

An EXAMINATION of GROWTH and STABILITY and  
IMPACTS of PROPRIETOR EMPLOYMENT and INCOME  
in WASHOE COUNTY, NEVADA

Thomas R. Harris, Professor and Director  
University of Nevada, Reno  
Department of Economics  
University Center for Economic Development

Gary W. Smith, Emeritus Professor and Director  
Washington State University  
Pacific Northwest Regional Economic Analysis Project



# FOUR OPTIONS FOR RELEASED WORKERS

1. Leave Washoe County
2. Become employed in another economic sector, probably at a lower pay scale, in Washoe County or an adjacent county and continue to live in Washoe County
3. Become unemployed and continue to live in Washoe County
4. Become self-employed in Washoe County as sole proprietor or a partner in a business.



# BEA PROPRIETOR DESIGNATION

- The number of self-employed are calculated for each county by the U.S. Bureau of Economic Analysis (U.S. Department of Commerce, 2013) using federal tax Form 1040 (Schedule C) for sole proprietorships and Form 1065 for partnership data



### Real Industry Earnings Growth Indices (1969=100): Metropolitan Nevada, 1969 - 2012

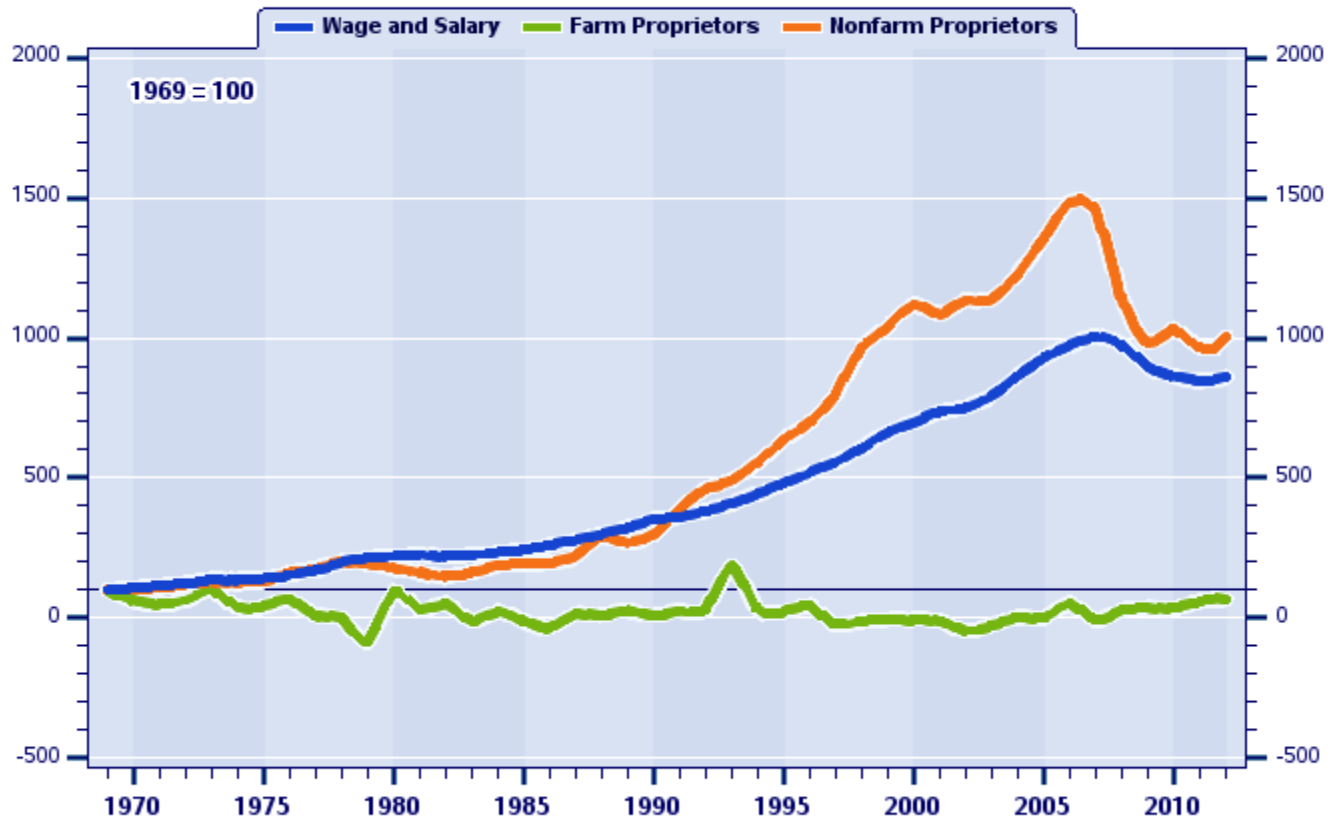
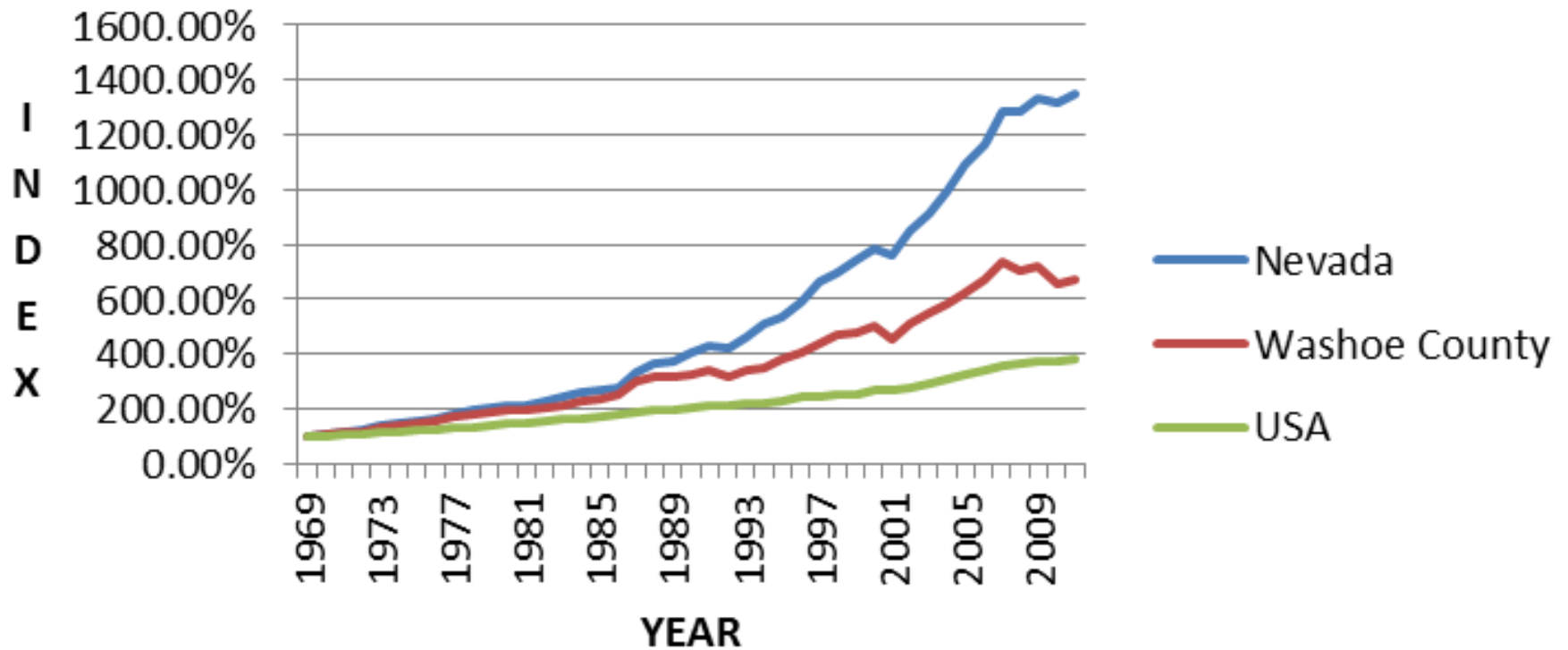


