

The United States of America

Developing Key National Indicators

Martha Farnsworth Riche

Euclid is supposed to have told Ptolemy: “There is no ‘royal road’ to geometry.” It is not clear that there is any royal road to evaluation of economic or social policies either. A variety of considerations that call for attention are involved, and evaluations have to be done with sensitivity to these concerns.

– Amartya Sen (*Nobel Laureate*), Development as Freedom

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EXECUTIVE SUMMARY

Public and private organizations around the world and throughout the United States are developing indicators and indicator sets to assess their performance, particularly in regard to the expectations of their stakeholders. These activities are driven by a variety of goals, but they generally reflect a concern for accountability and an understanding that decisions made in one area will affect activities and outcomes in another.

In the federal government and as a nation, we still struggle to evolve and integrate our ability to measure national performance. Previous attempts to develop a comprehensive set of U.S. performance indicators have foundered, whether for political or process reasons. Certainly, a century of experience with large-scale measurement efforts shows that clarifying the initial intent, the targeted audience, and the value proposition is a core ingredient of success. Meanwhile, countries with social and economic systems similar to our own are making considerable progress in developing indicator systems to support key national goals.

One challenge is that there are many alternative missions, audiences, and value propositions for a set of U.S. national indicators. These options range from exploratory efforts with a learning objective to performance-oriented efforts that directly inform decisions on issue definitions, goals, priorities, workable solutions, and relative resource allocations. Meanwhile, it is possible to develop an inventory of core principles for a set of national performance indicators based on lessons learned from previous national efforts, as well as current comparable efforts.

Current national and international efforts display several organizing concepts. Many of them have been considered in the U.S. at one time or another, and thus offer lessons for moving forward in this country with a key national indicators effort. At present, the current 'approach' in the U.S. literally combines all these frameworks in a complex, diversified, and large-scale decentralized effort, with both top-down and bottom-up approaches that appear to be evolving from integrative indicator efforts at local, state, and regional levels to a corresponding effort at the national level.

Information areas tend to develop in an evolutionary fashion, over relatively long time periods, and in some definable stages as they reach greater degrees of scientific and political consensus and transparency. Hence, some can be preliminarily identified as more "advanced" than others (e.g. health, the economy). These more advanced areas are a logical starting point for developing

a comprehensive US portfolio, while deciding how to tackle some very important but newer areas (e.g. homeland security).

Broad information areas that are relevant in the U.S. today include:

- Advanced areas, with a great deal of data and a broad consensus around the data, such as health and education
- Developing areas, with a developing information base and a need for consensus, such as governance and community health
- Formative areas, with pilot projects to outline suitable information bases, such as sustainability and security.

The aim of the Key National Performance Indicators Forum - held in Washington, D.C. on February 27, 2003 -- is to foster a new dialogue between users, producers, and funders of information on whether and how to develop a set of key national indicators for the United States. Among other topics, the central issues for discussion will be the potential merits of such an effort, where it might go, and alternatives for moving it forward - ranging from process and organization to resources and technology.

At the outset of such a dialogue, we are confronted with a dilemma. If one attempted to create a comprehensive indicator set, its scope, essentially ad hoc nature, and complexity would greatly reduce the chances for constructive dialogue by preempting ownership and involvement from a variety of perspectives. On the other hand, beginning a discussion on such a broad topic with no organizing framework to react to and provoke discussion, would likely be a poor use of a participant's valuable time.

Our solution is to present a 'rough draft' of what a US indicator set might look like for the United States. Since it is in a developmental stage, anticipating a more comprehensive version at some point in the future, we label it 'USA Series 0.5.' USA Series 0.5 can be a starting point for a focused and rich dialogue in the forum on what should be done to eventually move to a version 1.0, which itself would be simply the first complete instance of an ever evolving information resource.

INTRODUCTION

Thirty-four years ago this winter, the U.S. federal government issued a report on key national indicators.¹ Troubled by the paradox of rising economic indicators amid alarming signs of social discontent, the report asked, “Why have income and disaffection increased at the same time?” It contrasted the nation’s comprehensive set of economic indicators, watched “as closely as a surgeon watches a fever chart for indications of a change in the patient’s condition,” with the absence of similar indicators for social progress. And it outlined the first steps toward producing a comprehensive set of statistics that would not just resolve such paradoxes but also improve public performance in setting priorities and evaluating programs.

So here we are again. Much has changed since that report. If it hadn’t, its very language wouldn’t jar the contemporary reader (for example, the use of the term “Negroes,” or the concern for the attainment of sons but not daughters). We now have data to analyze many of the questions its experts couldn’t analyze then, such as data on Hispanic Americans, American Indians, and “other ethnic minorities.” And many of those experts’ concerns, such as the lack of increased life expectancy after age 65, have improved while others have worsened — notably access to medical care for the young.

Both in the federal government and as a nation, we still struggle to evolve and integrate our ability to measure national performance. We struggle to broaden our measures of the nation’s performance to include social indicators. We struggle to maintain our existing economic measures in the face of rapid economic change.

Meanwhile, at the international level, the industrialized countries of the Organization for Economic Cooperation and Development (OECD) now recognize a third “pillar” or ‘dimension’ of national progress -- environmental. The OECD is developing “*agreed* indicators that measure progress across all three dimensions of ‘sustainable development,’” – economic, social and environmental — as mandated by its ministers in 2001.² Concurrently, the United Nations (UN) is assessing the statistical indicators that have been developed in the course of various summit meetings held during the 1990s. High-level discussions among world policymakers, partly informed by this assessment, resulted in the UN Millennium Goals.

¹*Toward a Social Report*, U.S. Department of Health, Education, and Welfare, January 11, 1969.

² “Overview of Sustainable Development Indicators Used by National and International Agencies,” Statistics Norway. 200x (GAO: get date from Boris Kachura)

Both the OECD and UN effort are noteworthy milestones in the search for a holistic set of indicators to measure both national and international performance. Additionally, numerous commercial and non-governmental organizations (NGOs) here and internationally have developed indicators that explicitly or implicitly assess national performance.

At the national level, many advanced democracies – from Australia and Canada to the U.K. and the Netherlands – either have developed or are in the process of developing comprehensive indicator sets to measure national position, progress, and/or performance. (See selected bibliography)

In the United States, governments and private organizations at the regional, state, and local levels have been developing indicators and indicator sets to assess their own performance, particularly in regard to the expectations of their stakeholders. Many notable public/private partnerships are also attempting to measure national performance on particular topics, such as the effort facilitated by the Rockefeller Foundation on sustainability indicators.

In the U.S., interactions between different levels of government and different sectors in the creation and distribution of public information on national performance are extremely complex. The Federal government, which spends more than \$4 billion annually on statistics, produces much of the information that the nation relies on, partly because these data are extensive, and partly because they are “official” and thus broadly acceptable. On the other hand, some have estimated U.S. private-sector data production at more than \$10 billion annually. Governmental officials often rely on such information sources heavily in decision-making.³

In many instances, a wide variety of entities, working cooperatively, are able to create generally agreed-upon sets of indicators for critical areas (e.g. children) and combine federal data to develop ever more meaningful measures. One example (from the Annie E. Casey Foundation’s Kids Count) is an indicator of vulnerability for teenage child-bearing, devised by combining three separate Federal measures.

I. POSSIBLE AIMS FOR A KEY NATIONAL INDICATOR EFFORT

A century of experience with large-scale measurement efforts shows that clarifying the initial intent, the targeted audience, and the value proposition is a

³ These figures do not include international commercial and governmental expenditures in the world marketplace for public information.

core ingredient of success. At least three questions need to be answered: What is the “mission statement?” Who is the audience? And how will this effort add value for the audience? According to some observers, the major failing of the 1970s Social Indicators efforts was the failure to effectively address these questions.

The challenge is that there are many alternative missions, audiences, and value propositions for a set of U.S. national indicators. These options range from exploratory efforts with a learning objective to performance-oriented efforts that directly inform decisions on issue definitions, goals, priorities, workable solutions, and relative resource allocations. Some of these alternative missions include:

- **Accelerate National Learning**

With a learning focus, a set of national indicators could not only contribute to scientific understanding, but also enhance the awareness, insight, and foresight provided to leadership and the public. This is a communication focus—creating a “mental model” for awareness, understanding, and thinking prior to choosing. It requires no agreement on goals (e.g. “decent work,” Healthy People, “leave no child behind,” etc.) and the basic elements of the strategy to attain them (e.g. achieve public safety by incarcerating criminals, rather than trying to rehabilitate them).

