2F

BWIP Repository Project

**Working Draft
Interim Profile Report
Socioeconomic Conditions in Cultural
Communities: The Nez Perce Tribe,
The Confederated Tribes of the
Umatilla Indian Reservation and the
Confederated Tribes and Bands of
the Yakima Indian Nation**

P. A. Stokowski

E. A. Friedli

November 1987

**Prepared by
Battelle Human Affairs Research Centers
for the Pacific Northwest Laboratory
under Contract DE-AC06-76RLO 1830
for the U. S. Department of Energy**

**Pacific Northwest Laboratory
Operated for the U.S. Department of Energy
by Battelle Memorial Institute**

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor Battelle Memorial Institute, nor any of their employees, makes any warranty, expressed or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or Battelle Memorial Institute. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof, or Battelle Memorial Institute.

PACIFIC NORTHWEST LABORATORY
operated by
BATTELLE MEMORIAL INSTITUTE
for the
UNITED STATES DEPARTMENT OF ENERGY
under Contract DE-AC06-76RLO 1830

PNL-6386
BHARC-800/87/021
UC-70

BWIP Repository Project

WORKING DRAFT

INTERIM PROFILE REPORT
SOCIOECONOMIC CONDITIONS IN CULTURAL COMMUNITIES:
THE NEZ PERCE TRIBE, THE CONFEDERATED TRIBES OF THE
UMATILLA INDIAN RESERVATION AND THE CONFEDERATED
TRIBES AND BANDS OF THE YAKIMA INDIAN NATION

P. A. Stokowski
E. A. Friedli

November 1987

Prepared by
Battelle Human Affairs Research Centers
for the Pacific Northwest Laboratory
under Contract DE-AC06-76RLO 1830
for the U.S. Department of Energy

Pacific Northwest Laboratory
Richland, Washington 99352

TABLE OF CONTENTS

1.0	Background and Overview	1
1.1	Overview of the BWIP Program	1
1.2	Purpose of the BWIP Socioeconomic Profile Reports	2
1.3	Overview of the Study Area Described in the Profile Report.....	3
1.4	Organization of This Profile Report.....	5
2.0	Methods	6
2.1	Quality Assurance Context	6
2.2	Secondary Data Collection, Compilation, and Analysis.....	6
2.3	Primary Data Collection.....	7
2.4	Data Storage and Access	7
3.0	Profile of Socioeconomic Conditions in Cultural Communities.....	9
3.1	Land Area and Ownership.....	9
3.2	Tribal Affiliation and Enrollment Status.....	11
3.3	Residential Mobility.....	13
3.4	Demographic Characteristics	14
3.5	Educational Characteristics.....	18
3.6	Economic Characteristics	20
3.7	Housing Characteristics.....	31
4.0	Outstanding Technical issues and Data Requirements.....	33
4.1	Obtain Additional Information about the Population and Household Characteristics of the Reservation Communities and Other Comparable Populations.....	33
4.2	Obtain Additional Information about the Economic Characteristics of the Reservation Communities and other Comparable Populations	33
4.3	Obtain More Current and Comprehensive Information about the Social, Political, and Community Characteristics of the Affected Tribes.....	34
4.4	Identify a "Comparable Population" and Establish a Database that Allows Analysis and Interpretation of Descriptive Information about the Reservation Communities	34
5.0	References	35

LIST OF TABLES

TABLE 1. Land Area of the Nez Perce, Umatilla, and Yakima Reservations, 1976	9
TABLE 2. Tribal Composition and Enrollment Status for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980	11
TABLE 3. Residential Mobility for American Indians Living on the Nez Perce, Umatilla, and Yakima Reservations, 1980	13
TABLE 4. Age and Gender Composition for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980	14
TABLE 5. Family Composition for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980	15
TABLE 6. Marital Status for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980	17
TABLE 7. Educational Characteristics of American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980	18
TABLE 8. School Enrollment for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980	19
TABLE 9. Labor Force Status of American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1979	20
TABLE 10. Source of Employment for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980	21
TABLE 11. Occupations of American Indians Residing on the Nez Perce, Umatilla, and Yakima Reservations, 1980	22
TABLE 12. Employment in Selected Industries for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980	23
TABLE 13. Number of Weeks Worked by American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1979	24
TABLE 14. Income Characteristics for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980	25
TABLE 15. Income in 1979 Below Specified Poverty Levels for the Nez Perce, Umatilla, and Yakima Reservations	27
TABLE 16. Health Services and Benefits for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1979	29
TABLE 17. Characteristics of Housing Units for the Nez Perce, Umatilla, and Yakima Reservations, 1980	31

LIST OF FIGURES

FIGURE 1. Ceded Territory and Reservations of Affected Indian Tribes.....	4

1.0 BACKGROUND AND OVERVIEW

1.1 Overview of the BWIP Program

By the end of this century, the Federal Government plans to begin operating the first geologic repository for permanent disposal of commercial spent nuclear fuel and high-level radioactive waste. The Office of Civilian Radioactive Waste Management (OCRWM) of the U.S. Department of Energy (DOE) is responsible for implementing the Nuclear Waste Policy Act of 1982 (NWPAA). In the NWPAA, Congress approved geologic disposal by declaring that one of the key purposes of the NWPAA is to "establish a schedule for the siting, construction, and operation of repositories that will provide a reasonable assurance that the public and the environment will be adequately protected from the hazards posed by high-level radioactive waste and such spent nuclear fuel as may be disposed of in a repository" (42 USC §111(b)(1) (1982)).

The NWPAA specifies the process for selecting a repository site and involving the public in the siting decision. The DOE's final siting guidelines (10 CFR Part 960) further detail the steps leading to the siting decision. Following this process, in February, 1983, the DOE identified nine potentially acceptable sites for the first repository. These sites were evaluated in accordance with the DOE's siting guidelines. The results of these evaluations were reported in Draft Environmental Assessments (EAs), which were issued for public review and comment in December, 1984. The final EAs were issued in May, 1986. Chapter 4 of each EA included a description of site characterization activities and an analysis of the potential for environmental and socioeconomic impacts resulting from these activities. At that time, the Secretary of Energy identified five sites as suitable for site characterization and recommended three sites for characterization as candidate sites for the first repository. On May 28, 1986, the President approved characterization at three of these sites: Deaf Smith, Texas; Yucca Mountain, Nevada; and Hanford, Washington. This formally began the site characterization phase of the repository siting process. Site characterization is expected to last approximately seven years.

Issue resolution strategies have guided, and will continue to guide, the design of the site characterization activities at the BWIP Site. As part of this effort, the DOE will prepare a Site Characterization Plan (SCP) that describes in some detail the site, the proposed site characterization activities, and plans for decommissioning the exploratory shaft facility (ESF) and mitigating any significant environmental impacts caused by site characterization should the site be decommissioned. A significant part of the site characterization effort (which will be described in the SCP) will be research performed from the ESF. At each of the three proposed sites, one or more shafts will be sunk to the level where the potential repository would be built. Underground drifts connecting these shafts and underground rooms will be excavated so that tests and measurements can be made. In addition to the ESF, extensive surface-based field studies will be implemented during site characterization. These studies, which represent a significant level of effort, include surveys of soil conditions, monitoring of seismic activity, geologic and

hydrologic investigations at the ground surface and in boreholes not hydrologically connected with the ESF, and selected environmental reviews. Technical descriptions of the environmental and socioeconomic studies to be undertaken during site characterization will be provided in the Environmental and Socioeconomic Monitoring and Mitigation Plans (MMPs) and Comprehensive Environmental and Socioeconomic Plans (CEP and CSP).

The Mined Geologic Disposal System Program administers the overall site characterization effort for the Repository Program, and is responsible for site selection and repository construction. At BWIP, this program is organized into eight components: (1) Systems Engineering; (2) Waste Package Engineering; (3) Site Characterization; (4) Repository Design; (5) Regulatory and Institutional Activities; (6) Exploratory Shaft; (7) Test Facilities; and (8) Program Management. To implement the site characterization phase of the repository program, a work force of management, technical, and support services workers will be employed and a variety of materials and services will be procured. The program will pay taxes and make Payments Equal to Taxes (PETT) to state, county, and local government units. The program also involves extensive regulatory and institutional activities that include communication and liaison with other federal agencies, and with state, tribal, and local governments.

