software. A negative association between this variable and the dependent variables was expected.

Table 5 reports results of the regression analysis. In both equations, the amount of variation explained by our variables is modest as indicated by an "R²" that is much less than one. Another test (called an F-test) did show, however, that both equations are statistically significant.

All variables have the expected sign of direction and are mostly significant using a one-tailed test. A county with relatively high levels of poverty has a more difficult time attracting new jobs relative to a county with less, but a county with relatively high levels of high school graduates or better has an easier time attracting new jobs than those that do not. The base of employment is also important - the higher the base of employment, the greater the likelihood that new jobs will follow. In contrast, the farther a county is from the nearest interstate highway, the less likely it will see job growth relative to counties that are closer.

Table 5. Regression Equations

Statistic	Assessed Value Change	Employment Change
Model Significance	0.000	0.000
Adjusted R ²	0.554	0.286
Year of zoning	0.090*	0.215*
Percent Population in Poverty	-0.174*	-0.253*
Percent Population with HS or better	0.186*	0.019
Log of Non-Agricultural, Non-Mining Employment	0.471*	0.429*
Distance to Nearest Interstate	-0.071*	-0.055*

*One-tailed significance at 0.10 level.

Of interest here is the performance of zoning. In terms of its association with change in assessed value, the length of years in place has an estimated statistically significant value of 0.083, which suggests that the relationship is not likely to be random but instead systematic. Analysis covering longer periods of time may help determine whether there is indeed a statistically significant association. The analysis is stronger in terms of the association between zoning and job growth, being positive well within conventionally accepted levels ($p = 0.018$).

The standardized betas generally show how important a variable is to the overall explanation of change in the dependent variable. For explaining the variation in property values, years of zoning have a relatively small explanatory power, although it is comparable to the distance to an interstate's explanatory power. Years of zoning have a stronger explanatory power when applied to changes in employment where the zoning variable has explanatory power comparable to the other variables and significantly greater than distance from the interstate.

MATCHED-PAIR ANALYSIS

The matched-pair analysis is based on a simple concept. It is a test of whether differences exist between counties with zoning and counties without when counties are matched to reduce the differences that might come from some other sources besides zoning. In practice, this matching is never perfect, and the “other sources” of difference are never completely identified. One cannot, therefore, rely on simply whether differences exist, but must, instead, use statistical analysis tools that can help determine whether the difference between zoned and non-zoned counties reflects reality or just the luck of the draw. The selection process started with the list of non-zoned, rural counties and their characteristics according to the four selection criteria discussed previously. A similar list of rural counties with zoning was then compared with the non-zoned counties and matches were made as closely as possible.

When the list of rural counties with zoning was exhausted, there remained a large number of rural counties without zoning that were not matched. Additional matches were then sought from the list of non-rural counties. The counties that resulted from this match fall primarily into the categories of rural and outer exurban, according to the EDA-accepted typology, with two classified as inner exurban in 1992. By most definitions, all of the matched counties would be considered rural. If the EDA classification types are considered on a spectrum from more to less urban, they would be large urban, suburban, small urban, inner exurban, outer exurban, and rural.

After the initial pairings were completed, researchers conducted an analysis to determine whether significant differences existed between the elements of each pair. Where differences were found to exist, the pairs that showed the most differences were systematically eliminated until the remaining differences in the selection criteria were insignificant. The remaining pairs represented about one-half of the rural counties without zoning.

The four measures used to match the counties were (1) the distance to a major city, (2) the distance to an interstate, (3) the percentage of the population that is minority, and (4) the percentage of the population with a high-school or greater education. These measures reflect the results of other research, indicating they may be important to explaining differences in various mea-

ures of economic performance. If counties without zoning can be matched to counties with zoning along each of these measures, any remaining differences can be attributed to the presence or absence of zoning.

The four criteria used for matching are presented in Table 6. The columns in the table can be interpreted very straightforwardly. The mean difference is simply the average of the differences between the county in the pair without zoning and the county in the pair with zoning. The mean difference in the “Distance to Major City” row, for example, says that, on average, the counties without zoning were 2.83 miles closer to a major city than the counties with zoning. Similarly, the non-zoned

Table 6. Statistical Comparison of Chosen Pairs

	Mean Difference	Statistical Significance Two-Tailed
Distance to Major City (miles)	2.83	0.446
Percent Population Minority (%)	-1.54	0.554
Distance to Interstate (miles)	0.45	0.775
Percent Population with HS or Greater (%)	-0.01	0.429

One cannot, therefore, rely on simply whether differences exist, but must, instead, use

statistical analysis tools that can help determine whether the difference between zoned and non-zoned counties reflects reality or just the luck of the draw. The selection process started with the list of non-zoned, rural counties and their characteristics according to the four selection criteria discussed previously. A similar list of rural counties with zoning was then compared with the non-zoned counties and matches were made as closely as possible.

counties have 1.54 percent higher minority populations, are .45 miles closer to an interstate, and .01 percent more of their populations are high-school graduates. These data tell us that the matchings are not perfect.

The next question is whether these differences are statistically significant, which is not the same as “important.” For example, something can be statistically significant, but still not be important. Statistical significance is an expression of probability, not importance. What the Statistical Significance column in Table 6 shows is the probability that the mean difference is not zero. Generally, a value of between .1 and 0 is considered statistically significant. The closer you get to zero, the smaller the probability that the mean difference is not zero. The values in Table 6 for +statistical significance vary between .429 and .775, well above the .1 value threshold for statistical significance. With mean differences as low as Table 6 depicts, and the absence of statistical significance, it can be concluded that the differences between the pairs of counties with zoning and those without are neither important nor statistically significant.

Table 7 provides the mean differences and tests of statistical significance of various measures of economic development performance. These include per capita income for 1984, 1994, and 2000; the percentage change in employment between 1984 and 1999, and between 1994 and 1999; and the change in the squared per capita income between 1984 and 2000, and the change between 1994 and 2000. And, lastly, two property value variables were also reviewed - the percentage change in property values and the change in per capita property values between the years 1994 and 1999.

The mean differences in this table represent the counties with zoning minus the counties without. For each of the matched pairs of counties, the difference was calculated and the average taken of the sum of these differences for all matched pairs. In 1984, for example, counties with zoning had per capita incomes \$630 higher than counties without zoning. That difference grew to \$866 and \$1,415 in 1994 and 2000, respectively. On average, employment increased 19.5 percent more in zoned counties than non-zoned counties between 1984 and 2000, and increased 4.2 percent more between 1994 and 2000.

The change in squared per capita income cannot be interpreted meaningfully. These values were squared to examine the possibility that the relationship between per capita income over time is non-linear and has no literal interpretation. We could, however, examine how per capita income has changed over time for zoned versus non-zoned counties. Between 1994 and 2000, per capita incomes increased in zoned counties by about 1.6 percent more than in non-zoned counties. Within the matched pairs of this analysis, therefore, although the difference in changes in per capita incomes are statistically significant when squared, they do not appear to be particularly important.

However, as shown in Table 7, the change in property values, expressed as percentage changes and as percentage changes in per capita values, appears both statistically significant and important. On average, counties with zoning demonstrated an 11.4 percent higher increase in property values between 1994 and 1999. When expressed in per capita terms, the increases are similar. For both property value variables, the difference is statistically significant.

The two approaches to identifying statistical differences between zoned and non-zoned counties provided consistent and robust evidence to support the idea that

having zoning improves a community's ability to create employment.

It appears from the regression analysis that other factors are more important than zoning in determining the value of property in a community with the exception of distance to the interstate. Years of zoning appear to be relatively more important in explaining the changes in employment, and, the category is comparable to the other factors in terms of explanatory power, with exception of distance to the interstate where years of zoning is a significantly more powerful explanatory variable. However, the regression analysis showed that the variables identified do not explain a great deal of the variation seen among zoned counties with different years of zoning. Still, it would appear from this analysis that

Table 7. Statistical Comparison of Selected Performance Measures for Chosen Pairs

	Mean Difference	Statistical Significance One-Tailed
Per Capita Income: 1984	\$630	0.016
Per Capita Income: 1994	\$866	0.044
Per Capita Income: 2000	\$1,415	0.026
Percent Change in Employment: 1984-1999	19.5%	0.002
Percent Change in Employment: 1994-1999	4.2%	0.065
Change in Squared Per Capita Income: 1984-2000	\$47,735,748	0.032
Change in Squared Per Capita Income: 1994-2000	\$31,173,186	0.022
Percent Change in Property Values: 1994-1999	11.4%	0.005
Percent Change in Per Capita Property Values: 1994-1999	10.4%	0.003

counties with zoning should perform better over time in attracting new jobs than counties without. Also, the longer that zoning has been in place, the larger the increase in per capita assessed land value and overall county employment.

Evidence from paired-samples analysis also indicated that zoning is beneficial to a community in terms of employment growth. This analysis supports the contention that zoning increases the growth, both in percentage and per capita terms, of the value of property in a county. The evidence for the relationship between zoning and income, however, is cloudy, as the differences between the zoned and non-zoned, while (possibly) statistically significant, do not seem to be important.

Qualitative Assessment: What Economic Developers Said

What do rural economic development officials think about zoning that implements land-use plans? A survey of economic development officials representing equally rural counties with and without zoning was conducted for this research. The survey included an equal number

of economic development officials representing counties with and without zoning to implement land-use plans. Table 8 summarizes results.

Most economic developers of counties with a zoning policy who were interviewed reported that the presence of zoning has yielded community benefits and is an economic development asset. Alternatively, the majority of developers of counties without a zoning policy reported that the absence of zoning has resulted in community problems and is an economic development liability. In short, zoning is generally viewed as a positive measure by economic developers of zoned and non-zoned communities alike.

Opinions shared by some economic developers reflect a notion that the presence of zoning is synonymous with preventing development from entering the community. Although several developers of communities with zoning considered the ability to manage and guide where future development can go as a key benefit to zoning, few shared views that zoning should be used as a tool to exclude certain types of development in their entirety.

The majority shared views that zoning can be a tool for both community and economic development.

Several economic developers explained that those who once argued against zoning because they viewed it as an infringement on their property rights are often also those who argued "not in my backyard" and eventually became strong proponents of zoning. In other words, they were willing to accept some restrictions regarding how they could develop their property in exchange for some assurance that they would be protected from a nuisance development.

CONCLUSIONS

Does land-use planning implemented through zoning facilitate rural economic development? A review of the experiences of 57 rural communities across Georgia, including 14 with more than 20 years experience with zoning, provides ample evidence that it does. Looking at the experiences of Rural Georgia, it seems likely that some level of development may occur regardless of how rural a community may be. However, as many counties have

Table 8. Qualitative Assessment: What Economic Developers Said

Economic Developers of Rural Counties WITHOUT Zoning (37 interviewed)	Economic Developers of Rural Counties WITH Zoning (37 interviewed)
<ol style="list-style-type: none"> 1) The majority of economic developers (62.2 percent) interviewed did not consider the lack of countywide zoning a benefit. 2) When asked if their community has experienced any problems due to the lack of zoning, almost three-quarters (72.9 percent) of those interviewed replied "yes." 3) The majority of the economic developers interviewed (54.1 percent) did not consider the lack of zoning to be an asset from an economic development perspective. 4) Twenty-one economic developers viewed the lack of zoning to be an economic development liability, constituting the majority of those interviewed (56.8 percent). 5) Over two-thirds of the economic developers (67.6 percent) reported that their community's prospects have asked about zoning. 6) Approximately one-third of the 25 economic developers (who have been asked by prospects about zoning) reported that their prospects would have preferred that their community have zoning; one-fourth (24 percent) reported that their prospects haven't liked zoning. [The remaining developers either reported that they didn't know whether prospects like zoning or it depends on the prospect, or they didn't provide an answer.] 7) The average score provided on the effectiveness of the community's planning process was 4.4, on a scale of 1 to 10. 	<ol style="list-style-type: none"> 1) When asked if their community has experienced any benefits from zoning, the vast majority of the economic developers interviewed (83.8 percent) responded "yes." 2) The majority of those interviewed (62.2 percent) reported that their communities have not experienced problems as a result of their zoning processes. 3) More than three-quarters of the economic developers interviewed (78.4 percent) viewed zoning as an economic development asset. 4) The vast majority of economic developers interviewed (81.6 percent) did not consider zoning to be an economic development liability. 5) Over three-quarters of the economic developers interviewed (75.7 percent) reported that prospects have asked about zoning. 6) Of the 28 economic developers who reported that zoning is a fairly typical question asked by prospects, 13 (46.4 percent) reported that their prospects have viewed zoning as an asset; just over 10 percent report that their prospects have seemed wary of zoning. [The remaining developers either reported that there has been no feedback from prospects or it depends on the prospect, or they did not provide an answer.] 7) The average score provided on the effectiveness of the community's planning process was 6.4, on a scale of 1 to 10.

learned and will continue to learn, zoning helps the community guide what that development will be and where it will go. Furthermore, communities with zoning may be better positioned for future economic development.

