

# **Economic Profiles of Northeast Washington Counties**

Phase 2 of the Colville National Forest CFLRP Economic Monitoring Project  
Report to the NE Washington Forestry Coalition and  
Colville National Forest

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# **Economic Profiles of Northeast Washington Counties:**

## **Executive Summary**

FEI's original purpose was to provide a basis for economic monitoring of the Colville National Forest's Collaborative Forest Landscape Restoration Program (CFLRP) activities. A perceived mutual benefit from detailed economic studies encouraged two other agencies to contribute to our efforts in return for a broader set of more detailed products that described the structure and function of the intertwined economies of northeastern Washington.

For phase 1, an FEI field calibration team augmented and corrected the published economic data that had been available on the regional and county economies. They found significant errors of estimation, mis-categorization and omission. That phase 1 report has already been distributed. Phase 2 of the project is to take the corrected data and build the most current and accurate economic profiles of these economies possible. This report describes that set of findings.

This phase 2 report has been written as a standalone reference. It should serve as a useful instrument for economic policy-making for many of the project sponsors. However, it is actually an interim step leading to a final goal. In phase 3, we will be converting these corrected profiles into data matrices for Input-Output models. The ultimate purpose of phase 3 is to estimate how CFLRP activities transact through the local economies as job and income effects. Those models will allow CFLRP decision makers to predict how forestry activities link to the direct jobs and income of the local wood products sector. From there the models will be able to estimate how CFLRP activities also indirectly transact through other economic sectors. The phase 3 activity will generate total jobs and incomes effects.

The northeastern regional economy is clearly natural resources driven. The land base is primarily agrarian or forests, with pockets of valuable minerals. The 3.1 million acres of forests are managed for variable degrees of timber production that supports a strong wood products manufacturing sector. Many forest acres also have non-timber objectives, particularly non-industrial private forests, federal forests and to an extent, the three tribal forests. This land base also supports mostly summer outdoor recreation, other tourism and an extremely high proportion of summer RV and second home occupancy. This causes the service sectors to be seasonally skewed without sufficient winter business to allow for further year-round development.

Employment is 74% in the private sector and 26% in the public sector. An unusually high proportion of employment is commuter oriented. There is in addition a large proportion of unemployment and underemployment. This explains relatively high levels of poverty requiring a proportionally larger public social services sector, which also serves demographically graying populations.

Economic activity is extremely spatially unbalanced. What little economic activity that Ferry County has left is dominated by the Colville-Kettle Falls trade center in Stevens County. The same can be said for northern Pend Oreille County. Manufacturing is concentrated in that core area with some in southern Pend Oreille County. The entire region is trade dominated by Spokane to the southeast and Omak-

Okanogan to the west to the extent that commuter income constitutes a major revenue inflow, but external retail purchases limit that sector's development within the region.

## What to Look For in Phase 2

In the phase 1 field surveys, FEI found that the economic data on the three counties of northeastern Washington was seriously flawed. That phase 1 report showed only each county's sector by sector job estimate corrections. At the same time, our survey team was also adjusting earnings (salary) and income (salary plus other sources) estimates for each sector.

That basic data was the starting point for generating and interpreting the economic profiles of the region as a whole as well as the individual counties as parts. Those profiles are interesting in themselves, providing a key to understanding how these economies function, where their strengths and weaknesses exist, and they could serve as a precursor to any formation of economic policy.

We start with a brief regional overview. It highlights some economic similarities across the region, but also begins to introduce some glaring spatial differences between county economies. Readers should concentrate on the individual county profiles to highlight these. Even within counties there are some distinct differences between the economic cores and their peripheries.

In each county profile, we have tried to keep the categorical organization similar although the order may differ for emphasis. After readers read the first county profile, they will be familiar with presentation logic and contents, and can then concentrate on unique aspects of each county's economy. We posit that each segment of a county profile highlights a critical part of the economic structure and tells a story for those wanting to understand, or even manage, this economic environment.

### Look for Insights as follows:

1. **Spatial economic geography:** Political geography and economic geography are different. Each county has unique geographic concentrations of activity within their boundaries and the same holds between counties and economies adjacent to the region. A broad economic policy would affect different areas and spatially concentrated sectors differently.
2. **Employment and Earnings:** This is a snapshot of individual sector activity and the wages that are associated with it. It is the first place to look for county level strengths and weaknesses. Although jobs and earnings are loosely correlated, that some skilled jobs have high salaries and unskilled jobs are poorly paid. These job types tend to concentrate in different sectors.
3. **Income by Type and Source:** Earnings are only a part of residents' income. It is important to recognize where various types of income come from. High transfer payments, high outside earnings, or high inside earnings would all tell significantly different stories about a county's economic function. High transfer payments are particularly important to note in these counties and consist of social security, disability, welfare, subsidies, and unemployment.
4. **Economic Base Indicators:** These figures look like income by sector, but are actually estimates of net income inflows from outside of the local economy. They reveal economic export sector strengths and weaknesses.
5. **Cluster Analysis:** This is a calculation of a "location quotient" (LQ) that shows how a local sector or group of sectors compares to a national norm for the activities of that type. An LQ

shows where there are concentrations of labor capability. LQ's are used to paint targets on abnormally strong sectors that need to be protected or enhanced or weak sectors that might be enhanced by targeted development activities.

6. **Demographic Profile:** The age class distribution of a population tells really clear stories about the effects of current job opportunities, expected demands for specific types of public services, local marketing opportunities for various sectors, and it provides a starting place for both future economic and social policy.

## NE Washington Regional Economic Overview

### Core-Periphery Economy

Taking all three northeastern Washington counties together (Ferry, Pend Oreille, and Stevens), this region has only one relatively strong commercial and service core. This is the Colville-Kettle Falls regional trade center. There is also one struggling local trade center (Newport-Oldtown), and one very weak local trade center (Republic). Colville is not growing, but will remain economically strong as long as the dominant forest products industry stays healthy. Newport will have difficulty holding its own as Highway 2 is improved and more trade leaks out to Spokane and Sandpoint. Republic appears to be declining sharply, particularly with the Kettle River Mine closure. It faces the prospects of a continuing long term structural decline.

Population projections provided by the state expects continued growth in the overall region, but this is based on demography, not economics. The reality is that if jobs are not available, young residents will leave. This migration pattern is already evident in the Republic and Newport vicinity and reflected in bi-modal hollowed out age class distributions. Peripheral areas<sup>1</sup> typically have little economic diversity and depend on a few sectors. It will continue to be "hard to make a living" in these peripheral economies. In many cases, one or more members of local families will have to commute outside the peripheral economy to more stable and higher paying employment.

### Seasonal Economy

This region's peripheral areas and Ferry County in particular, have primarily a convenience and service economy. It is seasonal due to a reliance on tourism and summer residents. Tourism is slowly increasing and tourists will spend more money here in the future. Unfortunately, the tourist and recreation infrastructure is limited by dependence on only a single season and a tourist economy supports primarily low wage seasonal jobs.

The seasonal orientation of these economies is amplified by a having a high percentage of summer home residents and RV residents in both Pend Oreille and Ferry County (table 2-R1). All around Lake Roosevelt (even in some parts of Stevens County), a seasonal economy is the norm. In most cases, tourists do not spend much in such peripheral economies and there is a high degree of leakage, but summer home and RV owners do become active in the local economy temporarily. This makes the

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<sup>1</sup> Peripheral areas are lower on a spatial trade hierarchy and are economically dominated by a trade center.

region’s peripheral economies somewhat like the Alaska interior economy where permanent residents have to make their income in the summer then “hunker down” in the long winter.

**Table 2-R1  
NE Washington Summer Homes by County**

| <b>County</b> | <b>Total Housing Units</b> | <b>Seasonal Housing Units</b> | <b>% Seasonal</b> | <b>RV &amp; Camp units</b> | <b>% Summer Occupancy</b> |
|---------------|----------------------------|-------------------------------|-------------------|----------------------------|---------------------------|
| Ferry         | 2,951                      | 956                           | 32%               | 450                        | 48%                       |
| Pend Oreille  | 5,484                      | 1,685                         | 31%               | 300                        | 36%                       |
| Stevens       | 17,684                     | 1,997                         | 11%               | 500                        | 14%                       |
| Region Σ      | 26,119                     | 4,638                         | 18%               | 1,250                      | 23%                       |

The core areas of Colville-Kettle Falls and Newport are more typical twelve month economies, but still slow down significantly between Labor Day and Memorial Day.

### **Commuting and Bedroom Communities**

Quite a few residents of this entire region commute to high paying jobs elsewhere. This includes long distance travel to the North Dakota oil fields, Nevada gaming, but is mostly daily travel to nearby metropolitan areas (table 2-R2). Residents of southern portions of Stevens and Pend Oreille Counties commute into the greater Spokane area. Both of these commuting patterns are significant sources of outside income for the region. Commuters bring home larger paychecks than local residents and purchase a good portion of goods and services locally within the region. If commuting is too strong, as in the case of the Loon Lake area, residents may spend much of their income where they work and can be less involved in community affairs. Those who do commute do so to adjacent counties. The low commuter rate for Ferry County is surprising given the lack of local employment opportunity. It may be low due to outmigration. In our view, the most likely source of growth is linked to Spokane commuting. Nationally commuters are traveling greater distances from core cities and this should also be the case with Spokane.

