

Intelligence-Led Governance: Establishing Meaningful Community Indicators

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Abstract

Intelligence-led governance recognizes that governments are increasingly engaged in mining information to help evaluate the results of their efforts, improve performance, and enhance accountability. This paper begins with a review of the research and practical applications underlying present community indicator programs at the local government level and discusses the recent development and implementation of Clark County, Nevada's (the Las Vegas Valley) community monitoring efforts. The balance discusses the anticipated evolution of community indicator utility, using challenges that governments are likely to face in the first quarter of the 21st Century as an analysis framework. Our findings do not support that governing by numbers is a preferable or even plausible outcome, today or into the foreseeable future. Rather, they suggest that aggressive integration of information into the business that is government will increase performance and accountability as well as provide an early-warning system for social, economic, and fiscal issues.

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Background Discussion

Governments have increasingly been evaluating the results of their efforts. Usually, this has meant measuring service outputs (or inputs) for purposes of managing efficiency and accountability. Collecting performance measures is a commonly-used method to quantify and improve performance at the organizational level. More than half of all local governments in the United States are engaged in some type of performance measurement and monitoring in their communities (Ammons, 2001). More recently, however, a movement has emerged that seeks to assess wellbeing in a more holistic way by measuring quality-of-life outcomes (Swain, 2002). These outcomes, frequently referred to as social indicators or benchmarking, have been used effectively at the national and international levels (Cobb & Rixford, 1998). A significant challenge confronting the collection of this current indicator movement is how to make efforts meaningful and integrated at the organizational and community levels with a multitude of public and third-party entities while ensuring they have some influence on society and public policy outcomes. Frequently, statistics are collected and reports developed that have no visible impact on social processes and outcomes (Cobb & Rixford, 1998).

Performance measurement primarily has been focused at the organizational level and thus internally directed to support a host of management functions such as accountability, planning/budgeting, operational improvement, program evaluation, reallocation of resources, directing operations, and contract management (Ammons, 2001; Osborne & Gaebler, 1992; Poister & Streib, 1999). Performance measurement in local governments generally have been categorized as one or more of the following: workload (output) measures, efficiency measures, effectiveness (outcome) measures, and productivity measures (Ammons, 2001). Some governments have begun to measure more broadly defined indicators of the outcomes of public services and policies. These are

still more narrowly defined than holistic community outcomes because they focus on the outcomes of specific governmental activities; however, they substantially narrow the gap between traditional performance indicators and benchmarking (Swain, 2002). Most contemporary social indicators have sought to improve the ability to measure the well-being of the community without specific reference to the role of government in creating those more accurately measured conditions. As a result, most social indicators research has been more generally “descriptive” rather than concerned with the impact of public policies and the role of government in creating or altering social conditions (Cobb & Rixford, 1998).

Broad consensus exists that there is a need to do more than be descriptive. While practices and ideas about the design, production and role of community indicators seem to vary widely, it appears that much of the effort has been devoted to developing the numbers themselves rather than focusing on how they will be produced over time or how they will influence action (Innes & Booher, 2000). Cobb & Rixford (1998) contend that this is due to the indicators movement being associated with schools of academic sociology that have empathized endless collection of numbers which has resulted in provisional conclusions at best. The researchers have advanced an approach called the analytic method that looks for casual relationships between events rather than simply at the events themselves.

Innes & Booher (2000) posit that in order to be more influential and meaningful the indicator development needs to be part of a public dialogue which assists communities and regions in becoming better at self-management and more aware about the direction they are going. The authors argue that indicators that are influential are developed with the participation of those who are to use them and that the meaning comes to be shared in the relevant community and linked to policy outcomes. In order to accomplish this, they propose three types of indicators: 1) system performance indicators that provide information to the public about the overall health of a community or region;

2) policy and program measures that provide policy-makers with feedback about how specific programs and policies are working; and 3) rapid-feedback indicators that assist individuals and businesses to make more sustainable decisions on a day-to-day basis.

There is a growing recognition that the solutions to the country's most important problems can not be fully addressed inside a bureaucracy. As public problems become more complex, messy, and intractable, government has come to rely on more and more on a network of outside contractors in public, private, and nonprofit organizations to deliver services and to respond to these challenges. Goldsmith & Eggers (2004) have coined this as "network-based partnerships." Government is finding itself increasingly in the position of managing resources that belong to someone else in order to address community problems. Managing this array of network providers is dramatically different from managing internal organizational resources, and many governmental agencies lack the capacity to manage these networks effectively. Public administrators are moving away from managing people inside government who directly provide services and toward coordinating services that are provided by an array of public, private, non-profit, and faith-based organizations. Newland (2002); Goldsmith & Eggers (2004); and Salamon (2002), among others, suggest that we need to think of government less as the actual provider of certain services and more of a facilitator of them.

There is a growing acknowledgment of the inter-relatedness and inter-dependencies between the economic, fiscal, social, and environmental arenas; as well as in the private, public, non-profit, and faith-based sectors (Friedman, 2005; Goldsmith & Eggers, 2004; Reed, 2000; Salamon, 2002). Rapidly accelerating globalization is forcing fundamental change in the world's political, economic and, social systems. Thomas Friedman (2005) suggests that there is a flattening of the global economic field at the same time. Everything is interrelated and is constantly changing, and unpredicted results of interventions are normal. Effective management of complex, changing, large-scale social, and economic phenomena requires tremendous coordination and collaboration.

If the premise that government cannot operate in a vacuum, and can best serve community needs through the leveraging of resources, convening of appropriate stakeholders, and gathering input from affected citizens to solve problems holds true, then it stands to reason that an effective community indicators program can, and should be, used to measure the collective contribution and impacts of all of these participants at the outcome level. The management of complex collaborative relationships requires extensive coordination among all levels of the government, citizens, the private sectors, and faith-based groups. Indicators do not influence public-policy outcomes simply by existing, in isolation of what else is happening in the community. A community's well being is linked not only to quantitative performance metrics but also the public perception of a variety of quality of life factors and their view of government performance as well.