A comparison of all rural counties with a zoning policy to all rural counties without one reveals that zoned counties have larger economic bases than non-zoned counties. When reviewing the statistical relationship between years of zoning and economic performance, regressions analysis confirms that zoning does help to create new jobs, although other factors (e.g., accessibility to highways, education, poverty levels, and employment base) may likely play a greater role than zoning does. An analysis of matched pairs – that is, pairing counties with zoning to counties without according to similar economic positioning (e.g., distance to major city and interstate, education level, percentage of minority population) – also illustrates that zoning has a significant and positive impact on changes in employment as well as assessed property values.

Findings from interviews with economic developers also provide evidence that there are economic benefits related to zoning. More than three-quarters of the economic developers representing counties with zoning (78.4 percent) consider zoning an economic development asset. Benefits are numerous, including, but not limited to (1) business and citizen preference for land use predictability; (2) assurance for business prospects and residents that their investment will be protected; (3) the ability to guide future development and prevent haphazard (e.g., patchwork), harmful, or unwanted devel-

opment; and (4) the minimization of potential conflict between industry and residents.

Zoning which implements a well-conceived land use plan is a proven tool to ensure quality development within a community. Lack of zoning reportedly deters those industries that want to be viewed as a good corporate citizen and avoid conflicts with neighbors. Overall, the weight of the evidence would make it appear that land-use planning implemented through zoning may help to better position rural communities for economic development. 

Acknowledgement

Support for research reported in this article was provided by the Georgia Rural Economic Development Center at East Georgia College. Views expressed herein do not necessarily represent those of the sponsor's officials, staff, or members.

REFERENCES

Carlino, G. A. and E. S. Mills. 1982. "From Centralization to Deconcentration: Economic Activity Spreads Out." *Business Review* May-June: 15-25.

Erickson, R. A. and M. Wasylenko. 1980. "Firm Relocation and Site Selection in Suburban Municipalities." *Journal of Urban Economics* 8: 69-85.

Nelson, A. C., et. al. 1992. *Exurban Industrialization*. Atlanta: Georgia Tech

Pogodzinski, J. M. and T. R. Sass. 1991. "Measuring the Effects of Municipal Zoning Regulations: A Survey." *Urban Studies* 28(4): 597-621.

What's Your Professional Development Plan?

IEDC's wide range of education courses 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 focus 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 Courses
- Business Retention and Expansion
- Economic Development Credit Analysis
- Real Estate Development and Reuse

Elective Courses

Certified Economic Developer (CEcD) candidates must complete two (2) core courses.

- Economic Development Finance Programs
- Economic Development 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



To map your plan, see our Course Calendar and Course Catalogue for more information.

Over 50 Education Courses at More Locations Near You!

implementing strategic

CHANGE AT THE CHARLOTTE REGIONAL PARTNERSHIP

By Ronnie Bryant, CEcD, FM, and Doug Eadie

THE LONELY CHANGE ROAD

Significant, systematic, well-planned change is the exception to the rule in human affairs, primarily because of very understandable resistance to changing in important ways. The odds are so heavily against it that you will not meet many fellow travelers on the change road. This widespread resistance to change has to do not only with the desire to avoid extreme discomfort and with fear of failing at doing something new, but also with the very common ego attachment to the way things are. This often creates counter-productive nostalgia that exhibits itself as inertia that can slow or kill change. Resistance is sometimes based on indifference, rather than on attachment to current structure and practices: the "Why does it matter?/Who cares?" syndrome. Nowhere is the change road rockier than in the area of governance. Witness the fact that so many nonprofit boards are content to inherit the board of the past in terms of role, structure, and processes, rather than tackling serious governance reform.

BEATING THE ODDS: THE CRP STORY

The Charlotte Regional Partnership (CRP) is a nonprofit economic development organization representing 16 counties in North and South Carolina that brings together governments and local businesses to market the Charlotte region nationally and internationally as a premier business destina-



tion. Founded in 1992, CRP – with a \$3.8 million budget and 17 employees – spearheads national and international "missions" to promote the advantages of the Charlotte region to business leaders, conducts research on collaboration within the region, and fosters regional cooperation in the economic development sphere.

At its January 2006 meeting, the CRP Board of Directors unanimously accepted the Action Report of its Governance and Bylaws Task Force, putting in place a comprehensive re-design of CRP governance. This was the culmination of an intensive four-month developmental process that the Governance and Bylaws Task Force had spearheaded. The ambitious and far-reaching "High-Impact Governing Program" that was launched in January 2006 included such steps as:

- Adopting a "Board Governing Mission" setting out the key governing responsibilities of the Board.
- Putting in place a dual governance structure consisting of a Board of Directors to provide

MAKING POWERFUL USE OF A GOVERNANCE TASK FORCE

This article describes how the Charlotte Regional Partnership successfully employed a Governance and Bylaws Task Force consisting of Board members and the CEO to fashion – and secure Board of Directors' approval of – a set of recommendations aimed at updating the Partnership's governing structure and processes. The key factors that determined the success of the Task Force effort are identified, and special attention is paid to the composition of the Task Force, the "design guidelines" that provided a framework for developing the Task Force Action Report to the Board, the governance issues that the Task Force identified and that the Action Report addresses, and the roles that the CEO and Task Force consultant played in the process. The article also describes the organization of the Governance and Bylaws Task Force Action Report and the process that was followed in presenting it to the Board.

Ronnie Bryant, CEcD, FM, is president & CEO of the Charlotte Regional Partnership and vice chair and chair elect (07) of the IEDC Board of Directors.

Doug Eadie is president & CEO of Doug Eadie & Company, a Tampa Bay firm specializing in nonprofit board-CEO partnership building.

strategic oversight and an Executive Governing Board to do detailed governing work.

- Providing the Executive Governing Board with standing committees corresponding to broad governing functions to assist it in carrying out its responsibilities.
- Establishing a set of standing committee guidelines and revising the CRP Bylaws to legitimize the new governance structure.

The key components of the CRP High-Impact Governing Program have been successfully implemented. The Bylaws have been revised. The Executive Governing Board has been established, along with its standing committees, which are functioning in accordance with the guidelines that were adopted. CRP could never have accomplished such far-reaching governance change in such a short time by taking the traditional path: merely having a consultant come up with recommendations for change and then attempting to sell Board members on their merits. Attempts to drive change from outside are notoriously ineffective, in our experience, quickly succumbing to resistance from board members and executives who feel only scant ownership of the proposed changes.

Instead, rather than relying on the high-risk, outsider-driven approach, CRP employed the Governance and Bylaws Task Force, which consisted of 19 Board members and the CRP president/CEO, as the vehicle for coming up with the recommended changes in the CRP governance system. We believe that the CRP experience in using its Governance and Bylaws Task Force as a change vehicle can provide the reader with a model that, with appropriate tailoring, can be applied in any economic development organization in both designing a change program and ensuring its implementation, overcoming the odds that make traveling the change road such a lonely experience.

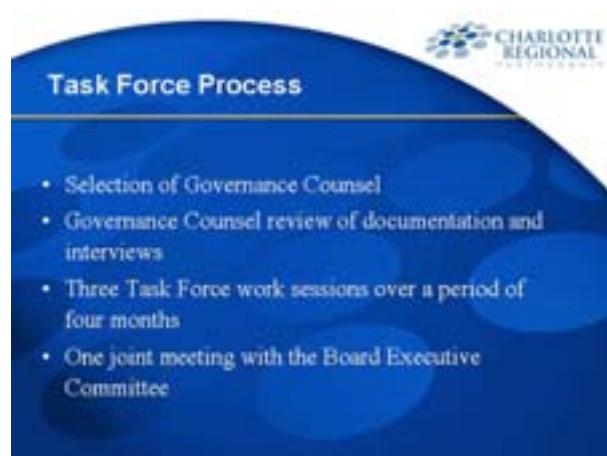
OVERVIEW OF THE TASK FORCE EFFORT

It did not take long for the newly appointed CRP president & CEO, who arrived on the scene in August 2005, to conclude that governance reform had to make his list of top CEO priorities during his first year on the job. In-depth interviews with all of the Board's officers and many of its other members, discussions with a number of community leaders outside the CRP Board, and review of Board meeting minutes indicated a number of problems. Chief among the governance issues were that fewer than half of the 90-some members of the Board attended the monthly Board meeting, which had become a "show and tell" exercise involving virtually no decision-making; the Executive Committee was acting as the real, behind-the-scenes governing body; and the Board was not systematically involved in providing strategic direction for the CRP. This was a call to action for the CEO, who realized that his long-term success depended on partnering with a truly high-impact governing Board.

Fortunately, the CRP Board chair and members of the Executive Committee agreed, and on September 13, 2005, the Board chair appointed the members of the

Governance and Bylaws Task Force, charging them to "generate an Action Report . . . consisting of detailed, practical recommendations for strengthening the Board's governing role, structure, and processes." Key milestones in the process of developing the Task Force Action Report included:

1. Selection of a consultant to serve as "Governance Counsel" to the Task Force, in this capacity conducting research on CRP governance practices, drafting sections of the Action Report for Task Force review, and facilitating Task Force work sessions.
2. Governance Counsel's interviews with Task Force members and his review of pertinent CRP governance documentation, such as the Bylaws and Board meeting minutes.



3. A half-day Task Force work session in October, at which two key sections of the Action Report were reviewed: the design guidelines to guide the Task Force's work and the governance issues that the Task Force recommendations were intended to address.
4. Another half-day Task Force work session in November, at which revised versions of the design guidelines and governance issues were reviewed and detailed action recommendations discussed.
5. Task Force teleconference in December, at which the revised action recommendations were reviewed and fine-tuned.
6. A joint meeting of the Task Force and the Board's Executive Committee later in December, at which the complete Action Report was reviewed and finalized and a strategy for presenting the Action Report to the Board was fashioned.

There's no question that the Governance and Bylaws Task Force was an effective strategic change vehicle: highly complex, high-stakes governance changes whose impact will be felt for years to come were actually implemented. Attempting to achieve this level of change through the business-as-usual operational planning process would have been a dead-end road. Five primary factors on which we will focus in the remainder of this article accounted for the success of the Governance and Bylaws Task Force as a governance change vehicle:

1. Careful construction of the Task Force in terms of its composition;
2. The development of a framework within which the Task Force could fashion its action recommendations, consisting of clear, detailed “Design Guidelines” that the Task Force could follow and a set of governance issues on which the Task Force could focus;
3. Strong, visible, hands-on CEO leadership throughout the Task Force effort;
4. The assistance of an outside consultant (“Governance Counsel”) with substantial change management and governance experience; and
5. Close attention to communication and “sales” where the Board was concerned.

TASK FORCE COMPOSITION

In the context of a generally disengaged Board of 90-some members, many of whom never attended Board meetings, the challenge facing the new Governance and Bylaws Task Force wouldn’t be to overcome resistance. Rather, capturing the attention of Board members – getting them really interested in governance improvement – was the challenge, and in this regard getting the right people to serve on the Task Force was highly important, starting with the Task Force chair. Fortunately, the Board chair and CEO recruited a real heavy-hitter as Task Force chair who would give the Task Force effort instant credibility: the immediate past chair of the Board, who was widely respected and admired for his unselfish service to CRP over the years.

With the right chair in place, it was relatively easy to attract a high-level, widely representative group of 19 volunteers to serve on the Task Force. In assembling the group, the Board chair, CEO, and newly recruited Task Force chair agreed that diversity of membership – in terms of gender, affiliation (business and government), and geography – would be critical to the Task Force’s ultimate success. They also employed a profile of desirable attributes and qualifications in recruiting Task Force members, including traits such as:

- A history of active, productive involvement in CRP governance,
- The ability and willingness to commit substantial time to Task Force deliberations (involvement in name only was clearly not an option),
- Demonstrated open-mindedness (not obviously wedded to particular governance approaches, such as being anti-committee),
- A team player (but not namby-pamby about expressing viewpoints), and
- The professional respect of colleagues.

That the Task Force was able to work through a number of very complex governance issues in only four months and that the deliberations were always highly substantive while invariably civil is testimony to the fact that the right people were recruited. In our experience,

THE TASK FORCE RECOMMENDATIONS

The CRP Governance and Bylaws Task Force Action Report recommended nine Action Steps in three phases:

- I. Adopt a “High-Impact Governing” resolution to legitimize the Action Steps to follow.
- II. Adopt a two-tier governance structure consisting of the Board of Directors and the Executive Governing Board.
- III. Adopt the “Board Governing Mission,” describing the major governing functions of the recommended Executive Governing Board.
- IV. Create a structure of five standing committees of the Executive Governing Board.
- V. Establish a High-Impact Governing Program to serve as a temporary framework for managing implementation of the Action Report.
- VI. Make necessary revisions in the CRP Bylaws as necessary to carry out the Recommendations in the Action Report.
- VII. Build the Executive Governing Board’s self-management capacity.
- VIII. Take steps to ensure a strong, productive Board-CEO working partnership.
- IX. Systematize the Board’s ongoing role in CRP strategic planning.

it could easily have taken six to eight months, in light of the complexity and stakes involved in the effort.

