

**COMMUNITY INDICATOR PROJECT**  
**Final Report to the Roundtable on Sustainable Forests**

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## PROJECT OVERVIEW

Throughout the summer of 2005, the Roundtable on Sustainable Forests hosted a series of workshops dedicated to the review and refinement of the Montreal Process Criteria and Indicators (C&I). This review marked the 10-year anniversary of the Santiago Declaration and the associated agreement to refine the criteria and indicators based on lessons gleaned from a decade of experience and research. As part of the review process, groups of social scientists gathered to discuss the social component of sustainability and the associated C&I of the Montreal Process. Two refinements to the Montreal Process C&I were offered, i.e., to create an index of *Community Livability* and to create an index of *Community Resilience*. These indices would be included in the sub-criteria, *Community Well-Being*. Community Well-Being refers to the general health of a community. Community Well-Being includes Community Livability, i.e., the community's ability to meet people's basic needs, and Community Resilience, i.e., the community's ability to adapt to change. These terms are discussed in more depth in the Analysis and Discussion section of this report.

Roundtable participants were unfamiliar with the concepts, but agreed that the current social C&I are not sufficient. The group recommended that a concerted study of social sustainability be initiated. In November, 2005 the Roundtable hosted a phone conference with experts in social sustainability and community indicators (See Appendix A: Experts and Interested Parties on Social Sustainability). Posed with the question of how best to initiate the study of social sustainability, the panel agreed that it would be wise to start by learning how communities approach the issue. Accordingly, the group advised that a project be undertaken to survey community indicator projects and to compare their efforts to those of the Montreal Process. These findings could then be applied to forest-based communities and the Montreal Process criteria and indicators.

Hence, the purpose of the Community Indicator project was twofold; first, to learn the kinds of social issues communities consider of import to track via a community indicator process, and second to compare the Montreal Process C&I to these efforts, specifically with regard to the two recommended indices, i.e., Community Livability and Community Resilience.

This report first presents the data and provides general observations about the survey findings. It then provides an analysis of the data specifically in relation to Community Livability and Community Resilience. It concludes with a presentation of lessons gleaned from the project and recommendations for next steps in the Roundtable discussion of social sustainability.

## RESULTS

### GENERAL OBSERVATIONS

To identify and gather data from community indicator projects, an extensive web search was conducted, and 150+ queries of communities, including 10 tribes, were made around the U.S. and Canada. From this search, data were gathered and compiled for 24 cities, 14 counties, 3 states, 4 regions<sup>1</sup> and 1 country (See Appendix B: *Communities*). This includes data from 8 international sites. The communities represent different regions in the country as well as urban and rural populations, and are proximate to both public and private forests. Of the ten tribes contacted, none utilized community indicator projects.

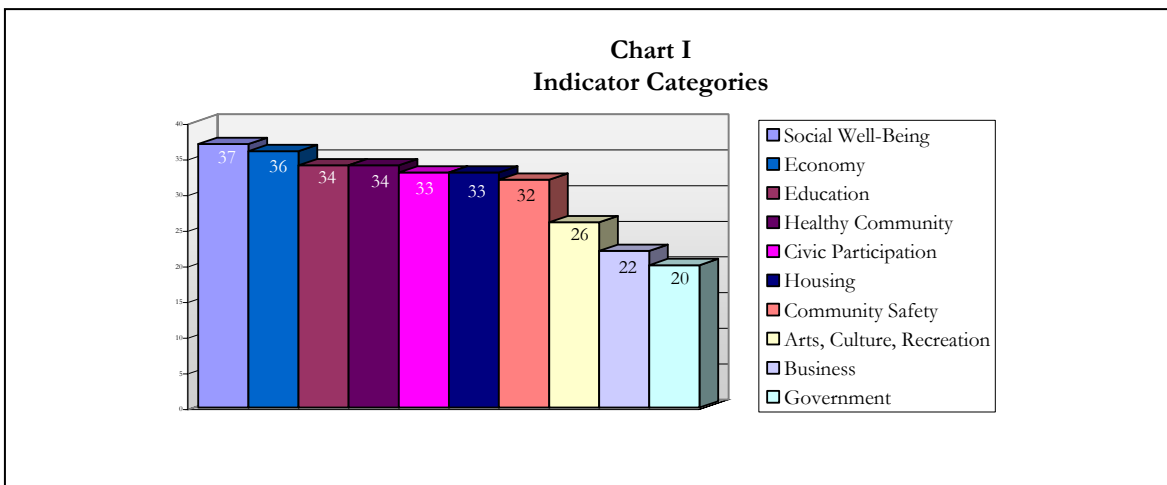
Several challenges were posed to this project. First, tribes track social issues in ways not amenable to this project, so their wisdom and contributions could not be captured herein. Second,

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<sup>1</sup> Note: region herein refers to areas larger than single counties within states

most indicator lists had to be distilled from various reports and documents. Third, the search and compilation process proved quite time consuming and limited the number of communities that could be represented in the short time allocated to this project. Finally, community indicators are typically associated with the community's strategic plan and goals. Hence, individual indicators are packaged differently to generate goal-specific information. Gathering data on community strategic plans and goals was beyond the charter of this project. Hence, indicators are presented in list form and are arranged according to the most frequent categories utilized by communities.

A set of charts display the indicators selected across all community indicator projects, including counties and states (See Appendix C: *Community Indicators*). The charts show the frequency with which various indicators are selected. The indicators are displayed in descending order starting with the most frequently selected indicator. The first chart displays indicators by category (See Appendix C Chart I: *Indicator Categories*). These categories reflect common categorization seen throughout the community indicator projects. Indicator categories include Social Well-Being, Economy, Education, Healthy Community, Civic Participation, Housing, Community Safety, Arts Culture and Recreation, Business and Government.



Each category contains a number of associated indicators. Charts II – XI detail the indicators associated with each category (See Appendix C).

1. Communities combined individual indicators in various ways to provide answers to community-specific questions. These questions are typically tied to the communities' strategic vision and goals. This project wasn't designed to complete that level of analysis. Hence, the indicators are presented in list form without reference to their ultimate use.
2. More sophisticated projects are integrating indicators from various 'domains' to create indices. This is apropos as both the recommendations for refinements in the social indicators, i.e., Livability and Resilience, are indices.
3. Economic data is included in this analysis as communities consider economic matters in relation to social sustainability and as vital to community well-being.
4. Most communities collect basic demographic data. It is not represented herein as its use is assumed.
5. As this survey was to focus on social sustainability indicators, information on transportation and environment was collapsed into single 'catch all' indicators. As a result, the data are

misleading, so are not included in the graphs. When the environment was considered, it was typically in regard to the environment's impact on community health, e.g., pollution, or open spaces, e.g., parks.

6. Rural cities often combine to generate indicator projects at the county level. Some go into detail about the individual cities, while others focus primarily at the county level.
7. Cities have developed the most comprehensive and sophisticated indicator lists.
8. Several states seem to have a statewide effort regarding social indicators, with community level indicators tied to state level indicators, e.g., Oregon, Minnesota, Florida, Connecticut. There are important lessons regarding scale here. Though the project didn't stipulate collection of data from state sources, data from a few states has been collected to illustrate this trend. Future endeavors might include more follow-up on this question.

### **OBSERVATIONS ACROSS CITIES, COUNTIES AND STATES**

The issue of scalability is of concern when considering a national level index. A significant question is whether indicators that reflect community conditions are also amenable for aggregation. Haynes (2003) addressed the scalability issue by collecting data for I46 on the county level and presenting that data for all counties in the nation. Kusel (1996), however, asserts that data collected at the county level obfuscates conditions unique to communities within the county. And while he recognizes communities as the logical unit of analysis, Kusel acknowledges the difficulties posed by community boundary definition and restricted data availability at the community level. Wright, Alward, Hoekstra, Tegler & Turner (2002) further elucidate the challenge of scale. They maintain that indicators developed for the national level don't address local level systems and questions. Moreover, while broad indicators, e.g., employment, can be applied at multiple levels, they have to be customized to each scale level in order to provide valuable information.

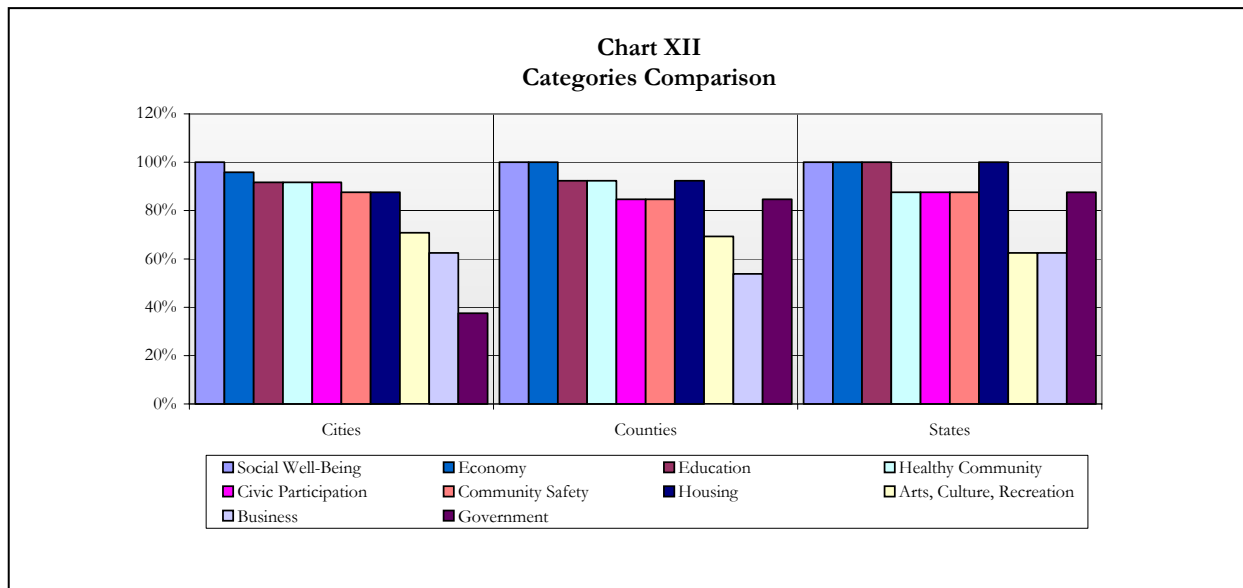
The question of scalability was not part of the charter for this project. However, as it is of import in the discussion of social indicators for the Montreal Process, data was collected on several states and one country to allow for some preliminary analysis. The second set of charts (See Appendix D: *Community Indicator Comparisons*) display data disaggregated into cities, counties and states. Data was standardized to allow for comparisons across scales.

The state category includes 3 states, 4 regions<sup>2</sup> and 1 country. Chart XII: *Categories Comparison* displays the information by categories, while Charts XIII – XXI present indicators related to each category. Indicators are presented in descending order for cities to facilitate comparison across various levels of scale.

1. There is clearly a similar trend in the kinds of information collected at various scales (See Chart XII *Categories Comparison*).
2. Cities, counties and states collect data on the same categories. With the exception of housing, arts and government, they prioritize categories similarly. Counties and states put more emphasis on housing and government data than did cities. States put less emphasis on art information than did cities and counties.
3. Within most categories, the general trend of prioritizing indicators is similar across cities, counties and states (See Appendix D: *Community Indicator Comparisons*, Charts XIII – XXI). Categories that illustrate more disparity include Art and Government.

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<sup>2</sup> Note: region herein refers to areas larger than single counties within states



- Though the state sample is small, findings from this survey suggest that efforts are underway to address the scalability issue. The sample suggests evidence of complementarity in indicator sets used across scales, as well as indicators that seem more apropos at different levels. More study is needed to develop a deeper understanding of how the community is addressing the scalability question.