**Table 2-R2  
NE Washington Employee Place of Work by County**

| <b>Place of Work</b> | <b>Ferry Co Location %</b> | <b>Pend Oreille Co Location %</b> | <b>Stevens Co Location %</b> |
|----------------------|----------------------------|-----------------------------------|------------------------------|
| Ferry County         | 78%                        | 0%                                | 1%                           |
| Pend Oreille County  | 0%                         | 58%                               | 1%                           |
| Stevens County       | 9%                         | 4%                                | 67%                          |
| Okanogan County      | 8%                         | 0%                                | 0%                           |
| Spokane County       | 1%                         | 27%                               | 28%                          |
| Canada               | <1%                        | 1%                                | 0%                           |
| Idaho                | 0                          | 8%                                | 1%                           |
| Washington West Side | <1%                        | 1%                                | 1%                           |
| Oil Fields           | 2%                         | 1%                                | 1%                           |

## Resource Based Industries

The region is very dependent upon natural resource based industries: agriculture, mining, and forest industries and even tourism. Table 2-R3 shows that a large proportion of the regional land base that supports these industries is publically managed (60.5%). Federal lands are 34.2%. Of these, the USDA-Forest Service is the dominant management agency. In Ferry County, Colville tribal lands are a large proportion and their management center is located outside of this region. Stevens County has both Spokane and Kalispell tribal forests.

**Table 2-R3**  
**NE Washington Upland Land Ownership by County (K acres)<sup>2</sup>**

| County           | Private        | Federal        | State        | Local       | Tribal       | Total          |
|------------------|----------------|----------------|--------------|-------------|--------------|----------------|
| Ferry            | 233.8          | 521.6          | 38.4         | 2.3         | 649.8        | 1,445.9        |
| Pend Oreille     | 332.0          | 529.8          | 34.3         | 12.2        | 5.0          | 913.3          |
| Stevens          | 1,009.4        | 313.0          | 166.4        | 4.9         | 131.8        | 1,625.6        |
| <b>3-CountyΣ</b> | <b>1,575.2</b> | <b>1,364.4</b> | <b>239.1</b> | <b>19.4</b> | <b>786.6</b> | <b>3,984.8</b> |

The available resource base may be declining. Private lands are being parceled out and land uses are changing. The focus of federal land management has shifted in the past thirty years towards resource preservation and conservation and away from commodity production. It is becoming procedurally difficult to develop ore bodies on federal lands where much of the ore is located. Long term prospects for increased federal timber harvest are uncertain, even though federal lands continue to accumulate timber inventory and have an increasing wildfire problem. This shifts the base for extractive resource industries to rely on private lands. Timber harvests have already shifted. There are limits to the economic contributions of these industries. Agriculture is becoming increasingly mechanized and land titles may be shifting towards out-of- region ownership. At best agriculture will be a stable component of the economy with no prospects for significantly increasing production.

## Hard Core Unemployment and Poverty

The region has more than its share of unemployment and low income residents. Conditions are not improving for this segment of the population. Considering the size of the working age population, unemployment statistics are high (10.6%) compared to Washington State's average of 6.2% (table 2-R4).

The working age population estimates are census based and the unemployment rates are known individuals receiving unemployment benefits. However, The high calculated numbers of non-working adults can have data and interpretive flaws. Non-job seeker insight and underemployment is hard to get at for several reasons: total regional jobs estimates vary widely depending on source from 8,229<sup>3</sup> to 19,397;<sup>4</sup> individuals may hold more than one job; there is an unreported job grey market; an where there are traditional family structures, often one spouse is a family manager and this occupation is not statistically recognized.

<sup>2</sup> Washington State Conservation and Recreation Office [www.rco.wa.gov](http://www.rco.wa.gov)

<sup>3</sup> US Bureau of Labor Statistics 2014

<sup>4</sup> FEI 9/25/2015 NE Washington Economic Data Sets. Appendices 1-3

**Table 2-R4  
NE Washington Employment Indicators<sup>5</sup>**

| <b>Employment Indicator</b>   | <b>Ferry</b> | <b>Pend Oreille</b> | <b>Stevens</b> | <b>Σ or Avg</b> |
|-------------------------------|--------------|---------------------|----------------|-----------------|
| Total Population              | 7,667        | 12,985              | 43,650         | 64,302          |
| Population ages 19-64         | 3,136        | 5,597               | 18,682         | 27,415          |
| Total Jobs (inc. proprietors) | 1,452        | 2,304               | 9,232          | 12,988          |
| Ages 19-64 not employed       | 53.7%        | 58.8%               | 50.6%          | 54.4%           |
| Unemployment rate             | 11.8%        | 10.3%               | 9.6%           | 10.6%           |

All three counties have poverty rates (table 2-R5) far above the state’s average and the region is clearly the poorest region in the state of Washington. Other social problems associated with rural poverty (poor educational attainment, drugs, alcohol and petty crime) are also evident in the region. One exception is the Native American community where casino revenue is starting to improve living and employment conditions.

**Table 2-R5  
Selected Income Indicators**

| <b>Indicator</b>   | <b>Ferry</b> | <b>Pend Oreille</b> | <b>Stevens</b> |
|--|--------------|---------------------|----------------|
| <b>Mean household income (\$\$)</b>                        | \$48,286     | \$53,674            | \$53,866       |
| <b>With Social Security</b>                                | 49.90%       | 40.10%              | 40.10%         |
| <b>With SSI</b>  | 10.70%       | 9.60%               | 7.50%          |
| <b>With cash public assistance income</b>                  | 5.80%        | 5.40%               | 5.60%          |
| <b>With Food Stamp/SNAP benefits in the past 12 months</b> | 19.90%       | 20.80%              | 18.10%         |
| <b>No health insurance coverage</b>                        | 10.90%       | 6.10%               | 10.00%         |
| <b>Families Below Poverty Level</b>                        | 14.30%       | 15.40%              | 11.00%         |

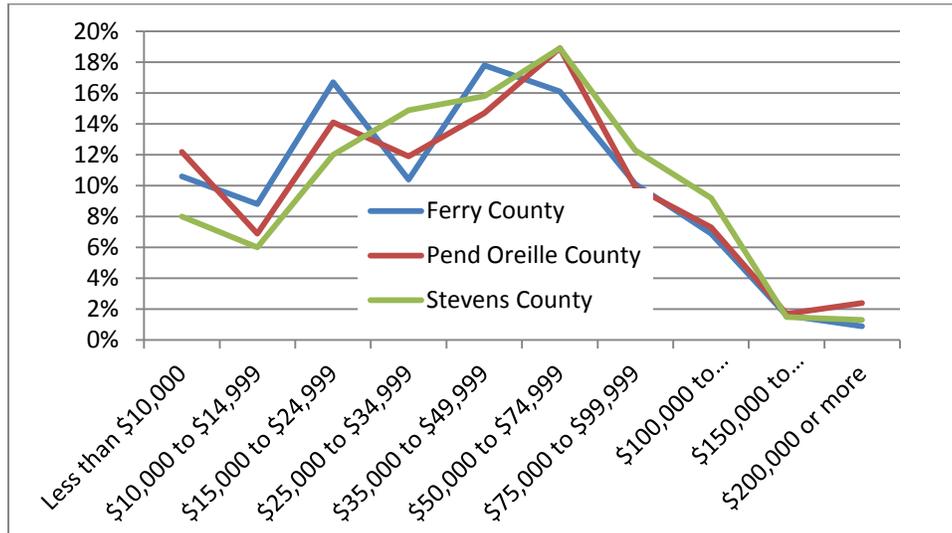
Some of this impoverished class could be characterized as hard core unemployed and perhaps unemployable. These residents require a strong social service sector and government services. Continued state and federal assistance are necessary to provide these services, but in many cases services will be located in core communities and not close to the low income population which tends to be rural and located in peripheral areas.

Income indicators show that Ferry County in particular has a high percentage of its population living on food stamps, cash assistance, SSI and other government transfer programs. All three counties are well over state and national averages in this respect. This data probably under-reports poverty and income indicators on the Colville and Spokane Indian Reservations due to under-counting of tribal populations and reliance on BIA programs that are not reflected in these statistics.

<sup>5</sup> Population estimates from US Census 2014, jobs FEI 2015, unemployment rate from Washington State Employment Security 2014

Household income Structure (Figure 2-R1) reflects the high incidence of rural poverty (households with less than \$10,000). This probably does not fully reflect conditions on the reservations, because census data historically undercounts tribal populations. The chart also shows that the region has a very small population of wealthy individuals.

**Figure 2-R1  
Household Income Structure**



### **Mediocre Employment Opportunities**

There are relatively few stable well-paying jobs in the region. These “good jobs” are in mining, wood products, manufacturing, health care and public schools. Private sector employment is widely dispersed between economic sectors (table 2-R6). There are small concentrations in two service sectors, health care and accommodation/food services. Budgets for the former may also be government linked. As will be seen in county specific profiles, manufacturing and retail trade tend to be spatially concentrated.