1.2 Purpose of the BWIP Socioeconomic Profile Reports

The BWIP Socioeconomic Profile Reports are designed to provide information about the characteristics of the communities in which socioeconomic impacts from BWIP may occur. The Profile Reports present a compilation of historical information about socioeconomic conditions in the affected communities. These reports are designed to provide a transition between the BWIP EA, published in 1986, the Monitoring Reports, and other technical reports associated with the BWIP SMMP and CSP. The principal objectives of the Profile Reports are to update the DOE BWIP socioeconomic database by compiling available secondary and primary data and to make this information available to both the DOE program and other interested parties. The initial Profile Reports will help identify the need for additional data. The database developed for the profiles will assemble socioeconomic data in a uniform, readily accessible format.

A series of BWIP Socioeconomic Profile Reports are being prepared. This report is one of the first set of five separate BWIP Profile Reports, which cover the following topics:

- Economic/Demographic Conditions;
- Fiscal Conditions;
- Housing Characteristics;
- Public Services and Facilities; and
- Socioeconomic Conditions in Cultural Communities.

The Profile Reports will be supported by an Interim Monitoring Report on BWIP Project Characteristics, which will provide information until SMMP implementation about the work force, purchases, and tax payments of the BWIP Program. The Interim Monitoring Report on BWIP Project Characteristics will include data from a survey of the BWIP work force that was conducted in August, 1987.

1.3 Overview of the Study Area Described in the Profile Report

The areas covered in this profile report include the present-day reservation lands of the tribes designated as "Affected Indian Tribes" for the purposes of the Nuclear Waste Policy Act: the Nez Perce Tribe, the Confederated Tribes of the Umatilla Indian Reservation, and the Confederated Tribes and Bands of the Yakima Indian Nation.

The Nez Perce Reservation occupies nearly 90,000 acres in northern Idaho, covering portions of Nez Perce, Lewis, Clearwater, and Idaho counties. Its tribal headquarters and major population center are located in the town of Lapwai, situated along the Clearwater River, a tributary of the Snake River and the major drainage through the reservation's dry, upland terrain. U.S. Highway 95 crosses the reservation from north to south, and U.S. Highway 12 crosses the reservation from east to west. Lapwai is about 80 miles east of the Tri-Cities.

The Umatilla Reservation occupies nearly 250,000 acres in northeastern Oregon, covering most of Umatilla County. Its tribal headquarters and major population center are located outside of the town of Pendleton, along the Umatilla River, which is a tributary of the Columbia and the major drainage through the reservation's rolling crop fields. Interstate 84 and the main line of the Northern Pacific Railway cross the reservation from southeast to northwest. The tribal headquarters is about 60 miles southeast of the Tri-Cities.

The Yakima Reservation occupies almost 1.4 million acres in central Washington, covering portions of Yakima and Klickitat counties. Its tribal headquarters and major population center are located in Toppenish, with additional population centers in the communities of Wapato and White Swan. The eastern portion of the reservation is relatively level, dry, and used for irrigated agriculture or livestock. The Yakima River, a major tributary of the Columbia, forms the reservation's eastern boundary. The western portion of the reservation extends to the main ridge of the Cascade Range; the land is a mix of ponderosa and fir forests, alpine meadows, and rugged mountain slopes. Interstate 82 and the Northern Pacific railway both cross the reservation along its eastern edge. Toppenish is about 60 miles from the Tri-Cities, although only about 30 miles from the western edge of the Hanford Site.

FIGURE 1. Ceded Territory and Reservations of Affected Indian Tribes.

1.4 Organization of This Profile Report

This report is divided into five sections. Section 2 summarizes the methods used to compile and analyze the data presented in the report. It includes a discussion of the Quality Assurance context within which the data were collected, analyzed, and stored; a definition of the variables and time period included in the profile; a description of the secondary data collection, compilation, and analysis procedures used in preparing the report; and a summary of the database management system that will be used to store and provide access to the data presented in the report. Section 3 contains the profile information, organized by topic. A combination of tables, figures, and text are used to describe the socioeconomic characteristics of the cultural communities. Section 4 summarizes outstanding technical issues and data requirements, and Section 5 provides a bibliography of the documents from which the data in this report were obtained.

2.0 METHODS

2.1 Quality Assurance Context

The Quality Assurance Program of Battelle's Pacific Northwest Laboratories ensures that researchers conduct activities in a planned and controlled manner and verify the quality of their results. Quality assurance for the data reported here is guided by PNL-MA-60, Quality Assurance Manual for License-Related Programs (Battelle 1985). PNL-MA-60 is designed to satisfy the requirements of NQA-1-1983, 10 CFR 50 Appendix B, and DOE-RL Order 5700.1A, Quality Assurance.

OA Plan ED-29 specifies which elements of PNL-MA-60 must be implemented for the Basalt Waste Isolation Environmental and Socioeconomic Program. Technical procedures for data collection for the Basalt Waste Isolation Environmental and Socioeconomic Program are prepared in accordance with PNL Administrative Procedure (PAP) 501, Preparation, Review and Approval of Procedures (PNL-MA-60, Procedures for License-Related Programs, Vol. I).

The data reported in this profile report were collected in accordance with Technical Procedures SMP-101 and SMP-102, for documenting the collection of primary and secondary data, respectively (Battelle 1987a, 1987b). SMP-101, Documentation of Primary Data Collection, is designed to ensure that sound social science practices are used in the collection of data from individual respondents, through direct observations, or from primary historical records, and that methods for data collection have been documented. SMP-102, Documentation of Secondary (Documentary) Data Collection, is designed to ensure that complete and accurate attribution is made for all secondary data cited in any project report.

Data traceability is provided through the application of procedures spelled out in SMP-101 and SMP-102. Reference to the source and origin of all data, whether collected from primary or secondary sources, will be provided through a comprehensive and integrated database management system. The database management system will permit information on the source of data collected as part of different tasks to be catalogued, cross referenced, and retrieved from a central point.

2.2 Secondary Data Collection, Compilation, and Analysis

The purpose of this report is to provide a profile of the social and economic characteristics of the Indian communities of the Nez Perce, Umatilla, and Yakima reservations. To this end, data from a number of sources have been reviewed, but the research has concentrated primarily on the special reports about Indian reservations compiled by the U.S. Bureau of the Census. Many of the data in the report were taken from the 1980 Census of the Population for the states of Washington (Yakima Reservation), Oregon (Umatilla Reservation), and Idaho (Nez Perce Reservation), and from the 1980 Special Census Report on American Indians, published by the U.S. Bureau of the Census.

While census data for Indian populations contain errors, these errors occur largely in states that have relatively small Indian populations (Passel and Berman 1987). Oregon, Idaho, and Washington are considered to have relatively reliable census data on Indian residents, and these data serve as a beginning for our socioeconomic profiling effort.

Other sources were reviewed to provide an historical overview of the Indian population on these three reservations, but the data were, in many cases, either not available or not comparable to the 1980 data. For example, census data were available for counties but not for reservations prior to 1970; data were available only for reservation areas of a certain size (2,500 or more Indian population in 1960 and 1950); or geographical boundaries changed so dramatically that reservation lands and population could not be compared for different years. Furthermore, prior to 1950, no special reports on Indians were compiled by the Bureau of the Census.

After potential sources were reviewed, tables were constructed to summarize and highlight important socioeconomic characteristics of the Indian population on the three reservations. Because the census data are accumulated through sampling, some figures may vary between tables due to extrapolation errors inherent in the census.

The 1980 U.S. census was conducted primarily through self-enumeration, using either a short-form or a long-form questionnaire that was sent to all households. In addition, a special census called the Supplementary Questionnaire for American Indians was administered by a census enumerator to households on Indian reservations. The special Indian census data were gathered by direct interviews; only those households receiving a short-form regular census questionnaire, and having at least one American Indian, Eskimo, or Aleut household member, were visited. The specific sampling procedures and more detailed data collection information are presented in Appendix C, "General Enumeration and Processing Procedures," of the 1980 Census of Population.

2.3 Primary Data Collection

No primary data were collected.

2.4 Data Storage and Access

To support the profiling effort, a database system is needed that supports multiple users and networks and provides access, security, integrity, and synchronization. Both research specialists and casual users need the data to be available on an ad hoc as well as a production basis, and they need to be able to access any combination of data elements. To meet quality assurance requirements, the data in the system must be modifiable only by authorized personnel who follow specified procedures, and the system must be constructed and operated in a manner that assures the data are accurate, without inconsistencies or anomalies in design or values.