- **Assess Position and Progress**

Measure where we as a country are in our vision and monitor our progress for our citizens. This is a broad, constituent-focused aim and requires a generally accepted common vision and holistic framework that helps uncover especially challenging problems and beneficial opportunities. These are largely descriptive indicator sets and provide a basis for comparing progress in one country with other countries, and our current with our past status. A current International Labor Organization (ILO) initiative called the ‘Decent Work Agenda’ offers an example:

“The decent work agenda brings together the goals of rights at work, employment, social protection, and social dialogue in a consolidated, gender-sensitive vision which guides economic and social policy choices across the board.... Decent work is a broad concept, with many dimensions. Some of its dimensions are much more readily measured than others, and that is reflected in the availability of statistics on different topics. It is, on the whole, easier to measure employment than it is to measure freedom of association. But while inevitably one ends up measuring the measurable, the very nature of decent work as an integrated framework calls for an approach which attempts to address the

difficult issues. If we cannot measure progress towards decent work, it is difficult to get beyond rhetoric and into the hard policy choices. This is a fundamental issue, a foundation for much else.”

- **Provide a Context for Evaluation**

A national indicator set would be an essential body of knowledge to use in assessing the performance of policies, programs, and institutions. For example, a well-articulated and highly developed set of indicators could provide a context for improved implementation of governmental performance initiatives (e.g. the Government Performance and Results Act, which requires Federal agencies to measure their performance in meeting agreed-upon goals). This requires a well-grounded conceptual basis that integrates a wide variety of activities into an accountability framework. Such a scorecard for government performance would call for a management/good government focus.

- **Inform Strategic Decisions**

This mission has a broad policy integration focus, in that it combines policy indicators from a variety of sectors in a holistic vision that can guide policy choices. This is the sort of systems model that ensures integration by surfacing the interrelationships between different indicators. This approach aims to answer questions (Why, not What or Whether), and responds to the growing perception amongst both experts and the public that interrelationships between economic, social, and environmental aspects of life are important and policies will have unanticipated effects if these interrelationships are not addressed.

II. PRINCIPLES FOR DEVELOPING KEY NATIONAL INDICATORS

The following draft principles are based to a great extent on lessons learned from previous national efforts, as well as current comparable efforts.

- **It is about the nation, not just government.**

Defining key national indicators goes beyond any one sector; beyond corporate governance; beyond non-profit outcomes; beyond government performance. Only if indicators are developed at this level can leaders, and the public, decide the respective roles of the public, private, and not-for-profit sectors.

- **If it is about the nation, it must incorporate the nation’s component parts.**

Specifically, it must allow local, state, regional and federal governments, as

well as private for-profit and not-for-profit sectors to coordinate and integrate their own efforts into a national perspective, and, in turn, to assess government performance as it affects their particular sector. Similarly, it must allow individual national agencies to nest their own performance goals within the national effort.

- **If it is national, it must be comprehensive.**

In principle, the effort has the purpose of measuring everything that is important about its particular unit of analysis. In other words, it is not "domain-based" (e.g. education, health care) but holistic in character. Thus, the framework must observe the extent to which different elements "bundle together."

As the Australian effort puts it, "Recent years have seen growing public interest in the interrelationships between economic, social and environmental aspects of life. There have been, for example, debates about the sustainability of economic growth and a recognition that the environment is neither an inexhaustible source of raw materials nor capable of absorbing an unlimited amount of waste. Similarly, progress relates to social concerns - health, education and crime - and whether and how economic growth benefits those areas." (Australian Bureau of Statistics, *Measuring Australia's Progress*)

- **If it is to be useful, the information must be targeted and trusted.**

Canada's principles for national indicators are that they should be *relevant, timely, comparable, easily available, and understandable for defined audiences with genuine needs*. The ILO observes a complementary set of principles: *conceptual relevance, easily communicated interpretation, availability of data, and reasonable comparability*. In fact, dozens of efforts over the last several decades have developed and applied similar criteria to the development of national indicators. One analysis of the best of all these efforts suggests that the following criteria might be applied to the development of a quality US indicator set: *significance, objectivity, accuracy, scope, timeliness, accessibility, clarity, efficiency, comparability, and contextual sophistication*.

- **If it is to drive decision-making, it must be systems-based.**

Important decisions typically involve tradeoffs and interactions. As a result, a national indicator effort must integrate the linkages and interactions between the component measures. The need to address this concern is behind the renewed initiatives to derive useful indicators, in addition to the increased demand for performance accountability.

This principle is not just common sense (e.g., poverty is negatively linked with educational attainment, and with government spending on education),

but it permits making the indicators actionable, by linking high-with low-level goals in a system of measurement. Two examples: Oregon uses the “circle of prosperity” system; the UN uses a “virtuous circle of economic development which creates jobs and generates resources for social protection.” Such systems allow us to sensibly consider things together, rather than in isolation.

As the Australian Bureau of Statistics puts it, “Each aspect of progress is related, either directly or indirectly, to most of the others. Change in one dimension of progress is typically accompanied by change elsewhere. Therefore it is important to consider the full array of indicators together.”

Broadly, we may think of two types of relationship between different areas of progress - trade-offs and reinforcement. Trade-offs occur when one area of progress improves at the expense of another. In some cases, trade-offs arise after a change of preference: spending on education might be cut, for example, to give more money to health. But they also occur as flow-on effects: for example, economic activity rises and so might greenhouse gas emissions. Reinforcements occur when one aspect of progress improves and strengthens another. For example, as economic production rises, so might employment. In reality, the overall effect of a change in any one dimension is much more complex.

- **If it is to be credible, it must be both science-based and understandable.** Science is the ultimate basis of credibility, but there are areas where science does not yet reach and even more where scientists disagree. But even in such areas, we can still formulate questions about what we need to know, so we can make sensible scientific statements and guide key areas of research and investigation. In just one example of the role that science can play, the European Union’s national indicators effort is attempting to ground itself in theoretical models from the social, political, economic, and environmental sciences before proceeding to measurement and statistics. Observing this principle calls for spending time to figure out the right questions to ask within a clear conceptual framework, starting with multidisciplinary scientists, as contrasted with exercises that are driven by statisticians and existing information, or policy executives and a desire to measure goals in an existing policy framework.
- **If it is to be evaluative, it must, to the extent possible, be outcome-based, as well as accounting for inputs and capabilities.** Only by enhancing our view of the relationships between resource inputs, societal capabilities and solutions, outputs, and outcomes can we determine what’s working and what isn’t and where the yield per unit of resource

expenditure is greatest. For example, the ILO calls for extending its measures beyond the “presence or absence of work” to assessing “the decency of work itself.” Including the full spectrum of resource mobilization in the service of a specific goal is a way to ensure the completeness of a national indicator set.

- **If it is to monitor progress, the public must be both involved and included.** This principle implies a need for polling and related research to define what Americans want for their country. As Derek Bok showed in his seminal work *The State of the Nation*, public opinion can form the basis for a robust measurement framework. Certainly, in any government that is founded “by and for the people,” the public is the ultimate judge. Without public assent, a key national indicator effort is unlikely to have a broad impact. Achieving such assent is more likely to the extent that there are specific plans to develop public understanding and ‘buy-in.’
- **If it is to have staying power, it must acknowledge the reality of resource constraints, and the corresponding need for judgement and compromise.** Decision-making and resource allocation in the United States take place at many levels, in many sectors and on many topics. This suggests that a true national effort will need to be based on some type of public/private partnership. No one sector or level of society can “own” the effort. Similarly, there will always be gaps between what information is conceptually preferable and what readily available or affordable, between depth and breadth. This suggests an ever-evolving approach with buy-in from leaders, professionals, and the public across all areas of U.S. society, yet enough independence to ensure the ability to consistently ‘tell the truth’ even if the news is bad.

III. USA SERIES 0.5 - INFORMATION AREAS AND ILLUSTRATIVE INDICATORS

A. Strategic Approaches

Comprehensive approaches by definition have to be tiered. In other words, they must be grounded in specific indicators but build up through progressively more abstract and broader ‘information areas’ (e.g. crime, health, education). Building a top-down tier from “goals,” as is possible in some parliamentary democracies, creates very different systems than building bottom-up from an informational approach or attempting to aggregate and integrate robust and independent systems of statistical information, as we have tended to do in the United States.