**Table 2-R6  
NE Washington Private Sectors Employment**

| <b>Northeast Washington Employment<br/>Private Sector Total</b> | <b>Per Cent</b> |
|---|-----------------|
|   | 74%             |
| Agriculture, Forestry, Fishing and Hunting                      | 5%              |
| Mining, Quarrying, and Oil and Gas Extraction                   | 2%              |
| Construction  | 4%              |
| Manufacturing (including wood products)                         | 8%              |
| Wholesale Trade   | 2%              |
| Retail Trade  | 9%              |
| Transportation and Warehousing                                  | 2%              |
| Finance and Insurance   | 2%              |
| Real Estate and Rental and Leasing                              | 2%              |
| Professional, Scientific, and Technical Services                | 2%              |
| Admin., Support, Waste Management and Remediation Services      | 2%              |
| Health Care and Social Assistance                               | 12%             |
| Arts, Entertainment, and Recreation                             | 3%              |
| Accommodation and Food Services                                 | 12%             |
| Other Services (except Public Administration)                   | 3%              |
| Industrial sectors not listed                                   | 5%              |

Government employment (table 2-R7) constitutes more than one quarter of total employment, but the local economy cannot support this tax burden, so large portions of government jobs are supported by state and federal revenue. However, government salaries tend to be spent locally.

**Table 2-R7  
NE Washington Government Sectors Employment**

| <b>Northeast Washington Employment<br/>Government Sector Total</b> | <b>Per Cent</b> |
|--|-----------------|
|  | 26%             |
| Federal Government, Civilian, Excluding Postal Service             | 2%              |
| Federal Government, Military                                       | 1%              |
| State Government, Excluding Education and Hospitals                | 1%              |
| Elementary and Secondary Schools (Local Government)                | 9%              |
| Local Government, Excluding Education and Hospitals                | 12%             |

# Ferry County Economic Profile

## Overview

Ferry County is the most economically isolated economy in Washington. In small open economies, data miss-estimation can pose significant problems. The phase 1 field survey found that the three common published sources of county level economic indicators show little agreement.<sup>6</sup> The EMSI data source job total is within 400 jobs of FEI estimations, but over-estimates ag/forestry and retail trade jobs, and under-estimates health and social services.

We found major differences in all data sources in respect to sawmills, log trucking, loggers and other wood products data. EMSI data estimated that candy manufacturing, breweries and wineries all generated more income than the entire wood products sector. There are no wineries in the county and breweries and candy manufacturers are minor employers with small earnings. Mathematical estimation of data is not comparable to actual observation. Such inconsistencies justified FEI's field calibration of data.

The FEI survey also collected primary data not otherwise available. For example, covered employment data from the US Bureau of Labor Statistics<sup>7</sup> does not include proprietors, so it understates employment and earnings. Ferry County has the type of economy where "you have to bring a job with you", so there are a high proportion of proprietors. Proprietors earnings are systematically underestimated (particularly in isolated areas) due to unreported income and tax write-off of earnings. As a result, published data on proprietors' earnings should be viewed as a low estimate of proprietors' earnings. FEI estimates are based on actual survey and observation.

## Ferry County Economic Situation

We found a weak, high leakage economy. The main manufacturing activity has ceased. The Republic sawmill closed a decade ago. The scheduled closure of the Kettle Mill (gold processing mill) will end a long history of export based "blue collar" goods producing industries in the county. The county seat of Republic is becoming even less of a local trade center as it is increasingly dominated by the Omak/Okanogan trade center to the west and Colville-Kettle Falls to the east.

Ferry County is making a difficult transition to amenity and retirement based service industries. Tourism is evident in all of the communities of the county, but provides sporadic income over a short season. The county already has the highest rate of seasonal housing in the state and when combined with the annual influx of summer RV travelers, it appears that over half of the population is seasonal.

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<sup>6</sup> FEI. 9/25/2015. Northeastern Washington Economic Data Sets: Corrected Calibrated and Augmented. Report to the NE Washington Forestry Coalition

<sup>7</sup> [www.bls.gov](http://www.bls.gov)

Previous FEI work with such economies in rural Idaho finds that without investment from diversifying sectors, or development of a winter recreation sector, it probably becomes a single season economy. Without a critical mass of year-round economic activity, most of the services (eating and drinking establishment, motels, and personal services) shut down or greatly reduce operating hours in the winter months and many close permanently. Seasonal low-paid service industry jobs provide little incentive for young people to stay. Usually a high percentage of the working age population starts to out-commute, but this rate is the lowest of the three NE Washington counties (22%). The alternative is to leave. As the tax base and personal income shrink, it becomes difficult to maintain essential public services (schools, roads, hospitals, law enforcement, etc.) As essential public services decline, even more of the population is inclined to move out. Residential real estate rarely remains vacant, but rents drop and the social character of inhabitants can change. Significant diversifying outside investment is needed to reverse this cycle of decline.

The recent “Great Recession” marked a point in which job growth in the region stopped and slow decline of business activity began. Since 2010, there has been no recovery, and a steady slow loss of jobs continues. Closure of the Kinrock-Kettle River Mill is perhaps the “last nail in the coffin” for prospects of economic growth from traditional sources in the county. At best we see a county struggling to maintain services and to stem the out-migration of young workers.

This "hollowing out" of the economy results in an increasingly split society. There are a high proportion of people living in poverty (the highest percentage in the State) and a few upper middle class business owners and seasonal residents. Ferry County is already the poorest county in the state, so this condition is already evident, but may worsen.<sup>8</sup>

The eastern portion of the county (east side of the Kettle Range) is less isolated and has better access to good jobs through commuting. Although spatially part of Ferry County, it is functionally part of the core “Colville-Kettle Falls economy.” This area also benefits from Lake Roosevelt tourism.

### **Ferry County Economic Structure**

Table 2-F1 Shows the recalibrated county jobs and earnings by economic sector. This identifies a reality that Ferry County employment is dominated by government jobs—almost a third of the total. To the extent that these jobs are paid out of state and federal budgets, they are an imported source of local income. However, local government jobs (including teachers) depend on a tax base that is weakening.

Even after the Republic mill closure, the wood products sector appears to remain a strong employment sector in jobs and very strong in earnings. Unfortunately, this is misleading.

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<sup>8</sup> US Census of Population, Census Factfinder. Whitman County actually has a higher percentage of people living in poverty, but this is due to categorizing college student as poor although they have resources such as student loans, scholarships. or family support.

Although the single remaining wood products manufacturer is spatially part of the Ferry County tax base, it is located on the county border such that almost all of its economic ties are with the Kettle Falls—Colville economy. Its postal address is even in Kettle Falls. Agriculture and mining are still visible sectors and part of the economic base. i.e. sectors that bring in outside income. Trade, motels and restaurants are a relatively strong sector, but their role in bringing in outside income is limited.

**Table 2-F1  
Ferry County Economic Structure**

| Ferry County                                    | Employment   | Earnings<br>(\$1,000) |
|---|--------------|-----------------------|
| Agriculture & Agricultural services             | 186          | \$5,715               |
| Mining, Sand, and Gravel                        | 104          | \$8,546               |
| Construction                                    | 80           | \$3,215               |
| Wood Products                                   | 250          | \$15,587              |
| Transportation                                  | 61           | \$1,015               |
| Trade   | 159          | \$3,416               |
| Finance, Insurance, and Real Estate             | 72           | \$2,082               |
| Motels & Eating/Drinking & Amusement/Recreation | 199          | \$3,202               |
| Consumer Services                               | 43           | \$1,243               |
| Business Services                               | 30           | \$898                 |
| Medical/Educational/Social services             | 62           | \$1,896               |
| Federal Government                              | 136          | \$7,596               |
| State & Local Government                        | 375          | \$18,745              |
| <b>Total</b>                                    | <b>1,757</b> | <b>\$73,157</b>       |

## Economic Base

The economic base describes how an area “makes its living” or what goods and services it sells to the outside world. The corollary with a household is a paycheck that the household receives for its services (salary income). This is different from, but correlated with, earnings in the previous table. State and federal government jobs do bring outside income into the county, but we do not view this income as base income as it generally provides services that are not unlike local government service jobs. In the case of Ferry County many of the federal jobs are resource management jobs that function like economic base jobs so we did include these jobs in the analysis. Forest Service jobs are some of the highest paid and most desirable jobs in the community so they are an important contribution to the economic health. Historically, these have been very stable jobs, but reductions in force have been felt throughout the agency.

Table 2-F2 shows Ferry County’s base income by sector. We omitted minor sectors that do produce base income, but contribute less than 1% of the total. It is obvious that Ferry County gets most of its base income from the wood products industry. Our concern is that much of this

base income leaks back out to Stevens County in subsequent transactions. The second leading source of basic income is the mining industry. State and federal government plays an important role in bringing in income because their operations are financed by Olympia and Washington DC. There is a small contribution of tourism and recreation that is reflected in retail trade sales, eating and drinking establishments and accommodations (motels). This sector also has potentially high leakage income. It was surprising to find how little agriculture contributes to the base, but this reflects how small the sales of legal agricultural operations in the county are.