## ANALYSIS AND DISCUSSION

The second objective for this project was to complete a comparative analysis for the Community Livability and Community Resilience indices, specifically to compare the Montreal Process C&I to concurrent endeavors. The worksheets, *Community Livability Analysis* (See Appendix E) and *Community Resilience Analysis* (See Appendix F), display the results of the analysis.

To perform the analysis, lists of indicators from several sources are presented together on the worksheet. A complete listing of community categories and indicators is provided in the left column. The current Montreal Process C&I are listed next. In addition to indicators, suggested measures from the Montreal Process are also included. Ideas brainstormed by the social scientists involved in the Roundtable workshops are then presented. Finally, models of the indices are presented to illustrate the kinds of indicators that might be included in an index and to facilitate comparison with the Montreal Process C&I.

The comparative models presented for Community Livability were developed by the Mt. Hood LUCID team and the Sierra Nevada Ecosystem team. The Mt. Hood LUCID project recently completed research on forest social sustainability indicators as part of the national Local Unit Criteria and Indicator Development project sponsored by the US Forest Service. Community Livability was one of its primary social categories. The Sierra Nevada Ecosystem team completed research on well-being in forest-dependent communities for Congress. A socio-economic scale corresponding to the Mt. Hood Community Livability category was one of its two constituents of community well-being.

The comparative models presented for Community Resilience were developed by the Sierra Nevada Ecosystem, the Mt. Hood LUCID team, the Centre for Community Enterprise and the Australian government. The Sierra Nevada Ecosystem project team researched community capacity,

a model analogous with Community Resilience. The Mt. Hood LUCID team and the Centre for Community Enterprise researched Community Resilience. Finally, the Australian government researched social capital, a key component of Community Resilience. The findings are discussed herein.

### **COMMUNITY WELL-BEING SUB-CRITERIA**

The well-being of forest-based communities and the livelihood of community members are very important social values and important aspects of public decision-making and policy regarding forests. These values are reflected in the Healthy Forest Restoration Act, specifically with regard to community collaboration and monitoring the impact of forest management on forest-based communities. It, further, is echoed throughout the literature on forests, sustainability and forest-based communities (Doak, & Kusel, 1996; Haynes, 2003; Richardson, 1996). Community Well-Being includes Community Livability, i.e., the community's ability to meet people's basic needs, and Community Resilience, i.e., the community's ability to adapt to change.

Community Well-Being is based on several premises. First, change is inherent both within and between forests and communities. Change emerges from multiple sources, including society, culture, economics, politics, technology and environment. Hence, both forests and communities must develop the capacity to positively integrate and adapt to change, i.e., they must become resilient.

Second, though forests and communities are each complete systems (Force, & Machlis, 1997), they are highly interrelated. That relationship is mutual in that community well-being affects forests equally as forest well-being affects communities. For example, communities with well-educated people and high levels of income have greater capacity to actively and constructively engage in collaborative endeavors with the forest. They further, have increased capacity for contributing to the forest via volunteering, political advocacy and general forest stewardship. On the other hand, communities plagued with crime and/or substance abuse will negatively affect forests through, for example, increased toxic dumping, harvesting of illegal contraband and increased crime on forest lands.

The relationship between forests and communities will change over time, and in response to both forest and community changes, thus affecting the community's well-being and the forest's sustainability (American Forests, 2004). For example, as a community's economic base becomes more diversified and its employers offer living wages, the community develops greater capacity and more resources to act as a steward of forest resources. Also, if the forest's capacity to provide ecological services, e.g., clean water, is compromised, it will have significant ramifications on downstream communities.

Finally, in order to understand that changing relationship and the associated roles between forest and community, both the forest and the community must first be understood holistically<sup>3</sup>. Criteria 1 - 5 provide an holistic view of the biophysical condition of forests. Criterion 6 needs to provide an holistic view of the social and economic condition of communities. Social scientists involved in the Roundtable meetings recommended that the C&I be refined to include the indices of Community Livability and Community Resilience, both under the sub-criteria of Community Well-Being.

These indices can provide vital information about the relationship between communities and forests. That information can be used by communities to actively increase their livability and

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<sup>3</sup> For a comprehensive listing of research related to Community Well-Being, see Richardson, Stability and Change in Forest-Based Communities: A Selected Bibliography.

resilience. It can be utilized by forests to evaluate impacts of prospective forest policy on forest-based communities. For example, if data reveals the community rates low on the livability and resilience scales, it will be more susceptible and less able to withstand significant negative impacts of forest policy and practice. Conversely, a community that rates high on the livability and resilience scales will have increased ability to withstand change induced by forest policy. Additionally, aided by baseline data on the community's livability and resilience, the forest can monitor community responses to forest policy execution and modify practice accordingly.

The Community Livability and Resilience indices are described herein, followed by an analysis of the indices as they relate to the Montreal Process C&I.

### **ANALYSIS OF COMMUNITY LIVABILITY**

Livable communities address basic needs such as education and health care, access to public goods and services, employment, transportation and housing (Mitchell, n.d.; Polese & Stren, 2000; Porter, Platt, Leinberger, Blakely & Maxman, 2000). These are requirements for a minimally acceptable level of well-being and they are basic human rights (Atkinson, Dubourg, Hamilton, Munasinghe, Pearce & Young, 1997; Streeten & Burki, 1978). Communities whose residents have higher levels of education, employment, availability of services, stable migration patterns and low crime rates are considered livable. These communities are less dependent on one source of livelihood, e.g., the forest, and have greater capacity to adapt and respond to change.

Information collected on Community Livability will provide an overview of the current socio-economic health of communities, as well as their current relationship with the forest. This information can be utilized by the forest sector and the communities to collaboratively determine their respective relationship and roles in sustaining forest and community well-being. Critical information on the impact of forest management on the communities will also be collected with this index, hence meeting the legislative requirement imposed by the Healthy Forest Restoration Act.

The *Community Livability Analysis* (See Appendix E) lists the categories and indicators utilized in community indicator projects. It also lists the indicators from the current Montreal Process C&I, the Roundtable meetings on indicator refinements, the Mt. Hood LUCID project and the Sierra Nevada Ecosystem project.

The Mt. Hood LUCID model provides the most comprehensive view of community livability. It includes measures of demographics, education, health, safety, economy and business. The Sierra Nevada model includes measure of education, employment, poverty and housing. Indicators from the Roundtable meetings are the result of initial brainstorming and hence are not comprehensive or complete. The Montreal Process C&I present a very incomplete view of community livability. First, they do not cover the major categories of livability. Well-being is a multifaceted phenomenon, affected not only by employment but by, for example, crime, education and housing. Second, Montreal Process indicators are written narrowly thus limiting information collected to a margin of the population.

For example, I44 measures employment only in the forest sector. The forest service is missing vital information, especially as much employment occurs outside the forest sector. For example, in a sample of forest-based communities in Oregon,  $\leq 8\%$  of the total population has knowledge and abilities related to agriculture, forestry, fishing, hunting and mining. Likewise, farming, fishing and forestry account for less than 5% of available jobs (Shinn & Magis, 2002). Assertions about community well-being based on a single indicator will be empirically unsound and invalid. Additionally, I44 understates the nature of community dependency on forests. Communities are

highly dependent of the forest, not just for employment, but also for aesthetic and subsistence purposes as well as for ecological services. For example, while Baltimore, New York City and Portland, Oregon are not traditionally labeled as forest dependent communities, they rely on the forest for services that produce clean water and air. The status of these ecological services has profound implications on the health and livability of these communities.

Of note, however, are the Montreal Process suggested measures. They are presented as possible measures to gather information on the indicators. The suggested measures are included in the analysis to highlight their close relation to the work in communities. They, further, reveal the movement within the Montreal Process toward more comprehensive measures of community well-being. Finally, they add value to the idea of community livability through their focus on indigenous peoples.

### **ANALYSIS OF COMMUNITY RESILIENCE**

‘A resilient community is one that takes intentional action to enhance the personal and collective capacity of its citizens and institutions to respond to, and influence the course of social and economic change’ (Centre for Community Enterprise, 2000). Communities are subject to constant change from internal sources, e.g., the changing structure and capacity of its populace, as well as external sources, e.g., market, technological and environmental pressures. A community’s resilience will determine its ability to successfully mobilize and respond to societal stress (Doak & Kusel, 1996; Harris, McLaughlin & Brown, 1998; Shinn, 1999). Hence, community resilience is integrally related to community, and social, sustainability (Beckley, 1995, 2000).

Community resilience is predicated on five constituents of community. First, social infrastructure such as associations, clubs and churches must be in place to provide community space in which to gather, learn and collaborate. Second, the community needs sufficient physical infrastructures, e.g., roads, utilities, schools, as well as the financial resources for community purposes. Third, the community needs collective knowledge, skills and abilities to anticipate and respond to change. Fourth, community members need be actively engaged in problem resolution and accomplishment of community objectives. Fifth, the community needs to reflect and honor the unique and diverse cultural traditions of its people. An index of Community Resilience, then, includes five associated types of community capital: social, physical/financial, human, political and cultural.

Information collected on the Community Resilience Index will provide an overview of the community’s capacity to respond to internal and external stress and change, maintain and improve their social well-being and advance forest conservation and sustainable management. Further, as resilience is dynamic and malleable, the information can be used by communities to strengthen their resilience (Centre for Community Enterprise, 2000; Haynes, 2003). Finally, the information will be vital to the forest service to discern how to best implement change in forest policy affecting communities, and to monitor the impact of those changes on the community, both of which are required under the Healthy Forest Restoration Act

The *Community Resilience Analysis* (See Appendix F) lists the categories and indicators utilized in community indicator projects. It also lists the indicators and suggested measures from the current Montreal Process C&I, the Washington DC Roundtable meeting on indicator refinements, the Sierra Nevada Ecosystem project, the Mt. Hood LUCID project, the Canadian Centre for Community Enterprises and the Australian Bureau of Statistics.

The work completed at the Roundtable refinement meeting represents an attempt to address each of the capitals, however as it was a brainstorming session, the list doesn’t necessarily list the

most appropriate indicators. The Sierra Nevada Ecosystem project focuses on various sources of community capital, i.e., social, cultural, physical, financial and human. The Mt. Hood LUCID project focuses on community capital as well, adding value through its contribution around civic engagement, i.e., political capital. The Centre and Australia provide comprehensive analyses and associated lists of community resilience and social capital respectively. The Centre model adds value through its detailed focus on political and social capital. The Australian model adds value through its detailed analysis of social capital.

The MP C&I best represent Community Resilience through I46, *Community Viability and Adaptability*. I46 was created to highlight community response to changing economic conditions (Haynes, 2003). It considers the community's economic dependence on the forest and its social well-being. Social well-being is described as including the community's socio-economic status as well as its capacity to respond to change. This definition corresponds with the definition of social well-being provided herein. Further, to the extent that viability refers to a community's socio-economic health and adaptability refers to its capacity to adapt to and create change, it aligns with the indices Community Livability and Community Resilience. The intent of I46, i.e., to measure a community's viability and adaptability, is in direct alignment with research and practice with regard to community well-being. Its design, however, can be improved.

First, the indicator is addressing two substantially different characteristics of community well-being, i.e., livability (viability) and resilience (adaptability). In the Sierra Nevada Ecosystem project, Doak and Kusel (1996) studied socioeconomic status and community capacity, which are virtually synonymous with Community Livability and Community Resilience. They found that while they are both constituents of social well-being, they measure different dimensions of it. Including two different indices in one indicator, I46, necessarily compromises the integrity of both as neither ends up being appropriately and sufficiently measured. It also confounds information that can be gleaned from the resultant data.