A GUIDING FRAMEWORK

At the get-go, the Task Force chair, CEO, and consultant retained to serve as “Governance Counsel” to the Task Force agreed that the Task Force process should be designed to guard against two very common pathologies that have bedeviled many strategic change initiatives in both the public and business sectors:

1. Taking a “sky’s the limit” approach - charging ahead in exploring possible governance improvements without any boundaries to constrain the examination of change possibilities, which could easily lead to rambling, frustrating Task Force meetings.
2. Jumping into detailed “problem-solving” without front-end agreement on the major governance issues to be addressed, which could lead to the premature selection of pet solutions that are passionately promoted by one or another Task Force member.

With these potential dangers in mind, the Task Force chair, CEO, and Governance Counsel agreed that early in the process the Task Force should reach agreement on a framework within which its deliberations would take place, consisting of: a set of “design guidelines” and a detailed description of the governance issues on which the Task Force should focus.

The design guidelines, which consisted of critical definitions, principles, and assumptions, were intended to provide a framework for the Task Force in carrying out its charge. By making the guidelines crystal clear at the very beginning – well before any action recommendations were under consideration – the Task Force

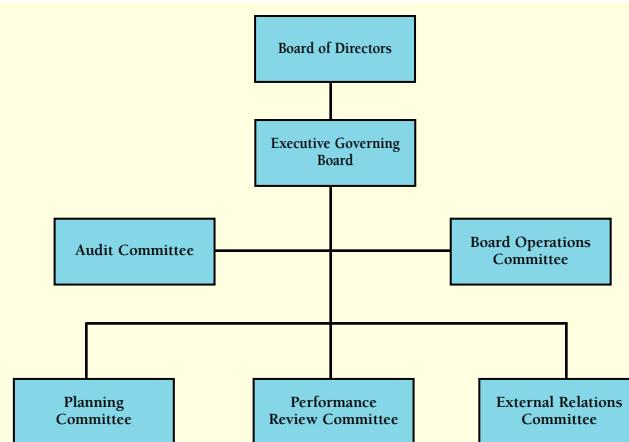
undoubtedly saved quite a bit of time that might otherwise have been wasted in debating possible change options as the process moved forward. The Task Force Action Report that was ultimately presented to the CRP Board set forth seven preeminent guidelines:

1. The Action Recommendations of the Governance and Bylaws Task Force are aimed at ensuring high-impact governance of the CRP, but stronger governance is not an end in itself. Rather, the preeminent reason for strengthening CRP governance is to ensure that CRP can more fully translate its vision and mission into actual practice in the Charlotte region.
2. High-impact governing work essentially consists of continuously answering three critical organizational questions:
 - In what directions should CRP head – and what should it become – over the long run (the strategic planning question)?
 - What should CRP be now and over the coming year (the mission and budget questions)?
 - How is CRP performing: programmatically, financially, and administratively (the accountability question)?
3. There are four sure signs that high-impact governing work is being done:
 - The critical strategic and policy-level decisions required to ensure CRP's long-term vitality and success are being made in a full and timely fashion.
 - The CRP Board is fully deployed as a precious resource, and CRP is capitalizing on the diverse experience, expertise, knowledge, and perspectives of Board members.
 - CRP Board members are creatively and proactively engaged in making strategic and policy-level decisions, rather than merely reacting to finished staff work.
 - CRP Board members are actively involved in monitoring the CRP's performance and in maintaining solid working relationships with key external stakeholders in the Charlotte region.
4. The Task Force Action Recommendations are intended to be practical, relatively easy to implement over the course of six months without disrupting CRP operations, and affordable in the sense of not requiring an extraordinary commitment of either time or money.
5. The Task Force Action Recommendations capitalize on recent advances in the rapidly changing field of nonprofit governance, rather than reinventing the proverbial wheel.
6. The Action Recommendations build on the strong foundation that has been built since the CRP's founding, in terms of:

- The execution of well-crafted programs that have fostered both regional economic development and public-private collaboration,
- A history of Board member dedication to the CRP mission, and
- A strong Board commitment to high-impact governance and receptivity to the changes that might be involved in strengthening CRP governance.

7. A close, productive, enduring Board-CEO partnership is at the heart of CRP success and must, therefore, be addressed in the Task Force Action Report.

The Governance and Bylaws Task Force spent twice as much time discussing the governance issues as it did the design guidelines, not only because the issues would lead directly to the action recommendations, but also because they were politically more sensitive. The challenge was to



Recommended new CRP standing committee structure.

pinpoint the truly important issues deserving serious Task Force attention without appearing to draw up an indictment of the Board of Directors or to impugn CRP's credibility. On the one hand, to sugar coat the problems would risk failing to make a compelling case for change; on the other, to be hyper-critical would risk offending Board members whose support was critical.

In its introduction to the description of governance issues, the Task Force pointed out that "CRP governance is far from broken. Indeed, this precious regional asset has made a substantial contribution to the Greater Charlotte economy since its founding, in large measure as the result of Board-CEO collaboration in providing oversight and direction to the large and complex enterprise that is CRP. Therefore, this Action Report is about fine-tuning governing role, structure, and processes, rather than radically reforming CRP governance, in order to ensure even higher-impact governance in a rapidly changing, always challenging world." Then the Task Force identified six important issues that made the case for change:

1. The CRP Board of Directors is not realizing its tremendous leadership potential as CRP's governing body and is, consequently, being underutilized as a precious regional resource, despite its high-level composition, which is highly representative of the business and public sectors in the regional economy.

2. The Board's falling short of its governing potential is clearly not the result of either inadequate Board composition or lack of Director commitment. Rather, the primary reason is the Board's under-development as a governing body, most significantly:
 - The Board's governing role and work are not clearly defined.
 - The Board is under-developed structurally. The absence of well-designed standing committees – with the exception of the Executive Committee – that can serve as "governing engines" to support Board deliberations is a serious impediment to the Board's realizing its governing potential in practice.
3. Key governing processes need to be updated to ensure creative, proactive Board involvement in making critical decisions, most notably: strategic and operational planning/budget development; monitoring programmatic and financial performance; and image building/external relations.
4. Board meetings are largely occasions for briefing Board members on CRP progress and for social interaction, providing virtually no opportunity for serious involvement in making critical governing decisions.
5. The Board's size works against active involvement in CRP governance, especially in the absence of well-designed standing committees.
6. The Board-CEO partnership needs to be more systematically managed to ensure that this precious but always fragile working relationship remains close, productive, and enduring.

HANDS-ON CEO LEADERSHIP OF THE PROCESS

The strong support and active participation of CRP's new Chief Executive Officer were critical to the success of the Governance and Bylaws Task Force as a change vehicle. The new CRP CEO viewed the Board as a precious asset to be fully deployed in the interest of carrying out the CRP mission and took responsibility for being the "Chief Board Developer," in this capacity making sure that the Task Force was successful in fulfilling its charge. In playing the "Chief Board Developer" role, the CEO:

- Collaborated with the Board chair in finding the right person to head the Task Force.
- Identified an external consultant with the requisite knowledge, skills, and experience to serve as "Governance Counsel" to the Task Force.
- Worked closely with the Task Force chair and Governance Counsel before the group was even assembled to make sure that the methodology and gameplan the Task Force would follow made sense both technically and politically.
- Named a top executive to serve as "Chief Staff" to the Task Force and day-to-day liaison with the external consultant and providing her with hands-on guidance throughout the initiative.
- Exercised rigorous quality control, carefully reviewing the materials that Governance Counsel developed and directly needed revision before transmitting them to

the Task Force, including meeting agendas and drafts of sections of the Task Force Action Report.

GOVERNANCE COUNSEL

The CEO and Task Force chair realized that it made good sense to retain the services of an outside consultant to assist the Task Force in carrying out its demanding charge for three primary reasons. First, having an objective, disinterested facilitator without a stake in the outcomes would certainly help move the process forward, keeping it from becoming any more political than necessary. Second, a governance expert would be able to bring in best practice information from the wider world. And, third, having someone prepare materials for Task Force meetings would not only expedite the deliberations, but would also take pressure off an already extremely busy executive team.

They agreed that the person who would serve as Governance Counsel must bring to the job a combination of:

- In-depth experience with a wide range of association and local economic development clients in two areas: implementing strategic change initiatives and governance improvement,
- Strong facilitation skills as demonstrated by successful engagements with similar task forces,
- "Thought leader" status in the fields of governance and economic development as demonstrated by published books and articles and by speaking engagements, and
- In the realm of style – enough presence to lead a group of Task Force members through a very demanding process.

By the end of December 2005, the Task Force had basically completed its technical work. The Action Report had gone through two drafts, was reviewed with the Board's Executive Committee, and fine-tuned for transmittal to the Board. The Task Force could now turn its attention to communication and "sales."

COMMUNICATION AND SALES

By the end of December 2005, the Task Force had basically completed its technical work. The Action Report had gone through two drafts, was reviewed with the Board's Executive Committee, and fine-tuned for transmittal to the Board. The Task Force could now turn its attention to communication and "sales." By the turn of the year, a two-part strategy aimed at securing Board approval of the Task Force recommendations was in place: (1) transmitting a comprehensive, easy-to-understand Action Report to the Board well in advance of its January meeting and (2) presenting and explaining the key recommendations at the January Board meeting.

No document as complex and far-reaching as the Governance and Bylaws Task Force Action Report to the

Board could be expected to speak for itself entirely, but the Task Force made sure that its Action Report came as close to being self-explanatory as possible. In addition to breaking up the text with headings and sub-headings and employing a numbering system for action recommendations, the 42-page Action Report was organized in a logical fashion that facilitated understanding, starting at a general level and becoming more detailed in later sections. The Action Report consisted of six major sections:

1. Executive Summary – summarizing the action recommendations,
2. Preface – describing the developmental process that the Task Force employed in preparing its Action Report to the Board,
3. Design Assumptions and Guidelines – explaining the key definitions, principles, and assumptions that provided boundaries for the Task Force in fashioning action recommendations,
4. Governance Issues – describing the governance gaps and problems that the action recommendations were intended to address,
5. Action steps – setting forth the recommended actions in three phases covering a period of six months, and
6. Exhibits – providing important backup detail, such as detailed functional descriptions of the recommended new standing committees and a committee organizational chart.

Even though its Action Report was designed to speak for itself to the extent feasible, the Governance and Bylaws Task Force recognized that presentation of the Action

Report at the January Board meeting would be a critical step in securing Board approval. Therefore, a detailed PowerPoint presentation covering the key points in the Action Report was developed and carefully reviewed by the Task Force and the designated presenters – the Task Force chair and CEO – thoroughly rehearsed the presentation before the Board meeting. At the Board meeting, Task Force members joined the presenters at the front of the room and actively participated in explaining the rationale and technical content of the recommendations and in responding to Board members' questions.

A TESTED CHANGE VEHICLE

The Board's unanimous acceptance of the Task Force recommendations at the January 2006 meeting and the subsequent translation of the Task Force Action Report into actual practice certainly appear to validate the work of the Governance and Bylaws Task Force. Feedback since the January Board meeting indicates that the Task Force really did make a significant difference, especially in legitimizing the recommendations, although it is not possible to scientifically prove that conclusion. It's quite possible that the same results might have eventually been achieved without the Task Force, but it would very likely have taken much longer and the change journey would almost certainly have been more painful. So the reader who is contemplating tackling change of the magnitude of CRP's governance reforms should at the very least seriously consider employing a board task force as a very practical mechanism for overcoming the many obstacles likely to be encountered on the change road. 



TOOLS FOR YOUR COMMUNITY

IEDC ADVISORY SERVICES & RESEARCH
CAN HELP YOUR COMMUNITY SUCCEED.

For over 20 years, IEDC's **Advisory Services and Research** department (ASR) has offered technical assistance and customized analysis to local and state economic development organizations, federal agencies and many others. ASR delivers cost-effective economic development solutions in:

- Strategic Planning
- Organizational Development & Program Analysis
- Real Estate Development
- Finance and Funding
- Technology-led Development
- Business Attraction, Retention and Expansion
- Neighborhood & Commercial Revitalization



For more information, contact Ed Gilliland at
202-942-9461 or egilliland@iedconline.org

NEWS FROM IEDC

IEDC REACCREDITS TWO ECONOMIC DEVELOPMENT ORGANIZATIONS

The Beacon Council of Miami-Dade County, Florida, and the



Cornerstone Alliance of Benton Harbor, Michigan, have each been recognized as one of 27 economic development organizations accredited by IEDC as an Accredited Economic Development Organization (AEDO). Following three successful years of activity as AEDO members, the Beacon Council and the Cornerstone Alliance continue to display professionalism, commitment to economic development, and technical expertise. The AEDO program is a comprehensive peer review process that evaluates economic development organizations and recognizes excellence. Maintenance of the AEDO status is required every three years.

OVER 1600 ATTEND IEDC'S 2006 ANNUAL CONFERENCE

This year's Annual Conference in New York City was one of IEDC's largest and most comprehensive conferences ever – with over 1,600 participants, exhibitors, sponsors, and speakers. The New York City Host Committee led by Rob Walsh, Commissioner of New York City's Department of Small Business Services, worked for the past few years developing this year's event. This was also the most international IEDC Annual Conference to date, with delegates from over 20 countries. The speaker lineup featured an impressive array of practitioners, business leaders, and policy makers.

Planning is well underway for next year's Annual Conference, which will be held in Phoenix, Arizona, September 16-19, 2007.