The Clark County Monitoring Program

The Clark County Monitoring Program was borne out of two independent efforts. In 2004, Clark County's Nuclear Waste Division and its consultant team implemented the Yucca Mountain Monitoring Program. The county has been evaluating socioeconomic impacts since 1987, when Clark County was identified by the United States Department of Energy as one of ten "affected units of local government" (Nuclear Waste Policy Act, as amended 1987). The Monitoring Program was designed in furtherance of the Clark County's Impact Assessment Report (2002) and was developed to provide a foundation for on-going policy discussions and to establish a baseline from which economic, fiscal, public health, safety, and social changes might be monitored over time (Conway, et al., 2006).

Concurrently, the Clark County Board of County Commissioners commenced the Community Growth Initiative (the "Initiative"). The Initiative was intended to create a forum to discuss the benefits and challenges that come with being the fastest-growing community in the

United States. As part of this process, Commissioners formed a Community Growth Task Force (the “Task Force”) to study growth matters and engage in public debate. A significant result of the Task Force’s work was the development of the Clark County Community Indicator Website. The site provides a broad cross section of economic, fiscal, and social performance and outcome data used by the Task Force in analyzing market conditions and formulating their recommendations.

A substantial amount of overlap existed between these two projects. As such, the two were merged into the Clark County Monitoring Program. Currently in its adolescence, Clark County’s indicators program is comprised of nearly 60 indices that track approximately 800 indicators, and is an integral part of a complex community-improvement process that involves many regional players in the public and private sectors. The program is located in the public domain at www.monitoringprogram.com (Conway, et al. 2006).

The Clark County Performance Management and Measurement Program

Simultaneous to the Monitoring Program’s development, the County initiated an enterprise-wide Performance Management and Measurement Program (PMM) entitled *Results Clark County*. The County has been engaged in strategic planning and performance measurement activities for over a decade. Over the years, both policy-level and organizational-level strategic planning have been enhanced and refined to varying degrees of success. The Monitoring Program provides us with a meaningful opportunity to strengthen the links between community requirements/expectations, and the core services offered in response to those requirements and expectations, and then measure our success in doing so. The PMM’s primary focus is to identify, track, evaluate, and report out on the County’s regional and municipal core services, outcomes, performance indicators, and initiatives. The PMM will not only serve to keep the public informed of progress and results on how their local tax dollars are being spent, it provides critical data for staff, management, and elected officials at

both strategic and tactical levels to identify, evaluate, and address current pressure points, as well as forecast future ones. As the County moves forward with its *Results Clark County* Program and the Monitoring Program, we recognize that we have only scratched the surface of harnessing the power of interweaving and linking organizational outcomes/indicators with community outcomes/indicators. The sections that follow discuss how Intelligence-Led Governance and other similar efforts will continue to evolve as governments both plan for, and react to, new challenges, new responsibilities, and new roles in the communities they serve.

The Evolution of Community Indicator Utility

The preceding sections of this paper have focused on history, evolution, and process. The question raised in this section is: *what comes next?* Historical progress has principally been classification-based. This is to say, advancements in the field of community monitoring have centered on the ability to count, classify, and analyze that which has already occurred. The majority of local-area efforts have been designed to be post-mortem; and, while proactivity is an oft-cited goal, it has emerged as an illusory benefit in many cases. Similarly, the overwhelming magnitude of the data combined with a deficit of technical ability and irregular funding have led some observers to conclude that the vast majority of indicator efforts are “unfocused, pregnant with unrealistic expectations, poorly developed and designed and doomed to be ignored” (Sawicki, 2002). While there is substantial evidence to support this position (see, e.g., Cobb, 2000; Wong, 2000), such a conclusion may be overly myopic, blind to both progress and potential.

Indicators systems themselves have shown significant advancement since President Herbert Hoover instituted the first comprehensive indicator project in 1929 (i.e., the President’s Research Committee on Social Trends). Improved technology and a heightened focus on sustainability have provided both new tools and new motivations for programmatic development, as have idiosyncratic

circumstances such as the siting of high-level nuclear waste facilities, enhanced economic development policies or community housing challenges. While not devoid of growing pains, the form and manner in which information is made available in a knowledge-intensive economy (e.g., the World Wide Web), combined with improved timeliness, utility, reliability and flexibility, have made visible paths formerly obscured. Moreover, analysts are also benefiting from improved history and standardization, nationally, regionally, and locally.

While the majority of commentary regarding community indicator programs has been critical, indicators and performance measures have become key elements in policy initiatives relating to sustainability and to the re-invention of government (Innes & Booher, 2000). Thus, the exploration of the future potential of community indicator programs is predicated on an anticipated evolution of local governance itself. Substantial research exists in this area and reasonable minds may certainly differ as to the expected role, form, and service delivery system for a model locality in the 21st Century. Further, there are some trends that may foreshadow the changes potentially in store. At the 2005 Future of Local Government Summit, Robin Hambleton, Dean of the College of Urban Planning and Public Affairs at University of Illinois Chicago, provided an outline of some of these key trends in his presentation, “New Leadership for 21st Century Local Democracy.” These included, among others, concentrated urbanization in metropolitan regions, adaptation to globalization pressures, citizen demands for responsiveness and accountability, social equity in development patterns, a redefinition of public service consumer, and repositioning government as having the “power to influence” rather than the “power to control” (Hambleton, 2005).

Again, while this is a meaningful synthesis of common expectations, it is admittedly an incomplete, skeletal structure. Moreover, these concepts point to an important underlying and recurring theme. This theme envisions a two-pronged model of local governance, the first prong providing essential (or core) services, while the second acts as mobile, flexible, and targeted resource

that can swiftly and efficiently address emergent, short-run concerns. Such an approach abandons the Procrustean notion that governments have a static, optimal form, embracing instead the ideology that local governments, much like the communities which they serve, should be in a constant state of redefinition.

While this semi-amebic government model raises a number of interesting practical questions (e.g., those relating to labor, capital construction and service segregation), this section is principally concerned with how community indicators programs might evolve concurrently with the governments and communities they are designed to serve. In the paragraphs that follow, we briefly review their potential role utilizing the trends and themes outlined above as a framework for this discussion.