In order to meet these requirements, the BWIP Socioeconomic Program is establishing a relational database in which the data presented in this report will be stored. A relational database is best suited to the storage and retrieval of the quantity and type of information included in the profile reports. It represents the data in tables and provides commands that allow manipulation of the data to create new tables that contain the data elements of particular interest. In this database system, Standard Query Language (SQL) will be used because it provides the necessary power, ease of use, flexibility, and accessibility. SQL is emerging as a standard for database languages. The database management system (DBMS) will use INGRES, a well-known commercial software program that provides access level authorization, journaling, and built-in referential integrity for related data elements. An expanded data dictionary structure will be provided in the database system to facilitate system access and use. The dictionary, coupled with a basic knowledge of SQL, will enable the user to access needed information quickly and easily while protecting data integrity and security. To further ensure data integrity, software control procedures are being implemented for database creation and maintenance.¹ For ease of use, the system will support multiple users and networks.

---

¹The database design for the relational database model will be based on Entity-Relationship diagramming, using Yourdon-DeMarco data flow diagrams for analysis. The relationships have been put into Third Normal Form, with referential keys identified.

3.0 PROFILE OF SOCIOECONOMIC CONDITIONS IN CULTURAL COMMUNITIES

3.1 Land Area and Ownership

TABLE 1. Land Area of the Nez Perce, Umatilla, and Yakima Reservations, 1976

Reservation	Total Acreage	Tribal Ownership	Allotted	Government-Owned	Non-Indian Land
Nez Perce Reservation	87,496	34,185	53,311	0	0
Umatilla Reservation	245,799	15,646	70,616	0	159,537
Yakima Reservation	1,367,405	842,978	274,988	23	249,416

Adapted from U.S. Department of Commerce 1974.

Table 1 compares the land area of the three affected Indian tribes' reservations by ownership status. Of the three, the Yakima Reservation covers the greatest area, containing nearly 1.4 million acres within its boundaries. Approximately 62 percent of this area, or more than 840,000 acres, is tribal land.² About 20 percent, or 275,000 acres, is held by individual allottees or their heirs,³ while more than 18 percent, or 250,000 acres within the Yakima Reservation's boundaries, is owned by non-Indians.⁴ The relatively small amount of government-owned land on the reservation is used by various federal agencies.⁵

² Tribal Lands: Lands to which a tribe or tribes hold title. Also, lands set aside by treaty, Congressional statute, or Executive Order to be held in trust by the U.S. government for the benefit of a designated tribe or tribes. Tribal trust lands may not be sold without Congressional authorization.

³ Allotted Lands: Lands to which individual Indians or groups of Indian individuals hold title by the authority of the General Allotment Act of 1887, its amendments, or special allotment legislation. The General Allotment Act authorized the allocation of reservation land parcels to individual Indians, usually 160 acres to household heads, 80 acres to others, and double those amounts if the land was suitable only for grazing. Title to the allotted land was to remain in U.S. government trust for 25 years, after which it was to be conveyed to the Indian allottee. The trust period was instituted to protect the allottee from immediate state taxation, with the idea that the time could be used to learn agricultural and business acumen.

⁴ Non-Indian Land: Land within the boundaries of the reservation to which non-Indians hold title. This land typically passed into non-Indian ownership due to allotment, as lands left over after allottees were granted their parcels were then placed in the public domain and usually made available for sale on the open market. Other former reservation land passed into non-Indian ownership when Indian allottees, at the end of the temporary trust period, either sold their allotments, or failed to meet their state and local property tax obligations, and had their lands sold by local authorities to recover unpaid taxes.

⁵ Government-Owned Land: Land to which the U.S. government holds title, but not specifically for the benefit of a tribal trustee. Such land is typically under the jurisdiction of the U.S. Department of Agriculture (National Forest Service, Soil Conservation Service) the U.S. Department of the Interior (National Park Service, Bureau of Land Management, Bureau of Reclamation, Fish and Wildlife Service), or one of the branches of the Armed Services.

The Umatilla Reservation today, with about 245,800 acres, is less than one-fifth the size of the Yakima Reservation. It has been more heavily affected by allotment. About 15,000 acres, or 6 percent of the area within the reservation's boundaries, are tribally owned. Just less than 30 percent of the reservation land area is allotted to Indians, while 65 percent of the land within the Umatilla Reservation is owned by non-Indians.

The Nez Perce Reservation is the smallest of the three, containing about 87,500 acres. About 61 percent of the Nez Perce Reservation has been allotted to individual Indians and their heirs, and the remaining 29 percent is held in tribal ownership. The current reservation does not include any land area owned by non-Indians.

3.2 Tribal Affiliation and Enrollment Status

TABLE 2. Tribal Composition and Enrollment Status for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Total American Indians				Enrolled in Tribe		
	Total	Male	Female	Total	%	Male	Female
Nez Perce Reservation							
Total Persons on Reservation	17,806						
Total American Indians	1,499	736	763	1,287	85.9	619	668
Colville	35	16	19	33	94.3	14	19
Nez Perce	1,173	577	596	1,055	89.9	511	544
Yakima	39	17	22	39	100.0	17	22
All other American Indians	252	126	126	160	63.6	77	83
Umatilla Reservation							
Total Persons on Reservation	2,619						
Total American Indians	901	402	499	749	83.1	322	427
Cayuse	46	20	26	36	78.7	17	19
Nez Perce	62	29	33	51	82.6	24	27
Umatilla	399	179	220	357	89.4	158	199
Walla-Walla	70	27	43	62	88.8	26	36
Yakima	155	52	103	148	95.1	47	101
All other American Indians	169	95	74	95	56.1	50	45
Yakima Reservation							
Total Persons on Reservation	25,363						
Total American Indians	4,946	2,421	2,525	4,350	87.9	2,125	2,225
Arapaho	30	19	11	24	79.9	15	9
Blackfoot	95	56	39	80	83.9	45	35
Chippewa	40	19	21	33	80.9	18	15
Colville	169	81	88	153	90.4	74	79
Navajo	31	13	18	19	59.6	6	13
Nez Perce	91	35	56	69	75.8	23	46
Puget Sound Salish	76	30	46	63	83.2	23	40
Sioux	45	24	21	23	50.2	15	8
Umatilla	44	17	27	41	94.7	14	27
Warm Springs	83	43	40	77	92.5	39	38
Yakima	3,762	1,836	1,926	3,476	92.4	1,693	1,783
All other American Indians	480	248	232	292	60.9	160	132

Adapted from U.S. Department of Commerce 1986 (Table 4).

Table 2 shows the total 1980 resident population, tribal affiliation, and enrollment status for Indians living on the Nez Perce, Umatilla, and Yakima reservations. Not all persons who live on reservation lands are Native Americans. In fact, only 1,499 persons (8 percent) of a total 17,806 who live on the Nez Perce Reservation report that they are Indians. The percentage is higher on the Yakima Reservation, where about 19 percent (4,946 persons) of the total reservation residents are Indians. The total number of Indians on the Umatilla Reservation (901 persons) comprise 34 percent of the total reservation residents.

Table 2 also outlines the tribal affiliation of Indians living on each of the three reservations in 1980.⁶ While the largest percentage of Indians on each reservation belong to the tribes and bands in whose name the reservation lands were vested, Indians of other affiliations also live on each reservation. For example, 1,173 Nez Perce Indians lived on the Nez Perce Reservation, along with 35 Colville Indians, 39 Yakima Indians, and 252 Indians of other tribal affiliations. Not all Indian people maintain tribal membership; the category entitled "Enrolled in Tribe" indicates the percentage of Indian residents who are enrolled tribal members in each of the tribes represented on the Nez Perce, Umatilla, and Yakima reservations.

---

⁶The data presented in this table include only tribes of 30 or more Indians. Data about the total Indian population on the Yakima Reservation are available from the 1950, 1960, and 1970 censuses, but these figures are not comparable to more recent data due to changes in the boundaries of the reservation and to sampling procedures.

3.3 Residential Mobility

TABLE 3. Residential Mobility for American Indians Living on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Nez Perce		Umatilla		Yakima	
	Total	%	Total	%	Total	%
Persons 1 Year and Older	1,472		881		4,810	
Residence in 1979						
Same house	1,076	73.1	719	81.6	3,859	80.2
Different house in USA	334	22.7	129	14.6	780	16.2
On this reservation	178	12.1	59	6.7	611	12.7
On another reservation	51	3.5	22	2.5	54	1.1
Off reservation	106	7.2	48	5.4	116	2.4
Abroad	0	0	0	0	5	0.1
Not reported	62	4.2	34	3.9	166	3.5
Year last moved onto this reservation						
1979 or 1980	198	13.5	107	12.1	299	6.2
1975 to 1978	203	13.8	161	18.3	421	8.8
1970 to 1974	149	10.1	88	10.0	237	4.9
1960 to 1969	67	4.6	46	5.2	288	6.0
1950 to 1959	23	1.6	22	2.5	103	2.1
1949 or earlier	27	1.8	34	3.9	123	2.6
Always lived on this reservation	746	50.7	387	43.9	2,982	62.0
Not reported	59	4.0	36	4.1	356	7.4

Adapted from U.S. Department of Commerce 1986 (Table 24).