**Table 2-F2  
Economic Base of Ferry County**

| Ferry County Economic Base                      | Base Income<br>(\$1000's) | Economic Base<br>Percentage |
|---|---------------------------|-----------------------------|
| Agriculture & Agricultural services             | \$ 2,005.93               | 1%                          |
| Mining, Sand, and Gravel                        | \$ 22,427.86              | 13%                         |
| Construction                                    | \$ 5,731.82               | 3%                          |
| Manufacturing: Food/Wood & Paper/Textiles       | \$ 80,396.50              | 46%                         |
| Transportation                                  | \$ 2,273.09               | 1%                          |
| Trade   | \$ 6,173.42               | 4%                          |
| Finance, Insurance, and Real Estate             | \$ 7,126.85               | 4%                          |
| Motels & Eating/Drinking & Amusement/Recreation | \$ 4,299.61               | 2%                          |
| Consumer Services                               | \$ 1,196.59               | 1%                          |
| Business Services                               | \$ 997.91                 | 1%                          |
| Medical/Educational/Social services             | \$ 1,041.46               | 1%                          |
| Federal Government                              | \$ 16,477.09              | 9%                          |
| State Government                                | \$ 18,671.33              | 11%                         |

### **Key Industries**

Natural resource based industries consist of ranching, forage crops, mining, logging and tourism. Ranching has been the most stable component of the economy, but does not support very many primary or secondary jobs. Forage crops support the ranching industry and do not bring in much outside income. With the exception of Columbia Cedar in the Kettle Falls area, the county has no wood products processing sector left. Logging and trucking activity supports mills in Kettle Falls, Colville and in Omak, but many loggers are actually based in Stevens County or on the west side where they are closer to the sawmills. Recent very large wildfires in the county may generate short term gains from salvage logging, but in the long term they will probably result in reductions in timber harvest.

The rest of the economy is non-basic or non-goods producing. There are some notable characteristics that show up from the secondary data and surveys. These include:

- Small construction sector serves the seasonal and retirement home market. Building permits indicate very little new primary home construction.
- Retail trade businesses that are oriented to serving tourism are evident in all of the communities. Most are operated by proprietors.
- Business, professional and personal services is a small sector serving the small resident population.
- Other essential services (educational and medical) are evident in the most of the communities, but may be at risk as the tax base and income of the population changes.
- There is very high trade leakage to surrounding areas (Colville-Kettle Falls, Spokane and Wenatchee).

## Resident’s Income in Ferry County

Figure 2-F1 shows income sources for Ferry County residents. Notable is the unusually large proportion of income derived from transfer payments. This suggests a large retired population living on a fixed income. Most of these retirees have relatively little investment income (dividends, interest, rent and other property income) that grow as the economy grows. Indigents also receive transfers. Due to its isolation, Ferry County residents commute less and receive less commuter income than other Washington counties.

**Figure 2-F1**  
**Ferry County Income Sources**

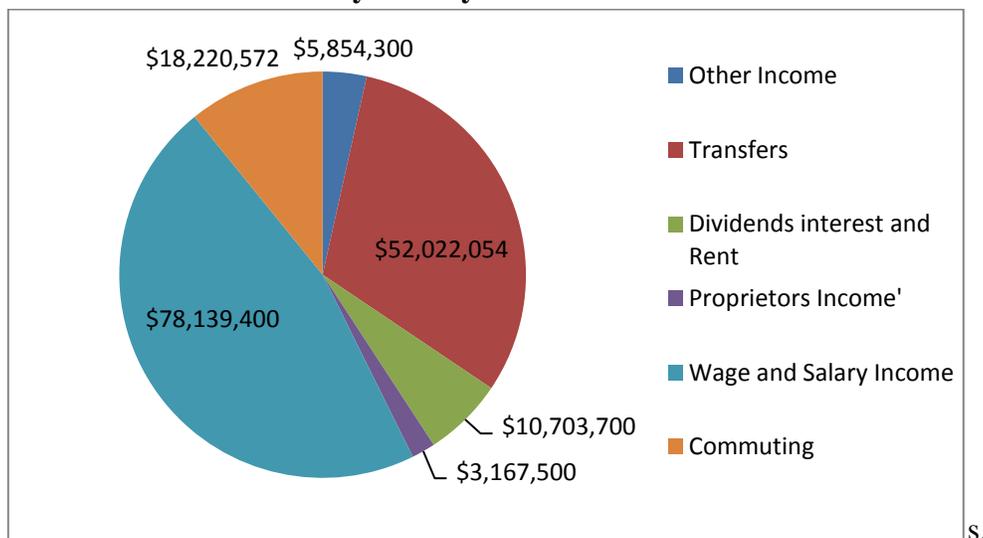


Table 2-F3 shows that Ferry County residents receive the majority of their income from outside the county. Transfer payment (social security, SSI and retirement) are larger than earned income from wage and salary employment. The core economy in the Republic area is even more dependent upon outside income because table xx includes employment at Columbia Cedar which

is functionally tied to the Kettle Falls economy (Stevens County). The commuting income is mostly evident on the east side of the Kettle Range where residents commute in to Kettle Falls and Colville.

**Table 2-F3  
Ferry County Residents' Income (\$1000's)**

| <b>Inside Income 41.5%</b>                          |                |
|---|----------------|
| Wage and Salary Earnings                            | 76,308         |
| In-commuter claims on Wages                         | -382           |
| Proprietors Earnings                                | 17,090         |
| Outside claims on profits                           | -9,871         |
| <b>Total Residents Inside Income</b>                | <b>83,146</b>  |
| <b>Outside Income (earned &amp; unearned) 58.5%</b> |                |
| Investment Income                                   | 17,825         |
| Transfer Payments                                   | 80,732         |
| Out-commuters Income                                | 18,537         |
| <b>Total Residents Outside Income</b>               | <b>117,094</b> |

### **Economic Strengths and Weaknesses**

Cluster analysis is one technique for comparing the local economy (Ferry County) to the national economy. A Location Quotient (LQ) score of one or greater indicates that the reference sector is stronger than the national economy. LQ's can be calculated for either sector sales or sector jobs and these indicators can differ.

Cluster Analysis (table 2-F4) confirms that the Ferry County economy is weaker than the national economy with several exceptions. The Ferry County economy has three sectors that are stronger than the national economy (Agriculture, Wood Products and Government). Hospitality services are about at the national average and all other clusters are weaker than the national economy.

As noted, the wood products sector is centered on the west side of the Kettle Range and has minimal impact on the core Republic area. Logger, truckers and mill workers live mostly outside the core Republic economy. The Kettle River Mine is scheduled to close so the mining sector will largely disappear. The strength of the government sector is a sign of weakness, not strength in the Ferry County economy.

Some of the sector weaknesses are to be expected in an area that is trade dominated, in this case by the Colville-Kettle Falls trade center. Others, such as recreation services, are a surprise as this is the sector that many locals visualize the county as transitioning to a recreation/tourism based economy.

**Table 2-F4  
Ferry County Cluster Analysis**

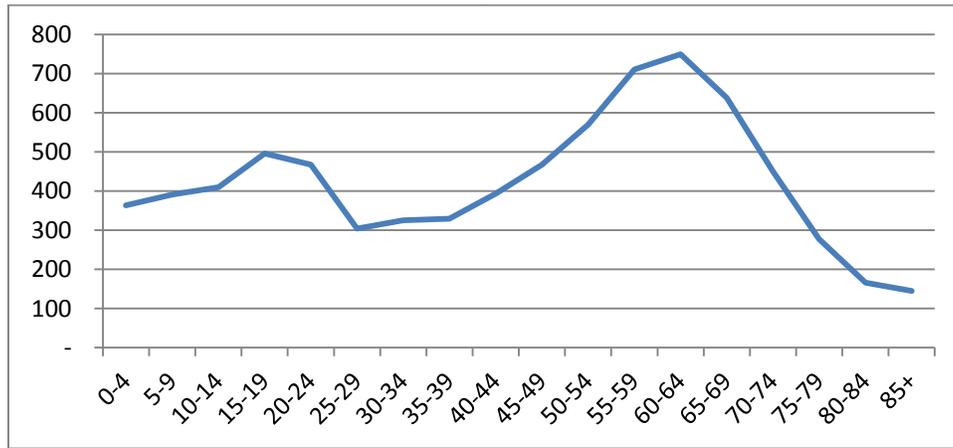
| <b>Sector Cluster ID</b>                  | <b>Sales Score</b> | <b>Employment Score</b> |
|---|--------------------|-------------------------|
| Agriculture and Food Processing Cluster   | 0.94               | 2.45                    |
| Wood Products Cluster                     | 16.10              | 18.10                   |
| Construction/ Land Development Cluster    | 0.31               | 0.65                    |
| Mining                                    | 2.02               | 3.11                    |
| Transportation/Materials Handling Cluster | 0.09               | 0.42                    |
| Trade Cluster                             | 0.20               | 0.57                    |
| Communications Cluster                    | 0.01               | 0.12                    |
| Financial Services Cluster                | 0.10               | 0.43                    |
| Education Cluster                         | 0.16               | 0.31                    |
| Health Care Cluster                       | 0.44               | 0.85                    |
| Recreation Services Cluster               | 0.05               | 0.18                    |
| Hospitality Services Cluster              | 0.90               | 1.76                    |
| Repair Services Cluster                   | 0.06               | 0.16                    |
| Personal services Cluster                 | 0.28               | 0.57                    |
| Religious and Non-Profits Cluster         | 0.08               | 0.43                    |
| Government Cluster                        | 1.80               | 3.03                    |

As the economic base deteriorates, the private sector economy follows and more jobs will be concentrated in government employment. Currently about one third of all employment is in government jobs and this is increasing. It will be difficult to support this large a government sector without a healthier private sector.