Current national and international efforts display several organizing concepts. Many of them have been considered in the U.S. at one time or another, and thus offer lessons for moving forward in this country with a key national indicators effort:

- **National Progress**

This organizing concept concentrates on rates of transformation, usually how well and how rapidly a society is moving through stages of development toward a robust, open, market-based, and democratic nation. The U.N. Millennium Development Goals process offers a revealing example of the “domains” process at work in a nation-based effort. Domains are a top-down approach—they take existing policy as given and work from there. The U.N. is effectively obliged to take this approach because the consensus that created the domains/policies is fragile. That is, the organization wants to measure progress in meeting negotiated goals, not to reopen the negotiations. In other words, the key indicator domains and their definition come from the political process but are highly constrained. The top-down approach also tends to be backward-looking, because the domains grow out of past work.

Early U.S. efforts took a simplistic version of this approach. For example, the Eisenhower-era *Goals for Americans* was described by observers as “a conservative and backward-looking document,” “journalistic,” and “simple-minded.”⁴ Subsequent attempts at national goal setting, especially during the post-Vietnam era where U.S. international competitiveness was in question, showed themselves to be highly ineffective for a society as large and complex as the U.S., and this approach has been largely abandoned.

- **Standard of Living**

This approach focuses on counting key assets owned, measuring national wealth and other economic and social achievements. In the U.S., we struggle to measure the economy well. Due to resource constraints, our measures still assume a primarily manufacturing economy, as we work to adapt to the reality of a services-dominated economy. Our measures also exclude many valuable assets and aspects of wealth that are not monetized or are difficult to measure. We also face challenges in developing truly comparable measures of standard of living.

- **Quality of Life**

This approach addresses how well a society satisfies people’s wants and

⁴ The National Planning Association subsequently did a “rigorous and sophisticated” analysis of the cost of securing these national goals. (See Michael Springer, “Social Indicators, Reports, And Accounts: Toward the Management of Society,” in *The Annals of the American Academy of Political and Social Science*, Vol. 388, March 1970)

needs. The Canadian approach is built on a vision statement called the Canadian Way, “which recognizes that economic and social progress must be pursued together, that the real value of a strong economy is the opportunity it generates for Canadians, and that a strong society allows all its members to participate.” The intention is thus to have an integrated framework, based on an understanding of linkages and cause/effect relationships between disparate phenomena. Still, the agenda is explicitly managerial: transparency and accountability for government activities, so that “Canadians are better placed to assess the performance of government programs and initiatives, and to engage in shaping public policy.”

- **Sustainability**

This evolving framework is both integrative and future-oriented. It addresses the needs of future generations simultaneously with those of the present. Thus, it includes reports on whether stocks of assets (human, natural, produced and financial, and social) are being maintained, grown, or depleted. This was the most recent U.S. approach, used by the President’s Council on Sustainable Development.⁵

At present, the current ‘approach’ in the U.S. literally combines all these frameworks in a complex, diversified, and large-scale decentralized effort, with both top-down and bottom-up approaches that appear to be evolving from integrative indicator efforts at local, state, and regional levels to a corresponding effort at the national level. The U.S. experience also includes all of the three basic types of indicator approaches:

- **One Number – A composite of different indicators**

The best known example of this approach is probably the UN’s annual Human Development Index. This approach provides a very useful tool for communicating “the direction we are going in” to a large audience, especially in a comparative context, in this case the world’s nations. However, such an index requires a consensus on weighting the different indicators that is very hard to obtain. As Amartya Sen has written, it is easy for an individual to judge which elements carry more weight, but the status of a public effort “must depend on its acceptability to others.” Sen also warns that “a democratic search for agreement or a consensus can be extremely messy.” (Amartya Sen, *Development as Freedom*, New York, 2000).

- **Accounts – A unified, balance sheet of indicators**

The National Income and Product Accounts (NIPA) are the best known balance sheet approach in this country. Most countries have a similar set of

⁵ This group’s term ended in 1999.

economic accounts, all linked at a certain level of detail by the UN-sponsored System of National Accounts. In the accounting approach, the indicators are both gathered and presented within a coherent hierarchical system.

The common complaint with this system as a broad measure of national performance resonates across the decades – it is limited to material transactions, and it treats them equally rather than acknowledging that some of them are negative. Depletion of resources is a physical example, as is pollution of other key resources like water. Moreover, it does not address the effects on humans, many of which are negative, such as air pollution or traffic congestion. Trying to address these effects as well is a major reason for developing broad-based national indicators of progress that would subsume such a domain-based accounting system in a unified whole.

- **Indicator Suite – A portfolio of information areas and key indicators**
This type of presentation is a good first start on an indicator project, as it does not require each element to be fully mature as a measure, but still allows for discussing the linkages between the elements. In this sense, the portfolio presentation lets people make their own evaluation of the whole, without requiring the rigor of individual measures necessary for arriving at a common consensus on the whole.

B. Content development and balance

Information areas tend to develop in an evolutionary fashion, over relatively long time periods, and in some definable stages as they reach greater degrees of scientific and political consensus and transparency. Hence, some can be preliminarily identified as more “advanced” than others (e.g. health, the economy). These more advanced areas are a logical starting point for developing a comprehensive US portfolio, while deciding how to tackle some very important but newer areas (e.g. homeland security)

The general trend is toward comprehensive, integrative approaches, which vary from country to country. For example, Canada has a “Standard of Living” approach. Singapore has a “national progress” approach. The United Kingdom has a “quality of life” approach. These different approaches are often expressed visually. France has five “axes,” Germany two concentric spheres, and the Netherlands a 3 x 3 matrix. As more integrative approaches are developed, new higher level categories are created. Such areas range from sustainability and transparency to well-being and accountability. It is critical to have a dialogue that can build off of established categories while remaining open to developing and integrating newer, less mature categories.

Broad information areas that are relevant in the U.S. today include:

- Advanced areas, with a great deal of data and a broad consensus around the data, such as health and education
- Developing areas, with a developing information base and a need for consensus, such as governance and community health
- Formative areas, with pilot projects to outline suitable information bases, such as sustainability and security

C. USA SERIES 0.5

The aim of the Key National Performance Indicators Forum - held in Washington, D.C. on February 27, 2003 -- is to foster a new dialogue between users, producers, and funders of information on whether and how to develop a set of Key National Indicators for the United States. Among other topics, the central issues for discussion will be the potential merits of such an effort, where it might go, and alternatives for moving it forward – ranging from process and organization to resources and technology.

At the outset of such a dialogue, we are confronted with a dilemma. If one attempted to create a comprehensive indicator set, its scope, essentially ad hoc nature, and complexity would greatly reduce the chances for constructive dialogue by preempting ownership and involvement from a variety of perspectives. On the other hand, beginning a discussion on such a broad topic with no organizing framework to react to and provoke discussion, would likely be a poor use of a participant's valuable time.

Our solution is to present a 'rough draft' of what a US indicator set might look like for the United States. Since it is in a developmental stage, anticipating a more comprehensive version at some point in the future, we label it 'USA Series 0.5.' USA Series 0.5 can be a starting point for a focused and rich dialogue in the forum on what should be done to eventually move to a version 1.0, which itself would be simply the first complete instance of an ever evolving information resource.

What USA Series 0.5 is: Most indicator initiatives feature several common elements. Thus, series 0.5 includes indicators that have been prominent in past efforts in this country. It also includes indicators from countries whose economic and social systems are, in some respects, comparable to our own, namely Canada and Australia. (These two countries are among the leaders in the technical aspects of indicator development.) Although many leading professionals have contributed to this paper, it expresses a single point of view.

Any successful indicator initiative is comprehensive; it does not exclude key information areas because the information base is inadequate, but uses the best available measures as proxy until adequate measures are available. Indeed, one goal of indicator projects is to foster development of needed information. Thus, while based primarily on existing information, series 0.5 includes information areas that are developing as well as those that are mature.

What USA Series 0.5 is not: Because Series 0.5 is a “rough draft” meant to give this conversation a starting point, it lacks a firm “mission statement,” or conceptual framework. Thus, it is not systems-based – what such a system might be is yet to be agreed upon. Nor does it have an identified audience. And although it attempts to be comprehensive in terms of presenting a framework for discussion, it does not, because it is a preliminary version, presume to be complete in terms of including the many information areas that might likely be incorporated into later versions. (See next page)

Furthermore, it does not attempt to propose indicators for new or ‘formative’ information areas that have, by definition, large knowledge gaps because they are taking shape based on new questions being asked about our nation and our world. Because it is a single individual’s point of view, it does not represent a broad formal consensus of either professionals, leaders, the public, or key institutions.