A. Changing Urban Forms: Concentrated Urbanization in Metropolitan Regions

Growth is a challenge in many communities particularly as urban forms become increasingly compact in response to higher land and housing prices, structural changes within the national economy, and continuing migration of population into large cities (particularly in the West and Southwest United States). This contributes to a number of problematic secondary affects, from traffic congestion to affordable housing to infrastructure inadequacy. One of the principal problems with community indicator programs as they relate to urban development is that it tends to segment social issues (e.g., housing affordability) from economic, fiscal, or geographic considerations. In reality, these elements are inextricably linked. In much the same way as traditional econometric input-output models provide a mathematical representation of commodity and labor demand, as well as production and importation within a defined economic unit, models of community resources and demands within small area geographies are beginning to emerge.

The emerging systematic utility of available information notwithstanding, information technology has enhanced nearly every aspect of the community planning process – visioning, planning, implementing, and assessment. Permit applications, approvals and development activity are available in real time in many communities and geographic information systems allow spatial analyses of current and proposed development at a level impossible only a decade ago. Existing land use information can be combined with records of assessment to identify trends in property value escalation, and, in turn, ad valorem taxation. Robust transportation planning applications can translate permitting activity into traffic volumes and air quality implications while econometric models can analyze the value of alternative employment structures within the economy or provide reliable estimates of the demand on schools, police and fire departments, or local hospitals.

Increased access to information and improved ability to analyze these data (e.g., through community monitoring programs) has created a political environment in which unforeseen consequences should be minimized. If a principal challenge facing local governments is the potential impacts of population growth, and, in turn, a changing urban form, the economic, fiscal, social, environmental, and public health and safety impacts of prevailing development policies ought to be nearly transparent. The impacts of growth on infrastructure and other public service demands should be well understood by the affected service providers, and those entities in turn should be able to clearly and readily communicate those impacts to the taxpaying public. Property, sales, excise, income, and other taxes ebb and flow based on business cycles; however, their longer-run trend lines tend to be fairly consistent. The same is also true of the demand for core public services. Governments know, or should know, the impacts of alternative development scenarios on traffic and air quality long before gridlock results or air quality breaches national standards. This is no longer a question of data availability, but rather a community's ability and willingness to use available information effectively. Looking forward, government challenges surrounding the changing urban

form will not be the result lack of foresight regarding the implications of selected growth patterns; rather, it will be the product of a decision to accept negative consequences in trade for benefits otherwise accruing to the community. (See Appendix, Figure 1).

Two valid criticisms of the commentary provided above is that it oversimplifies the interrelationships of diverse, and often competing factors and implicitly suggest that local governments should attempt to impose the public will on the free market. While we stop short in this missive of undertaking these important issues, assuming *arguendo*, that both are shown to limit governments' ability to impact the pattern or intensity of development, neither erodes the legitimate place of community indicator data in mitigating the potential impacts changing urban forms. Only local governments have access to the information necessary to implement such a program, and only local governments can represent the longer-run interests of the public at large. Whether preventative or reactionary in nature, mitigating the negative externalities associated with 21st Century development trends will be improved by the utility of community indices.

B. Economic Development in the Flat World: Adaptation to Globalization Pressures

There is perhaps no more fertile ground for community indicators than in the field of economic development. Many observers note the United States (and much of the world) is in the midst of a structural change -- much as the nation moved from an agrarian to an industrial economy, it is now shifting from an industrial to an information-based economy. The basis for and implications of this shift notwithstanding, competitive pressures to provide opportunities for millions of displaced workers has led many local governments to enhance economic development polices and ask hard questions about their competitive positing in a very unfamiliar global marketplace. (See Appendix, Figure 2).

Community indicators play two important roles as they relate to economic development. First, they can provide a relative gauge of a community's competitiveness in terms of labor quality

and depth, housing affordability, supply chain, and tax climate. Second, they can provide a gauge for progress in terms of both job creation and local economic diversity. These concepts are far from novel, but in a climate of structural change, the ability to assess and adapt quickly to changing opportunities is increasingly important. Global competitiveness is, of course, a global issue.

However, global preparedness is very much local issue. The World Economic Forum's (WEF) Global Competitiveness Report 2005-2006 uses several indicators to rank the positing of nations, finding:

The United States...demonstrates overall technological supremacy, with a very powerful culture of innovation. However, technological prowess is partly offset by a weaker performance in other areas measured by the index. The US has a relatively low rank of 20 for the contracts and law indicator, with particular concerns on the part of the business community about the government's ability to maintain arm's-length relationships with the private sector, and in the formulation of policies more generally. But the country's greatest weakness concerns the health of its macroeconomic environment, where it ranks a low 47th overall. This echoes the increasingly vocal international concerns about the macroeconomic imbalances in the US economy, especially as regards the public finances (WEF, 2005-2006).

Local governments rarely have the ability to influence the core considerations underlying global competitiveness, such as those involving contracting laws, trade balances, commodity prices or currency strength. By contrast, local governments do have the ability to impact those factors most notably influencing domestic corporate site selection. The table provided in Figure 3 reflects the top ten site selection factors reported in Area Development Magazine's 2005 Site Selection Survey (Price, 2006). (See Appendix, Figure 3).

All of the considerations noted on this table lend themselves to benchmarking, trending, and comparative analysis. Moreover, they provide an important framework for understanding and gauging relative economic competitiveness for sub-national economic development. A great many communities are tracking, analyzing, and using these data to solicit business investment within their

boarders. They are also combining them with other considerations such as natural resource availability, quality of life measures, and industrial clustering data to develop sustainable economic development programs.

Pragmatic realism would suggest that Bangor, Maine is not competing with Bangalore, India nor is San Jose, California competing with Shanghai, China nor is Minneapolis, Minnesota competing with Matamoros, Mexico. Rather, these American cities are competing against one another for service-oriented and knowledge-based economic development, which is less tied to geographic resource considerations and more linked to geographic market proximity, industrial and resource clustering and regulatory environments that promote operating efficiency. These communities are unavoidably linked to a global supply chain, in which U.S. markets play an increasing role at the front (e.g., research and development) and back (e.g., product delivery and servicing) ends.

The second prong of the economic development question is that of performance tracking. More information than ever is available on employment, wage, and economic output growth and decline by sector as well as expansion and siting of new businesses and industrial clustering. These data can, and in many cases are, being tracked on a recurring basis to gauge the effectiveness of economic development policies and the general health of the local economy. Globalization is inevitable and community indicators will play an increasing role in enhancing community competitiveness and promoting sustainable, sub-national economic units.