### **Demographic Considerations**

Ferry County’s population is growing at a very slow rate. Population growth is linked to demographics, but the age class distribution is influenced by the state of the economy and job availability. This county’s unusual bimodal pattern has a concentration of age classes in youth, a gap in family formation age classes, and an extreme concentration in older age classes (figure 2-F2). This is an unstable pattern that suggests strong out-migration of productive residents and in-migration of age classes requiring services.

**Figure 2-F2  
Ferry County Population Pyramid**



## Pend Oreille County Economy

### Economic Geography

The Pend Oreille County economy can be broken down into three geographic units that function almost independently. These are: the Spokane commuting area from Diamond Lake south; the Newport area; and the lower Pend Oreille valley.

The Spokane commuting area is populated by workers who drive daily to the major regional trade center. As a result there is little community structure or local trade presence. Spokane commuters bring money into the county, but spend much of their paychecks in Spokane, so the area does not support a strong retail community. Businesses are convenience oriented or recreation service businesses. The exceptions are auto repair and towing which are typically present on any highway corridor.

Newport and vicinity is the local core economy and county seat. It has a small retail and service community that is struggling to survive in a competitive situation. It is located on the Highway 2 corridor about half way in between Spokane and Sandpoint. The Newport economy functionally incorporates the cities of Oldtown and much of Priest River (both in Idaho). Oldtown butts up against Newport and Priest River is only 6 miles away. Area residents work and shop in all three communities. There are also strong ties to the Sandpoint area which is similar in its specialization as a recreation-based economy.

The lower Pend Oreille Valley is a resource based economy with mining, logging, recreation and power production. The small communities of Cusack and Metaline have tourist oriented services that serve the small resident population in winter months. Miners at the Pend Oreille Mine commute long distances for the dangerous but highly paid jobs at the mine. Although there is a

route to Colville, most residents tend commute into Newport, Sandpoint or Spokane for shopping. This portion of the county has a higher proportion of low income and families below the poverty level. The Kalispell Tribe has offices in Cusick and Usk and operates a large casino in Airway Heights.

Spokane area residents may travel the full Highway 2 corridor to Sandpoint and occasionally use services all along the route. However, both Spokane and Sandpoint have major retailers, big box stores and national franchise retailers, restaurants and motels. Weekend shopping to Spokane and Sandpoint and the draw of major retailers siphons off most of the trade on the Highway 2 corridor. As the highway is upgraded to a freeway, it will be even more difficult to maintain retail services in Newport. On the other hand, highway improvements could make it feasible to locate “footloose” manufacturers in the Pend Oreille valley where the quality of life is superior to Spokane. There is already one such large firm, Zodiac Aerospace.

Major local employers include the Newport Newsprint Mill, Zodiac Aerospace, the Usk Sawmill, the Pend Oreille PUD, the Hospital District; the Kootenai Tribe; and the Pend Oreille Mine in Metaline Falls. Newport provides services and shopping for most of the county which is strongly linked to and dominated by the Spokane-Spokane Valley MSA. Commuting to Spokane is significant, and Spokane area residents use the area for weekend recreation. About one quarter of the county’s residents commute to jobs in the Spokane area.

## **Employment**

Across the county there is apparent economic diversity (table 2-P1). However, the previous discussion shows that the aggregate statistics are misleading and some sectors are spatially concentrated.

Forest industries are a major employer in the Newport-Oldtown and Priest River economy. Mills and log processing logs are located in Oldtown, Priest River and Usk, with mill workers residing in all three towns. The mills are highly specialized with different log and species requirements, so there is minimal competition between the local mills for log supplies. The Vaagen Usk mill is an efficient stud mill that utilizes small diameter lodgepole pine (currently running one shift). The Newport Newsprint Mill (Pend Oreille Paper) imports pulp logs and chips from a very large working circle. The IFG Mill in Priest River is currently a cedar products mill. A cedar pole manufacturer in Oldtown uses large diameter cedar logs from a large working circle. The Stimpson Mill uses species suitable for dimension lumber (Douglas fir and larch). Chips (except for cedar) from several sawmills are used by Pend Oreille Paper in Usk.

**Table 2-P1  
Pend Oreille County Employment**

| Pend Oreille County Economy | Employment   | Earnings<br>-----(\$1,000)----- |
|-----------------------------|--------------|---------------------------------|
| Agriculture and Forestry    | 215          | \$6,163                         |
| Mining                      | 254          | \$23,964                        |
| Construction                | 125          | \$3,034                         |
| Wood Products               | 199          | \$18,583                        |
| Other Manufacturing         | 105          | \$6,976                         |
| Transportation              | 79           | \$3,001                         |
| Utilities                   | 127          | \$5,600                         |
| Information                 | 57           | \$1,762                         |
| Trade                       | 285          | \$6,933                         |
| Finance                     | 166          | \$5,280                         |
| Hospitality Services        | 221          | \$3,454                         |
| Consumer Services           | 146          | \$4,054                         |
| Business Services           | 113          | \$3,473                         |
| Medical Services            | 650          | \$26,330                        |
| Federal Government          | 143          | \$7,134                         |
| State & Local Government    | 392          | \$16,711                        |
| <b>Total</b>                | <b>3,276</b> | <b>\$142,453</b>                |

## **Economic Strengths and Weaknesses**

Cluster analysis compares the county economy to national norms.<sup>9</sup> In this case, the employment location quotient (LQ) shows that wood products is the strongest employer in the region relative to national averages (table 2-P2) followed by mining and social services. Government and health care are both also relatively strong. Unfortunately, this indicates a large lower income population. There is not a large elderly population, but the county has excellent health care services and they are a major employer. The strong performance in transportation equipment is associated with Zodiac Aerospace.

The most important industries in terms of jobs and income are medical and social services, mining, forestry, wood products manufacturing, hospitality services (motels, restaurants and recreation services) and retail trade. Wood products, mining, and tourist services (hospitality services and part of part of retail trade) are part of the economic base. Medical and social services and most of retail trade serve the resident population. Utilities and other services also serve the resident population.

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<sup>9</sup> Values of 1.0 or higher for an employment cluster indicate that a region's sector is stronger than the national economy.

The relatively poor showing of trade, hospitality services, and recreation services shows how weak tourism is in the Newport area economy. It has “passing through” tourist services rather than destination facilities. Tourists generally favor recognizable franchise restaurants and “nicer motels”. We found none of either type.

Although recreation and tourism is weak in Newport and overall, it is still an important enterprise in some parts of the county. Camping and RV sites are numerous all along the Pend Oreille River and lakes in the county (Diamond Lake in particular). Pend Oreille County still has a stronger recreation and tourism orientation than other counties in the region and benefits more directly by its proximity to Spokane. The county is less isolated than other parts of the three-county region because of its location on the US Highway 2 corridor, with a four lane freeway into the heart of Spokane. The entire Pend Oreille Valley from Sandpoint to the Canadian Border is a water based recreation area.

**Table 2-P2  
Pend Oreille County Employment Clusters**

| <b>Employment Cluster</b>   | <b>L Q</b>  |
|-----------------------------|-------------|
| Agriculture & Forestry      | <b>1.46</b> |
| Mining                      | <b>4.87</b> |
| Wood Products Manufacturing | <b>9.38</b> |
| Transportation Equipment    | <b>1.41</b> |
| Trade                       | <b>0.57</b> |
| Communications              | <b>0.65</b> |
| Financial Services          | <b>0.76</b> |
| Business support services   | <b>0.35</b> |
| Educational services        | <b>0.19</b> |
| Health Care                 | <b>1.38</b> |
| Social Services             | <b>4.03</b> |
| Recreation Services         | <b>0.60</b> |
| Hospitality Services        | <b>0.95</b> |
| Repair Services             | <b>1.58</b> |
| Personal services           | <b>0.82</b> |
| Religious and Non-Profits   | <b>0.80</b> |
| Government                  | <b>1.71</b> |

Good basic metal prices have helped the mining industry which provides very high paying jobs in economically isolated sites. Transportation is strong because it includes main line rail and trucking. Trucking primarily serves the areas wood product mills and the mining industry. Basic metal ore from the Pend Oreille Mine is trucked to Canada for processing.

Agriculture and forestry services are somewhat less important in this county than in the rest of the region. Some of the agricultural and forest lands in the southern portion are being converted to rural residential housing. The wood products sector is exceptionally strong because of milling rather than logging. There is proportionately less industrial forest land in this county and harvestable forests lands are located more in the north with the exception of the Salmo-Priest Wilderness area. The Priest River State Forest in Idaho is important to the forest industry in this Washington economy and is a major supplier of logs into it.

