

# PREDICTING HOW NATIONAL & STATE ECONOMIC CONDITIONS WILL AFFECT LOCAL BUDGETS



Neil Abercrombie

Doug Macdonald

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# RECESSION...OR NOT A RECESSION?

- "*I don't think we're in a recession, and I don't think Utah is headed for one,*" Lt. Governor Gary Herbert interview with the Deseret Morning News.

» April 3<sup>rd</sup> 2008

*"It now appears likely that real gross domestic product will not grow much, if at all, over the first half of 2008 and could even contract slightly,"* Federal Reserve Chairman Ben Bernanke told the Joint Economic Committee.

Translation: The U.S. economy may be in recession.

» April 3<sup>rd</sup> 2008



Deteriorating National Economic Conditions  
are Now Negatively Affecting Utah Budgets.

### Salient Economic Indicators for Utah Cities

	Year-to-date % change	Last 3 Months % change	Latest Month % change	Assessment
Utah Wages and Salaries (coincident)	9.8%	8.1%		 slowing
Utah Employment (coincident)	4.0%	3.0%	2.8%	
Utah Average Wage (coincident)	5.8%	4.9%	n/a	
Utah Unemployment Claims (leading)	10.9%	4.6%	15.9%	 worsening
Construction employment (leading)	8.8%	2.1%	0.8%	
Residential construction values (leading)	-63.2%	-64.3%	-66.1%	 worsening
Nonresidential construction values (leading)	-2.7%	0.0%	-9.2%	 worsening
Long/short term yield spread (leading)	0.15%	1.25%	1.55%	 improving
Misery Index (leading)	8.8%	6.9%	6.8%	
U.S. CPI (inflation) (coincident)	2.8%	3.9%	3.8%	 worsening
Utah unemployment rate (coincident)	2.8%	3.0%	3.2%	
Local 1% sales tax	5.2%	2.0%	2.7% (January sales)	 worsening

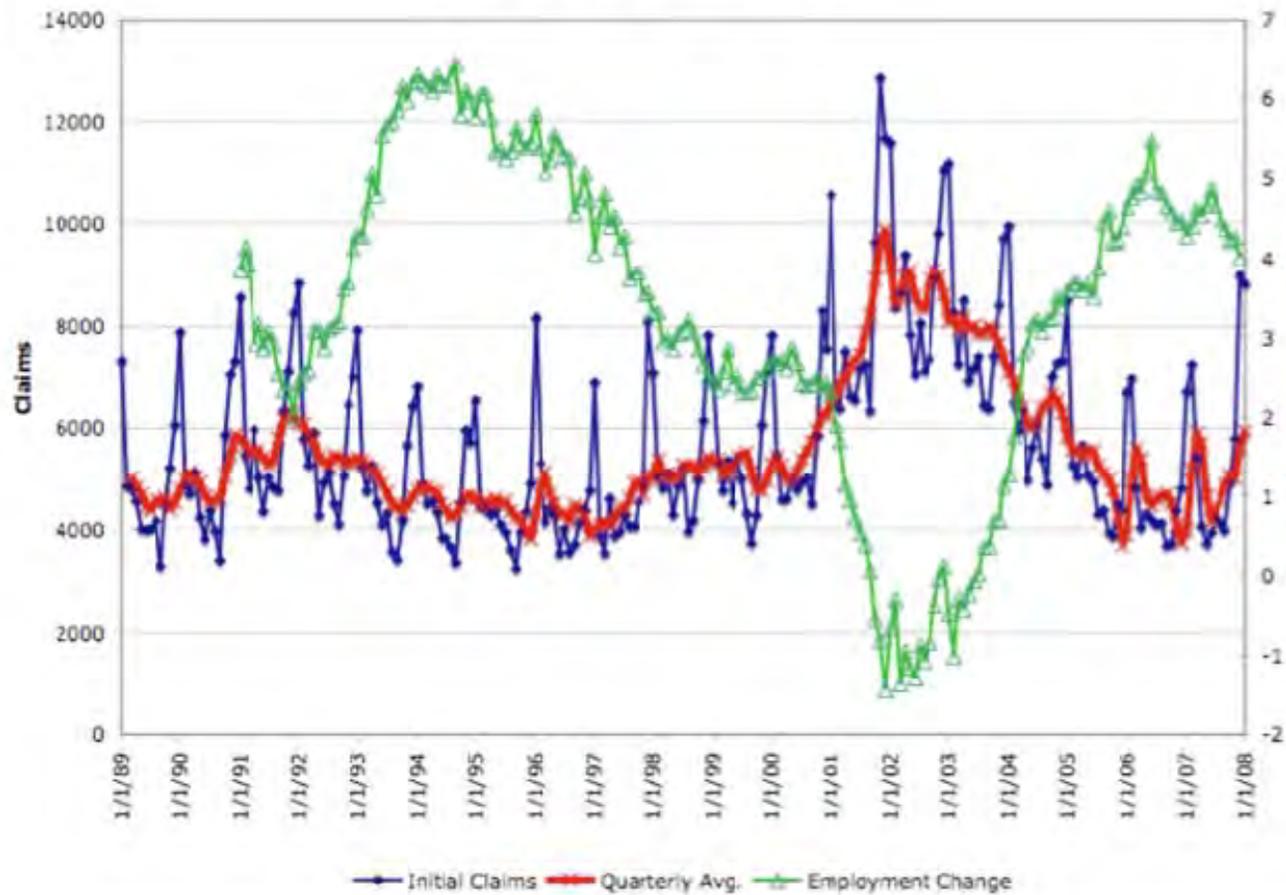
Many of Utah's  
Economic  
Indicators are  
Slowing Down or  
in Decline

