Regional Economic Development: An Analysis of Practices, Resources and Outcomes



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Report	
Executive Summary	1
Study Purpose	2
Background	3
Literature Review	6
Study Methodology	11
Data Description	14
Regression Analysis of Virginia Regions	17
Analysis of Regions in the Three-State Area	21
Survey Methodology and Publication	23
Survey Analysis	30
Final Focus Points	42
Appendix	
Appendix A—Survey Response Tools	i
Appendix B—Survey of Regional Economic Development Organizations	iii
Appendix C—SWOT Index Scores by Question (Virginia)	xi

Executive Summary

The practice of Economic Development on the regional level in the United States represents an important social and political tool in the growth of localities. The purpose of this paper is to assess the practices of Economic Development Organizations (EDOs) in Virginia, Maryland and North Carolina. Each organization combines these practices with the specific assets and resources within their individual regions to generate outcomes typically defined as "growth" or "development." This paper will interpret the relationship between the practices of the EDO, the assets available in the region and the outcomes observed there.

In a statistical regression analysis, the creation of jobs in the Information, Financial and Manufacturing industries appear to have the greatest marginal effect on development outcomes. Increasing jobs and investment in these categories appears related to improvements in per capita income and overall growth. Likewise, there is a statistical relation between High School level educational attainment and property tax rates and regional development success.

The alternative purpose of this paper is to analyze attitudinal information about the perspectives and activities of regional development organizations. Through *the Survey of Regional Economic Development Organizations*, this information was gathered from responding regions within the three-state area. Also, this survey analysis was used to create a general template for a Strengths/Weaknesses/Opportunities/Threats (SWOT) analysis of Economic Development organizations, which can be utilized to perform comparison between economic development regions.

Study Purpose

We are graduate students in Public Policy in the Thomas Jefferson Program in Public Policy at the College of William and Mary. Our goal is to perform a cross sectional comparison of the inputs and outputs of Economic Development Organizations across Virginia, Maryland and North Carolina. We will use this analysis to determine what factors have the greatest effect on economic development outcomes. In these three states, there are 28 independent (though interconnected) regional development organizations. Each operates in a different environment, with different goals and available tools to reach them. We will analyze the resources, practices and outcomes across these regions to try and determine what approaches best position each for development success.

Background

Economic Development Practices have long existed in the United States. Just after the Revolution, these simplistic government and non-government agencies sought to best exploit local advantages for the sake of economic health. Industrial parks and macro-investment strategies appeared as early as 1791 in states like New Jersey and Pennsylvania.¹

The Modern Practice of Economic Development was born from the Great Depression of the Late 1920's and 1930's. Southern states, suddenly aware of certain deficiencies in their economic infrastructure—most notably the lack of established manufacturing—began to offer incentives for companies to relocate to open land. The practice seems to have first emerged in Mississippi, which entered the Depression as the nation's poorest state. Determined to protect its cities from the weakness of the national economy, Mississippi leaders sought to diversify production and manufacturing in the state through a program that came to be known as "Balancing Agriculture With Industry." Citizen groups and marketing agents worked together to build new manufacturing infrastructure and attract textile, canning and other production facilities.

In the 79 years since the throws of depression first encouraged this new innovation in development, EDOs and their supporting structures have grown and developed in many ways.

The organizations and the regions they represent vary in size, composition and resources and also in the way they act to best exploit these factors. The process has grown ever more complex,

¹ Peter Eisinger, The Rise of the Entrepreneurial State: State and Local Development Policy (Madison, WI: The University of Wisconsin Press, 1988): 15.

² Connie Lester, "Economic Development in the 1930s: Balance Agriculture with Industry," Mississippi History Now (Mississippi Historical Society), http://mshistory.k12.ms.us/features/feature52/economic.htm.

with multiple levels of development ranging from local cities and towns all the way to the Federal Government with the Economic Development Agency (www.eda.gov).

Regional EDO's face a wide variety of challenges while managing their regions within such a large framework. At any given time, they might have to cope with varying political pressures within their own region (from local governments and other economic agents such as Chambers of Commerce), statewide political factors and a changing national landscape. From region to region, these organizations do so with vastly different resources and workforces on both the regional and organizational level.

Despite these variations, there seems to be some level of basic commonality of goals through the development industry. As expressed through the mission statements of each organization, the general direction of their work is toward general economic and cultural growth of their region. The Greater Richmond Partnership claims its mission to generate growth within the region by increasing new jobs, developing existing industries and fostering a "continued improvement of the region's business climate." The New River Valley Economic Development Alliance, 175 miles west of Virginia's Capital City, states its purpose as to "foster job creation, to facilitate new investment, and to nurture and improve quality of life throughout the valley." At the very top, the Federal Economic Development Agency declares its mission as "preparing American regions for growth and success in the worldwide economy."

Within the Commonwealth of Virginia, regions work to attract new business and solidify existing industry. Though there is a shared sense of existence within the borders of the

³ Mission Statement. Greater Richmond Development Partnership. Available: http://www.grpva.com/New pages/ps mission.shtml

⁴ Mission Statement. New River Valley Economic Development Alliance. Available: http://www.nrvalliance.org/the_alliance/mission.html

⁵ Mission Statement. Federal Economic Development Agency. Available: http://www.eda.gov/AboutEDA/Mission.xml

Commonwealth, each individual region (ranging in involvement from highly complex and active to quite rudimentary organizations) is autonomous and capable of driving its own activities.

Statewide organizations like the Virginia Economic Development Partnership (VEDP) work between and around each individual region. VEDP takes several roles while working with individual regions. It establishes marketing targets across the state and tries to determine specific regional niches based upon the strengths of each. Also, VEDP works to enhance development through assistance with specific project opportunities for individual regions.

Regardless of the specific wording of a mission statement or the relationship among regions within the state, the overall message is quite clear. Whether termed as "growth" or "quality of life," the work of an EDO is to ensure that each individual region best utilizes the resources and assets available to it in order to grow, develop and adapt in a changing world so as to best enable it citizens to live productive lives.

Literature Review

Analyzing the practices and outcomes of EDOs is incredibly challenging. Just as there is an incredible range of variation across different regions, so too is there great variation in the methods used to assess growth and development. These methods, over time, have been tried and developed in order to account for the many challenges present in the practice of Economic Development as well as its study.

Critical Evaluations of Economic Development Policies, edited by Laura Reese and David Fasenfest, explores the history and variation in the academic study of regional development. The book—a compilation of studies done by several different academic authors seeks to establish a new, structure of analysis for development policy. This new strategy of "Critical Analysis" is contrasted against what the authors generally refer to as the "Traditional" format.

In the Traditional work, the theoretical structure used in development study is straightforward. The goals—determined outcomes desired by development organizations—drive the decisions made in EDO methodology. Policies and practices are developed to meet goals. This is a clear and simple expression of the ends of development policies. However, the simplicity of this framework seems to ignore much of the complexity involved in determining these goals and interpreting the resources available to meet them. The final expression becomes "more jobs good, less jobs bad." While this may seem to be an adequate expression of desired outcome, it omits a vast majority of nuance associated with actual development.

⁶ Laura Reese and David Fasenfest, ed. Critical Evaluations of Economic Development Policies. (Detroit, MI: Wavne State University): 2.

The goals of development, instead, need to encompass a wider range of growth. In this way, they might be able to more effectively include the range of missions expressed above: from "growth" in a simple form to "quality of life," a much more complex metric. Essentially, the ends of development as understood in assessment efforts must be to build stability and levels of income while increasing local control over the market and ensuring empowerment of all sectors of the community.

Determining goal strategies are important to assessing outcomes. However, processoriented evaluations are also an important tool in such studies. As explained by David L.

Imbroscio, one of the authors enlisted by Reese and Fasenfest, it is essential to understand the process of development as a political exercise. Like all politics, such activity carries with it a normative value: it is considered and expressed as a "good" thing. While this might certainly be true—economic development efforts undoubtedly benefit many within a community—to begin with this as a basic understanding makes it very difficult to truly assess the usefulness of individual development practices.

In its most distracting form, the political necessity of development policy makes it very difficult to assess. In an expression of this, author Robert Giloth chidingly asked: "Why bother evaluating Economic Development when no one cares?" Giloth's point was not that there should be no evaluation, nor was it that nobody actually cares about development issues.

Instead, he was highlighting the frustrations inevitable in trying to assess an organization in an unbiased manner in an environment of such normative belief. People care, but they want to

⁷ Robert Giloth, Commentary on "Can economic Development Programs be Evaluated?" In *Dilemmas of Urban Economic Development*. R. Bingham, ed. (Thousand Oaks, CA: Sage, 1997): 278-283.

reinforce the status of normative "good" in economic development rather than truthfully assess its usefulness.