MARK YOUR CALENDARS 2007 FEDERAL ECONOMIC DEVELOPMENT FORUM

Economic developers from around the country will gather March 18-20 in Arlington, VA, for the IEDC 2007 Federal Economic Development Forum, *The Future of the Innovation Economy: How Does America*

Remain Competitive? Participants will learn about cutting edge issues related to innovation that have a real impact in local communities. The Forum will



feature in-depth sessions on knowledge creation, federal R&D, technology transfer, entrepreneurship, and workforce development. Speakers will include federal agency leadership, think-tank representatives, economic development experts, and corporate executives. The event will also provide an opportunity to help frame future policy directions to be included in the new IEDC Innovation Agenda: A Policy Statement on American Competitiveness.

AWARDS PROGRAM RECOGNIZES OVER 40 WINNERS

IEDC's Excellence in Economic Development Awards program provides a medium for exchanging ideas and best practices, and encouraging the creation and promotion of innovative programs



that foster positive change in urban, suburban, and rural communities. The 2006 Awards Program which culminated at the 2006 IEDC Annual Conference was a great success, thanks to the hundreds of submissions from domestic and international organizations. Over forty winners were recognized at an Awards Ceremony attended by IEDC's Board of Directors. Information about the winners is available at www.iedconline.org.

Look for next year's entry information in January 2007. The Call for Entries will run March 1 - May 18, 2007 so be sure to enter your best programs and promotional tools and earn the recognition you deserve.

2006 NATIONAL SALARY SURVEY REPORT

IEDC is set to release its 2006 National Salary Survey results in January 2007. The survey was launched in partnership with 23 state associations and was conducted by Readex Research, an independent research company. Approximately 4,990 economic development professionals responded, creating a detailed profile of their professional activities, compensation, and benefits. The report will be available for sale this January.

IEDC members - \$85

Non-members - \$100

Visit www.iedconline.org to purchase this report. For more information, contact Carrie Ridgeway at survey@iedconline.org.

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.

CONFERENCES

2007 Leadership Summit

January 28-30, 2007
San Diego, CA

Federal Economic Development Forum

March 18-20, 2007
Arlington, VA

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

Entrepreneurial and Small Business Development Strategies

January 25-26, 2007
New Orleans, LA

IEDC Certified Economic Developer Exam

January 27-28, 2007
San Diego, CA

Real Estate Development and Reuse

February 1-2, 2007
Newport Beach, CA

Neighborhood Development Strategies

February 15-16, 2007
Baltimore, MD

Economic Development Credit Analysis

February 27-March 1, 2007
St. Simons Island, GA

Business Retention and Expansion

March 15-16, 2007
Arlington, VA

IEDC Certified Economic Developer Exam

March 17-18, 2007
Arlington, VA

Economic Development Credit Analysis

March 19-21, 2007
Albany, NY

Introduction to Economic Development

April 30-May 2, 2007
Reno, NV

Real Estate Development and Reuse

May 17-18, 2007
Kansas City, MO

IEDC Certified Economic Developer Exam

May 19-20, 2007
Kansas City, MO

Entrepreneurial and Small Business Development Strategies

June 6-7, 2007
Atlanta, GA

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@erols.com (703-715-0147).

structuring a successful GREENHOUSE CLUSTER IN NORTHWEST OHIO

By Neil Reid, Ph.D., and Michael C. Carroll, Ph.D.



Bedding plants are a staple crop of the northwest Ohio greenhouse industry.

INTRODUCTION

Increasing numbers of communities around the world are adopting a cluster-based approach as the central focus of their economic development efforts. Communities from St. Louis, Missouri (Bezold, 2004) to Sialkot, Pakistan (Nadvi, 1999) are utilizing cluster-based economic development to retain their competitive edge in an increasingly competitive world. Implementing a successful and sustainable cluster-based economic development program is challenging (Bongiorni, 2005; Meagher, 2005). The purpose of this article is to outline some of

the challenges that economic development practitioners might face in implementing a cluster-based economic development initiative and to suggest possible solutions to overcoming these challenges.

The context for this article is the greenhouse nursery industry in northwest Ohio. In 2003 we (the authors) received funding from the U.S. Department of Agriculture (USDA) to conduct an assessment of the economic challenges facing northwest Ohio's greenhouse nursery industry. Based on this assessment, we recommended that the industry organize itself as an industrial cluster¹ and use a cluster-based approach to address the competitive challenges it was facing. Subsequent funding from the USDA allowed us to implement the cluster-based strategy that we had recommended².

THE NORTHWEST OHIO GREENHOUSE INDUSTRY

The greenhouse industry has a strong historical presence in northwest Ohio. The industry dates back to European immigrants who settled in the region in the late 19th and early 20th centuries. The core of the region's industry is in Lucas County. Lucas County ranks 4th in the state and 94th in the nation in terms of dollar value of greenhouse nursery crops sold. These rankings place Lucas County in the top 5 percent statewide and top 4 percent nationwide. There are 82 greenhouses in the five-county northwest Ohio region

Neil Reid, Ph.D. is director of the Urban Affairs Center and associate professor of geography and planning at the University of Toledo.

Michael C. Carroll, Ph.D. is director of the Center for Regional Development and assistant professor of economics at Bowling Green State University.

Acknowledgements: The authors would like to acknowledge the cartographic assistance of Tim Ault and the photographic expertise of Sue Wuest. Funding for this project was provided by the United States Department of Agriculture.

OVERCOMING THE CHALLENGES

Faced with competitive challenges that threaten its economic viability, northwest Ohio's greenhouse industry recently organized as an industrial cluster. The cluster was established to enable the industry to respond to these competitive challenges. By coming together and identifying collaborative solutions to common problems the goal is to enable these family-owned businesses to survive and thrive. For the cluster to be successful, key challenges have to be addressed. These include a lack of experience with cluster development, convincing competitors to engage in collaborative efforts, and establishing the appropriate support infrastructure for the cluster. This article outlines these challenges, describes how they were overcome, and assesses the current status of the cluster.

(Figure 1). The industry is responsible for over 750 jobs and has an economic impact of almost \$100 million in the five-county region (Reid and Carroll, 2005).

Like many other industries, northwest Ohio's greenhouse growers are facing significant competitive challenges. Major threats to the economic security of the industry are international competition (particularly from southern Ontario), Big Box store purchasing contracts, and high and rising utility costs. The industry also exhibits a number of significant weaknesses, including dated production technology, old greenhouse buildings, heavy reliance on traditional sources of fuel, and naiveté in the marketing of its products.

Figure 1. Geographic Distribution of Northwest Ohio Greenhouses



CHALLENGES TO STARTING A GREENHOUSE CLUSTER

In starting a greenhouse cluster, we faced a number of significant challenges. Ironically, money was not one of these challenges. The project was funded by the U.S. Department of Agriculture³. The challenges that we did face, however, were significant. These were lack of past experience in cluster development, potential resistance to the development of a greenhouse cluster on the part of the growers themselves, and the lack of an infrastructure to support an operational cluster. The rest of this article details the nature of these challenges and outlines how we overcame and continue to overcome them.

Lack of Past Experience in Cluster Development

We had no experience in starting and running an industrial cluster. While we were well versed in the academic literature on the topic, we had no knowledge of what it would take to get an industrial cluster up and running and to maintain it once it was established. We did not know what type of infrastructure, especially in terms of personnel, would be required. Furthermore, there was no history of cluster-based economic development in the local region and we could not, therefore, turn to local economic development agencies for implementation assistance.



Migrant workers are an important part of the greenhouse labor force in northwest Ohio.

Selling the Cluster Concept

A major challenge that we faced was convincing the growers that a cluster-based development strategy could help them. Cluster-based economic development requires members of an industry to think differently about how to respond to competitive challenges. It requires them to think of their small greenhouse as part of a larger regional network of greenhouses. Cluster-based economic development also requires them to think of competitors as potential partners. It requires them to think of a culture of collaboration coexisting beside a culture of competition. Perhaps most importantly, this type of development requires members of an industry to realize that their economic destiny is increasingly tied to the economic destiny of their neighbors and that, working collaboratively, they can become empowered to shape a prosperous economic future.

Establishing the Infrastructure

Critical to a successful greenhouse cluster is the establishment of the necessary personnel support infrastructure. Based upon four days we spent examining cluster-based economic development in Wolverhampton, England (see next section) and our knowledge of other cluster initiatives elsewhere in the world, we believed that establishing an advisory board and hiring a project manager and cluster champion would be required. We also had strong ideas as to the composition of the advisory board and the skills and experiences needed for those holding the project manager and cluster champion positions. The real challenge would be finding individuals who had the desired skills and experiences.

Engaging the Growers

Once the key growers had agreed to adopt the cluster-based approach, we were faced with engaging a sufficient number of growers to generate the critical mass necessary to make the cluster viable. A fundamental challenge

that we faced in engaging a sufficient number of growers revolved around the issue of trust. Lack of trust operated at a different number of levels. As academics, we were eyed with suspicion. We were viewed as coming from an environment that generated ideas and theories that had little applicability to "real-world" issues. Not only did the growers not trust us, but in many cases, did not trust each other. Years of fierce competition had resulted in growers eyeing each other with suspicion. Furthermore, the northwest Ohio greenhouse industry is one in which old inter-family feuds are passed down from generation to generation.

OVERCOMING THE CHALLENGES

Lack of Past Experience in Cluster Development

We decided that the best way to overcome our lack of practical experience in cluster implementation and development was to spend some time with individuals who had experience in cluster-based economic development. In August 2004, we spent four days in Wolverhampton, England. The West Midlands region of England had been engaged in cluster-based economic development for several years. An emerging relationship between the University of Toledo and the University of Wolverhampton helped facilitate our visit. More importantly, there was a simultaneously emerging relationship between the two regions' major economic development agencies – the Regional Growth Partnership in northwest Ohio and Black County Investment in the West Midlands Region of England⁴.

In Wolverhampton, we met with approximately 35 individuals involved in cluster-based economic development. These included meetings with the cluster strategy team leader, the director of the Wolverhampton Telford Science and Technology Corridor, the executive director of the Wolverhampton Science Park, the champion of the Advanced Engineering Cluster, and representatives of a number of companies participating in the region's cluster program.

While the Wolverhampton trip was extremely informative, we recognized the danger of trying to replicate the Wolverhampton model in northwest Ohio. Therefore, we supplemented our Wolverhampton experience with information about cluster initiatives in other parts of the world. This additional knowledge was primarily gleaned from government reports, cluster initiative websites, and academic journals. In fall 2004, we introduced the concept of cluster-based economic development to northwest Ohio's greenhouse industry and offered this as a strategy for helping the industry retain its competitive edge.



Geraniums are a popular plant with northwest Ohio residents.

Selling the Cluster Concept

One of the first challenges that we faced was identifying growers to whom we should pitch the concept of cluster-based economic development. Fortunately, the university had strong relationships with a number of Toledo-based agents from the Agricultural Research Service⁵. The ARS representatives were able to identify the region's most respected and innovative growers. It seemed best to present the cluster-based strategy to a small group of forward-thinking growers. If they saw merit in the concept, we could address the broader community of growers.

In October 2004 at a meeting with eight of the region's growers, we made a two-part presentation. The first half of the presentation outlined the current economic challenges facing northwest Ohio's greenhouse industry. In particular, we focused upon the issues of Canadian competition, high energy costs, Big Box store purchasing contracts, lack of technological sophistication, outdated physical infrastructure, and low levels of marketing expertise. We also presented what we believed would be the industry's future if it failed to address these competitive challenges.

Having made the growers aware of the potential consequences of inaction, we presented the concept of cluster-based economic development and the possibilities that it offered for their industry. In outlining the cluster concept, we provided a very simple definition whose central focus was

the need for growers to come together and engage in collaborative problem identification and collaborative problem solving. In particular, the focus was on the large industry-wide problems (e.g., high energy costs) that individual growers had dealt with for years and were incapable of solving as individual businesses.

The presentation emphasized that the cluster-based strategy could help the region's greenhouse industry, however the growers themselves had to see value in the approach. If the growers were willing to implement the strategy, then we would help them. However, the growers themselves would be expected to take ownership of the strategy and take a leadership role in all aspects of the cluster, including strategic visioning and decision-making. In other words, this would be their cluster. Our responsibilities would be to acquire funding for the cluster⁶, provide a connection to university resources when required, and assist in strategic visioning for the cluster.

The discussion following the presentation was critical. If we had not convinced the growers that a cluster-based approach was worth pursuing, we would have had to

walk away from that meeting and rethink our strategy. Fortunately, there was sufficient interest among the growers and they agreed that a follow-up meeting was warranted in several months to further discuss the cluster-based approach. At that meeting, we agreed to provide a detailed description of how a cluster-based approach could be operationalized, including the infrastructure (particularly personnel) that would be required.

In December 2004, we met with the same eight growers again. This time, the discussion focused on the specifics of what it would take to get a greenhouse cluster up and running in northwest Ohio. As noted previously, based upon the experience in Wolverhampton and our knowledge of cluster-based initiatives in other parts of the world, we advocated that the cluster be managed by an advisory board and that it be staffed by a project manager and cluster champion. The respective roles of each of these was discussed and agreed upon. Meeting participants discussed and agreed upon the composition of the advisory board and qualifications for both the project manager and cluster champion positions were also discussed and agreed upon. It was also agreed that the idea of a greenhouse cluster had to be presented to a larger number of the region's growers. The upcoming winter conference of the Toledo Area Flowers and Vegetable Growers Association (TAFVGA) provided the perfect venue to reach a larger number of growers with the concept (Carroll and Reid, 2005).

