

Community-Centered Research Series:

Measuring What Matters

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USING THE INTERNET FOR COMMUNITY ANALYSIS: SOURCES OF WESTERN DATA

Community-based research (by and for the community) is important in planning for meaningful and positive community change.



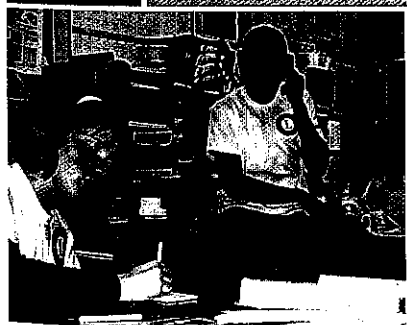
This type of research is not only desirable, it is feasible.



By providing theory as well as tangible next steps, this series will get your community excited about moving forward with community-centered research.



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USING THE INTERNET FOR COMMUNITY ANALYSIS: SOURCES OF WESTERN DATA

by Dr. Andrew Seidl and Lee Elder, Colorado State University

INTRODUCTION

Until recently, good data has been hard to find. Elected officials, salaried analysts, journalists, consultants, employers, and residents who wanted to better understand issues and trends in their communities had to visit a variety of places: county and municipal offices, the public library, and perhaps the local extension office of the state's land grant university. Another layer of complexity was added if they wished to learn about the issues and trends affecting communities in other states.

Today many of these useful sources of data and analysis are readily available on the Internet, if one knows where to look. In many cases these data are available over time, and search engines can be used to compare and contrast one city, county, or state with another—with little or no additional time or expense. To an increasing extent, the Internet can facilitate one-stop information shopping from a home computer.

In this article we identify commonly used, publicly available sources of online socioeconomic data on the western United States, with particular focus on county-level information with an orientation toward rural areas (where human and financial resources are likely more thinly spread). We

discuss the use of secondary information and the quality of available data, and provide several caveats or concerns about using these tools and information.

TWO TYPES OF DATA

First, we need to distinguish between *primary data* and *secondary data*.

Primary Data: Answers a specific research question.

Primary data is collected in order to answer a specific research question, often through the use of surveys, polls, focus groups or other means to elicit specific information about a particular issue, policy or idea. For example, voters might be polled regarding their preferences for a new business, consumer product, land use policy, or noise ordinance.

The principal advantage of primary data is that it is specific. However, common concerns surrounding primary data include

- objectivity;
- cost to obtain;
- inability to transfer information across alternative projects, policies, or to other jurisdictions;

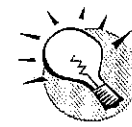
- the proprietary nature of primary data collected by private consultants, businesses and research firms.

Secondary Data: Creates a context for understanding.

Secondary data, on the other hand, does not answer specific questions per se, but rather creates a context within which a proposed policy might be better understood. Skilled manipulation of secondary data can generate significant insights into potential community opportunities and challenges, or support or call into question conventional wisdom and identify areas in which further information might be strategically collected. Secondary data is collected on an ongoing basis, often by a government agency or its representative, in order to provide indicators of community welfare and economic performance over time. For example, school finance information, tax information, housing starts, employment by sector, per capita and per household income, race, age, and education data are all collected by a number of government agencies.

The principal benefits of secondary data include

- the perception of objectivity in the collection process;
- application across a variety of potential public and private issues;
- comparability across jurisdictions;
- relatively low cost; and
- ease of access.



While both types of data are commonly used to inform decision making, a review of secondary data should always precede and guide primary data collection efforts.

WHAT DATA IS AVAILABLE, AND WHAT CAN I DO WITH IT?

Reliable secondary socioeconomic data is available from a number of federal, state, and local government sources. There are also many freely available sorting and analytical tools that use government data. Secondary data sites are identified in this chapter only if they provide information at the county level and can be aggregated to the state or regional level with relative ease. State-level aggregation is an option for many of these datasets.