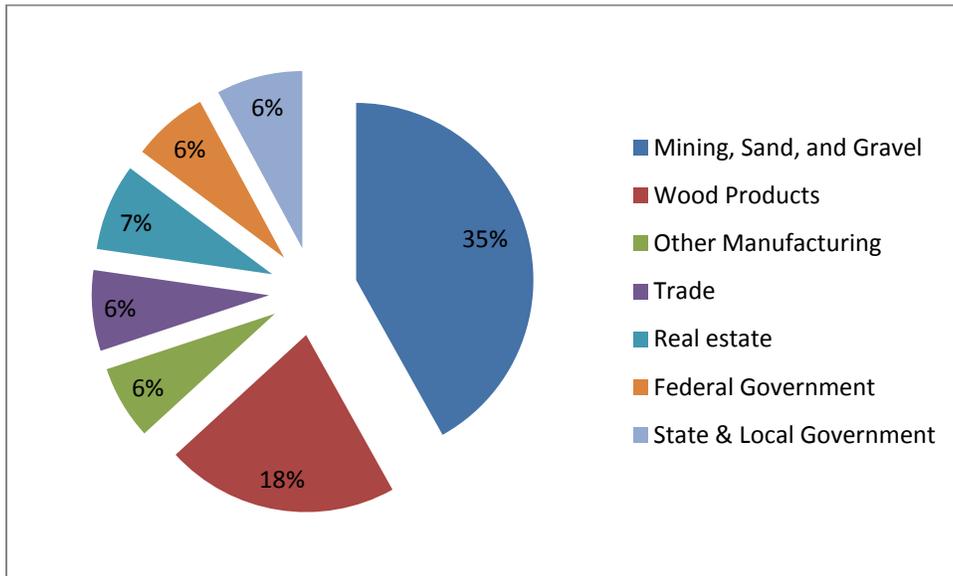
Because of its proximity to larger trade centers (Spokane, Sandpoint, and Coeur d'Alene) trade leakage has prevented the development of a strong retail and service sector, or economic diversification. Weekly shopping trips into larger trade centers and commuting are very evident. Relatively little new investment in retail or service industries was found in any of the communities. Closer to Spokane there is more real estate development and convenience retail expansion evident. Conspicuously absent were franchise or chain retailers who drive trade expansion in metropolitan areas. The cluster analysis also confirms that certain services, such as: business and financial services, communications, educational services and personal services, are mostly provided primarily by the Spokane area economy.

About one third of the housing stock in the county is seasonal housing (summer homes). When RV sites and campgrounds are added, it is clear that the county's population swells by about forty percent in the summer months. This is most evident in the Diamond Lake, Sullivan Lake and Pend Oreille River areas. Newport serves as a retail center for this activity, but Newport's population itself is not very seasonal.

## **Economic Base**

The economic base of the county (figure 2-P1) is mining and manufacturing (primarily wood products). Real estate development (sales of recreational property), tourism (retail trade) and government all make some contribution. State and federal governments contribute to the base because they bring in revenue from outside the local economy, but they are not indicators of a strong economy. They are indicators of the need to service a large low income and poor population. A small portion of the real estate industry serves the outside market selling recreational property to non-residents.

**Figure 2-P1  
Pend Oreille County Economic Base**



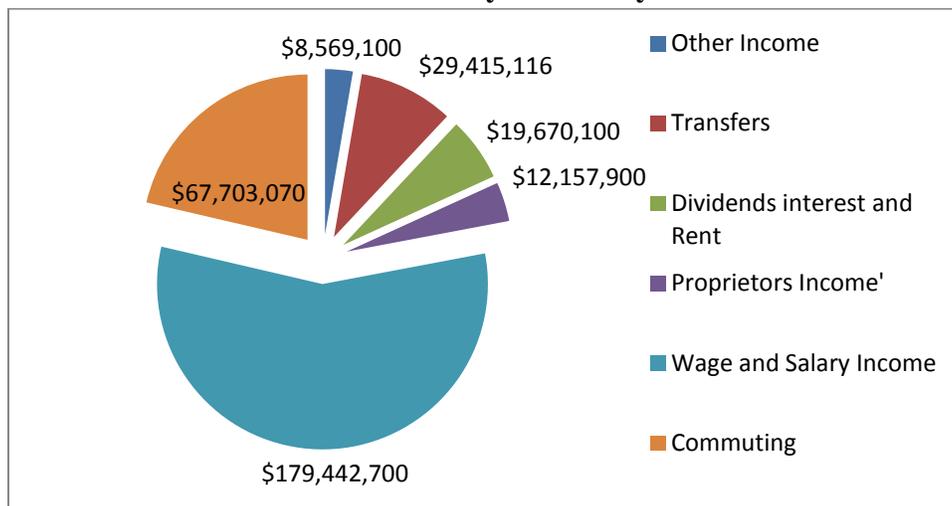
The county has about a ten percent unemployment rate which varies seasonally from 8.5 to 11 percent. This reflects the continuing impact of the “Great Recession”. Many workers laid off in the recession have not found replacement jobs. This is one of the highest unemployment rates in the state, but still below Ferry County and about on a par with Stevens County. Private sector employment has not increased since 2003, so this may explain some of the continuing unemployment problem. At this point, the problem could be characterized as long term structural unemployment due to a long-term decline in the wood products sector which was the major basic employer. The national recovery of this sector is bottlenecked locally by the capacity of remaining infrastructure. The problem may not resolve itself until unemployed former woods workers reach retirement age or migrate out.

The county has a challenging labor market for two income families because most of the higher paying jobs are in male dominated industries. Families have made an adjustment to this situation by commuting to Spokane. Women have also come to dominate jobs in education, health care and government. The county has a mix of extractive industries that are not expected to grow appreciably unless there are major changes in federal land management. We do not foresee this, and expect the county’s resource based employment to be stable. The most important factor that could change the economy would be major improvements to US Highway 2. There are two counter-veiling effects possible: (a) increased commuting and trade leakage to Spokane and Sandpoint and (b) quality of life industrial migration. Without this, we expect the population to remain stable with no appreciable growth. The one exception could be increased rural amenity housing in the Spokane commuting vicinity that is not tied to the economic base.

## Pend Oreille Income

Pend Oreille County residents make most of their income from working in the local economy and commuting to jobs in Spokane (figure 2-P2). About eighty percent of residents' income is derived from these sources. The county has the smallest proportion of transfer payments of any in the three-county region. It also has a small component of investment income (also associated with an older population). The income statistics along with wage rate data suggests a county with middle income and some poor residents, with only a small component of wealthy individuals who have moved into areas around Diamond Lake and along the Pend Oreille River.

**Figure 2-P-2**  
**Pend Oreille County Income by source**



## Residents Income Types

Residents of Pend Oreille County receive most of their income from wage and salary earnings, either from working in the local economy, or from commuting to Spokane (table 2-P3). This suggests a healthy economy with most people reliant on earned income for their major source of income. Transfer payments (Social Security, SSI, welfare and retirement) are a smaller portion of the pie than in either Stevens or Ferry County.

Commuting to Spokane is a major source of income with about one quarter of the labor force working in the Spokane economy. Commuting between Newport and Oldtown-Priest River is also significant with about ten percent of the labor force employed in these two communities.

Residents make a little less than half of their total income from within the county. Commuting and transfer payments make up about half of residents total income. Newport and the Pend Oreille Valley are surrounded by stronger labor markets so in-commuting is not a major factor except within the Newport-Oldtown area.

**Table 2-P3  
Pend Oreille County Residents' Income (\$1000's)**

| <b>Inside Income (46.8%)</b>                         |                |
|--|----------------|
| Wage and Salary Earnings                             | 142,452        |
| In-commuter claims on Wages                          | -259           |
| Proprietors Earnings                                 | 58,342         |
| Outside claims on profits                            | -44,261        |
| <b>Total Residents Inside Income</b>                 | <b>156,275</b> |
| <b>Outside Income: earned &amp; unearned (53.2%)</b> |                |
| Investment Income                                    | 30,864         |
| Transfer Payments                                    | 78,450         |
| Out-commuters Earned Income                          | 68,535         |
| <b>Total Residents Outside Income</b>                | <b>177,849</b> |

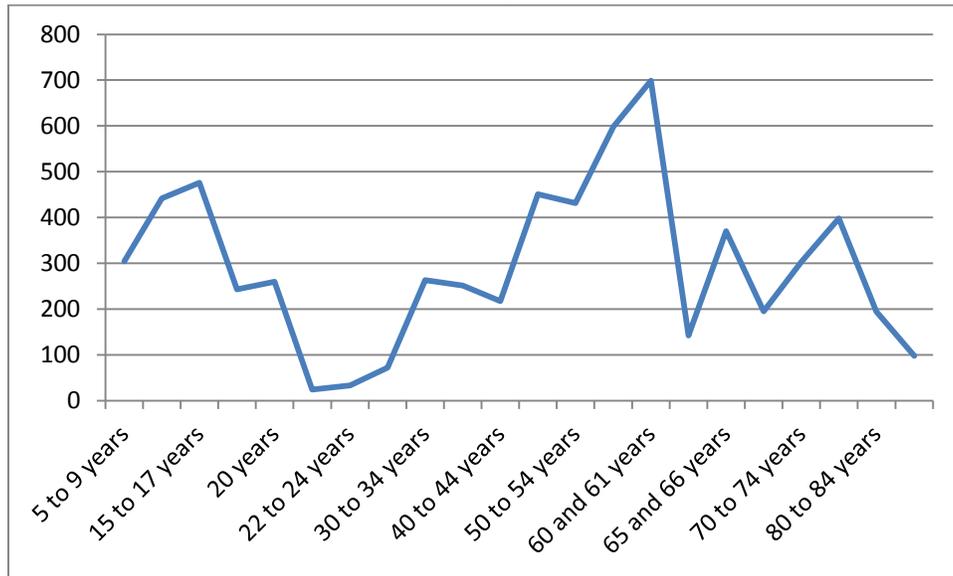
The county has about twenty percent of its population living below the poverty level, a much higher rate than the state or national average. Poverty in this county is primarily rural poverty and is most evident in the lower Pend Oreille Valley.