Three months ago most indicators were green lights... "go"

### Salient Economic Indicators for Utah Cities

	Year-to-date % change	Last 3 Months % change	Last Month % change	Assessment
Utah Wages and Salaries (coincident)	10.1%	8.8%		 worsening
Utah Employment (coincident)	4.3%	3.8%	3.4%	
Utah Average Wage (coincident)	8.8%	8.8%	N/A	
Utah Unemployment Claims (leading)	10.1%	80.8%	17.8%	 worsening
Construction employment (leading)	18.8%	8.8%	7.8%	 worsening
Residential construction value (leading)	-22.2%	-47.8%	-13.7%	 worsening
Nonresidential construction value (leading)	21.8%	8.8%	-14.8%	 worsening
Long/short term yield spread (leading)	0.18%	0.78%	1.03%	 improving
Misery Index (leading)	8.8%	8.8%	7.3%	 worsening
U.S. CPI (inflation) (coincident)	8.8%	4.8%	4.1%	
Utah unemployment rate (coincident)	2.8%	2.8%	3.8%	
Local 1% sales tax	4.2%	2.1%	12.8% (November sales)	 improving

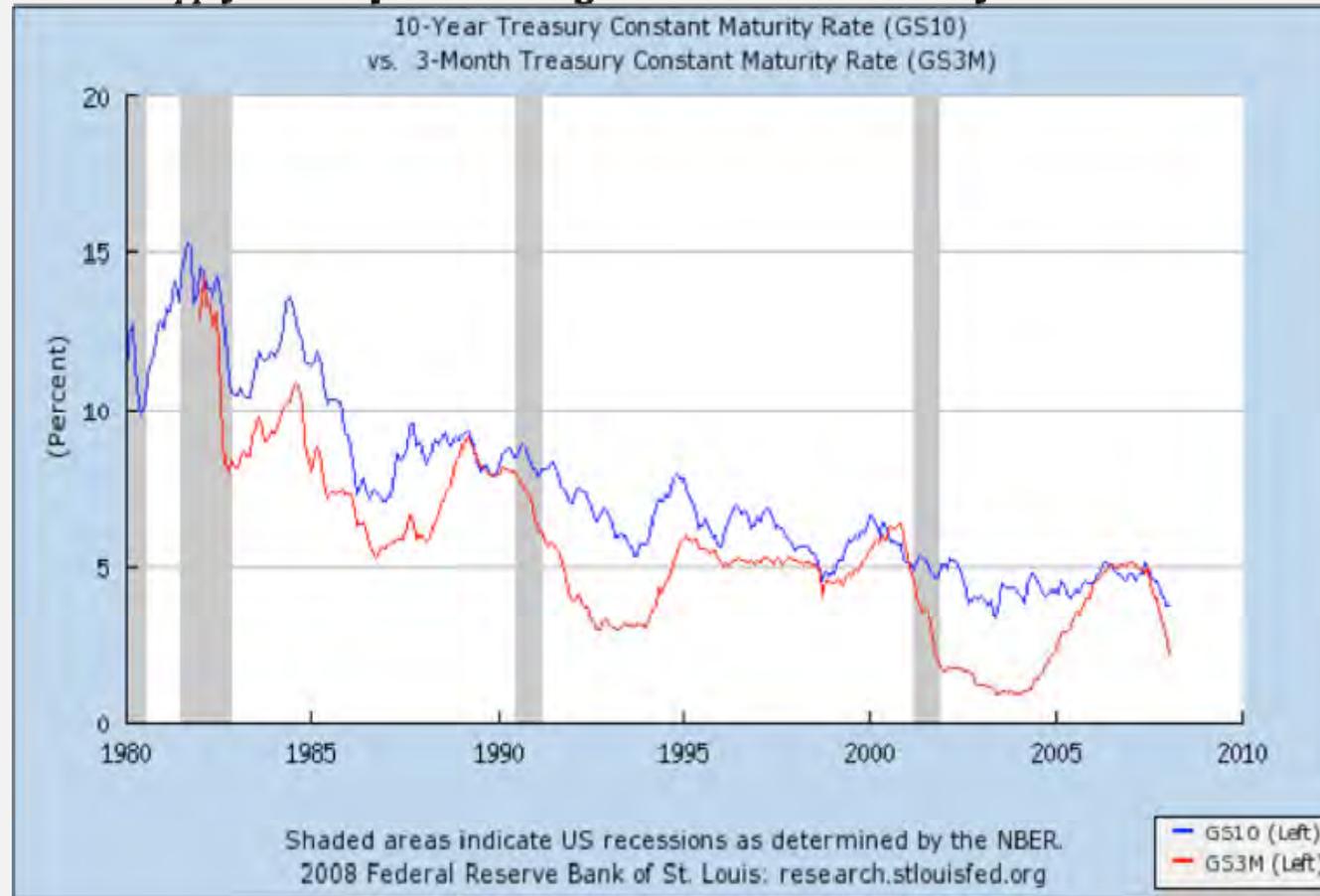
Utah Initial Unemployment Claims and  
Percent Change in Utah Jobs



