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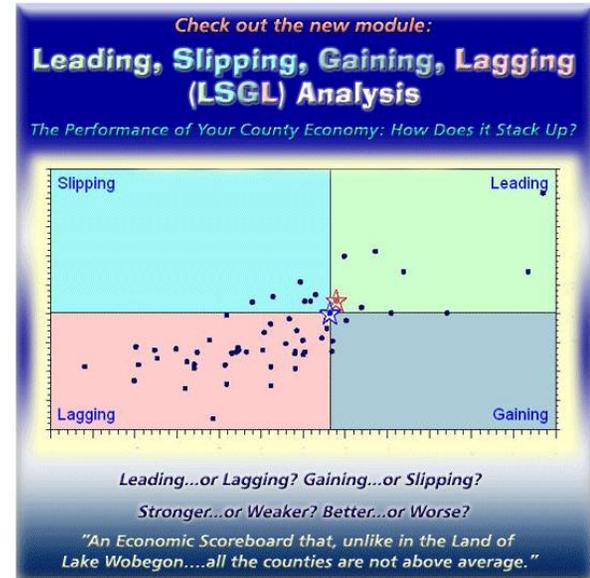


University of Texas
Austin, TX

For further information contact:

Gary W. Smith
PNREAP Director
(253) 219-6604
gsmith@pnreap.org

An Introduction to LSGL Analysis:
A Web-Based Tool for Calibrating
and Classifying the Performance of
State and Local Economies
with...the "Click of a Mouse"



For Presentation at the
63rd Annual AUBER Conference
October 18th-20th, 2009
Austin, Texas



Gary W. Smith, Director
James Latham, Technical Director

You are cordially invited to join...

Regional AnalysisWithout Paralysis



With the click of a mouse!

An Economic Scoreboard



“Unlike in the land of Lake Wobegon...

...all states are not above average”



in using and applying the



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What's Involved and How Can We Become a Host For Our State's Regional Economic Analysis Project?

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**San Juan County and Washington:
Total Personal Income, 1969-2007**

