

THE ECONOMIC CONTRIBUTIONS OF DATA CENTERS IN NORTH CENTRAL WASHINGTON

January 2010

1. OVERVIEW

As counties throughout the state suffer through deep recessionary losses, several north central Washington counties are enjoying new money and new economic opportunities as a result of substantial new data center development. These centers – also called cloud computing centers – are integral to the information economy. Washington state – home to Microsoft, Amazon, Boeing Commercial Airplanes – has long been a technology leader. Developing this emerging sector would further solidify the state’s tech credentials. More important, as the data confirm, data centers provide both short- and long-term economic benefits to the communities in which they locate.

Nationally, states have begun to compete aggressively for these multi-million dollar infrastructure investments. Economic development leaders recognize that winners of the first-round of data center installations position themselves for future expansion.

A February 2009 story in Texas Real Estate Business, touting that state’s success in landing a \$500 million center, concluded, “As the United States makes the shift to an information-based economy, data centers are going to become more important than ever. Cities such as San Antonio, Dallas and Austin are poised to take advantage of this movement, ensuring the prosperity of the Texas economy for decades to come.”

Former Microsoft CFO Mike Brown, in a December 11, 2009 Seattle Times commentary, says, “Attracting computer centers to our state would be a huge win for Washington. They create jobs to build, operate and service, they pay property taxes that provide economic stability to the counties and schools where they are located, and they attract suppliers and support infrastructure firms that are drawn to locate nearby.”

We’re seeing it happen in North Central Washington.

Attracted by low cost land and electricity, plenty of fiber bandwidth, favorable weather conditions, and low risk of natural disasters, data center developers are investing hundreds of millions of dollars in rural communities throughout the country. In Washington, four such projects have already been built and are operational in Grant County, while three additional projects are in various stages of development in Douglas and Grant. One data center opened in Wenatchee in an already-developed property leased from the Port of Chelan.

These projects result in hundreds of millions of dollars in new investment in construction, interior improvements and new equipment, well-paid construction jobs, extraordinary taxable retail sales during construc-

tion, on-going high-wage employment at the centers themselves, and significant property tax contributions on an on-going basis that will lower the burden on other taxpayers paying for local city and county governments, schools and other special local districts. In addition, support goods and services for the data centers and their permanent employees will spur additional secondary employment.

2. COMPARATIVE ECONOMIC REVIEW

In this report we take a look at economic data for Chelan, Douglas and Grant Counties. Located next to one another the three counties share

many of the same characteristics – irrigated agricultural land, cold winters, and relatively inexpensive land, certainly compared with the Seattle Metro area. And all three counties are home to a series of hydro-electric dams along the Columbia River that produce low-cost and renewable electrical power. A few statistics help illustrate how these neighboring counties compare with one another.

Grant and Chelan’s economies are more than twice the size of the Douglas County economy, with Wenatchee (Chelan) and Moses Lake (Grant) both acting as retail centers in their own localized areas.

The work forces in Chelan and Grant, correspondingly have more than three and four times the number of employed, respectively, compared with Douglas County.

Table 1: Income, Population and Employment

	2005	2006	2007
Personal Income (millions)			
Chelan	\$2,062.4	\$2,189.0	\$2,312.7
Douglas	\$839.4	\$907.0	\$982.3
Grant	\$1,818.1	\$1,900.4	\$2,037.0
Population			
Chelan	68,892	69,825	70,694
Douglas	34,343	35,142	36,035
Grant	79,531	80,845	82,361
Employment			
Chelan	52,548	53,775	54,258
Douglas	12,863	12,687	13,061
Grant	40,749	41,895	42,765
Per Capita Personal Income			
Chelan	\$29,937	\$31,349	\$32,714
Douglas	\$24,441	\$25,809	\$27,260
Grant	\$22,861	\$23,507	\$24,733
State	\$36,227	\$38,639	\$41,203

Source: Bureau of Economic Analysis, U.S. Department of Commerce, CA-04

Grant, the most populous of the three counties, has more than twice as many people as Douglas.