Table 3 profiles the residential mobility patterns for Indians living on the Nez Perce, Umatilla, and Yakima reservations. In 1980, only about 4 percent of the Indian persons on the Yakima Reservation had lived there less than one year; these persons had moved there from an off-reservation residence. This compares with about 8 percent of the Indian residents on the Umatilla Reservation and about 11 percent on the Nez Perce Reservation. About 3 percent of the Indian residents on the Umatilla Reservation in 1980 and 4 percent of the Indian residents on the Nez Perce reservation had moved there from another reservation.

A majority of the Indian residents of the Yakima and Nez Perce reservations in 1980 had always lived on those reservations (62 percent and 51 percent, respectively, compared with 44 percent of the Indian residents on the Umatilla Reservation). Over 72 percent of the Indians on the Yakima Reservation had lived there for ten or more years in 1980, or had lived on that reservation their whole life. This is a considerably higher percentage than on the Umatilla Reservation (about 56 percent) or the Nez Perce Reservation (almost 59 percent).

A relatively high percentage of Indian residents of the Umatilla Reservation (18 percent) had moved to that reservation between 1975 and 1978. Indian residents of the Nez Perce and Umatilla reservations were more likely (27 percent and 30 percent, respectively) than residents of the Yakima Reservation (15 percent) to have moved to that reservation since 1974.

3.4 Demographic Characteristics

TABLE 4. Age and Gender Composition for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Nez Perce Reservation				Umatilla Reservation				Yakima Reservation			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
Total Persons	1,501	100.0	739	762	903	100.0	404	499	4,948	100.0	2,424	2,524
Under 5 Years	168	11.2	85	83	97	10.7	46	51	605	12.2	315	290
5 to 14	372	24.8	185	187	213	23.6	90	123	1,188	24.0	621	567
15 to 19	169	11.3	91	78	106	11.7	51	55	637	12.9	306	331
20 to 24	131	8.7	61	70	53	5.9	24	29	477	9.6	225	252
25 to 44	358	23.9	168	190	224	24.8	105	119	1,157	23.4	538	619
45 to 64	195	13.0	97	98	122	13.5	55	67	626	12.7	316	310
65 and Older	108	7.2	52	56	88	9.7	39	55	258	5.2	103	155
Median Age	21.4				23.1				20.5			

Adapted from U.S. Department of Commerce 1986 (Tables 5 and 21).

Table 4 illustrates the age and sex distribution for Indians living on the Nez Perce, Umatilla, and Yakima reservations in 1980. For Indians on each reservation, the number of females slightly exceeds the number of males, with this difference most prominent among persons aged 20-44 years. The Indian population on the Yakima Reservation was slightly younger than the Indian population on the other two reservations: 49 percent of all Indians on the Yakima Reservation were under 20 years of age, compared with 47 percent on the Nez Perce Reservation and 46 percent on the Umatilla Reservation. Overall, the Indian population on each reservation was younger than the state of Washington as a whole; 31 percent of state residents were under 20 years of age in 1980 (Washington Office of Financial Management 1986).

Family Composition

TABLE 5. Family Composition for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Nez Perce	Umatilla	Yakima
All Indian persons	1,500	903	4,948
Families with one or more American Indian, Eskimo, or Aleut	379	235	1,202
% with own children under 18 year	62.6%	54.8%	67.6%
Families with American Indian, Eskimo, or Aleut householder or spouse	370	228	1,164
% with own children under 18 years	62.5%	54.4%	67.8%
Persons per family	4.18	4.16	4.45
Families with American Indian, Eskimo, or Aleut householder	322	196	1,065
% with own children under 18 years	62.2%	53.1%	68.6%
Married couple families	212	119	625
Female householder, no husband present	91	61	355
Persons per family	4.19	4.17	4.57
Total Indian householders			
Family householder or spouse	370	228	1,164
Non-family householder	81	42	200
Persons under 18 years			
% living with two parents	59.9%	49.2%	48.0%

Adapted from U.S. Department of Commerce 1986 (Tables 6 and 22).

Table 5 shows family composition for Indian persons living on the Nez Perce, Umatilla, and Yakima reservations. The term "family" refers to a householder together with one or more other persons related by birth, marriage, or adoption living in the same housing unit. Indian families are categorized by the Bureau of the Census according to whether the householder is a Native American, whether the householder or spouse is Native American, or whether any Native American persons are members of the family.

Regardless of family composition, the average size of the family was relatively consistent across all three reservations in 1980. The number of persons per family for Indian families on the Nez Perce and Umatilla reservations was approximately 4.2; Indian families on the Yakima Reservation were slightly larger, with about 4.5 persons per family. The percentage of families with their own children differed markedly among the three reservations ("own children" are sons and daughters who have not married and are under 18 years of age; this includes step-children and adopted children). Fewer Indian families on the Umatilla Reservation have children (about 55 percent) than families on the Nez Perce Reservation (62 percent) or the Yakima Reservation (almost 68 percent). These data are consistent with Table 4, which

showed that the Indian population on the Yakima and Nez Perce reservations was slightly younger than on the Umatilla Reservation.

Fewer than half of all persons under 18 on the Yakima and Umatilla reservations lived in a household with two parents and only 60 percent of all persons under 18 on the Nez Perce Reservation lived in a household with two parents. In 1980, for the state of Washington as a whole, 79 percent of all persons under 18 lived in a household with two parents (U.S. Department of Commerce 1983f: Table 64).

Families headed by Indian women constitute about 33 percent of all families headed by Yakima Indians, and about 32 percent of all families headed by Umatilla Indians. On the Nez Perce Reservation, families headed by Indian women constituted about 28 percent of all families headed by Indians. For the state of Washington as a whole, female-headed households constitute 26 percent of all households in 1980 (U.S. Department of Commerce 1983f: Table 64).

Marital Status

TABLE 6. Marital Status for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Total Persons	Single	Now Married	Separated	Widowed	Divorced
Nez Perce						
Male, 15 Years and Older	467	172 36.8%	222 47.5%	12 2.6%	23 4.9%	38 8.1%
Female, 15 Years and Older	493	129 26.2%	230 46.7%	27 5.5%	52 10.5%	55 11.2%
Total	960	301	452	39	75	93
Umatilla						
Male, 15 Years and Older	267	105 39.3%	122 45.7%	8 3.0%	10 3.7%	22 8.2%
Female, 15 Years and Older	325	100 30.8%	130 40.0%	17 5.2%	46 14.2%	32 9.8%
Total	592	205	252	25	56	54
Yakima						
Male, 15 Years and Older	1,488	582 39.1%	705 47.4%	58 3.9%	44 3.0%	99 6.7%
Female, 15 Years and Older	1,667	514 30.8%	668 40.1%	138 8.3%	176 10.6%	171 10.3%
Total	3,155	1,096	1,373	196	220	270

Adapted from U.S. Department of Commerce 1986 (Table 21).

Table 6 shows the marital status of Indian persons on the Nez Perce, Umatilla, and Yakima reservations in 1980. Of Indian persons aged 15 years and over on each of the three reservations, a substantially larger percentage of males than females were single, and a slightly larger percentage of males than females were married. A substantially higher percentage of females than males were separated or widowed. Although these patterns held across all three reservations, the percentage of single and widowed persons varied by reservation. It should be noted that the Bureau of the Census does not make a distinction between "traditional" Indian marriages and those recognized by the civil authority.

3.5 Educational Characteristics

TABLE 7. Educational Characteristics of American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Nez Perce	Umatilla	Yakima
Total Persons on Reservation	17,806	2,619	25,363
Total American Indian Persons	1,500	903	4,948
Persons 3 Years and Over Enrolled in School	571	342	1,833
Persons 3-34 Years: % Enrolled	58.4%	60.9%	55.6%
Persons 5-19 Years: % Enrolled	52.8%	52.9%	48.5%
Persons 16-19 Years: % not Enrolled in School, not High School Graduates	15.1%	17.2%	30.6%
Persons 18-24 Years			
Number	179	96	695
% High School Graduates	55.2%	54.1%	48.9%
% 4 or More Years of College	0	0	0.7%
Persons 25 Years and Older	660	434	2,041
Male	315	193	957
% High School Graduates	64.6%	57.8%	53.0%
Median School Years Completed	12.4	12.2	12.1
Female	345	241	1,084
% High School Graduates	55.5%	55.4%	49.8%
Median School Years Completed	12.2	12.2	12

Adapted from U.S. Department of Commerce 1986 (Tables 7 and 23).

