2019 County by County Analysis

RETURN PER DOLLAR CONTRIBUTED BY CITIZENS WITHIN EACH COUNTY
STATE & FEDERAL TRANSPORTATION FUNDS
2019 ANALYSIS

5-YEAR HISTORICAL LOOK
2015 – 2019

Includes Additional Tables on the Impact of Transportation

Short-term Transportation Investments in the State and Local Economies

PURPOSE OF THIS HISTORICAL ANALYSIS

- The county-by-county analysis attempts to address the frequently asked question of where the transportation related money has been raised across the state and where it was spent on transportation projects.
    - This analysis allocates transportation revenues and spending in a simplified method.
    - Fuel taxes are collected at the supplier and distributor level, and not at the gas station level. Fuel tax revenues are not tracked at the county, but rather this analysis allocated statewide fuel tax revenue to each county based on population.
    - It assumes that only the county with the highway within its borders receives the benefits of the transportation investment.
- This historical analysis covers a five fiscal-year period of actuals from fiscal years 2015 – 2019. ("Actuals" refers to a completed year of data versus projected or estimated totals.)
    - A single-year analysis was also completed for 2019 to compare the most recent year with the 5-year average.
- The analysis includes state collected and federal transportation funds used by WSDOT.
- Revenues derived from local sources and expended on city streets, county roads, or for public transportation were not included.
- The analysis covers the use of pre-existing funds, the 2003 Nickel package, 2005 Transportation Partnership and Connecting Washington revenue packages.
- State fuel-tax allocations to local governments to be used for highway purposes were included as state spending.

KEY ASSUMPTIONS – SOURCES OF FUNDS

To estimate the allocation of sources of funds by county, the following key assumptions were made:

- Actuals from the most recent five fiscal years (2015-2019) were used for this historical analysis.
- Local allocation factors, like county population and motor vehicle registrations, were updated for recent data through 2019.
- Motor fuel tax revenues are attributed to counties based on county population.
- Bond proceeds are excluded from this analysis.
- Toll revenues are allocated to counties based on a recent review of licensed vehicles paying tolls by facility.
- Ferry fare revenue is attributed to counties based on a historical average of ferry fares collected by route.
- License Permit & Fee revenues (LPF) are categorized into three revenue groups: Basic $30 License fees, Combined License Fees, and Other License and Permit Fees. Each LPF revenue category is allocated on a unique allocation factor.
    - The Basic $30 License fee revenue is allocated based on historical county registrations for Basic passenger vehicles.
    - The Combined License fee revenue is allocated based on historical county registrations for trucks.
    - The Other License and Permit fees revenue is allocated based on historical average county registrations for passenger vehicles.
- Motor vehicle sales tax revenues are attributed to counties based on historical passenger car registrations by county.
- Federal revenues were based on federal expenditures for each fiscal year and allocated based on county population percentages.

KEY ASSUMPTIONS – USES OF FUNDS

To estimate the allocation of uses of funds by county, the following key assumptions were made:

- This 2019 expenditure analysis includes five historical fiscal years and state and federal revenue sources.
- WSDOT capital project lists were used to report the historical capital expenditures (improvement, maintenance, preservation, ferry and toll capital, etc…) categorized by expense period, type of expense and funding, and county of expenditure. The expenditures that cannot be attributed to a specific county are then allocated based on historical average expenditures for their sub-program.
- WSDOT operating expenditures by fiscal year, source of funds and program area were totaled and allocated to the county based on county population percentages.
    - Administrative expenses are attributed to counties based on historical program percentages
- Motor fuel taxes that are redistributed directly to the cities and counties are funds that are required to be spent on roads. These tax distributions are attributed to counties based on the actual distributions made to the cities and counties by the Washington State Treasurer.
- Transportation Improvement Board and County Road Administration funds are attributed to counties based on their county population percentage.
- WSDOT spending on local capital projects from Program Z pass-through funds are attributed to counties based on their county population percentage.

SUMMARY OF 2019 ANALYSIS

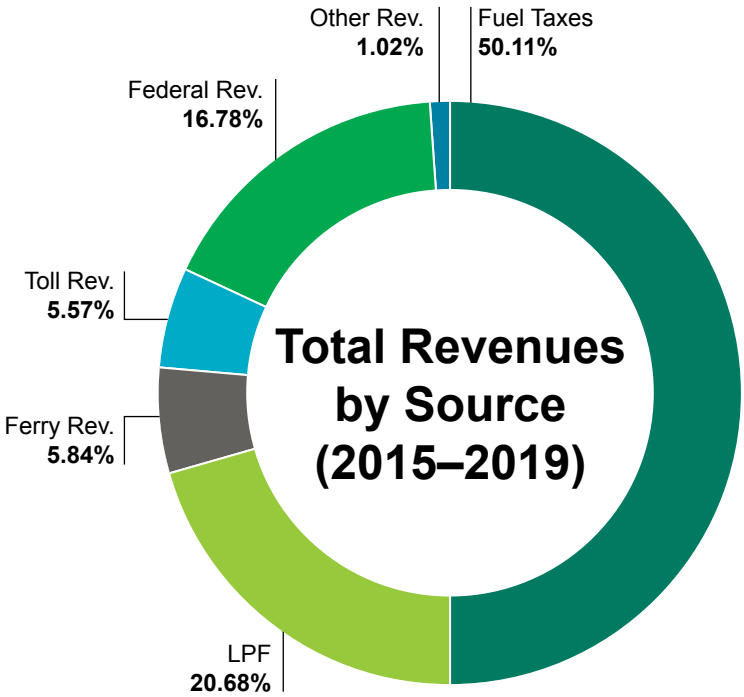
County level analysis of five years of actual contributions and expenditures for FY 2015 through FY 2019 compared to one year FY 2019.