Establishing the Infrastructure

Following a presentation to TAFVGA, we started putting in place the infrastructure that was necessary to get the cluster up and running. In January 2005, we hired a project manager and established an advisory board.

The composition of the advisory board was critical. In keeping with the promise that the growers would have a leadership role in the cluster, eight of the advisory board's members were growers. The other six represented the academic, economic development, and government communities (Table 1). Also, in keeping with the idea of grower control, it was determined that only growers would have voting rights on the advisory board. In a subsequent meeting, it was agreed that a grower did not have to be a member of the advisory board to vote at meetings. Simply being in attendance at a meeting entitles a grower to vote at that meeting. This is in keeping with the bottom-up philosophy of the cluster, to encourage broad participation by growers, and to discourage the possible criticism of the advisory board being an exclusive group. The advisory board agreed to meet

Table 1. Northwest Ohio Greenhouse Cluster Advisory Board

Name	Title	Organization
Dick Bostdorff	Owner	Bostdorff Greenhouse Acres
Bill Dearing	Owner	Dearing Greenhouse
Mark Hecklinger	Owner	Hecklinger Greenhouse Inc.
Tony Keil	Owner	Louis Keil & Sons
Walt Kruger	Owner	Lakewood Greenhouse Inc.
Don Schmidlin	Owner	Schmidlin Greenhouse Inc.
Alan Schmidt	Owner	Schmidt Brothers Inc.
Tom Wardell	Owner	Wardell's Farm Market
Michael Carroll	Director	Center for Regional Development, Bowling Green State University
Beth Fausey	Floriculture Program Manager	Ohio State University Agricultural Business Enhancement Center
Joe Perlaky	Project Manager	University of Toledo
Lindsay Potts	Special Assistant	Congresswoman Kaptur's Office
Neil Reid	Director	Urban Affairs Center, University of Toledo
Lee Springer	Director, International Development	Regional Growth Partnership

monthly, with meetings taking place at the Toledo Botanical Gardens (TBG). The TBG had long been a preferred meeting place for many grower meetings and was considered neutral territory by many of those in the industry.

One of the advisory board's first decisions was to hire a project manager. Ideally, the project manager needed the following skills and experience:

1. Experience as a small business owner. This allows the project manager to have a good understanding of the challenges facing northwest Ohio's family-owned greenhouses.
2. Experience in the area of economic development. One of the overarching goals of the greenhouse cluster is to contribute to the economic development of northwest Ohio. A project manager with economic development experience gives the cluster a better chance of meeting this larger goal.
3. Excellent networking, brokering, and communication skills. The project manager's principal job is to ensure that the various parts of the cluster infrastructure (advisory board, cluster champion, cluster ambassadors, and hired consultants) are working together efficiently and effectively towards the common goal of advancing the cluster. The project manager is also responsible for serving as a liaison between the cluster and the media.

The individual chosen to be project manager, Joe Perlaky, has all of the requisite skills and attributes. He had previously owned his own retail and industrial dry-cleaning businesses and had extensive experience in economic development, having served as commissioner of economic development for the city of Toledo. Mr. Perlaky had also held positions as a business development specialist and as a technology and commercializa-

tion specialist with the Regional Growth Partnership. In his most recent position as program director of an alternative energy system grant at the University of Toledo, he honed his networking, brokering, and communication skills. Initially, the position of project manager was ten hours per week. As the cluster increasingly moved from concept to implementation, the time dedicated to the position was increased to 30 hours per week in October 2005.



U.S. Congresswoman Marcy Kaptur attends a meeting of the Maumee Valley Growers Advisory Board at the Toledo Botanical Gardens.

With the advisory board and project manager in place, the next task was to identify and hire a cluster champion. The role of the cluster champion was to spend time in the field, visiting growers and identifying collaborative opportunities. The skill set required of the champion is quite different than that required of the project manager. Ideally the cluster champion has the following skills and experience:

1. Extensive experience working in and knowledge of the greenhouse nursery industry. Knowledge of the industry is a critical attribute for choosing a champion. Being able to speak the language of the growers and to understand the intricacies of the industry are vital.
2. Ability to think innovatively and to move growers to think and act innovatively. The cluster-based approach requires that growers be willing to think and act in new and different ways. Old, failed approaches to solving problems will not deliver the desired results. A key responsibility of the cluster champion is to convince growers that collaboration will play a central role in their future economic prosperity.
3. High level of trust and respect from the growers. If the growers are going to be asked to think and act in new and different ways, it is critical that the individual (i.e., the champion) asking them to do so be trusted and respected by the growers. The champion is the face of the cluster to the growers.
4. Excellent networking, brokering, and communication skills. Being able to effectively communicate the cluster's overall vision to the growers in language that resonates with them is a key champion skill.

Furthermore, he or she must be capable of ensuring that the growers understand the value-added that will come from their participation in the cluster.

Given that the champion has frequent and regular interaction with the growers and has prime responsibility for engaging growers in the cluster-building process, the advisory board felt that it was critical that the growers decide whom to hire for this position. The hiring of the champion took longer than expected. The original candidate, a retired Ohio State University Agricultural Extension Agent, decided, at the last minute, to decline the offer. It took several months for the growers to regroup and identify another champion candidate.

The second candidate identified by the growers was Dr. Dean Krauskopf, the Agricultural Extension Agent for Michigan State University (MSU),



Jeff Creque provides a tour of his greenhouse in Sylvania, Ohio, to staff members of U.S. Senator Mike DeWine.

which has a service area that includes southeastern Michigan. This choice presented both challenges and opportunities. On the one hand, this raised the issue as to whether Dr. Krauskopf would be permitted by the MSU Extension Office to divide his time between the geographically contiguous southeastern Michigan and northwest Ohio. On the other hand, Dr. Krauskopf's appointment could represent a future opportunity to extend the northwest Ohio greenhouse cluster into southeastern Michigan, which would help break down a historical political barrier to collaborative economic development efforts. The MSU Agricultural Extension Service approved Dr. Krauskopf filling the position for the northwest Ohio greenhouse cluster and he was appointed in May 2005.

Dr. Krauskopf holds a Ph.D. in horticulture from North Carolina State University and has over 20 years experience working in the greenhouse industry. He also

understands the nature of the competitive challenges facing the greenhouse industry and recognizes that local industry practices have to change if the industry is to prosper. Most importantly, however, Dr. Krauskopf is trusted and respected by local growers.

Engaging the Growers

With the cluster infrastructure in place, it was time to operationalize the cluster. The first step was to bring together the advisory board and identify the first cluster project. This occurred at the June 2005 advisory board meeting. The first project had to meet a number of key criteria:

1. It had to have a strong collaborative element and have high potential to engage a large number of growers.
2. It had to bring demonstrated value to the growers.
3. It had to have a high probability of being successful.

In the ensuing discussion, two potential first projects quickly emerged as the preferred choices of the growers. Those projects were marketing and energy costs. The growers admitted that their marketing efforts were unsophisticated, fragmented, and generally ineffective. Sixty-five percent of growers who had responded to our survey had identified marketing naiveté as a barrier to market expansion. With regard to energy costs, the region suffered from having some of the highest utility rates in the state. The fact that during the summer of 2005 energy costs seemed to be in an upward spiral added to the urgency of dealing with this issue.

By the end of the meeting, the growers had agreed that marketing should be the focus of the first cluster project. The critical factor that resulted in marketing being chosen over energy costs was the relative chance of success. Successfully addressing the energy cost issue is complex and difficult. The growers felt that the infant cluster was not yet equipped to take on such a task.

With marketing identified as the first cluster project it was imperative that the momentum and enthusiasm of the group be kept going. The relationship that we had with the growers was very fragile. Their level of trust in us and the cluster concept was increasing. However, to maintain and increase the trust level we had to move quickly onto the marketing initiative. The growers were extremely busy, action-oriented people. All the activity up until now had been building towards making things happen and providing demonstrated value to the industry.

In keeping with the cluster philosophy of solving problems with local expertise, the advisory board agreed that a local company should be hired to provide marketing expertise to the cluster. The growers chose a local

company that specializes in branding and marketing, Thread Incorporated. Again, the process of identifying and choosing Thread provided an opportunity for growers to come together and collaborate. The cluster hired Thread in August 2005.

Representatives from Thread started attending monthly advisory board meetings. They suggested that the greenhouse industry should first develop a brand identity and then use that brand identity as the framework for developing and implementing a comprehensive marketing strategy. A marketing sub-committee, comprised of advisory board members, was formed and also met

Figure 2.
Maumee Valley Growers:
Logo and Positioning Statement



Wardell's Farm Market in Waterville, Ohio.

monthly. The sub-committee worked with Thread to develop a brand identity. To better understand the nature of the local greenhouse industry, representatives from Thread accompanied the cluster champion on a number of his field visits to greenhouses. These visits also provided Thread with an opportunity to explain the concept of branding to growers and to encourage their participation in the process. The visits also

allowed Thread to start building a relationship of trust with the growers.

During the months of September and October 2005, Thread worked on developing a brand identity for the northwest Ohio greenhouse industry. The potential names, logos, and positioning statements associated with the brand identity were tested with both growers and consumers. Grower participation in the brand development process was particularly critical. Developing a brand was as much about bringing the growers together under a common identity as it was about providing the consumers with a brand with which they can identify. By November 2005, the brand identity process was complete. Northwest Ohio greenhouse growers now had a common identity – Maumee Valley Growers' (Figure 2). The positioning statement, "Choose the Very Best," emphasized the high quality of the products that were grown in northwest Ohio greenhouses.

With the brand established, it was essential that as many growers as possible adopt and identify with the brand. To facilitate the process of grower buy-in, we rec-

ognized the need to engage the assistance of growers beyond those on the advisory board. Thus was born the Maumee Valley Growers Ambassador Program. Five non-board growers were identified to serve as ambassadors, using three main criteria.

1. Ambassador growers are not members of the advisory board. This increases the number of growers actively involved in the cluster. Involving more growers in an active role increases grower commitment to the success of the cluster.
2. Ambassador growers have to be committed to the concept of the cluster and be willing to commit the time necessary to the position.
3. Ambassador growers are evenly spread geographically throughout the five-county region.

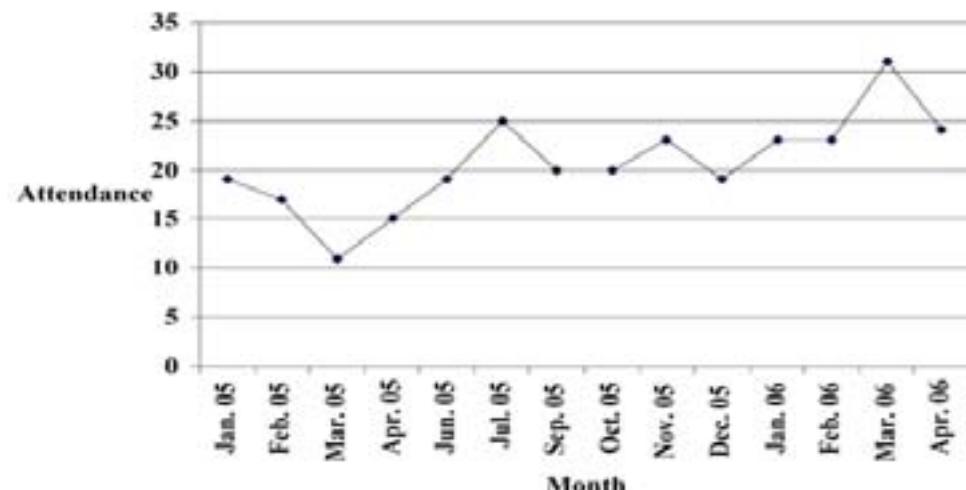
Ambassadors are an addition to the cluster personnel infrastructure of advisory board, project manager, and champion. The role of ambassadors is to function as a liaison between the advisory board and the growers. As such, their job is to promote the brand and cluster activities to growers within their geographic area, to supplement the work of the champion when needed, and to be the eyes and ears of the advisory board with regard to identifying collaborative opportunities that might arise.

As the 18-month mark approaches after the inception of the northwest Ohio greenhouse cluster, grower engagement in the cluster is at a healthy level. Attendance at advisory board meetings generally numbers in the 20-25 range (Figure 3). Despite the early success, there are a number of significant challenges ahead if the Maumee Valley Growers are going to prosper.

CONCLUSIONS AND CHALLENGES AHEAD

In this article, we have outlined the genesis and evolution of the northwest Ohio greenhouse cluster, especially identifying the major challenges faced in creating and developing this cluster. Overcoming lack of experience in cluster development, selling the cluster concept to the growers, establishing the proper infrastructure and staffing it with the appropriate people, and engaging the growers to a satisfactory level have been the key challenges faced in establishing the northwest Ohio greenhouse cluster. Most of these challenges have been satisfactorily overcome. The toughest challenge was, and still remains, engaging growers. This is a challenge we

Figure 3. Attendance at Advisory Board Meetings January 2005 – April 2006



As the 18-month mark approaches after the inception of the northwest Ohio greenhouse cluster, grower engagement in the cluster is at a healthy level. Attendance at advisory board meetings generally numbers in the 20-25 range.

are gradually winning, however, as shown by the increasing attendance at advisory board meetings.

