Quality of Life Indicator Systems–Definitions, Methodologies, Uses, and Public Policy Decision Making

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Abstract

During the past two decades, there has been a gradual increase in the development of key indicator systems.[1] Transcending the typical emphasis on quantitative measures, many of these key indicator systems have combined qualitative measures with hard statistical data with the purpose of making determinations about quality of life (QOL). According to many experts, this alternative approach has allowed for a greater understanding of the pulse or measurement of the *status and position* of a designated population—local, regional, state, national or international in scope.

The advantages of QOL key indicator systems are straightforward. They provide a human dimension to measuring progress in broad issue or policy areas by allowing for an integration of indicators that take into consideration and gauge people's values, preferences, and opinions. This is done generally by the application of scientifically applied surveys that look at non-monetary and normative data and information, which in turn, show commonalities among groups or specified populations.

Introduction

> The well-being or quality of life of a population is an important concern in economics and political science. It is measured by many social and economic factors. A large part is standard of living, the amount of money and access to goods and services that a person has; these numbers are fairly easily measured. Others like freedom, happiness, art, environmental health, and innovation are far harder to measure. This has created an inevitable imbalance as programs and policies are created to fit the easily available economic numbers while ignoring the other measures, that are very difficult to plan for or assess.[2]

Today there are an estimated two hundred indicator systems used by state and local government entities in the United States to measure the progress of their respective populations in a variety of policy areas. Typically, much like the South Carolina Indicators Project, these systems consist of designated areas or categories—usually eight to ten—such as education, the economy, the environment, social and health conditions, public safety, culture and recreation, and government administration or civic participation. Within these categories, there are key indicators which are, in fact, quantitative data used to measure the progress of education, the economy, and so on.

For example, under education, there are generally several indicators, including graduation or dropout rates, various achievement or test scores, per pupil expenditures, and teacher

salaries, to mention a few. Similarly, under the economy, measurements include data pertaining to unemployment rates, workforce participation, poverty rates, income, productivity, and diversity of industry. These data are quantifiable, comparable, and readily available through reliable sources. They are used as "yardsticks" or "signposts," so to speak, to measure trends over time and to compare to benchmarks or other designated populations.

The users of these indicator systems include, for all intents and purposes, nearly everyone. Interested citizens use them to weigh and understand the position and status of issue areas via their accompanying indicators. Policymakers use them for the same reasons, but equally important, they use them to guide their decision making. Thus, indicator systems are important in that they give focus to gaps or problems that exist, allow for recognition of appropriate linkages, assist in determining priorities, and help in deciding what should be done for improvement purposes.

Most indicator systems utilize quantifiable or numerical data that are, for the most part, universally acknowledged as statistically sound and objective. These traditional systems are widespread and highly useful. However, there has been a consistent and sustained movement towards looking at wider or multi-dimensional perspectives, namely the human or normative spheres.

To this end, many key indicator systems are bringing into the mix measures that give a more humanistic interpretation of what constitutes well-being, satisfaction, or desirability, i.e., the quality of life (QOL). In this sense, QOL indicators are measures that are non-monetary, socially-oriented, and qualitative in context. They manifest the pervasive agreement or general consensus of a population on what is valued and desired. Additionally, they are indicative of what is a collective *priority* concern and interest of a group of people, or more precisely, "a specified populace within a defined geographic jurisdiction."[3]

Of significance, these QOL indicators are derived scientifically and reflect the overall general sense of citizens, not the individual. Thus, subjectivity is minimized or eliminated altogether by using accepted methodological and controlled survey practices.[4] As such, the overall position and status of what is important to a designated group is clear-cut and detached in content and, therefore, considered both consistent and reliable. Hence, a QOL indicator complements the traditional indicator by stating what is commonly preferential or what is valued, e.g., "infant mortality is bad" and "literacy is good."

In this paper, QOL key indicator systems or models will be examined briefly from four perspectives. First, the importance or aim of QOL indictors will be discussed and definitions will be explored. Second, issues related to methodologies in determining QOL measures and indexes will be touched upon. Third, several state and local models of QOL indicators will be reviewed. Fourth, and lastly, the public policy implications of QOL systems will be considered briefly. The purposes of this paper are, consequently, to give some meaning to QOL indicators and systems while acknowledging their significance

and complexity and, additionally, demonstrate their usage and impact on public decision making.
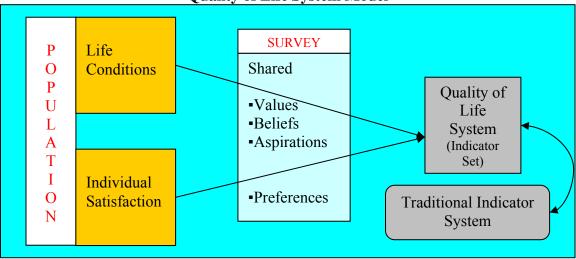
Definitions

As one might suspect, definitions of QOL vary in many cases. This is expected given the psychological aspects of what individuals consider as important. Nevertheless, though some variance exists by virtue of individual subjectivity, there is still a consistency of definitional terminology due to the uniformity of scientific examination practices applied to QOL systems. Mainly, this consists of the meticulous validation of commonalities (and differences) among group preferences, opinions, behaviors, and values, which give, as stated by experts, solid meaning to and understanding of what constitutes quality of life. In this way, QOL models have commonly been developed that reflect collective personal values, preferences and expectations, while at the same time, combine life conditions and statistics of a traditional nature. (See Figure1.)