Chelan County, which is more of a regional retail center for the north central Washington area, has the highest per capita personal income of the three counties.

Douglas County has slightly higher per capita personal income than Grant, likely due to its proximity to Wenatchee in Chelan County.

While per capita income in all three counties is substantially lower than the average for the state, Douglas County saw growth similar to state-

wide per capita growth – 12 percent compared with 14 percent statewide in 2007, concurrent with the data center construction phase of the Sabey development.

Median family incomes are also higher in Chelan and Douglas Counties than in Grant County. In 2007, median household incomes

Table 2: Median Home Prices

	2005	2006	2007	2008
Chelan	\$173,900	\$202,000	\$243,900	\$247,000
Douglas	\$173,900	\$202,000	\$236,900	\$234,900
Grant	\$113,900	\$133,500	\$154,500	\$159,000
State	\$225,000	\$260,900	\$293,800	\$266,700

Source: Washington Center Real Estate Research, Washington State University, 2009

Chart 1: Total Employment Growth

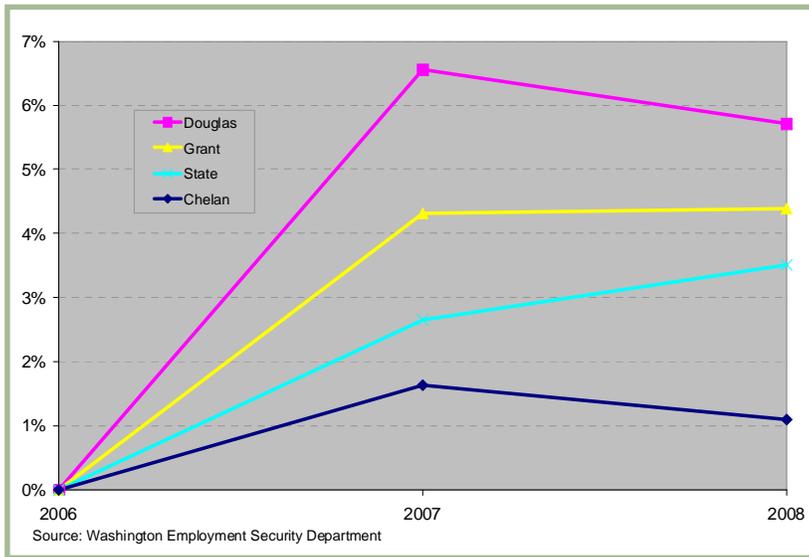


Chart 2: Construction Employment

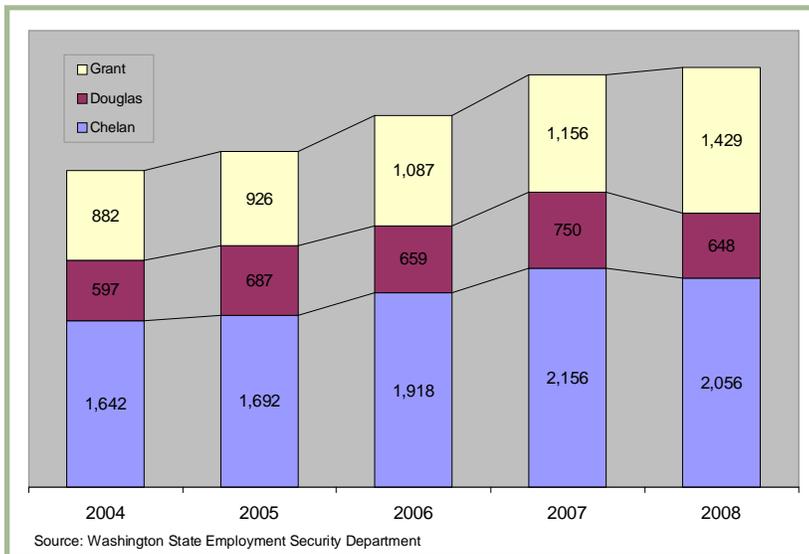


Table 3: Average Annual Wage

	2005	2006	2007	2008
Chelan	\$27,856	\$29,008	\$30,244	\$31,489
Douglas	\$24,527	\$25,645	\$26,614	\$27,899
Grant	\$26,674	\$28,064	\$29,633	\$31,955
State	\$40,705	\$42,881	\$44,967	\$46,559