Beyond the normative notion of Economic Development is another problem created by the collision of politics and economics: the sense of development as a "zero sum game." At a very basic level, if a business chooses to relocate to or expand within a specific region, town or county it is *not* doing so in another. While there is an interconnectivity of all localities within a certain area, this can be very hard for specific political entities to understand. In one particularly colorful description of economic development practices, a North Carolina newspaper lamented the failings of the state's northern localities against out-of-state neighbors: "Interstate competition for industrial prospects can be a rough business, at times employing devious tactics likened to those of back-alley poker games or shady used-car lots."

The point of this paper is not to consider the truth of this statement, which almost definitely was painted more out of frustration at local failures than factual observation.

However, such vitriol is a clear and present danger to EDOs. This is compounded by the fact that businesses, for their part, are concerned purely with the cost and benefits of their investment and not with the geopolitical benefits they might bring to a region. As expressed by Robert McClintock, Chief Researcher for the VEDP: "Prospects do not understand political boundaries, period." This is an understandable fact of doing business, but one that clearly complicates the work of an EDO.

From the political confusion of economic development, assessment naturally turns to the connection between the explicit practices of an EDO and the environment in which they take

⁸ Tom Joyce. "Industry Incentives Can be a High Stakes Game." *The Mount Airy News*. Mount Airy, NC. 11 October, 2008. Available:

http://www.mtairynews.com/articles/2008/10/12/news/local_news/local01.txt

⁹ Robert McClintock. Personal Interview. 7 October 2008.

place. The activities of an EDO must be understood within the framework of assets and resources present in the region. Resources for development come in many forms; people and geography combine in different ways in order to produce the raw materials of a local economy. For an EDO, understanding and exploiting these resources is an essential piece of the puzzle.

As highlighted in a 2006 report published by the Brookings Institution, this process is most utilized through communication and shared knowledge between EDOs and the entities at work in the region—both in the form of workforce and industry. Development policymakers must build on the strengths (in terms of physical and human capital) present in their resources and not try to mimic the development successes of others. This is best done through a knowledge driven dialogue that involves existing industry and government.¹⁰

Based on this need for knowledge as a practice in exploiting existing assets, an assessment of practices in economic development must be wary of the presence of this knowledge in the regions. Essentially, it is important to study both what the region does and what it knows. How it thinks—as an organization—about the resources and assets present within its borders will drive the processes used to bring growth.

This relationship was emphasized in a report released by the University of North Carolina in October of 2008. The study, which aimed to assess the economic vitality of Danville, VA, established a series of different types of "capital assets" important to fostering community economic development. These different assets ranged from the political and social climate to infrastructure and general education.¹¹ The lesson of the Danville study is clear: the foundation

¹⁰ Joseph Cortright. "Making Sense of Clusters: Regional Competitiveness and Economic Development." (The Brookings Institution: March 2006) Available: http://www.brookings.edu/reports/2006/03cities cortright.aspx

¹¹ James H. Johnson, Jr. et al. "Assessing the Economic Competitiveness of the Danville, VA Region." (Chapel Hill: The University of North Carolina, October 2008). 8.

of assessment for development practices must be assets, resources and the regional ability to exploit them.

Examining the existing literature on Regional Economic Development, it is clear that the history of its study is varied and complex. While there are many challenges for this study, this academic background has highlighted a basic framework for comparison. Essentially, EDOs make operational decisions for two reasons: to pursue goals and to utilize resources. While goals—in general—seem to be relatively consistent across regions, variations in capital assets allow these organizations to steer an individual course towards fostering regional economic health. A study of practices in regional economic development must include an assessment of resources and assets and work to understand each organization's actions within this framework.

Study Methodology

We have performed a cross-sectional comparison of different development regions using a comparison of input and outcome data. Outcome data, including employment and income factors, is available from trusted sources such as the US Census Bureau and the economic development partnerships in each state. This data has been used in statistical analysis of the regions across the three states in our study. In order to measure the inputs and practices of each individual EDO, we have designed, published and analyzed a web-based survey targeted at the Executive Directors (or equivalent) of each organization.

A cornerstone of our analysis is a Strengths/Weaknesses/Opportunities/Threats (SWOT) structure. The basic theories of SWOT are designed to compartmentalize the factors that affect outcomes into internal and external categories. Internal factors are categorized as either Strengths or Weaknesses while External ones are either Opportunities or Threats. For our analysis, we understand this distinction to exist both for the region (in terms of available resources, workforce, education, etc) and also the organization itself (staff size, budget, etc).

Survey

The survey's population is every Regional Economic Development Organization in Virginia, Maryland and North Carolina. Due to the limited size of this group about which we are trying to learn, there is no need for any type of sample to be drawn. Our survey could be distributed to the entire population. It was deployed via an approach email sent to the Executive Director/President of each regional EDO. In its basic design, facilitating easy response was the most important consideration. This goal was pursued through a careful focus on both length and depth.

Long surveys increase the respondent burden and limit the number of subjects willing to participate. If a respondent is marginally unwilling to respond, they will either be completely deterred from participating by the required time investment or begin the survey and fail to finish. The final survey, the result of over a month of editing and trimming, presented the respondent with only 29 questions. After pretesting it was estimated that a respondent would not require more than 15 or 20 minutes to complete the survey.

The "depth" question was a more challenging obstacle. The purpose, essentially, is to get useful and important (deep) information that is really only available from the respondent. Such responses involve the facts of the region's situation, but also the perspective of the respondent and the culture of the EDO. Creating questions that achieve such response is the best way to make use of survey research. However, the question must be presented and answerable such that the respondent can avoid having to perform exhaustive research during the survey process.

To meet this end, the survey was designed to include multiple matrices and ranking modules. Respondents were asked to rank resources and assets within the region, gauge the level and quality of relationships and incentives and determine the operational focus of the organization. For factual questions (such as investment breakdowns or numbers of Requests for Information) respondents were cautioned that estimates were allowable if gathering specific data was cumbersome. The combination of these practices (developed and refined with the help of a Professorial Team at the College) allowed for the implementation of a survey that limited the burden of response and maximized the utility of the data gathered.

Beyond these concerns, the specific questions of the survey were designed to fit into our SWOT analysis framework. The survey itself consists of five sections:

- 1) Organization
- 2) Regional Assets/Resources

- 3) Incentives
- 4) Locality and Regional Relations
- 5) Action

There is certainly overlap within these sections to be considered, but they generally fit within an internal (Strengths/Weaknesses) or external (Opportunities/Threats) framework. The first two sections, the organization of the EDO and regional assets/resources, are internal factors. They are the raw materials and structure within the EDO must work to generate development. The next two, incentives and locality relations, are more external. While EDOs can work to affect each of these, they are in many ways beyond their control and represent an outside environment in which they must exist. The final section, actions, is designed to actually assess the marketing and development work of the organization. Questions in this section investigate the strength and importance of relationships with site selection consultants and companies and the operating focus of the organization.

Outcome Measurement

We have determined the key output variables which represent the goals of regional economic development to be: dollars invested in the region, new jobs created and per capita income—which serves as a proxy for quality of life. Further, we have attempted to control for the years of collected data and size of the region, so the variables are measured as: Jobs created per capita per year, Investments made per capita per year, and per capita income.

Data Description

Variables Researched

Labor Force; Labor Force Participation Rate; Unemployment; Unemployment Rate; Employment; Per Capita Personal Income; Workers in Region; Employment by Sector [Natural Resources, Construction, Manufacturing, Trade, Transportation and Utilities, Information, Financial, Services, Government, and Other]; Educational Attainment [General Education Degree, Associates Degree, and Bachelors Degree]; Educational Enrollment [Preschool, Elementary, Combined, Middle, High School, Alternative, and Special]; Student-Teacher Ratio [Elementary and Secondary]; Per Pupil Expenditure; Number of Doctors

States

Virginia, North Carolina and Maryland

Regions Analyzed

Capital Region; Central Maryland; Eastern Shore, Maryland; Southern Maryland; Western Maryland; Charlotte Region, Eastern North Carolina; Northeast North Carolina; Piedmont Triad; Research Triangle; Southeast North Carolina; Western North Carolina; Eastern Shore, Virginia; Greater Charlottesville; Greater Fredericksburg; Greater Richmond; Hampton Roads, Lake Country; New River Valley; Northern Shenandoah Valley; Northern Virginia; Rappahannock Region; Region 2000; Roanoke Valley; Shenandoah Valley; Southside Virginia; Virginia's aCorridor; Virginia's e-Region; Virginia's Gateway Region; Virginia's Heartland; Virginia's River Country

Data Sources

Virginia

http://virginiascan.yesvirginia.org/communityprofiles/RegionProfiles.aspx

North Carolina

http://www.nccommerce.com/en/BusinessServices/LocateYourBusiness/EDISSearch

Maryland

http://www.choosemaryland.org/regionsandcounties/randcindex.html

Overview

The project lacks the resources to create a perfect statistically significant economic development data table. Firstly, Virginia (VA) collected the most economically relevant data and included all data in up-to-date regional profiles on its economic development website. Figuring out the VA method for quantifying data remained at best unclear. North Carolina (NC) tabulated all their data in the Economic Development Intelligence System (EDIS). While EDIS is preferential to the state's authorities, it is not compatible with some computer operating systems,

increasing the challenge of using it for aggregated analysis. Maryland's (MD) economic development website remains primitive comparative to VA and NC. MD fails to do anything but aggregate relevant county data through a county comparison program. Little to none of the MD data was stratified by region and much could not be aggregated to match that of VA.