Year	San Juan County					Washington				
	Current Dollars	2000 Dollars ¹	Index ²	Percent Change ¹ (2000 \$)	Percent of State Total	Current Dollars	2000 Dollars ¹	Index ²	Percent Change ¹ (2000 \$)	Percent of U.S. Total
1969	16,343	64,712	100.0		0.12	13,645,271	54,029,978	100.0		1.77
1970	19,317	73,098	112.9	12.87	0.13	14,323,382	54,156,768	100.2	0.23	1.72
1971	22,142	80,300	124.1	9.94	0.15	15,057,798	54,608,682	101.1	0.83	1.68
1972	25,417	89,095	137.7	10.95	0.16	16,274,582	57,047,750	105.6	4.47	1.65
1973	30,251	100,565	155.4	12.87	0.16	18,408,456	61,196,290	113.3	7.27	1.67
1974	34,942	105,276	162.7	4.68	0.17	20,938,757	63,085,647	116.8	3.09	1.72
1975	38,329	106,603	164.7	1.26	0.16	23,684,118	65,871,556	121.9	4.42	1.78
1976	46,212	121,777	188.2	14.23	0.17	26,475,392	69,767,556	129.1	5.91	1.80
1977	53,960	133,531	206.3	9.65	0.18	29,449,483	72,876,721	134.9	4.46	1.81
1978	63,811	147,547	228.0	10.50	0.19	34,307,676	79,327,775	146.8	8.85	1.87
1979	73,857	156,946	242.5	6.37	0.19	39,572,181	84,090,569	155.6	6.00	1.93
1980	86,708	166,496	257.3	6.08	0.19	45,004,033	86,416,592	159.9	2.77	1.96
1981	101,319	178,630	276.0	7.29	0.20	50,294,912	88,672,271	164.1	2.61	1.95
1982	107,836	180,150	278.4	0.85	0.20	53,328,134	89,089,584	164.9	0.47	1.93
1983	118,004	189,000	292.1	4.91	0.21	56,665,796	90,758,210	168.0	1.87	1.92
1984	135,199	208,657	322.4	10.40	0.22	61,085,840	94,275,546	174.5	3.88	1.86
1985	143,027	213,677	330.2	2.41	0.22	64,923,578	96,993,513	179.5	2.88	1.85
1986	152,755	222,776	344.3	4.26	0.22	69,203,009	100,924,629	186.8	4.05	1.87
1987	163,169	229,987	355.4	3.24	0.22	73,461,020	103,543,518	191.6	2.59	1.87
1988	195,483	265,044	409.6	15.24	0.25	79,647,768	107,989,652	199.9	4.29	1.88
1989	222,224	288,708	446.1	8.93	0.25	88,083,919	114,436,313	211.8	5.97	1.93
1990	240,529	298,801	461.7	3.50	0.25	97,399,408	120,996,060	223.9	5.73	2.00
1991	262,315	314,455	485.9	5.24	0.25	103,974,021	124,640,695	230.7	3.01	2.07
1992	289,496	337,314	521.3	7.27	0.26	112,034,871	130,540,258	241.6	4.73	2.09
1993	317,291	361,363	558.4	7.13	0.27	117,265,725	133,553,967	247.2	2.31	2.11
1994	353,525	394,322	609.3	9.12	0.29	123,293,856	137,521,869	254.5	2.97	2.11
1995	360,031	393,146	607.5	-0.30	0.28	129,844,598	141,787,346	262.4	3.10	2.11
1996	387,049	413,748	639.4	5.24	0.28	139,650,493	149,283,775	276.3	5.29	2.14
1997	426,577	448,443	693.0	8.39	0.28	150,118,526	157,813,513	292.1	5.71	2.17
1998	474,631	494,521	764.2	10.28	0.29	163,761,546	170,624,045	315.8	8.12	2.21
1999	508,872	521,519	805.9	5.46	0.29	175,491,324	179,852,753	332.9	5.41	2.25
2000	532,664	532,664	823.1	2.14	0.28	187,853,404	187,853,404	347.7	4.45	2.23
2001	549,896	538,617	832.3	1.12	0.28	193,498,304	189,529,555	350.8	0.89	2.22
2002	560,884	541,697	837.1	0.57	0.28	197,451,578	190,697,087	352.9	0.62	2.23
2003	591,258	559,919	865.2	3.36	0.29	202,942,123	192,185,501	355.7	0.78	2.22
2004	664,334	612,899	947.1	9.46	0.30	218,431,726	201,520,155	373.0	4.86	2.25
2005	722,638	647,635	1000.8	5.67	0.32	226,585,245	203,067,946	375.8	0.77	2.21
2006	771,095	672,418	1039.1	3.83	0.31	245,764,517	214,313,945	396.7	5.54	2.24
2007	856,238	727,728	1124.6	8.23	0.32	265,738,395	225,854,711	418.0	5.38	2.28

¹ 2000 constant dollar estimates determined using the chain-weight Implicit Price Deflator for Personal Consumption.

² Values are expressed as 100% for 1969 (2000 Dollars) and as a percent of 1969 for the following years.

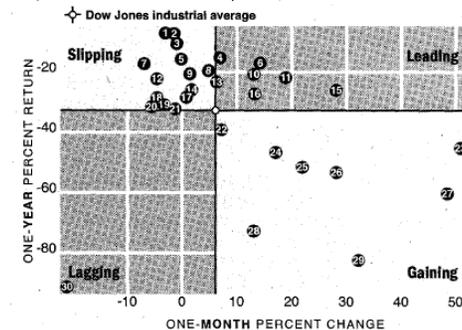
Source: U.S. Department of Commerce, Bureau of Economic Analysis with calculations and table prepared by the Washington Regional Economic Analysis Project

**Leading-Slipping-Gaining-Lagging Analysis:
Assessing Real Personal Income Growth Across Washington Counties**



Dow30Stocks

The Dow enjoyed its eighth weekly gain over the past nine weeks, lifted by continued optimism that the worst of the recession may be over. Leading the pack were financial stocks, including Bank of America (BAC) and Citigroup (C). A government report showed 19 big lenders were in better shape than many had feared, with nine showing no need for additional capital to weather a worse-than-expected recession.



Leading: beat Dow for month and year. **Gaining:** beat Dow for month, trailed over year.
Lagging: trailed Dow for month and year. **Slipping:** trailed Dow for month, beat over year.

