

## BLM Social Science Guideline 4 Using EPS Tools for Land Use Planning



## I. Introduction

As demands on public lands grow more diverse, the management of these lands becomes more complex.<sup>1</sup> This creates new challenges for Bureau of Land Management (BLM) managers, planners and consultants as they develop or revise resource management plans (RMPs). These plans must accurately describe social and economic conditions in the planning area, as a foundation for identifying patterns of change, including the changing role of public lands. The quality of this information and how well it is understood by the public are critical to the BLM's success in meeting its multiple use mandate. Involving community members and decision makers in the socio-economic aspects of the planning process is an excellent means of increasing public support for BLM efforts and creating plans that reflect local conditions and perspectives.

The BLM is required by section 202 of the Federal Land Policy and Management Act (FLPMA) to integrate "physical, biological, economic, and other sciences" into its land use planning (43 USC 1712). Section 102 of the National Environmental Policy Act (NEPA) requires federal agencies to "insure the integrated use of the natural and social sciences . . . in planning and decision making" (42 USC 4332). BLM's Land Use Planning Handbook (<u>http://www.blm.gov/nhp/200/wo210/landuse\_hb.pdf</u>) provides that social and economic analysis should be incorporated into most phases of the planning process, including:

- scoping and issue identification
- description of baseline conditions (the Affected Environment chapter of the RMP/EIS)
- identification of alternatives, and
- evaluation of effects of the alternatives (the Environmental Consequences chapter).

This guide describes two automated data retrieval systems – the Economic Profile System (EPS) and the Economic Profile System—Community (EPSC). (They are referred to collectively as EPS/C or EPS Tools.) The guide describes how EPS/C can be used quickly and easily to gather accurate data and present it in a manner readily understood by non-social scientists. High quality land use plans must go beyond simply supplying data, so this guide also explains how to interpret and combine various types of information to understand significant demographic and economic changes that affect public lands management. It also describes how to use EPS/C to meet new guidelines for socio-economic analysis described in BLM's Land Use Planning Handbook (revised 2005). An appendix to this guide provides a

<sup>&</sup>lt;sup>1</sup> The Sonoran Institute has prepared this guide in partnership with the Bureau of Land Management, to assist the BLM's staff, contractors, and the public. For questions on the use of this guide contact Rob Winthrop, Senior Social Scientist, Planning and Science Support, Bureau of Land Management, 202-785-6597, robert\_winthrop@blm.gov; or Ben Alexander, Director, SocioEconomics Program, Sonoran Institute, 406-587-7331, ben@sonoran.org.

chart highlighting which pages of EPS/C profiles provide information on particular topics cited in the guidelines.

## II. The Economic Profile Systems: EPS and EPSC

EPS and EPSC are designed to be easily used by anyone interested in local demographic and economic conditions, particularly as they concern land-use decisions. BLM staff and other agency personnel, consultants, community members, industry representatives, and conservationists can all use these tools to ensure that planning efforts reflect a full understanding and appreciation of the demographic and economic conditions of their areas. EPS/C can be used in a comprehensive manner throughout the planning process, or before the planning process begins – any time a convenient overview of demographic and economic conditions is needed.

EPS and EPSC utilize databases and instructions that operate within Microsoft Excel<sup>®</sup> to produce tables and graphs that may be imported directly into planning documents or presentations by using simple copypaste actions. Both systems are available without charge at the Sonoran Institute's website: <u>www.sonoran.org/eps.</u> The systems require Microsoft Office 2000 or later, running on the Microsoft Windows<sup>®</sup> 98, ME, 2000, or XP operating system. EPS Tools are not currently available for other operating systems.

EPS draws upon a variety of federal databases to produce thorough and multi-faceted profiles of economic and demographic change over the past 30 years. It is updated annually, although federal data sources tend to have a two-year lag in releasing data. Thus the 2004 version of EPS contains data through 2002. EPSC uses the Decennial Census to create in-depth community-level profiles, and offers comparisons of data from the 1990 and 2000 Censuses.