Virginia quantified data extensively. Beginning data collection with Virginia presented several impossibilities for data research into several sectors within North Carolina and most within Maryland. Maryland provided the least amount of data. North Carolina provided the most but not all the data overlaps. In general, the project presents a multitude of areas for statistical arguments.

<u>Problems with Data (Ordered Alphabetically)</u>

Labor Force

Statistically calculable = Unemployment + Employment

VA and NC: States assumingly aggregated data similarly.

MD: State aggregated from age 25 instead of age 16.

Labor Force Participation Rate

Labor force usually consists of those individuals capable of work over the age 16 in a population.

MD: quantified data from age 25. The population measure did not deduct individuals under 16. Calculation: [Labor Force (above 25) / Total Population] for each region.

Educational Attainment

MD: gave a percentage of population with a degree instead of the number. Calculation:

[add percentages/number of regions * aggregate population of regions).

MD: aggregates data from those in population over age 25.

Educational Enrollment

MD: State does not display preschool data.

NC: State only differentiates based on elementary and secondary enrollment although combined schools do exist. Unclear how to differentiate between students in combined schools based on data.

Employment by Sector

NC: State calculated almost double the amount of sectors. Consolidating the data seemed easy because most fell under services. The Government employment aggregate number was significantly greater than public sector employment subdivision. In order to adjust for this difference in data between VA and NC: [NC Service Sector = Quantified Services Sector - (Total Government Employment – Total Public Sector Employment)

MD: State combined utilities and transportation with trade. So adding those two columns in VA and NC needs to occur. Rather than weaken the integrity of the data in place, these categories were not manipulated.

Per Pupil Expenditure

NC: does not include school lunches.

MD&VA: unclear whether MD or VA included school lunches.

Student Teacher Ratio

MD: Information did not differentiate between secondary and elementary.

NC: Data aggregation unclear due to failure to aggregate exact amount of teachers based on breakdown of information between counties.

Unemployment and Unemployment Rate

MD: Same problem as with Employment and Labor Force.

NC and VA: Interim North Carolina data comes from fourth quarter 2007 while Virginia comes from 1st quarter 2008.

Underemployment

VA: Data based on five somewhat arbitrary factors.

NC & MD: Hard to quantify, if not impossible, in NC and MD based on lack of data.

Regression Analysis of Virginia Regions

The measured output variables are divided by the population to control for heavily populated areas and the differences in size of each region. However, as you will see, per capita investments and job creation measures may result in a bias toward lower population regions. I have tried to control for population and time for the investment and job variables by dividing the raw numbers by the number of years of observation and the number of people in the region. For example:

Number of Jobs created 2003-2008 \div Population \div Years = Jobs created per person per year

The three outcome measures are combined into a composite score based on the interest that our survey respondents expressed in their development preferences. From the survey results we received, 73% of respondents preferred development with large capital investment requirements, 69% of respondents desired development in which the majority of jobs are high-paying, and 52% of respondents preferred development with large labor force requirements. As percentages of entire responses, the preference ratio of investments to income to jobs is 37% to 36% to 27%. These preferences were derived from the 8 responses to this question we had received at the close of the survey period.

We have utilized an Ordinary Least-Squares regression to determine which variables, if any, exhibit the greatest effect on the outcome score. In order to determine which variables (property tax rate, educational attainment, organizational budget) have the greatest increasing effect on our "outcome success score", the coefficients of each variable demonstrates the importance of each in increasing desired outcomes. Variables that aren't significant with 95% confidence are ignored in this section.

¹² It was possible for a region to show preference for each category of development. Percentages are relative to the total answers for each question, and should not add to 100 for all three.

The coefficient outputs are seen below. |P>t| values of .05 or less are significant with 95% confidence. The regression analysis results in a set of variables that, if manipulated by the regions may increase the likelihood of success.

Relationship between weighted outcome score and sector employment:

Employment Sector	Coefficient	Standard Error	t	P>t	[95% Confidence Interval]	
Natural Resources and Mining	0.0000145	.000048	0.30	0.77	-0.0000941	0.0001231
Construction	-0.0000116	.0000724	-0.16	0.876	-0.0001754	0.0001521
Trade	-0.0000321	.0000141	-2.28	0.049	-0.0000639	-2.41E-07
Transportation and Utilities	-0.0000565	.0000672	-0.84	0.422	-0.0002084	0.0000955
Manufacturing	0.0000721	.0000235	3.07	0.013	0.000019	0.0001252
Information	0.0004601	.0002114	2.18	0.058	-0.0000182	0.0009384
Financial	0.0001444	.000066	2.19	0.056	-4.86E-06	0.0002937
Services	-0.0000407	.0000233	-1.74	0.115	-0.0000934	0.0000121
Government	1.85E-06	9.76e-06	0.19	0.854	-0.0000202	0.0000239
constant	-0.0787251	.1334411	-0.59	0.57	-0.3805899	0.2231398

The output indicates that employment in the information, financial and manufacturing sectors tends to associate with high output scores. Tailoring resources to those sectors or targeting those industries may have a positive effect on the economic development region.

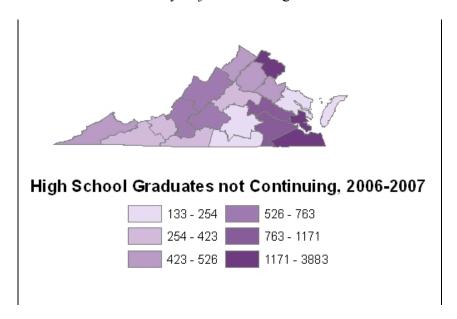
Surprisingly, employment in the trade sector demonstrates a negative relationship with the outcome score. This insinuates that an increase in the number of those employed in trade relates to a less successful region in terms of the outcome score.

Relationship between weighted outcome score and educational attainment:

Educational Attainment	Coefficient	Standard Error	t	P>t	[95% Confidence Interval]	
High School Degree, not continuing	0.0002123	.0000681	3.12	0.007	0.0000672	0.0003575
Associates Degree	-0.0000715	.0000419	-1.71	0.109	-0.0001609	0.0000178
Bachelors Degree	-0.0000207	.0000154	-1.34	0.2	-0.0000536	0.0000122
constant	0.1737525	.1369434	1.27	0.224	-0.1181354	0.4656404

There is a statistically significant, positive relationship between the number of those with a high school degree (not continuing) and the outcome score. This indicates that a large number of regional residents with just a high school degree correlate with high levels of job growth,

investment, and per capita income. This makes sense as high school graduates are a large part of the labor pool and can fill a wide variety of jobs in the region.



Relationship between the weighted outcome score and age brackets:

Age Bracket	Coefficient	Standard Error	t	P>t	[95% Confidence Interval]	
Age 0-17	-0.000015	9.97e-06	-1.51	0.155	-0.0000366	6.50E-06
Age 18-21	8.10E-06	.0000172	0.47	0.645	-0.000029	0.0000452
Age 22-39	-0.0000215	.0000206	-1.05	0.314	-0.000066	0.0000229
Age 30-49	0.0000247	.0000227	1.09	0.296	-0.0000243	0.0000737
Age 50+	8.39E-06	6.73e-06	1.25	0.235	-6.15E-06	0.0000229
constant	-0.3919569	.1633794	-2.40	0.032	-0.7449167	-0.0389972

Relationship between the weighted outcome score and employment:

Employment	Coefficient	Standard Error	t	P>t	[95% Confidence Interval]		
Unemployed	0.0000165	.0000324	0.51	0.618	-0.0000529	0.0000859	
Unemployment Rate	8.423586	5.95674	1.41	0.179	-4.35235	21.19952	
Underemployed	-8.33E-06	.0000122	-0.68	0.507	-0.0000346	0.0000179	
Work in the Region	1.15E-06	1.16e-06	0.99	0.341	-1.35E-06	3.64E-06	
constant	-0.5770758	.350628	-1.65	0.122	-1.329098	0.1749465	

Relationship between weighted outcome score and educational factors:

Educational Factor	Coefficient	Standard Error	t	P>t	[95% Confidence Interval]	
Elementary Student Teacher Ratio	0.0206305	.0813694	0.25	0.803	-0.1528042	0.1940653
Secondary Student Teacher Ratio	0.0637517	.0885118	0.72	0.482	-0.1249068	0.2524101

The Thomas Jefferson Program in Public Policy

Per Pupil Expenditure	0.0000371	.0000845	0.44	0.666	-0.0001429	0.0002172
constant	-1.322192	1.737372	-0.76	0.458	-5.025313	2.380928

The regression results imply no strong relationship between any of the age brackets and the outcome score, unemployment/underemployment and the score, or educational factors and the score. This is not to say that any of these factors is unimportant to the success of the economic development region, only that the marginal effects of these variables are not as significant to a high score as previously mentioned factors.