Source: Washington Employment Security Department, Covered Wages

were \$53,244 in Chelan County, \$52,229 in Douglas County, and \$46,446 in Grant County. These incomes then support higher median housing prices – \$247,000 and \$234,900 in Chelan and Douglas, respectively, compared with just \$159,000 in Grant.

3. RECENT GROWTH TRENDS

Data center construction and development investment offers economic stimulus, especially to these relatively rural areas in eastern Washington. In the near-term there are more jobs, wages and higher average wages resulting from construction activity (see the Data Center Development Timeline on page 5).

In the longer term data center presence contributes to on-going job and wage growth, as well as to increased tax base over which local governments may spread the cost of their public spending. The numbers, while small in the context of the larger statewide economy, signal important economic diversification for these rural areas of Washington State.

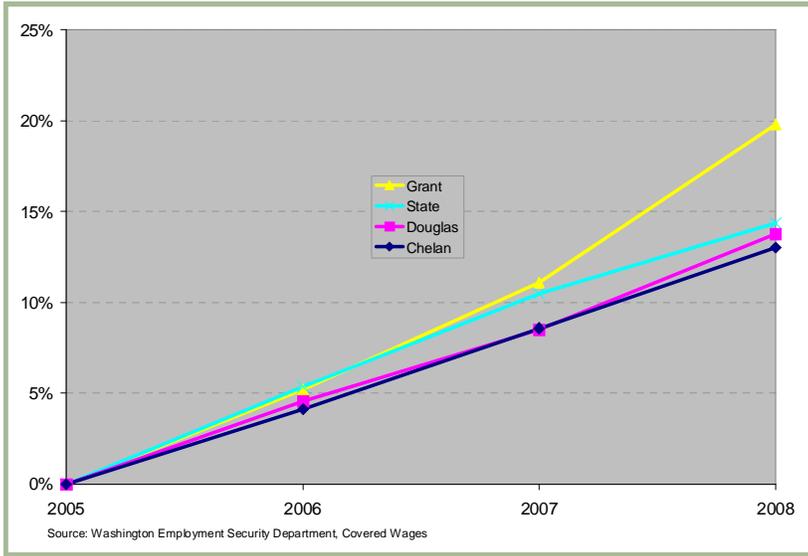
4. AVERAGE ANNUAL COVERED EMPLOYMENT

Total jobs (as measured by average annual employment in jobs covered by unemployment insurance) in Grant and Douglas Counties grew in large part in response to data center location. Most of this initial growth response occurred in 2006 and 2007, while the data centers were under construction. The effect was most dramatic in Douglas County, which, as shown in Chart 1, grew by 5.7 percent between 2006 and 2008 – an increase of 571 jobs – compared with Douglas County’s growth of 4.4 percent (1,474 jobs) over the same two years. State jobs, by comparison, grew only 3.5 percent and nearby neighbor, Chelan County grew by only 1.1 percent (427 jobs).

5. CONSTRUCTION JOBS

Construction jobs increased in all three counties. Douglas and Chelan County reported most of their construction job gains between 2004 and 2007, with construction employment in both areas falling off in

Chart 3: Average Wage Growth from 2005



2008. Data center construction was largely completed by this time.

Grant County, on the other hand, which continues to attract data center investment, had construction job-related growth each year from 2004 to 2008, growing overall by more than 500 jobs. See Chart 2.