Second, the measures can be improved. Selected measures need to provide an accurate and wholistic picture of the aspect of community they presume to portray. In I46, a three-part composite measure of Community Viability and Adaptability is utilized. Economic resilience is measured via employment in major sectors. Civic infrastructure is measured via its proxy, population density. Finally, social and cultural diversity is measured by its proxy, lifestyle diversity. Lifestyle diversity is measured by percent minorities and availability of forestlands. The resultant package of measures includes employment, population density, percent minorities and availability of forestlands.

These measures, alone or combined, do not accurately portray the livability of a community or its resilience in the face of change. Livability is determined by numerous conditions including, but not limited to, employment. Resilience is not measured by employment, population density, percent minorities and availability of forestlands, but rather by community capital. I46 measures also do not comprise an wholistic measure of the community. The exemplar models convey a more multi-faceted and wholistic perspective of the community. For example, Community Livability is comprised of education, employment, healthy, crime, housing, etc. The efforts of the exemplar models demonstrate that there are both more direct and accurate measures and that these measures need be combined to present a multifaceted and wholistic picture of the community.

## RECOMMENDATIONS

1. Develop indices for *Community Livability* and *Community Resilience* under Criteria 6 Sub-Criteria *Community Well-Being*.

In the *Linking Communities to the MP C&I* Final Report (2004), the authors indicated that the social and economic C&I were of little help to communities in discerning appropriate indicators of Community Well-Being. They, additionally, were not useful in understanding the social and economic relationship between the communities and the forests. The project's Technical Committee concurred with the communities and recommended that more emphasis be placed on developing appropriate social and economic indicators. Likewise, the test sites for the Local Unit Criteria and Indicator project (Wright, Alward, Hoekstra, Tegler & Turner; 2002) found it necessary to transcend the Montreal Process C&I and to further develop measures of social sustainability. The community indicator project validates those findings, both through its survey of communities across North America and its review of several existing models of livability and resilience indices.

2. Develop the *Community Livability* and *Community Resilience* indices to include a set of indicators that reflect their multi-faceted and wholistic nature.

A single indicator cannot provide sufficient information to answer questions related to Community Well-Being. Community Well-Being is based on a number of highly interrelated factors. For example, a healthy economy is based on community safety and an educated populace. Likewise, civic participation is facilitated by a populace that is healthy and secure, as well as a government that is open and representative. The Community Indicator Project categories and the index models exemplify the multi-faceted and wholistic nature of these indices.

3. When creating the indices, utilize criteria to ensure the indices meet the stated objectives of the Roundtable and provide accurate and reliable data.

A few of those criteria include, 1) the indices should be designed to elucidate the interdependence between communities and the forest so to inform subsequent efforts of both the community and the forest; 2) the indices should maximize readily available information at various levels of scale to facilitate aggregation and disaggregation; 3) the indices should utilize indicators that provide accurate measurement.

4. Perform additional analysis of how communities combine indicators to answer various questions.

It is critical to design indicators and indices that translate data into usable information. Many communities create indicators in association with community strategic plans and goals. In this way, only the indicators that have potential to contribute to answering select questions are utilized. Examining the connection between indicator sets and community plans and goals was not a part of this project's charter. So, community indicators are presented as categorized lists. Additional analysis will provide important information regarding the kind of information revealed by different sets of indicators and the relationship between the individual indicators.

5. Carry out additional analysis of how the community is addressing the scalability question.

Findings from this survey suggest that efforts are underway to address the scalability issue. Several examples of local and higher level indicator projects were presented in this study. The number, however, was very small. Further, as this question was not part of the charter of this

project, critical questions regarding complementarity and coordination of indicator projects between local and state levels were not examined. Additional analysis will provide information that will aid the Roundtable in its endeavors to address the ‘scalability problem’.

6. Conduct additional examination of how tribes monitor social issues.

In this study, the ten tribes contacted did not monitor social issues via community indicator projects. Tribes, however, have extensive histories of passing traditional knowledge. It is the author’s opinion that the questions asked by this project were not sufficient to access the knowledge regarding social issues and sustainability that tribes have to offer. Further discussion with the tribes would reveal different approaches to the matter that have the potential to educate and inform the Roundtable efforts.

7. Complete further analysis of community indicator projects internationally.

The brief review of international work on social sustainability conducted by this project revealed a wealth of information addressing many of the issues considered in this report. However, time constraints on this project limited the amount of information that could be collected. Further study will illuminate the many lessons offered from that work.

8. Field-test the indices in several states, including both local- and state-level demonstration sites.

The project can be designed in a number of ways. For example, it can consist simply of a survey to discern whether communities collect this data, or can develop systems to collect it. Or it can be more extensive, similar to the Linking Communities project, and involve assisting communities to develop and utilize the indices.

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## APPENDICES

## APPENDIX A: EXPERTS AND INTERESTED PARTIES ON SOCIAL SUSTAINABILITY

These people represent those with interest and expertise in social sustainability and community indicators. Some of them were involved in the panel discussion that initiated this project, while others have joined after hearing about the project. All interested parties are invited and encouraged to join this group to advance social sustainability within the Montreal Process.

Craig Patterson	Community Based Forest Advocate
Connie Carpenter	USDA Forest Service
Graham Cox	Audubon
Carol Daly	Flathead Policy Center
Gery Gray	American Forests
Maureen Hart	Sustainable Measures
Rob Hendricks	USDA Forest Service
Linda Kruger	Pacific Northwest Research Station
Jonathan Kusel	Forest Community Research
Edwin Lewis	Yakima Reservation
Kristen Magis	Leadership Institute/Portland State University
Maureen McDonough	Michigan State University
Ruth McWilliams	USDA Forest Service
Doug Outen	Baltimore County
Craig Shinn	Portland State University
Diane Snyder	Wallowa Resources
Romero Villalvazo	USDA Forest Service

## APPENDIX B: COMMUNITIES

### CITIES

Jacksonville, FL	<a href="http://www.jcci.org./statistics/qualityoflife.aspx">http://www.jcci.org./statistics/qualityoflife.aspx</a>
Dallas, TX	<a href="http://dallasindicators.org/DallasIndicators/Pages/StartPage.aspx">http://dallasindicators.org/DallasIndicators/Pages/StartPage.aspx</a>
Baltimore, MD	<a href="http://www.bnia.org/indicators/index.html">http://www.bnia.org/indicators/index.html</a>
Santa Monica, CA	<a href="http://santa-monica.org/epd/scp/matrix.htm">http://santa-monica.org/epd/scp/matrix.htm</a>
Oklahoma City, OK	<a href="http://www.unitedwayokc.org/research_vs.htm">http://www.unitedwayokc.org/research_vs.htm</a>
Charlotte, NC	<a href="http://www.charmeck.org/NR/rdonlyres/el6igs2v6mfpwhhrzzxttjula4csy6imss&lt;br/&gt;echekf6dp5hxedapizd2a4eq7kjk4tgsvt7n754nu6jzpuscdmhnauxg/2004_9_7_Q&lt;br/&gt;OL_Appendix_B-E.pdf">http://www.charmeck.org/NR/rdonlyres/el6igs2v6mfpwhhrzzxttjula4csy6imss echekf6dp5hxedapizd2a4eq7kjk4tgsvt7n754nu6jzpuscdmhnauxg/2004_9_7_Q OL_Appendix_B-E.pdf</a>
Columbus, OH	<a href="http://communityresearchpartners.org/14651.cfm?action=detail&amp;id=38">http://communityresearchpartners.org/14651.cfm?action=detail&amp;id=38</a>
Boulder, CO	<a href="http://www.bococivicforum.org/indicators/index.html">http://www.bococivicforum.org/indicators/index.html</a>
Seattle, WA	<a href="http://www.sustainableseattle.org/">http://www.sustainableseattle.org/</a>
Montreal Lake, Sk, CA	<a href="http://www.ssrc.msstate.edu/Publications/Policy&amp;Rural/PDF%20Files/Parkins,&lt;br/&gt;%20John.pdf">http://www.ssrc.msstate.edu/Publications/Policy&amp;Rural/PDF%20Files/Parkins, %20John.pdf</a>
Cape Cod, MA	<a href="http://www.sustaincapecod.org/SIR03/toc.htm">http://www.sustaincapecod.org/SIR03/toc.htm</a>
Cincinnati, OH	<a href="http://www.sustainablecincinnati.org/pages/indicators.html">http://www.sustainablecincinnati.org/pages/indicators.html</a>
Norwalk, CT	<a href="http://www.communityplanning.org/hsc/images/community%20indicators%201-2005.pdf">http://www.communityplanning.org/hsc/images/community%20indicators%201-2005.pdf</a>
Chattanooga, TN	<a href="http://www.researchcouncil.net/data.asp">http://www.researchcouncil.net/data.asp</a>
Cleveland, OH	<a href="http://www.communitysolutions.com/store/index.asp?DEPARTMENT_ID=37">http://www.communitysolutions.com/store/index.asp?DEPARTMENT_ID=37</a>
Portland, OR	<a href="http://www.portlandonline.com/auditor/index.cfm?c=27358">http://www.portlandonline.com/auditor/index.cfm?c=27358</a>
Boston, MA	<a href="http://www.tbf.org/indicators2004/executivesummary/summary.asp?id=3023">http://www.tbf.org/indicators2004/executivesummary/summary.asp?id=3023</a>
Candle Lake, Sk, CA	<a href="http://www.ssrc.msstate.edu/Publications/Policy&amp;Rural/PDF%20Files/Parkins,&lt;br/&gt;%20John.pdf">http://www.ssrc.msstate.edu/Publications/Policy&amp;Rural/PDF%20Files/Parkins, %20John.pdf</a>
Albuquerque, NM	<a href="http://www.cabq.gov/progress/pdf/box-score.pdf">http://www.cabq.gov/progress/pdf/box-score.pdf</a>
Hamilton, Cty, ON, CA	<a href="http://www.vision2020.hamilton.ca/NewVision2020pdf/Indicators2004/text-&lt;br/&gt;only/Local-Economy-text.pdf">http://www.vision2020.hamilton.ca/NewVision2020pdf/Indicators2004/text- only/Local-Economy-text.pdf</a>
Edmonton, AL, CA	<a href="http://www.edmonton.ca/socialplan/documents/CommunityServicesOutcome&lt;br/&gt;Indicators.pdf">http://www.edmonton.ca/socialplan/documents/CommunityServicesOutcome Indicators.pdf</a>
Winnipeg, MB, CA	<a href="http://www.iisd.org/pdf/wpg.qoli.pdf">http://www.iisd.org/pdf/wpg.qoli.pdf</a>
Moncton, NB, CA	<a href="http://www.geog.utoronto.ca/CommunityReporting/PDFfiles/SOCsummaries&lt;br/&gt;/MonctonSOC.pdf">http://www.geog.utoronto.ca/CommunityReporting/PDFfiles/SOCsummaries /MonctonSOC.pdf</a>
Porirua City, NZ	<a href="http://www.bigcities.govt.nz/pdf2004/Quality_of_Life_2004_Porirua.pdf">http://www.bigcities.govt.nz/pdf2004/Quality_of_Life_2004_Porirua.pdf</a>