Analysis of Regions in the Three-State area

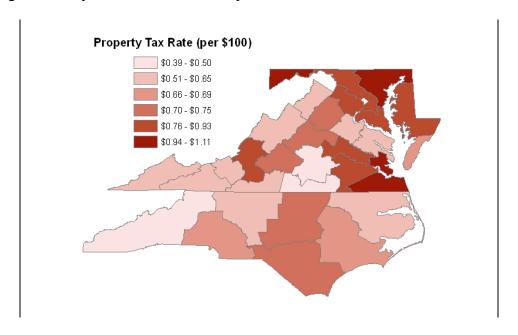
Like the regression results for the Virginia-only analysis, the coefficients show the marginal effect of the variable on the outcome score. Effects that are not significant with 95% confidence are ignored.

Relationship between weighted outcome score and census statistics of 3-state region:

Relationship between v	, cigirca out		Company	Statistic		-
Census Statistic	Coefficient	Standard Error	t	P>t	[95% Co Inter	
White Population	-0.0024151	.0050059	-0.48	0.655	-0.0163139	0.0114836
Black Population	-0.0024135	.0050047	-0.48	0.655	-0.0163087	0.0114817
Hispanic Population	-0.0024496	.0050052	-0.49	0.65	-0.0163462	0.011447
Other Race Population	-0.0024208	.0050032	-0.48	0.654	-0.016312	0.0114705
Number of Males	0.0026666	.0050119	0.53	0.623	-0.0112485	0.0165817
Number of Females	0.0027654	.0050354	0.55	0.612	-0.011215	0.0167457
Age 0-17	-0.0003652	.0002176	-1.68	0.169	-0.0009693	0.0002389
Age 18-21	-0.0003405	.0002078	-1.64	0.177	-0.0009174	0.0002364
Age 22-39	5.65E-07	.0000824	0.01	0.995	-0.0002283	0.0002295
Age 30-49	-0.0002452	.0001367	-1.79	0.147	-0.0006247	0.0001344
Age 50+	-0.0001756	.0001417	-1.24	0.283	-0.0005691	0.0002179
Median Age	-1.878231	1.18951	-1.58	0.189	-5.180841	1.42438
Median Age of Men	1.384994	.8111781	1.71	0.163	-0.8671973	3.637185
Median Age of Women	0.5681076	.4501471	1.26	0.276	-0.681701	1.817916
Average Household Size	-9.95693	6.502351	-1.53	0.2	-28.01035	8.09649
Number of Families	0.0000232	.0000809	0.29	0.789	-0.0002015	0.0002479
Average Family Size	15.64193	8.947812	1.75	0.155	-9.201179	40.48504
Housing Units	-0.0001682	.0001012	-1.66	0.172	-0.0004492	0.0001129
Vacant Housing Units	0.0001419	.0000984	1.44	0.223	-0.0001314	0.0004151
Property Tax Rate	2.388933	.7556386	3.16	0.034	0.2909437	4.486922
Renter Occupied Housing Units	-0.0000337	.0000388	-0.87	0.433	-0.0001414	0.0000739
Labor Force	-5.21E-06	3.48e-06	-1.50	0.209	-0.0000149	4.46E-06
Labor Force Rate	3.862701	2.803207	1.38	0.24	-3.92025	11.64565
Unemployment	-9.39E-07	.0000688	-0.01	0.99	-0.000192	0.0001901
Unemployment Rate	27.84755	13.92495	2.00	0.116	-10.81431	66.50941
Work in the Region	-3.88E-08	3.95e-06	-0.01	0.993	-0.000011	0.0000109
constant	-29.03948	15.1073	-1.92	0.127	-70.98406	12.9051

When we regress census statistics variables on the outcome score, the only significant variable is the local property tax rate. Local property tax rate shows a tendency to raise the outcome score as they increase. At first glance, this seems counterintuitive, however, the effect of higher property tax rates may reflect reverse causation or the fact that economic development

incentives lead to the need for local governments to raise revenues from individuals rather than from businesses which can be exempt from corporate taxation, a popular tool to promote growth. So, the high rates may be the result of development success and not vice versa.



Relationship between weighted outcome score and economic development organization factors of survey respondents:

Organization Factor	Coefficient	Standard Error	t	P>t	[95% Confidence Interval]	
Number of Full Time Employees	0.0262703	.0596395	0.44	0.67	-0.1086437	0.1611843
Number of Part Time Employees	-0.1823417	.2498366	-0.73	0.484	-0.7475113	0.3828279
Organizational Budget	-3.42E-08	3.09e-07	-0.11	0.914	-7.34E-07	6.66E-07
Dollars Spent per Hour of Work	0.0028876	.0092354	0.31	0.762	-0.0180043	0.0237795
constant	-0.1019493	.7028888	-0.15	0.888	-1.691994	1.488096

This final regression output shows the relationship between economic development organization inputs and the outcome score from the survey results we received. Surprisingly, there is not a significant relationship between these factors and the score. This "no relationship" result may mean that regional growth and quality of life is not dependent on these factors.

Survey Methodology and Publication

The basic purpose of the Survey of Regional Economic Development Organizations was to gather 'perspective' or attitudinal data from the directors of each development organization.

These busy respondents carry valuable information for our study, and our goal was to present them with a tool for sharing that information with as few hurdles to do so as possible.

Through the publicly available data on economic development, we were able to gather a lot of general information about the region itself and its environment for economic development. What we needed from these respondents, on the other hand, was the benefit of their knowledge, experience and perspective. Gathering this type of attitudinal data from our respondents allowed us to have a more telling window into their tools for doing business, rather than the regurgitation of facts and figures from an annual report.

<u>Population</u>

As mentioned before, the population we aimed to examine with our survey consisted of all Regional Economic Development Organizations in Virginia, North Carolina and Maryland. Due to the relatively small number of regions—twenty-eight—in this population area, we were not forced to do any type of sampling. We were able to include every region as a potential respondent. Our goal was to get the survey to the highest operational staff member within the office. Depending on the nomenclature, this could have been an Executive Director, President, CEO, etc. A key, however, was to make sure that we reached *operational staff* and not board members or oversight committees. Upon publication of the survey, we advised each addressee that they could delegate response to another staff member if they saw fit. Once again, our goal was to make response as easy and accommodating as possible.

Between the regions, there can be a high level of diversity in terms of the type, structure, goals and operations of these organizations. Examining these differences (and similarities where they exist) is the main goal of this study. However, it can make the question of definition very difficult, both for the researcher and the respondent.

For example, during the open response period of the survey, one potential respondent contacted us with a concern about their place on the spectrum of development organizations. The respondent cautioned: "I'm not sure that we meet your definition of regional economic development organization. We do not perform any direct economic development functions. We only support our region's economic development organizations with data, mapping, etc., however actual economic development activities are performed by other agencies."¹³

The concern highlighted in this message is a key issue in economic development. In many ways, this particular respondent was able to illuminate it better than any of the specific questions on the survey could have. Defining a development agency is a difficult task. There is no basic template for economic development; there is no basic structure for an organization that seeks it. The reality is that regional development is pursued by a series of agencies that operate in different environments with different goals. They may share similarities in any of these areas; they also may be completely different. This is by the nature of the pursuit: each organization is charged with helping an individual region meet specific goals based upon the resources available to them. Therefore, they are best if they can act in whatever ways allow them to most effectively meet these goals. This engenders a level of diversity across regions. While this respondent

¹³ This comment was taken from a personal email correspondence between the researchers and a potential survey respondent. All respondents were promised confidentiality in all business regarding survey response.

believed that their organization did not fall within the definition we were looking for, it is more important to understand that they fit the role for their region.