C. The New Local Government: Responsive and Accountable

In many ways governments are plagued with an impossible dichotomy of demands: *be no more than you must be, but be everything that is needed as soon as it is needed*. Being all things to all people is, of course, a Sisyphian task; however, a streamlined, responsive, and accountable local government is clearly desirable and a trend promoted by limited resources, diverse demands, and

lower information barriers. Community indicator programs play a vital role in both responsiveness and accountability efforts.

Performance measurement is an important tool and a topic that is very much in vogue. Generally speaking, performance measurement programs provide a focus on core community services and seek to generate recurring measures of local government's ability to effectively and efficiently deliver those services to the public. A pioneer in employing performance measurement/performance management programs is Sunnyvale, California, a city of approximately 120,000 located in the heart of the Silicon Valley. For each core public service area, Sunnyvale defined goals, identified community performance indicators, established objectives and created service-area performance measures. Consequently, the focus of the decision-making process purportedly broadened from intended outcomes to measurable results. The results of its efforts have been impressive as average annual productivity increased, the city's average cost of service dropped in inflation-adjusted dollars and Sunnyvale reported using fewer people to deliver services than other cities of similar size and type.

Perhaps more important than the success or failure of Sunnyvale's program is its design, process and elements: 1) establishing goals, 2) identifying internal measures of operational efficiency and 3) identifying external measures of programmatic success. These foundational elements impact both government's responsiveness and accountability. The State of Oregon, which followed a somewhat similar track and has one of the most comprehensive benchmarking programs in the United States, recently noted that "[b]y tracking and reporting on a set of measurable indicators of economic, social and environmental health, the legislature and citizens of Oregon see just how Oregon is doing in achieving the goals set out in the plan" (Oregon Press Board 2005). The Oregon Shines program began in 1989, but it was not until 2005 that the biennial report began to demonstrate

how state agencies contribute to benchmarking targets, again marrying the concepts of internal performance and external outcomes. (See Appendix, Figure 4).

If the future of local government demands accountability and responsiveness, the Oregon and Sunnyvale, California models, while impressive, represent only the first step in a long journey. They must transition from an assessment-based construct to an “early-warning” system. The next generation of community indicators will need to address questions such as: Does an increase in the number of methamphetamine arrests indicate a high probability of child protective services caseload escalation? Does an increase in housing prices lead to smaller household sizes, and in turn less demand for education services? Do higher costs of living impact population in-migration? Do higher development densities impact fire or police response times? The identification and exploration of collinearity and causality of distinct, but interrelated, conditions within a community will not only help governments better respond to the needs of their citizens but also make them significantly more effective in avoiding costly, crisis situations. (See Appendix, Figure 5).

This is not solely a future concept. One of the best examples of this type of community indicator-based resource allocation is found in the crime-related spatial analyses. Police departments are using some of the most advanced geographic information systems software to prepare crime “weather reports.” Public safety resources can then be allocated to identify “hot spots” in an effort to halt the proliferation of such activity. The police model is one of the simplest because it tends to be site-specific and the skills of highly-trained officers are, in many cases, transferable. In the absence of improved technology, data collection and analytical abilities, these types of analyses would be impossible or so time consuming that they became an inefficient use of resources. Today, this type of community monitoring saves communities time and money and adds measurably to quality of life. Tomorrow, similar techniques will be used to analyze everything from health care to recreational service demand. Moreover, expansion of similar models across functions will allow for a balancing

and comparison of needs, impacts and abilities, facilitating responsiveness and promoting accountability.

D. The Balanced Community: Social Equity in Development Patterns

Community is defined as “an interacting population of various kinds of individuals in a common location (www.webster.com).” As such, community itself recognizes the concepts of diversity, division of labor, and utilitarianism. Governments are uniquely positioned to ensure that communities remain balanced such that the will of a minority does not lay waste to a society designed to sustain the many. If maintaining community balance is to be a primary function of local governments in the 21st Century, community indicators will almost certainly play an important role in identifying inequities and fashioning solutions aimed at maintaining and/or restoring a social equilibrium.

Social equity itself does not have a simple definition. In a community planning and development construct, the early definition provided in the 1975 Cleveland Policy Planning Report continues to be cited. That report noted, in pertinent part, that “[w]e use 'equity planning' here as a shorthand to refer to planning efforts that pay particular attention to the needs of poor and vulnerable populations, populations also likely to suffer the burdens of racial and sexual discrimination, both institutional and personal” (Krumholz, 1990 p). In more recent roundtable discussions, California planners considered several dimensions of social equity, including “economic equity,” “equity of opportunity and access,” “equity of results and public service delivery” and “cultural equity” (Blakely, 2002).

How might a community identify areas of imbalance, promote necessary equilibriums, or measure the success of policies intended to sustain or enhance social equity in absence of community data that reflect, for example, demographic makeup, housing dispersion or income disparity? The reality is they likely cannot. The relative concentrations or dispersion of physical developments (e.g.,

apartments versus single family homes), geographic separation by income level or inequities in access to universally-demanded public services can and are being tracked by many local governments. (Brunet, 2002; Harmon, 2004; Resource Innovations, 2005) Moreover, the broader concept of social equity embraced by Blakely (2002) and his colleagues, including economic, fiscal, and cultural considerations (e.g., minority or women business enterprise program or equal access recreation opportunities) can only be successful when instituted concurrently with a systematic set of evaluation criteria. (See Appendix, Figure 6).

Also worth noting is the fact that promoting “balance” is a common thread interwoven throughout most of the nation’s indicator efforts. Recent commentary tends to supplant the notion of balance with that of “sustainability,” modifying the former to contemplate the future in concert with the present. Sustainable development, as defined by the World Commission on Environment and Development (the Brundtland Commission), is "the capacity to meet the needs of the present without compromising the ability of future generations to meet their own needs" (U.S. Department of State, 2002). The same authors also note that, in a modern context, development needs now go beyond economic issues to encompass the full range of social and political concerns that impact the overall quality of life. *Id.*

Community indicator programs and monitoring systems will play a key role in developing balanced, or sustainable, communities. The maps above illustrate how spatial analyses can be used to identify and track changes in age and income dispersions as well as housing unit mix and poverty concentrations. Currently, there is a strong trend toward nodal concentrations in core metropolitan areas, which are linked with transit corridors and attempting to generate live-work-play environments. Community indicators will help policymakers understand what is working and what is not, altering these programs to enhance income and employment equity, reduce distance-based asymmetry, ensure air quality standards are preserved, and reduce unnecessary service delivery gaps.