The northwest Ohio greenhouse cluster is a living project. No one knows the long-term success of the initiative. In May 2006, northwest Ohio's greenhouse industry was in the middle of its peak sales for the season. To increase market awareness of the Maumee Valley Growers, a media campaign was in full swing. This included traditional media advertising (paid newspaper and television spots) and newspaper articles about the fledgling organization (e.g., see McKinnon, 2005; *Toledo Business Journal*, 2006). A web-site, oriented towards both growers and consumers, has also been launched (www.maumeevalleygrowers.com).

There are still a number of challenges ahead. The primary challenges are:

1. Increase growers' commitment to and engagement in the northwest Ohio greenhouse cluster via their participation in the Maumee Valley Growers.
2. Develop a plan to address the high energy costs facing the Maumee Valley Growers. This is a primary goal during the fall and spring of 2006-2007.
3. Develop a plan to wean the Maumee Valley Growers off of their dependency on USDA funding.⁸ While the Maumee Valley Growers are currently funded by the USDA, it is necessary that a funding plan be developed that does not depend upon federal funds.

Successfully addressing these challenges during the coming months will be critical to solidifying the foundation that has been established for a successful greenhouse cluster in northwest Ohio. 

REFERENCES

Bezold, B. (2004). Technology Clusters in St. Louis. *Economic Development Journal*, Winter, 50-53.

Bongiorni, S. (2005). Clusters were Everywhere: Now they are being Retooled. *Greater Baton Rouge Business Report*, March 15 (www.businessreport.com).

Carroll, M. and N. Reid. (2005). Competing successfully in a global marketplace. *Toledo Area Winter Greenhouse Conference*, Monclova, Ohio, January 13.

Meagher, K. (2005). Social Networks and Economic Ungovernance in Small Firm African Clusters. Paper presented at the Queen Elizabeth House 50th Birthday Conference (New Development Threats and Promises), Department of International Development, Oxford University, July 4-5.

McKinnon, J. (2005). Greenhouses in area tend to marketing. *Toledo Blade*, December 8, www.toledoblade.com. Last accessed May 8, 2006.

Nadvi, K. (1999). Collective Efficiency and Collective Failure: The Response of the Sialkot Surgical Instrument Cluster to Global Quality Pressures. *World Development*, 27(9): 1605-1626.

Reid, N. & Carroll, M. (2005). Using Cluster-based Economic Development to Enhance the Economic Competitiveness of Northwest Ohio's Greenhouse Nursery Industry. *Papers of the Applied Geography Conferences*, 28, 309-319.

Toledo Business Journal. (2006). Greenhouse cluster targets brand awareness. *Toledo Business Journal*. March 1, 22, 28.

FOOTNOTES

- 1 An industrial cluster is a geographic concentration of businesses in a particular industry that cooperate with each other to overcome business challenges that they cannot overcome as individual business units. A mature cluster also includes supporting infrastructure such as universities and economic development agencies.
- 2 This project is funded by U.S. Department of Agriculture grants CSREES 2003-06230, CSREES 2004-06222, and CSREES 2005-02216. The project team comprises faculty and staff from Bowling Green State University, Indiana State University, Ohio State University, University of Toledo, and Toledo Botanical Gardens.
- 3 For fiscal year 2003-04, the project team received a grant from the USDA in the amount of \$139,307. For fiscal year 2004-05 an additional grant of \$667,153 was received from the USDA. An additional \$679,671 was received from the USDA for fiscal year 2005-06.
- 4 More information about the West Midlands' cluster program can be found at www.ae-cluster.co.uk and <http://www.advantagewm.co.uk/>.
- 5 The Agricultural Research Service is the U.S. Department of Agriculture's chief scientific research agency (www.ars.usda.gov).
- 6 Eventually, the growers will take over the responsibility for funding the cluster.
- 7 The appellation, Maumee Valley, refers to the valley of the Maumee River that starts in Fort Wayne, Indiana, and flows through northwest Ohio before draining into nearby Lake Erie.
- 8 On Tuesday, May 23, 2006, Representative Jeff Flake attempted to remove funding for the Maumee Valley Growers through an amendment to the Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2007. The amendment failed to pass. See Congressional Record, 2006 Daily Digest (www.gpoaccess.gov/record/).



EXCELLENCE IN ECONOMIC DEVELOPMENT AWARDS

This is your time to shine! Send that innovative program, promotion or project in and get the recognition you and your organization deserve. The International Economic Development Council's 2007 Excellence in Economic Development Awards will kick off its Call for Entries on March 1, 2007. Enter early and save!

2007 AWARDS TIMELINE

MARCH 1 – Call for Entries opens

APRIL 27 – Early Bird Submission Fee deadline (entry fees increase after this date)

MAY 18 – Final Submission Deadline

JULY – Winner/Non-Winner notification

SEPTEMBER – Winners recognized at **IEDC'S 2007 ANNUAL CONFERENCE in PHOENIX, ARIZONA.**

More information about the program, including submission requirements and entry fees, will be available online at www.iedconline.org in January 2007.

Each year, the International Economic Development Council conducts the Excellence in Economic Development Awards program. With promotional, program, partnership and leadership categories, IEDC's highly regarded program recognizes the "best of the best" in the economic development profession. Award winners will be recognized at IEDC's Annual Conference in September 2007 in Phoenix, Arizona.



734 15TH STREET, NW SUITE 900
WASHINGTON DC 20005
202-223-4745 • WWW.IEDC.ORG

**For more information contact: Rachel Andrews at
(202) 942-9485 or rAndrews@iedconline.org.**

professional and business

SERVICES IN REGIONAL ECONOMIES

By Ellen D. Harpel, Ph.D.

Regional economies are increasingly service-oriented and the Professional and Business Services (PBS) sector is one of the most important service sectors in terms of generating employment and output. As communities strive to establish a place in the new global economy and replace lost manufacturing jobs, the PBS sector may provide a promising opportunity for both job creation and economic vitality. This article explains why the PBS sector is important, describes the key elements of the PBS sector, reviews its role in regional economic development, and explains where PBS employment tends to locate. It concludes with a guide for understanding the role that the PBS sector plays in individual communities.

WHY PROFESSIONAL AND BUSINESS SERVICES?

Professional and business services is one of the fastest growing service sectors and represents the knowledge- and information-intensive industries and jobs critical to generating growth in today's economy. Consider these facts:

- From 1970 to 2005, total services employment jumped from 69 percent to 83 percent of total



Rosslyn, VA, is one of several locations in Greater Washington with a high concentration of professional and business services firms.

employment. The PBS and Education and Health Sectors were the fastest growing service sectors over this period. (See Figure 1.)

- In 1970, there were 17.8 million manufacturing jobs compared to 5.3 million jobs in the PBS sector, according to the Bureau of Labor Statistics. By 2005, there were 14.2 million manufacturing jobs and over 16.8 million PBS jobs. (See Figure 2.)
- The PBS employment growth rate has generally outpaced services and total employment growth, especially since 1990. Between 1990 and 2005, the PBS sector grew 56 percent and accounted for 25 percent of total US job growth.
- PBS employment is not just a home-grown, small business phenomenon. Businesses in this

Ellen D. Harpel, Ph.D., is President of Business Development Advisors in Arlington, VA.

GROWTH AND GAPS

The professional and business services (PBS) sector is an important and expanding portion of the US economy and an essential element of most major metropolitan area economies. Beyond creating jobs, professional and business services can generate regional exports and increase innovation and productivity, thereby supporting economic growth. While PBS employment growth is largely positive for regional economies, opportunities are not evenly spread, and significant disparities exist between the professional services and business services components of the PBS sector. Given its important role in job creation in many regions, understanding the dynamics of the PBS sector is an imperative for economic development and community leaders.

sector are growing and moving at higher rates than firms in many other sectors that have traditionally been the focus of the business recruitment process. Site selection analysts have reported that between 1999 and 2005, professional, technical and scientific services operations accounted for 1,550 new facility announcements among companies with at least \$5 million in sales and a minimum of 25 employees – more than any other individual sub-sector.¹ The business services category accounted for hundreds more new and expanded facility announcements.

PBS employment is growing because of the need for specialized knowledge created by an increasingly complex global operating environment. As business transactions become more complex, more services are required to help companies stay competitive. For example, when companies serve customers around the world, services such as communications, logistics, and market research become increasingly important to the firm (O'hUallachain and Reid 1991). Financial services and the legal and regulatory environment have also become more complex and specialized, often requiring experts from outside the firm (Hansen 1994, Marshall and Wood 1995, Tordoir 1995, Illeris 1996, Gong 1997). Similarly, firms often need specialized knowledge to apply new technologies in their business processes (Kutscher 1988, Beyers and Lindahl 1996, Illeris 1996). Finally, marketing, advertising and product design and development are increasingly the factors that determine firm profitability or failure. Professional and business services provide these knowledge-based, productivity-enhancing support functions that can help firms in all sectors prosper in today's economy.

PROFESSIONAL AND BUSINESS SERVICES SECTOR ACTIVITIES

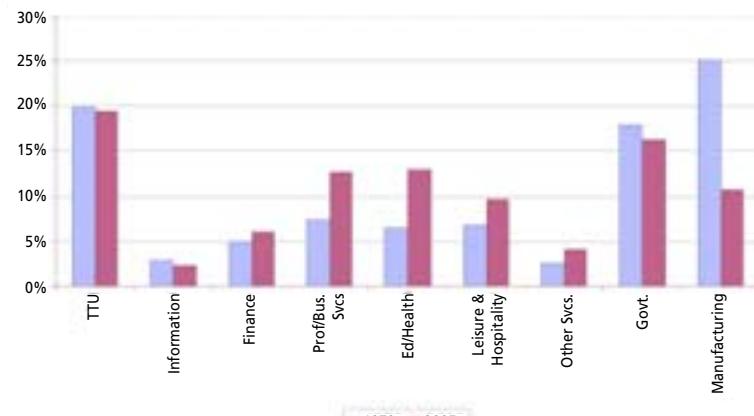
The professional and business services sector includes three sub-sectors:

- Professional, Scientific, and Technical Services (42 percent);
- Management of Companies and Enterprises (10 percent); and
- Administrative and Support Services and Waste Management Services (48 percent).

Professional, Scientific, and Technical Services are activities that require a high degree of expertise and training. This sub-sector includes:

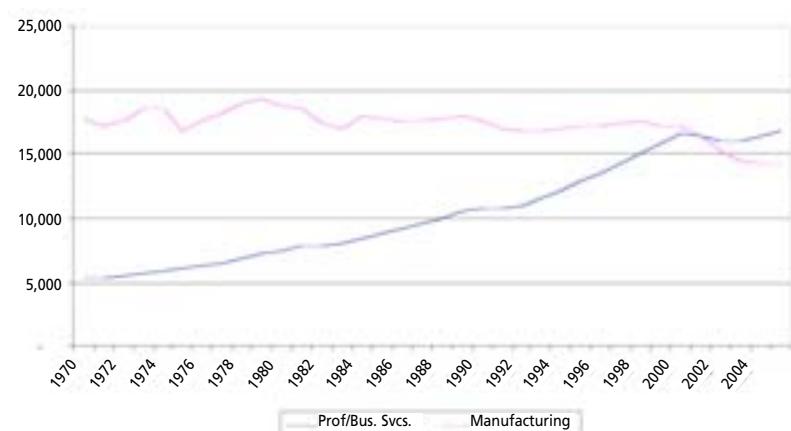
- Legal services,
- Accounting services,
- Architectural, engineering and related services,
- Specialized design services,
- Computer systems design,
- Management, scientific and technical consulting services,
- Scientific research and development services,
- Advertising and related services, and

Figure 1. Sector Employment as a Percentage of Total Employment, NAICS Basis



Source: Bureau of Labor Statistics

Figure 2. PBS and Manufacturing Employment (000)



Source: Bureau of Labor Statistics

- Other professional, scientific and technical services.

Within the professional services sub-sector, legal, architectural and engineering, and computer systems design services had the most employees in 2005. Consulting and computer systems design have experienced the most rapid growth since 1990, growing at more than twice the rate of the PBS category as a whole.

Administrative services are routine support activities provided to other organizations. This sub-sector includes:

- Office administrative services (such as billing, personnel, or logistics),
- Facilities support services (such as janitorial or security services),
- Employment services (employment placement or temporary help services),
- Business support services (such as call centers and mailing services),
- Travel services,

- Investigation and security services,
- Services to buildings and dwellings (such as pest control and cleaning services), and
- Other support services.

This category also includes waste management and remediation services. Within the administrative services sub-sector, employment services is by far the most important, accounting for 44 percent of total business services in 2005 – up from only 32 percent in 1990. It is worth noting that workers in the employment services industry are not necessarily performing services work at all. The American Staffing Association reported in its 2006 Annual Economic Analysis of the Staffing Industry that 35 percent of contract and temporary employees worked in industrial occupations. Services to buildings is next, accounting for 21 percent of business services employment in 2005.