Given this concern, it is important to define the selection process for each region included in the study. We wanted to gather information about every development region in a three state area. In order to define what those regions were, we relied on the state level development agencies. Though there is variation from one state to another, these higher-level organizations do not typically supercede the regions on any type of bureaucratic hierarchy. Instead, they more typically act as resource providers or coordinators for the regions operating beneath them. As explained by Mr. McClintock of the VEDP, the Partnership tries to assist regions with prospective and active transactions that are ongoing in the Commonwealth.

Maryland and North Carolina have counterpart organizations comparable to the VEDP.

The Maryland Department of Business and Economic Development (www.choosemaryland.org)
and the North Carolina Department of Commerce (www.nccommerce.org) both contain
comprehensive lists of the regional EDOs operating within their states. The EDOs for our
population were determined from each of these sources.

Ensuring Response

The survey was developed over the course of a month. The initial drafts were subjected to peer review, client review, professorial review at the College and a week-long pretest. The final version was ready for publication to the selected population as of the beginning of November 2008. Ensuring response was a key factor in the formulation of the survey and the central focus of the two-week period during which the survey was open. Response was encouraged through three activities: pre-approach emails, reminder emails and reminder calls made to respondent offices.

The pre-approach process was seen as an essential piece of ensuring response. It was decided that the best possible resource for this was another statewide development group: the Virginia Economic Developers Association (VEDA). They are a constant presence in regional economic development and a respected part of the process. VEDA was willing to cooperate with Virginia regions, but did not have time to get approval from its board to do the same for our Maryland and North Carolina subjects. Professor Eric Jensen, the Director of the Thomas Jefferson Program in Public Policy at the College of William and Mary, agreed to send a similar message to potential respondents in Maryland and North Carolina. These pre-approach messages were sent as emails exactly 24 hours before the scheduled publication of the survey.

Upon publication of the survey, respondents received an automatically generated email referring to their specific pre-approach message and containing basic instructions for the completion of the survey. This email highlighted the points explained above, that the survey could be completed with minimal research required by the respondent; a completed response would take 15-20 minutes.

After this initial publication, the surveying program Opinio (www.objectplanet.com/opinio) generated reminder emails at specified intervals. The first was sent one week after initial publication, the second (and final) reminder followed ten days after initial publication. Each of these reminders included a new link to the survey and a brief reminder of the project and the importance of each response (For a copy of all pre-approaches, approaches and reminders, please refer to Appendix A).

These automatic reminders were incredibly useful, but had one limitation: reminder emails would not be sent to any respondent who had opened the survey already. This was fine for those respondents who had finished the survey, but it ignored those who had begun the

survey but neglected to finish. It was possible to manually send individualized reminders to each of these respondents, along with a fresh "re-opened" link to the survey. This step was taken twice during the response period, roughly corresponding to the automatically generated emails.

The final step in assuring response was direct phone communication. On 10 November, halfway through the initial response period, a research team member called the office of every EDO that had yet to submit a completed response of the survey. The researcher first confirmed that the survey had been received, asked if there were any problems, confirmed contact information and offered to resend a link to the survey.

Throughout this entire process, respondents could contact the research team with any questions or problems. When there seemed to be some consistent frustration among respondents, we moved to address it for the rest of our population. The only response issue that developed was some confusion over entry format for budget values: the survey program did not recognize commas as part of a valid number. An email was sent to all remaining respondents—including those who had started the survey but not yet finished—asking them to report numbers only. For example, an annual budget of \$12,345 should be reported as "12345." (For a copy of the questions from the Survey, please refer to Appendix B.)

Responses Gathered

Of the 28 regions within our population, we received 11 complete responses. Also, three respondents completed the "Organization" section of the questionnaire but did not continue. Though these responses were not complete, there is no reason why the information shared by the respondent should not be taken as valid; it was included in the analysis of this section of the survey. In total, this represents a 39% completion rate and some type of usable response information from 50% (14 of 28) of possible respondents.

Each respondent was guaranteed confidentiality, and there will be no individual identification of any specific respondent or region in the report or analysis of results. Looking at the positions of those staff members who completed the survey, it seems we were successful in reaching our target within each office. In 12 of the 14 offices from which we received usable information, the respondent was an Executive Director or CEO level officer. In the remaining two, the response had been delegated to an office coordinator and a marketing specialist. In each of these cases, delegation was acceptable, especially since given the typically small size of each organization there is a high level of cooperation and shared knowledge among staff.

Response gathering efforts were far more successful in Virginia than in North Carolina or Maryland. Of 19 potential respondents in the Commonwealth, we received 11 responses (58%). Of these, nine were completed (47%) and two were not completed but had usable information. This is a very good response rate for a web-based survey. Most importantly, there was diversity in the geography, type and size of those organizations that responded. Therefore, it seems as if there is only a limited non-response bias within Virginia; those regions that responded are representative of the state in general. This means that the information gathered from the questionnaire can be used to make larger inferences about operations within the state at large.

In the other two states, on the other hand, we were not as successful in gathering response. Of 13 possible respondents (each of those states are divided into fewer, larger regions than Virginia) we received only three responses (23%). Of these, two were completed (15%) and one was incomplete but with usable information. It is hard to pinpoint exactly why there was such a high level of non-response from these areas. It may be due to the weakened name recognition of the College (a Virginia State Institution) or to other operational factors in these

other states. Regardless, this limits our ability to make inferences about the population at large from this subsection of our survey respondents.

Survey Analysis

The input gathered from the survey is useful for several different analyses. The first is a SWOT analysis (explained above) using indexes created from selected questions. Additionally, responses allow for general analysis of the operational environment and actions taken by each region.

As explained above, a regional SWOT analysis divides the characteristics of each region into internal and external categories. Those things that are internal to an organization are either Strengths or Weaknesses (S/W). Those that are external are either Opportunities or Threats (O/T). The first four sections of the survey may be divided into such categories. The Organization and Assets/Resources sections represent information that is internal to the region: either that which the EDO has available within its own office or to market within the region. Therefore, survey responses within these sections can be represented on a spectrum between strength and weakness.

The next two sections, Incentives and Regional Relations, represent external factors that each EDO faces as they work for their region. While some regions can lobby government agents for healthy incentive structures, for the most part they are externally offered by outside authority. Likewise, while EDOs can work to improve/alter relations within and around their region, for the most part the level of cooperation or competition among these groups are an external factor with which they must cope. Therefore, responses in these sections may be represented on a spectrum between opportunity and threat.

The final section, Action, does not fall directly within this organizational scheme, but instead represents the response of the region to these factors. Thus, it is not included as part of

Brett Levanto Mehs Ess

30

the SWOT analysis. It will represent a separate piece of survey interpretation and will be faced along with the general assets/resources portion of the analysis.

Coding for SWOT Analysis

The survey was composed of different types of questions, each designed to gather a different type of information. One of the key factors of the SWOT analysis was to synthesize these many different forms into one uniform index that is useful for a common interpretation. This effect is achieved through the creation of a coding scheme that transforms responses into a SWOT index. This process was approached differently for each section.

The first challenge was to integrate a series of numeric responses from the Organization section into some comparative index. The biggest challenge in doing so is to control for the size of each organization. This control will prevent the few large organizations in the data set from dominating the input from the majority of smaller ones. This was done using two questions from within the section. The first (question 4) asked respondents to estimate the total person-hours invested by their staff into organizational functions per week. Better than just staffing levels, this value is an expression of the total working output of the organizations. The second (question 5) asked respondents to input their total annual operating budget.

The responses for these two questions were combined to create a value representing the budgetary funds available per person-hour of work done by operational staff. The combination is quite simple: the weekly person-hour value was multiplied by the 52 weeks in a year in order to create a yearly total. The total budget value inputted was then divided by this yearly output. The resulting value represented dollar value of budgetary resources available per hour of work output by the organizational staff.

This final value represents the resources available to an individual worker within the organization. It has controlled for the size of the organization by incorporating both staffing level and total budget. For example, a large organization with a large budget is now comparable to a smaller organization with a correspondingly smaller budget. If there are more budgetary funds available per hour of work output within an EDO, the workforce will have more resources available in order to perform their job. Therefore, this value is a reasonable assessment of budgetary strength/weakness.

The final three sections are coded somewhat differently from the first. In each, responses have been converted into a point value scale. Since these questions vary in type, each has an individual coding structure. While specific to each question, they are designed with a consistent rationale so that they can be aggregated across each section.

In the Assets/Resources section, the first two questions asked respondents to rate a series of development resources according to their "strength" within the region. From each series, respondents were allowed to rate each from Strongest to fifth Strongest. In assessing the responses from each, it is clear that there are certain resources that are popular in every region. For example, in Question 7, "Available Land for Manufacturing" was by far the most popular development asset. Likewise, in Question 8, State and Federal Highways were the strongest infrastructure resources present in the vast majority of responses.