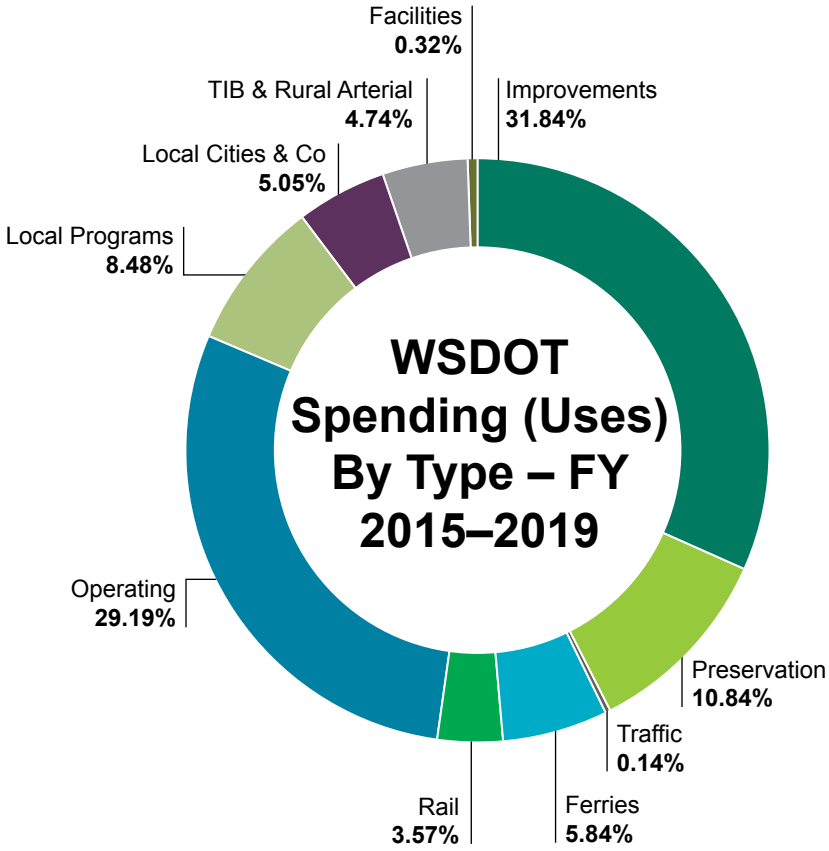
- Total contributions for the past five years' actuals total $16.145 billion of which the most recent actual in FY 2019 totaled $3.49 billion, with an annual average of $3.23 billion.
- Total expenditures for the past five years has totaled $14.84 billion of which the most recent actual in FY 2019 totaled $3.14 billion, with an annual average of $2.97 billion.
- Each "return per county" indicates for every $1 the county contributed in transportation taxes and fees, this is the amount of state transportation spending that occurred in that county. For example, in the 5-year historical period, the return for Pierce County is $0.95, which means for every $1 Pierce County residents paid in taxes and fees, they received in $0.95 in state transportation spending.
- In the time period of this analysis, the Connecting Washington (CW) Revenue package was passed by the 2015 Legislature. As a result, fuel tax rate increases occurred in FY 2016 and 2017 and other licenses, permits and fee increases beginning in FY 2017. The revenues from the CW package are incorporated into this 2019 analysis but the spending on all the CW projects is not finished and started slowly in FY 2017. The spending on CW projects will continue for many more years beyond the time period illustrated in this 5-year period.
- The counties with the highest return per county were small counties with the following counties ranked from highest (1) – (5): Kittitas, Wahkiakum, Ferry, Lincoln and Garfield. All five of these counties had returns per county greater than $2.
- One of the main reasons why these small counties had high returns per county is because they do not have a high percentage of total population or vehicle registrations so only a small amount of revenue is allocated to each county. If the county has any small projects in their county, this will result in spending being much greater than revenue and a return significantly above $1.
    - For example, in Kittitas, WSDOT spent millions on improving Interstate 90 over Snoqualmie Pass and this project spending is mostly in Kittitas County where the population in the county is small, therefore the return in Kittitas spikes high to $4.92, the highest among all counties. This analysis gives all the benefits of the improved I-90 freeway to this county, yet this transportation investment benefits all Washington and out of state drivers on this stretch of freeway.
- The main reason for a county's return-on-the-dollar to be low or below $1 is due to more revenues being allocated to that county because they are a large county with lots of people or vehicles registered in their county, or they have toll revenue allocated to the county, or the state capital project spending is smaller than usual because a large project might have just ended.
    - For example, Kitsap County has a low return per county at $0.39, but that is because there are no large projects within that county. In the past, this county had the Tacoma Narrows Bridge (TNB) reconstruction spending incorporated into its return per county. In addition, Kitsap County now has the toll revenues from TNB allocated to its return.
- As expected in the 5-year historical period, the counties with the two highest total capital project spending were King and Pierce counties. The projects with the largest expenditures were the State Route 99/ Alaskan Way Viaduct project and the SR 520/ Montlake to Lake Washington project in King County and the Interstate 5 / SR 16 Interchange, I-5 Steilacoom-DuPont Road and I-5 / Portland Avenue to Port of Tacoma Road projects in

Pierce County. Also note that some projects can get federal funds, which boosts a county's return as in Pierce County, where the Tacoma-Point Defiance Bypass project received federal funds during this time period of the analysis, causing the Pierce County return to be higher.