Table 7 describes 1980 school enrollment and educational characteristics for Indians living on the Nez Perce, Umatilla, and Yakima reservations. On each of these reservations, only half of those students aged 5-19 had graduated or were enrolled in school in 1980: 53 percent on the Nez Perce Reservation, 53 percent on the Umatilla Reservation, and 49 percent on the Yakima Reservation.

Among the high school-aged Indian population (ages 16-19) on the Yakima Reservation, almost 31 percent were neither enrolled in school nor high school graduates, a substantially higher percentage than on the Nez Perce Reservation (15 percent) or on the Umatilla Reservation (17 percent). Correspondingly fewer Indian young adult reservation residents (ages 18-24) had graduated from high school: about 49 percent on the Yakima Reservation, 55 percent on the Nez Perce Reservation, and 54 percent on the Umatilla Reservation. The percentage of adult Indian reservation residents (25 years of age and over) who had graduated from high school was generally only slightly higher than the percentage of young adult graduates. These data can be compared with data for the state of Washington as a whole, where 85 percent of those ages 16-19 were high school graduates or enrolled in school in 1980, and 78 percent of those ages 18-24 were high school graduates (U.S. Department of Commerce 1983f: Table 66).

School Enrollment by Type of School

TABLE 8. School Enrollment for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Total	Tribal School	BIA School	Other Public School	Other Private School	Not Reported
Nez Perce						
Nursery School	34	11	3	12	0	8
Kindergarten	34	2	0	31	0	1
Elementary	320	1	0	299	0	20
High School	150	12	7	118	1	12
College	32	1	0	27	1	3
Total	570	27	10	487	2	44
Percent	100.0%	4.7%	1.8%	85.4%	0.4%	7.7%
Umatilla						
Nursery School	22	9	3	7	0	4
Kindergarten	34	1	1	30	0	1
Elementary	168	1	0	154	0	13
High School	89	8	5	72	1	4
College	28	1	0	26	0	1
Total	341	20	9	289	1	23
Percent	100%	5.9%	2.6%	84.7%	0.3%	6.7%
Yakima						
Nursery School	122	49	12	28	6	27
Kindergarten	100	8	3	78	2	9
Elementary	995	22	6	883	22	63
High School	456	47	14	356	5	34
College	159	18	5	107	13	15
Total	1,832	144	40	1,452	48	148
Percent	100%	7.9%	2.1%	79.3%	2.6%	8.1%

Adapted from U.S. Department of Commerce 1986 (Table 23).

Table 8 shows the distribution of Indian students among four types of schools: tribal schools, Bureau of Indian Affairs schools, other public schools, and other private schools. In 1980, about 85 percent of the Indian students living on the Nez Perce and Umatilla reservations, and 80 percent of the Indian students living on the Yakima Reservation, were attending public schools other than BIA or tribal schools. Between 5 and 8 percent of Indian students on these reservations were attending tribal schools.

3.6 Economic Characteristics

Labor Force Status

TABLE 9. Labor Force Status of American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1979

	Total	Nez Perce			Total	Umatilla			Total	Yakima		
		%	Male	Female		%	Male	Female		%	Male	Female
Persons 16 years and older	924				573				3,006			
Persons in labor force in 1979	670	72.5	363	307	407	71.1	205	202	2,107	70.1	1,145	962
Worked in 1979	634	68.6	350	284	402	70.2	201	202	2,021	67.2	1,107	914
Paid job: business or farm	616		341	275	389		199	190	1,966		1,087	879
Traditional work	17		8	9	13		2	11	55		20	35
Did not work in 1979	36	3.9	13	23	5	0.7	4	1	87	2.9	38	49
Not in labor force 1979	255	27.6	69	166	165	28.8	55	110	898	29.9	278	620

Adapted from U.S. Department of Commerce 1986 (Tables 9 and 25).

Table 9 displays data on labor force status and participation rates for Indians ages 16 years and over living on the Nez Perce, Umatilla, and Yakima reservations in 1979. In this table, a person who worked in 1979 or who had any weeks of covered unemployment is considered to be in the labor force. On the Nez Perce Reservation, 670 persons (almost 72 percent of the 924 Indians aged 16 years and over) were considered to be in the labor force in 1979, while 255 (28 percent) were not. The labor force participation rates were similar for Indian persons living on the Umatilla and Yakima reservations. According to these data, the labor force participation rate for Indian women for each of the reservations was substantially lower than that for men (between 61 and 65 percent, compared to about 80 percent). For the state of Washington as a whole, the labor force participation rate for persons 16 years and older in 1980 was 63.4 percent. There was a slightly higher rate in the urban areas (64.4 percent) than in the rural areas (60.4 percent) of the state (U.S. Department of Commerce 1983f: Table 67).

Source of Employment

TABLE 10. Source of Employment for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Nez Perce				Umatilla				Yakima			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
Total civilians working in 1980 reference period ^a	468		255	213	296		155	141	1,532		860	672
Private wage and salary workers	173	36.9	120	53	126	42.6	72	54	501	32.7	305	196
Tribal or Indian-owned business	33		19	14	15		9	6	179		101	78
Private ownership business	140		101	39	110		63	47	322		205	118
Tribal government workers	126	26.9	61	65	84	28.4	48	36	594	38.8	295	299
Federal government workers	91	19.4	32	59	54	18.2	19	35	198	12.9	131	67
BIA & Indian health service workers	53		19	34	39		11	28	123		80	43
State or local government workers	49	10.4	21	28	20	6.8	5	15	101	6.6	37	64
Self-employed workers	28	5.9	21	7	12	4.1	11	1	124	8.1	85	39
In agriculture	28		21	7	12		11	1	124		85	39
Unpaid family workers	1	0.2	0	1	0	0	0	0	14	0.9	7	7
In agriculture	1		0	1	0		0	0	14		7	7

^aTotal persons 16 years old and working in 1979 were: Nez Perce 634, Umatilla 402, Yakima 2,021.

Adapted from U.S. Department of Commerce 1986 (Table 26).

Table 10 summarizes the sources of employment⁷ for Indian persons who lived on the Nez Perce, Umatilla, and Yakima reservations in 1980. Private (incorporated) businesses employed the largest percentage of Indian workers in 1980. About 30 percent of the Nez Perce, 37 percent of the Umatilla, and 21 percent of the Yakima Indian workers were employed by private businesses that were not tribal or Indian-owned. About 12 percent of the Indian workers on the Yakima Reservation were employed by a tribal or Indian-owned business (compared to 7 percent on the Nez Perce and 5 percent on the Umatilla reservations).

Tribal governments and the federal government were also important employers. More Indian residents of the Yakima Reservation were employed by the tribal government than by private business (594 and 501 persons, respectively). On the Nez Perce and Umatilla reservations, the federal government employed a higher percentage of the working women (28 and 25 percent, respectively) than the working men (13 and 12 percent, respectively). On all three reservations, state and local government provided a higher percentage of the jobs held by Indian women than by Indian men.

⁷Self-employed workers are categorized as "private wage and salary workers" if their business is incorporated (i.e., if they are paid workers), but are categorized as "self-employed" if their business or profession is unincorporated. "Total civilians working in the 1980 reference period" refers to persons aged 16 years and over who were working at the time of the census and who worked in the month prior to the census.

Occupational Characteristics

TABLE 11. Occupations of American Indians Residing on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Nez Perce		Umatilla		Yakima	
	Total	%	Total	%	Total	%
Total civilians working in 1980 reference period	468	100.0	300	100.0	1,532	100.0
Managerial and professional specialty	66	14.1	39	13.0	235	15.3
Executive, administrative, managerial	31		14		80	
Professional specialty	35		25		155	
Technical, sales, and administrative support	123	26.3	82	27.3	343	22.4
Technologists and technicians	12		15		38	
Sales	7		14		58	
Administrative support, including clerical	104		53		247	
Service occupations	77	16.5	50	16.7	292	19.1
Private household services	2		3		4	
Other services	75		47		28	
Farming, forestry, and fisheries	34	7.3	25	8.3	247	16.1
Precision production, craft, and repair	46	9.8	32	10.7	143	9.3
Operators, fabricators, and laborers	105	22.4	63	21.0	222	14.5
Traditional occupations	17	3.6	9	3.0	50	3.3
Tribal government	13		8		33	
Native healers	0		0		0	
Sheep workers	0		0		0	
Artists and performers	1		0		9	
Jewelers	0		0		0	
Handworking						
Beaders	3		1		6	
Carvers	0		0		0	

Adapted from U.S. Department of Commerce 1986 (Table 27).