Introduction

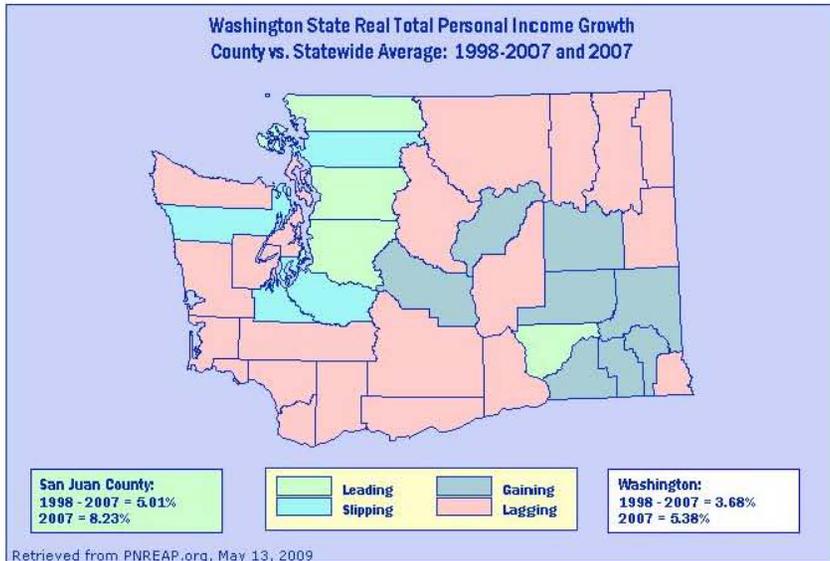


Figure 1.

Borrowing from an approach that sometimes appears in the finance sections of the popular press, LSGL analysis is a handy and versatile way to compare, portray and classify the patterns of real total personal income growth across all of Washington's 39 counties. In finance, this technique is used for comparing and assessing the market performance of individual securities or across industry sectors. For example, the performance of the 30 stocks contained within Dow are compared with one another over the past week in contrast to their performance over the past month using the Dow's respective averages as the points of reference.

Here in this *Washington Regional Economic Analysis Project* report, we adopt this approach to gauge and compare the real total personal income growth of Washington's 39 counties over the past year (2007) against the backdrop of their growth over the past decade (1998-2007). In so doing we classify their growth and performance into 4 broad categories: *Leading, Slipping, Gaining* and *Lagging*. Particular attention is given to highlighting and assessing the real personal income growth of San Juan County.

Highlights of Results: San Juan County is Classified Among those Washington Counties Whose Real Personal Income Growth was Leading in 2007

San Juan County's real total personal income growth rate of 5.01% surpassed the statewide overall average of 3.68% over 1998-2007, and its 8.23% growth rate also exceeded Washington's statewide average of 5.38% over 2007. Accordingly, San Juan County is classified as "Leading" in that its real personal income growth recorded above the Washington average in 2007 and its longer-term average posted above that of the average statewide over 1998-2007.

**Washington Real Total Personal Income Growth
County vs. Statewide Average, 1998-2007**

Gaining

County	1998-2007		2007	
	Rank	Percent	Rank	Percent
Kittitas	13	3.38	10	6.04
Douglas	18	2.69	12	5.56
Walla Walla	23	2.34	7	7.55
Columbia	29	1.95	1	17.34
Whitman	33	1.80	6	8.01
Adams	35	1.58	4	12.71
Lincoln	38	0.27	3	14.49
Garfield	39	-0.88	2	15.45
Washington		3.68		5.38

Lagging

County	1998-2007		2007	
	Rank	Percent	Rank	Percent
Clark	10	3.58	16	4.98
Kitsap	11	3.57	33	3.40
Island	12	3.52	32	3.45
Benton	14	3.35	17	4.97
Mason	15	3.29	28	3.71
Skamania	16	3.10	14	5.22
Clallam	17	2.94	23	4.25
Spokane	19	2.67	24	4.23
Chelan	20	2.57	36	2.97
Stevens	21	2.56	29	3.65
Klickitat	22	2.43	15	5.14
Okanogan	24	2.24	25	4.16
Wahkiakum	25	2.05	18	4.83
Pend Oreille	26	2.01	31	3.49
Asotin	27	1.99	38	2.26
Yakima	28	1.96	27	3.78
Lewis	30	1.90	37	2.34
Cowlitz	31	1.85	35	3.09
Grant	32	1.81	22	4.47
Grays Harbor	34	1.63	39	1.55
Pacific	36	1.51	34	3.13
Ferry	37	0.94	30	3.60
Washington		3.68		5.38