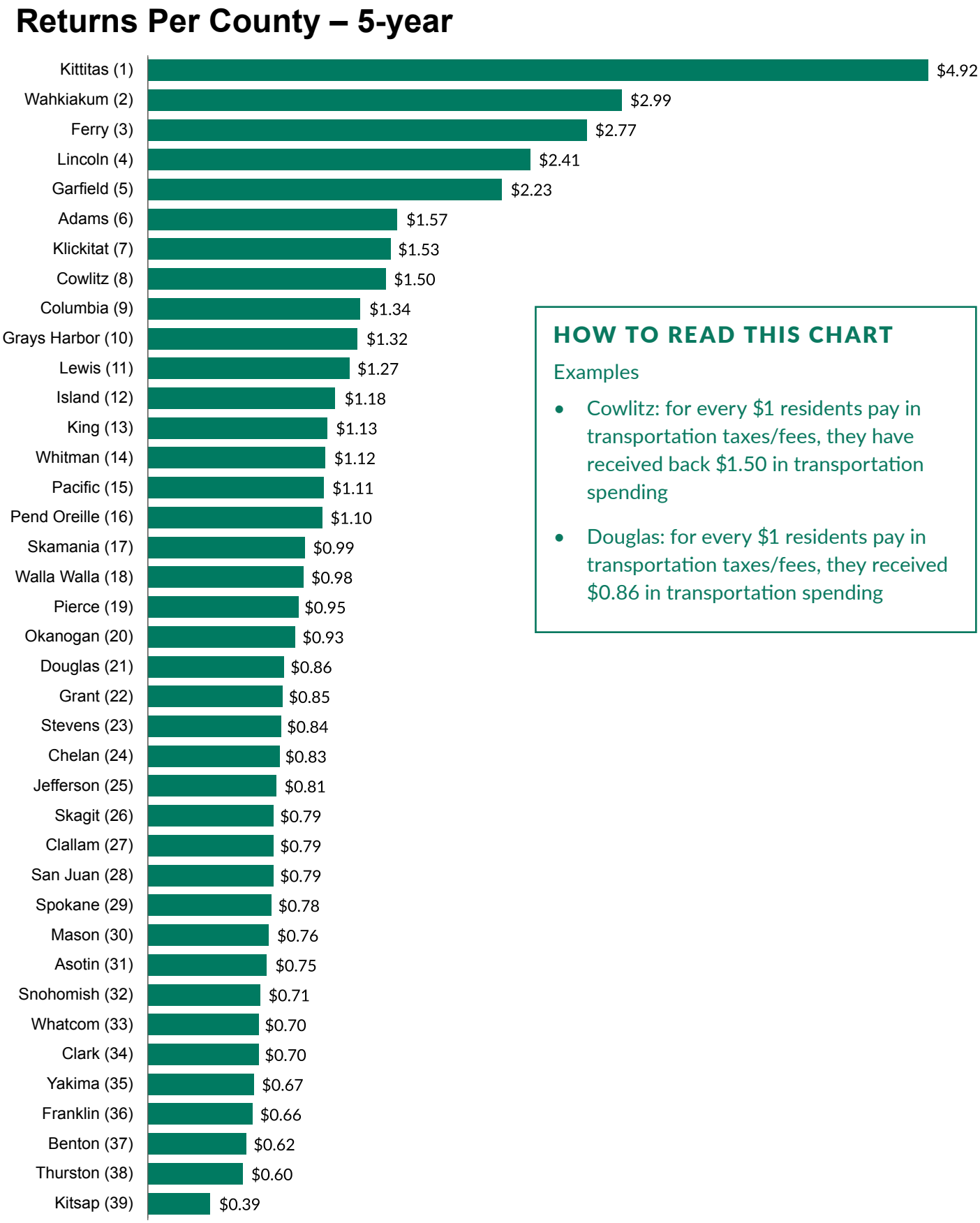
- Slightly under half of the counties in the 5-year actual table (41% or 16 counties) had a rate of return greater than $1 (59% or 23 counties) had a return below $1. This same percentage, 41% of all counties, had a single year 2019 return greater than $1, and 59% of the counties had a return less than $1.
- Examining a single-year return per county can produce unusual results if there are new projects or completion of old projects removed from that year's expenditures. This is especially true of returns in smaller counties.
    - For example, in the 2019 single year return analysis, Wahkiakum County now has the highest return per county at $6.81. The reason for the big increase in return is because their largest project in the county is SR 409 / Columbia River Bridge at Puget Island and it had a big increase in its expenditures in 2019. Some counties like Wahkiakum can see wide swings in their returns.
- In comparing the 5-year average return per county with a single most recent year return in 2019, the results are similar with 21 counties or 53.8% of the counties having a higher return in 2019 than the 5-year historical return.

SOURCES AND USES OF FUNDS





$ RETURN PER COUNTY RESULTS OF 5-YEAR HISTORICAL AND SINGLE YEAR (2019) ANALYSIS:

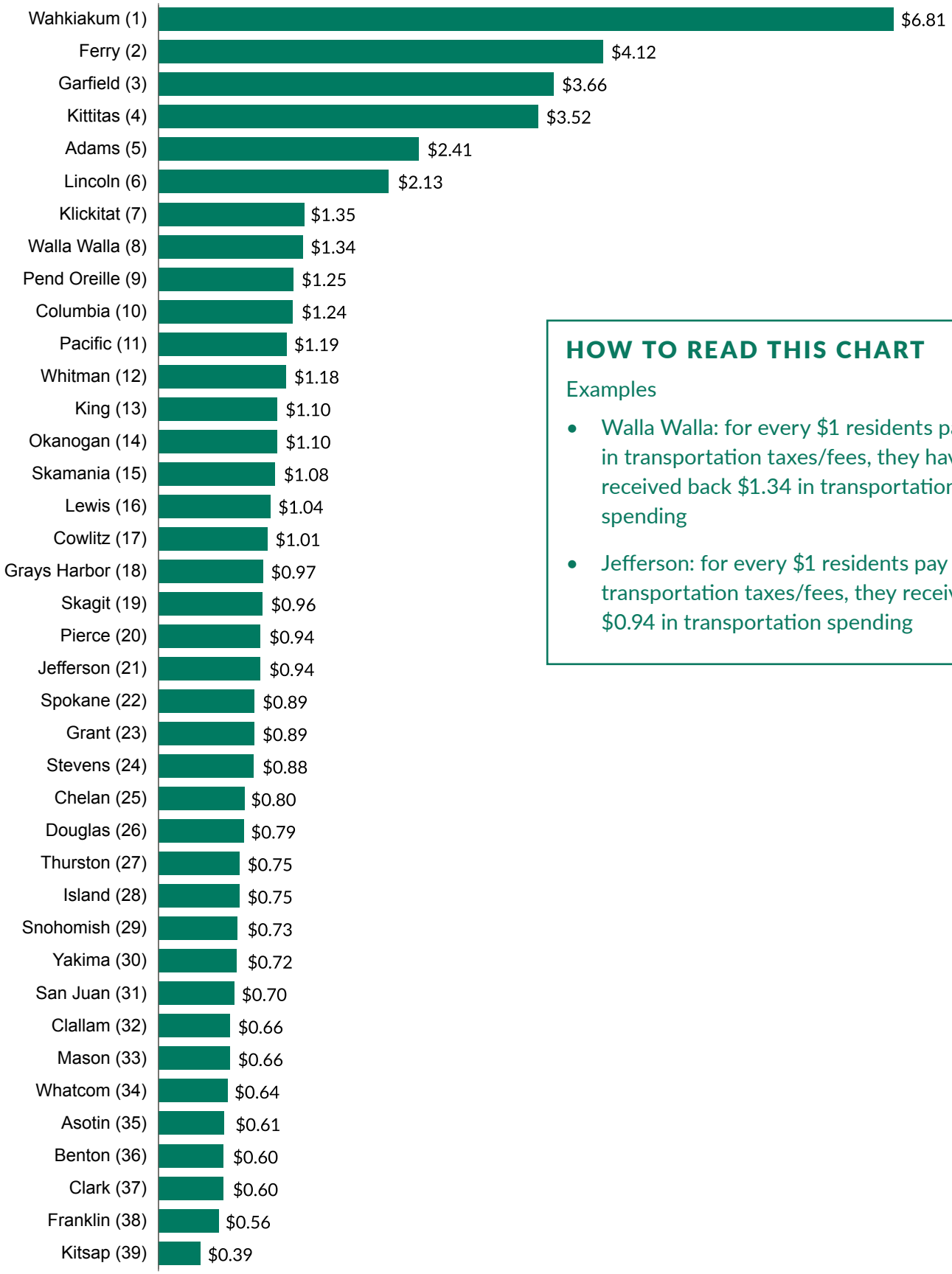


HOW TO READ THIS CHART

Examples

- Cowlitz: for every $1 residents pay in transportation taxes/fees, they have received back $1.50 in transportation spending
- Douglas: for every $1 residents pay in transportation taxes/fees, they received $0.86 in transportation spending

Returns Per County – 2019



HOW TO READ THIS CHART

Examples

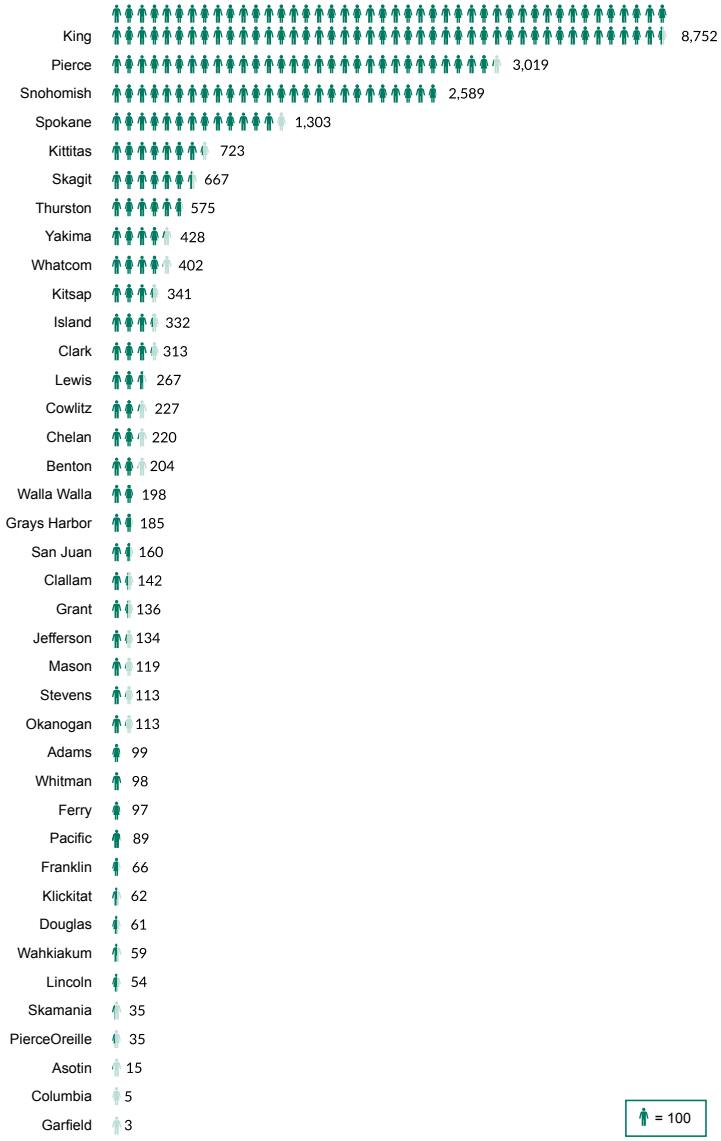
- Walla Walla: for every $1 residents pay in transportation taxes/fees, they have received back $1.34 in transportation spending
- Jefferson: for every $1 residents pay in transportation taxes/fees, they received $0.94 in transportation spending