6. AVERAGE WAGES

Average wages per job grew in each of these counties from 2005 through 2008. More remarkable, average wage growth kept pace with or exceeded average wage growth statewide, especially in Grant County between 2007 and 2008. See Table 3.

The relationships are easier to see in the line graph in Chart 3. Grant’s average wages grew 20 percent compared with statewide wage growth of just 14 percent.

7. TAXABLE RETAIL SALES

Retail sales in the three counties show the effects of the heightened investment activity in Douglas and Grant Counties during 2007 and 2008. Where sales grew by 25 percent in Chelan County or about \$310 million from 2006 to 2008, Douglas and Grant sales grew 85 and 78 percent, respectively. This growth resulted in an additional \$308 million in retail sales in Douglas County over the period and \$679 million in Grant. See Table 4.

The relationships are easier to see in a line chart comparing percentage changes over 2005. Chart 4 shows Grant County’s surge of sales growth from 2005 to 2007 with a leveling in 2008, consistent with investment activity associated with Yahoo and Microsoft data center development. This compares with Douglas County’s sales surge in 2007 taking its growth to 85 percent with construction of the Sabey Inter-gate.Columbia data center project. Chelan, by comparison experienced relatively modest sales increases, and statewide, sales actually declined in 2008 with reduced construction and a national economic downturn.

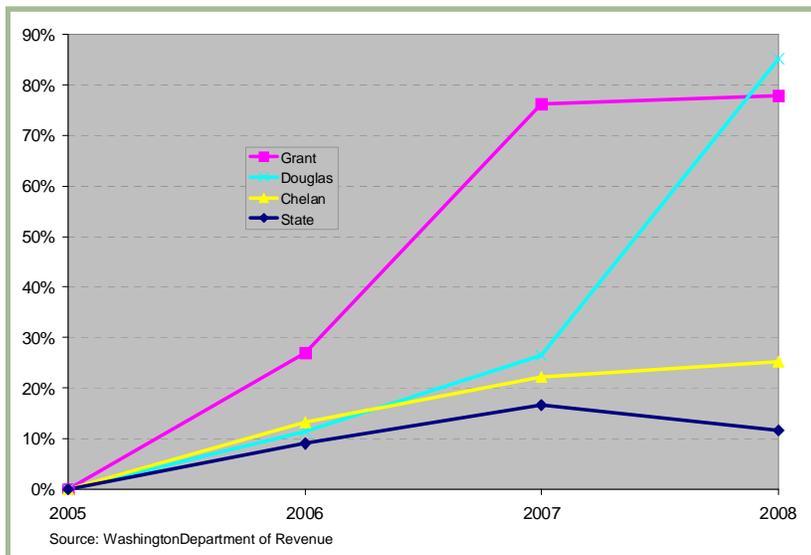
Retail sales taxes were collected by each of the counties on these retail sales based on a 6.5 percent state rate plus the sales taxes

Table 4: Taxable Retail Sales (billions of dollars)

	2005	2006	2007	2008
Chelan	\$1.223	\$1.386	\$1.495	\$1.533
Douglas	\$0.362	\$0.403	\$0.457	\$0.670
Grant	\$0.873	\$1.108	\$1.538	\$1.552

Source: Washington State Department of Revenue

Chart 4: Taxable Retail Sale Growth from 2005



authorized locally.

In both Chelan and Douglas Counties local sales are taxed at 1.5 percent. In Grant County they are taxed at 1.4 percent. In the primary construction period for the data centers Douglas County’s retail sales tax collections grew the fastest. At 66 percent between 2006 and 2008, they brought in an additional \$4 million in locally levied taxes in 2008 over those collected in 2006. Grant’s collections also grew substantially over the same two years – by 40 percent, bringing in an additional \$6.2 million in locally levied taxes. See Figure 7.