Economic Indicators.xls, Unclaims Chart2, 1/26/08, 2:09 PM

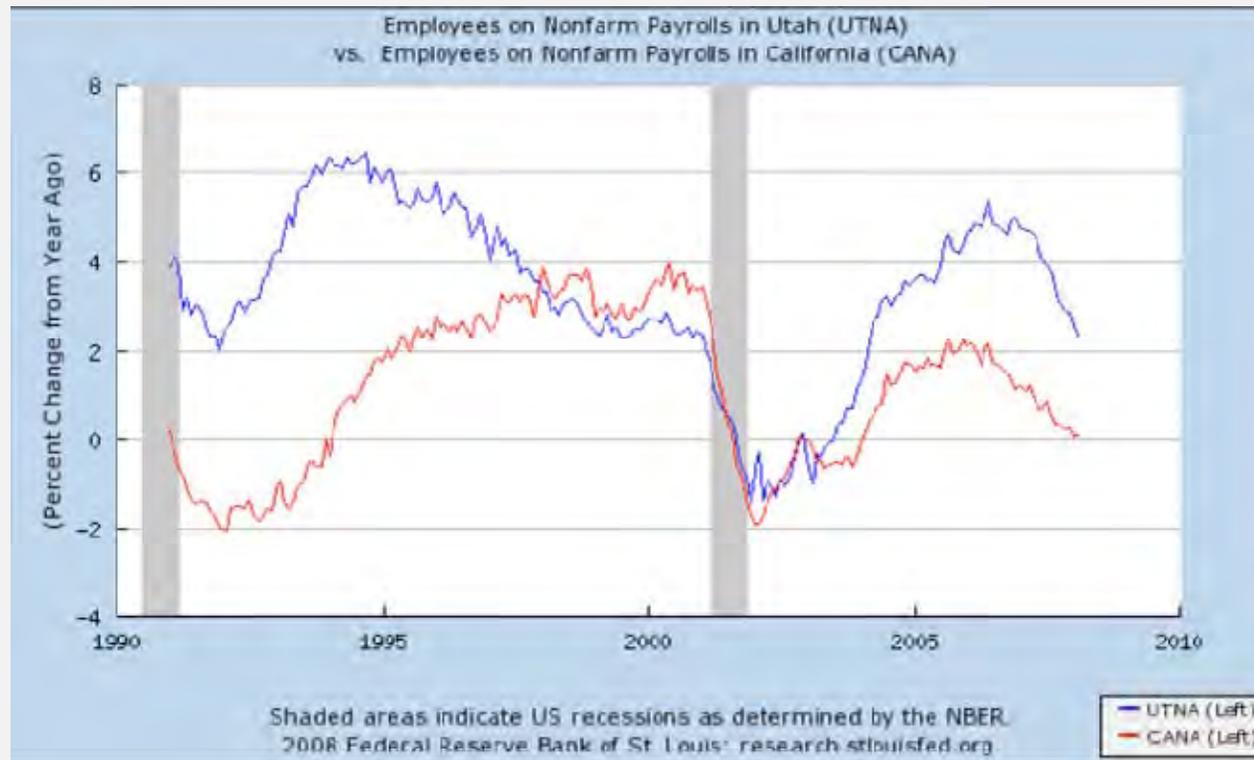
Unemployment claims are heading up, but still lower than the  
2001-3 recession