SHORT-TERM ECONOMIC IMPACT OF WSDOT TRANSPORTATION INVESTMENTS

In addition to the dollar return per county, transportation projects provide the local economies with additional sales in various industry sectors. Transportation projects have several phases including right of way purchases, utilizing professional engineering services and construction activity. These state transportation investments were simulated in WSDOT's Remi-Transight model for FY 2018 and 2019 and average annual results for key economic variables for each county are presented in this report.

The county economic impact results represent short-term benefits and excludes the long-term benefits like travel-time savings and safety benefits. Key results include employment, gross domestic product and disposable real personal income per capita.

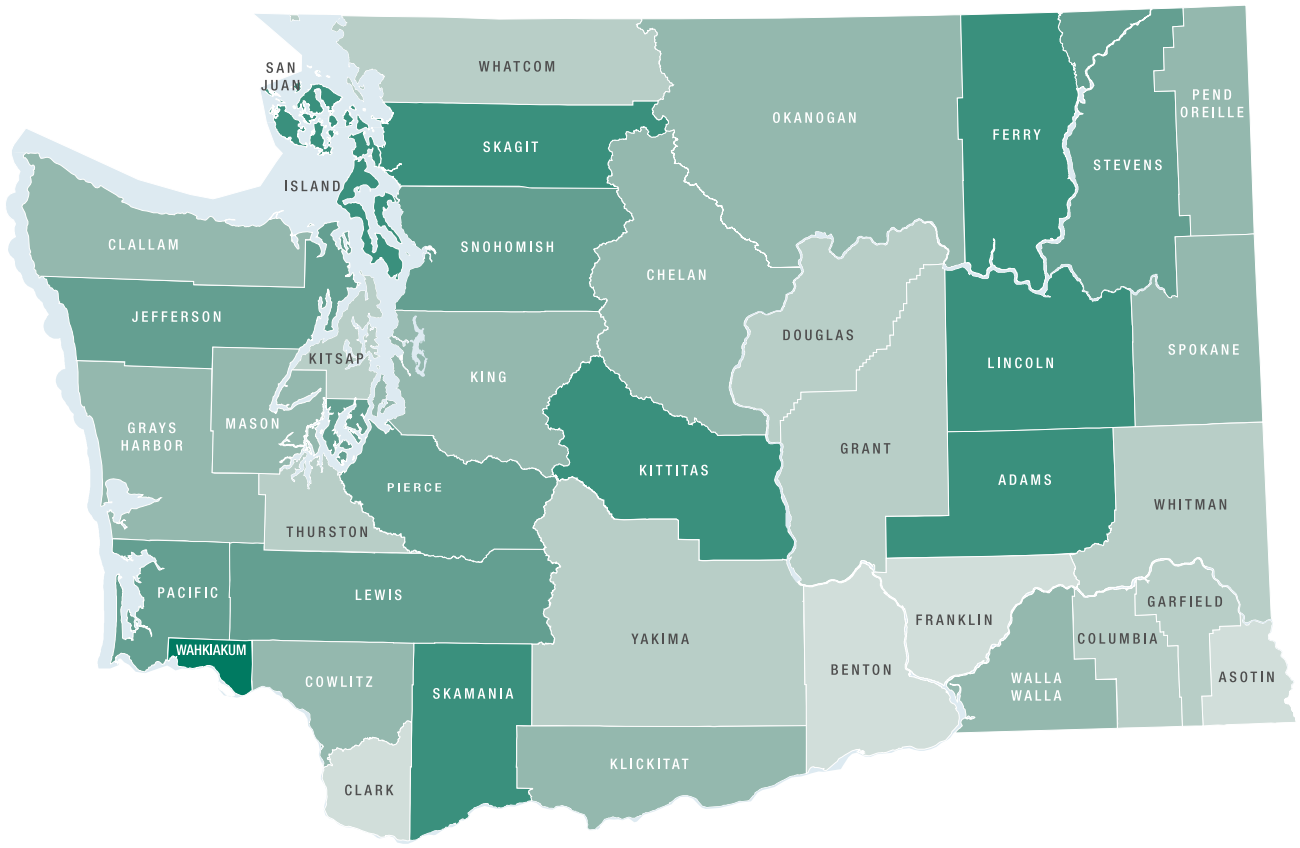
Change in Employment by County-Average Annual Employment (2018-19)



Employment

- As expected, the counties with the highest positive employment change from the transportation investments were the largest counties in the state with King County investments creating/retaining 8,752 jobs on average annually in 2018 and 2019.
- The second largest employment change was Pierce County with 3,019 jobs created/retained on average for that 2-year period.
- The county with the third largest employment gain was Snohomish at 2,589 jobs, which is a sharp contrast from Snohomish County's return per county rank of 32 and 29 in the 5-year average and 2019 analysis respectively.
- If a county did not have much state transportation spending during this 2-year period, the employment gain was small and their rank is low.
- Examining the percent change in employment from the transportation spending is also interesting to illustrate the importance of the transportation activity-related jobs, as many small counties' jobs are a larger percent of the county's overall jobs.
    - For example, Wahkiakum's created/retained jobs was 4% of the county total jobs, which was the highest percentage change in the state.
    - Most counties, 76%, had a percentage change in jobs of less than 0.9%