Nationwide databases commonly provide searchable access at one or more of the following scales: census tract, municipality, county, metropolitan region, and/or state. Smaller scale access is generally aggregable to larger scale units, but not the converse. For example, the U.S. Census provides nationwide information on demographics, agriculture, and housing. However, nationwide databases do not yet exist for such important categories as taxes, education, and building permits. Since most states compile and provide this information, we have provided URLs for data on taxes, education, and building permits

for each western state at the end of the chapter.

Not all states provide data in the same format, nor do they provide access in the same way. The most commonly used formats facilitate downloading to a spreadsheet (e.g., Microsoft Excel, Lotus) or database management program (e.g., D-Base, Microsoft Access), which are largely compatible with one another. Unfortunately, data from some states (and older data) may only be available as scanned documents or Adobe Acrobat (pdf) files, which do not lend themselves to data analysis. Despite this unfortunate practice, we have provided links to the best available information.

These data can be used to illustrate trends and/or socioeconomic profiles. Changes in proposed or adopted policy, or development alternatives, can be evaluated against changes in broad community indicators over time. Trends in single parameters, or overall profiles, can be compared to trends in neighboring communities, regionwide or statewide averages, or to similar information from other states. This type of comparison can

- reveal comparative strengths or areas for potential improvement;
- illustrate differences and similarities between communities that have chosen similar or distinct development paths or have similar or distinct natural endowments, challenges or opportunities;
- help in evaluating the efficacy of community choices over time.

TAKE A DIGITAL FIELD TRIP

Demographic Data



The U.S. Census Bureau conducts a comprehensive population census every ten years (e.g., 1980, 1990, and 2000). This enormous undertaking

provides detailed household information to the census tract level, and is considered the definitive source of household-level demographic information. Its official uses include determining the number of Congressional representatives to which each state is entitled, and the number of people each district is meant to represent. The census also aids the government in the distribution of hundreds of billions of dollars every year.

Because data collection methods have been consistent over time, population growth estimates in total (by U.S., state, Congressional district, county, municipality, census tract) and by ethnicity, age, race, or other household characteristics can be estimated by comparing one census to another.

Easy-to-use U.S. Census 1990 and 2000 data can be found at <http://quickfacts.census.gov/qfd/>. Test the site by choosing a state of interest, and then selecting a county. Data will be displayed, and you have the option of scrolling to the bottom of the page to access more data sets for the county of interest.

The Census Bureau FactFinder site (<http://factfinder.census.gov/servlet/BasicFactsServlet>) provides more detailed information. To test the site, begin by clicking on any one of the options named in "Data Sets." You will then be able to fine tune your summary file selection. Select the "Detailed Tables" option, choose "County" as the geographic area, and then the desired state and county. (Click "Add" to specify them as your search criteria.) Click "Next," select and add one or more tables of interest, and then click "Show Table."

Agricultural Data



The U.S. agricultural sector employs relatively few people but it controls a large portion of the nation's natural resources. The agricultural sector remains an impor-

tant part of the economy in many rural areas, and is very influential in national policy deliberations. Agricultural sector data provide insights into how rural communities and their agricultural and natural resource-based industries have fared over time. Agricultural and natural resource data sources can be used to illustrate economic features of resource use, the drivers of the economic base, and the likely implications of policies on the resource base and economy over time.

Since its formation in 1863, the National Agricultural Statistics Service (NASS) <http://www.usda.gov/nass/sso-rpts.htm> has provided the most reliable nationwide agricultural information. NASS has offices in every state, and most offices provide access to state-level "historical" (from less recent censuses) data. NASS annual reports provide county-level information on crop acreage, price, production, farm income, expenditures, and livestock.

The Census Bureau has assigned the responsibility of conducting the Census of Agriculture to the Department of Agriculture. The USDA mails surveys to all U.S. farmers at five-year intervals (e.g., 1987, 1992, 1997, 2002). Oregon State University has compiled data from the 1987, 1992, and 1997 Censuses of Agriculture and made a very useful dataset accessible through <http://govinfo.kerr.orst.edu>. After passing through this gateway, select the Census of Agriculture hyperlink, then select "Geographic Area," and finally select the state and county of interest. Data are provided for the entire nation, disaggregated to state and county levels, on features such as number of farms, farm size, acreage in farms, value of sales, irrigation specifics, machinery, crops produced, production level, number of livestock operations, and many other farm categories. Data on farm income and expenses are provided through the efforts of many agencies (Figure 1).