The information in EPS/C profiles can be used in many ways, including:

- to identify sectors of the economy that are prospering or declining,
- to provide a comprehensive view of demographic change, and
- to clarify the role of natural resources in the local economy.

Using EPS/C to collect socio-economic data allows planners and consultants to spend more time focusing on qualitative issues, such as community values, beliefs and attitudes; quality of life issues; and the community's capacity and willingness to adapt to change.



Fig. 1 EPS

Table 1 below summarizes the databases that EPS and EPSC access and shows how they may be used to complement each other.

## Table 1. Databases Used by EPS and EPSC

	EPS	EPSC
Geographic level of detail	Nation Region (metro, non-metro, total) State (metro, non-metro, total) County	Nation, Region, Division, States, Counties, County Subdivisions, Places (Towns), Indian Reservations, Congressional Districts
Databases used	Bureau of the Census (Census) County Business Patterns (CBP) Bureau of Labor Statistics (BLS) Bureau of Economic Analysis (BEA), Regional Economic Information System (REIS)	Bureau of the Census (Census) Decennial Census of Population and Housing, 1990, 2000 (1990 data included at county level only)
Time series used	Continuous data from 1970 to as close to the present as possible, currently 2002.	2000. At the county level 1990 to 2000 comparisons are made to show changes in age and household income distribution.
Advantages	Long-term trend analysis; changes in employment and personal income by industry sector, change of businesses establishments by type and size, and non-labor sources of income, such as retirement and age-related income. * Counties are compared to states and nation. * Performance comparisons.	Age distribution Race Housing costs and affordability Education rates Poverty * Finer geographic detail. * Allows comparisons to user-selected 'benchmark' areas.
Disadvantages	For some counties, employment and personal income data may be suppressed for some industries and for some years. EPS includes a system for estimating these data gaps, and a chapter in the EPS User's Manual profiles step-by-step instructions.	Census data are not suppressed, but they are less useful than REIS data used in EPS for long-term trends by industry, since data are only available for 2000.

Data gathered from EPS and EPSC profiles should be cited from their original source. This noted at the bottom of each page of data in EPS, and at the bottom of each data table in EPSC.



Fig. 2 EPS User's Guide

## **III. The BLM Planning Process**

This section reviews the BLM planning process and describes how EPS and EPSC can be used to enhance both process and outcomes. Figure 3 provides an overview of the BLM planning process, and indicates responsibility for each stage, while the sections below describe ways that EPS and EPSC data may be used in the process.





## Conduct Scoping / Identify Key Issues

Scoping helps identify issues to be considered in the planning process. Many of the issues raised during



scoping have social and economic dimensions that can be clarified by consulting EPS and EPSC profiles. The scoping process is an appropriate time for planning staff or consultants to access the EPS and EPSC systems from the Sonoran Institute website (<u>www.sonoran.org/eps</u>), and prepare profiles for the counties and communities within the planning area.

BLM Handbook H-1601-1

## Figure 4: Land Use Planning Handbook

Consider making relevant profiles accessible to BLM staff as well as the public by posting pdf versions onto the RMP website.

The scoping process is an ideal time to hold an Economic Strategies workshop. Bringing together community members, agency staff and interest groups in a collaborative setting can set a positive tone for the entire planning process. On the economic strategy workshop requirement for RMPs, see the BLM Land Use Planning Handbook, App. D; Sec. III. B.

### Collect Data and Analyze the Management Situation

After issues are identified and the planning criteria established, BLM staff and consultants must assemble data concerning the natural resources and environmental conditions of the planning area, including social and economic conditions.

Drawing on these data, the Analysis of the Management Situation (AMS) describes the current conditions and trends of the resources and the uses/activities in the planning area in sufficient detail to create a framework from which to resolve the planning issues through the development of alternatives. The AMS is a key planning document that is often referred to for guidance as the plan is implemented.