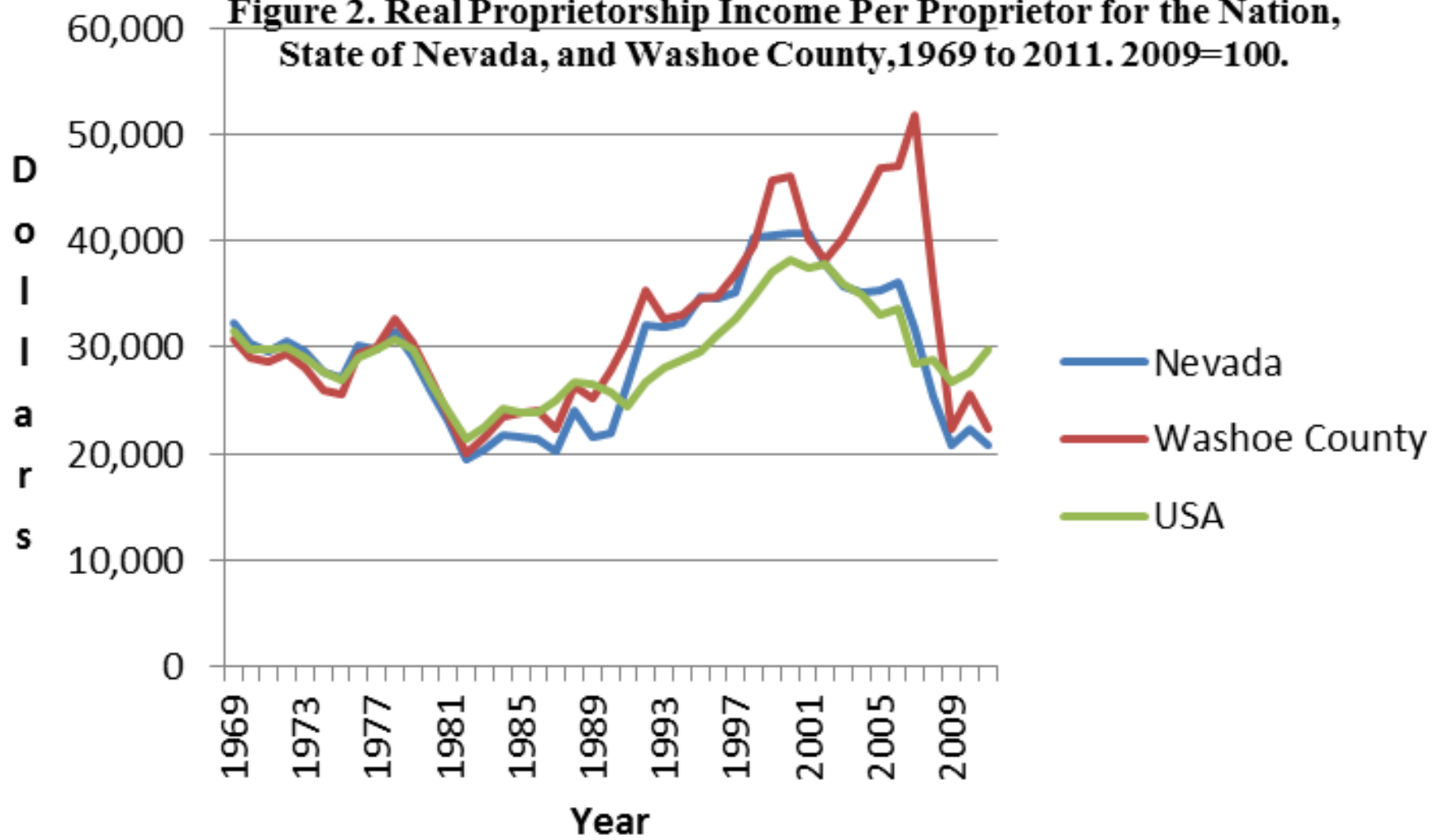
Figure 3.