USA Series 0.5 specifically addresses areas in which national performance might be measured. Any such report on the state of the nation would need to provide a context for these measures by describing changes in key background variables, such as population change and its components: births, deaths, and migration, both national and cross-border. These are not included in this paper. Some might view changes in these contextual measures as representing progress, or lack of progress. However, there is considerable and fundamental disagreement over the appropriate direction of change in these basic demographic measures (except, perhaps, for deaths). In contrast, there is broad acceptance of their contextual relevance.

Acknowledging these limitations applies lessons from the past and makes an important statement about the preliminary nature of what I’m presenting today.

USA Series 0.5: Key Information Areas
 (Boldface = Information areas with illustrative indicators)

<i>Information Area Development Stage</i>	<u>Economic</u>	<u>Social</u>	<u>Environmental</u>
<u>Advanced</u>	Macroeconomy	Education Health Crime Social support	
<u>Developing</u>		Community Governance	Ecology
<u>Formative</u>	Sustainability Transparency	Sustainability Transparency Security	Sustainability

It is worth noting that the distance between a USA Series 0.5 and a USA Series 1.0 is significant. This is especially the case if one assumes that 1.0 is an initial version with formal individual and institutional consensus that it is a starting point for an ever-evolving set of key national indicators. The path from 0.5 to 1.0 is essentially one of to achieve the ‘key principles’ identified earlier in this paper. But more specifically, progress toward a version 1.0 will require a combination of:

- Building consensus within a core set of leading individuals, groups, and institutions around information areas and indicators;
- Devising a sustainable process and place (i.e. forum) for continuous dialogue and organized action;
- Identifying current indicators that are either in need of recalibration, refinement, or elimination because – based on new scientific understanding – they misinform rather than inform; and
- Making progress in new information areas that are deemed important but which still lack appropriate measures.

The following table -- based on 10 months of preliminary discussions leading up to the Key National Performance Indicators Forum -- shows one possible view of both 1) how new information areas might be added over time and 2) how information areas would continually mature from formative stages of development to more advanced bodies of public information.

USA Information Area Development Over Time (*Cumulative*)

<i>Information Area Development Stage</i>	<u>Series 0.5</u>	<u>Series 1.0 - 2.0</u>	<u>Series N.0</u>
<u>Advanced</u>	Health Macroeconomy Education Crime/Public Safety Social Support	Microeconomy Energy Special Populations Labor and Employment Resource Allocation	Community Governance Ecology
<u>Developing</u>	Ecology Community Governance	Well-Being/Happiness Wealth/Prosperity Competitiveness Citizenship Infrastructure	Justice Families Innovation Knowledge
<u>Formative</u>	Sustainability Transparency Security	Globalization Cities Neighborhoods Equity Diversity Accountability	Values Arts & Culture Civility Freedom Mobility Opportunity Trust

D. USA Series 0.5: Illustrative Indicators

In the advanced and developing information areas for USA Series 0.5, I have judgmentally chosen approximately 10 indicators to illustrate a starting point for a set of key national indicators.

There are many different examples of how groups of experts have applied criteria to develop comprehensive indicator sets. And ultimately, for a U.S. indicator portfolio to have credibility, a set of common criteria and methods will need to evolve. But the purpose today is not to suggest what those criteria are.

These indicators are illustrative and based on data that currently exist. Hence, they could be a basis for arriving at a “core set” with a broader base of consensus. They also serve to sketch the rough outlines of what could be done if we were to work collectively to achieve an integrated portfolio of key national performance indicators.

Health

The United States already has an existing, legitimized set of indicators in Healthy People, developed and monitored by the Department of Health and Human Services. Health is generally considered an advanced area for measurement. The information base is sophisticated and broad. There is also a wide consensus on what is health (no one chooses “the alternative”), as well as on the need to think of health in a broad sense as something influenced by both individual and collective action. On the other hand, the current audience for this information is largely the public health community and some believe that the body of indicators fails to account for economic interactions and quality factors that are especially relevant in current discussions about reform.

“The “healthy people” indicators have been produced for many years now and in their current version are labeled Healthy People 2010. Chosen to measure the health of the nation, each of the ten indicators were selected on the basis of their ability to motivate action, the availability of data to measure progress, and their importance as public health issues. The leading health indicators are: physical activity, overweight and obesity, tobacco use, substance abuse, responsible sexual behavior, mental health, injury and violence, environmental quality, immunization, and access to health care.

Healthy People 2010 is a full-fledged, national measurement system, involving federal, state, and local governments as well as the private sector. The ten leading indicators break down into a total hierarchy of 467 objectives. The data are updated quarterly on the National Center for Health Statistics (NCHS) web site, and regular reviews of action and progress on the Healthy People objectives are held. They are also an important input into HHS’ annual report on the health status of the nation.

Thus, the focus is on the overall health of Americans, not on health care system performance. Moreover, with the possible exception of physical activity, the indicators do not reveal the specifics of how various economic, social, and environmental forces are interacting to shape our health. Taken together, however, they give Americans a good idea of how healthy we are.

Other broader outcome measures are usually included in broad national indicator portfolios. Their absence would limit comparisons with other countries, and might well leave an uneasy sense of “something missing.” The most common are the following indicators from *Canada’s Performance 2001*:

Life expectancy is the number of years a person would be expected to live, starting from birth. This is one of the most commonly used indicators, and has long been regarded as a basic and reliable indicator of the overall health of a population. It has sometimes been criticized for emphasizing longevity over quality of life (hence the following indicator). Even so, life expectancy is an indicator that lends itself to reliable comparisons over time and across jurisdictions.

Disability-free (or health or active) life expectancy introduces the concept of quality of life. This indicator measures the number of years a person could expect to live free of any activity limitation. It also provides an estimate of the cost to society of caring for disabled people. “Estimates of disability-free life expectancy from 1995 to 1997 indicate that women could expect to spend just over 12 years, or 15 percent of their lives, with a disability, compared with about 10 years, or 13%, for men. Thus, the longer total life expectancy for women does not mean that they have an equivalent advantage in disability-free years.... High obesity rates, high smoking rates, and high rates of depression are associated with shorter active life expectancies.” (*Canada’s Performance 2001*)

Self-rated health status measures physical and mental health as experienced by citizens themselves. It is an assessment of wellness, not simply the absence of disease. It can also be a good predictor of the existence of more objectively measured problems.

Infant mortality is widely used as a basic indicator of social and economic development. Thus it offers the possibility of reliable comparisons over time and across jurisdictions. Child or youth mortality are other indicators that the society is successful in bringing its children into adulthood.

Physical activity influences health as opposed to being a measure of it. Lack of physical activity has long been recognized as a risk factor for coronary heart disease. “Physical activity provides many health benefits, including weight control; reduced risk of diabetes, cancer, and osteoporosis; stress reduction; and more.... Studies indicate that physical activity can reduce the risk of Type 2 diabetes by over 50 percent and that the odds of having heart disease are significantly higher for those who are sedentary (5.0%) or who engage in only light physical activity (3.7%) than for those who engage in moderate or vigorous physical activity (1.0% and 1.3% respectively).” (*Canada’s Performance 2001*)

Canada also tracks disparities in health indicators across populations, such as aboriginal peoples. It tracks obesity and smoking, which measure individual performance. And it tracks organizational performance through a measure of access to high quality health care.

Australia has a second tier indicator on the “burden of disease.” This approach is very useful for helping to prioritize health initiatives. For example, when the World Health Organization, the World Bank, and others collaborated on a study of the “global burden of disease,” they found that the potential burden on society was greatest for smoking. Although smoke-related conditions were not as severe for the individual as other conditions, the sheer numbers of people who smoked put smoking at the top of the “burden” list. However, this approach requires a complicated methodology and better data than are generally available, so it does not seem suitable for an introductory effort.

Combining the broad national approach of societies that are similar to the U.S., and with which we would wish to compare ourselves, with the more directed domain approach suggests the following ten indicators for the health portfolio of Series 0.5:

- **Life expectancy – at birth, at different policy-relevant ages**
- **Health/active life expectancy**
- **Infant/child/youth mortality (i.e. successful survival to adulthood)**
- **Disability limitations – as represented by inability to perform normal activities of daily living.**
- **Physical activity**
- **Tobacco use**
- **Overweight and obesity**
- **Substance abuse**
- **Immunization**
- **A measure of access to health care – availability, affordability, etc., e.g. personal expenditures for health care as a percentage of per capita income.**

Macroeconomy

The U.S. has an explicit set of national economic objectives, in that The Full Employment Act of 1946 committed the national government to the twin goals of maximum employment and economic stability. The U.S. also tracks the growth of the economy and changes in key market forces through a long-standing system of national income accounts. The accounts framework designed by Simon

Kuznets fosters wide use and acceptability, despite many controversies over the measurement and definition of individual indicators.