The rationale of comparing these resources is to find which regions can differentiate themselves by showing comparative strength where others might be weak. Therefore, in coding the question, the two most popular responses from each are omitted. The coding scheme then focuses on how many of each individual region's top *three* selections are included in the

remaining options. Only the top three selections were used because it appears that the fourth and fifth resource tend to be far less important to the development of the region than the top three.

For each of the top three selections made by a region that are not in the omitted categories, the EDO receives a point (+1). For each of the top three selections that are in the omitted categories, the region loses a point (-1). The point total is then summed for the question. For example, imagine a region responded to question 7 that their strongest three assets were "Available Land for Manufacturing", "Available Land for Residential Development" and "Existing Land for Manufacturing," respectively. Since their first selection is one of the two that were omitted based on commonality, they lose a point (-1). The remaining two are both outside of the most popular selections, meaning that these are areas in which the region can differentiate itself from others. For each, they receive a point (+2). So, this region's final value for the question is (+1). This same coding scheme is used for questions 7 and 8.

The final question used in the Assets/Resources section is question 11. In the question, regions were asked to answer whether or not they were seeking development in a series of different categories. Theoretically, in order for a region to seek development in a specific category, it must mean that the resources necessary to allow such growth are available within the region. Therefore, for each "Yes" answer in the question, the region receives a point (+1). For each "No" answer, the region loses a point (-1); the region does not have the resources available to reasonably pursue such development.

While examining a summary of responses to this question, it was noteworthy that not a single respondent actively seeks development in Mining.¹⁴ Since there is no variance in this

¹⁴ Categories for these questions were taken from past surveys and data sets created by the US Bureau of Labor Statistics (www.bls.gov).

category, it was removed from consideration for coding—there is no need to include it since it would offer no additional information to the output score.

In the Incentives section, respondents were asked (question 12) to rate the helpfulness of a series of different incentive structures. Of the possibilities offered, each could be divided into one of three categories: (A) tax assistance (B) utility and zoning and (C) financing assistance. Within each response, a point was awarded (+1) whenever a category was completely present and defined by the respondent as "helpful" within the region. A point was deducted (-1) for any category that was not complete.

The second question in the section (question 13) asked respondents to include any helpful incentives that *were not* included in the list initially offered to them. If a respondent offered a program in this answer that did *not* fall within any of the existing categories, the region was rewarded an extra point (+1). If no additional programs were offered or if they could reasonably fall within an existing category, no points were awarded or deducted; the question was coded as neutral (+0).

The Regional Relations section was the final one coded for SWOT analysis. Within the section, respondents were asked (questions 16 and 17) to rate the competitiveness of a series of different relationships both within and around their region, and (question 18) describe the development of those relationships over time. Finally, each region was asked (question 21) to rate the level of knowledge of the EDOs operations and activities held by an *ordinary person* who lives or works in the region.

To rate the relationships (question 16), respondents were given a scale with three options: "More Competitive," "More Cooperative" or "No Relationship." Likewise, three options were presented to describe the relationships over time (question 17): "We have grown more

interdependent," "We have grown more independent" or "We have not changed our relationship." Finally (question 18), respondents were asked to rate public knowledge from "Very Aware" to "Not Aware" across three categories encompassing the goals, successes/failures and activities of the EDO.

In each question a response that represents some level of cooperation, interdependence or awareness earns the responding region a point (+1). Conversely, any response that represents competition, independence or lack of awareness loses a point for the responding region (-1). Finally, any answer displaying no relationship or change is coded as neutral (+0).

The final step in the coding process is to aggregate these values within each section. The result will be four independent scores. The indexed values for Organization and Assets/Resources represent strength or weakness and those for Incentives and Relations represent opportunity or threat. This final coding scheme is comparative. It is most useful as a tool of comparing the outputs across all responses within the population. It should not be used to assess any individual region absent of the other responses.

SWOT Analysis

When aggregated across all sections, the SWOT index scores from *all respondents* can be summarized in the following table:

SWOT Index Scores from All Respondents

	SWOTING	CA SCULCS II OI	и жи ксэронасі	113
Section	Average	Median	Minimum	Maximum
Organization (Dollars/Hour)	\$80.13	\$71.31	\$32.05	\$168.27
Assets/Resources (Index Score)	1.27	1	-5	7
Incentives (Index Score)	1.09	1	-3	4
Relations (Index Score)	3.09	4	-7	9

The typical respondent (median observation), based on this assessment:

- Has \$71.31 in budgetary resources available per hour of staff work output.
- Is consistent with other regions (a score closer to 0 indicates no relative advantage or disadvantage) in both Assets/Resources and Incentives.
- Despite some instances of "More Competition" enjoys relatively genial relationships within and around its region.

SWOT is a comparative structure. The values above indicate how the *typical* region responded within each category. However, before making any comparison, we should address the issue of non-response from Maryland and North Carolina. As mentioned before, extremely limited responses in these states inhibit our ability to make general assessments of the entire population. Examining the limited responses from these other states, the information seems to be from larger regions with bigger budgets. These values bias our outcomes, so a responsible comparison should also examine only Virginia Respondents:

SWOT Index Scores from Virginia Respondents

Section	Average	Median	Minimum	Maximum
Organization (Dollars/Hour)	\$72.12	\$70.51	\$32.05	\$128.20
Assets/Resources (Index Score)	1.11	1	-5	7
Incentives (Index Score)	.67	1	-3	4
Relations (Index Score)	2.78	4	-7	7

The typical Virginia respondent (median observation), based on this assessment:

- Has \$70.51 in budgetary resources available per hour of staff work output.
- Is consistent with other regions (a score closer to 0 indicates no relative advantage or disadvantage) in both Assets/Resources and Incentives.
- Despite some instances of "More Competition" enjoys relatively genial relationships within and around its region.

General Analysis

Brett Levanto Mehs Ess

SWOT is a telling comparative analysis structure, but there are other bits of information derived from the survey that help to illustrate Regional Economic Development. This general analysis can be done using all five sections of the survey.

For organizational data, we have brought back all 14 respondents from whom we received some type of response. The data can be seen in the following table:

Organizational Resources for All Respondents

	Average	Smallest	Largest	Median
Full Time Staff	7.2	0	20	4
Part Time Staff	0.6	0	2	0
Person-Hours	310.4	2	800	200
Budget	\$1.5 million	\$10,000	\$7 million	\$550,000
Public/Private Funding Mix	62/38	All Private	All Public	44/56

For comparative purposes, it is once again appropriate to use the median of each category. In this particular case, this is especially necessary due to the presence of some large outliers in the data. There were a couple of respondents with large organizations and budgets; these high values will affect the average as an effective measure of central tendency. We do not want to eliminate these observations; they are a valid and useful part of our data set. However, we have to be wary of them in our assessment of the data.

Examining these median values, the typical EDO in our set of responses has four full time staff members who produce 200 hours of work output per week. They have an operating budget of \$550,000 and have a relatively even balance of public and private spending. In the

table, it is clear that the largest value (which skews our data and prevents the average from being representative) is not at all consistent with the typical case. In fact, the largest observation has a staff more than five times and a budget more than 12 times that of the typical organization.

In the Assets/Resources section, it is apparent that there is a level of consistency in terms of asset strength. As mentioned before, the majority of all respondents claim available land for both industrial and commercial development as the strongest resources. Likewise, the vast majority of respondents reported that their strongest transportation infrastructure were federal and state highways. So, in both these categories, there is a consistency between all regions that responded.

In terms of activity already present, respondents were asked to indicate (question 9) the percentage of all business in the region performed within a list of categories. Of these, the most prevalent industries reported by respondents are Government, Wholesale/Retail Sales, Manufacturing and Transportation/Distribution. This set of resources is most interesting when compared with question 11, which asked respondents in which areas their EDOs were actively seeking new development. In the Government and Wholesale/Retail categories, only one third of respondents claimed they were actively seeking new development, despite the fact that these were two categories represented the highest levels of existing activity.

It is reasonable to infer that this difference stems from two things. First, Government industries do not typically operate in the same commercial manner as the other categories of investment. Therefore, it might be a less effective strategy to actively lobby for new government investment, regardless of how much is already present in the region. The second issue this highlights is the "top-down" focus of regional economic development. Essentially, a "top down"

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¹⁵ Once again, the categories selected for these questions were taken from the US Bureau of Labor Statistics (www.bls.gov).

focus means that EDOs pursue development on large-scale levels. When this development occurs, it brings with it growth in the smaller sectors that service the population.

Wholesale/Retail sales tend to stem from increases in population and wealth levels among the existing population. Therefore, a region can stimulate growth in these areas by pursuing larger development that will stimulate this growth as a subsidiary effect.