**Washington Real Total Personal Income Growth
County vs. Statewide Average, 1998-2007**

Leading				
County	1998-2007		2007	
	Rank	Percent	Rank	Percent
San Juan	1	5.01	5	8.23
Whatcom	3	4.34	11	5.71
King	6	4.24	8	6.49
Franklin	7	3.87	13	5.41
Snohomish	9	3.81	9	6.14
Washington	3.68		5.38	

Slipping				
County	1998-2007		2007	
	Rank	Percent	Rank	Percent
Jefferson	2	4.90	19	4.78
Skagit	4	4.34	21	4.66
Thurston	5	4.26	20	4.66
Pierce	8	3.85	26	3.93
Washington	3.68		5.38	

Overview of LSGL Analysis

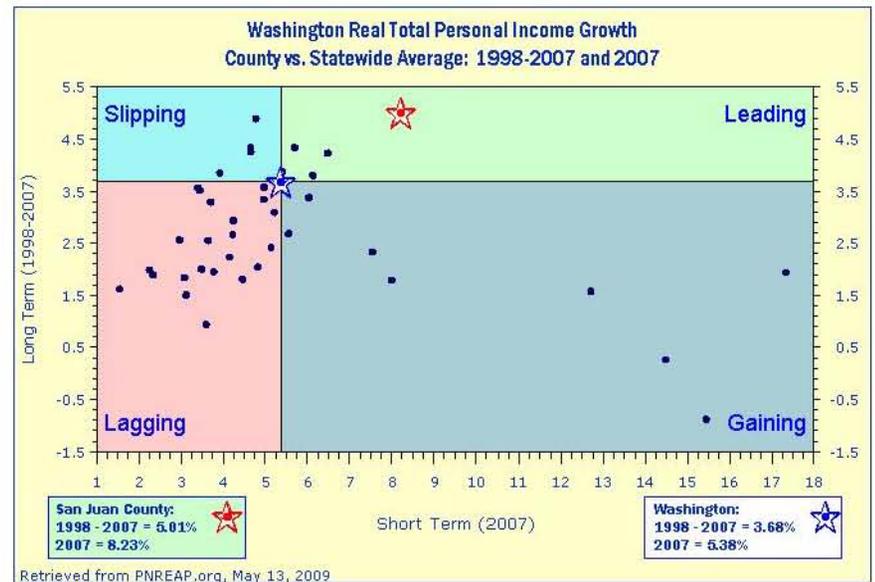


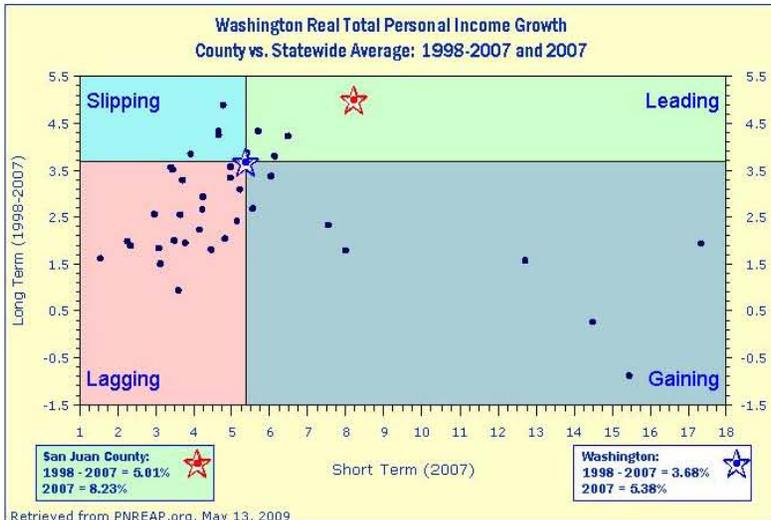
Figure 2.

Figure 2 displays the 39 counties of Washington as dots on a scattergram, with the vertical axis representing the average annual real total personal income growth rate over the past decade (1998-2007), and the horizontal axis representing the real total personal income growth rate for the near-term (2007).