The principal problem of these aggregate measures of economic production and transactions is that they only partially represent Americans' well-being. That is, higher levels of aggregate income do not translate perfectly into longer lives, clean air and water, safe communities, better education, or even more fun. Hence, there is a recurring demand for a broad set of national indicators.

The human aspects of the economy are perhaps most endowed with solid data, though most series refer to households rather than individuals – income levels and distribution, poverty measures, employment/unemployment, and so on. These measures are the most commonly requested from the Federal statistical system, judging by “hits” on the various Federal web sites. They may be highly correlated with successful outcomes, or they may not. Oregon, for example, found that simple measures of employment and unemployment did not address what its citizens cared about – more “good” jobs, so the state measures wage growth instead. The ILO also finds that existing measures tend to over-rely on unemployment and employment, at the expense of “adequate pay, acceptable levels of mental, physical and financial risk, social protection, and respect for ... recognized rights.” (*Measuring Decent Work with Statistical Initiatives*, Policy Integration Paper No. 1, 2002)

In general, the knowledge base in this information area is vast, though uneven. For example, the Federal Reserve Board uses a base of nearly 20,000 data series to analyze the U.S. economy. Common measures addressed by national indicator efforts include the following:

Economic growth:

- Real GDP. This is a simple measure of growth in the economy; its value and measurement are both subject to dispute but data are widely available both over time and for comparison with other countries.
- Real GDP per employed person (level and growth). This is a standard measure of labor productivity. Many economists are more interested in measuring total factor productivity, and work on achieving this measure has been underway in the U.S. for quite some time. Real GDP per capita is equivalent to the total inflation-adjusted income per person generated during the year, and is a commonly used indicator for measuring improvement in the standard of living.

Employment opportunity:

- Labor force participation. This is the ratio of employment to the working-age population, and is a broad measure of the utilization of the nation's human

capital. Economies where significant numbers of adults are not engaged in the work force tend to have slower economic growth, according to World Bank and other research.

Working age is largely determined by the choices of individuals, to the extent allowed by law, and changes in these ages are themselves a reflection of progress in other domains. For instance, the rise in college enrollment is reflected in a rise in the age at which people become “permanently” attached to the labor force. Similarly, the rise in healthy life expectancy has halted the decline in early retirement, and enables increasing numbers of older people to work, whether out of need or pleasure.

- Unemployment. High unemployment rates mean the economy is not using all the skills available to it. It also means that the standard of living for a large portion of Americans is threatened or worsening, rather than improving.

Innovation:

- Expenditures on R and D as a share of GDP. Innovation is a primary driver of productivity growth, but we have no good way of measuring it yet. In the meantime, this measure was devised by Canada, and can be reproduced by the United States.

Income:

- Real disposable income per capita. This is akin to a national version of “take-home” pay, and measures the income available for people to spend or save. It is dependent on many of the other indicators, as well as on tax and transfer policies and programs.
- Poverty – Ideally, not just the level of people in poverty in the nation, but how persistent their poverty is, and what the flows are into and out of poverty.
- Median household net worth. With an increasing share of Americans living beyond the prime working ages, net worth is a way to estimate how well the population can access economic resources.

The quality of work:

- The composition of wage earnings. When Oregon established its indicators program, it found that its citizens viewed progress in earnings as more “good” jobs and fewer “bad” jobs. The usual wage rate measures obscure this trend.
- A corollary would be to view the same trend via some measure of occupational mobility, or of access to good jobs throughout the prime working ages. Longer active life expectancies are leading many to have longer work lives, often as much for the pleasure of working as for the need

for economic support. Yet occupational requirements and needs can change rapidly. Thus, job opportunities are important to workers at all ages.

Housing:

- Home ownership rate. Housing is the most important form of wealth for most Americans, as well as their most important possession. The Roper Organization's annual American Dream survey consistently finds owning a detached home as the most important material component of "the American Dream." It is also a significant element in acquiring wealth that can be liquidated if needed in later life.

Other useful measures that have been used by various entities include:

- Economy: inflation, deficit-to-GDP ratio, and debt-to-GDP ratio.
- Labor market: long-term unemployment
- Income inequality (across the population and for subgroups, such as age or race and ethnic origin)
- Innovation: patent applications, researchers per 1,000 labor force
- Housing: affordability, e.g. average home price/average household income

Combining the broad national approach of societies that are similar to the U.S., and with which we would wish to compare ourselves, with the more directed domain approach suggests the following ten indicators for the economics information area of USA Series 0.5:

- **Real GDP**
- **Real GDP per employed person**
- **Labor force participation**
- **Unemployment**
- **Expenditures on R & D as a share of GDP**
- **Real disposable income per capita**
- **Median household net worth**
- **Composition of wage rates (good jobs/bad jobs)**
- **Poverty**
- **Home ownership**

Education

Education has been perhaps the prime source of Americans' economic and social success, for the nation as well as for individuals. As the 1969 U.S. report said, "Knowledge, intellectual skills, and the creative capacity of scientists and artists are an important part of the nation's wealth." In a society that values economic

and social mobility, education is relied upon by all. Consequently, the nation has a long history of statistics for assessing educational performance.

Educational attainment. This is an essential measure of the nation's human capital. These days education increasingly provides an entrée to better jobs; it also affects labor productivity. (Enrolment is an input, not an outcome; but it could be an indicator of access.) From the standpoint of the individual, education allows Americans to learn, work, and live well. It is also a strong factor in the continued economic innovation that is at the heart of our economic success.

- Literacy is another key measure, since the ability to read and comprehend is key to success in today's highly competitive global economy. A basic level of literacy is now required to get and keep most jobs and to adjust to changing economic opportunities.

In today's world, literacy is more than simply being able to read and write; it refers to an individual's ability to understand and use different types of information. An international survey of adults in 1994 found that about 50 percent of Americans aged 16 to 65 functioned below the minimum desirable threshold, which corresponds roughly to successful high school completion and college entry. No such survey is conducted regularly; ideally, we should conduct one. In the meantime, a proxy measure must be found, such as skills measured by the National Assessment of Educational Progress (NAEP). Certainly, the NAEP fills what was probably the most significant measurement gap cited by the 1969 U.S. report, so some measure of what Americans actually have learned is an essential indicator.

- Mathematics and science. Advances in technology have "deepened" the technical aspect of the nation's job portfolio, and contributed to progress in many domains. This is one area in which Americans have been influenced by international comparisons, as the U.S. has done relatively poorly. These comparisons are also useful in that mathematics performance can be easily compared among nations with different languages and cultures. A different result has been found by a measure of science and technology: net payments by foreigners for patented techniques or technical expertise. (This measure, of course, does not address basic science.)
- Computer access and computer literacy.
- Safe schools (can link with drug and substance abuse)

- Degree of racial/ gender/ class/ disability equity in post-secondary access and completion. In recent decades, post-secondary education has become commonplace, as jobs that require a significant amount of education have proliferated, and pay for such jobs has outpaced pay as a whole. However, longstanding discrimination against women and against members of racial and ethnic minorities has not been eliminated.
- Employability. Lengthening work lives contrast with changing work requirements throughout the work life. As a result, education policymakers are beginning to frame their thinking in terms of life-long learning opportunities. Some measures that have been used in this context include participation/access to appropriate adult education, incidence of and spending on employer-sponsored training, and the unemployment rate of university graduates.

Other useful indicators that have been used include:

- Pupil/teacher ratios
- Expenditures on education as a percent of GDP

Combining the broad national approach of societies that are similar to the U.S., and with which we would wish to compare ourselves, with the more directed domain approach suggests the following ten indicators for the education information area of USA Series 0.5:

- **Percent of the population aged 25 and over that has completed post-secondary education.**
- **A NAEP or other measure of literacy equivalent to high school graduation.**
- **Percent of the population aged 15 to 29 that are neither enrolled in nor have completed high school.**
- **Enrolment in science and engineering (NSF)**
- **Mathematics test scores (NAEP)**
- **Percent of population with computer literacy, computer access**
- **Safe schools**
- **Gap in attainment by race and ethnic origin and other relevant factors (e.g. disability)**
- **Adult education participation/access**

Crime/Public Safety

Crime is a negative indicator of social capital. It is costly to society in terms of time lost to productive work as well as in direct costs in damage to property and people. And it is a misery for the families of both victims and perpetrators.

Respect for peace and the rule of law is an essential ingredient that links neighborhoods and communities.