## COUNTIES

Gogenbic Cty., WI	<a href="http://www.communitiescommittee.org/fsitool/CaseStudyMI.pdf">http://www.communitiescommittee.org/fsitool/CaseStudyMI.pdf</a>
Equ Claire Cty, WI	<a href="http://www.uwex.edu/ces/ag/sus/html/eau_claire_county.html">http://www.uwex.edu/ces/ag/sus/html/eau_claire_county.html</a>
Washtenaw Cty., MI	<a href="http://www.ewashtenaw.org/government/departments/planning_environment/sustainable_washtenaw/sw_indicators_report.pdf">http://www.ewashtenaw.org/government/departments/planning_environment/sustainable_washtenaw/sw_indicators_report.pdf</a>
Truckee Meadows NV	<a href="http://www.quality-of-life.org/newsletters/05community_report.pdf">http://www.quality-of-life.org/newsletters/05community_report.pdf</a>
Missoula Cty, MT	<a href="http://www.co.missoula.mt.us/measures/">http://www.co.missoula.mt.us/measures/</a>
Broward County, FL	<a href="http://www.sfrpc.com/ccb/tbb00.htm">http://www.sfrpc.com/ccb/tbb00.htm</a>
SW Colorado	<a href="http://www.operationhealthycommunities.org/path.html">http://www.operationhealthycommunities.org/path.html</a>
Wood Cty, WI	<a href="http://woodcountyassetsurvey.com/survey2.html">http://woodcountyassetsurvey.com/survey2.html</a>
Yampa Valley, CO	<a href="http://www.yampavalleypartners.com/cip/index.html">http://www.yampavalleypartners.com/cip/index.html</a>
Wallowa Cty, OR	<a href="http://www.wallowaresources.org/aboutwc.htm">http://www.wallowaresources.org/aboutwc.htm</a>
Larimer Cty, CO	<a href="http://www.larimer.org/compass/">http://www.larimer.org/compass/</a>
Bay Area, CA	<a href="http://www.nccsf.org/report/report-overview.htm">http://www.nccsf.org/report/report-overview.htm</a>
Sarasota Cty, FL	<a href="http://www.scopexcel.org/communitytools/INTRO_CRC_04_05.pdf">http://www.scopexcel.org/communitytools/INTRO_CRC_04_05.pdf</a>

## STATES, REGIONS, COUNTRY<sup>4</sup>

Oregon	<a href="http://www.oregon.gov/DAS/OPB/2005report/obm_list.shtml">http://www.oregon.gov/DAS/OPB/2005report/obm_list.shtml</a>
Minnesota	<a href="http://server.admin.state.mn.us/mm/goal.html">http://server.admin.state.mn.us/mm/goal.html</a>
Colorado	<a href="http://www.hmccolorado.org/coloradocenter/web/Colo%20Index.pdf">http://www.hmccolorado.org/coloradocenter/web/Colo%20Index.pdf</a>
Buffalo Niagra Region	<a href="http://www.regional-institute.buffalo.edu/sotr/index.cfm">http://www.regional-institute.buffalo.edu/sotr/index.cfm</a>
Southeast LA	<a href="http://indicators.top10by2010.org/home.cfm">http://indicators.top10by2010.org/home.cfm</a>
Southwestern Pennsylvania	<a href="http://www.sustainablepittsburgh.org/">http://www.sustainablepittsburgh.org/</a>
Central Texas	<a href="http://www.centex-indicators.org/indicators/civic.html">http://www.centex-indicators.org/indicators/civic.html</a>
New Zealand	<a href="http://www.bigcities.govt.nz/indicators.htm">http://www.bigcities.govt.nz/indicators.htm</a>

## TRIBES

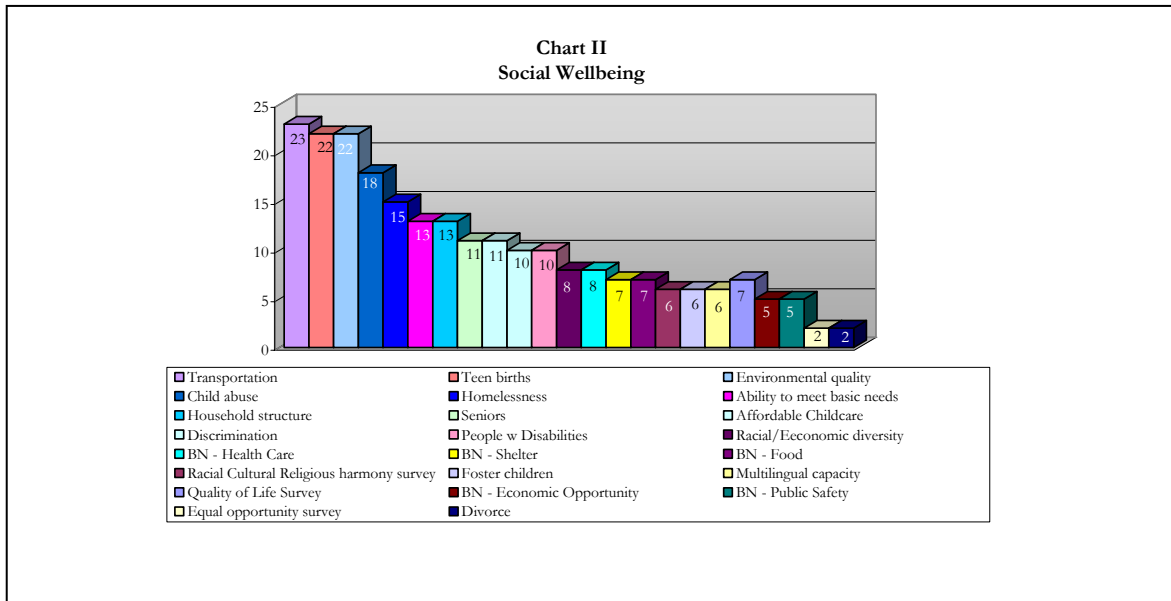
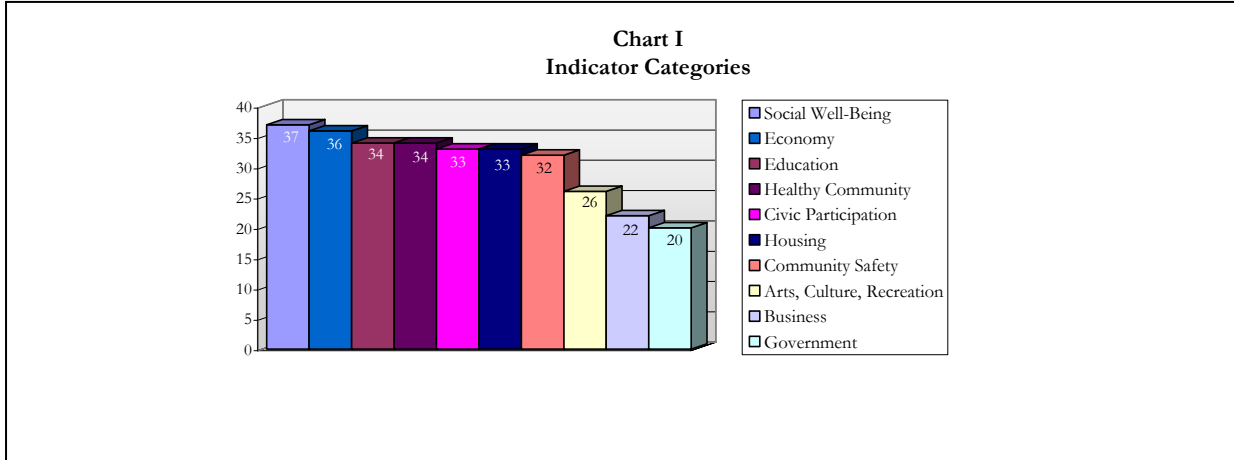
Colville	Reggie Atkins	Nespelem, WA	509-634-2331
Grand Portage	Tim Miller	Grand Portage, MN	218-475-2277
Confederated Salish & Kootenai Tribes	Jim Durglo		406-676-3755 ext 6009
Quinault Indian Reservation	Gary Morishima	Taholah, WA	206-236-1406 ext 201
Hoopa	Darin Jarnaghan	Hoopa, CA	530-625-4284 ext 112
Mescalero Apache Tribe	Thora Pedilla	Mescalero, NM	505-464-4711
Warm Springs	Theron Johnson	Warm Springs, OR	541-553-2416 ext 254
Makah	Joyce Trettevick	Neah Bay, WA	360-645-3036
Yakama	Edwin Lewis	Toppennish, WA	509-865-5121
Nez Perce	Aaron Miles, Sr.	Lapwai, ID	208-843-7328 ext 2380

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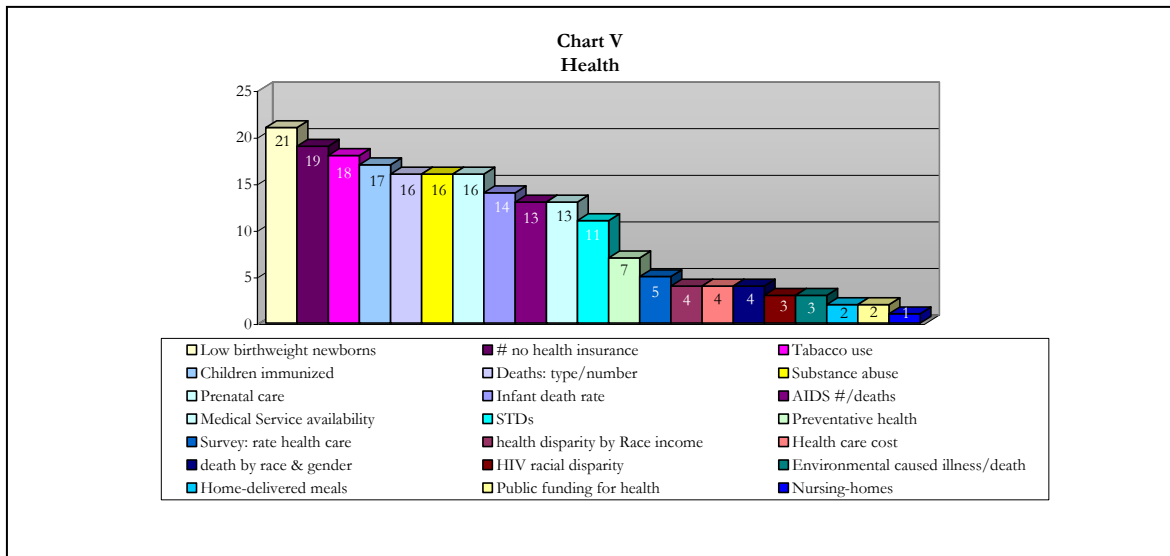
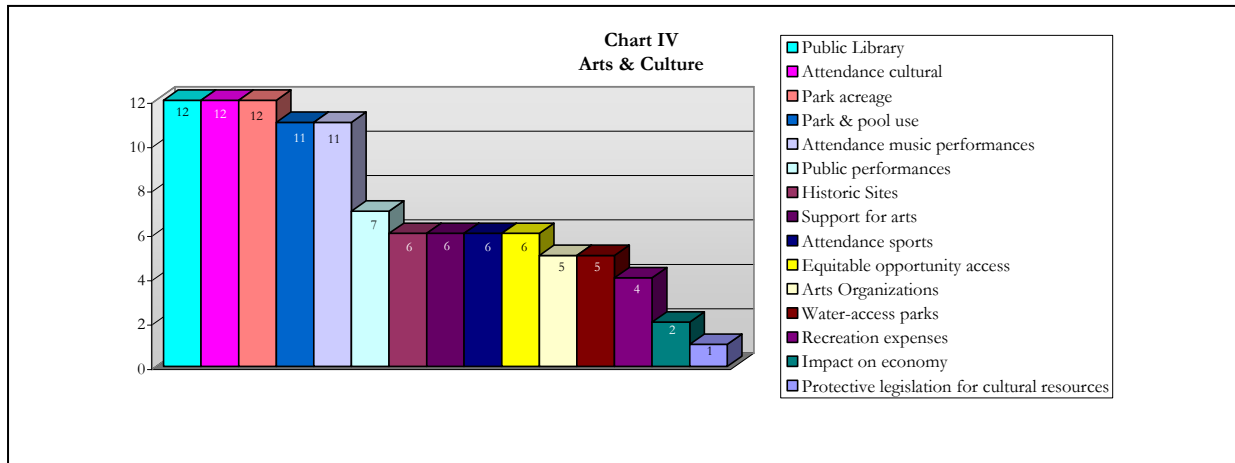
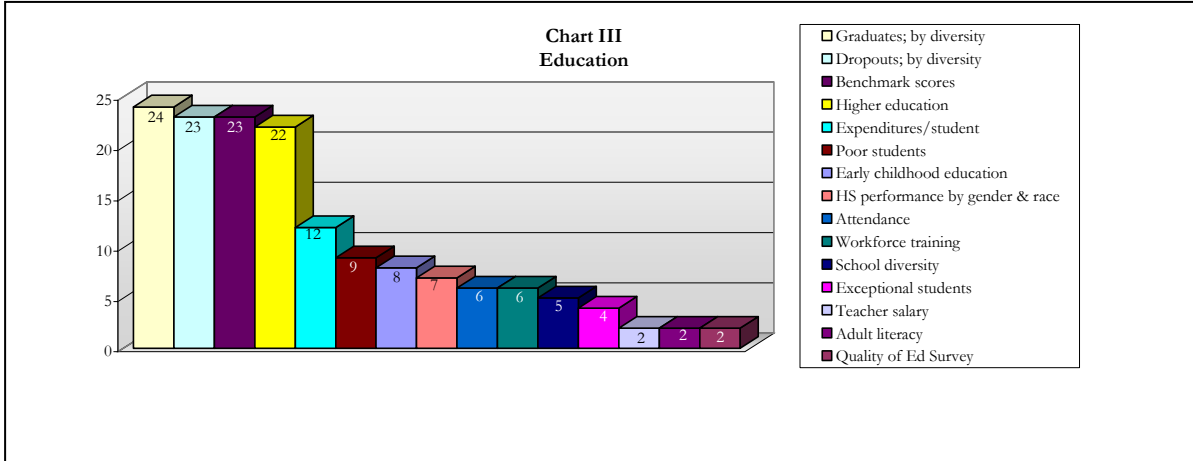
<sup>4</sup> Note: region herein refers to areas larger than single counties within states