Diener and Suh (1997), early researchers in the field of QOL models, state that the empirical study of quality of life is more than simply an intellectual exercise. It is a purposeful effort by people to understand the fundamental concerns of societies. Accordingly, the quality of a society can only be determined by measurement or asking the principal question—"Is society improving or is it deteriorating?" Intuition or individual subjective opinion is not sufficient in itself to give comprehensive meaning to society's overall shared values and potentialities. Common ideas and notions about what are desirable qualities of life must be examined and assessed on an empirical basis by surveying a distinct population using strict scientific methods and rules. In this way, precision (lack of error) and empirical soundness (reliability) are attained giving a true representation of what variables comprise a superior quality of life.[5]

Further, according to Diener and Suh, "QOL indicators or well-being measures are necessary since their aims are to evaluate society and add substantially to the regnant economic indicators that are now favored by some policymakers."[6] These QOL indicators provide an important additional measurement, a "direct" one, about how people feel about life conditions, which unlike economic and other objective measures or data are "indirect." As such, QOL indicators explore and identify what *factors* are important to the good life, which do not rest solely on wealth or gross domestic product (GDP).[7]

Kekic (2005)[8], as well as in an earlier article by Felce and Perry (1995)[9], state that these QOL factors are varied and extensive and cover the wide range of life domains. These include, for example, material comforts, health conditions, recreational opportunities, social interaction, learning or education status, creative expression and diversity, cultural values, work environment, compensation and finance, professional development, leisure activities, safety, housing, and freedom of expression. These factors, when placed within a common frame of reference, give an alternative and expanded comprehension as to existing external influences and life conditions, i.e., "a more complete, fuller assessment of the quality of life."[10]

Figure 1.
Quality of Life System Model

Similarly, Swain (2002), a practitioner rather than an academician, reinforces these positions. He states that "indicators are not objective in any sense of the word, although many of them derive from 'objective' data." He stresses that quality of life is based solidly on standards and norms of "a community or larger assemblage of people, from reams of stringently collected data from appraisals and assessments that identify communal beliefs and aspirations."[11] Swain states additionally that indicator systems should be equally based on citizen polling rather than purely on independent or dispassionate sources. The reasoning behind this is that, in some ways, "people's perceptions of their quality of life are as important, or perhaps more important, to document the reality in which they live."[12]

Swain continues by way of illustration. "Crime serves a useful example. Data from the FBI's Uniform Crime Report yields measures on 'actual crime' rates (burglary, assaults, etc.), while annual telephone interviews provides measures on 'people's fears of crime,' both of which are important, but differ in connotation."[13]

In the *The Economist* (2006), experts have addressed the meaning or nature of quality of life in recent articles explaining its expansion beyond that of purely monetary and other impartial data used as indicators to measure human progress. In one article, for instance, entitled "Happiness and How We Measure It," it posits that a number of economists, who once were content with market data on employment, income, and traditional data indicators, are now looking to something else as an economic barometer—what is making people happy. This mix of economics with psychology takes into account a defining concept; namely, that salary, unemployment rate, and annual payroll data do not in themselves give a full picture of a designated population or rather its economic well-being. Non-monetary data pertaining to lifestyles, work environment, and a sense of community are equally important in evaluating the standard of living. Why? There is a paradox: "Affluent countries have not gotten much happier as they have grown richer."

Hence, politicians are becoming increasingly interested in not just "the GDP, but equally important the GWB (general well-being)."[14] [15]

Methodological Approaches

Several methodological approaches are used to measure quality of life. For example, one method that psychologists and physiologists have utilized in scientific experiments is the placing of electrodes on the scalps of individuals to measure brain waves and contractions of oculi facial muscles to identify various hedonic states or stimuli when asked questions as to what is pleasurable or agreeable. Another technique that is used is simply keeping a log or journal—a diary—of feelings or attitudes by various individuals of things (e.g., regarding safety, health, learning, or economic well-being) over time. As one recent article puts it, "Generally, people can show or say how they feel at any given moment, on a scale from zero to ten."[16]

On the whole, however, most QOL indicators and indices (data) are derived more conventionally, that is, through surveys.[17] These surveys involve the systematic collection, analysis, and interpretation of certain aspects of how people feel about various societal issues—mainly economics, health, safety, and environmental concerns. Collection methods are done by telephone interviews or written questionnaires, or both. Random sampling is used universally; sample size varies, of course, but is set at within the appropriate probability frame, an estimated +/- margin of error, mostly at a 95% confidence level.

The aim of the QOL survey, often described as "attitudinal," is again the integration of direct data (opinions, perceptions, or aspirations) with indirect data (statistical or hard data). Flynn, Berry and Heintz (2002) state that "indicators in these different realms give a more complete picture of contemporary society. No one lives in a purely economic world in which only market transactions occur... Integrating measures moves us closer to real life and sheds light on statistical blind spots."[18]

Greenwood (1999), Center for Colorado Policy Studies, maintains that surveys are integral to measuring quality of life. He asserts, by way of example, that while the indexed crime rate is an important indicator of health and public safety, equally significant, is the indicator of the percentage of people who feel safe walking in their neighborhood alone, a question only derived by survey. In the same way, Greenwood states that while the number of registered voters (or alternately the percentage registered voters actually voting) is an appropriate indicator under the category of civic participation or government administration, so too is the percentage of people who trust government. And in the area of transportation, the average commute time is obviously a statistically useful indicator, yet likewise, is the percent of people who feel that traffic congestion is problematic.[19]