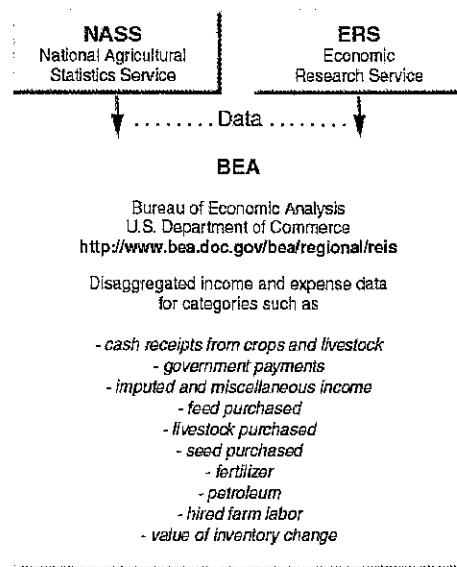


Figure 1. Agencies contributing data to BEA website.

Economic Base Data



County level data and analysis across all economic sectors are available from the BEA Regional Economic

Information System (REIS) <http://www.bea.doc.gov/bea/regional/reis/>. These data include population, personal income, earnings-by-industry, jobs-by-sector, and transfer payment data. As with farm income data, the database is in-depth with many different features within each of the outlined categories. For example, income by sector has information broken down to specific types of mining (such as minerals or coal).

BEA/REIS data may be displayed at the metropolitan statistical area (MSA), the BEA economic region scale, for metropolitan versus nonmetropolitan (rural) areas of the state, as well as by local political jurisdictions. State-level information, including data such as gross state product, personal income, and annual/quarterly state personal income plus numerous other topics, is also available from the BEA homepage <http://www.bea.gov/>.

Taxes



No nationwide or regional multi-state web page for county tax information exists. However, each western state's department of revenue keeps time series data (such as property taxes paid, mill levy rates, sales tax rates, and sales taxes accrued) online. Historical tax information is often—but not always—provided to the public through the state department of revenue or the department of taxation. As a result, there is great variation in the type and amount of secondary tax information available across western states.

School District Revenue/Expenditures



Discussion of public school district revenues is often considered in conjunction with property tax burden, since school districts are commonly strongly supported by local property tax revenues through a designated mill levy. School district revenues and expenditures are usually reported through the state departments of education. Again, no national or regional repository of school finance information is available. Some western states have extensive online databases, while others do not. Due to the large and anticipatory capital investments represented by new school buildings, time series information is of particular importance in understanding education finance.

For example, Colorado changed its fiscal year accounting in the mid 1990s, making current data non-comparable with revenue and expenditure information prior to the change in 1994-95. Idaho only has online school finance reports for two years, and Wyoming has only one year of financial statement observations.

However, these sites provide a starting place for obtaining more information.

Educational Information



Higher average educational attainment is associated with lower crime rates, higher incomes, better health, greater longevity, and more attractive sites for new businesses. Unfortunately, no national or regional online database for researching the number of annually enrolled students is available. Generally, states provide annual enrollment counts to the public. Decennial information for the number of enrolled students and the level of educational attainment of the population is found within the U.S. Census <http://factfinder.census.gov/servlet/BasicFactsServlet>. To access this database, choose Summary File 1. Secondly, choose either 1990 Summary File 3 or 2000 Summary File 3. Next, choose the "Detailed Table" option and the type of data required, such as county, state, or census tract. The following page will need to be displayed by subject, so the selection of "by subject" on the top of the page will put the website in required terms. Then, by scrolling down the subject option box and choosing "education," all education statistics will be displayed. This page shows school enrollment by school level—elementary, high school, college, and then further categorized by public or private. Other educational information includes educational attainment and school enrollment by race.