Source: Nevada.REAProject.org (4-3-2014)  
Data: Regional Income Division, BEA (3-19-2014)

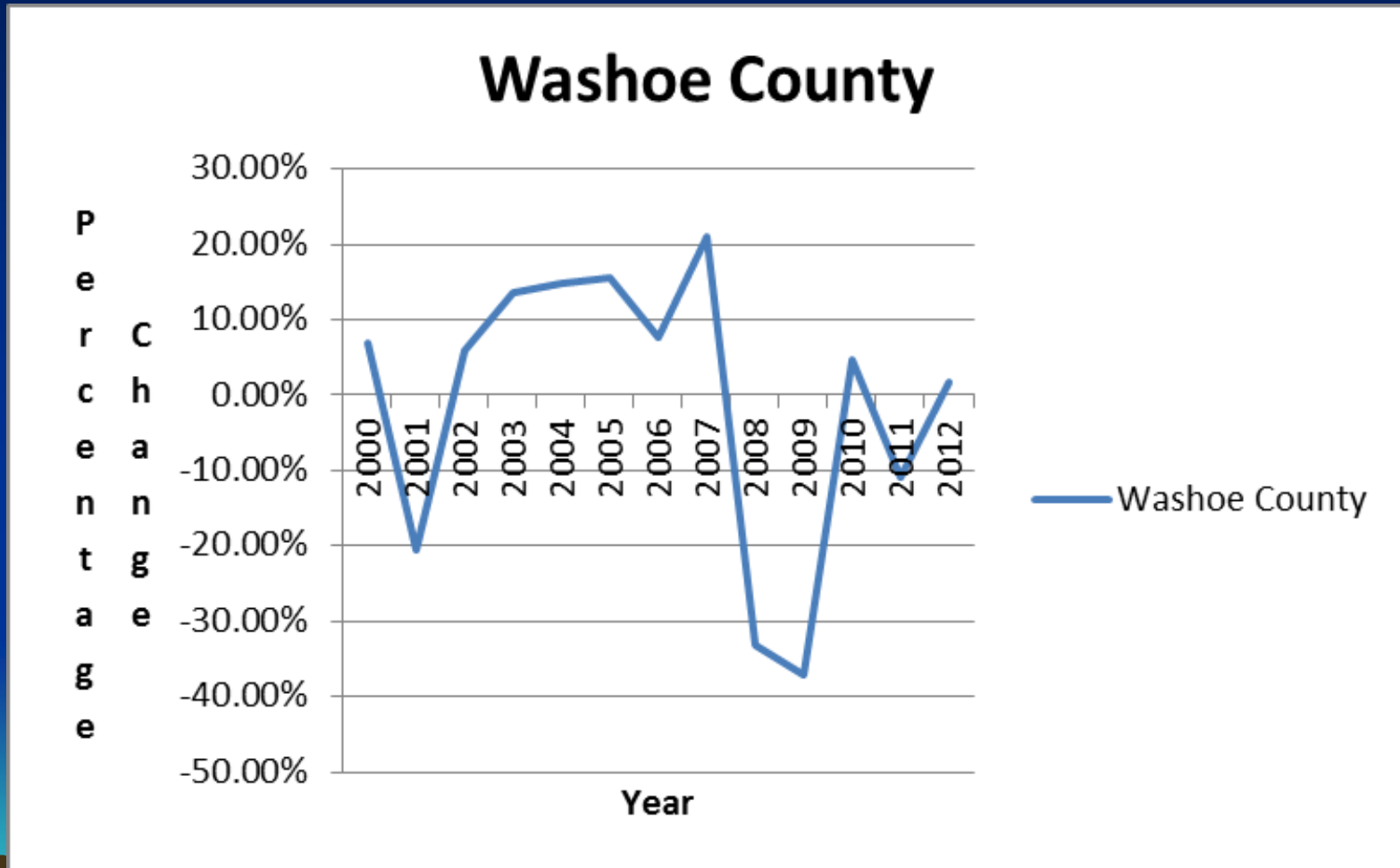
**FIGURE 1. Index of Total Proprietorship Numbers for the Nation, State of Nevada, and Washoe county, 1969 to 2011, where 1969=100.**