Table 11 describes the occupations of Indian persons aged 16 years and older who lived on the Nez Perce, Umatilla, and Yakima reservations in 1980. Approximately one quarter of those working during the reference period worked in technical, sales, and administrative support occupations (26 percent of the Nez Perce, 27 percent of the Umatilla, and 22 percent of the Yakima). Between 15 and 22 percent of the Indian workers on these reservations were operators, fabricators, or laborers, and between 17 and 19 percent worked in the service occupations. In 1980, between 13 and 15 percent of the Indian workers on these reservations were managers or professional specialists. A relatively high percentage of the Yakima Indian workers were engaged in farming, forestry, and fisheries occupations (16 percent). Relatively few (3 to 4 percent) of the Indian workers on any of these reservations were engaged in traditional occupations.

Employment by Industry

TABLE 12. Employment in Selected Industries for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Nez Perce				Umatilla				Yakima			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
Total civilians working in 1980 reference period	469	100	256	214	297	100	155	141	1,532	100%	861	671
Agriculture, forestry, fisheries	35	7.5	24	11	19	6.4	18	1	258	16.8	215	43
Mining	0	0	0	0	0	0	0	0	1	0.1	1	0
Construction	49	10.4	45	4	25	8.4	25	0	114	7.4	110	3
Manufacturing	76	16.2	62	14	49	16.5	28	20	169	11.0	105	64
Transportation, communications, other public utilities	7	1.5	7	0	19	6.4	13	5	73	4.8	63	9
Wholesale trade	1	0.2	1	0	5	1.6	5	0	7	0.5	6	1
Retail trade	26	5.5	7	19	18	6.0	8	10	115	7.5	36	79
Finance, insurance real estate	20	4.3	8	12	6	2.0	3	3	13	0.8	7	6
Services	107	22.8	36	71	86	29.0	24	62	390	25.5	111	278
Business and repair	8		6	2	6		3	2	17		15	2
Personal, entertainment, recreation	7		3	4	7		4	3	42		19	23
Professional and related	92		27	65	73		16	57	331		78	253
Public administration	148	31.6	65	83	71	23.9	32	39	393	25.7	206	187
Total civilians working in industries located on the reservation	341	72.7			181	54.2			1,172	76.5		

Adapted from U.S. Department of Commerce 1986 (Table 26).

Table 12 presents a profile of the industries in which American Indians on the Nez Perce, Umatilla, and Yakima reservations worked in 1980. The term "total civilians working in the 1980 reference period" refers to persons aged 16 years and older who were working at the time of the census or during a specified period in 1980. For all three reservations, over 50 percent of the Indians working in the 1980 reference period were employed in either service industries or public administration. Manufacturing industries provided the next most important source of employment for Indians living on the Nez Perce and Umatilla reservations, while agriculture, forestry, and fisheries provided the next most important source of employment for Indians living on the Yakima Reservation. Between 7 and 10 percent of the Indians on these reservations who were working during the reference period were employed in construction industries.

In 1980, about 77 percent of the Yakima workers and 73 percent of the Nez Perce workers were employed in industries located on the reservation, compared to only 54 percent of the Umatilla workers. For all three reservations, more females were employed in service industries than males, and more men than women were employed in manufacturing, construction, and agriculture, forestry and fisheries industries.

Number of Weeks Worked

TABLE 13. Number of Weeks Worked by American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1979

	Nez Perce				Umatilla				Yakima			
	Total	%	Male	Female	Total	%	Male	Female	Total	%	Male	Female
Persons 16 years and older	924				573				3,006			
Total persons worked in 1979	634	68.6	350	284	402	70.2	201	201	2,021	67.2	1,107	914
50-52 weeks	251		140	111	148		71	75	863		516	377
40-49 weeks	59		36	23	56		29	27	178		99	79
27-39 weeks	91		52	39	53		29	24	218		132	86
14-26 weeks	85		44	41	54		34	20	296		157	139
1-13 weeks	148		78	70	93		39	54	437		205	232
Persons working < 50 weeks, 1979	383	60.4	210	173	255	63.4	130	125	1,218	60.3	662	536
Main reason for working < 50 weeks												
Personal reasons	119	31.1	47	72	121	47.4	48	73	38.5	193	276	
Seasonal job	101	26.3	63	38	40	15.6	22	18	22.8	180	98	
Slack work	36	9.4	28	8	25	9.8	19	6	6.6	57	24	
Did not want work	7	1.8	1	6	1	0.4	1	0	1.0	6	7	
Could not find work	25	6.5	17	8	14	5.5	10	4	7.3	63	26	
% Unemployed 15 or more weeks	34.2				34.4				33.7			

Adapted from U.S. Department of Commerce 1986 (Tables 9 and 25).

Table 13 shows the number of weeks worked in 1979 by Indian persons living on the Nez Perce, Umatilla, and Yakima reservations. Persons aged 16 years and older were considered to be "working" if they received pay, or worked in a family or tribal business, or were active in the Armed Forces. During 1979, about 70 percent of the Indians 16 years of age and older living on the Nez Perce, Umatilla, and Yakima reservations were considered to be working. On all three reservations, less than 40 percent of working persons worked for 50 weeks or more, and about 20 percent worked for fewer than 14 weeks.

The most common reasons for working less than 50 weeks (a full year) were "personal reasons," such as family illness, child care, school, pregnancy, or retirement, or "seasonal job," such as those in agriculture, construction, or retail selling. Only a small percentage gave "could not find work" or "did not want work" as the main reason for working less than 50 weeks.

Income Characteristics

TABLE 14. Income Characteristics for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Nez Perce		Umatilla		Yakima	
	Total	Median Income	Total	Median Income	Total	Median Income
American Indian, Eskimo, or Aleut Householder						
Households	403	\$10,154	238	\$10,594	264	\$10,485
Families	322	\$11,364	196	\$11,134	1,065	\$10,933
Married Couple Families	212	\$13,996	119	\$13,384	625	\$15,013
Single Female Householder	91	\$5,216	61	\$7,968	355	\$6,223
Persons 15 Years and Older With Income						
Male	416	\$5,231	238	\$5,864	1,303	\$6,172
Female	369	\$3,778	264	\$3,241	1,243	\$3,250

Adapted from U.S. Department of Commerce 1986 (Table 28).

Table 14 displays the median incomes for Indian householders and persons 15 years of age and older living on the Nez Perce, Umatilla, and Yakima reservations in 1979. In this table, the median income for households and families includes households and families with no income. The median income computed for persons includes only persons 15 years of age and older who have income.

On all three reservations, the median income of Indian households headed by single females was substantially lower than the median income of all Indian households. On the Nez Perce Reservation, the median income of these female-headed households was only 51 percent of the median income of all Indian households. (This compares to 75 percent and 59 percent on the Umatilla and Yakima reservations, respectively.)

On each reservation, the median income of Indian males was higher than the median income of Indian females. The difference was least on the Nez Perce Reservation, where the median income of females was 72 percent that of males, and greatest on the Yakima Reservation where the median income of females was only about 53 percent that of males. The median income of Indian persons on each reservation was substantially lower than the median income of persons throughout the states in which the

reservations are located.⁸ The differences were particularly striking for Indian men, whose median income was less than 50 percent that of men in each state as a whole (46 percent for Nez Perce, 46 percent for Umatilla, and 44 percent for Yakima men). The median income of Indian women on the Yakima Reservation was only about 53 percent of the median for women throughout Washington state, but the median income of Indian women on the Nez Perce Reservation was 89 percent of the median for women throughout Idaho. The actual dollar figures are shown in Table 14.

---

⁸ The median incomes for persons 15 years and older with income for each state are:

	<u>Males</u>	<u>Females</u>
Idaho	\$11,443	\$4,521
Oregon	\$12,761	\$5,106
Washington	\$14,007	\$6,172

Sources: U.S. Department of Commerce 1983d, 1983e, 1983f.

Poverty Levels

TABLE 15. Income in 1979 Below Specified Poverty Levels for the Nez Perce, Umatilla, and Yakima Reservations

	American Indian, Eskimo, Aleut Householder			% Persons ^a
	% Households	% Married Couple Families	% Female-Headed Households	
Nez Perce				
Below poverty level	35.0	18.1	57.0	30.4
Below 75% of poverty level	27.2	11.8	51.6	23.1
Below 125% of poverty level	46.3	28.6	69.3	41.3
Below 150% of poverty level	55.0	39.5	77.0	52.0
Umatilla				
Below poverty level	30.8	20.9	43.9	30.5
Below 75% of poverty level	20.7	11.3	41.1	22.4
Below 125% of poverty level	46.3	33.0	68.5	49.6
Below 150% of poverty level	52.4	41.6	70.3	55.4
Yakima				
Below poverty level	37.3	23.1	59.9	38.7
Below 75% of poverty level	28.4	16.1	46.8	28.6
Below 125% of poverty level	47.2	32.4	74.6	50.2
Below 150% of poverty level	53.9	38.8	82.3	57.8

^aIn the State of Washington, 9.8%, 6.2%, 13.7%, and 17.6% of persons were below these four categories of poverty.