Percent Change in Employment by County-Average Annual (2018-19)



0.00% – 0.20%		0.20% – 0.40%		0.40% – 0.60%		0.60% – 0.90%		0.90% – 3.00%		3.00% – 5.00%	
Clark	0.13%	Columbia	0.21%	Chelan	0.40%	Snohomish	0.64%	Island	0.91%	Kittitas	3.18%
Franklin	0.15%	Garfield	0.23%	Clallam	0.40%	Stevens	0.66%	Skamania	0.93%	Ferry	3.37%
Asotin	0.16%	Kitsap	0.25%	Spokane	0.43%	Pierce	0.67%	Skagit	0.93%	Wahkiakum	4.11%
Benton	0.18%	Grant	0.28%	PierceOreille	0.44%	Lewis	0.73%	Adams	1.04%		
		Whatcom	0.31%	Cowlitz	0.45%	Jefferson	0.86%	Lincoln	1.07%		
		Yakima	0.32%	Okanogan	0.46%	Pacific	0.88%	San Juan	1.35%		
		Douglas	0.36%	King	0.48%						
		Thurston	0.37%	Klickitat	0.54%						
		Whitman	0.38%	Walla Walla	0.55%						
				Mason	0.57%						
				Grays Harbor	0.59%						

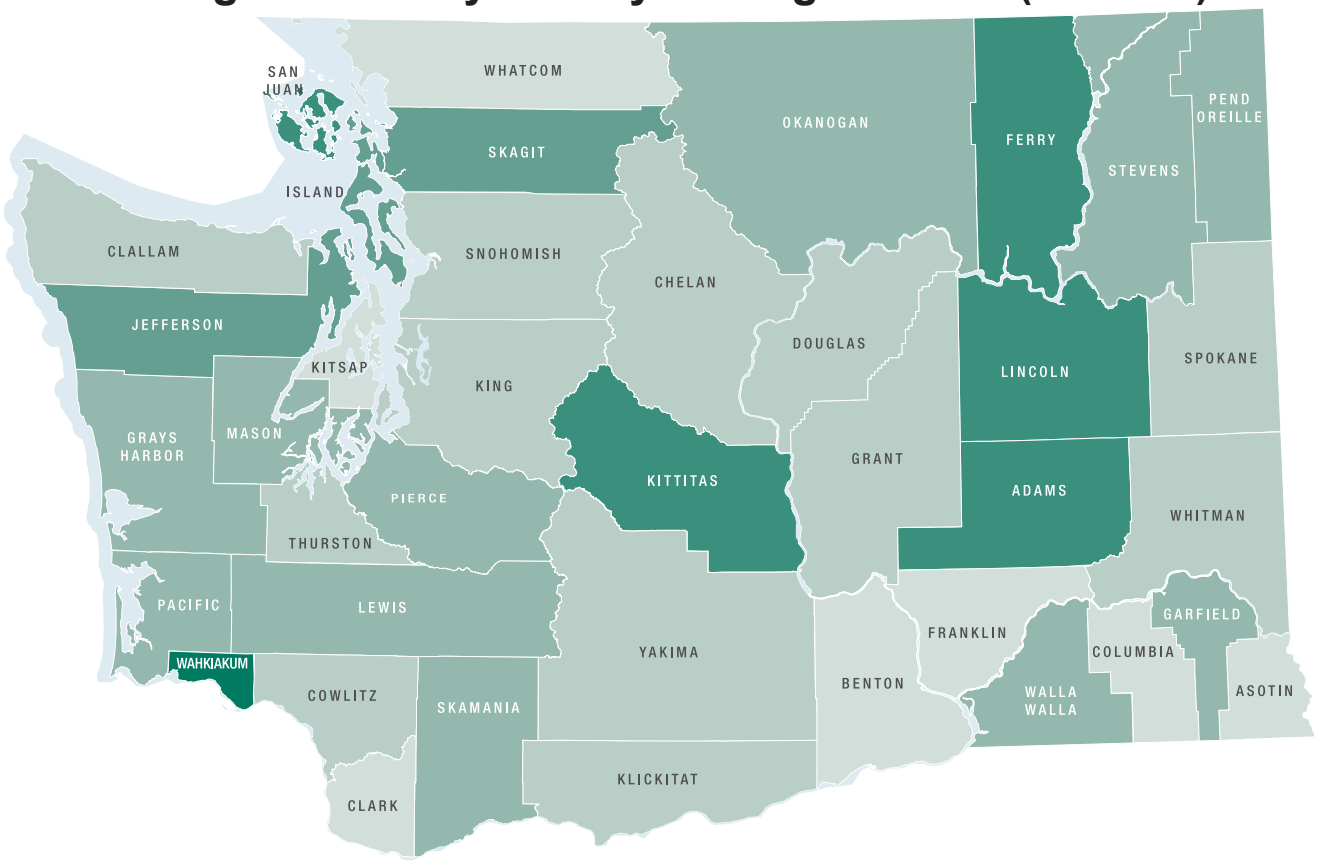
Gross Domestic Product (GDP)

- Gross Domestic Product represent the best measure of the overall county, state or nation's economy. It is the total value of final goods and service produced in a geographic area in a year.
- The following charts review the average annual GDP impacts in $ amount (in millions) by county and as a percent of total GDP in each county.