In the foreseeable future, better integration of information technology in the policy process will allow more targeted approaches.

E. Customer-oriented Governance: A Redefinition of the Public Service Consumer

The famous closing phrase of Abraham Lincoln's 1863 "Gettysburg Address" held up the virtues of a government "of the people, by the people, for the people" (Basler, 1990, p. 734). In many ways governments during the better part of the last 150 years became more removed from the general public as governance tended to elevate form over function. The modern model of government, and the one most likely to shape the next century, is one that embraces accountability and one in which government services are increasingly personal. This should not be read to suggest that governments are becoming, or attempting to become, all things to all people -- quite the opposite is clearly the trend. This having been said, governments are adjusting the lens through which they view public needs, bringing government to the people, increasing focus on accountability and monitoring each function's relative ability to make a difference. Governments will increasingly view resident populations as consumers, customers, and citizens (Hambleton, 2005).

Residents as consumers. Internal indicator programs, commonly referred to as performance measurement programs, have allowed governments to focus increasingly on what services are being demanded and how efficiently governments can deliver those services to the public. Borrowing yield management techniques from the public sector, local governments are more routinely measuring both transaction volume and transaction costs. They are also increasingly marketing services that can be delivered more efficiently and downplaying those with higher unit-based costs.

Outcome-oriented performance measurement programs are not novel. As offered in early sections of this note, however, improved information technology, a more techno-savvy workforce

and an increased focus on accountability have allowed government officials access to measurable and consistent information on productivity, effectiveness, quality, and responsiveness. While governments may be in the adolescence of data collection and refinement, they remain in the infancy of analysis. As they continue to mature to this end, governments will become more efficient in their service delivery and more utilitarian in their reforms. Governments cannot be all things to all people; however improved access to, and utility of, performance information allows government to be more things to more people.

Residents as customers. The concept of public service is becoming increasingly personal. That is to say, governments may put more police on the streets, but effective government is measured by the public more on the basis on how safe residents feel in their homes rather than a ratio of officers per 1,000 residents. Again, borrowing from the calculus of private sector commerce, governments are increasingly concerned with consumer sentiment. Consumer-research techniques including focus groups and direct surveys are being utilized to hone governments' understanding of what is important to the public, where the public customer feels that services are adequate and where service deliver gaps exist.

Generally speaking, these questions take many forms including importance and service delivery metrics, factors contributing to quality of life, general economic conditions, environmental issues as well as accessibility ease and frequency assessments. The vast majority of these efforts have been infrequent, irregular and too targeted to provide a meaningful benchmark for analysis purposes. The expectation is that this trend will change. Much like the use of performance measures, the application of consumer-based analyses is neither new nor particularly noteworthy. What is an interesting extension of this line of thought, however, is the integration of this information with other performance and analysis metrics collected internally and externally. In most cases, three economists

can agree only if two of them are dead. This is often the nature of analysis in any discipline, but adding to the witch's brew sound public expectation data offers both a limiting and expanding factor in that it highlights areas of concern and disposes of issues that are more ancillary or anticipatory in nature. This is not to say that these issues are not important, but rather, suggests that quality of life is equal parts perception and reality; and, governments must address both.

Residents as citizens. Of the tripartite regime offered here, the resident as citizens' traunch is the one most easily linked to the benefits of community indicator and information systems. "Government by the people," presupposes citizen input and interaction. Local governments more than ever are bringing government to the people instead of asking people to come to government. Information websites, blogs, government access television channels and Podcasts represent just a few of the venues providing a growing network of interactivity that will be enhanced as the first generation of children growing up with computers in their homes and classrooms emerge from the age of common apathy and become more engaged in public policy.

The current generation has more information than any preceding it regarding what government is doing. Subsequent generations will have significantly improved access not only to the process but also to outcomes. The likely vehicle for this increased access and interactivity are the results of recurring and consistent performance and community indicators, allowing for both the internal and external analysis of performance, efficiency and effectiveness.

F. Repositioning Government: the "Power to Influence" Rather than the "Power to Control"

Throughout this section we have imagined a government that is more streamlined, more decentralized, more informed, more flexible, more accessible, and more personal. This discussion has largely focused on what government "will be" as opposed to what government "will do." Is politics the art of controlling the environment, as the 20th-century American journalist Hunter Thompson

suggested (Josephson Institute of Ethics 2005)? Is it the forceful overseer envisioned by President Washington when he proclaimed, “Government is not eloquence. It is force. And, like fire, it is a dangerous servant and a fearful master” (Wilstach, 1924, p. 526)? Or, is it the misguided intervener contemplated by President Reagan: “If it moves, tax it. If it keeps moving, regulate it. And if it stops moving, subsidize it” (Reagan, 1986)? It could be argued that these were merely the roles that government had played in response to conflict, internal and external, as America grappled to alleviate the growing pangs of its rapid ascendancy. If governments can be more completely, more simply viewed as the custodian of the public good, then the context of our current world and the flatter one that lies beyond the horizon must provide the framework from which its role will be fashioned.

What then does this framework look like in the information age? Government is uniquely positioned. It has access to a broader cross section of data than any individual industry; it is also concerned with a broader target market and has the ability to monitor and identify trends from multiple quarters concurrently. This is not to say that governments are somehow elevated to omnipotence in an information-based society, but they are exceptionally situated to inform the public. In many ways, the ability to inform is the ability influence, particularly in an information-dependent economy. It would be naïve to suggest that governments will be relegated to the role of policy advisor. The ability to lead begins with the ability to understand and the ability to improve begins with the ability to measure. If governments lose “home field advantage” on information, their ability to govern will be limited as will their practical ability to promote effective policies.