PBS AND ECONOMIC DEVELOPMENT

While the employment figures are impressive, the essential question for economic development professionals is whether PBS activities are beneficial to regional economies. Both economic theory and empirical studies suggest that the answer is yes. Beyond creating jobs, professional and business services can generate regional exports and increase innovation and productivity, thereby supporting economic growth. Further, as described below, PBS jobs are good jobs for people and their communities.

Exports and Innovation

Economic base theory divides activities into basic (exported) and non-basic (used locally) categories. Exports are more valuable to the local economy because they bring in new income from outside the area and generate a multiplier effect, rather than simply recycling income internally. The theory and those who have applied it have often assumed that most services are non-basic. However, many services are exported. Exported services include wholesaling, transport, tourism, government activities, university education, and most types of producer services, which are services that are inputs into another product or service and include professional and business services (Greenfield 1966, Daniels 1985, Gillis 1987, Marshall and Wood 1995, Beyers 2000). Further, transportation and telecommunications advances mean more services can be exported today than previously, especially those that are transmitted using telecommunications (such as back offices) or those with value that far exceed the costs of travel (such as engineering or consulting services) (Illeris 1996).

“Indirectly basic” activities can also contribute to regional exports. “A variety of service providers may act as indirect exporters in a large, diversified service center. They are likely to range from banks, business consultants, corporate lawyers, and advertising firms to providers of security guards, janitors, and printing. In a major center like Boston or New York, the export base is largely made up of firms that provide services to corporate headquarters. These indirect exporters may account for a major share of export-sector employment” (Stanback 2002, 50-51).

Another viewpoint proceeds from the premise that innovation (not exports) drives economic growth. Services firms play important roles in this process both by innovating themselves and by catalyzing and diffusing innovation in others (Marshall 1988, Miles and Boden 2000, Aslesen and Isaksen 2004). Unfortunately, service innovation can be difficult to measure. Standard measures of R&D spending and capital investment are not good proxies for innovation in services firms (Marshall & Wood 1995, Marklund 2000). Still, there have been several empirical studies to try to assess whether PBS firms do contribute to innovation in their client companies.



Center for Innovative Technology (CIT) based in Reston, VA. CIT is a nonprofit corporation designed to enhance the research and development capability of the state's major research universities in partnership with local industries.

Job Quality

There is a perception, or at least a lingering concern, among community leaders that services jobs are low-quality, low-paying jobs, despite evidence that there are many high-wage, high-productivity jobs employing skilled workers in producer services industries. Recent research examined data on occupations, education, and earnings by industry sector to assess the quality of PBS jobs (Harpel 2006).

Table 1 reflects the level of “good” jobs by occupation associated with three industry sectors: manufacturing, PBS, and other services, which includes wholesale trade, retail trade, personal services, social services, entertain-

Table 1. Occupational Quality by Select Industry Sector, 1990 and 2000 (percentage)

	Manufacturing		PBS		Other Services	
	1990	2000	1990	2000	1990	2000
High	23%	27%	50%	59%	16%	19%
Middle	33%	32%	31%	26%	47%	44%
Low	44%	41%	19%	15%	37%	37%
TOTAL	100%	100%	100%	100%	100%	100%

Source: Current Population Survey, 2003

ment and recreation services. Modifying frameworks used by previous research in this area (Aoyama and Castells 2002, Appelbaum and Albin 1990, Illeris 2002), this analysis organizes occupations into three ordered categories:

- High Level Occupations: Executive/Managerial, Professional, Technicians, and Health/Education/ Public Administration
- Middle Level Occupations: Sales, Administrative/Clerical; Precision Manufacturer/Craft
- Low Level Occupations: Other Services, Operator/ Fabricator/Assembler, Other

The PBS sector has more than double the level of high level occupations compared to either the manufacturing or other services sector. Middle level occupations are more evenly distributed, with other services having the highest level of these jobs, followed by the manufacturing and PBS sectors. The manufacturing sector has the highest percentage of low level jobs, followed by other services. The PBS sector has very low percentages of the low level occupations.

In terms of education, 41 percent of individuals in the PBS sector hold at least a bachelor's degree compared to 21 percent and 17 percent in manufacturing and other services sectors respectively. By contrast, PBS has the lowest levels of workers with a high school degree or less (32 percent) compared to the other two categories (54 percent in both manufacturing and other services).

Breaking down the PBS sector into its components, the professional and technical services category has the highest percentage of college-educated workers at 59 percent. The management services category has a heavy percentage of workers with some college or an associate degree. The administrative category has relatively high levels of workers with a high school diploma or less at 52 percent. (See Figure 3.)

Finally, earnings in the PBS sector are 20 percent above the national average and are on par with manufacturing earnings. (See Figure 4). Earnings ratios are presented instead of dollar values for wages. Earnings ratios above one mean the industry wages are above the private sector average, while ratios less than one mean wages are below the average. The PBS earnings ratio in 1990 was 1.17 and reached 1.20 by 2003. Manufacturing starts the period with an earning ratio of 1.21 and ends with 1.22. By contrast, the overall services sector continues

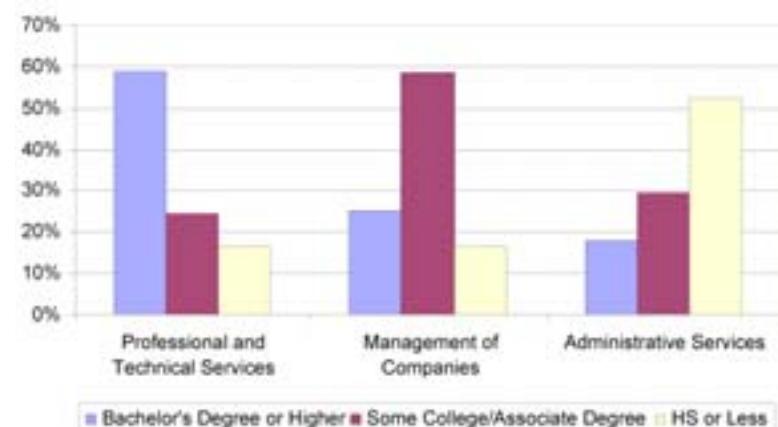
to lag, with earnings below the national average.

As with educational attainment, there is disparity in earnings within the PBS sector. Management of Companies and Professional and Technical Services both have earnings ratios well above the national average and above the PBS and Manufacturing sector ratios. Professional and Technical

Services started the period at 1.50 and ended it at 1.60. Management services expanded from 1.7 in 1990 to 1.93 in 2003. By contrast, business services stayed below the national average and far below the PBS sector average for this period, with an earnings ratio of 0.69 in both 1990 and 2003. This ratio is also well below the overall services sector average.

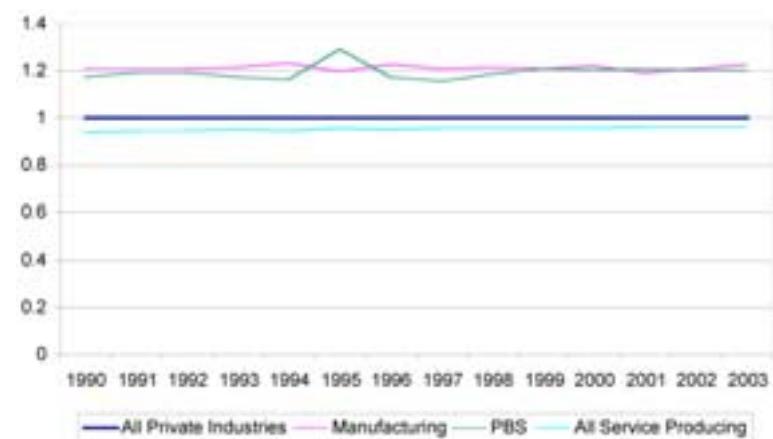
In sum, PBS jobs involve higher order occupations and require greater educational attainment than the average

Figure 3
Educational Attainment by PBS Sub-sector (percentage)



Source: Current Population Survey, 2003

Figure 4
Earnings Ratios, 1990-2003, by Select NAICS Sector



Source: Quarterly Census of Employment and Wages

job, and they pay approximately 20 percent above the national average. Compared to the manufacturing and overall services sector, PBS jobs are demonstrably stronger as measured by occupation type and education. Professional and business services jobs, as a whole, also command the same type of wage premium as the manufacturing sector and pay far above the average services job.

However, there is a wide gap between the professional services and business services components of the overall PBS sector. Nearly 60 percent of professional services workers have at least a college degree compared to less than 20 percent of business services workers. Earnings in the business services category are actually lower than the national average, in contrast to professional services earnings, which are approximately 50 percent above the national average.

PBS LOCATION PATTERNS

PBS firms tend to cluster in large cities around the world. Several operating factors drive these location decisions. First, firms gain access to large numbers of the highly qualified workers they need for successful operations (O'hUallachain and Reid 1991, Beyers and Lindahl 1996, Gong 1997, Gatrell 2002, Aslesen and Isaksen 2004). Second, corporate headquarters, which have been predominantly located in major metropolitan areas, both generate great demand for external services (Stanback and Noyelle 1984, Coffey 1995, Sassen 2000, Hansen 2001) and spin off the talent to form new PBS companies (Bryson 2004). Third, information and knowledge are the tools of the trade for PBS firms. Locating in cities facilitates formal and informal access to information among institutions, networks, customers and suppliers, both through proximity and by being part of a greater volume of activity. The "transaction cost" associated with obtaining knowledge, information, and specialized inputs is therefore lower in cities.

As more cities are able to offer these attributes, PBS employment has started to disperse from the very largest cities (O'hUallachain and Reid 1991, Gong 2001). More recent research shows that employment has indeed dispersed from the largest two metro areas (New York and

Los Angeles), but PBS employment concentration and job growth remain greatest in metropolitan areas with a population over one million. These large metropolitan areas have 53 percent of the population and 55 percent of total employment, but 66 percent of all PBS jobs. These metropolitan areas also have PBS location quotients (LQ) greater than 1, while those with less than 1 million people have LQs below 1 (Table 2). Further, large metropolitan areas accounted for 68 percent of total PBS employment expansion between 1990 and 2004 (Harpel 2006).

Table 3 lists the MSAs with a population greater than one million and their PBS employment characteristics. Individual metropolitan areas often have PBS patterns that differ from their size category. For example:

- PBS employment for the entire set of MSAs listed in Table 3 represented 15 percent of total employment, matching the US as a whole, but with a range of 10-26 percent. The group's location quotient was 1.19, but with a range of 0.84 – 2.05.
- 15 of the 49 MSAs had location quotients less than 1, with the lowest levels in Providence, RI; Riverside, CA; Hartford, CT; Louisville, KY; and Rochester, NY.
- Tampa, FL, led the group with a location quotient of 2.05, followed by Washington, DC; San Jose, CA; and Detroit, MI.
- PBS employment growth ranged from only 1,500 in Hartford, CT, to 245,500 in Washington, DC, between 1990 and 2004; median growth was 53,000.
- 23 of these MSAs had a PBS employment growth rate below the US rate of 51 percent, with the lowest growth rates in Hartford, CT, and Pittsburgh, PA. The highest growth rates were in Tampa, FL; Las Vegas, NV; Phoenix, AZ; Austin, TX; and Orlando, FL.
- For individual MSAs across the country, the PBS sector is their major job generator. PBS represented more than 50 percent of total job growth in a diverse group of cities, including New York, NY; Los Angeles, CA; Boston, MA; Detroit, MI; Baltimore, MD; Tampa, FL; Cleveland, OH; San Jose, CA and Rochester, NY.