**Figure 2. Real Proprietorship Income Per Proprietor for the Nation, State of Nevada, and Washoe County, 1969 to 2011. 2009=100.**



# Percentage Change in Non-Farm Proprietor Income in Washoe County, 2000 to 2012.



# Measurement of Entrepreneurial Activity

- Employment Growth (%), 1969-2011
- Average Earnings Per Job (\$), 2011
- Per Capita Income (\$), 2011
- Ratio of Number of Proprietors to Number of Wage and Salary Workers, 2011
- Ratio of Proprietor's Income to Wages and Salaries, 2011
- Percentage Growth in Number of Proprietors, 1969 to 2011
- Average Income Per Proprietor, 2011
- • Percentage Growth in Average Income for Proprietor, 1969 to 2011





# Table 1. Overall Economic and Entrepreneurship Activity

## Indicators for Nevada Counties, 1969-2011.

ENTITY	OVERALL ECONOMIC INDICATORS			Entrepreneuership Indicators				
	Employment Growth (%) 1969-2011	Avg. Earnings Per Job (\$) 2011	Per Capita Income (\$) 2011	Percentage of Proprietors/W&S Workers 2011	Percentage of Proprietors Income/Wage 2011	Avg. Ann. Growth Proprietors 1969-2011	Avg. Income Per Proprietor (\$) 2011	Real Ann. Avg. Growth Proprietor Income 1969-2011
Churchill	482.26	31,080	43,759	153.82%	50.13%	8.24%	13,691	6.57%
Clark	746.66	48,529	35,896	26.67%	15.00%	7.72%	24,971	7.35%
Douglas	277.98	36,305	52,858	56.44%	19.76%	6.89%	14,023	5.11%
Elko	285.68	52,371	41,644	12.63%	3.59%	3.01%	13,374	1.51%
Esmeralda	151.78	22,142	44,170	176.49%	2.99%	9.47%	690	1.27%
Eureka	708.37	90,833	40,163	12.94%	0.25%	6.24%	1,608	-0.47%
Humboldt	217.9	57,212	44,648	21.68%	10.19%	3.42%	24,081	2.72%
Lander	234.27	65,130	45,158	24.00%	2.65%	4.13%	6,980	2.85%
Lincoln	133.51	35,265	25,238	40.55%	6.49%	3.66%	5,921	1.36%
Lyon	449.9	37,827	29,581	36.72%	13.27%	5.75%	13,169	3.62%
Mineral	-23.21	37,884	36,221	43.19%	7.78%	2.98%	7,146	3.97%
Nye	72.04	46,052	32,748	36.37%	10.15%	7.87%	12,908	4.85%
Pershing	102.71	46,245	27,159	30.41%	4.52%	2.59%	6,575	0.03%
Storey	972.6	46,439	34,528	23.74%	4.63%	5.58%	8,605	3.27%
Washoe	282.71	47,946	42,599	27.20%	16.34%	4.83%	26,069	4.72%
White Pine	33.65	49,769	39,401	24.68%	7.37%	2.29%	13,839	0.77%
Carson City	396.35	48,456	41,033	33.00%	19.05%	5.63%	25,558	4.62%
Nevada	514.76	48,051	37,396	28.25%	15.04%	6.57%	23,629	6.00%
USA	93.11	30,433	41,560	26.31%	16.58%	3.27%	30,433	3.28%