Figure 2 sets apart those counties whose long-term real total personal income growth exceeded the statewide average of 3.68%, by portraying them in the top two quadrants demarcated at 3.68% on the vertical axis. Counties whose long-term average annual real total personal income growth rate trailed the statewide average (3.68%) are distributed in the bottom two quadrants. In all, 9 counties surpassed the statewide average during the decade 1998-2007, while 30 counties fell below.

Similarly, the two quadrants on the right of Figure 2 present the positions of the 13 counties whose most recent (2007) real total personal income growth rate exceeded the statewide average (5.38%). The two quadrants on the left feature those 26 counties whose real total personal income growth over 2007 trailed the statewide average.

Overview of LSGL Analysis



Retrieved from PNREAP.org, May 13, 2009

Figure 2.

Similarly, the two quadrants on the right of Figure 2 present the positions of the 13 counties whose most recent (2007) real total personal income growth rate exceeded the statewide average (5.38%). The two quadrants on the left feature those 26 counties whose real total personal income growth over 2007 trailed the statewide average.

Accordingly, each quadrant portrays the performance of all 39 counties corresponding with their long-term (1998-2007) and near-term (2007) performance relative to their respective statewide averages of 3.68% over 1998-2007 and 5.38% over 2007:

Leading counties (top-right quadrant)...are counties whose average annual real total personal income growth rate surpassed the statewide average both long-term (3.68%) and near-term (5.38%).

Slipping counties (top-left quadrant)...are counties whose long-term average annual real total personal income growth rate exceeded the statewide average (3.68%), but whose near-term growth has "slipped" by falling below the states average (5.38%).

Gaining counties (bottom-right quadrant)...are counties whose long-term average annual real total personal income growth rate fell below the statewide average (3.68%), but whose near-term growth has "gained" by registering above the average (5.38%) statewide.

Lagging counties (bottom-left quadrant)...are counties whose average annual real total personal income growth rate fell under the statewide average both long-term (3.68%) and near-term (5.38%).

Summary of Washington's 39 County Totals				
		Short Term Average		
		Below	Above	
Long Term Average	Above	4	5	9
	Below	22	8	30
		26	13	39

Recapping San Juan County's Results

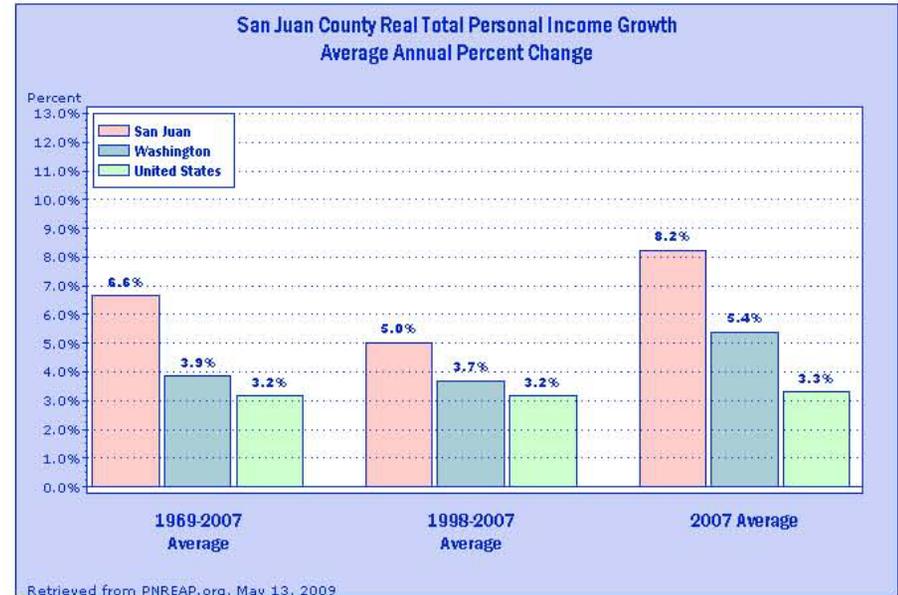


Figure 7.