Adapted from U.S. Department of Commerce 1986 (Table 29); 1983f (Table 72).

Table 15 shows the percentage of households, families, and persons on the Nez Perce, Umatilla, and Yakima reservations below specified poverty levels in 1979.⁹ Among Indian householders on all three reservations, married couple families were the least likely, and female-headed households the most likely, to be below the poverty level in 1979. Approximately one-fifth of the married couple families on each reservation were below the poverty level (18 percent on the Nez Perce Reservation, 21 percent on the Umatilla Reservation, and 23 percent on the Yakima Reservation) and approximately one-third of all the households with an Indian householder were categorized as below poverty level (35 percent on the Nez Perce Reservation, 31 percent on the Umatilla Reservation, and 37 percent on the Yakima Reservation). Over half of the female-headed households on the Nez Perce and Yakima reservations were below the poverty level (57 percent and 60 percent, respectively); over 40 percent were below poverty level on the Umatilla Reservation (44 percent).

⁹As defined for the census, there is no one "poverty level." Poverty level is determined by income thresholds, which vary according to the size of the family, the number of children, and the age of the householder or person. Income levels are updated yearly to reflect variations in the Consumer Price Index. Some of the standards used by the 1980 US Bureau of the Census were as follows: for single persons under 65 years of age, the poverty level was \$3,774; for single persons 65 years and older, the poverty level was \$3,497; for a non-farm family of four, the poverty level was \$7,412. Since definitions of poverty level may vary, the Census Bureau presents a range of poverty level estimations; included in this table are four levels, from "below poverty level" to "below 150 percent of poverty level."

In general, a higher percentage of Indian persons and households on the Yakima Reservation were within each poverty category than on the Nez Perce and Umatilla reservations. A much higher percentage of Indian persons from all three reservations were within each poverty category than the average for the state of Washington. In 1979, Indian persons on the Nez Perce and Umatilla reservations were more than three times as likely to have incomes below the poverty level than the general population in Washington state, and Indian persons on the Yakima Reservation were nearly four times more likely than the general population to be below the poverty level.

Health Services and Benefits

TABLE 16. Health Services and Benefits for American Indians on the Nez Perce, Umatilla, and Yakima Reservations, 1979

	Nez Perce		Umatilla		Yakima	
	Total	%	Total	%	Total	%
Receipt of Benefits						
Households with an American Indian, Eskimo, or Aleut householder	403		238		1,264	
Received 1 or more benefits 1979	286	71.0	160	67.2	811	64.1
Did not receive benefits 1979	118	29.2	78	32.8	454	35.9
Persons 15 years and over	960		593		3,155	
Received 1 or more benefits 1979	460	47.9	258	43.5	1,404	44.5
Did not receive benefits 1979	500	52.1	335	56.5	1,751	55.0
Type of Benefits^a						
Households with an American Indian, Eskimo, or Aleut householder received 1 or more benefits from:						
Medicaid or Medicare	76	18.8	46	19.3	201	15.9
Food stamps	92	22.8	31	13.0	338	26.7
Federal Housing Assistance	43	10.7	51	21.4	89	7.0
Women, Infants, and Children (WIC)	87	21.6	47	19.7	274	21.7
Social Security	100	24.8	74	31.1	273	21.6
Supplemental security, U.S. government	26	6.5	5	2.1	88	6.9
Aid to Families With Dependent Children	52	12.9	18	7.6	93	7.3
BIA General Assistance	80	19.9	29	12.2	197	15.6
Other assistance or welfare benefits	78	19.4	31	13.0	179	14.2

^a Totals to more than 100% since persons may receive more than one benefit.

Adapted from U.S. Department of Commerce 1986 (Tables 8 and 30).

Table 16 details the social and health benefits received by Indian households and persons on the Nez Perce, Umatilla, and Yakima reservations in 1979. Different patterns of benefits were received by Indian households on the three reservations, although the proportion of the Indian population receiving one or more benefits was relatively constant. Approximately two-thirds of the households with an Indian householder received benefits from at least one source in 1979, with the range extending from 64 percent on the Yakima Reservation to 71 percent on the Nez Perce Reservation. For Indian persons aged 15 years and older, slightly less than one half received one or more benefits in 1979, with the percentage ranging from 44 percent on the Umatilla Reservation to 47 percent on the Nez Perce Reservation.

When benefits are ranked according to the percentage of households receiving them, patterns related to the economic and demographic characteristics of the Indian residents of each reservation emerge. On the Nez Perce Reservation, the benefits received most frequently by Indian households, in

rank order, were social security (24.8 percent of households); food stamps (22.8 percent); Women, Infants, and Children (WIC) aid (21.6 percent); BIA General Assistance (19.9 percent); and other (19.4 percent). On the Umatilla Reservation, the most frequently received benefits were Social Security (31.1 percent); Federal Housing Assistance (21.4 percent); WIC (19.7 percent); Medicaid or Medicare (19.3 percent); and food stamps (13.0 percent). On the Yakima Reservation, the five most frequently received benefits were food stamps (26.7 percent); WIC (21.7 percent); Social Security (21.6 percent); Medicaid or Medicare (15.9 percent); and BIA General Assistance (15.6 percent).

The high percentage of Indian households on the Yakima Reservation receiving food stamps and WIC aid is consistent with the generally higher level of poverty, larger numbers of young children, and higher proportions of female-headed households on this reservation. The greater importance of Social Security and Federal Housing Assistance among Indian households on the Umatilla Reservation reflects the older age of the Indian population there.

3.7 Housing Characteristics

TABLE 17. Characteristics of Housing Units for the Nez Perce, Umatilla, and Yakima Reservations, 1980

	Nez Perce		Umatilla		Yakima	
	Total	%	Total	%	Total	%
Occupied housing units	452	6.4	289	30.6	1,350	16.1
Owner-occupied units	276	61.1	160	59.5	831	61.5
Renter-occupied units	176	38.9	109	40.5	519	38.5
Persons in occupied housing units	1,651		997		5,420	
Persons per housing unit	3.65		3.70		4.01	
Median number of rooms						
Owner-occupied units	5.6		5.7		5.7	
Renter-occupied units	4.8		5.3		4.7	
Year structure built						
1979 to March 1980	18	3.9	7	2.6	58	4.3
1975 to 1978	105	23.2	83	30.8	224	16.6
1970 to 1974	85	18.8	77	28.6	308	22.8
1960 to 1969	65	14.3	37	13.8	180	13.3
1940 to 1959	80	17.6	30	11.1	329	24.3
1939 or earlier	98	21.7	35	13.0	252	18.6
Facilities						
Lack complete plumbing for exclusive use	17	3.8	4	1.5	36	2.9
No piped water in building	10	2.2	17	6.3	13	1.0
No complete kitchen facilities	14	3.1	2	0.7	32	2.6
No telephone	139	30.8	60	22.3	538	39.8
No electric lighting	0	0	0	0	2	0
Lack central heating system	129	28.5	102	7.9	432	32.0
Total Year-Round Housing Units on Reservation	7,009		829		8,395	

Adapted from U.S. Department of Commerce 1983a, 1983b, 1983c, (Table 102).

Table 17 describes characteristics of housing units with Indian occupants on the Nez Perce, Umatilla, and Yakima reservations in 1979. A significant difference across these reservations is the percentage of total year-round housing units that are occupied by Indian people. On the Nez Perce Reservation, only 6 percent of the total housing was occupied by Indian persons. The percentage was considerably higher on the Yakima Reservation (16 percent) and higher still on the Umatilla Reservation (30 percent), but on none of the three reservations did Indian people occupy even half of the total housing units on the reservation.

The characteristics of the Indian-occupied housing were generally similar for the Nez Perce, Umatilla, and Yakima reservations. For all three reservations, approximately 60 percent of the Indian-occupied housing units were owner-occupied. The owner-occupied units averaged approximately one room larger than the renter-occupied units. The number of persons living in Indian-occupied housing was

slightly higher on the Yakima Reservation (4.01), than on the Nez Perce (3.65) or the Umatilla reservations (3.70).