Figure 2.
Sample of Civic/Government QOL Indicators

Indicator	Colorado	Austin	Jacksonville	Seattle

	Springs			
% of registered voters voting in local elections	26.3	19.3	22.8	22
% reporting trust in government	47		71	
% believing city is moving in the right direction	63			
% reporting good quality of life	58			
% perceiving racism as a problem			49	
Racial disparities civil courts*		1.8		3.3
% volunteering time without pay		47	67	
% who know or help neighbors		72		56

Source: Greenwood, D. (1999). *Local Indicators, of quality of life: a preliminary look at the Pikes Peak Region*. Policy Paper. Colorado Springs, CO: Center for Colorado Policy Studies, p. 13.
*For Austin, the likelihood of an African American youth being prosecuted in criminal court is 1.8 times their population representation, while for whites it is .78 and for Hispanics 1.15. For Seattle, the likelihood of an African American youth being prosecuted in juvenile court is 3.3 times greater than their population representation, while for whites, Asians and Hispanics the ratio is 1:1.

Methodologically, it is essential to select survey questions that 1) meet a specified selection criteria, and 2) are suitable to a given geographic scale. Swain (2002), Chambers (2004)[20], and Henderson, Lickerman, and Flynn (2000)[21], identify related criteria useful for choosing QOL indicators and, hence, the survey questions for deriving analogous data.

Experts generally agree that the premier QOL system selection criteria used today is that of Jacksonville Community Council, Incorporated (JCCI). JCCI uses 13 criteria which have been developed and refined for over two decades. These criteria include 1) purposefulness, 2) importance, 3) validity and accuracy, 4) relevance, 5) responsiveness, 6) anticipation, 7) understandability, 8) availability and timeliness, 9) stability and reliability, 10) outcome orientation, 11) asset orientation, 12) scale, and 13) "representativeness." Figure 3 provides a brief description of each of these criteria.

Of these criteria, four stand out as essential to survey development and implementation. First, an indicator that is fundamental is one which measures the QOL that a select population feels is *important* in terms of priorities "based on shared expectations and goals." Second, an indicator must be based on accepted survey methods which, in turn, assure *validity* and *accuracy*. Third, a QOL indicator should be clear and *understandable* as well as relate to life experiences that are *relevant* or germane. And fourth, a QOL indicator obtained by survey should be both *informative* and usable for *decision making*, especially as relates to policy and programs.[22]

Figure 3.
Definitions of Selection Criteria

Purpose: The indicator is both meaningful (it provides information valuable for community members to understand important aspects of their quality of life) and useful (it offers a sense of direction for additional research, planning, and action toward positive community changes and a means of assessing progress toward these desired changes).

Importance: The indicator measures an aspect of the quality of life which a diverse group of people in the community would agree is important in relation to the priorities in the community's shared vision or goals.

Validity and accuracy: If the indicator trend line moves upward or downward, a diverse group of people in the community would agree on whether the quality of life is improving or declining.

Relevance: The indicator measures an aspect of the community's quality of life that the community can improve through public decision making and action at the community level.

Responsiveness: The indicator trend line responds relatively quickly and noticeably to real changes in the quality of life.

Anticipation: The indicator anticipates future trends rather than reacting to past trends. A "leading" indicator is generally more useful than a "lagging" indicator because it allows a proactive response.

Understandability: The indicator measures an aspect of the community's quality of life in a way that most citizens can easily understand and interpret in relation to their own lives.

Availability and timeliness: Data for the indicator are readily available and affordably accessible on an annual basis from a credible public or private source.

Stability and reliability: Data for the indicator are collected, compiled, and calculated in the same way each year.

Outcome orientation: Where possible, the indicator measures the actual condition of the community's quality of life. Alternatively, it measures an outcome of the response to the issue rather than the input of the response itself.

Asset orientation: Where possible, the indicator measures a positive aspect of the community's quality of life (to focus on community assets) and a trend line increase clearly denotes an improvement in the quality of life.

Scale: The indicator is reported for a geographic area that is most meaningful for community understanding and most helpful for improvement. For many indicators, both regional and single-county trendlines are reported; others have sub-county measures.

Clarity: The indicator uses measures that filter out extraneous factors. Per-person rates filter out the effect of population growth, and constant dollars eliminate the effect of inflation. Raw numbers are used where magnitudes are important.

Representativeness: Taken together, the indicators measure the major dimensions of the community's quality of life.

Source: Jacksonville Community Council, Inc. (2006). *Quality of life progress report.* Jacksonville, FL: Author, p. 6.

In terms of deciding on geographical boundaries (i.e., survey population) for a QOL indicator system, several considerations should be taken into account. Chambers (2004) offers some insights here. One is that sponsoring organizations and/or mandates generally make such determinations as to what area or group of people is to be covered. This is plainly done for reasons of suitability and desirability of data and pertinent information. Additionally, these determinations are driven for purposes of comparability and trend analyses. Chambers states also that geographical boundaries are determined by virtue of the availability of existing statistics as well as data that can be derived by survey methodologies. This varies, depending on the data, by size—state, region, county, and municipality. Further, costs are a significant factor. Data collection, compilation, and analysis can be expensive depending on geographical scale. Finally, Chambers maintains that the geographical size or population unit for an indicator system must be meaningful in terms of public comprehension and affecting change. In the main, this implies that the smaller the population or geographical (political) boundaries, the better.