Housing Data



Increases in population and household numbers generally imply an increase in the demand for housing. An increase in housing vacancy rate suggests a decrease in rental rates and home prices. The

American Fact Finder website provides an all-encompassing site for the evaluation of housing data, by county, for each state. To access this database, visit <http://factfinder.census.gov/servlet/BasicFactsServlet>, choose "Detailed Tables" on Summary File 1 for either 1990 or 2000. The following selection is the geopolitical unit, "County," and then the appropriate state and county can be selected. Next, choose the "by subject" option. Then, under the subject search box choose "Households and Families," "Housing Unit Totals," "Population Totals," or "Urban/Rural." From these subject titles, statistics include population in households by race, average household size, average family size, housing units, and urban/rural housing units.

Building Permits



Building permits show the level of construction that is occurring to keep up with the demand for housing and commercial development. Typically, the construction sector follows growth in the rest of the economy. However, some communities experience residential growth without industrial or commercial growth drivers. This phenomenon can be observed in communities that are attractive to retirees, second home owners, or commuters. Local officials in high amenity and fast growing western communities may want to pay attention to atypical growth in the construction sector because, in view of the differential taxation rates discussed above, high levels of residential development relative to commercial or industrial development may indicate a financial drain rather than a boon to community coffers.

The Census Bureau (<http://www.census.gov/const/www/permitsindex.html>) offers the most

comprehensive multi-state record of building permits. Some states have more information available on the site than others. For example, Montana has building permit data available for only two counties, but information on the number of electric permits for all Montana counties is available. The number of electric permits is highly correlated with building permits and can provide a substitute measure for construction sector activity. Like Montana, neither Washington nor Nevada provides easily accessible electronic data on building permits, but 13 of 17 Nevada counties and 8 Washington counties are found on census web page.

Multiple Data Pages

Initiated in 1978 by the Census Bureau, the State Data Center (SDC) (<http://www.census.gov/sdc/www/>) combines the information of many state-level economic departments. The SDC was created in order to provide Census Data to the public through universities, state agencies, libraries, and regional and local governments. The websites provided through the SDC are official sources of demographic, economic, and social statistics produced by the Census Bureau.

The state of Nevada provides easy access to other state government pages (<http://silver.state.nv.us/USMAP.htm>). Through this website every state government official homepage and all state agencies in the nation are accessible.

CONCLUSIONS

Want to know how many people of what age and heritage moved to your town in the last ten years? The Internet can tell you in a matter of minutes. How many houses were built? How high are your property taxes compared to those of neighboring communities or states?

What was, or what is, the economic base of your county, region and state? How fast is land being converted out of agriculture? What is being spent on public schools, and how does that compare to other regions? All of this information is just a few clicks away.

The availability of many sources of Internet data has created an unprecedented opportunity to use relevant quantitative information to facilitate and inform community choice, but this information cannot be used without consideration of its source and its appropriate application. Socioeconomic data, either primary or secondary, only helps paint a picture of a community and its economy. Combined with local knowledge (qualitative understanding of traditions, culture, and institutions), data can help tell a story about the challenges and opportunities facing communities. Used properly, secondary data can inform local decision makers by helping them evaluate policy alternatives, but the decisions themselves require thoughtful and objective use of all available information.

Our treatment was not meant to be exhaustive, but rather to pique the interest of potential users of such information. The interested reader will be able to locate other appropriate sources of information to increase community understanding. Other papers in this series provide tools and approaches to reveal these essential factors in community decision-making.

About the Authors

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ABOUT THIS SERIES

The *Measuring What Matters* series provides encouragement, support, and tools for communities engaged in self-assessment. It is a comprehensive road map for understanding 1) what community-centered research is, 2) what forms it might take, and 3) what it might accomplish.

The series consists of an overview (CCR1, Winter 2003) and subsequent articles written by university faculty from across the West. The authors have experience working with rural communities, knowledge of self-assessment principles and techniques, and a good sense of the issues rural communities face.