A substantial percentage of the housing occupied by Indian people on all three reservations was built since 1970 (46 percent on the Nez Perce Reservation, 62 percent on the Umatilla Reservation, and 44 percent on the Yakima Reservation). Almost 43 percent of the Indian-occupied housing on the Yakima Reservation was built before 1960. This compares with 39 percent on the Nez Perce Reservation, and 24 percent on the Umatilla Reservation.

A higher percentage of Indian-occupied housing on the Yakima Reservation lacked a central heating system (32 percent) and had no telephone (almost 40 percent), than did Indian-occupied housing on the Nez Perce or Umatilla reservations. This is consistent with the higher level of poverty and somewhat older housing found on the Yakima Reservation.

4.0 OUTSTANDING TECHNICAL ISSUES AND DATA REQUIREMENTS

The socioeconomic characteristics of the reservation communities are to be described and monitored in close consultation and coordination with tribal authorities. While coordination arrangements are still being discussed, preliminary secondary data have been compiled, principally from the U.S. Bureau of the Census. Time series analysis and comparisons with larger, regional populations are being designed and remain to be undertaken. Many of the secondary data about the three reservation communities available from non-Indian sources are contained in government reports and records. To date, only a small portion of these materials have been obtained and reviewed. In particular, the Portland Area Office of the Bureau of Indian Affairs is an untapped source of information regarding the three reservations.

Idiosyncracies of data collection and reporting create difficulties for analyzing trends in the socioeconomic conditions of the cultural communities over the last ten to twenty-five years. To more fully appreciate the significance of trends apparent in the profile data, some standards of comparison and additional data are needed. Consequently, the most pressing technical issues and data requirements are for additional, detailed information about the cultural communities over the recent past, and for the design and compilation of data about a larger, regional population to which the socioeconomic characteristics of the reservation communities can be compared.

4.1 Obtain Additional Information about the Population and Household Characteristics of the Reservation Communities and Other Comparable Populations

Additional data about the size, age and gender composition, and vital statistics (births and deaths) of the reservation communities and the geographic areas selected for comparison are needed to better understand the population dynamics and household characteristics of the reservation communities. Particularly critical is the need for information about the geographic distribution of the population, including mobility patterns. To supplement these population data, additional information is needed about the composition and economic role of households and families, for both the reservation communities and the larger, regional population that is selected to provide comparison data. Data about the relationship of household and family members to one another, changes in the composition of households and families over time, and the acquisition and use of material resources by the household and family unit need to be compiled and analyzed.

4.2 Obtain Additional Information about the Economic Characteristics of the Reservation Communities and other Comparable Populations

In addition to demographic data, more information is needed about the economic characteristics and conditions of the reservation communities and other populations to be used for comparison. Data are

needed for employment, labor force, occupational characteristics, worker experience and mobility, and training programs, as well as the sources and distribution of personal income. To date, relatively little information has been compiled on the non-cash economy or the economic structure of the communities on and near the reservations. Data are needed concerning the type and size of businesses and industries (both Indian- and non-Indian-owned) located on or near the reservations. As with the outstanding data requirements regarding population and household characteristics, much of the detailed economic data will be gathered in coordination with the tribal authorities. As discussions take place concerning this coordination, secondary data sources from the state and local government need to be compiled and analyzed so that appropriate comparison populations can be identified and a database assembled.

4.3 Obtain More Current and Comprehensive Information about the Social, Political, and Community Characteristics of the Affected Tribes

An important requirement of the profiling and monitoring effort is to gain an understanding of the social and political structure of the three reservation communities. This involves obtaining and synthesizing information about the structure and role of the tribal governments (their origin, charters, authorities, personnel, resources, and responsibilities) and developing an understanding of the system by which services and facilities are provided and obtained by reservation residents. Attendance at tribal council meetings and discussions with tribal government staff may be especially useful in gaining an understanding of tribal government. Information is also needed to understand more about the nongovernmental organizations that structure community life (for example, religious groups and voluntary organizations). Data in these categories will be obtained by consulting published and unpublished written materials and by contacts with key community representatives, all in close consultation and coordination with tribal representatives.

4.4 Identify a "Comparable Population" and Establish a Database that Allows Analysis and Interpretation of Descriptive Information about the Reservation Communities

Preparation of the Interim Profile has highlighted the need to identify a population or populations (for example, rural counties in the Pacific Northwest) that can serve as a basis of comparison with the reservation communities. Lacking consistent, detailed historical data on the socioeconomic characteristics of the reservation communities, it is especially important that appropriate comparison groups be identified promptly so that comparison data can be compiled and analyzed. It is anticipated that the data needed for these comparison groups will be obtained from secondary data sources.

Arrangements to coordinate access to tribal sources of information about the reservation population are still being discussed. Until such coordination is achieved, profile efforts will continue to focus on identification and compilation of non-tribal data sources.

5.0 REFERENCES

Battelle Human Affairs Research Centers 1987a. Documentation of Primary Data Collection. SMP-101. Seattle, WA: Battelle Human Affairs Research Centers.

Battelle Human Affairs Research Centers 1987b. Documentation of Secondary (Documentary) Data Collection. SMP-102. Seattle, WA: Battelle Human Affairs Research Centers.

Battelle Pacific Northwest Laboratories 1985. Quality Assurance Manual for License-Related Programs. PNL-MA-60. Richland, WA: Battelle Pacific Northwest Laboratories.

Nuclear Waste Policy Act of 1982. 42 U.S.C. §111(b)(1) 1982.

Passel, Jeffrey S., and Patricia A. Berman 1987. Quality of the 1980 Census Data for American Indians. Social Biology 33(3-4): 163-182.

U.S. Department of Commerce 1982a. Bureau of the Census. 1980 Census of the Population. Volume 1, Characteristics of the Population, Part 14, Idaho. Chapter B, General Population Characteristics. Publication PC80-1-B14.

U.S. Department of Commerce 1982b. Bureau of the Census. 1980 Census of the Population. Volume 1, Characteristics of the Population, Part 39, Oregon. Chapter B, General Population Characteristics. Publication PC80-1-B39.

U.S. Department of Commerce 1982c. Bureau of the Census. 1980 Census of the Population. Volume 1, Characteristics of the Population, Part 49, Washington. Chapter B, General Population Characteristics. Publication PC80-1-B49.

U.S. Department of Commerce 1983a. Bureau of the Census. 1980 Census of Housing. Volume 1, Characteristics of Housing Units, Part 14, Idaho. Chapter B, Detailed Housing Characteristics. Publication HC80-1-B14.

U.S. Department of Commerce 1983b. Bureau of the Census. 1980 Census of Housing. Volume 1, Characteristics of Housing Units, Part 39, Oregon. Chapter B, Detailed Housing Characteristics. Publication HC80-1-B39.

U.S. Department of Commerce 1983c. Bureau of the Census. 1980 Census of Housing. Volume 1, Characteristics of Housing Units, Part 49, Washington. Chapter B, Detailed Housing Characteristics. Publication HC80-1-B49.

U.S. Department of Commerce 1983d. Bureau of the Census. 1980 Census of the Population. Volume 1, Characteristics of the Population, Part 14, Idaho. Chapter C, General Social and Economic Characteristics. Publication PC80-1-C14.

U.S. Department of Commerce 1983e. Bureau of the Census. 1980 Census of the Population. Volume 1, Characteristics of the Population, Part 39, Oregon. Chapter C, General Social and Economic Characteristics. Publication PC80-1-C39.

U.S. Department of Commerce 1983f. Bureau of the Census. 1980 Census of the Population. Volume 1, Characteristics of the Population, Part 49, Washington. Chapter C, General Social and Economic Characteristics. Publication PC80-1-C49.

U.S. Department of Commerce 1986. Bureau of the Census. 1980 Census of the Population. Volume 2, Subject Reports: American Indians, Eskimos, and Aleuts on Identified Reservations and in the Historic Areas of Oklahoma (Excluding Urbanized Areas), Part 2. Publication PC80-2-1D.

Washington Office of Financial Management 1986. 1986 Population Trends for Washington State. Olympia, WA: Population Estimation and Forecasting Unit.

DISTRIBUTION

No. of
Copies

18	Pacific Northwest Laboratory A. K. Baldwin (5) D. H. Fickelsen C. A. Geffen R. H. Gray J. P. McDonald T. L. Page J. B. States Publishing Coordination (2) Technical Report Files (5)
9	Battelle Human Affairs Research Centers C. Cluett E. B. Liebow E. A. Friedli C. D. Taylor P. R. Yost D. R. Wieringa HARC Library (2) HARC Records Center