Maintaining public order is a fundamental characteristic of government. Consequently a rich array of statistics is regularly available, both from reports of governmental organizations charged with the safety of the public, and from citizens themselves. Nevertheless, new issues emerge, and previously unknown or tolerated issues reach the public consciousness.

Common measures of crime include:

- National Crime rate: the number of reported total criminal offences per 100,000 people.
- Violent Crime rate: the number of reported violent criminal offences per 100,000 people. Violent crime includes: murder, attempted murder, common assault, aggravated and other types of assault, sexual assault and other sexual offences, abduction, and robbery. These are all actions that are opposed by almost every society, and thus a common measure for international comparisons.
- Property crime rate: incidents that involve unlawful acts with the intent of gaining property but do not involve the use or threat of violence. Common property crimes include theft, breaking and entering, fraud, and possession of stolen goods.
- Other Criminal Code violations: mischief, weapons offences, prostitution, arson, counterfeiting, and disturbing the peace.
- Incarceration (as proportion of the population, by age groups) and recidivism can be a measure of how well the justice system is functioning.

Other measures of public safety have been proposed/developed at one time or another to address the following concerns:

- There are longstanding indications of bias in the justice system on the basis of race and ethnic origin. Similarly, poor people of color have very high rates of victimization.
- Injuries and property losses are not only regrettable, they cost both the victims and the economy productive time and/or wealth. Thus “weighting” crime measures according to the direct or indirect harm they cause has been called for, or at least estimating the dollar costs. For example, forensic economists have devised ways to measure the cost to a family of death. Others have estimated how the cost of an accident, say a broken limb, can be much more severe for an older than a young person. Or the cost of a burglary might be greater for a poor person than a rich one.

- Deaths/injuries from automobile or other transportation accidents signal a flawed public safety.
- Deaths/injuries from fires and other household accidents are also a measure of public safety to the extent that they can be prevented.
- Finally, terrorist attacks have reminded Americans that public safety does not just depend on how citizens behave, but also requires a large investment by the taxpayers. This investment basically involves redirecting otherwise productive human capital into training, supporting, and staffing various protective services, both public and private. This investment has been measured by expenditures on protective services per capita, or the proportion of the work force engaged in protective services.

Perhaps the weak link in the crime and safety data is how safe people feel, and how their feelings of safety affect their behavior – and how that might affect the nation as a whole, whether in the strength of its communities or the strength of the economy. So far, the measure that comes closest to meeting this goal is represented by the numbers/percent of people afraid to leave their house or walk alone at night.

Combining the broad national approach of societies that are similar to the U.S., and with which we would wish to compare ourselves, with the more directed domain approach suggests the following ten indicators for the crime/public safety information area of USA Series 0.5:

- **Crime victimization rates (by subgroups such as age, sex, and race/ethnic origin)**
- **National crime rate**
- **Violent crime rate**
- **Property crime rate**
- **Incarceration (as percent of population, by age rates and by race and ethnic origin)**
- **Deaths due to transportation accidents**
- **Deaths due to fires**
- **Proportion of jail inmates who committed offense to get money for drugs**
- **Percent of working age population providing protective services.**
- **Percent of population afraid to walk alone after dark**

Social Support

In every society, the adult population supports people who are not working. Some of these dependent populations may be living in institutions, such as people who are severely disabled or college and other post-secondary students.

Others are living on their own or with peers, notably the elderly, while others, mostly children, live with their parents and/or other close family members.

Americans generally provide social support through unpaid work with young, elderly, or disabled family members. However, despite enormous progress in health, death can leave a dependent individual bereft of close relatives, or deprive a family of its most economically productive members. Consequently, society provides broad support, recognizing its need to invest in new generations of Americans and its obligation to older ones who have already served.

With one important exception, the information needs of U.S. social policy provide a rich body of data for assessing Americans' performance in meeting the needs of dependent populations – children, the dependent elderly, and the disabled. The exception is that most family measures are rooted in the living unit. This was effective in earlier days, when both household and family had virtually the same meaning, but since the 1960s, both older Americans and young adults have tended to live independently, no matter how close their family ties. More directly worrying, divorce has given many children separate homes with each parent.

Consequently, many common measures tend to overlook important family contributions. For instance, many children of “single parents” are actually receiving care and attention from both parents, but only special surveys acknowledge the one who is non-resident. (And one month's non-resident parent may be the resident parent the next time the survey is conducted.)

Other measures fall short because they are based on out-moded dependency thresholds. When 18 was set as the age of adulthood, most 18-year-olds were economically independent. Now, with the rising value of post-secondary education, many American youth are dependent well into their 20s. Similarly, when 65 was set as the upper threshold of economic independence, the relatively few Americans who were alive at that age tended to reside with a child or other family member. Now most Americans look forward to years of active retirement, supported by their own resources rather than dependent on others.

Canadians have made an interesting attempt to capture the social support that family, neighbors, and close friends exchange across household lines. One interesting discovery is the importance of adult siblings as well as friends to people whose children are grown. Meanwhile, a substantial body of research in the U.S. is tracking intergenerational transfers of care and money among Americans. Despite the aging population, the bulk of such transfers still flow from older to younger generations.

The U.S. federal statistical system has two multi-agency forums that focus on indicators of well-being – one for children and one for older Americans. These measures suggest the following performance-type indicators of social support:

Older Americans in poverty and living alone. Macroeconomic performance is a logical place to assign the measurement of poverty, for people of all ages. However, living arrangements interact with financial resources to create specific cases of need, particularly for households that include no working people. Absent cross-household measures of care, older people who live alone and in poverty are a likely measure of elderly with insufficient social support.

Reliance on Social Security. Social Security is the nation's financial floor for older Americans, but it was not designed to be more than a floor. Income from savings and investment were intended to provide the bulk of retired Americans' income, as indeed they do for most. Consequently, a measure such as "proportion of older Americans for whom Social Security provides at least __ (50?, 66?, 75?) percent of income" would signal how well Americans are providing for their old age.

In 1998, Social Security accounted for more than 80 percent of the incomes of those Americans aged 65 and older who were in the two lowest fifths of the income distribution, compared to less than 20 percent of those in the highest fifth. It accounted for 45 percent for those in the second-highest fifth and 64 percent for those in the middle fifth.

Labor force participation of older Americans. Americans' active life expectancy has grown considerably over the past century, and now extends well beyond 65 for most, especially those with more education. Consequently, many older Americans expect to work, either because they enjoy it or because they need the money. Monitoring the extent to which older Americans who want to work are unemployed could provide a broad measure of their options for self-support through work.

Housing costs and benefits. For most older Americans, the house they own is not just shelter, but also the primary component of their net worth. The extent to which they need to convert their homes to income can indicate significant problems for their communities as well as themselves and their families. Communities inevitably change over time, and those that have significantly increased real property taxes have experienced a loss of older citizens with relatively low call on such expensive community services as schools. Normally, the burden of housing as a proportion of household expenditures decreases with age.

Disability. Inability to perform core physical functions can diminish older Americans' ability to care for themselves as well as their spouses or others. Common measures include such activities as the ability to climb stairs, walk a quarter mile, reach up over one's head, and stoop, crouch, or kneel. Between 1984 and 1985, older women and men both reported improvements in each of these categories. Similar measures could identify the broad disabled population in need of care.

"Who's minding the children?" The ongoing reform of welfare policy has raised the question of childcare, as so many welfare recipients are single mothers. Additionally, many children with two parents have no stay-at-home parent. In 2001, 61 percent of children age 6 and younger received care on a regular basis from someone other than their parents. In 1997, nearly half of pre-schoolers (children under age 5) with working mothers were primarily cared for by a relative while their mother worked; the others were divided between child-care centers and non-relatives in a home-based environment.

Diet quality of children. A series of national reports has focused attention on the quality of children's diets, and the effects on their health, particularly childhood obesity. Both family and schools are responsible for developing healthy eating habits for children, as poor habits tend to linger into adulthood and contribute to many diseases. The U.S. Department of Agriculture has developed a Healthy Eating Index (HEI) as a summary measure of diet quality. Its ten components each represent a different aspect of a healthy diet. In 1998, most American children had a diet that scored as either "poor" or "needed improvement," according to the HEI.

Youth neither enrolled in school or working. The transition from school to work is a challenge for all young Americans, as well as for society in general. Young people who are not engaged in either work or education are putting themselves at risk of an unsuccessful transition to adulthood, especially if the situation persists for several years. Research indicates that such youth risk having lower earnings and a less stable employment history.