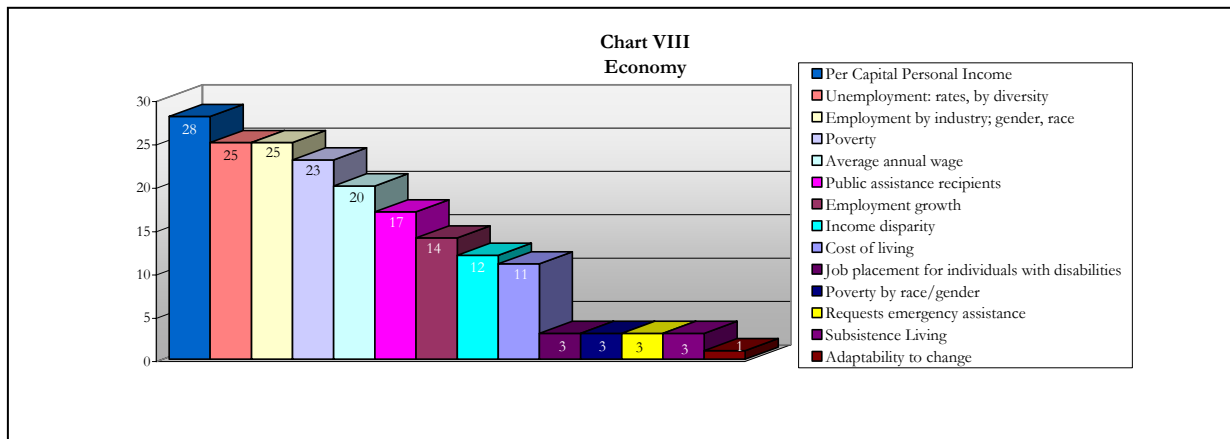
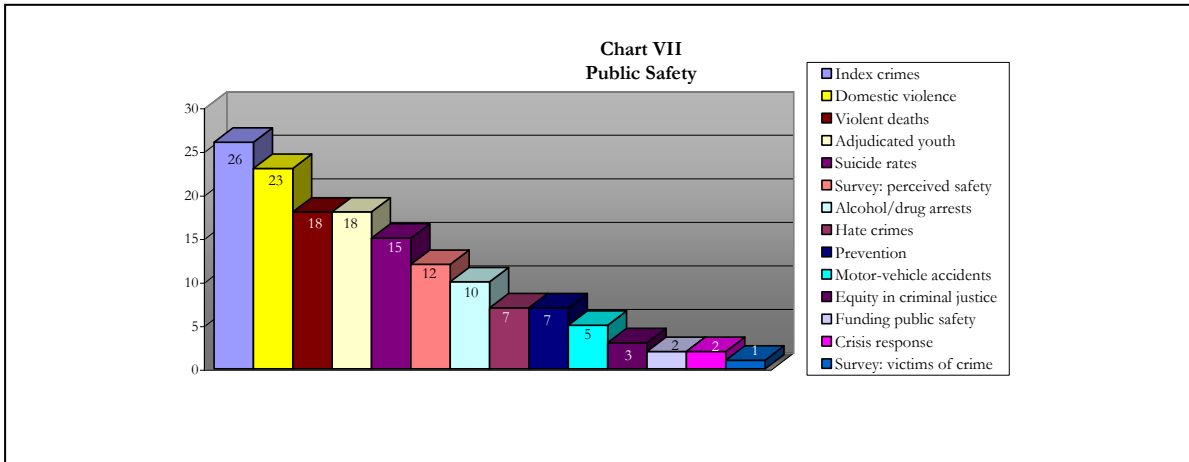
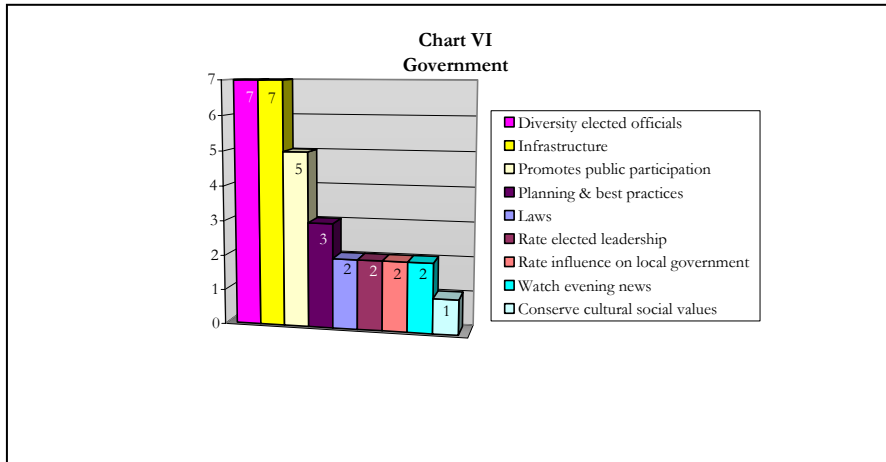
## APPENDIX C: COMMUNITY INDICATORS

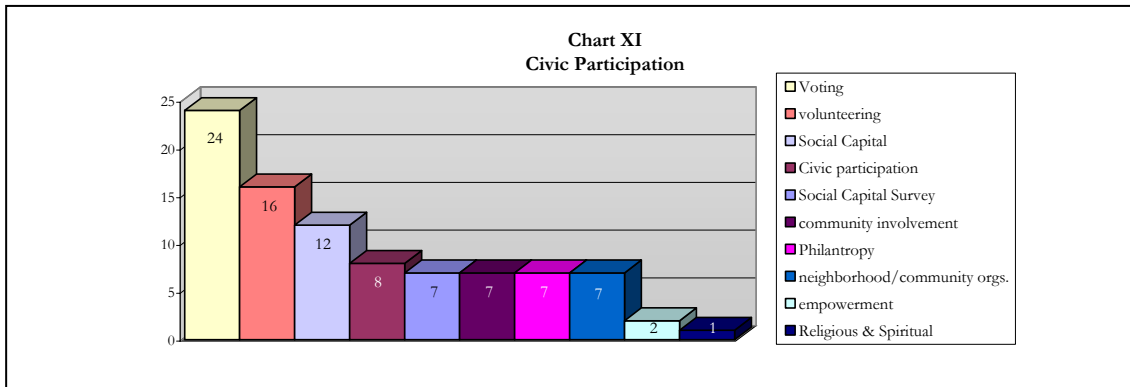
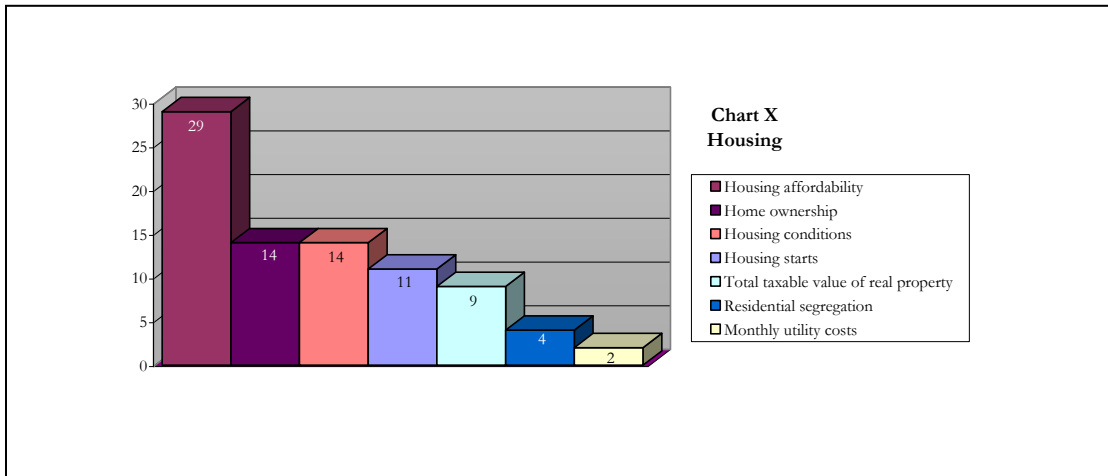
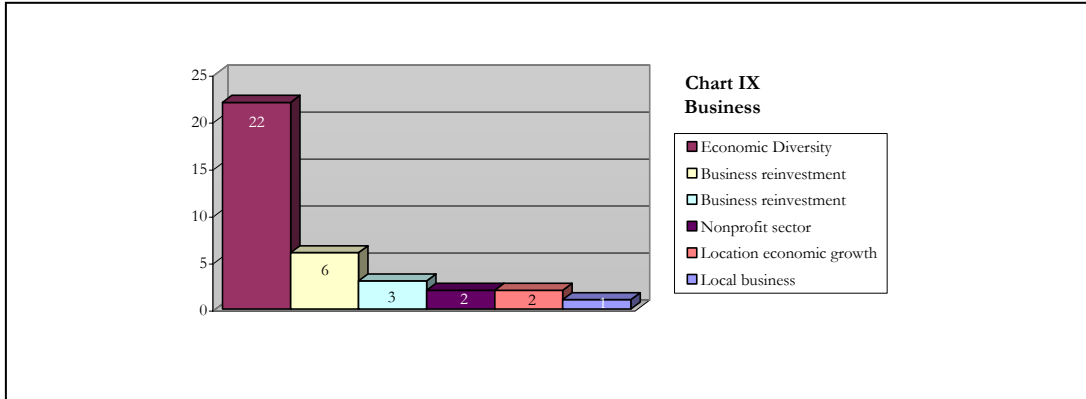
The following charts exhibit indicators aggregated from all community indicator projects, including 24 cities, 14 counties, 3 states, 4 regions<sup>5</sup> and 1 country. The charts show the frequency with which various indicators are selected. The indicators are displayed in descending order starting with the most frequently selected indicator. Chart I: *Indicator Categories* displays indicators by category. Charts II – XI detail the indicators associated with each category.