Table 2: PBS Employment by Population Category, 2004

MSA Population Category	Number of MSAs	% Population (2000)	% Total Employment	% PBS Employment	PBS Location Quotient 1990	PBS Location Quotient 2004
10 million+	2	11%	10%	12%	1.31	1.19
2.5M - 10M	17	26%	27%	34%	1.28	1.24
1M - 2.5M	30	16%	18%	20%	1.08	1.12
250K-1M	115	19%	19%	18%	0.92	0.94
100K-250K	149	8%	8%	5%	0.66	0.68
<100K	25	0.7%	0.8%	0.5%	0.64	0.61
Other		19.3%	17.2%	10.5%	0.56	0.58
US TOTAL	338	100%	100%	100%	1.00	1.00

Source: Calculation from Bureau of Labor Statistics and US Census; preliminary 2004 data

Table 3. PBS in Metro Areas with Population > 1 Million

	2000 Population	PBS as % of Total Emp. (2004)	PBS LQ 2004	PBS Emp. Growth (000) 90-04	PBS Emp. Growth Rate 90-04	PBS Share of Total Job Growth 90-04
New York, NY	18,323,002	15%	1.18	216.9	22%	56%
Los Angeles, CA	12,365,627	15%	1.21	113.6	16%	79%
Chicago, IL	9,098,316	15%	1.23	165.9	32%	42%
Philadelphia, PA	5,687,147	15%	1.17	92.8	30%	38%
Dallas, TX	5,161,544	14%	1.09	166.8	83%	24%
Miami, FL	5,007,564	17%	1.33	200.8	111%	37%
Washington, DC	4,796,183	22%	1.73	245.5	67%	41%
Houston, TX	4,715,407	14%	1.09	104	50%	20%
Boston, MA	4,540,941	16%	1.25	95.4	34%	55%
Detroit, MI	4,452,557	17%	1.4	70	24%	55%
Atlanta, GA	4,247,981	16%	1.31	166.9	82%	25%
San Fran., CA	4,123,740	16%	1.32	46.1	17%	35%
Riverside, CA	3,254,821	11%	0.87	62.3	99%	14%
Phoenix, AZ	3,251,876	16%	1.3	160.6	146%	24%
Seattle, WA	3,043,878	13%	1.03	65	47%	23%
Minneapolis, MN	2,968,806	14%	1.13	63.6	35%	18%
San Diego, CA	2,813,833	16%	1.31	81	65%	28%
St. Louis, MO	2,698,687	14%	1.09	32	22%	24%
Baltimore, MD	2,552,994	14%	1.13	57	47%	52%
Pittsburgh, PA	2,431,087	12%	0.98	12.3	10%	13%
Tampa, FL	2,395,997	26%	2.05	216.7	198%	55%
Denver, CO	2,179,240	16%	1.26	53.9	42%	17%
Cleveland, OH	2,148,143	12%	0.99	23.3	21%	52%
Cincinnati, OH	2,009,632	14%	1.13	49.2	52%	31%
Portland, OR	1,927,881	13%	1.03	43.6	56%	20%
Kansas City, MO	1,836,038	13%	1.06	37	41%	27%
Sacramento, CA	1,796,857	11%	0.91	44.2	83%	19%
San Jose, CA	1,735,819	19%	1.55	50.1	43%	135%
San Antonio, TX	1,711,703	12%	0.94	43.6	95%	20%
Orlando, FL	1,644,561	17%	1.35	95.1	140%	26%
Columbus, OH	1,612,694	15%	1.17	47.7	56%	26%
VA Beach, VA	1,576,370	13%	1.07	40.1	66%	29%
Indianapolis, IN	1,525,104	13%	1.08	56.1	90%	27%
Milwaukee, WI	1,500,741	13%	1.03	29.7	39%	40%
Las Vegas, NV	1,375,765	12%	0.94	60.3	172%	14%
Charlotte, NC	1,330,448	15%	1.16	53.2	90%	24%
New Orleans, LA	1,316,510	12%	0.95	20.7	39%	26%
Nashville, TN	1,311,789	13%	1.02	48.9	116%	26%
Providence, RI	1,291,932	10%	0.84	19.4	47%	34%
Austin, TX	1,249,763	13%	1.07	52.2	143%	19%
Memphis, TN	1,205,204	12%	0.94	30.2	72%	25%
Buffalo, NY	1,170,111	12%	0.94	16.3	34%	N/A*
Louisville, KY	1,161,975	11%	0.88	20	44%	23%
Jacksonville, FL	1,122,750	15%	1.21	48.9	125%	32%
Richmond, VA	1,096,957	14%	1.15	20.8	32%	20%
OK City, OK	1,095,421	12%	0.98	28.8	76%	26%
Hartford, CT	1,059,878	11%	0.85	1.5	3%	N/A*
Birmingham, AL	1,052,238	12%	0.97	21.4	53%	27%
Rochester, NY	1,037,831	11%	0.89	15.6	38%	91%

Source: Calculation from Bureau of Labor Statistics and US Census Bureau; preliminary 2004 data;

* Experienced a loss of jobs for this period.

In sum, PBS employment remains concentrated in metropolitan areas with a population greater than one million, though it is growing rapidly nationwide. Size alone does not explain which metropolitan areas will have strong PBS sectors either in terms of job concentration or growth. PBS employment patterns, of course, ultimately depend on the characteristics of each location. Given its importance, these tables suggest that economic developers should examine the dynamics of the PBS sector in their communities, whether to understand the reasons for a lagging performance, to sustain an important source of growth, or to support an up-and-coming sector.

CONCLUSIONS AND A GUIDE FOR ECONOMIC DEVELOPERS

This article has described the role of professional and business services in regional economies in terms of job creation, contributions to economic growth, job quality, and location patterns. The professional and business services sector is an essential element of most large metropolitan area economies. Given its dominant role in job creation in many regions, understanding the dynamics of the PBS sector is an imperative for economic development and community leaders.

The accompanying checklist provides a starting point for assessing the PBS sector in individual regions or communities. The split between the professional services and business services sub-sectors is an especially important element of this assessment. On many data points, each represents an extreme on opposite sides of the PBS average, making the PBS sector data useful primarily as a starting point. Knowing the level and characteristics of PBS employment is good; understanding the characteristics of the professional services and business services components is better.

While it may be tempting to conclude that business services sector jobs are not as desirable as professional services sector employment based on industry, education, and earnings information, these jobs may be as beneficial in terms of overall economic development. The business services sector may provide job, income and ownership opportunities that may not appear on paper to be as good as professional service occupations, but in fact provide better opportunities for individuals than they may otherwise have – especially with the decline in manufacturing employment. For example, it has been noted that in the 1990s, "... there was also an increase in startups of many service businesses using relatively unskilled labor for services such as building cleaning, security, detective, and security services. These may be started by career-oriented individuals who have recognized opportunities or developed new ideas to allow them to compete favorably

Professional and Business Services Checklist

- ❑ What is the level of professional and business services employment in your community or region?
- ❑ How does the level of professional and business services employment compare to your competitor or peer regions?
- ❑ How fast is professional and business services employment growing?
- ❑ What is the split between professional services and business services employment in your community or region?
- ❑ What are the occupations, income, and education levels associated with professional and business services employment in your community?
- ❑ What are the dominant industries within your professional and business services sector?
- ❑ What are the characteristics of firms in these industries? What is the mix of small and large businesses? What role do entrepreneurs and sole proprietors play?
- ❑ How are these industries connected to the rest of your regional economy?
- ❑ Where are firms in the professional and business services sector located within your community or region? How are they clustered? What are the implications for planning and real estate development?
- ❑ How many recent business attraction and retention projects fall into the professional and business services category? How well do the economic development services offered match the needs of these firms?

Source: www.businessdevelopmentadvisors.com



Professional and business services jobs provide high value to regional economies.

in these markets, based on their own experiences or on spillovers from others (Acs 2005, 11). It is therefore important to understand the dynamics of these activities in each region.

Beyond measuring the basic size and scope of the PBS sector, it is important to understand how the sector and its components fit into the overall regional economy. For example, it is useful to know where business services tend to cluster compared to where professional services are concentrated.

As one of the fastest growing sectors of many regional economies, the location requirements of PBS firms have important implications for the patterns of growth within metropolitan areas, as well as workforce development issues and demand for office and other types of working space. Further, understanding the structure of each sub-sector including the role of entrepreneurs, size and employment patterns, as well as the inter-relationships between professional services and business services would provide valuable insight into their role in regional economic development.

This article attempts to make the case that policy makers in metropolitan areas should be aware of the nature and extent of the professional and business services sector in their regions. With deeper understanding of the sector, regional leaders may choose to develop economic development policies that incorporate consideration of PBS sector trends and needs. 

REFERENCES

Acs, Z. and C. Armington. 2005. The impact of geographic differences in human capital on service firm formation rates. *Journal of Urban Economics*. 56(2):244-278.

Aoyama, Y. and M. Castells. 2002. An Empirical Assessment of the Information Society: Employment and Occupational Structures of G-7 Countries, 1920-2000. *International Labour Review*. 141(1-2): 123-159.

Appelbaum, E. and P. Albin. 1990. Shifts in Employment, Occupational Structure, and Educational Attainment. (ed. Noyelle) In *Skills, Wages, and Productivity in the Service Sector*. Boulder, CO: Westview.

Aslesen, H. W. and A. Isaksen. 2004. Knowledge intensive business services and urban industrial development. Do KIBS cause increased geographic concentration industries? XIVe Conférence RESER: TIC et relations de services dans une économie globalisée, Castres.

Beyers, W.B. and D.P. Lindahl. 1996. Explaining the Demand for Producer Services: Is Cost-Driven Externalisation the Major Factor? *Papers in Regional Science*. 75(3):351-374.

Beyers, W. B. 2000. Cyberspace or Human Space: Wither Cities in the Age of Telecommunications. *Cities in the Telecommunications Age: The Fracturing of Geographies*. J. O. Wheeler, Y. Aoyama, and B. Warf. (eds.) New York, Routledge.

Bryson, J. R., P. W. Daniels and B. Warf. 2004. *Service Worlds: People, Organisations, Technologies*. London, Routledge.

Coffey, W. 1995. Producer Services Research in Canada. *Professional Geographer*. 47(1):74-81.

Daniels, P. W. 1985. *Service Industries: A Geographical Appraisal*. London: Methuen & Co. Ltd.

Gatrell, J. D. 2002. Business Services, Productivity and Wages: Metropolitan and Nonmetropolitan Michigan Counties, 1977-1997. *The Professional Geographer* 54(3): 365-378.

Gillis, William R. 1987. Can Service-Producing Industries Provide a Catalyst for Regional Economic Growth? *Economic Development Quarterly* 1(3): 249-256.

Gong, H. 1997. Location Analysis of Business and Professional Services in US Metropolitan Areas, 1977-1992. Ph.D. Dissertation, University of Georgia.

Gong, H. 2001. A Hierarchical Change Model of Business and Professional Services in the United States. *Urban Geography*. 22(4) 340-359.

Greenfield, H. 1966. *Manpower and the Growth of Producer Services*. New York: Columbia University Press.

Hansen, N. 1994. The Strategic Role of Producer Services in Regional Development. *International Regional Science Review*. 16(1&2): 187-195.

Hansen, N. 2001. Knowledge Workers, Communication and Spatial Diffusion. In *Theories of Endogenous Regional Growth*. C. Karlsson, B. Johansson, R. Stough, ed. Berlin, Springer-Verlag.

Harpel, E. 2006. The Role of Professional and Business Services in Regional Economies. Ph.D. Dissertation, George Mason University.

Hauknes, J. 2000. Dynamic Innovation Systems: What is the Role of Services? In *Services and the Knowledge Based Economy*. London: Continuum.

Illeris, S. 1996. *The Service Economy: A Geographical Approach*. West Sussex, England: John Wiley & Sons, Ltd.

Illeris, S. 2002. Are Services Jobs as Bad as Theory Says? Some Empirical Findings from Denmark. *The Service Industries Journal*. 22(4):1-18.

Jakobsen, S.-E. and H. W. Aslesen. 2004. Location and Knowledge Interaction between Head Office and KIBS in City Areas. XIVe Conférence RESER: TIC et relations de services dans une économie globalisée, Castres.

Kutscher, R. E. 1988. Growth of Services Employment in the United States. In *Technology in Services*. Washington: National Academy Press. (eds. Guile and Quinn)

Larsen, J. N. 2000. Supplier-User Interaction in Knowledge-Intensive Business Services: Types of Expertise and Modes of Organization. In *Services and the Knowledge Based Economy*. London: Continuum.

Marklund, Goran. 2000. Indicators of Innovation Activities in Services. In *Services and the Knowledge Based Economy*. London: Continuum.

Marshall, J.N. et al. 1988. *Services and Uneven Development*. Oxford: Oxford University Press.

Marshall, J.N. and P.A. Wood. 1995. *Services and Space: Key Aspects of Urban and Regional Development*. Harlow: Longman.

Miles, I. and M. Boden. 2000. *Services and the Knowledge Based Economy*. London: Continuum.

Noyelle, T. and T. Stanback, Jr. 1984. The Economic Transformation of American Cities. Totowa, NJ: Rowman & Allanheld.

O'Hallachain, B. and N. Reid. 1991. The Location and Growth of Business and Professional Services in American Metropolitan Areas, 1976-1986. *Annals of the Association of American Geographers*. 81(2): 254-270.

Porter, M.E. 1998. Clusters and Competition. In *On Competition*. Boston, MA: Harvard Business School Publishing.

Sassen, S. 2000. *Cities in a World Economy*. Thousand Oaks, CA: Pine Forge Press.

Stanback, T. 2002. *The Transforming Metropolitan Economy*. New Brunswick, NJ: Center for Urban Policy Research.

Tordoir, P. P. 1995. *The Professional Knowledge Economy*. Dordrecht, The Netherlands: Kluwer Academic Publishers.

Wilber, Steven C. 2002. Essays in Economic Growth. Ph.D. diss., Georgetown University.

FOOTNOTE

¹ "Will New and Expanded Intensify in 2006?" Pete Julius, *Conway Data Scoreboard & Whittaker Associates, Inc.* <http://www.whittakerassociates.com/newsletter/new/index.htm>.

"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
Muncie-Delaware County Indiana
Economic Development Alliance



ACCREDIT YOUR ECONOMIC DEVELOPMENT ORGANIZATION

The benefits of IEDC's Accredited Economic Development Organization (AEDO) Program include:

- Heightened visibility of your economic development organization's efforts in the community and region
- Independent feedback on your organization's operations, structure and procedures
- An excellent marketing tool to help promote your organization



Click here to learn more about the AEDO program and application process, or call (202) 223-7800