In the incentive section, it is not surprising that all possible types of incentives were rated—if present—to be helpful on some level. Of all the possible options, respondents rated tax incentives and financing assistance to be the most helpful. No category, if present, was rated to be unhelpful. Of all categories, Utility assistance was considered the least helpful; one third of respondents considered it to be "neutral".

In the cooperation section, the majority of respondents claimed their relationships both within and around their region were "more cooperative." Of all the relationships described in the questionnaire, only Among Local Governments within the Region did most respondents claim a competitive level of relation. This means that the only level of competition typically observed by responding EDOs was between the local governments within their regions. Over time, nearly 90% of respondents claim that they are either maintaining the same relationships within their region or growing more interdependent. From these responses, it appears that most regions enjoy cooperative relationships within their region and they are growing closer together over time.

In terms of public awareness, all but one region engage in some type of marketing directed at the typical person who lives or works in their region. Most report some level of awareness of their activities and successes/failures. However, only one of ten respondents reported that the general public has any knowledge of their organizational goals. So, though

Brett Levanto Mehs Ess

EDOs are able to publicize their actions—most likely through local newspapers and the general media—it is more difficult for them to make the typical person aware of *why* they are performing them.

The action section focuses heavily on the gathering of Requests for Information (RFIs). These are the main tools site selection consultants and growing companies have in narrowing down selection decisions between different locations. In a way, an RFI is a good indication of the activity of an EDO. Questions in the section surround the relationship between the EDO and the organizations from which they receive RFIs. Respondents were asked to describe their relationship with the organizations submitting RFIs to them, how involved they are with them *before* receiving the RFI. There is an even mix of requests made from consultants and companies that long-standing relationships with the EDO, those that have just begun their relationship and those that have had no previous relationship.

We also asked respondents what actions typically seem to cause these requests. From our data, there is an even distribution between ongoing relationships, website searches and trade shows. Of those RFIs received, there is also an even distribution between consultants and companies that have worked considered the region for previous development projects and those that have not. Interestingly, past failure does not diminish the importance of maintaining relationships. Ninety percent of respondents reported receiving an RFI in the past 12 months from a consultant or company for which they had *lost* a previous competition. This is a larger portion than those that received RFIs from organizations that had considered *and chosen* their region in previous decisions (56%). Short-term setbacks or losses do not diminish the importance of maintaining and improving long-term relationships.

In the final question of the Action section, respondents were asked whether they focus more heavily on New Development or Expanding Existing Industry. Fifty six percent of respondents focus on Expanding Existing Industry. Regardless of selection, we asked the respondents why their organization had made this choice. In every case, the organization reported that their selection stemmed from the particular needs of their region. In some cases, the strength of existing industry clusters or the high value of the work offered by them required the focus and attention of the EDO. In others, expanding existing industry was more a focus of local governments; within this context, the logical work of the region is to generate new development.

This situation highlights a point made earlier. There is not consistent purpose of a Regional Economic Development Organization. There may be consistency of resources or activities. There may even be consistency in goals. However, in the end EDOs act in the ways that best achieve the goals they have set for their regions while utilizing the environment of opportunity in which they exist.

Summary Survey Conclusion

Concluding our survey analysis requires addressing both types of analysis performed in the survey. The General Analysis indicates that there is a high level of consistency among our responding regions in terms of asset/resource strength, development focus and relationships. Most of these agencies appear to be smaller, locally focused organizations with a handful of staff members. Knowledge of assets and resources is obviously very important, but there is a level of consistency among the resources actually available within the population. Therefore, building relationship—whether within a region or with outside agents—is clearly an essential job for these staffs.

Brett Levanto Mehs Ess

Final Development Focus Points

The purpose of our study was to examine the relationship between economic development outcomes and the variables that surround the work of Economic Development Organizations. We used this analysis to try to interpret a series of "best practices" that might help to focus the efforts of these EDOs as they attempt to improve their work. Based upon the high level of diversity from one region to the next, it is very difficult to specify a laundry list of actions that best inform development. However, from our work, it has been possible to highlight certain areas in which an organization's focus might best be directed to engender development.

The first is relationship building. Our general survey analysis highlighted the variability of resources and goals that exists among the regions in our population. Beyond a heavy reliance on manufacturing development and highway infrastructure, there is no common thread that unites these regions more than the need to build and maintain relationships. Developing these connections requires a high level of cooperation within inter-regional groups and governments, and extends to the companies and site selection consultants who mark regions for development.

As we have seen, it is important for EDOs to establish their goals based on the resources available and the needs of their region. We performed a statistical analysis comparing different inputs and resources to a weighted outcome variable that combined income, investment and jobs created. This analysis has shown that there are some areas—across our population—on which it might be wise to focus. On various levels of our analysis, Information, Financial and Manufacturing sector investments, High School educational attainments all demonstrated positive relationships to economic development outcomes. Property tax rates did as well, but we believe that this is a demonstration of inverse causation: incentives for businesses cause pressure for localities to generate revenue through other means. In this way, it is increased development

Brett Levanto Mehs Ess

that causes increases in tax rates. Still, regions should focus on developing tools that enhance these advantageous assets in education and development.

Using our survey tool, we have created a Strengths/Weaknesses/ Opportunities/Threats (SWOT) scoring index. This is a useful tool in assessing the relative advantages and disadvantages of the regions within our study area.

Economic development is a difficult goal to achieve. These many organizations work to insure the economic health of their regions and the improved quality of life of their citizens. "Best practices" are dependent largely on the needs of the region and the tools available to meet them. Such decisions are best made by the EDOs themselves. This paper has created this series of focus points as a tool to help these organizations improve as they work to grow their regions.

Appendix A—Survey Response Tools

A.1. Survey Pre-Approach Letter

[Personal Salutation]

In the next day, you will receive an email inviting you to participate in a web-based survey. It has been developed by a graduate research team working for the Thomas Jefferson Program in Public Policy at the College of William & Mary (web.wm.edu/publicpolicy/).

The events of the past year have made it clear the interdependence of our national economy. Now more than ever, we must work to ensure that at all levels of society we work to build and grow our communities and ensure a sound economic future. The goal of this survey is to investigate the relationship between the economic growth of regions and the practices, resources and structure of the Economic Development Organizations that serve them. You have been chosen, along with your fellow regions across Virginia, Maryland and North Carolina, to be an integral part of this study.

I know you often are inundated with surveys. Let me thank you in advance for your willingness to help with this work, and more importantly, to assist with this timely research. The survey will help to build a roadmap towards healthy economic development practices and it is vital that your voice be heard.

[Personal Closing]

A.2. Survey Invitation Email

[Reference to appropriate pre-approach letter with explanation of study]. We are now inviting you to be a part of this work. In this email is a link that will connect you to web-based survey that is integral to this research.

The goal of this survey is to investigate the relationship between the economic growth of regions and the practices, resources and structure of the Economic Development Organizations that serve them. You have been chosen, along with your fellow regions across Virginia, Maryland and North Carolina, to be an important part of this study.

Please go to the following web address to respond to the survey: [Survey Link]

We thank you very much for your help. It should not take you more than 20 minutes to complete. It has been carefully designed in order to protect you from having to perform any calculations or time-consuming research. All questions should be answerable based solely upon your knowledge, perspective and experience.

If you have any questions regarding the survey or our work, please contact Brett Levanto (bflevanto@wm.edu) or Mehs Ess (maess@wm.edu) at the College.

A.3. Survey Reminder #1

A week ago, you were invited to participate in a Survey of Regional Economic Development Organizations. Your support is a vital part of our work and we would like to ask you to take twenty minutes of your time to complete the survey.

Please go to the following web address to respond to the survey: [Survey Link]

If you have any questions regarding the survey or our work, please contact Brett Levanto (bflevanto@wm.edu) or Mehs Ess (maess@wm.edu) at the College.

A.4. Survey Reminder #2

This message is to remind you that you have not responded to the survey below. You are a very important part of our research and we want to ensure that your organization's voice is heard.

This is the final reminder:

[Survey Link]

If you have any questions regarding the survey or our work, please contact Brett Levanto (bflevanto@wm.edu) or Mehs Ess (maess@wm.edu) at the College.

Appendix B—Survey of Regional Economic Development Organizations

B.1. Survey Instructions

Welcome to the Survey of Best Practices in Regional Economic Development. We assure each survey respondent that your organization's responses will be kept **strictly confidential**. Our work will assess the general connection between the actions and resources of Economic Development Organizations and the development of their region, but our report will not reveal any information at the respondent level. Essentially, there will be no way that anyone other than the research team could know your individual region's responses.