Recap of Results: San Juan County is Classified Among those Washington Counties Whose Real Total Personal Income Growth was Leading in 2007

San Juan County's real total personal income growth rate of 5.01% surpassed Washington's overall average of 3.68% over 1998-2007, and it's 8.23% growth rate also exceeded the statewide average of 5.38% over 2007. Accordingly, San Juan County is classified as "Leading" in that it's real personal income growth recorded above the statewide average in 2007 and it's longer-term average posted above that of the average statewide over 1998-2007.

San Juan County is among the 5 of 39 (13%) Washington counties whose real total personal income growth was classified as *Leading* in 2007. In 2007, it ranked 5 out of the 39, over 1998-2007 it ranked 1.

Lagging Counties



Figure 6 depicts the distributions of the 22 Washington counties classified as *Lagging* (bottom-left quadrant). These counties trailed the statewide average annual real total personal income growth both long-term (1998-2007 = 3.68%) as well as near-term (2007 = 5.38%). Again, each county is identified by its corresponding ranking based on its average annual real total personal income growth rate over 1998-2007 as noted in the table just below.

56% of Washington's counties, 22 of 39, are characterized here as *Lagging*.

County	1998-2007		2007	
	Rank	Percent	Rank	Percent
Clark	10	3.59	16	4.98
Kitsap	11	3.57	33	3.40
Island	12	3.52	32	3.46
Benton	14	3.35	17	4.07
Mason	15	3.29	28	3.71
Skamania	16	3.10	14	5.22
Clallam	17	2.94	23	4.25
Spokane	19	2.87	24	4.23
Chelan	20	2.57	38	2.97
Snohomish	21	2.56	29	3.95
Kittitas	22	2.43	15	5.14
Okanogan	24	2.24	25	4.16
Wahkiakum	25	2.05	18	4.83
Pend Oreille	26	2.01	31	3.49
Asotin	27	1.99	38	2.26
Yakima	28	1.96	27	3.78
Lewis	30	1.90	37	2.34
Cowlitz	31	1.85	35	3.09
Grant	32	1.81	22	4.47
Grays Harbor	34	1.53	39	1.55
Pacific	36	1.51	34	3.13
Ferry	37	0.94	30	3.60
Washington		3.68		5.38

Leading Counties

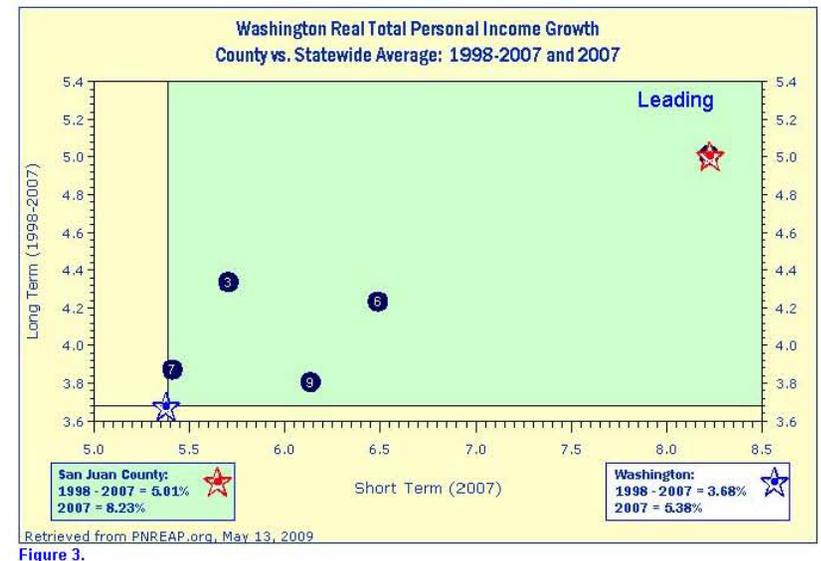


Figure 3.

Turning attention to the top-right quadrant from the discussion above, Figure 3 features a display of the distribution of the Washington counties classified as *Leading*. These counties surpassed the Washington's average annual real total personal income growth both long-term (1998-2007 = 3.68%) as well as near-term (2007 = 5.38%). Each is identified by its corresponding ranking based on its average annual real total personal income growth rate over 1998-2007 as noted in the table below.

Of Washington's 39 counties, just 5 (13%) are classified within the *Leading* category.

Note: Should you wish to identify and feature the position of a particular county in the above graph, or in the 4-quadrant graph (Figure 2) introduced earlier, you may do so by clicking on its name in the table below.