Much of the data used in the BLM socioeconomic baseline assessment can be



derived from EPS and EPSC profiles. The profiles also contain data that allow conditions and trends within the planning area to be put into a regional or national context, which is a key aspect of interpreting the data.

### Formulate Alternatives

Alternatives form the basis of choices that will be made in the RMP. Considering a reasonable range of alternatives helps the BLM and its partners understand the various ways of addressing the planning issues and different scenarios for management of the resources and uses in the planning area. Development of alternatives should draw on the management opportunities identified in the AMS. Each alternative includes desired outcomes (goals and objectives), and the allowable uses and actions anticipated to achieve those outcomes. Planners should identify social and economic opportunities and constraints relevant to shaping the planning alternatives. Where applicable, the alternatives should also reflect environmental justice considerations (see below).

The BLM must estimate and describe the physical, biological, economic, and social effects of implementing each alternative considered in detail, including the no action alternative (43 CFR 1610.4-6). This analysis should provide adequate information to evaluate the direct, indirect, and cumulative impacts of each alternative in order to determine the best mix of potential planning decisions to achieve the identified goals and objectives.

#### Estimate Effects of Alternatives

The analysis of alternatives for current and new residents, as well as visitors, should consider effects on social and economic conditions. The analysis of effects should reflect the socio-economic themes identified in the Analysis of the Management Situation, for example rapid population growth or declining value of certain resource uses.

Data relating to social, demographic and economic issues should be presented in a coherent manner that allows the reader to understand in what ways individuals, firms, and communities within the planning area depend on the public lands. Context is particularly important in assessing the significance of effects of various alternatives.

EPS and EPSC are not economic impact analysis tools. They do not provide estimates of the direct and indirect economic effects of changes in resource use. Nonetheless EPS/C can supplement impact estimates by providing a context within which to assess the impacts provided by models such as IMPLAN.

#### Select the Preferred Alternative

In this stage, the BLM identifies a preferred alternative from the range of alternatives in the draft RMP/EIS. The preferred alternative should be the one that best reflects the purpose and need identified earlier in the planning process, and best resolves identified planning issues. Social and economic factors may be important in selecting the preferred alternative.

### Implement the Plan

Following the Record of Decision, plan implementation begins. Once the plan is finalized, EPS can be used to track changes in social and economic conditions since it is updated annually. Because EPSC incorporates data from the Decennial Census, it is only updated every ten years – but it may still provide a useful baseline for comparisons with more recent data collected from other sources.

## **IV. Environmental Justice Considerations**

Environmental Justice involves the fair treatment and meaningful involvement of all people--regardless of race, ethnicity, national origin, or income--in the development, implementation, and enforcement of environmental laws, regulations, and policies. Executive Order 12898, issued in 1994, requires that "each Federal agency shall make achieving Environmental Justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

Socio-economic analysis should include baseline information about minority, tribal, and low-income populations in the Affected Environment section, and should evaluate potentially adverse effects on such populations in the Environmental Consequences section. EPSC is particularly useful in identifying information relevant to environmental justice considerations. For further information see Section IV (Environmental Justice Requirements) in the BLM Land Use Planning Handbook, Appendix D.

Type of Data	Page of Profile	Use
Race, Ethnicity	2	May suggest areas where traditional cultural land uses are important, i.e. Native American religious uses, gathering of forest products, etc.
Language	16	May suggest need for educational materials, signage and public meetings to be made accessible to non-English speakers
Poverty by Age and Sex; Poverty by Race and Ethnicity; Poverty by Household Type	14-15	Points out which groups in a community are succeeding and which may be struggling
Educational Attainment; School Enrollment	11	Can help to understand what kinds of land uses, industries and occupations are appropriate for the community
Place of Birth, New Residents Since 1995	7	Can point to conflicts over land uses between long-time residents and newcomers
Seasonal Workers; Income by Work Status	12	Reveals level of dependence on seasonal tourism or seasonal changes related to institutions of higher learning