The state also received a boost in its retail sales tax collections. Douglas County retail sales resulted in an additional \$21.3 million in state levied tax collections in 2008 over 2006; in Grant this increase for state coffers was \$35.1 million, for a total from the two counties of \$56.4 million in state retail sales taxes.

8. ON-GOING CONTRIBUTIONS

The construction phase of any project adds short-term stimulus to an area’s economy through high-paid jobs and heavier taxable retail activity. Data center development will also enhance the area economies by way of on-going property tax collections on the centers themselves, as well as through direct and indirect jobs and the wage earnings associated with the direct and indirect employment.

Property taxes are collected based on applying tax levy rates to the assessed value of each piece of land and its improvements. Developers like Yahoo, Microsoft, Intuit and Sabey Development, buy properties and improve them for specific higher-valued purposes. These properties then produce more tax revenues for state and local taxing districts.

Measuring tax effects is not necessarily straight-forward. Sometimes property re-valuation occurs at the same time the property is added to the tax rolls; in other cases valuation increases occur over several years as tenants in a particular project make leasehold improvements and are taxed separately from the owner of the land and building shells. This will be the case with the Intergate.Columbia data center project in Douglas County. How local officials choose to bring these properties onto the tax rolls will differ with each project and increases in tax collections may therefore be concentrated in one or two years, or spread over several years.

In addition different County Assessors can elect to handle the timing of

Chart 5: Data Center Development Timeline

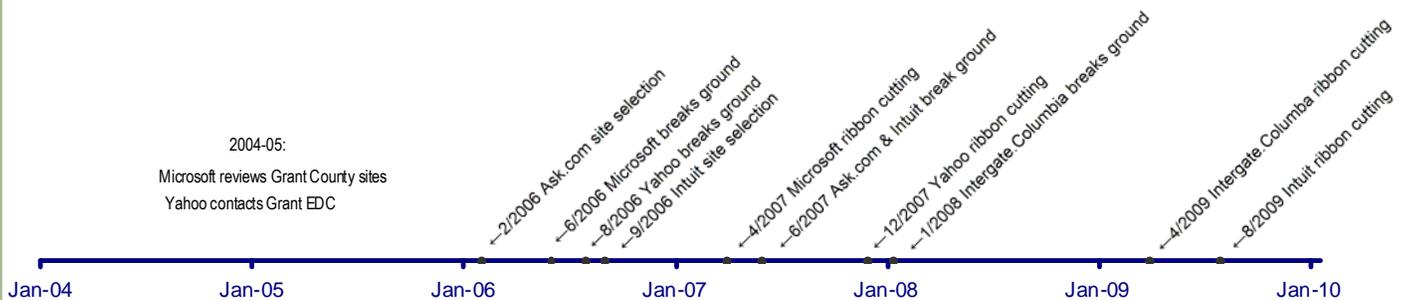


Table 5: Data Center Investments

Firm	Location	Date Opened	Amount Invested	Property Size	Direct Jobs ¹	Indirect Jobs ¹	New Earnings ¹	New Earnings Per Job ¹
Yahoo	Wenatchee, Chelan Co.	May 2004	n/a	45,000 sq. ft.	n/a	n/a	n/a	n/a
Microsoft	Quincy, Grant Co.	April 2007	\$600 million ²	75 acres	50	50	\$5,814,000	\$58,140
Yahoo	Quincy, Grant Co.	Dec. 2007	\$100 million	50 acres	50	50	\$5,814,000	\$58,140
Red Sea TITAN ³	Moses Lake, Grant Co.							
Ask.com	Moses Lake, Grant Co.	Fall 2007	\$20 million		30	30	\$3,488,000	\$58,133
Intuit	Quincy, Grant Co.	Aug. 2009	\$120 million	68 acres	38	38	\$4,419,000	\$58,145
Intergate.Columbia	East Wenatchee, Douglas Co.	April 2009	\$100 million	30 acres	20-70	20-70	\$1,162,800	\$58,140
T-Mobile & VMware ⁴	East Wenatchee, Douglas Co.	April 2009	\$250 million				-\$8,139,600	

¹Economic Modeling Specialists, Inc. www.economicmodeling.com for Grant EDC

²Includes both construction and improvement investments

³Re-development of Titan Missile Base, Ask.com is a tenant

⁴Leasing from Intergate.Columbia and making separate leasehold improvements

bringing a property onto the tax rolls based on the calculus of property valuation. They have a choice to appraise a property immediately and base their assessment on the investment costs of the project. By doing this, they tie their tax base to this valuation for several years until the property can next be re-valued.