Change in GDP by County-Average Annual (2018-19)

- As expected, the counties with the highest positive GDP in the state are the ones with the largest overall transportation investments, which are the largest counties in the state with King County projects producing $1,352 million on average annually in 2018 and 2019.
- The second largest GDP change was Pierce County with $278 million for that 2-year period.
- The county with the third largest GDP gain from transportation projects was Snohomish at $210 million.
- The ranking for GDP are very similar to the employment rankings.
- Examining the percent change in GDP from transportation spending also illustrates the importance of the transportation activity in counties as many small counties' GDP from transportation is a larger percent of the county's overall GDP.
    - For example, Wahkiakum's gain had the highest ranking of GDP change on a percentage basis at 6% of the county total GDP
    - Most counties, 85%, had a percentage change in GDP of less than 0.9%

Percent Change in GDP by County-Average Annual (2018-19)

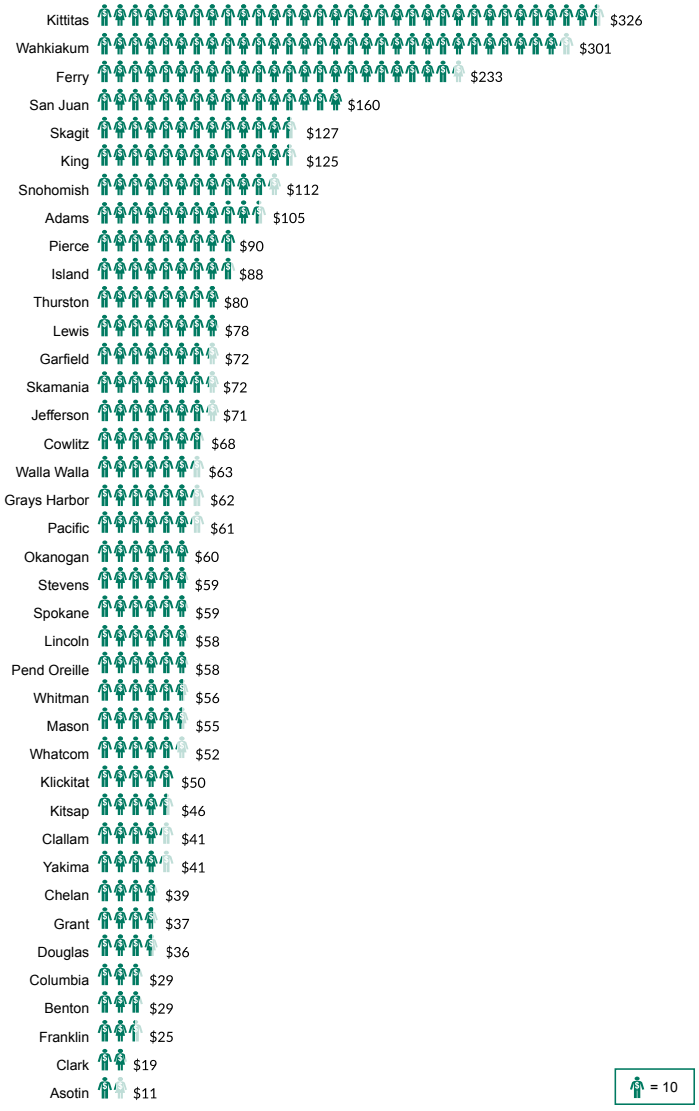


0.00% – 0.29%		0.30% – 0.49%		0.50% – 0.69%		0.70% – 0.89%		0.90% – 3.9%		4.00% – 7.00%	
Clark	0.14%	Grant	0.30%	Pend Oreille	0.50%	Skagit	0.73%	Adams	1.01%	Wahkiakum	6.14%
Franklin	0.16%	Klickitat	0.35%	Walla Walla	0.52%	Island	0.76%	San Juan	1.54%		
Benton	0.21%	Yakima	0.36%	Garfield	0.55%	Jefferson	0.81%	Lincoln	1.95%		
Kitsap	0.21%	Whitman	0.37%	Okanogan	0.56%			Ferry	3.13%		
Asotin	0.23%	Clallam	0.38%	Mason	0.56%			Kittitas	3.56%		
Columbia	0.27%	Douglas	0.39%	Skamania	0.60%						
Whatcom	0.28%	Thurston	0.39%	Pacific	0.60%						
		Chelan	0.43%	Grays Harbor	0.64%						
		King	0.44%	Pierce	0.65%						
		Spokane	0.45%	Stevens	0.66%						
		Snohomish	0.49%	Lewis	0.67%						
		Cowlitz	0.49%								