Residents tend to identify most strongly with the smallest unit of government. They feel that therein lays their best chance for making a difference. So citizen involvement may be easier to achieve if you 'think small.' Remember, the ultimate outcome of a Quality-of-Life assessment is improving your community.[23]

State and Local Model QOL Systems

Again, there are numerous indicator systems at all sizes of jurisdiction and sphere. Several are designated as specifically QOL indicator systems, of which, many stand out as models. In the narrative that follows, three QOL systems are reviewed briefly which are considered among experts as exemplary.[24] The purpose of this review is to highlight these systems which may be, in turn, useful as benchmarks for formulation, development, and/or improvement of QOL programs.

The Jacksonville Community Council, Inc. QOL System

The Jacksonville Community Council, Inc. QOL System[25] (JCCI), is arguably the most respected and renowned QOL indicator system in the United States. It is extensively referred to in the literature and has been in existence since 1985, one of the longest if not the longest QOL system in continuous existence.

JCCI measures QOL indicators for Jacksonville, Florida and adjacent areas (five counties in all, covering Northeast Florida—i.e., Baker, Clay, Duval,[26] Nassau, and St. Johns Counties). Its *2006 Quality of Life Report* comprises 111 indicators in nine categories. These categories include: Achieving Educational Excellence; Growing a Vibrant Economy; Preserving the Natural Environment; Promoting Social Wellbeing and Harmony; Enjoying Arts, Culture, and Recreation; Sustaining a Healthy Community; Maintaining Responsive Government; Moving around Efficiently; and Keeping the Community Safe.

Data are gathered from traditional sources, reliable public and private organizations, and additionally from an annual survey conducted by a private survey firm that donates its time and expense *pro bono*.[27]

According to the 2006 report, three factors should be taken into account with regard to content and context. First, the indicators compare the community to itself and the goals set for 2010. Second, the data provide only numerical QOL indicators leaving some significant measurements not covered. And third, the indicators do not offer explanatory information as to trends and what improvements are needed. Obviously, decision makers using the JCCI indicators must hold discussions, in some form, as related to trend patterns and what appropriate intervention is required.[28] [29]

In terms of a JCCI indicator using traditional data sources, under the category of Achieving Educational Excellence, for example, public school student graduation rates

are included. In the 2006 report, the importance of high school graduation is indicated by asserting that "a diploma is critical for furthering one's education and obtaining quality (high-paying) employment."[30] The trend analysis, as presented in graphic or bar chart format, covers an eight-year period and provides graduation rates for both Duval County (the City of Jacksonville area) and the remainder of Northeast Florida. A definition of graduation rate is also presented as are percentages of change for the most recent two years for each of five counties. Of importance, a 2010 target of 90% graduation rate is set by community leaders and groups. (See Figure 4.)

It should be noted as well that under the student graduation rates, on the same page in JCCI's *2006 Report*, public high school dropout rates are presented too.[31] In this case the trend analysis covers 12 years; encompasses only Duval County; provides relevant definitions; and presents the percent of change for the past two years 2004-05 and 2005-06. However, in this case, no target or goal has been set for lowering the dropout rate.

Figure 4.
JCCI's Student Graduation Indicator Presentation
2006 Quality of Life Report

Perhaps the clearest indicator of education in the community is the high school graduation rate. A diploma is critical for furthering one's education and obtaining quality employment. Youth who do not complete high school, on the other hand, have a difficult time finding employment or advancing beyond lower-paying jobs.

Public high school graduation rate:

Duval County: 60.5%   **NE Florida: 66.5%**
Blueprint for Prosperity has a Target for 2013 of 90 percent.

What does this measure? The percentage of students who graduate from Duval County/Northeast Florida public high schools within four years, as tracked by student I.D. numbers.

How are we doing? The graduation rate declined from 65.5 percent in 2004-05 in Duval County. The rate in Northeast Florida also declined, from 70.1 percent in 2004-05 to 66.5 percent.

	2004-05	2005-06	Change
Baker	72.2%	73.1%	+ 0.9%
Clay	75.1%	74.7	- 0.4%
Duval	65.5%	60.5%	- 5.0%
Nassau	85.2%	81.8%	- 3.4%
St. Johns	76.8%	76.7%	- 0.1%
NE Florida	70.1%	66.5%	- 3.6%

Source: Jacksonville Community Council, Inc. (2006). *Quality of life progress report.* Jacksonville, FL: Author, p. 10.
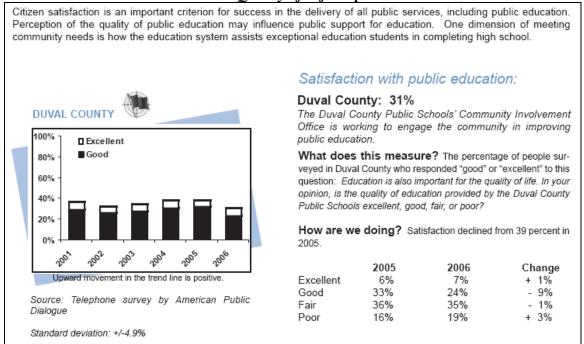
An example of a *non-traditional* QOL indicator in the *JCCI 2006 Report* is "satisfaction with public education." Data for this qualitative indicator was collected through a random telephone survey conducted by the American Public Dialogue Company, a survey firm used by JCCI since 1993; the potential for error due to sampling in this survey is +/-4.9%. Covering only Duval County, this indicator—satisfaction with public education—shows a 31% satisfaction rate for school year 2006, down from 39% in 2005. A six-year

trend analysis is presented as well as pertinent definitions and a two-year percent of change to the survey question: "Education is also important for the quality of life. In your opinion, is the quality of education provided by the Duval County Public Schools excellent, good, fair, or poor?" (See Figure 5.) According to JCCI, this non-traditional indicator dealing with satisfaction of public education is extraordinarily significant to the measurement of "achieving educational excellence" in that it reveals the "real perceptions of the community and that of education in successfully meeting community needs."[32]