Jobs in the mining industry are higher paying than most professional jobs. Schedules allow miners to work for a block of time (up to ten days in row) then have a block of time to return home. Long commutes to these jobs are typical and we found this to be the case with the Pend Oreille Mine at Metaline. A parking lot survey identified miners from throughout the Pacific Northwest and Canada. The mine is owned and operated by a Canadian mining company.

### **Demographics**

Pond Oreille County's population structure shows two interesting conditions (figure 2-P3). With a northern population, the age class distribution pyramid should show more young people and a gradually declining population cohort as mortality takes effect. This county's younger population cohorts are fairly large until high school graduation age (17-18) when out-migration begins in earnest. Middle-aged adults who have jobs and are committed to the area have fairly large cohorts. At 62 when social security retirees takes effect, a large portion of the population leaves. This is the inverse of the Tri-county area and is hard to explain because Newport offers good health services and lower cost of living.

**Figure 2-P3  
Pend Oreille County Population Distribution**



## Stevens County Economic Profile

### Economic Geography

The Stevens County economy functions as five inter-active geographic units. The five units are:

1. Spokane commuting area from Chewelah south;
2. Spokane Indian Reservation;
3. Colville-Kettle Falls regional trade center;
4. peripheral valleys that feed into Colville; and
5. Lake Roosevelt National Recreation Area.

The southern portion of the county (Spokane commuting area) has the best jobs and highest pay scales. This is reflected in more expensive housing and upscale development along the Spokane River and around Loon Lake. Higher end retail is evident in Suncrest and the Nine Mile Falls area. These areas are very close to Spokane and clearly function as parts of the Spokane economy rather than the Stevens County economy.

The Spokane Indian Reservation has a mix of some older housing that is in very poor condition and newer tribal housing projects built as planned unit communities. These planned unit communities have recreation services, health and educational services and tribal offices. Retail trade is very limited throughout the reservation. Most of the population of the tribe works for the tribal enterprises, rather than in a retail setting. Trade hierarchies are Spokane rather than Colville-Kettle Falls dominated.

Colville and Kettle Falls are the core retail and service area for the rest of the region. Most of the county population resides either near these two communities or in Chewelah. Key government offices, schools, and medical facilities are located in Colville. Colville also provides weekend shopping at stores such as Wal-Mart and Super One. The core area has a diversified manufacturing economy with a particularly strong wood products sector. Most of the loggers and log truck operators for the whole tri-county region are based nearer the mills in Colville and Kettle Falls. Colville and Kettle Falls share the same wood products and manufacturing economic base that anchors the entire region. Residents of the two towns commute back and forth for work and shopping.

Valleys leading into the Columbia River include: Colville River Valley, Kettle River Valley and Upper Columbia River Valley. All have highways that leading into Colville and that reinforce a radial trade hierarchy. These valleys are populated by an older population with less dependence on wage and salary income. Job opportunities are limited and seasonal in these peripheral areas, so many workers commute into the Colville and Kettle Falls. Businesses in the peripheral areas are limited to tourist services with a few educational and medical services for residents.

The area around Lake Roosevelt is similar to the valleys leading into the Columbia, but it is entirely federally managed. The Bureau of Reclamation operates Grand Coulee Dam and The National Park Service manages the national recreation area all around the reservoir. There are public campgrounds and boat launches on the shorelines between Ferry and Stevens County, but most of the activity is in Stevens Co. Direct access to the reservoir is limited and fees accrue directly to the federal treasury. This limits shoreline commercial services and retail development that would ordinarily occur around such a large lake as in North Idaho lake communities which exhibit extensive shoreline development. As a result, economic linkages are less robust.

### **Overview of the Economy:**

Stevens County is a resources, services, and government based economy as shown in table 2-S1. Major employers in the County include the Spokane Tribe, Boise Corporation, Colmac, Vaagen Brothers Lumber, Providence Health Care, the Colville National Forest, public schools and Hewescraft.

**Table 2-S1  
Stevens County Employment Table xx**

| Stevens County                          | Employment    | Earnings<br>-----(\$1,000)----- |
|---|---------------|---------------------------------|
| <b>Agriculture and Forestry</b>         | <b>1,705</b>  | <b>\$43,529</b>                 |
| <b>Mining</b>                           | <b>114</b>    | <b>\$4,986</b>                  |
| <b>Construction</b>                     | <b>443</b>    | <b>\$17,934</b>                 |
| <b>Wood Products MFG.</b>               | <b>559</b>    | <b>\$32,171</b>                 |
| <b>Other MFG</b>                        | <b>85</b>     | <b>\$9,600</b>                  |
| <b>Transportation</b>                   | <b>423</b>    | <b>\$13,444</b>                 |
| <b>Publishing &amp; communications</b>  | <b>352</b>    | <b>\$13,335</b>                 |
| <b>Public utilities</b>                 | <b>57</b>     | <b>\$8,779</b>                  |
| <b>Trade</b>                            | <b>127</b>    | <b>\$4,288</b>                  |
| <b>Accommodation Services</b>           | <b>1,586</b>  | <b>\$45,152</b>                 |
| <b>Financial Services</b>               | <b>561</b>    | <b>\$14,115</b>                 |
| <b>Recreation Services</b>              | <b>1,347</b>  | <b>\$21,407</b>                 |
| <b>Consumer services</b>                | <b>401</b>    | <b>\$12,789</b>                 |
| <b>Business services</b>                | <b>493</b>    | <b>\$15,395</b>                 |
| <b>Medical and Educational Services</b> | <b>709</b>    | <b>\$16,037</b>                 |
| <b>Federal Govt.</b>                    | <b>450</b>    | <b>\$31,442</b>                 |
| <b>State &amp; Local Govt.</b>          | <b>2,496</b>  | <b>\$122,521</b>                |
| <b>Total</b>                            | <b>11,907</b> | <b>\$426,924</b>                |

The wood based sectors are well developed and account for almost 20% of all direct employment. Forestry related jobs (timber harvest, log hauling, silviculture and fire suppression) are major components. They are shown combined with agriculture, but agriculture is highly mechanized and does not employ a lot of workers.

Wood products manufacturing is also a major employer with mills capable of cutting all species and classes of logs. National housing markets have recovered so sawmills are running at or near capacity. They should continue to do well as long as the recovery holds. The recent record wildfires should shift timber harvests from green stands due to planned salvage operations of the tribe, private industrial owners and non-industrial private owners. Salvage operations had already begun when we surveyed the region in August of 2015. We include the Avista operated biomass generation plants as it offers a niche market for mill residuals and harvest slash. This is a unique type of wood-using infrastructure that is not present in many other timbersheds. Mills in the county are somewhat specialized (pine board mills, dimension mills and plywood mills), so competition for logs and in product markets is indirect.

Outside the core Colville-Kettle area, tourism oriented retail and timber harvest related activities are the primary employers. Timber harvest tends to be concentrated north of Colville and Kettle Falls and the Kettle Range is somewhat more recreation oriented. A significant portion of the Kettle Range is managed as a roadless area.

## Economic Strengths and Weaknesses

Cluster analysis shows strengths and weaknesses of an economy. Once identified, strengths can be reinforced and weaknesses can be strengthened. In Stevens County the only strong clusters are agriculture, wood products, equipment manufacturing, social services, government, repair services and hospitality services (table 2-S2).