It is vital to the validity of our study that we achieve a very high response rate. Every survey respondent is important and we hope you will fill out the survey. However, your participation is completely voluntary. Regardless of whether or not you choose to participate, if you would like a copy of our final report we would be happy to provide one for you. For such requests, or with any questions about the completion of the survey or the study itself, please contact us at our information listed in your invitation email.

Thank you very much for your time and your help.

B.2. Survey Questions as Presented to Respondents via Opinio Survey Publication Program

Survey of Regional Economic Development Organizations

Organization

 \ 	What is your	official title	within your	organization	(e.g l	Executive.	Director)	?
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2)]	How many	tul	l time s	taff mem	bers do	o vou .	having v	working	tor vour	organizat	.10n?

3)	Hc	w many	part	time staff	members	do y	you l	have wor	king :	tor your	organizat	ion?
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4) How many total person-hours does the *professional* and *support* staff work per week on average? (For example: if you organization had 10 employees who worked 40 hours a week, they would be supplying 400 person hours of work.)

5) What was the *total* Annual Operating Budget of **your organization** for FY2007?

<u>\$</u>	
6) What <i>percentage</i> of this total bu	adget comes from:
Public sources Private sources	

Assets/Resources

7) Which of the following *development resources* are the strongest assets in your region:

	Strongest	2nd	3rd	4th	5th
	Asset	Strongest	Strongest	Strongest	Strongest
Available land for industrial development					
Available land for commercial development					
Available land for residential development					
Existing development available for industrial use					
Existing development available for commercial					
use					
Existing development available for commercial					
use					

8) Of the following examples of *established transportation infrastructure*, please indicate the relative strength of each asset to the economic of your region. (For example: If your region attracts investment mostly because companies or government agencies can utilize your proximity to an International Airport, this might be your strongest asset.)

	Strongest	2nd	3rd	4th	5th
	Asset	Strongest	Strongest	Strongest	Strongest
Interstate Highways					
State Funded Highway(s)					
International/Commercial Airport					
Municipal Airport					
Rail Transportation/Shipping Depot					
River/Inland Navigable Waterway					
Deep Water Shipping Port					

9) What percentage of economic activity (in terms of total number of jobs present) comes from each of the following industries?

Manufacturing	
Mining	
Farming/Agriculture	
Energy	
Transportation/ Distribution	
Wholesale/Retail Sales	
Government	
Financial Services	
Leisure and Hospitality	
Technology	

10) Of the following, please select the two *existing industries* that are currently *most economically valuable* to your region (please select ONLY TWO):

Manufacturing
Mining

Farming/Agriculture
Energy
Transportation and Distribution
Wholesale/Retail Sales
Government
Financial Services
Leisure and Hospitality
Technology

11) Are you actively seeking new economic activity in the following industries?

	Yes	No
Manufacturing		
Mining		
Farming/Agriculture		
Energy		
Transportation and Distribution		
Wholesale/Retail Sales		
Government		
Financial Services		
Leisure and Hospitality		
Technology		

Incentives

12) Rate the helpfulness of the following *incentive* structures in attracting business to **your region** (If your region does not receive the following incentives, please select "Not Present."):

	Very helpful	Helpful	Neutral	Not helpful	Not Present
State Tax Assistance					
Local Tax Assistance					
Assistance by Utility Providers					
Zoning and Permitting Assistance					
Low-interest financing programs					

13) Please briefly describe any incentive structure not mentioned in the previous questions that are helpful in your region:

Relations

14) Are there economic development organizations at the local/regional level that *duplicate the efforts* of your organization? While answering this question, think only of the organizations in our region in relation to your own, not to each other.

Yes
No

15) Please list below those entities duplicating the efforts of your organization.

16) For each of the *following*, please indicate whether **your organization's** relationship (if there is one) is more cooperative or more competitive:

	More	More	No
	Cooperative	Competitive	Relationship
Other regional economic development organizations.			
Local Governments within your region.			
Sub-regional economic development organizations			
(such as Chambers of Commerce) within your region.			

17) For each of the following, please indicate whether the **relationship described** is more cooperative or more competitive:

	More Cooperative	More Competitive	No Relationship
Among local governments within your region			
Among the specific Sub-regional economic			
development organizations (such as Chambers of			
Commerce) within your region.			

18) In the last five years, which of the following statements is the most applicable to **your organization's** relations with the other economic and political organizations *within* your region?

We have grown more interdependent
We have not changed our relationship
We have grown more dispersed

19) Does your ability to raise funds (from either public or private sources) *inhibit* the fundraising capacity of the other economic or political organizations *within your region*?

Yes
No

20) Do the sub-regional economic development organizations (such as Chambers of Commerce) within your region believe that that your ability to raise funds *inhibits* their fundraising capacity?

Yes, All DO
Most DO, some DO NOT
Some DO, most DO NOT
No, None DO

21) How aware do you believe the *typical person* (somebody not directly connected to your work but who lives or works) in your region is about **your organization's**:

	Very Aware	Somewhat Aware	Not Aware
Goals			
Activities			

Successes/Failures		

22) Does **your organization** engage in any form of marketing designed to raise awareness of the *typical person in your region* of your work?

Yes
No

ACTION

23) How many Requests for Information (RFIs) did **your organization** receive in each of the following calendar years?

2005	
2006	
2007	

24) Which of the following expressions *best describes* **your organization's** relationship to the organizations (both businesses and site selection consultants) submitting RFIs to you? (Select only one)

We have developed and continuing relationships with			
these companies/consultants.			
We first connect with the shortly before the RFI.			
We have no relationship with them prior to the RFI.			

25) What percentage of all RFIs received by your **organization in the past 12 months** resulted from the following:

	1-25%	26-50%	51-75%	76-100%
From ongoing relationships with known				
"site selection consultants."				
From information searches on your				
website.				

From meetings made from trade/industry		
shows.		

26) *In the past 12 months*, has **your organization** received RFIs from companies/consultants that:

	Yes	No
Have never considered your region for a project before.		
Have previously considered your region for a project and awarded it to you region.		
Have previously considered your region for a project but awarded it to another region		

27) Which of the following activities is *more important* to the operating and development goals of **your organization**?

New Industry Development
Expanding Existing Industry

- 28) Please briefly explain why your organization has chosen its focus in the previous question.
- 29) What is **your organization's** mission statement?

Appendix C—SWOT Index Scores by Question (Virginia)

C.1. Summary Statistics of SWOT Scores by Section and Question

The following tables demonstrate the summary data for each individual question used in SWOT analysis. Given the high non-response from Maryland and North Carolina, these figures are for Virginia respondents only. Please note that these are summary statistics and do not provide any information about specific respondents.

Organization

Q4 & Q5: Budgetary Resources Available Per Hour of Work Output				
Average Median Minimum Maximum				
\$72.12	\$70.51	\$32.05	\$128.20	

Assets/Resources

Note: The questions have been included in each table for reference, though answer options have been omitted to save space. For complete questions, please refer to B.2. Values shown are the summary statistics of the individual SWOT indexes created for each question.

Q7: Which of the foll region?	Q7: Which of the following development resources are the strongest assets in your region?				
Average Median Minimum Maximum					
78	-1	-2	1		

Q8: Of the following examples of established transportation infrastructure, please indicate the relative strength of each asset to the economic of your region. (For example: If your region attracts investment mostly because companies or government agencies can utilize your proximity to an International Airport, this might be your strongest asset.)

Average	Median	Minimum	Maximum
33	-1	-1	1

Q11: Are you actively seeking new economic activity in the following industries?				
Average Median Minimum Maximum				
2.22	1	-3	7	

Incentives

Q12: Rate the helpfulness of the following incentive structures in attracting business to
your region (If your region does not receive the following incentives, please select "Not
Present."):

resem j.						
Average	Median	Minimum	Maximum			
.22	1	-3	3			

Q13: Please briefly describe any incentive structure not mentioned in the previous questions that are helpful in your region:

questions that are helpful in your region:					
Average	Median	Minimum	Maximum		
.44	0	0	1		

Relations

Q16: For each of the following, please indicate whether your organization's relationship (if there is one) is more cooperative or more competitive:			
Average	Median	Minimum	Maximum
1.78	2	-3	3

Q17: For each of the following, please	indicate whether the relationship described is
more cooperative or more competitive:	

more cooperatore or more competitives			
Average	Median	Minimum	Maximum
.33	0	-2	2

Q18: In the last five years, which of the following statements is the most applicable to your organization's relations with the other economic and political organizations within your region?

	Average	Median	Minimum	Maximum
	.44	1	-1	1

Q21: How aware do you believe the typical person (somebody not directly connected to your work but who lives or works) in your region is about your organization's:

П				-
	Average	Median	Minimum	Maximum
	.22	1	-3	3