Alternatively, assessors can wait to bring the property on the rolls in order to have the income producing experience of the property on which to base its appraisal, normally at a higher value. Depending on the length of a County’s valuation cycle, the tax benefit to the County can vary. Those counties with longer valuation cycles (revaluation every four years versus every two years, for example) will be more inclined to considering the benefit of waiting for a higher initial assessment.

In Grant County where the Yahoo and Microsoft data centers were first to be added to the property tax rolls, regular property tax values in the city of Quincy grew nearly three-fold between 2006 and 2009, from about \$260 million to \$764 million. As a result, property tax collections in the city grew by more than \$1.4 million over the period – a 178 percent increase.

The Quincy School District and Grant County’s general property taxes also experienced significant increases over the same period. The schools raised nearly \$1.6 million more, a 43 percent gain over 2006. And the County’s general property taxes grew by more than \$3 million, about 37 percent over 2006.

Overall, property tax revenues, not counting junior taxing districts like hospitals, ports, EMS districts, libraries and the like, grew by more than \$6 million between 2006 and 2009, while tax rates fell by 10 percent. This rate reduction is the result of the tax districts’ having a larger base of property values over which to levy taxes. A larger tax base allows existing taxpayers to enjoy lower tax rates at the same time that local revenues are nonetheless increasing for the county and the affected city, school district, and other special districts.

On average in the city of Quincy the overall property tax rate fell by 10 percent or about \$.79 per \$1000 of assessed valuation. For a house valued at \$159,000 then, the annual savings would total approximately \$125.60 (or \$159 x \$.79).

This increase is the beginning of an on-going stepped-up level of property tax collections in the city of Quincy. While Quincy's total property valuations in 2006 were just 6 percent of valuations for Grant County, they grew 22 percent between 2006 and 2009, and by 2009 they were 11 percent of the county's valuation. Similarly, actual property taxes due grew by 47 percent from 2006 to 2009, so that Quincy's taxes grew from being just 10 percent of the County's general property taxes in 2006 to being 20 percent by 2009.

Direct Jobs. As the data centers move past development and construction, there will be upwards of 220 direct jobs. As shown in the accompanying table, these include the jobs from the Yahoo, Microsoft, Ask.com, and Intuit centers in Grant County. Reports on T-Mobile and VMware have estimated Intergate.Columbia will produce between 20 and 70 direct jobs. A job count for the Yahoo facility in Chelan County was not made available. So, assuming the Intergate.Columbia produces 50 direct jobs, a conservative direct jobs estimate for all of the data centers to date is about 220 jobs.

Grant EDC contracted with Economic Modeling Specialists, Inc. (EDS) to determine the earnings and multiplier effects of the Grant County data center jobs. EDS calculated that each direct data center job would eventually create one additional job throughout the rest of the economy, in businesses such as grocery stores, gasoline stations, printing and newspaper publishing, landscaping, and temporary help firms. Using their results and applying their multipliers to all data center jobs throughout the three-county area, direct and indirect jobs will eventually total more than 440 jobs.

Earnings. EDS also estimated new earnings associated with these jobs. On average the new earnings for each job in Grant County will be about \$58,140 annually. While average earnings are a bit higher in Douglas and Chelan Counties, this number is used to estimate new earnings throughout the three-county region to reach a conservative estimate of total new earnings for the region of nearly \$25.6 million.