## Table 2. Classification of County or Region Entrepreneurship Activity.

Classification	Description
Entrepreneurship of Necessity	Counties or region with employment growth <u>less</u> than the U.S. average and ratio of entrepreneurs to workers <u>greater</u> than U.S.
Strong Job Growth and Strong Entrepreneurship	County's or region's employment growth <u>greater</u> than U.S. average and ratio of entrepreneurs to workers <u>greater</u> than U.S.
Strong Job Growth and Weak Entrepreneurship	County's or region's employment growth <u>greater</u> than U.S. average and ratio of entrepreneurs to workers <u>less</u> than U.S.
Weak Job Growth and Weak Entrepreneurship	County or region with employment growth <u>less</u> than U.S. average and ratio of entrepreneurs to workers <u>less</u> than U.S.

Source: Daphane Clones Corporation for Enterprise Development. "An Assessment of Entrepreneurship in Local Appalachian Economies, 1989-1994." Appalachian Regional Commission, Washington, D.C. 1998.



# USING CLASSIFICATION FOR NEVADA COUNTIES

- Two (2) counties exhibit “Entrepreneurship of Necessity”.
- Nine (9) counties are classified in the largest category of “Strong Job Growth and Strong Entrepreneurship.”
- Five (5) counties are categorized as “Strong Job Growth and Weak Entrepreneurship.
- One (1) counties are categorized as “Weak Economies and Weak Entrepreneurship.”
- Washoe County can be classified as “Strong Job Growth and Strong Entrepreneurship.”



Table 3. Real Percentage Growth by Major Sources of Personal Income, Recession and Expansion, Washoe County, Nevada, 2002-2009.

SOURCE	Percentage	Average Annual Percentage Change			Cyclical
	Share		Expansion	Recession	Swing
	2009	2002-2009	2002-2007	2008-2009	2002-2009
WAGE and Salaries	49.48%	0.09%	2.65%	-7.60%	10.25%
Supplements to wages and salaries	11.81%	1.36%	2.82%	-3.03%	5.85%
Farm proprietors' income	0.01%	60.68%	-143.24%	672.44%	-815.69%
Nonfarm proprietors' income	6.74%	-2.36%	1.29%	-13.32%	14.62%
Less Contributions for government social insurance 5/	-7.05%	0.03%	2.40%	-7.08%	9.48%
Plus: Adjustment for residence 6/	-0.74%	-5.72%	2.14%	-29.32%	31.46%
Plus: Dividends, interest, and rent 7/	25.49%	1.13%	4.50%	-8.97%	13.46%
Plus: Personal current transfer receipts	14.26%	7.94%	5.76%	14.51%	-8.75%
Personal income (thousands of dollars)	100.00%	1.10%	3.31%	-5.56%	8.87%



# Table 4. Major Sources of Personal Income by Percent for Washoe County, Nevada.

	Percentage	Percentage					
	Share	Share	1969-2011	Average Annual	Adjusted Total	Cyclical	Standard
SOURCE	1969	2011	Share-Shift	Growth Rate	Cyclical Swing	Response	Error
Wage and Salaries	66.74%	46.88%	-19.86%	3.80%	5.82%	0.8105	0.1935 (**)
Supplements to wages and salaries	6.46%	11.43%	4.97%	6.15%	4.51%	1.1728	0.2289 (**)
Farm proprietors' income	0.09%	0.02%	-0.07%	-32.38%	4.64%	-9.5546	20.7327 (NS)
Nonfarm proprietors' income	8.92%	7.66%	-1.26%	4.72%	4.67%	0.3706	0.5041 (NS)
Less Contributions for government social insurance 5/	-5.68%	-6.21%	-0.53%	5.02%	4.65%	1.5085	0.2504 (**)
Plus: Adjustment for residence 6/	-0.44%	-0.17%	0.27%	5.79%	4.64%	2.8448	1.3065 (**)
Plus: Dividends, interest, and rent 7/	17.64%	25.49%	7.85%	5.73%	4.38%	0.8186	0.3089 (**)
Plus: Personal current transfer receipts	6.27%	14.90%	8.63%	6.87%	4.43%	-0.0308	0.2648 (NS)
Personal income (thousands of dollars)	100.00%	100.00%		4.64%		0.6334	0.1721 (**)