Figure 5.
JCCI's Satisfaction with Public Education Indicator Presentation
2006 Quality of Life Report

Source: Jacksonville Community Council, Inc. (2006). *Quality of life progress report.* Jacksonville, FL: Author, p. 18.

The Arizona Indictors Project

The Arizona Indicators Project (AIP) was created formally in 2007. Previously, the AIP took the form of *What Matters - The Maturing of Greater Phoenix* (1999-2004), a collaborative project under the auspices of the Morrison Institute for Public Policy at Arizona State University. The AIP is still run by Arizona State University and staffed by faculty members in different areas of expertise. Collaborative and working liaisons also continue to exist among a group of public and private entities.
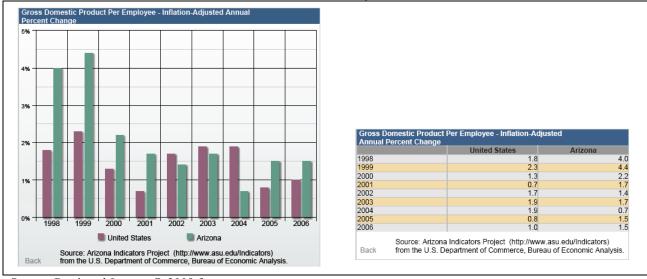
The basic aim of the new AIP is to expand eventually the metropolitan-scaled project of Phoenix into one which covers the composite of communities that makeup the entire State of Arizona. Progress has been made in achieving this purpose already. Additionally, in the near future, innovation indicators will be added to correspond appropriately to a more globally competitive view. Thus, according to the AIP, "the project will provide a

one-stop data research tool that track's Arizona's economic, social and environmental trajectory."[33]

AIP is ultimately "intended to affect decision making among policymakers, including civic and business leaders, and community activists." [34] Data have a baseline from 1997, in many cases, originating from the original project design and development. Additionally, though non-traditional QOL indicators are scattered among the categorical framework of the AIP, today's web-based version includes a categorization that is specifically referred to as "Quality of Life," consisting of a compilation of indicators related to public libraries, nonprofit organizations, personal giving, volunteering, voting, poverty and income distribution, and arts and culture.

Furthermore, AIP is, like its predecessor *What Matters*, a project that combines public views, determined by survey methods, with traditional statistical data to define and measure the QOL for Arizonians. Economic, education, innovation, sustainability, and quality of life are the new categories or "dashboards"[35] that AIP are using currently. By way of illustration, the economic dashboard includes data such as GDP per employee, per capita personal income, average wages per job, and median household income. Figure 6 illustrates the presentation of GDP by employee, a traditional indicator (data) available readily through the U.S. Bureau of Economic Analysis.

Figure 6.
GDP per Employee
Arizona Indicators Project
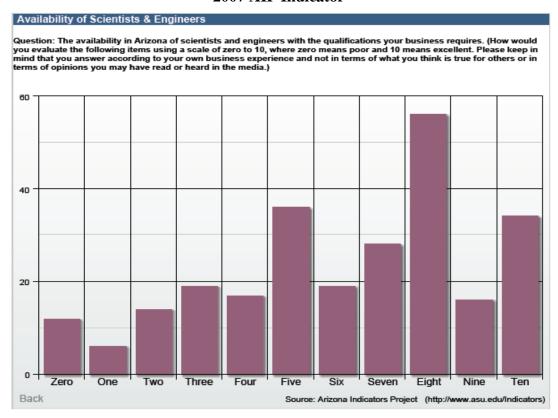

Source: Retrieved January 7, 2008 from
https://webapp4.asu.edu/corda/dashboards/EconomicIndicators_public/main.dashxml.

In addition to the comparisons between the U.S. and Arizona, there are included on this dashboard or presentation different graphs and charts depicting comparable GDP data between the metro areas of Flagstaff, Lake Havasu City, Phoenix, Prescott, Tucson, and Yuma.

With regard to non-traditional economic indicators, the AIP contracted with a survey organization, the Behavior Research Center of Phoenix, to administer a questionnaire to key business leaders and managers throughout Arizona. Some 450+ individuals were surveyed by telephone during April 2007. The questions where primarily multiple choice, but also included a few open-ended questions as well. Companies with less than 10 employees were excluded.

There where a total of 17 questions: four of which pertained to the characteristics of the company and respondent; five dealing with the availability of specialized suppliers, scientists and engineers, business incentives, skilled workers, and government supported education; five relating to the quality of lifestyles, colleges and universities, research and development cooperation, transportation, and communication infrastructure; and four pertaining to the cost of wages, crime, taxation, and employee benefits. As an example, Figure 7 presents in graph form the results to the question on scientists and engineers with the qualifications required by the respondent's (business leader or high-level manager) company.