Teen-aged childbearing. Researchers have found that very young mothers create vulnerable conditions for their children as well as themselves, and the U.S. has engaged in intensive efforts to reduce teen-aged childbearing, with pronounced success. In 2000, the birth rate for adolescents reached a historic low of 27 births per 1,000 girls aged 15 to 17. Given higher health risks for both mother and child, as well as the negative impact on education and family stability, adolescent births remain a significant indicator of need for social support.

Family involvement. Sociologists have determined that parents who read to their young children have a significant effect on how well the child will do at school. In 2001, 58 percent of children ages 3 to 5 were read to daily by a family member. This percentage fluctuated between 53 and 58 starting in 1993. How well the parents are educated also has an impact on children's educational outcomes. In 2001, 11 percent of native-born children had a parent with less than a high school diploma, compared with 42 percent of foreign-born children with at least one foreign-born parent.

The current status of research and data in the U.S. suggests the following ten indicators for the social support portfolio of Series 0.5:

- **Older Americans living alone and in poverty**
- **Proportion of older Americans for whom Social Security is more than a "floor"**
- **Older Americans who are involuntarily unemployed**
- **Housing costs as a percentage of income for older Americans**
- **Percentage of older Americans unable to perform certain physical functions**
- **Proportion of children receiving child-care, by source**
- **Proportion of children whose diet is "poor"**
- **Proportion of youth ages 16 to 19 who are neither enrolled in school or working**
- **Adolescent birth rate**
- **Family reading to young children**

Ecology

People around the world have become more concerned about their physical environment, particularly as the earth's population more than doubled in the last four decades of the 20th century. As the 1969 U.S. report noted, "Since the economy does not destroy the matter it absorbs there will be a tendency for the pollution problem to increase with the growth of population and economic activity." Indeed it has. Certainly, a clean and healthy environment is essential for a country's economic and social well being. Much of the natural environment is renewable and highly resilient, but if it becomes overloaded, the economic, health, and social impacts can be devastating.

Canada's 2001 indicators report expresses environmental concerns in a way very similar to what a U.S. indicators report might do: "Our environment is part of our identity, part of our values. The results of inaction and failure to strategically manage issues are clear: costs to our health and the health care system will

increase; the sustainability of the economy and our way of life will continue to be compromised; safety and security risks will rise; opportunities to promote innovative solutions to environmental issues will be lost; costs of clean-up and recovery will increase for future generations; and more and more unique spaces and species - our natural heritage - will be lost.”

A series of global meetings have called for developing new ways to measure the health of the environment, with particular attention to maintaining the ability of future generations to meet their needs. These measures vary from country to country, reflecting the great variety of environmental resources and threats. And most of these measures are in the process of development, so the information base is “immature” in indicator terms. Nevertheless, researchers and regulators have made enough progress in defining desirable characteristics of the natural environment to allow a reasonable introductory portfolio of indicators. For instance, a National Research Council study in 2000 suggested a set of key indicators to measure the nation’s ecological condition.

- Air quality: Most indicator projects call for monitoring emissions of nitrogen oxide, sulfur oxide, and carbon dioxide. Pollutants that come from the combustion of fossil fuels in vehicles, homes, power plants, and other industries affect air quality in the U.S. They also contribute to worsening air quality in other countries, particularly our Canadian neighbors. The Clean Air Act, supplemented by efforts within communities to deal with smog or other manifestations of unhealthy air, has resulted in improved air quality. However, simple population growth has often worked in the opposite direction.
- Water quality/availability. Americans rely on high-quality fresh water for consumption, recreation, livestock watering, and crop irrigation as well as industrial processes. Yet population growth in parts of the country, notably the Southwest, means there is not enough water to maintain current levels of human use. Already water deficits have had severe impacts on various forms of wildlife and plants, changing some landscapes permanently.

In addition to the supply of water, human activity affects the quality of water resources through such threats as sewage, storm water runoff, industrial effluent, waste from intensive livestock operations, agricultural runoff, and the deposit of atmospheric pollution. Climate change also influences water quality. Higher temperatures and more evaporation in summer, for example, will reduce surface water volume while promoting growth of microorganisms. Municipal wastewater effluents remain one of the biggest sources of pollution, by volume. An input measure of progress might be municipal waste generation/containment.

- Biodiversity. Wildlife populations and their habitats have been disappearing rapidly as a result of deforestation, the spread of non-native species, the loss and deterioration of wetlands, hunting and harvesting, and air and water pollution. Many Americans mourn the loss of familiar species and a natural diversity that has been a fundamental characteristic of national identity. Beyond these spiritual and aesthetic values, the loss of species or change in species composition can threaten the health of the ecosystem and pose risks to our economic and socio-cultural sustainability.

One way to minimize the effects of human activity on biodiversity is to create large reserves of protected areas. The U.S. has done this to great effect throughout the 20th century, saving not only areas of great natural beauty but also preserving essential wetlands, old growth forests, and fisheries.

- Greenhouse gases. The international scientific community has come to a consensus that human activities are contributing to global climate change. The U.S. accounts for the largest single share of greenhouse gases (an estimated 25 percent) – a result of a large population that is very wealthy relative to other countries. One measure of U.S. progress toward minimizing its contribution to greenhouse gases might be emissions of greenhouse gases per capita. Another one might be net greenhouse gas emissions per \$GDP.
- Toxic contaminants. Toxic substances come from many industrial and household sources. Thousands of substances are in use in industrial processes and consumer goods, and new substances are developed every year. Although these substances may improve our standard of living, many of them could threaten our health and our environment – and we don't always know which is which.

We do know that certain substances, such as mercury and PCBs, build up in organisms over time, become increasingly concentrated, and have a stronger toxic effect as they move through the food chain. So controlling these substances is an important measure of progress.

- Illnesses traceable to poor environmental quality might be another indicator, providing the data are available.

Combining the broad national approach of societies that are similar to the U.S., and with which we would wish to compare ourselves, with the more directed domain approach suggests the following ten indicators for the ecology information areas of USA Series 0.5:

- **Level of nitrogen oxide as a percentage of acceptable levels**
- **Level of sulfur oxide as a percentage of acceptable levels**
- **Level of carbon dioxide as a percentage of acceptable levels**
- **Per capita water consumption**
- **Some measure of water quality, e.g. percent of population with access to safe drinking water.**
- **Change in status of species at risk of loss.**
- **Protected areas as a proportion of vulnerable areas.**
- **Emissions of greenhouse gases per capita.**
- **Net greenhouse gas emissions per \$GDP.**
- **Reduction of emissions of toxic substances**

Community

Strong cohesive communities are a fundamental national building block. When community members are mutually supportive, everybody gains; when they resolve their differences effectively, the quality of life improves for all – without the intervention or assistance of more distant entities. Community values can vary noticeably, as people tend to seek out communities where they are comfortable. Consequently, it is important to choose indicators that represent shared national values.

The following list is something of a ‘grab-bag’, as there does not seem to be a widely accepted empirically based construct for assessing community health. Although, the National Research Council has released a study of community indicators that makes important progress toward common understanding in this very difficult area.

- Volunteerism: Volunteer work is perhaps the most commonly used indicator of cohesive communities. Volunteering makes a large and often underestimated contribution to the national economy, as citizens who perform a service without pay help create a mutually supportive society. Moreover, researchers have found a positive correlation between volunteering and other forms of community involvement and investment such as philanthropy, group membership, and voting. Volunteering among young people is particularly important, as researchers have found that early involvement in the community is likely to set a pattern for later life. Charitable contributions are another common voluntary measure.
- Participation in a social or cultural activity. Other countries commonly track attendance at live performances or participation in cultural activities, but this

is a rather narrow definition for the United States, given the value that sport and popular culture play. The important element may well be social participation, not social “elevation.” As the 2001 Canadian report puts it, “Such participation broadens people’s experiences by exposing them to their social, cultural and historical surroundings, introducing new and different ideas and encouraging greater understanding across social and cultural groups.” In the United States, attending or participating in sports, performing arts, and heritage events or sites serve these broad purposes.