**Table 2-S2**  
**Cluster Analysis of Employment Clusters**

| <b>Summary of Clusters</b>                | <b>LQ</b>    |
|---|--------------|
| <b>Agriculture &amp; Food Processing</b>  | <b>2.51</b>  |
| <b>Wood Products Cluster</b>              | <b>15.32</b> |
| <b>Construction &amp; Development</b>     | <b>0.85</b>  |
| <b>Chemicals (non-metallic) Cluster</b>   | <b>0.21</b>  |
| <b>Metals Manufacturing Cluster</b>       | <b>0.22</b>  |
| <b>Equipment &amp; Machinery Mfg</b>      | <b>2.17</b>  |
| <b>Transportation Equipment</b>           | <b>0.80</b>  |
| <b>Furniture Manufacturing</b>            | <b>0.31</b>  |
| <b>Miscellaneous Manufacturing</b>        | <b>0.18</b>  |
| <b>Transport &amp; Materials Handling</b> | <b>0.61</b>  |
| <b>Trade</b>                              | <b>0.88</b>  |
| <b>Communications</b>                     | <b>0.40</b>  |
| <b>Financial Services</b>                 | <b>0.34</b>  |
| <b>Business support services</b>          | <b>0.33</b>  |
| <b>Educational services</b>               | <b>0.24</b>  |
| <b>Health Care</b>                        | <b>0.30</b>  |
| <b>Social Services</b>                    | <b>1.57</b>  |
| <b>Recreation Services</b>                | <b>2.50</b>  |
| <b>Hospitality Services</b>               | <b>1.14</b>  |
| <b>Repair Services</b>                    | <b>1.97</b>  |
| <b>Personal services</b>                  | <b>0.10</b>  |
| <b>Government</b>                         | <b>2.64</b>  |

There are many weak sectors. Low employment location quotient (LQ) scores<sup>10</sup> in retail trade indicate substantial trade leakage to the Spokane regional trade center. Most of the services

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<sup>10</sup> A location quotient (LQ) value of 1.0 or higher for an employment cluster indicates that the region's sector is stronger than found in the national economy.

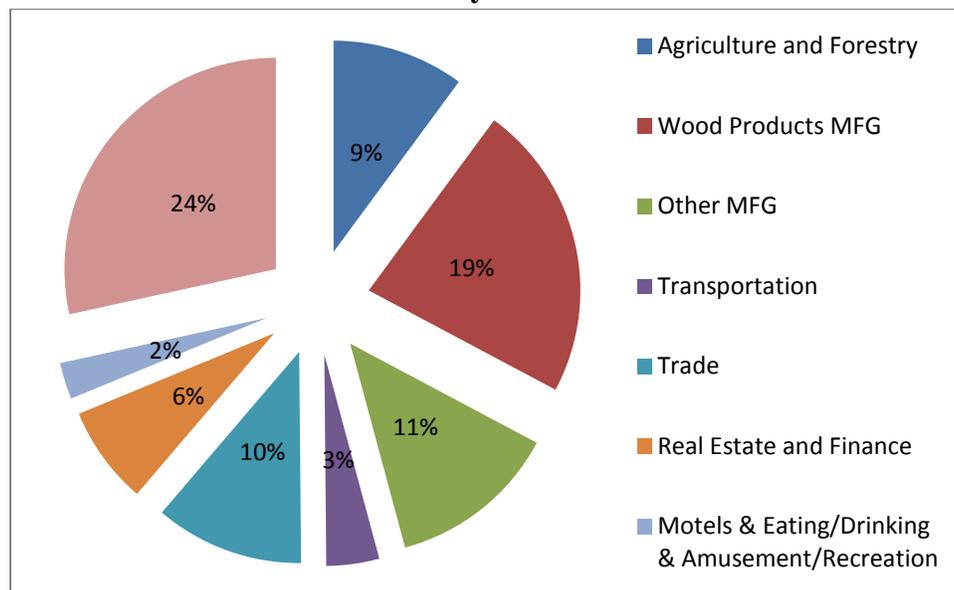
sectors are also low indicating a reliance on the large Spokane economy for a wide variety of services (information, business services, financial services and consumer services).

Agriculture is more profitable in portions of this county than in the rest of the three county regions and even in Stevens County are spatially concentrated. Cereal grain agriculture and fruit production are the two most profitable agricultural operations.

## Economic Base

The county's economic base describes what it sells to the outside world or in a sense how the county makes its living. There is some correlation with the employment clusters, but the relative value of sector export product is also considered.

**Figure 2-S1**  
**Stevens County Economic Base**



The county's economic base is tied strongly to forest industries with a little over one quarter of the economic base in forestry, log and forest products trucking (transportation) wood products manufacturing.<sup>11</sup> Government (state, federal and that portion of local government funded from outside the county) account for another quarter of the economic base. Normally government employment is not an important part of the economic base. Its importance in Stevens County reflects a high dependence on outside government funding to maintain educational, medical,

<sup>11</sup> Economic base analysis for this county is performed using two techniques (Stevens supply-demand pool and-or location quotients). The analysis uses the lower of these two values, or a value that is over-riden based upon either survey data or judgment. For example it is clear that sawmills do not sell directly to final demand (consumers), so an over-ride value is used for sawmill production that reflects that all output is sold to either lumber brokers or suppliers outside the area.

social and other government supported services. About thirty percent of the economic base is linked to recreation services and tourism (trade, real estate, and motels and restaurants). Manufacturing industries other than wood products account for the remaining eleven percent of the economic base.

## Stevens County Income

This county has the healthiest economy of the three in Northeastern Washington, but it is still plagued with long term structural unemployment higher than the state average. The county's workforce is typically less skilled and less well-educated than in other areas of the state.

The county also has a higher proportion of wealthy households than other areas of the region. This is most evident near Spokane; around the ski area and around lakes and rivers in the county. There are also significant pockets of rural poverty in the peripheral valleys and on the Spokane Indian Reservation. The county still has a healthy middle class in the core area due to forest products and other manufacturing jobs.

**Figure 2-S2**  
**Stevens County Income Sources**

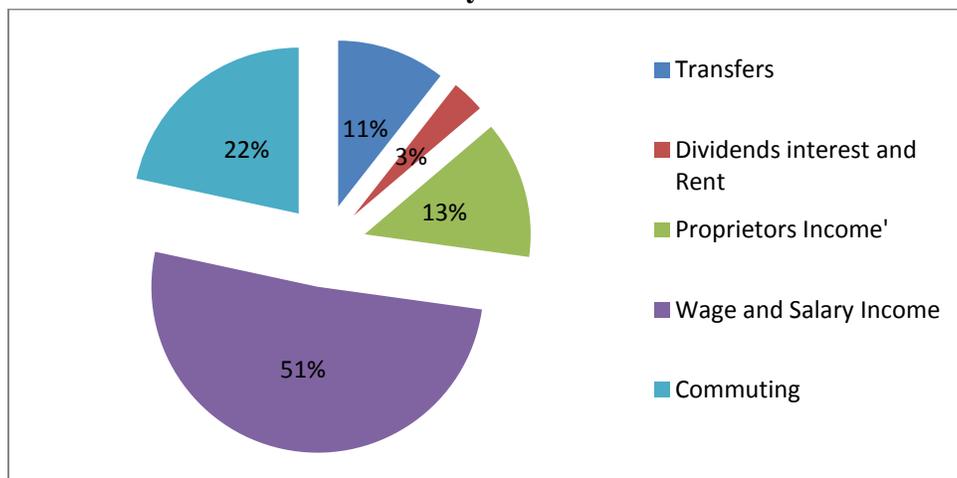


Figure 2-S2 shows that Stevens County residents earn most of their income from work (working in the county, operating a business, or commuting). County residents rely less on government transfer payments than in the other two counties. Only a small percent of income is unearned income associated with wealth (dividends, interest and rental income). This supports the idea that wealthier Spokane residents do not typically retire to or live in the county. Other studies have shown that a larger proportion of wealthy Spokane residents tend to move or own second homes around the northern Idaho lakes.

**Table 2-S3  
Stevens County Residents' Income Sources (\$1000's)**

| <b>Inside Income</b>                         |                |             |
|--|----------------|-------------|
| Wage and Salary Earnings                     | 426,924        | 55%         |
| In-commuter claims on Wages                  | -4,346         | -1%         |
| Proprietors Earnings                         | 124,611        | 16%         |
| Outside claims on profits                    | -97,877        | -13%        |
| <b>Total Inside Income</b>                   | <b>449,312</b> | <b>58%</b>  |
| <b>Outside Income: earned &amp; unearned</b> |                |             |
| Investment Income                            | 56,077         | 7%          |
| Transfer Payments                            | 86,991         | 11%         |
| Out-commuters Income                         | 180,261        | 23%         |
| <b>Total Outside Income</b>                  | <b>323,329</b> | <b>42%</b>  |
| <b>Total Income</b>                          | <b>772,641</b> | <b>100%</b> |

Stevens County residents make the majority of their income in the local economy and the biggest source of income is work (wage and salary income, commuter income, and proprietor's income (table 2S-3). This shows a healthy economic situation with about eighty percent of income derived from wages, salaries and proprietors earnings. Only a small portion of income (about ten percent) is derived from government transfer payments. Other sources of retirement income (investment income) also play a small role. The other part of this picture is poverty. Like Ferry and Pend Oreille County, Stevens County has its share of county residents living below the poverty level (16.5%). Poverty rates on the Spokane Reservation have been historically high, but this is slowly changing with the development of tribal enterprises that employ a large portion of the tribes working population.

Wood Products industry jobs are some of the higher paying jobs in the region and Stevens County has a large share of these jobs, both in timber harvest and wood products manufacturing.

## **Demographics**

Stevens County demography shows the same out-migration of young workers (right after high school) that is evident throughout the region. This creates a population structure where a smaller proportion of the population is working age and able to support the relatively large population of school-aged children and the elderly. Looking at Figure 2-S3, the hollowed out working age class area (the cup) has to support the large shoulders (non-working age classes). The county is growing at a slower rate than the state. This is due to the out-migration of young workers who are in the child-bearing years.

**Figure 2-S3**  
**Stevens County Age Class Distribution**