Figure 7.
Availability of Scientists and Engineers
2007 AIP Indicator

Source: Retrieved January 8, 2008 from
https://webapp4.asu.edu/corda/dashboards/EconomicIndicators_public/main.dashxml.

Northwest Indiana Quality of Life Indicators Council

The Northwest Indiana Quality of Life Indicators Council (QLC) was developed in September 1997, and began its status as a non-profit organization in 2000. QLC is a partnership of public and private organizations. Its mission is to promote sustainable development regionally within the jurisdiction of three adjacent Indiana counties—Lake, Porter, and LaPorte Counties. QLC consists of some 100 membership organizations and has a 19-member Board of Directors. Of interest, the chairmanship of the board alternates among six college and university presidents or chancellors within the QLC's regional area. The current chair represents Purdue University Calumet.

QLC's latest indicator report, published in 2004, and nicely articulated in a web-based format, comprises nine categories: A Diverse Community; A Thriving Community; A Community of Opportunity; A Community in Balance with Its Environment; A Learning Community; A Healthy Community; A Community of Viable and Open Neighborhoods; An Accessible Community; A Safe Community; A Community that Appreciates the Arts and Celebrates Life; and, A Community of Engaged and Caring Citizens.

The categories are described by QLC as "aspirational." Thus, for example, "A Thriving Community" translates into data and indicators relating to the economy; "A Learning Community" equates to educational factors; and, "An Accessible Community" concerns transportation.

Also QLC provides a number of interesting features for each indicator. Icons are, for example, used in two instances: One for indicators particularly relevant to the well-being of children and families, and another specific one for indicators that are especially relevant to race and the "role of a shared life."[36]

Another unique feature for each indicator is use of grades and trend summaries. For example, the indicators relating to the arts and recreation receive a B+, while those indicators concerning learning or education get a C-. Explanations for the grades are provided though no systematic scoring method appears to be utilized. Further, trends are shown graphically, sometimes in various forms per indicator, and explanatory narrative is provided as well.[37]

Also, policy recommendations are included for each category. They are described as broad and suggestive rather than explicit and prescriptive. The rationale is to engage readers and decision makers to pay attention to the trends and discuss possible strategies to address policy gaps and weaknesses.

What is different about QLC is that these additional features allow for extensive "subjective" interpretation of hard data from traditional sources. Hence, while no survey is currently used to gauge views and opinions, forums and wide participation by QLC

members and sponsors provide collective input of a non-traditional nature that is then put in analytical narrative. This interpretative approach is important in the fact that it transcends mere statistical data from original and secondary traditional sources and brings together shareholders and benefactors (via controlled focus groups) of the region; viz., citizen's views, preferences, and values.

By way of illustration, under the category of "A Thriving Community," two main areas (indicators) are presented: 1) employment and 2) leading industries. Within these areas are plentiful data presented in numerous tables relating to labor force, unemployment rates, employment by industry, farming profiles, major employers, small business by size and employer, tons of steel produced, and tons processed at Ports of Indiana. In addition, each table is explained (i.e., definition and importance of data) in narrative form. Following this data and information is the interpretive analysis. In this case—A Thriving Community—a grade of "D" is given and the trend is described using the word "Promising." More specifically, the analysis states verbatim:

> The grade of "D" is assigned to this domain in order to call attention to the need for coordinated planning pertaining to Northwest Indiana's economic future. At the same time, there is good news with respect to our economy. Indeed, a fundamental transformation is now taking place. The restructuring of the steel industry is underway. The gaming industry in Northwest Indiana has stabilized at a high level of productivity. Much of the infrastructure needed to support the development of a viable logistics industry is in place. The region's housing market is strong. The inventory tax has been abolished. And the property tax imbalance between homeowners and the business community is now being addressed. At the same time, the kind of coordinated planning that will be required to support a thriving community is not yet in place. Tax policy, land use policies and infrastructure development, especially transportation and communications systems, profoundly influence business decisions that are reserved to the private sector.[38]

Following this analysis a goal statement is presented. It reads:

> The Quality of Life Council recommends that Northwest Indiana develop a robust planning process to support the development of an economy that is both sustainable and less reliant on just one or two industries. We believe that this kind of planning can only be accomplished on a regional level. This recommendation does not constitute a call for "unigov," a policy option that would entail a much more dramatic form of restructuring. It is instead a call for coordinated planning pertaining to tax policy, land use, and infrastructure development. If Northwest Indiana fails to institute processes of this kind, we fear that emerging opportunities will be lost and development will proceed along a path that is beneficial to

some in the near-term, but, nevertheless, detrimental over the long-term.[39]

Policy Implications of QOL Systems

In principle, all key indicator systems uphold the following axiom: *To identify problems or gaps in society, and to achieve progress, one must be able to measure situations and circumstances within the public domain.* While this is, of course, a common sense precept or notion of public policymaking, it is unfortunately one that it is often overlooked or ignored. Why indeed is this the case? Mainly, policies and programs addressing certain societal needs and problems are incremental in nature, that is to say, once a policy decision is set into place it transforms itself into a program and bureaucracy that is self-perpetuating regardless of whether or not it is making a clear results-driven difference. Add to this the fact that performance measurement and benchmarking are not done at all, anecdotal, or poorly constructed, and it becomes even more challenging and difficult. Bottom line, many policymakers—those who value genuine and appropriate change—are hamstrung to measure, with some certainty, existing and emerging societal problems and, therefore, rely on prejudiced information and data from advocacy groups and self-interested public servants. As a result, indicator information or data fail to measure and compare with either accuracy or reliability, much less with any degree of independence or objectivity.