## Table 2. EPSC Data on Demographic Trends

## V. Land Use Changes across the West: Common Trends

Examining different types of data and interpreting them in meaningful ways is key to understanding "big picture" changes on public lands, and essential in crafting effective land use plans. EPS and EPSC data are particularly well-suited to identifying trends that may determine the most important planning issues. The following sections illustrate four common West-wide trends: the decline of traditional extractive industries, an increase in economic diversification, rapid population growth in areas adjacent to public lands, and the aging and retirement of the baby boomer generation.

## **Trend 1: The Declining Importance of Extractive Industries**

In most areas of the West, the share of personal income and employment derived from logging, mining, grazing and other extractive industries shares has steadily decreased over the past thirty years. In many areas of the West, the income generated by commodity production has been dwarfed by growth in personal income in both the service and professional and non-labor sectors. Despite declines in resource dependent economies, many areas of the West are growing while their economies diversify.

To gauge how much the relative importance of income earned from extractive industries has changed in a given planning area, see Personal Income, on pages 30-31 of an EPS profile. The Personal Income graph (Figure 6) below is typical for the western U.S. in that it shows considerable growth in non-labor income and the services and professional sector. Agriculture, manufacturing (including forest products) and mining account for smaller proportions of the county's total personal income than they did in 1970 or 1980.

Comparing these data with state and national trends provides the context to understand the significance of the local situation. Page 12 of an EPS profile compares county Income Growth to the state and nation, and shows how well the local economy recovers from recessions.



Figure 6. Personal Income 1970-2000, Dolores County, Colorado

As Figure 6 shows, personal income sources have changed substantially over time. An accompanying chart in the profile gives more detail about those changes, including how much new income is generated by each sector.

Information about changes in employment by sectors is provided by the **Employment** graphs and charts on pages 28-29 of the EPS profile.

Other changes that may accompany shifts in income sources and employment sectors include fluctuations in average earnings per job, per capita income, and income distribution. EPS provides information on each of these measures.

Page 14 shows how Average Earnings per Job may have changed as the job base shifted, while page 15 describes trends in Per Capita Income (which includes non-labor income). Both of these pages compare county trends to those of the state and nation and evaluate local economic resiliency against recessions. Page 14 lists reasons why average earnings per job may have declined. This data should be compared with information about **Household Income Distribution** on page 5. In some locations, average earnings per job have declined, but income distribution has become more equitable, with fewer very poor households and more middle class ones. This is due largely to the increase in non-labor income (although these figures are not adjusted for inflation, which also accounts for some of the change).

Table 3 identifies types of EPS data that reflect changes in the composition of a local economy.

Type of Data	Page	Use		
Personal Income 30-3		To see changes in personal income over time		
Income Growth	10	To see how county economic growth compares to the state and		
Comparison	12	nation		
Employment 28-29		To see changes in employment over time		
Average Earnings per Job 14		To see how earnings from jobs have changed		
Per Capita Income	15	To see how individuals have fared in the changing economy		
Household Income		To soo how households have fored in the changing economy		
Distribution	5	To see now nousenoids have lared in the changing economy		

## Table 3: EPS Data on Economic Change

## Trend 2: Increased Economic Diversification

One measure of success is economic diversity, or the lack of specialization. Communities heavily reliant on only a few industries are more vulnerable to economic fluctuations, such as boomand-bust cycles in mining, or climate and trade impacts on agriculture.

EPS profiles offer several means of gauging the degree to which a county's economy is diverse. Page 23 of the Profile offers an **Employment Diversity Index** (Figure 7) that compares the county's aggregate economy to the U.S. median, and gives more specific information about how particular economic sectors compare to the U.S. as a whole.