<sup>5</sup> Note: region herein refers to areas larger than single counties within states

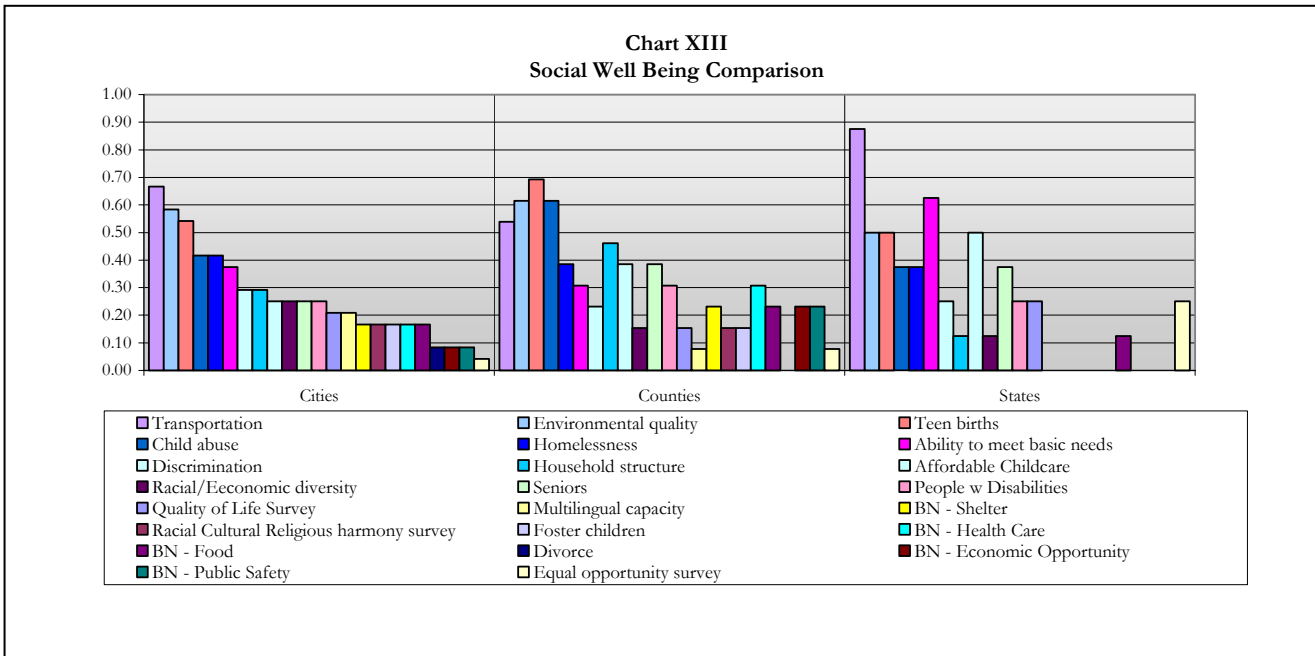
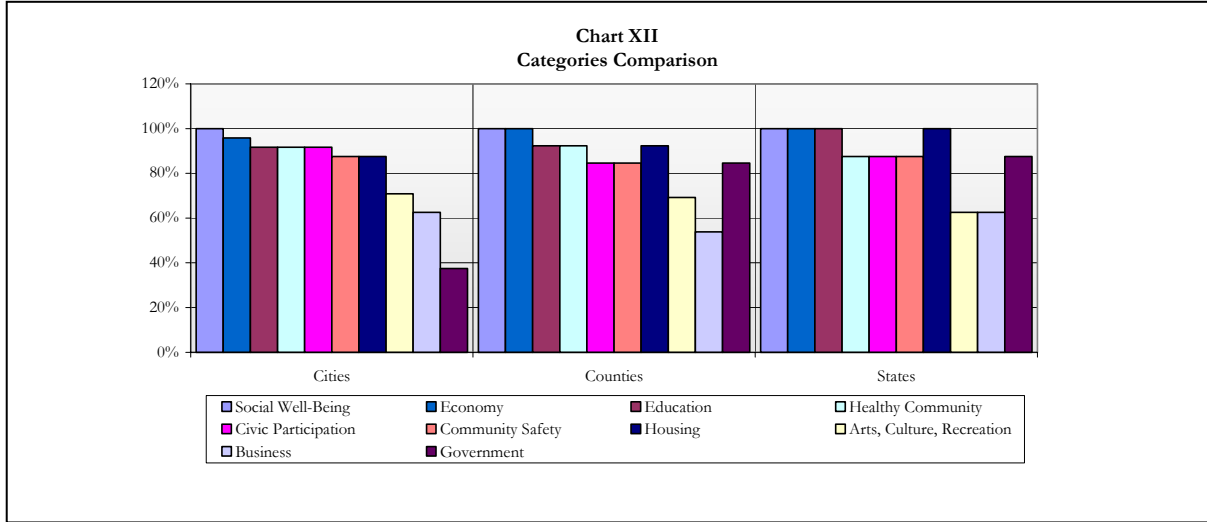






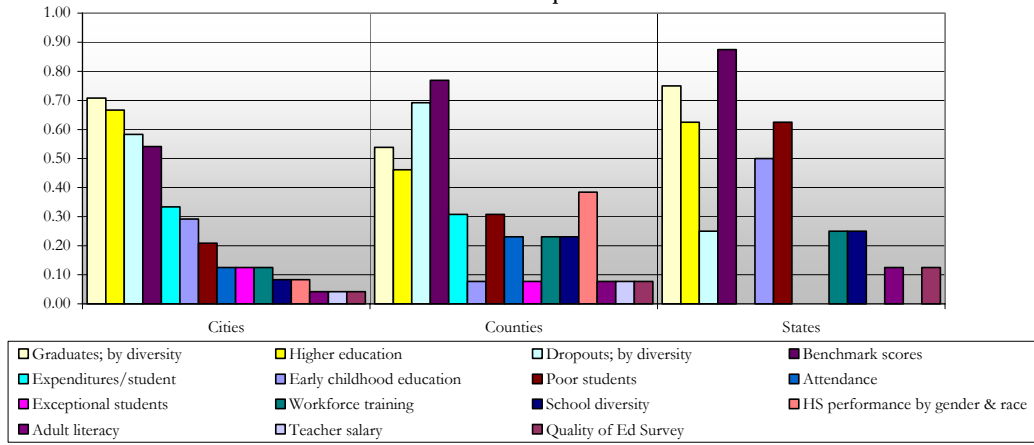
## APPENDIX D: COMMUNITY INDICATOR COMPARISONS

The following charts display data disaggregated into cities, counties and states. The state category includes 3 states, 4 regions<sup>6</sup> and 1 country. The charts show the frequency with which various indicators are selected. Chart XII: *Categories Comparison* displays the information by category. Charts XIII – XXI present indicators related to each category. Indicators are presented in descending order for cities to facilitate comparison across various levels of scale.

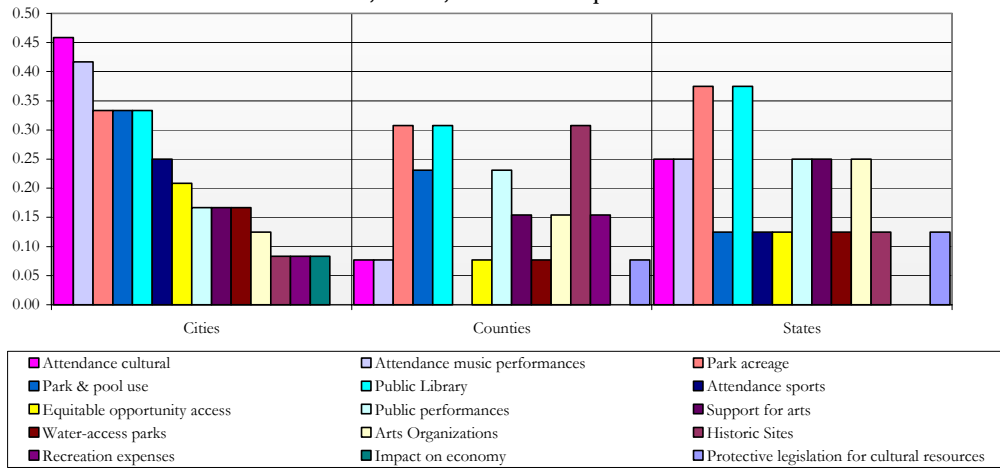


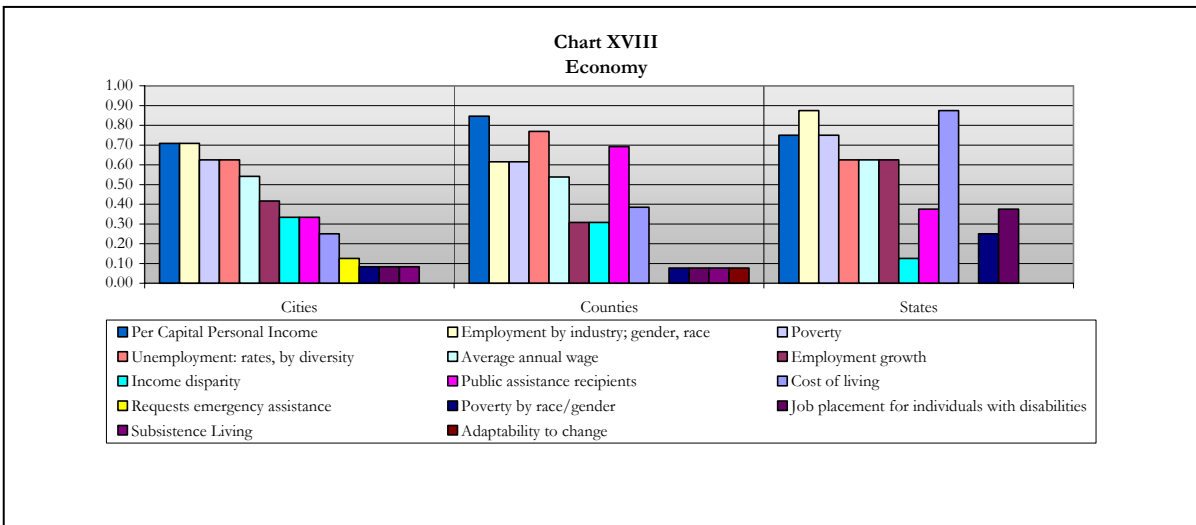
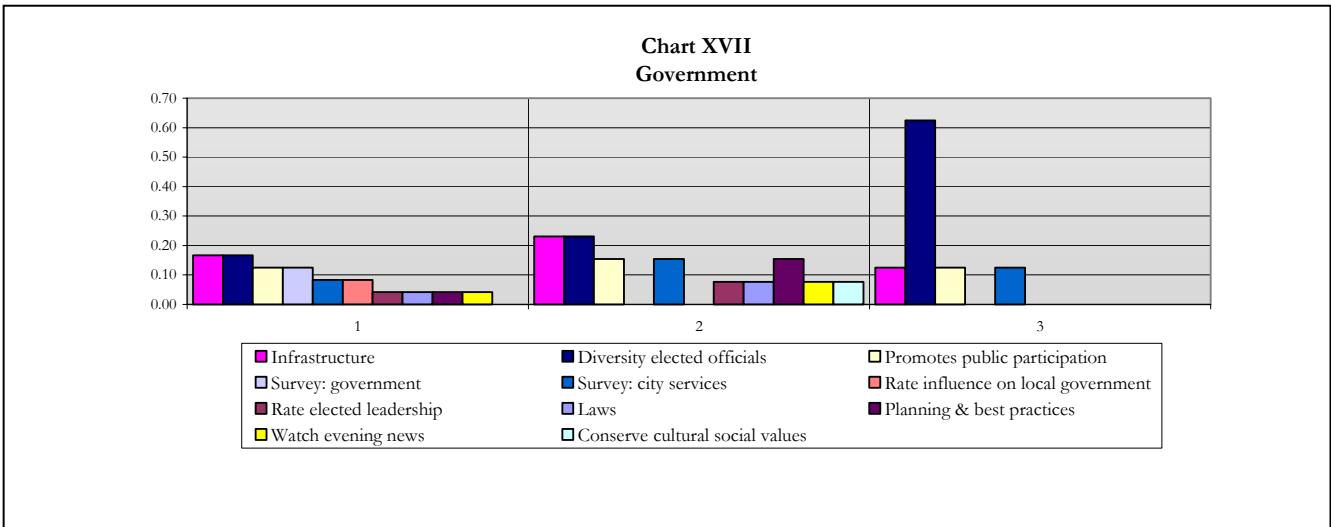
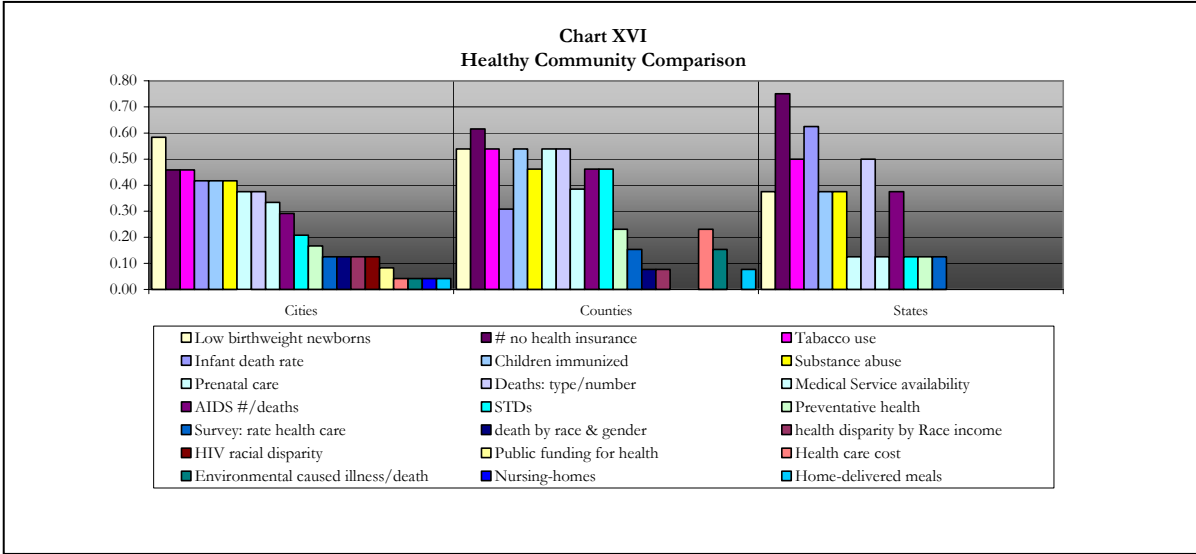
<sup>6</sup> Note: region herein refers to areas larger than single counties within states