Conclusion

Governments and the communities they serve are changing, a condition that is as novel as it is preventable. Throughout this paper we have explored both the role of government and the manner of governance. Underlying both is the emergence of an information-based society and a public role

that is more about providing the opportunity for economic and social well-being than providing the service pursuant thereto – *a government that is more architect than it is mason*. Fundamental to this transition is the ability to obtain, catalog, analyze, and utilize information. This is fundamental to “intelligence-led governance,” a model that asks governments to lead, to facilitate, to influence, and to oversee rather than merely to provide.

Respecting the Orwellian undertones of such a notion, information about citizens as well as the economic, fiscal, environmental, and social landscape of the host community are instrumental to creating data systems that routinely monitor a community’s vital signs. Today, these data are available and rapidly evolving, but remain mostly decentralized. Layering data, from water bills to welfare caseloads, in a central repository will eventually help communities not only provide a profile for service delivery but also map and monitor the anatomy of the community itself.

Our findings do not support that governing by numbers is a preferable or even plausible outcome, today or into the foreseeable future. Rather, they suggest that aggressive integration of information into the business that is government will increase performance and accountability as well as provide an early-warning system for social, economic, and fiscal issues. This, in turn, will allow government to focus more directly on providing the core services for which it is legally, morally, and ethically responsible to provide to its citizens.

While the impetus and implementation for the Clark County’s community indicators program was to develop an “early warning system” on a specific project, it has been quickly propelled forward to be applied to broader program areas at both a regional and municipal level. This paper provides perspectives on the potential utility for, and intent to, demonstrate the significance of performance measurement at an organizational level for purposes of strategic and tactical planning and implementation. Essential program components such as indicator identification, data collection, analysis, trend identification, integration of citizen opinion and involvement, and effective

communication and reporting can be used by affected stakeholders to enhance both short- and long-term decision-making. The transparency and transferability of this unique community indicators system renders it a valuable tool for policymakers across any discipline.

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troublesome servant and a fearful master. Never for a moment should it be left to irresponsible action.” Also noting, this can be found with minor variations in wording and in punctuation, and with “fearful” for “troublesome,” in George Seldes, *The Great Quotations*, p. 727 (1966).; see also *Respectfully Quoted: A Dictionary of Quotations*. 1989.

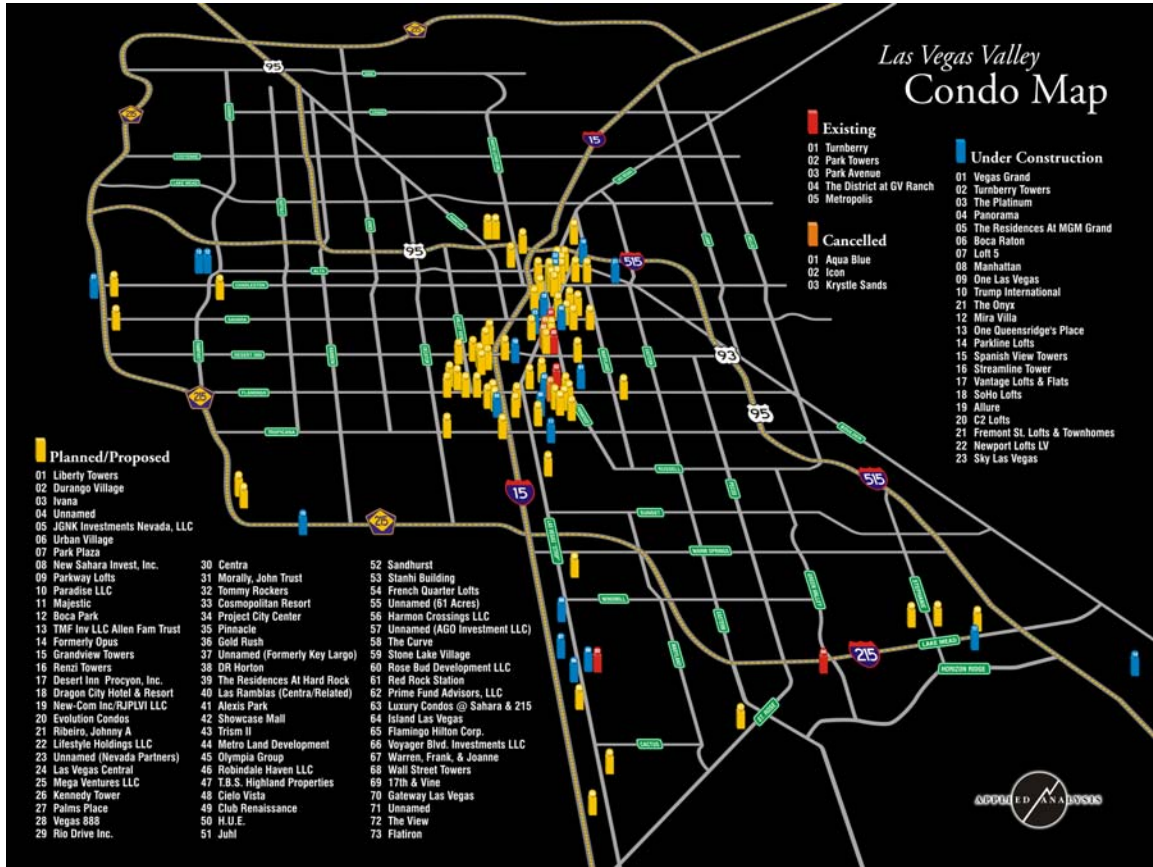
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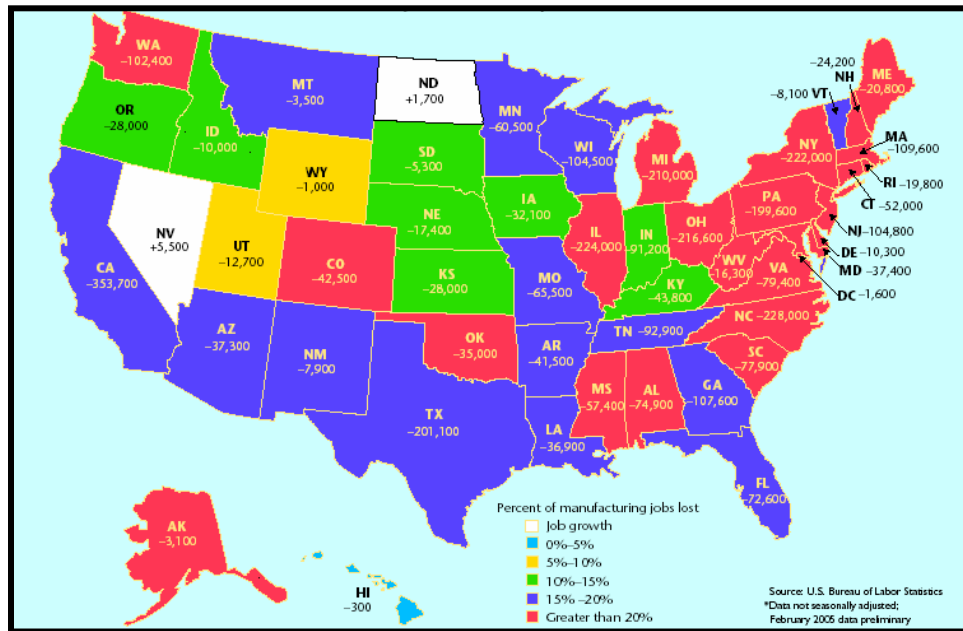
Appendixes