■ Dolores County, Colorado ■ United States

Figure 7. Comparison of Employment Share by Industry Between Dolores County, CO and the U.S. as a Whole

A common perception is that new jobs within the Services and Professional category are low-paid, lowskilled tourism-related jobs such as restaurant and hotel workers. However, a hallmark of communities near public lands that are successfully negotiating economic change is the growth of higher paid service sector jobs, such as those in the health, business, and legal professions. Detailed information about the growth or decline of various economic sectors is available in the **Employment** data on pages 28-29 and the **Personal Income** data on pages 30-31 of an EPS profile. To gauge whether an area is attractive to entrepreneurs looking to start a new business, examine the **Proprietors** data on pages 8 and 9 of an EPS profile. As page 9 notes, an increasing number of proprietors can be either a positive or negative sign. Growth of proprietor employment and income can be a sign that opportunities for entrepreneurship exist, especially when considered with the data on **Firms by Industry** and **Firms by Size** (pp. 16-18). Growth of proprietors can also mean that an increasing number of people in the community want (or need) side jobs in addition to their wage and salary employment. To see if this is the case, look for other potential stress indicators in this profile: **Unemployment Trends** (p. 19), **Earnings per Job** (p. 14), **Per Capita Income** (p. 15), and **Housing Affordability** (p. 5).

Tables 4 and 5 summarize the types of data useful for understanding sectoral change and diversification.

Type of Data	Page	Use		
Personal Income	30-31	To see changes in personal income over time		
Employment Diversity 23		To evaluate how diverse the county economy is compared to state and national economies, and discover where diversity lies		
Employment by Industry, 1970 and 2000	28-29	To determine which economic sectors are growing or declining		
Proprietors	8-9	To determine if the area is attractive to new businesses and which size of businesses have been most prevalent		
Firms by Industry	16	To see which types of businesses have been most prevalent over time		
Firms by Industry and Size	17-18	To assess which types of businesses are most numerous and how many people they employ		
Unemployment Trends	19	To evaluate how the local job market has fared over time		
Earnings per Job	14	To determine whether economic changes have resulted in higher or lower wages		
Per Capita Income	15	To determine whether economic changes have increased overall personal income		
Agriculture Business Information	21	To gather more detail about changes in the agricultural economy over time		
Housing Affordability	5	To assess the local cost of living		

## Table 4: EPS Data on Economic Diversity

### Table 5: EPSC Data on Economic Diversity

Type of Data	Page	Use		
Employment by Industry	5	To get information on employment by sector and gender		
Place of Work; Commute Time	6	To determine how dependent residents are on local jobs, services and retailers		
Income Distribution 8-9		To assess the economic health of the community		

## Trend 3: Rapid Population Growth

Demographic shifts can affect property values, lead to changed land uses, and raise new management challenges. Rapid population growth is a key trend in many western counties.

Maricopa County, Arizona, which includes the Phoenix metropolitan area, has grown by more than 2 million people, or 236% over the past 32 years (Figure 8). Here as in many other western counties, open space is becoming more valuable economically and ecologically as it becomes scarcer.



Figure 8. Population Trends, Maricopa County, Arizona





Page 2 of an EPS profile provides **Population Trends** since 1970. The percentage growth rate and total number of new residents are provided. This page also provides a **Population Comparison** (Figure 9) that compares county population growth to state and national averages, and examines whether population growth has been impacted by economic recessions.

The Maricopa County example is typical of many areas in the West where extremely rapid population growth may alter land management priorities.

Many of the new residents of Maricopa County, as in other areas, have come as retirees or to fill service and professional jobs created by knowledge-based industries. But rapid population growth can drive the demand for housing above the supply, pushing housing prices beyond what many local residents can afford. This can cause sprawl into formerly open areas or push population growth into surrounding towns, which then become bedroom communities. It can also create a growing gap between "haves" and "have-nots."