# CONCLUSIONS

- With loss of jobs from “The Great Recession” and the downsizing of employment by large corporations, entrepreneurships are an area of economic development to keep workers in Urban America.
- Following national and state trends, Washoe County proprietorship numbers increased from 1969 to 2011. However, the number of non-farm proprietors declined after the Great Recession in 2008.
- In real dollars (2010=100.0), U.S. real non-farm proprietor income per proprietor remained fairly constant decreasing slightly from \$31,541 in 1969 to \$29,801 in 2011. For the state of Nevada, real non-farm proprietor income per proprietor decreased from \$32,299 in 1969 to \$20,769 in 2011. Also, for Washoe County real non-farm proprietor income per proprietor increased from \$30,742 in 1969 to \$51,764 in 2007 and declined to \$22,252 in 2011.



# CONCLUSION

- In real dollars (2010=100.0), U.S. real non-farm proprietor income per proprietor remained fairly constant decreasing slightly from \$31,541 in 1969 to \$29,801 in 2011. For the state of Nevada, real non-farm proprietor income per proprietor decreased from \$32,299 in 1969 to \$20,769 in 2011. Also, for Washoe County real non-farm proprietor income per proprietor increased from \$30,742 in 1969 to \$51,764 in 2007 and declined to \$22,252 in 2011.
- Since the inception of the Great Recession, non-farm proprietor income in Washoe County increased by 20.95% or \$514,757,000 in 2007. However by 2009 this figure declined by 58% or \$1,723,478,000. By 2012, Washoe County non-farm proprietor income declined by 60.17% from 2007 levels or loss of \$1,788,069,000.



# CONCLUSIONS

- Following an Economic Development Administration publication for gauging local and regional proprietorship activity, it was judged that Spokane County is a “Strong Job Growth and Strong Entrepreneurship” area. This means that Washoe County from 1969 to 2011 had an employment growth rate higher than the national average and the ratio of entrepreneurs to workers was greater than the national average. Given by 2011 income per proprietor in Washoe County was lower than the national average, public education programs in small business development could be advantageous in the county. This analysis should be completed in intervals.
- For entrepreneurial development, it is important for Washoe County decision makers to understand factors which enhance or retard regional entrepreneurships formation and growth.





# CONCLUSIONS

- Investigating the characteristics of the cyclical performances of the major categories, Non-Farm Proprietor Income exhibited a very definite cyclical pattern of behavior by declining at a -13.32% average annual growth rate during contraction and at a 1.29% average annual growth rate during expansion. This results in a positive cyclical swing measure for Non-Farm Proprietor Income of 14.62%.
- As may be anticipated given the intended purpose of certain Transfer Payments for unemployment and income maintenance programs, Transfer Payments exhibited extreme counter-cyclical behavior with a cyclical swing of -8.97. Public policies suggesting reducing “Transfer Payments” would have intensified the impacts of the “Great Recession” in Washoe County, Nevada.



# CONCLUSIONS

- As a share of total personal income, Wages and Salaries declined from 66.74% in 1969 to 46.88% in 2011. Also Non-Farm Proprietor Income share declined from 8.92% in 1969 to 7.66% in 2011. Dividends, Interest, and Rents increased as a share of total personal income by a factor of 1.45 (17.64% to 25.49%) while Transfer Payments increased by a factor of 2.38 (6.27% to 14.90%).
- The response indices for Wages and Salaries and Dividends, Interest, and Rents are significant but for Transfer Payments and Proprietor Incomes were insignificant. Thus, for Transfer Payments and Proprietor Incomes in Washoe County, Nevada, one cannot say that response index for these variables are different from zero. However, Wages and Salaries and Dividends, Interest, and Rents in Washoe County, Nevada exhibit a pattern of growth that correspond with the cyclical performance of the national economy.