There are possibly, as one might presume, other issues at stake here with regard to poor and non-results-driven policies and decision making, including, but not limited to, sheer incompetence, prejudice, favoritism, outright laziness, political gain, and emotional or intellectual detachment. But, all in all, governing bodies and individual policymakers simply fail often to align or link remedies to real problems for lack of good data.

Indicator systems, especially those that embody a sense QOL, are therefore crucial to defining and understanding the status and position of a public matter or issue and assessing priorities and goals as well as strategies and resources needed to make a progressive or positive impact. If objective data are available and policymakers make use of them, then clearly proper goals will likely be established by priority, and resources will be brought to bear on real problems facing society. Equally of importance, policymakers and citizens will be able to track change, whether positive or negative, and make adjustments accordingly.

Moreover, QOL indicators provide sufficient and timely data and information for high-quality decision making—i.e., assessment and planning. QOL model systems cover all the areas of policy concern, again, usually within the span of the following categories—the economy, education, social and health areas, public safety, the environment, arts and culture, and civic administration or government. Key indicators within each category provide valuable data and information. This information while illuminating in itself with regard to careful consideration or reflection (assessment), more importantly, makes it possible for decisiveness and preparatory action (planning). In short, policymaking can only be done when there are accurate indicators available that give meaning and direction

to attaining a healthy, educated, and economically thriving population or society. QOL indicators of a non-traditional kind add perspective and give value to what constitutes a "good" life. Thus, *well-being* and *sustainability* are possible, and in a real sense, attainable. McSwain (2002) states this more narrowly and plainly:

> However, indicators do not influence public policy outcomes simply by existing, in isolation of what else is happening in the community. They do so, either directly or, more often indirectly, as an integral part of a complex community improvement process that operates over long periods and involves many players, public and private. The contributions of indicators are most evident in the planning phase and again in the assessment phase of a community's processes of seeking improvement. The more consciously indicators are tracked, and then applied to the planning and assessment processes, the greater chance exists of bringing about meaningful positive change in a community, regardless of the policy area.[40]

Furthermore, policymaking takes on greater significance in light of today's changing world. Consider, for example, South Carolina's economy. The state has had record growth in job creation and capital investment over the past six years. These are great successes. They are successes, however, which must be sustained and enhanced. This is, however, perplexing and challenging. This is particularly so given today's volatile and competitive economic environment—one that is characterized by emerging technologies and globalization. And equally important, these are influenced more and more by what people consider or deem integral to QOL. Flynn, Berry, and Heinz (2002) state:

> The twin forces of globalizing technology and markets along with information overload beg for greater sophistication and interpretation of extant data on well-being. Consumers and businesses want to know what the statistics mean. How do the numbers relate to one another? What are the short-term and long-term implications? Is there something significant in the numbers or are we simply collecting more data?[41]

Today's political or *elected* leaders—as primary and archetypical policymakers—should be privy to the best data and information possible. Laws, rules, ordinances, and other obligatory requirements, especially those dealing with significant financial and other material resources, must be based on hard data, both of a traditional and non-traditional type. Add to this a grasp of what's "behind the numbers" and our elected officials are best prepared to articulate vital and needed policy, not to mention vision and direction that is of strategic import to all concerned.

Conclusion

QOL indicator systems have established themselves as useful and insightful ways of determining the status and position of select populations. They provide another facet, a more humanized one, to assess the progress of the economy, education, health, and other

commonly used categorizations of people within a specified geographical area—from the community-level to much larger spheres such as regions and states, even nations (e.g., Canada and the UK).

Methodologically, QOL indicators are predominantly achieved by random sample instruments. These QOL indicators, obtained in a scientific manner, present essentially shared values, beliefs and aspirations of the people. Add this to statistical data from sources such as the U.S. Census Bureau, the Bureau of Economic Analysis, the National Center for Health Statistics, the FBI and EPA, and one—anyone—has a well-rounded and complete data set for meaningful assessment, and possibly planning and policymaking purposes.

What is more, there are model QOL systems in place that have proven to be of enormous utility and success. The City of Jacksonville in Florida, the Northwest region of Indiana, and the State of Arizona are but three examples explored in this paper. All three examples have proven beneficial to their respective constituencies, especially those individuals in positions, public and private, whose decision making affects the public welfare.

Finally, and foremost, public policy must be fact-based. To make appropriate decisions about a planned course of action, one which is intended to intervene or remedy a condition or circumstance pointed out by *reliable* and *valid* indicators, sound data—traditional and non-traditional—must be sought, found, presented, understood, and acted upon. Key indicator systems, especially those integrating QOL factors, are vital in such circumstances. As expressed often in today's political vernacular, oddly a Latin term, they have *gravitas*.[42]