Page 5 of an EPS profile includes information on **Housing Affordability**, while pages 3-4 of an EPSC profile give **Housing** data such as ownership versus rentals, seasonal homes, and home construction by decade. Page 6 of an EPSC profile reveals **Place of Work** data such as the percentage of residents who work in town versus the number of commuters, method of commute, and commuting times. Page 7 gives **In-Migration** data such as Place of Birth and New Residents Since 1995.

### Table 6: EPS Data on Demographic and Economic Trends

Type of Data	Page	Use			
Population Growth, Population Trends	2	To see population growth rates over the past 30 years and compare them to state and national growth rates			
Housing Affordability	5	To determine whether the average family can afford the median home			

### Table 7: EPSC Data on Demographic and Economic Trends

Type of Data	Page	Use		
Housing	3-4	Data on various housing-related factors such as seasonal housing, home construction by decade, rentals, income paid to rent, etc.		
Place of Work	6	Commuting information		
In-Migration		Shows where new residents were born or relocated from		

## Trend 4: Retirement of the Baby Boomers

Many retirees are choosing the quieter lifestyle and attractive landscapes offered by communities near public lands. These "equity refugees" often sell larger houses in more expensive cities to seek communities that offer easy access to areas for recreation—hiking, fishing, bird watching, and similar activities. This trend will accelerate in the coming decades as the Baby Boom generation retires. Retirees can breathe new life into communities by patronizing local businesses and increasing the demand for services, and they are apt to favor places with varied recreational opportunities and adequate health services. The experience and commitment they may bring to BLM planning efforts can also be a boon. Page 4 of an EPS profile provides several types of **Age and Gender** information useful for exploring this trend: a **2000 Breakout**, **Change in Population**, and **Change in Share of Total** (Figure 10).

EPSC contains other data that will help determine whether the area is attractive to retiring baby boomers and other new residents. Page 7 of an EPSC profile gives **In-Migration** information such as **Place of Birth** and the percentage of **New Residents Since 1995**.



## Figure 10. Population Change by Age Group, 1990 - 2000

One of the most important attributes that baby boomers may bring with them is non-labor income (typically income from pensions, social security, or investments). In many western counties the non-labor component of **Personal Income** (EPS p. 30) predominantly represents income brought in by retirees, second-home buyers, and others who have a choice about where they will locate, since they are less likely to be tied to jobs in the local economy. Maintaining a high quality of life, including recreational opportunities on public lands, can be essential to keeping this source of income flowing into the local economy. Note that most non-labor income is "basic." It comes to local economies as new dollars from outside the region and offers a healthy multiplier effect for local businesses.

### **Table 8: EPS Data on Retirement Patterns**

Type of Data Page		Use	
Age and Gender 4		Illustrates changing proportions of residents of various ages to determine whether retirees are a significant proportion of the local population	
Personal Income	30	To gauge the economic effects of baby boomers by looking at the importance of non-labor income (retirement and investment income)	

## **Table 9: EPSC Data on Retirement Patterns**

Type of Data Pa		Use		
In-Migration 7 Info		Information about new residents such as Place of Birth and New Residents Since 1995		

## **VI.** Conclusions

The socio-economic components of BLM planning documents can play an important role in ensuring that plans not only achieve management goals, but maximize the benefits for affected communities. Using EPS/C allows more time and resources to be allocated to other aspects of socio-economic assessments.

In preparing resource management plans, the Economic Profile System and EPSC can:

- Simplify socio-economic data gathering and analysis
- Make it easier to fulfill NEPA and FLPMA requirements
- Create a common base of understanding in the planning process
- Understand local demographic and economic trends over the past 30 years
- Identify new land management issues that arise from a changing economy
- Understand the role of natural resources in the local economy
- Understand the context within which private and public land use decisions are made
- Provide indicators to use when monitoring important socio-economic changes
- Track local, regional and national trends through annual EPS/C data updates.

Please see the Sonoran Institute website at <u>www.sonoran.org/eps</u> to download EPS/C and the User's Manual without charge.