We encourage you to collect the entire series. Each issue is three-hole punched for easy storage in your own resource binder. *Measuring What Matters* issues published in Spring 2004 include:

- *Using the Internet for Community Analysis: Sources of Western Data* (CCR 2)
- *Surveys as Tools for Community-Centered Research* (CCR 3)
- *Video as a Tool for Community-Centered Research* (CCR 4)
- *Truth, Ethics and Credibility in Community-Centered Research* (CCR 5)

Watch for additional topics being developed as *Measuring What Matters* publications. These include:

- Qualitative Data
- Race/Ethnic/Language Considerations
- The Importance of Partnerships
- Community Mobilization
- Case Studies

WESTERN STATES ONLINE DATA RESOURCES

Tax Information

Arizona	http://www.revenue.state.az.us/txfacts.htm
California	http://www.sco.ca.gov/pubs/index.htm#stagovrep
Colorado	http://www.dola.state.co.us/is/taxcty.cfm
Hawaii	http://www.state.hi.us/tax/taxreports.html
Idaho	http://www2.state.id.us/tax/publications.htm
Nevada	http://tax.state.nv.us/taxnew/pubs.htm#annual%20report
New Mexico	http://www.state.nm.us/tax/pubs/taxresstat.htm
Montana	http://www.state.mt.us/revenue/css/2forindividuals/07publications.asp
Oregon	http://www.dor.state.or.us/
Utah	http://www.tax.ex.state.ut.us/property/rates.html
Washington	http://dor.wa.gov/content/Statistical_Reports/stats_ecodata.asp
Wyoming	http://revenue.state.wy.us/doclistout.asp?div=3&dtype=23&dtsub=11

Table 1. Tax Information Websites

School Expenditures and Revenue

Arizona	http://www.ade.az.gov/AnnualReport/AnnualReport1998-99/Summary.asp
California	http://www.cde.ca.gov/fiscal/financial/financialdata.htm
Colorado	http://www.cde.state.co.us/cdefinance/RevExp.htm
Hawaii	http://doe.k12.hi.us/reports/index.htm
Idaho	http://www.sde.state.id.us/finance/financial_sum.htm
Nevada	http://www.nde.state.nv.us/hrt/reports/index.html
New Mexico	http://www.sde.state.nm.us/resources/index.html
Montana	Not available
Oregon	http://dbi.ode.state.or.us/ssf.htm
Utah	http://www.usoe.k12.ut.us/homepage/datafile.htm#BUDGET
Washington	http://www.k12.wa.us/safs/
Wyoming	http://www.k12.wy.us/DATATECH/statseries.html

Table 2. School Expenditures and Revenue Websites

Building Permits

Arizona	http://www.cob.asu.edu/seid/arec/index.cfm?page=construct
California	http://www.dof.ca.gov/HTML/FS_DATA/profiles/pf_home.htm
Colorado	http://dola.colorado.gov/demog/mule/Mule.cfm
Hawaii	http://www.state.hi.us/dbedt/
Idaho	http://www.idoc.state.id.us/idcomm/profiles/index.html
Nevada	Not available
New Mexico	http://www.unm.edu/~bber/econ/pmts.htm
Montana	Not available
Oregon	http://www.econ.state.or.us/stats.htm
Utah	http://www.qget.state.ut.us/programs/c1.asp?database=bp&tabletype=1a
Washington	Not available
Wyoming	http://eadiv.state.wy.us/housing/annlbldg.htm

Table 3. Building Permit Websites

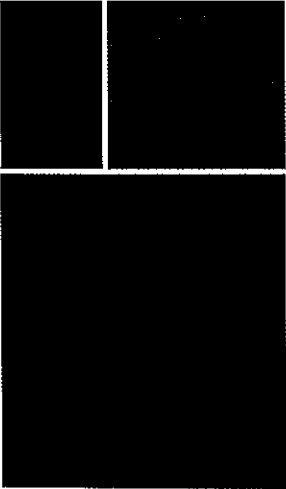
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The Western Rural Development Center (WRDC) is one of four regional centers funded by USDA-CSREES to strengthen the capacity of local citizens to guide the future of their rural communities. Each Center links the research and extension capacity of land grant universities with local decision-makers to address a wide range of rural development issues. The WRDC also receives substantial support from Utah State University through Cooperative Extension; the Agricultural Experiment Station; the College of Humanities, Arts and Social Sciences; and the College of Natural Resources. The WRDC does not discriminate on the basis of race, color, religion, national origin, sex, age, disability or veteran status.

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