Figure 1: Las Vegas Valley Luxury Condominium Map



Clark County, Nevada is the fastest-growing metropolitan areas of its size in the United States. It is also one of the most rapidly changing with regard to its urban form. With more than 100 high-rise condominium projects planned, proposed or under construction, it may provide a glimpse into the future urbanization of major metropolitan areas.

Figure 2: Manufacturing Job Changes in the United States 2000-2005



Globalization and off-shoring have significantly impact the United State economy. This structural change is most clearly reflected in the change in manufacturing job during the past several years.

**Figure 3: Top Ten Site Selection Factors
Ratings 2005¹**

<u>Rank</u>	<u>Consideration</u>	<u>Score</u> (100 = highest)
1	Highway accessibility	91.4
2	Labor costs	87.9
3	Availability of skilled labor	87.2
4	State and local incentives	86.0
5	Availability of high-speed internet access	85.7
6	Corporate tax rates	85.0
7	Occupancy or construction costs	83.7
8	Tax exemptions	83.6
9	Proximity to major markets	83.2
10	Energy availability and costs	82.8

¹ All figures are percentages and are the total of "very important" and "important" ratings of the Area Development Corporate Survey and are rounded to the nearest tenth of a percent.

**Figure 4: Oregon Shines Program
Key Indicators Summary**

Benchmark	Page	Benchmark	Page	Benchmark	Page	Benchmark	Page
ECONOMY		EDUCATION		SOCIAL SUPPORT		COMMUNITY DEVELOPMENT	
Business Vitality		Kindergarten – 12 th Grade		Health		Growth Management	
1	Employment in Rural Oregon ... 15	18	Ready to Learn 24	39	Teen Pregnancy 36	68	Traffic Congestion 51
2	Trade Outside of Oregon 15	19	3rd Grade Reading & Math... 24	40	Prenatal Care 36	69	Drinking Water 51
3	New Employers 15	20	8th Grade Reading & Math... 24	41	Infant Mortality 36	Infrastructure	
4	Net Job Growth 15	21	Certificate of Initial Mastery.. 25	42	Immunizations 36	70	Commuting 51
5	Professional Services 16	22	High School Dropout Rate... 25	43	HIV Diagnosis 37	71	Vehicle Miles Traveled 52
6	Economic Diversification 16	23	High School Completion 25	44	Adult Non-Smokers 37	72	Road Condition 52
Economic Capacity		Post Secondary		45	Premature Death 37	Housing	
7	Research & Development 17	24	Some College Completion ... 26	46	Perceived Health Status 37	73	Home Ownership 53
8	Venture Capital Investments..... 17	25	Postsecondary Credentials ... 26	47	Child Care Affordability..... 38	74	Affordable Housing 53
Business Costs		26	College Completion 26	48	Child Care Availability..... 38		
9	Cost of Doing Business 17	Skill Development		Protection		ENVIRONMENT	
10	On-time Permits 18	27	Adult Literacy 27	49	Teen Substance Abuse 38	Air	
Income		28	Computer/Internet Usage ... 27	50	Child Abuse or Neglect 39	75	Air Quality 56
11	Per Capita Income 19	29	Labor Force Skills Training . 27	51	Elder Abuse 39	76	Carbon Dioxide Emissions..... 56
12	Pay Per Worker 20	CIVIC ENGAGEMENT		52	Alcohol/Tobacco During PG 39	Water	
13	Income Disparity 20	Participation		Poverty		77	Wetlands 56
14	Workers Above Poverty 21	30	Volunteering 31	53	Poverty 40	78	Stream Water Quality 57
15	Unemployment 21	31	Voting 31	54	Health Insurance 41	79	Instream Flow Rights 57
International		31	Feeling of Community 31	55	Homelessness 41	Land	
16	Export Stability 21	Taxes		56	Child Support Payments 41	80	Agricultural Lands 58
17	Foreign Language Skills 21	33	Understanding Taxes 32	57	Hunger 42	81	Forest Land 58
		34	Taxes Per Income 32	Independent Living		82	Timber Harvest 58
		Public Sector Performance		58	Independent Seniors 42	83	Municipal Waste Disposal 59
		35	Public Managmt. Quality 33	59	Working Disabled 42	84	Hazard. Substance Cleanup... 59
		36	S&P Bond Rating 33	60	Disabled Living in Poverty 43	Plants and Wildlife	
		Culture		PUBLIC SAFETY		85	Freshwater Species 60
		37	State Arts Funding 33	Crime		86	Marine Species 60
		38	Public Library Service 33	61	Overall Crime 46	87	Terrestrial Species 61
				62	Juvenile Arrests 47	88	Protected Species 61
				63	Students Carrying Weapons..... 47	89	Invasive Species 62
				64	Adult Recidivism 47	Outdoor Recreation	
				65	Juvenile Recidivism 48	90	State Park Acreage 62
				66	Cooperative Policing 48		
				Emergency Preparedness			
				67	Emergency Preparedness 48		