# The Sonoran Institute is a non-profit organization which brings diverse people together to achieve their conservation goals in western North America, from Mexico to Canada.

The Sonoran Institute's collaborative "begin with the end in mind" approach brings a wide variety of viewpoints to the discussion of conservation. Public and private land managers, environmental advocates, ranchers, builders and developers, local officials, community groups, and other interested people have learned that informed, strategic cooperation can produce the best results with the highest probability for long-term success.

The Sonoran Institute partners with the USDI Bureau of Land Management on a range of projects in support of planning, community development, and cooperative conservation, including the EPS Tools and Understanding Your Economy workshops.

For more information, please see the Sonoran Institute website, <u>www.sonoran.org</u>, or call (406) 587-7331.

## Appendix

## Checklist for Socio-Economic Analysis: Resource Management Plan / Environmental Impact Statement

	Торіс	Planning Relevance	Examples	Relevant EPS or EPSC Data
DEMOGRAPHY AND SOCIAL INDICATORS	population	potential demand on BLM lands and resources	population trends; distribution by age and gender	<ul> <li>Population: EPS p. 2, 3</li> <li>Age, gender: EPS p. 4; EPSC p. 1</li> <li>Seasonal, recreational rentals in Vacant Units table, EPSC p. 3</li> </ul>
	inequality	Differences in visibility and influence; identify vulnerable populations (environmental justice)	income distribution; percent of households in poverty;	<ul> <li>Income distribution: EPS p. 5; EPSC p. 8, 9</li> <li>Poverty by age &amp; gender: EPSC p. 14</li> <li>Poverty by race &amp; family type: EPSC p. 15</li> </ul>
	social difference	barriers to public involvement; different user needs and values; identify distinctive populations (environmental justice)	ethnicity; languages spoken in household; tribal affiliation	<ul> <li>Race &amp; ethnicity: EPSC p. 2</li> <li>Poverty by race: EPSC p. 15</li> <li>Language: EPSC p. 16</li> <li>Tribal affiliation: Run EPSC profile for specific tribes by name</li> </ul>
	social indicators	can indicate community strengths and weaknesses that may have implications for planning issues	crime rates, divorce rates, unemployment, education, length of residence	<ul> <li>Unemployment: EPS p. 19</li> <li>Education: EPSC p. 11</li> <li>Place of work, commuting: EPSC p. 6</li> <li>Place of birth, new residents since 1995: EPSC p. 7</li> <li>Commuting flows: EPS p. 20</li> </ul>
SOCIAL ORGANIZATION AND INSTITUTIONS	communities of place	local and regional population centers relative to planning area	gateway communities; natural resource- dependent communities	• Run EPS and EPSC profiles for all counties and communities in planning area

	Торіс	Planning Relevance	Examples	<b>Relevant EPS or EPSC Data</b>
ATTITUDES AND VALUES	values and beliefs regarding local environment and its use	Local understandings may shape acceptability of proposed land use decisions [formal techniques: surveys, interviews, focus groups]	survey to clarify local understanding of effects of coal bed methane technology on ground-water conditions	• Review p. 28-29 and 30-31 of EPS profiles to see how employment and personal income have changed and to get some idea of where the economy is headed
	attitudes regarding proposed land management actions	while public attitudes are elicited in scoping, formal data collection can identify important differences between groups, providing further information to help identify impacts and mitigation strategies [formal techniques: surveys, interviews, focus groups]	interviews to assess social impacts of prescribed burning	<ul> <li>Refer to race, ethnicity, language, age, gender, and poverty info in EPSC profiles to identify major groups</li> <li>Race &amp; ethnicity: EPSC p. 2</li> <li>Poverty by race: EPSC p. 15</li> <li>Language: EPSC p. 16</li> <li>Tribal affiliation: Run EPSC profiles for specific tribes</li> <li>Poverty by age &amp; gender: EPSC p. 14</li> <li>Poverty by race &amp; family type: EPSC p. 15</li> </ul>