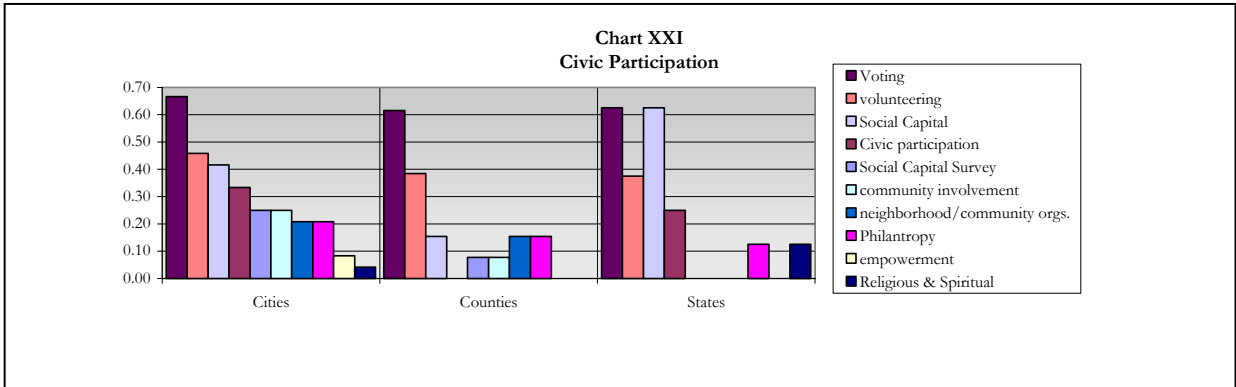
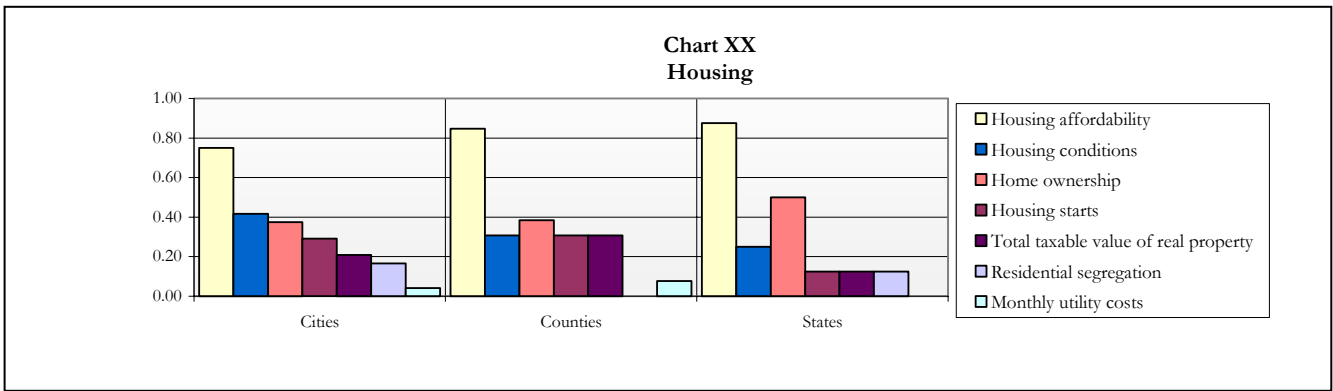
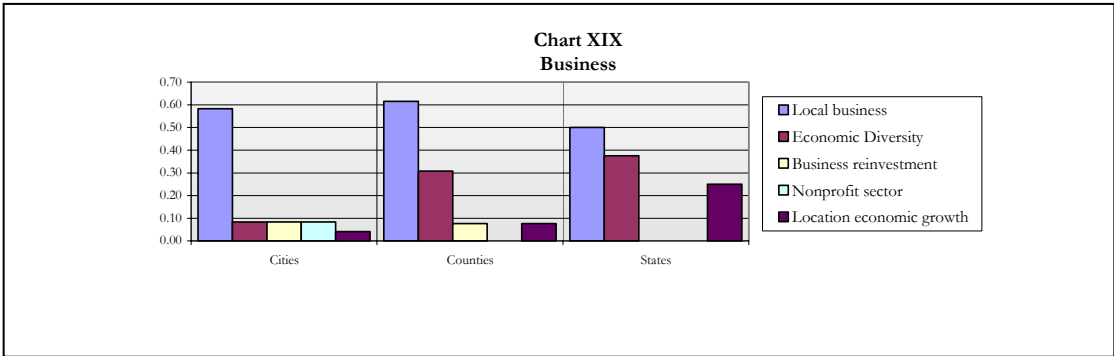
**Chart XIV  
Education Comparison**



**Chart XV  
Art, Culture, Recreation Comparison**







## APPENDIX E: COMMUNITY LIVABILITY ANALYSIS

The *Community Livability Analysis* lists the categories and indicators utilized in community indicator projects in the far left column. It then lists the indicators from the current Montreal Process C&I, the Roundtable meetings on indicator refinements, and the Mt. Hood LUCID project.

Communities	Current MP C&I	Last Draft MP C&I	Mt. Hood LUCID	Sierra Nevada Ecosystem	
Social Well-Being					
Quality of Life Survey	<b>KEY</b> <i>I - Indicator from MP C&amp;I</i>  <i>SM - Suggested Measure from MP C&amp;I</i>				
Racial Cultural Religious harmony survey					
Equal opportunity survey					
Discrimination					
Racial/Economic diversity	<i>SM - ethnicity</i>		D - ethnicity		
Teen births					
Child abuse			<b>KEY</b> <i>D - Demographics</i> <i>AS - Availability of Services</i> <i>SA - Spousal Abuse</i> <i>US - Use of Services</i>  <i>C - Crime</i> <i>EU - Employment</i> <i>Unemployment</i> <i>E - Education</i>  <i>CLU - Complexity of Land Use</i>  <i>M - Migration</i>		
Foster children					
Divorce					
Volunteerism					
Philantropy					
Ability to meet basic needs					
Shelter					
Health Care					
food					
Economic Opportunity					
Public Safety					
Homelessness					
Household structure	<i>SM - age structure SM - presence of dependent children</i>			D - age structure	
Affordable Childcare					
Seniors					
Multilingual capacity					
Environmental hazards					
People w Disabilities					
Transportation					

Communities	Current MP C&I	Last Draft MP C&I	Mt. Hood LUCID	Sierra Nevada Ecosystem
Education				
Early childhood education		education by level		
Quality of Ed Survey				
Graduates		education by level	E - Educational attainment by age class & income group	Education
Dropouts				
Benchmark scores				
HS performance by gender & race				
Attendance				
Teacher salary				
School diversity				
Exceptional students				
Higher education		education by level	E - Educational attainment by age class & income group	Education
Expenditures per student				
Adult literacy				
Poor students				
Workforce training		education by level	E - Educational attainment by age class & income group	
Arts, Culture, Recreation				
Protective legislation for cultural resources				
Historic Sites				
Arts & Cultural Organizations				
<a href="#">Public performances</a>				
<a href="#">Support for arts</a>				
<a href="#">Park acreage</a>				
<a href="#">Park &amp; pool use</a>				
<a href="#">Attendance music performances</a>				
<a href="#">Attendance sports</a>				
<a href="#">Attendance cultural</a>				
Equitable opportunity access				
<a href="#">Public Library</a>				
Recreation expenses				
Water-access parks				
Impact on economy				

Communities	Current MP C&I	Last Draft MP C&I	Mt. Hood LUCID	Sierra Nevada Ecosystem
<b>Healthy Community</b>				
Infant death rate				
Racial disparity infant death				
Low birthweight newborns				
Prenatal care			US - % births with prenatal care	
# no health insurance				
Health care cost				
Survey: rate health care				
Deaths: type/number				
death by race & gender				
Tabacco use				
Substance abuse				
STDs				
AIDS #/deaths				
HIV racial disparity				
Environmental caused illness/death				
Nursing-homes				
Home-delivered meals				
Medical Service availability				
Preventative health				
Public funding for health				
Children immunized			US - immunization	
<b>Government</b>				
Laws				
Rate elected leadership				
Promotes public participation				
Conserve cultural social values	I42 % land managed for c, s, s needs			
Planning & best practices				
Rate influence local government	<i>SM - political efficacy SM - income distribution</i>			
Voting				
Survey: city services				
Survey: government				
Diversity elected officials				
Watch evening news				