Disposable Personal Income per Capita

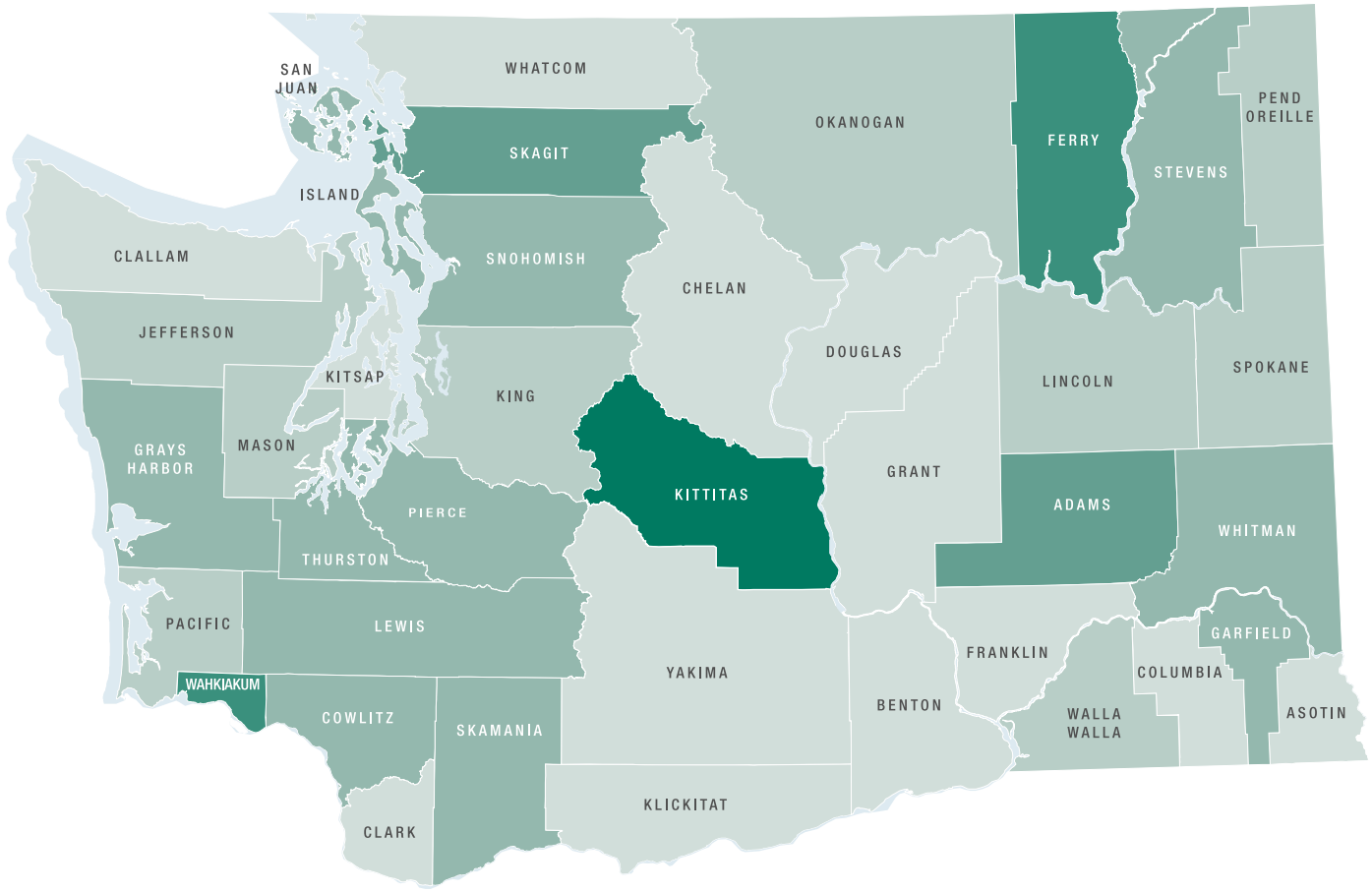
- Disposable personal income per capita represent the amount of after-tax income people have to spend in the economy.
- The results below represent the difference or dollar amount gained per person in each county from the transportation projects being completed each year. On average for all counties, the disposable personal income per capita was $46,422 in 2019. The results are also illustrated as a percent change in disposable personal income per capita.

Change in Disposable Personal Income Per Capita by County-Average Annual



- The change in disposable personal income takes into consideration not only the large investments in transportation projects that might be occurring in counties, but also the size of the population. The rankings of disposable personal income per capita reveals that Kittitas County saw the largest increase in disposable personal income per capita at $326 per person. This occurred because there is a lot of spending on the I-90 Snoqualmie Pass project as well as the county having a small population, which leads to a higher gains per person.
- The second largest disposable personal income per capita change was Wahkiakum County with $301 per person increase on average annually.
- Ferry and San Juan counties had gains of $233 and $160 per person respectively.
- Of the more populous counties, King County had a disposable income per capita of $125 per person, which was sixth highest in the state.
- Note the ranking of counties based on disposable personal income per capita, produces results very similar to the 5-year average returns per county rankings.
- The percent change in personal income per capita from the transportation spending illustrates the importance of the transportation in counties as many small counties' income gain is a larger percent of the county's overall income per capita.
    - In this instance, Kittitas had the highest ranking of personal income per capita change on a percentage basis at 1% of the county income per capita.

Percent Change in Disposable Personal Income Per Capita



0.00% – 0.14%		0.15% – 0.19%		0.20% – 0.29%		0.30% – 0.79%		0.80% – 0.99%		1.00% – 2.00%	
Asotin	0.03%	Spokane	0.16%	Whitman	0.20%	Skagit	0.32%	Ferry	0.85%	Kittitas	1.06%
Clark	0.04%	Mason	0.17%	Cowlitz	0.20%	Adams	0.32%	Wahkiakum	0.92%		
Columbia	0.08%	Lincoln	0.17%	Thurston	0.20%						
Benton	0.08%	Jefferson	0.18%	Stevens	0.20%						
Franklin	0.09%	Pend Oreille	0.18%	Grays Harbor	0.21%						
Chelan	0.10%	Walla Walla	0.18%	Island	0.21%						
Kitsap	0.11%	Okanogan	0.19%	Garfield	0.21%						
Douglas	0.12%	Pacific	0.19%	Skamania	0.21%						
Clallam	0.12%	King	0.19%	Pierce	0.22%						
Grant	0.12%			Lewis	0.24%						
Yakima	0.12%			Snohomish	0.27%						
Klickitat	0.14%			San Juan	0.28%						
Whatcom	0.14%										

FOR QUESTIONS ABOUT THIS ANALYSIS

WSDOT Economic Analysis

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