- Political participation. Voting rates are an obvious indicator, particularly voting in community elections. Other measures commonly used by survey organizations to identify “influentials” include writing a letter to the editor, serving on a community committee, or standing for community office.
- Cross-community relations. Americans often laud the country’s melting pot history, but at the same time, hate crimes and similar behavior indicate that there are social tensions between groups of different origin and values. It is may be easier to measure this indicator negatively, through documented hate crimes, than positively.
- Time use. The Canadians measure the allocation of free time in hours based on the average number of hours per day spent by the population aged 15 years and over. This measure therefore looks at various activities in the context of how people allocate their free time. This kind of information helps governments plan spending, for instance by making sure that their citizens have access to libraries, the Internet, or television reception, as well as indicating how active citizens are in their societies.
- Homelessness. Homeless people are a visible reminder that many people have not found a constructive/productive role in the community. As yet there is no universally agreed-upon measure, although a consortium of federal agencies funded a major survey in the 1990s that provided valuable learning.
- Other common community-relevant indicators might be problematic in American society. For instance, Australia has an indicator of persons living alone, as well as of waking-time spent alone, while the United States is relatively tolerant of “loners.” Australia also views marriage and divorce rates as appropriate indicators, but the Canadian view – that unhappy marriages are not necessarily a sign of successful social relationships – would undoubtedly be shared by many Americans.

Combining the broad national approach of societies that are similar to the U.S., and with which we would wish to compare ourselves, with the more directed domain approach suggests the following ten indicators for the community information area of USA Series 0.5:

- **Rate of volunteering, through non-profit or charitable organizations**
- **Youth rates of volunteering**
- **Charitable contributions as a percent of incomes**
- **Attendance at events and institutions that address the national heritage (such as monuments, historical sites, and national parks)**
- **Attendance at performing arts, by categories.**
- **Participation in organized sports.**
- **Voting rates.**
- **Reported hate crimes**
- **Allocation of free time**
- **Homelessness**

Governance

Questions about governance arise from time to time, and government's response to the horrific events of September 11, 2002 has made the present one of those times. Now new questions are being asked about the proper balance between protecting the nation and observing Americans' civil rights, as well as the perennial questions of government responsibilities, priorities, and effectiveness. At the same time, decades-long efforts to assure that all Americans enjoy equal rights before the government continue. As a result of both new and on-going concerns, there are many efforts to measure progress in governance.

Inclusiveness. Perhaps the most common measure of governance internationally, and it is very common domestically, is tracking inclusiveness at high levels of government. Typically, these measures address the proportion of traditionally excluded populations in elected offices; others also address the proportion in high appointed offices.

Civil rights activities are a related measure, such as the number of discrimination cases investigated by the Equal Employment Opportunities Commission.

Civil liberties. Freedom of speech is a right that is often threatened in war-like times. So is tolerance for diversity. The Canadian report has a specific indicator on attitudes toward diversity, and the 1969 U.S. effort called for survey data to "discern any major changes in the degree of tolerance and in the willingness to

state unpopular points of view, as well as information about the legal enforcement of constitutional guarantees.”

Voting measures citizen choices regarding community participation (as above), but also the effectiveness of an important governance responsibility, as the 2000 presidential election demonstrated. The microscopes trained on the election in Florida found that some citizens who exercised their franchise were turned away, confused as to the ballot, or had their ballots rejected.

Tax effectiveness. Americans tend to be both opposed to paying taxes and to foregoing public services, at least not the ones that matter to them as individuals. Consequently, a measure of how effectively their taxes are in providing services might get at the heart of their concerns about governance.

Beyond civil rights, Americans are concerned about fair access to public goods and services, as witnessed by legislated requirements for transparency in various government processes and programs, such as procurements and funds allocations. Similarly, Americans are perennially concerned that the law treat everyone equally.

Public assistance. There is little consensus about government’s responsibility to provide public assistance in case of need, but a strong consensus that there should be some form of a “safety net.” There is, for instance, consensus around providing public help to citizens who are victims of a disaster, though not for those who could have avoided a situation of need.

Finally, public leaders give great weight to a perceptual measure that may lack scientific validity: responses to the poll question, “Is the nation on the right (wrong) track?”

Combining the broad national approach of societies that are similar to the U.S., and with which we would wish to compare ourselves, with the more directed domain approach suggests the following ten indicators for the governance information area of USA Series 0.5:

- **Proportion of high elected offices (Congress, mayors, governors, etc.) held by women, minorities, etc.**
- **Proportion of high appointed offices held by women, minorities, etc.**
- **Information about the “legal enforcement of constitutional guarantees of civil liberties”**
- **Civil rights: enforcement data? Prevalence of complaints?**
- **Successful management of the voting franchise – e.g. proportion of ballots that are disqualified**

- **Some measure of tax expenditures that reflect how effective the government is in taking care of the citizenry**
- **Some measure about how well government agencies are providing fair access to public services and utilities**
- **Some measure of how the law treats/does not treat Americans equally**
- **Some measure of the existence of an effective safety net**
- **Proportion of residents who believe that the Nation is "on the right track"**

CONCLUSION

Given the state of the practice in large-scale performance measurement, the current evolution of global societies, as well as the complexity and scale of the United States of America, there appear to be at least three inescapable conclusions.

The first is that, if not now, at some point in time in the future the United States will develop a holistic approach to measuring national performance. This will come about as a result of one or all of these three factors: a) as a natural result of our current societal evolution, b) because of our need to make major national choices that require an integrated view or c) because of our desire to remain a leading democracy.

The second is that if the U.S. is ever to develop such a system of key national indicators, it will require a place and a process for conducting a sustainable dialogue on what to measure and how best to inform key national and global audience with that information. The place and process must a) incorporate the latest developments in information technology and scientific understanding and b) be appropriately designed to capitalize on the strengths of our highly diversified socio-economic structure and also to compensate for its weaknesses.

The third is that the genesis of a national effort must organize a critical mass of leading individuals and institutions to, at a minimum, address the following issues:

- Research: What key questions need to be answered, in the short and long-term, to adequately confront such a challenge?
- People and institutions: Who should be involved and how should decisions be made?
- Resources: How might we form capital to invest in this effort and enlarge the pie as opposed to creating a zero-sum game with a new effort that competes with existing research and statistical programs?
- Solutions: What alternative organizational and technological solutions might be considered for collecting, managing, and distributing information on key national indicators and what are their relative costs, benefits, risks, and possibilities?
- Starting points: What are the criteria we might consider for places to build on existing successful efforts (e.g. children), or take on new and urgent challenges (e.g. homeland security)?

I. Scale

Multinational

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(*reference provides other useful links or sources)

Bookmarks

A. Multinational

[European System of Social Indicators](#)

[Global Reporting Initiative - Sustainability Reporting Guidelines](#)

[Measurement and Indicators for Sustainable Development - IISDnet](#)

[OECD International Development Statistics](#)

[OECD Worldwide Statistical Sources](#)

[UN High Commissioner for Refugees - The State of The World's Refugees](#)

[UN Human Development Report 2002](#)

[UN Millennium Development Goals](#)

[UN Population Fund - State of World Population 2002](#)

[UN Statistics Division - Social Indicators](#)

[UN Statistics Division](#)

[World Bank's Millenium Development Goals](#)

[Worldwatch Institute State of the World 2002](#)

B. National

[Australian Bureau of Statistics - Measuring Australia's Progress](#)

[Canadian Social Indicators Site](#)

[Conference Board of Canada](#)

[FedStats Home Page](#)

[Flynn Research - Sustainability and Quality of Life Indicators](#)

[Heinz Center - The State of the Nation's Ecosystems](#)

[Interagency Working Group on Sustainable Development Indicators](#)

[Redefining Progress - Social and Economic Sustainability](#)

[Societal Indicators of Canada](#)

[STAT-USA - State of the Nation](#)

[State of the Black World Conference](#)

[UK Government Sustainable Development Indicators](#)

[UK National Audit Office](#)

[University of Toronto Performance Indicators for Governance](#)

[University of Washington Human Services Policy Center](#)

[White House - Latest Federal Government Statistics](#)

C. Regional or Multi-state

[List of Performance Indicators for the Buffalo-Niagara Region](#)

[Northeast Midwest Institute Home Page](#)
[Northwest Area Foundation Indicator Website](#)
[Regional Research Institute, West Virginia University](#)
[Worcester \(MA\) Regional Research Bureau](#)

D. State

[Idaho Reweaving Community Project](#)
[Living with the Future in Mind - New Jersey's 1999 Sustainable State Report](#)
[Maine Marks for Children, Families and Communities](#)
[Minnesota Planning Home Page](#)
[Oregon Shines - Oregon Progress Board](#)
[Public Policy Institute of California](#)
[The Quality Indicator Project - Maryland Assn. of Hospitals and Health Systems](#)
[Vermont Agency of Human Services](#)
[Virginia Performance Management](#)

E. Local

[Baltimore Neighborhood Indicators Alliance](#)
[Abbott Strategies- - Sustainability and City Government](#)
[Burlington Vermont Legacy Indicators Project](#)
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[The Nation's Report Card - Educational Progress](#)
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[Federal Interagency Forum on Aging-Related Statistics](#)
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