	Торіс	Planning Relevance	Examples	Relevant EPS or EPSC Data
	quality of life	can indicate community perceptions that may have implications for planning issues	perceived access to community resources; satisfaction with community conditions, such as opportunities for employment	<ul> <li>Income distribution: EPS p. 5; EPSC p. 8, 9</li> <li>Poverty by age &amp; gender: EPSC p. 14</li> <li>Poverty by race &amp; family type: EPSC p. 15</li> <li>Housing affordability: EPS p. 5; EPSC p. 4</li> <li>Seasonal workers, income by work status: EPSC p. 12</li> <li>Educational attainment and school enrollment: EPSC p. 11</li> <li>Employment recession recovery: EPS p. 7</li> <li>Job growth compared to state and nation: EPS p. 7</li> <li>Personal income recession recovery: EPS p. 12</li> <li>Income growth compared to state and nation: EPS p. 12</li> <li>Earnings per job over time: EPS p. 14</li> <li>Per capita income over time: EPS p. 15</li> <li>Unemployment trends: EPS p. 19</li> <li>Performance Comparisons: EPS p. 25</li> </ul>
HUMAN GEOGRAPHY	distribution of communities, roads, and resources	clarify geo- spatial context; can predict potential conflicts and impacts over proposed land use allocations	wildland-urban interface, recreational demand from nearby cities	• Seasonal, recreational rentals in Vacant Units table, EPSC p. 3
ECONOMIC VALUE	products and uses of the assessment (study) area	regional economic sectors and their interrelation	annual receipts from manufacturing, agriculture, mining, tourism	<ul> <li>Employment by Industry: EPS p. 28-29</li> <li>Personal Income by Source: EPS p. 30-31</li> <li>Employment by Industry by Gender: EPSC p. 5</li> </ul>
EMPLOYMENT, INCOME, AND SUBSISTENCE	Employment	change in relative significance of various economic sectors	jobs from government, construction, agriculture	<ul> <li>Employment by Industry: EPS p. 28-29</li> <li>Employment by Industry by Gender: EPSC p. 5</li> </ul>

	Торіс	Planning Relevance	Examples	Relevant EPS or EPSC Data
	income	change in relative significance of various economic sectors	non-labor income (dividends, transfer payments)	• Personal Income by Source: EPS p. 30-31
	economic diversity and resilience	ability of stakeholder communities to respond to external change	level of dependence on single economic sector	<ul> <li>Employment Diversity Index: EPS p. 23</li> <li>Personal Income Stability vs. State and Nation: EPS p. 24</li> <li>Population growth recession recovery: EPS p. 3</li> <li>Employment recession recovery: EPS p. 7</li> <li>Personal income recession recovery: EPS p. 12</li> </ul>
PUBLIC FINANCE AND GOVERNMENT SERVICES	government revenues and expenditures	fiscal capacity and resilience under change	county PILT receipts	<ul> <li>Population growth recession recovery: EPS p. 3</li> <li>Employment recession recovery: EPS p. 7</li> <li>Personal income recession recovery: EPS p. 12</li> </ul>
ENVIRON- MENTAL JUSTICE (EJ)	characterize Environmental Justice populations in planning area	Demography and Social Indicators: inequality, social difference	Much of the commercial harvesting of non-timber forest products in Pacific Northwest is organized through ethnic networks	<ul> <li>Income distribution: EPS p. 5; EPSC p. 8, 9</li> <li>Poverty by age &amp; gender: EPSC p. 14</li> <li>Poverty by race &amp; family type: EPSC p. 15</li> <li>Race &amp; ethnicity: EPSC p. 2</li> <li>Poverty by race: EPSC p. 15</li> <li>Language: EPSC p. 16</li> <li>Tribal affiliation: Run EPSC profile for specific tribes by name</li> </ul>