February 25, 2008

ENDNOTES

[1] See Young, R. (2005, January). *An overview of the GAO report on key national indicators*. Columbia, SC: Institute for Public Service and Policy Research, University of South Carolina. Retrieved November 29, 2007 from http://www.ipspr.sc.edu/ejournal/ejmay05/Indicators.pdf.
[2] Retrieved November 8, 2007 from http://en.wikipedia.org/wiki/Quality_of_life.
[3] For discussion of social indicators and issues associated with population or geographic units see Schnieder, M. (1976, May/June). The "quality of life" and social indicators research. *Public Administration Review*, p. 304.
[4] It should be noted that focus groups are often used in place of surveys.
[5] Diener, e. and Suh, S. (1997). Measuring quality of life: economic, social and subjective indicators. *Social Indicators Research*. **40**: pp. 189-216.
[6] Ibid.
[7] Ibid.
[8] Kekic, L. (2005). The world's best country. *The Economist*. Printed in *The World in 2005*. Retrieved November 29, 2007 from
http://www.economist.com/theWorldIn/international/displayStory.cfm?story%20id=3372495&d=2005.
[9] Felce, D. and Perry, J. (1995). Quality of life: its definition and measurement. *Research in Developmental Disabilities*, Vol. 16, No. 1, pp. 51-74.
[10] Op. Cit. Kekic, L. (2005).

[11] The purposes, of these assessments, states Swain, are to be used for planning, advocacy, and action.

[12] Swain, D. (2002). *Measuring progress: community indicators and the quality of life*. Jacksonville, FL: Jacksonville Community Council, Inc., pp. 9 and 15.

[13] Ibid.

[14] (2006, December 23). Happiness (and how to measure it). *The Economist*, p. 13.

[15] "For many years, most economists and political leaders believed that we could 'increase the size of the pie,' that is, the total out put of goods and services (Gross Domestic Product) this would improve the standard of living for everyone. It was also widely argued that increased national productivity and incomes would create additional resources necessary to protect the environment and broaden access to education and health care for citizens without giving up other elements of our standard of living. This appears less true today, and raises questions about relying too heavily on income and output as measures of success." From Greenwood, D. (1999). *Local Indicators, of quality of life: a preliminary look at the Pikes Peak Region*. Policy Paper. Colorado Springs, CO: Center for Colorado Policy Studies, p. 3.

[16] (2006, December 23). Economics discovers its feelings. *The Economist*, p. 33.

[17] Again, focus group methods are sometimes substituted for surveys.

[18] Flynn, P., Berry D., and Heintz, T. (2002, Fall). Sustainability and quality of life indicators: toward integration of economic, social and environmental measures. *The Journal of Social Health*, Vol. 1, No. 4, pp. 18-19.

[19] Op. Cit. Greenwood, D. (1999), pp.12-14.

[20] Chambers, M. (2004). *Quality indicators for progress: a guide to community quality of life assessments*. Jacksonville, FL: Jacksonville Community Council, Inc.

[21] Henderson, H., Lickerman, J., and Flynn, P. (2000). *Calvert-Henderson quality of life indicators: a new tool for assessing national trends.* Bethesda, MD: The Calvert Group.

[22] Jacksonville Community Council, Inc. (2006). *Quality of life progress report.* Jacksonville, FL: Author, p. 6.

[23] Op. Cit. Chambers, M. (2004).

[24] Other QOL indicator systems not discussed in this paper but significant include: Chicago Metropolis 2020; Carver County QOL Indicators; and the City of Cincinnati.

[25] "JCCI is a nonpartisan civic organization that engages diverse citizens in open dialogue, research, consensus building, advocacy and leadership development to improve the quality of life and build a better community in Northeast Florida and beyond." Retrieved January 4, 2008 from http://www.jcci.org.

[26] This county, Duval, covers the City of Jacksonville.

[27] It should be pointed out that the survey database extends currently over a 22-year period.

[28] Op. Cit. Jacksonville Community Council, Inc. (2006), p. 2.

[29] "JCCI responds to these indicators through its annual citizen-based studies. Each study researches a community issue in depth and makes recommendations for positive change. Each is followed by an implementation process though which volunteers advocate for community action. Positive change is reflected in the indicator trends." Retrieved January 4, 2008 from http://www.jcci.org.

[30] Op. Cit. Jacksonville Community Council, Inc. (2006), p. 10.

[31] See Op. Cit. Jacksonville Community Council, Inc. (2006), p. 10.

[32] Ibid.

[33] Retrieved January 7, 2008 from http://www.asu.edu/indicators/about.htm.

[34] Morrison Institute for Public Policy. (2004). *What matters: the maturing of greater phoenix*. Tempe, AZ: University State University.

[35] "A dashboard is a web interface for users that organizes and presents information in a way that is easy to read and interpret. Dashboards are meant to provide visibility into key performance indicators (KPIs) – through simple visual graphics such as gauges, charts and tables within a web browser – of information most important to the institution. The information is intended to be simple to monitor at a glance and, where appropriate, actionable. Ultimately, dashboards are created to provide a unique and powerful means to present information about any range of topics. In many respects, a reporting dashboard can be likened to a dashboard in an automobile. It provides an 'at-a-glance view' of the current operational state of the vehicle." Retrieved January 8, 2008 from http://www.asu.edu/indicators/dashboard-basics.htm.

[36] Northwest Indiana Quality of Life Council. (2004, September). *Quality of life indicators report.* Gary, IN: Author, p. 9.

[37] Ibid., p.10.

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[38] Ibid., p. 27.
[39] Ibid.
[40] Op. Cit. McSwain, D. (2002, September), p. 20.
[41] Op. Cit. Flynn, P., Berry, D., and Heinz , T. (2002, Fall), p.14.
[42] The Latin term meaning "quality of substance."