County	1998-2007		2007	
	Rank	Percent	Rank	Percent
San Juan	1	5.01	5	8.23
Whatcom	3	4.34	11	5.71
King	6	4.24	8	6.40
Franklin	7	3.87	13	5.41
Snohomish	9	3.81	9	6.14
Washington		3.68		5.38

Slipping Counties



Figure 4 depicts the distribution of the 4 Washington counties classified as *Slipping* (top-left quadrant), in that their long-term average annual real total personal income growth rate outpaced the average statewide (1998-2007 = 3.68%), while they trailed the statewide average near-term (2007 = 5.38%). Again, each county is identified by its corresponding ranking based on its average annual real total personal income growth rate over 1998-2007 as noted in the table just below.

Only 4 (10%) of Washington's 39 counties are classified as *Slipping*.

Note: To identify and feature the position of a particular county in the above graph, or in the 4-quadrant graph (Figure 2) introduced earlier, you may do so by clicking on its name in the table below.

County	Slipping	
	1998-2007 Rank Percent	2007 Rank Percent
Jefferson	2 4.90	19 4.78
Skagit	4 4.34	21 4.66
Thurston	5 4.26	20 4.66
Pierce	8 3.85	26 3.93
Washington	3.68	5.38

Gaining Counties

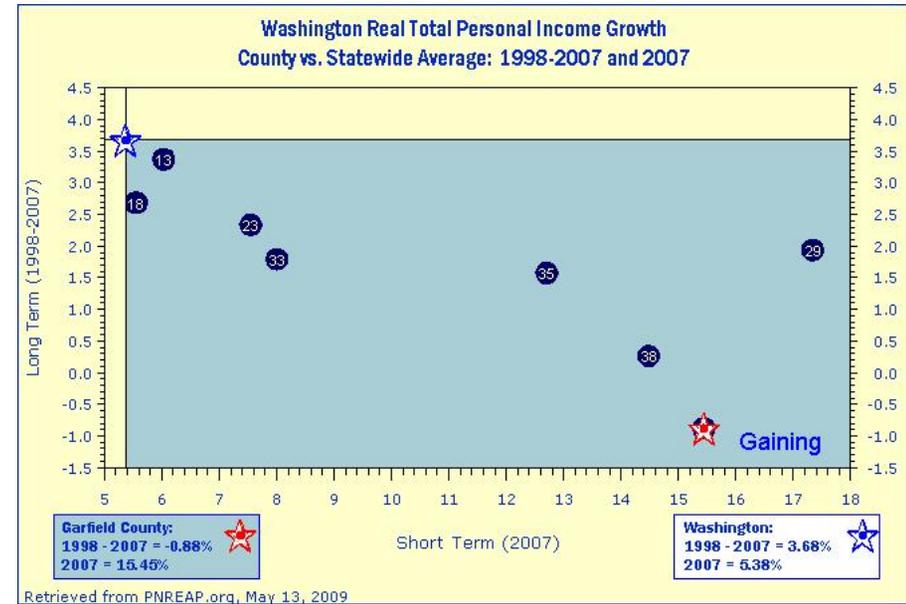


Figure 5 shows the distribution of the 8 Washington counties classified as *Gaining* (bottom-right quadrant), in that their long-term average annual real total personal income growth rate posted below the average statewide (1998-2007 = 3.68%), while they outpaced the state's average near-term (2007 = 5.38%). Again, each county is identified by its corresponding ranking based on its average annual real total personal income growth rate over 1998-2007 as noted in the table just below.

Of Washington's 39 counties, 21 (8) are featured as *Gaining*.

Note: To identify and feature the position of a particular county in the above graph, or in the 4-quadrant graph (Figure 2) introduced earlier, you may do so by clicking on its name in the table below.

County	Gaining	
	1998-2007 Rank Percent	2007 Rank Percent
Kittitas	13 3.38	10 6.04
Douglas	18 2.69	12 5.56
Walla Walla	23 2.34	7 7.55
Columbia	29 1.95	1 17.34
Whitman	33 1.80	6 8.01
Adams	35 1.58	4 12.71
Lincoln	38 0.27	3 14.49
Garfield	39 -0.88	2 15.45
Washington	3.68	5.38