Figure 5: City of Phoenix Crime Hotspot Map Robbery

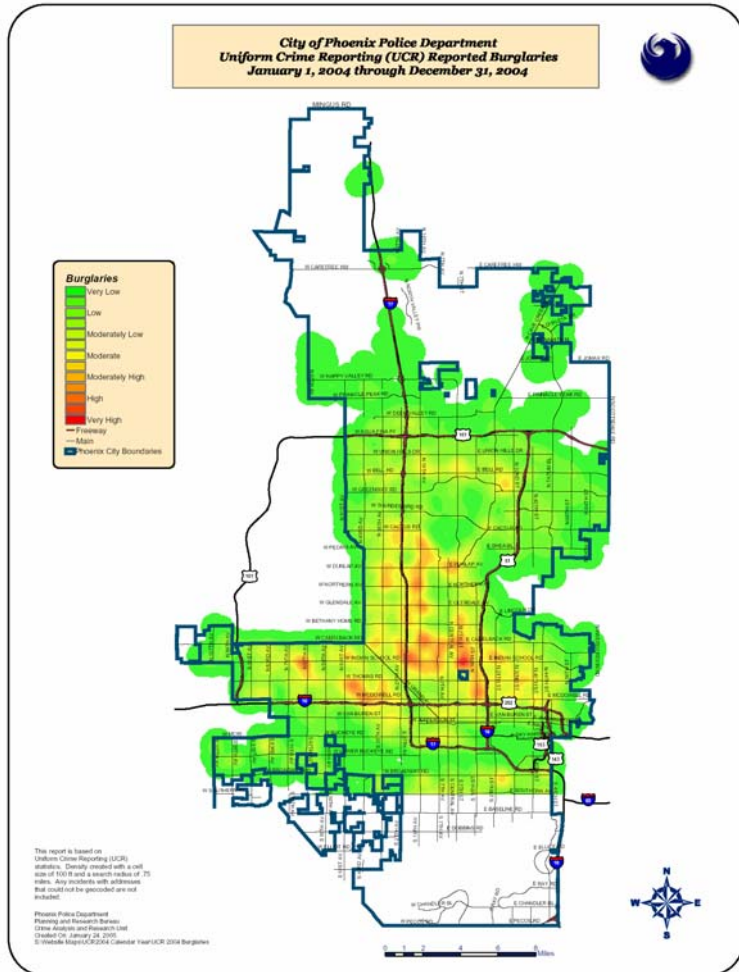
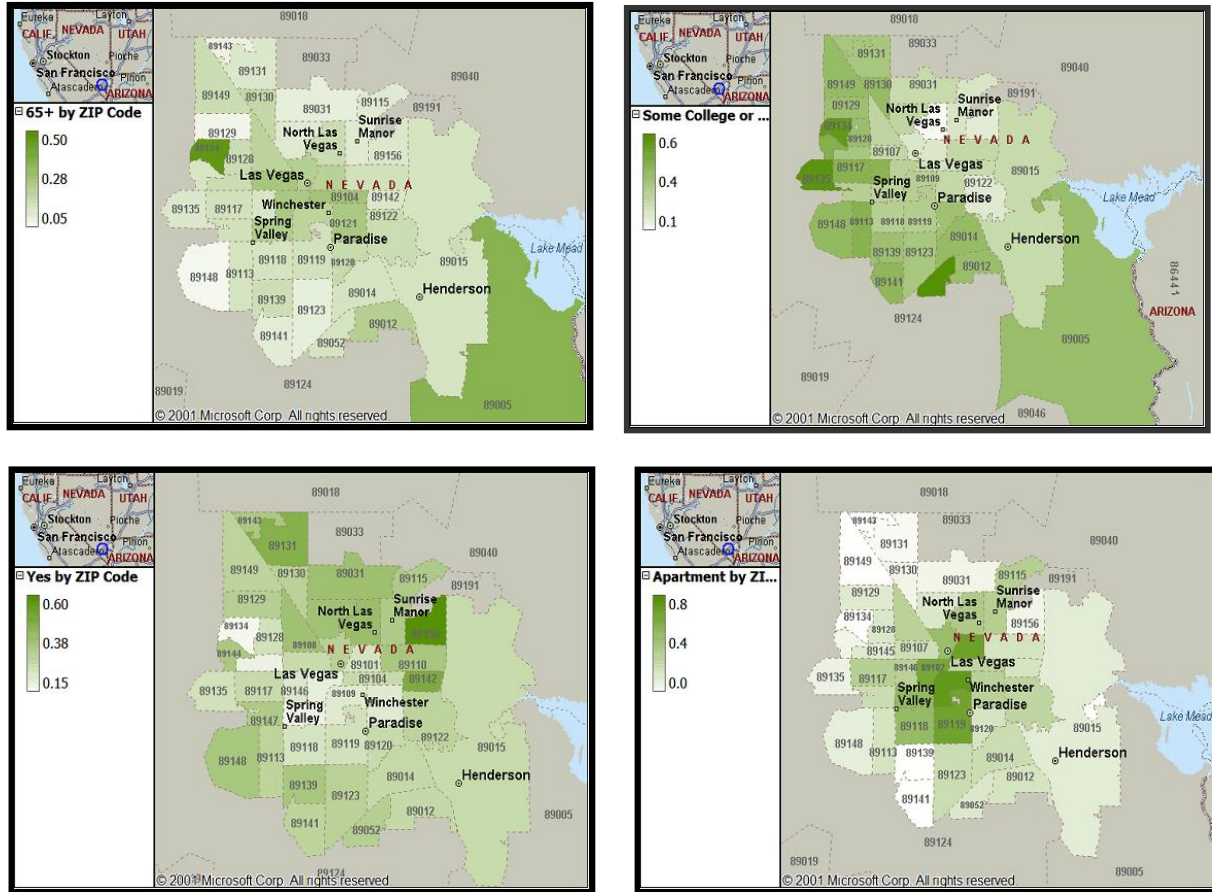


Figure 6: Socio-economic Concentrations Maps
Las Vegas Valley, Nevada



The ability to view and track concentrations has increased with the proliferations and ease of geographic information system technology. Merging analysis with spatial representation enhances both analytical capability and the ability to communicate results to the community.