Communities	Current MP C&I	Last Draft MP C&I	Mt. Hood LUCID	Sierra Nevada Ecosystem
<b>Community Safety</b>				
Index crimes			C - crime rates by category of crime	
Hate crimes				
Adjudicated youth				
Alcohol/drug arrests				
Equity in criminal justice				
Survey: perceived safety				
Survey: victims of crime				
Funding public safety				
Prevention				
Crisis response				
Domestic violence			SA - Spousal abuse - incidents per year	
Motor-vehicle accidents				
Suicide rates				
Violent deaths				
<b>Economy</b>				
Cost of living				
Employment growth			EU - change employment rate	
Employment by industry	I44 employment in forest sector <i>SM - Total employment in all sectors; Direct employment in the various forest sectors; Indirect employment in appropriately identified downstream activities</i>		EU - job types	Employment
Average annual wage	I45 average wage and injuries in forest sector; <i>SM wage and injury rates by different components of the forest sector, including non-wood industries and services.</i>	average wage rates		
Job placement for individuals with disabilities				
Unemployment: rates, claims	<i>SM - Employment and labor force (rate of unemployment, years worked in the forest sector, experience in other industries, age structure of workforce, education or skill level attained, level of non-indigenous employment</i>	unemployment	EU - unemployment rate	
Per Capital Personal Income	<i>SM - level of household income</i>	% families at various levels of income		
Poverty		poverty intensity		
Poverty by race/gender		poverty intensity		

Communities	Current MP C&I	Last Draft MP C&I	Mt. Hood LUCID	Sierra Nevada Ecosystem
<b>Economy</b>				
Public assistance recipients	<i>SM - dependence on social security</i>	# families with children and aged receiving public assistance		Children in households with public assistance income
Requests emergency assistance				
Income disparity		income disparity/inequality, GINI coefficient		
Subsistence Living	<i>147 % land used for subsistence; SM Number of permits requested and issued for access to harvesting rights for particular products or land; Information on policies relating to access to these areas; Traditional and social uses such as shelter, instruments, art, healing, food, fuel, transport, weapons, trade, water finding, ceremonies, and gatherings; Economic uses including cultural tours or camps, artifacts, medicines, bush food, seed</i>			
Adaptability to change				
<b>Business</b>				
Local business	<i>135 recreation and tourism; 136 facilities; 137 visitor days; SM - How local communities are involved in forest management practices, possibly including the number of indigenous people employed in the forest sector, and the number of forest-based enterprises owned by indigenous people</i>		CLU - change in type of business	
Economic Diversity	<i>SM - Level of community dependence on individual forest commodities or industries, or services</i>			
Business reinvestment				
Nonprofit sector				
Location economic growth				
<b>Housing</b>				
Housing starts				
Housing affordability				
Monthly utility costs				
Total taxable value of real property				
Home ownership				Housing Tenure
Housing conditions				
Residential segregation				

Communities	Current MP C&I	Last Draft MP C&I	Mt. Hood LUCID	Sierra Nevada Ecosystem
<b>Civic Participation</b>				
Social Capital Survey				
Civic Participation				
empowerment				
community involvement				
volunteering				
neighborhood orgs.				
Social Capital				
Religious & Spiritual				
<b>Additional Indicators for Models</b>	<i>SM - Community infrastructure (number of schools, enrollments, childcare facilities, retail and trade services, community groups and use of local services)</i>	# doctors/1000 people	US - emergency room care	
	<i>SM - length of residence</i>		AS - travel distance to services	
			E - Distance to post secondary	
			C - comparison to Oregon Benchmarks	
			CLU - Zoning data	
			M - population change	
			M - residency tenure	

## APPENDIX F: COMMUNITY RESILIENCE ANALYSIS

The *Community Resilience Analysis* lists the categories and indicators utilized in community indicator projects in the far left column. It then lists the indicators and suggested measures from the current Montreal Process C&I, the Washington DC Roundtable meeting on indicator refinements, the Sierra Nevada Ecosystem project, the Mt. Hood LUCID project, the Canadian Centre for Community Enterprises and the Australian Bureau of Statistics.

Communities	<a href="#">Current MP C&amp;I</a>	<a href="#">Last Draft MP C&amp;I</a>	Sierra Nevada Ecosystem Project	Mt. Hood LUCID	<a href="#">Centre for Community Enterprise, Canada</a>	<a href="#">Australian Bureau of Statistics</a>
Social Well-Being			CC - Cultural Capital			
Quality of Life Survey	SM - Social well-being (qualitative assessment of attachment to place, sense of community, quality of life).					
Racial Cultural Religious harmony survey						
Equal opportunity survey	<b>KEY</b> <i>I - Indicator from MP C&amp;I</i>	<b>KEY</b> <i>HC - Human Capital</i>	<b>KEY</b> <i>HC - Human Capital</i>	<b>KEY</b> <i>CECA - Civic Enterprise</i>		
Discrimination						
Racial/Economic diversity						
Teen births		<b>PC - Political Capital</b>	<b>PC - Political Capital</b>	<b>SCOA - Social Capital: Organizational Abundance</b>		
Child abuse		<b>PFC - Physical and Financial Capital</b>	<b>PhC - Physical Capital</b>	<b>SCOA - Social Capital: LS - Local Services</b>		
Foster children			<b>FC - Financial Capital</b>	<b>CCCL - Civic Competence at the Community Level</b>		
Divorce						
Ability to meet basic needs						
Shelter						
Health Care						
food						
Economic Opportunity						
Public Safety						

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Homelessness						
Household structure						
Affordable Childcare						
Seniors						
Multilingual capacity						
Environmental hazards						
People w Disabilities						
Transportation						
<b>Education</b>			HC - skills, education, experiences, and general abilities of residents		9a. % population by education level	
Early childhood education					9a.	
Quality of Ed Survey						
Graduates		HC - Level of education			9a.	
Dropouts					9b.	
Benchmark scores						
HS performance by gender & race						
Attendance						
Teacher salary						
School diversity						
Exceptional students						
Higher education		HC - Level of education			9c.	
Expenditures per student						
Adult literacy						
Poor students						
Workforce training					9c.	

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<b>Arts, Culture, Recreation</b>						
Protective legislation for cultural resources						
Historic Sites		CC - Cultural Heritage Sites				
Arts & Cultural Organizations						
Public performances						
Support for arts						
Park acreage						
Park & pool use						
Attendance music performances						
Attendance sports						
Attendance cultural						
Equitable opportunity access						
Public Library				SCOA - # environ. Nonprofits, range of local orgs		
Recreation expenses						
Water-access parks						
Impact on economy						
<b>Healthy Community</b>						
Infant death rate						
Racial disparity infant death						
Low birthweight newborns						
Prenatal care						
# no health insurance						
Health care cost						
Survey: rate health care						
Deaths: type/number						
death by race & gender						
Tabacco use						
Substance abuse						
STDs						

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<b>Healthy Community</b>						
AIDS #/deaths						
HIV racial disparity						
Environmental caused illness/death						
Nursing-homes						
Home-delivered meals						
Medical Service availability				SCOA - # environ. Nonprofits, range of local orgs		
Preventative health						
Public funding for health						
Children immunized						
<b>Government</b>						
Laws						
Rate elected leadership					1. Diversified, representative leadership	
Promotes public participation		PC - governance infrastructure that facilitates community action			2. Leadership is visionary, shares power and builds consensus 3. community involved in significant community decisions	
Conserve cultural social values						
Rate influence local government					3. community involved in significant community decisions	
Survey: city services						
Survey: government						
Diversity elected officials					1. Diversified, representative leadership	Common Purpose - Civic participation: representativeness
Infrastructure		PFC - quality and capacity of infrastructure	PhC - physical elements and resources			
Watch evening news						

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<b>Government</b>						
Planning & best practices	SM - Community vision (qualitative assessment of the potential for alternative development of options or scenarios)				19. Citizens are involved in creation & implementation of community vision and goals 20. ongoing action toward achieving community goals 21. regular evaluation of progress against plan 22. org use plan to guide actions 23. community adopts development approach that encompasses all segments of the population	
<b>Community Safety</b>						
Index crimes						
Hate crimes						
Adjudicated youth						
Alcohol/drug arrests						
Equity in criminal justice						
Survey: perceived safety						Norms - Trust: perceived safety
Survey: victims of crime						
Funding public safety						
Prevention						
Crisis response						
Domestic violence						
Motor-vehicle accidents						
Suicide rates						
Violent deaths						

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<b>Economy</b>			FC - Financial capital			
Cost of living						
Employment growth						
Employment by industry	I44 employment in forest sector	% communities by type workers		CCCL - Range of knowledge, skills and abilities	12. Diversified employment	
Average annual wage	I45 average wage and injuries in forest sector					
Job placement for individuals with disabilities						
Unemployment: rates, claims						
Per Capital Personal Income						
Poverty						
Poverty by race/gender						
Public assistance recipients						
Requests emergency assistance						
Income disparity						
Subsistence Living						
Adaptability to change	I46 viability and adaptability of forest-dependent and Indigenous communities					
<b>Business</b>						
Local business					13. Major employers are locally owned	
Economic Diversity						
Business reinvestment						
Nonprofit sector						
Location economic growth						
<b>Housing</b>						
Housing starts						
Housing affordability						
Monthly utility costs						
Total taxable value of real property						
Home ownership						
Housing conditions						
Residential segregation						

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<b>Civic Participation</b>			SC - ability and willingness of residents to work together for community goals			
Social Capital Survey						
Civic Participation	SM - participation in community groups.	SC - % population		CECA - # collective action experiences, duration or history of experiences	4. community feels a sense of civic pride	Common Purpose - civic participation, time spent,
empowerment						
community involvement		SC - % population		CECA - # collective action experiences, duration or history of experiences	4. community feels a sense of civic pride	Norms - Cooperation: social and civic cooperation; Common Purpose - Social Participation: Participation in social activities
volunteering		SC - hours volunteerism			4. community feels a sense of civic pride	Common Purpose - Community support - voluntary work, frequency, hours
neighborhood/community orgs.		SC - # and diversity orgs		SCBR - civi mediating institutions		Common Purpose - Civic Participation: Membership in clubs; # clubs, time spent, active involvement
Social Capital						Common Purpose - Friendships
Voting		voter participation rates				Common Purpose - civic participation: voting
Philanthropy						Norms - Reciprocity: Donating time or money; Common Purpose - Community Support: personal business donations
Religious & Spiritual	SM - Folklore and oral history from elders	SC - # and diversity orgs		SCBR - civi mediating institutions		Common Purpose - Social Participation: religious affiliation, attendance

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<b>Additional Indicators for Models</b>		CC - Native land use and traditional environmental knowledge		SCBR - civi mediating institutions, e.g., clubs, social service orgs., youth orgs., Chamber of Commerce	5. relative level of optimism expressed by community people	Norms - Trust: institutional
		CC - forest-related traditions and rituals		SCOA - # environ. Nonprofits, range of local orgs (banks, auto, grocers, internet, post office, etc.)	6. degree to which people percieve mutual assistance and cooperation in community	Norms - Sense of Efficacy: personal, community, local decision making
		CC - traditional, local and practical knowledge		SCOA - miles to medical services, degree of dependence	7. Degree to which people percieve sense of attachment to community	Economic Participation - colleagues in current social network, friends as source of business info, use of local shops, unions and other associations, cooperatives, bartering orgs.
					8. The community is self reliant and addresses its own issues	Network Structure - Network Size; Network frequency/intensity and communication mode; Density and openness; transience/mobility; power relationships
		PFC - dollars available to address community needs			11. Organizations have developed partnerships & collaborative working relationships	Netowork Transactions - sharing support; integration into community; sharing knowledge; negotiation; applying sanctions
		SC - membership networks			14. Community has strategy for increasing independent, local onwership	Netowork Types - Bonding, bridging, linking, isolation
		PC - # and duration of collective action			15. openness to alternative ways of earning a living & economic activity	
					16. Degree to which people percieve that outside resources have been accessed to address gaps or achieve goals.	
					17. Community is aware of its competitive position in the broader economy	
					18. Community has an economic development plan	