**The gap between long-term (10-year) and short term (3-month) Treasury bills indicates how the supply of money will be doing in the next 6 months to a year**

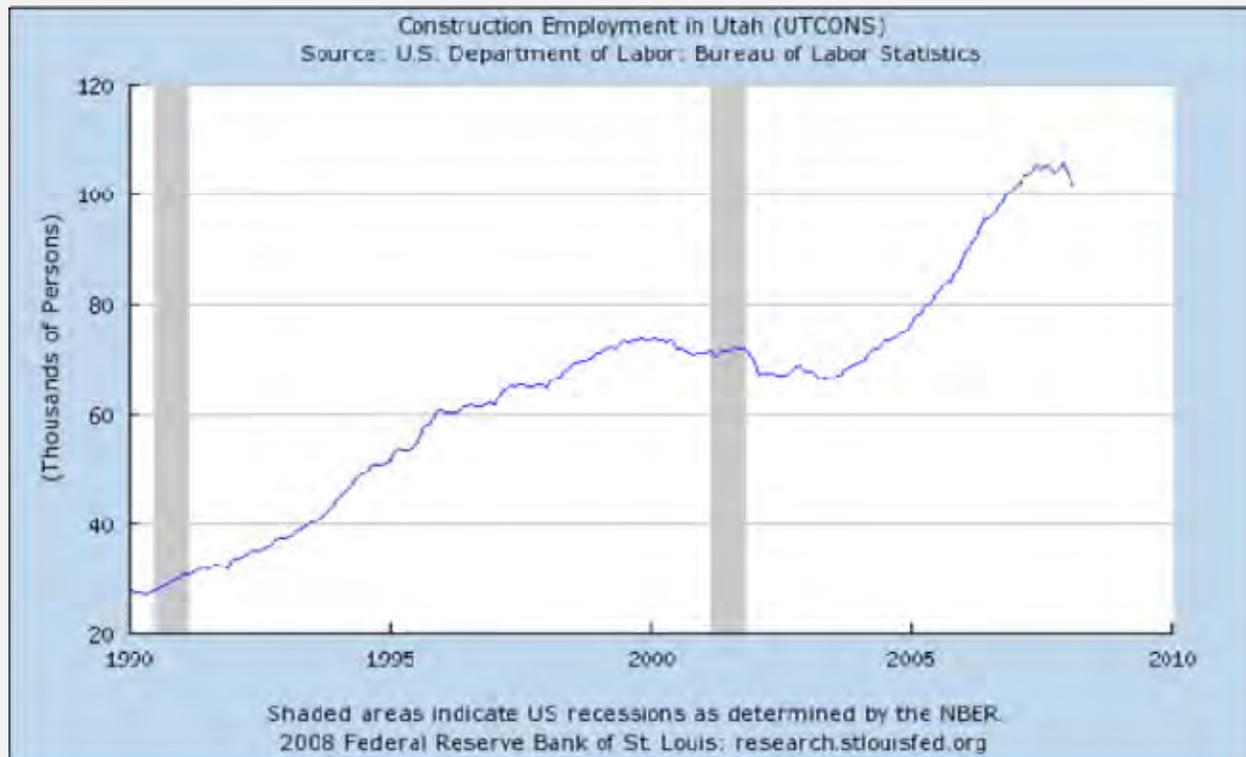


Supply of money will increase over the next 6 to 12 months

**Both Utah's and California's job growth rates have turned down, but Utah is still in expansion mode, at least for the next few quarters**



Utah's job growth rate still in expansion mode, but receding quickly, faster than California's



Utah's construction employment heading down the roller coaster

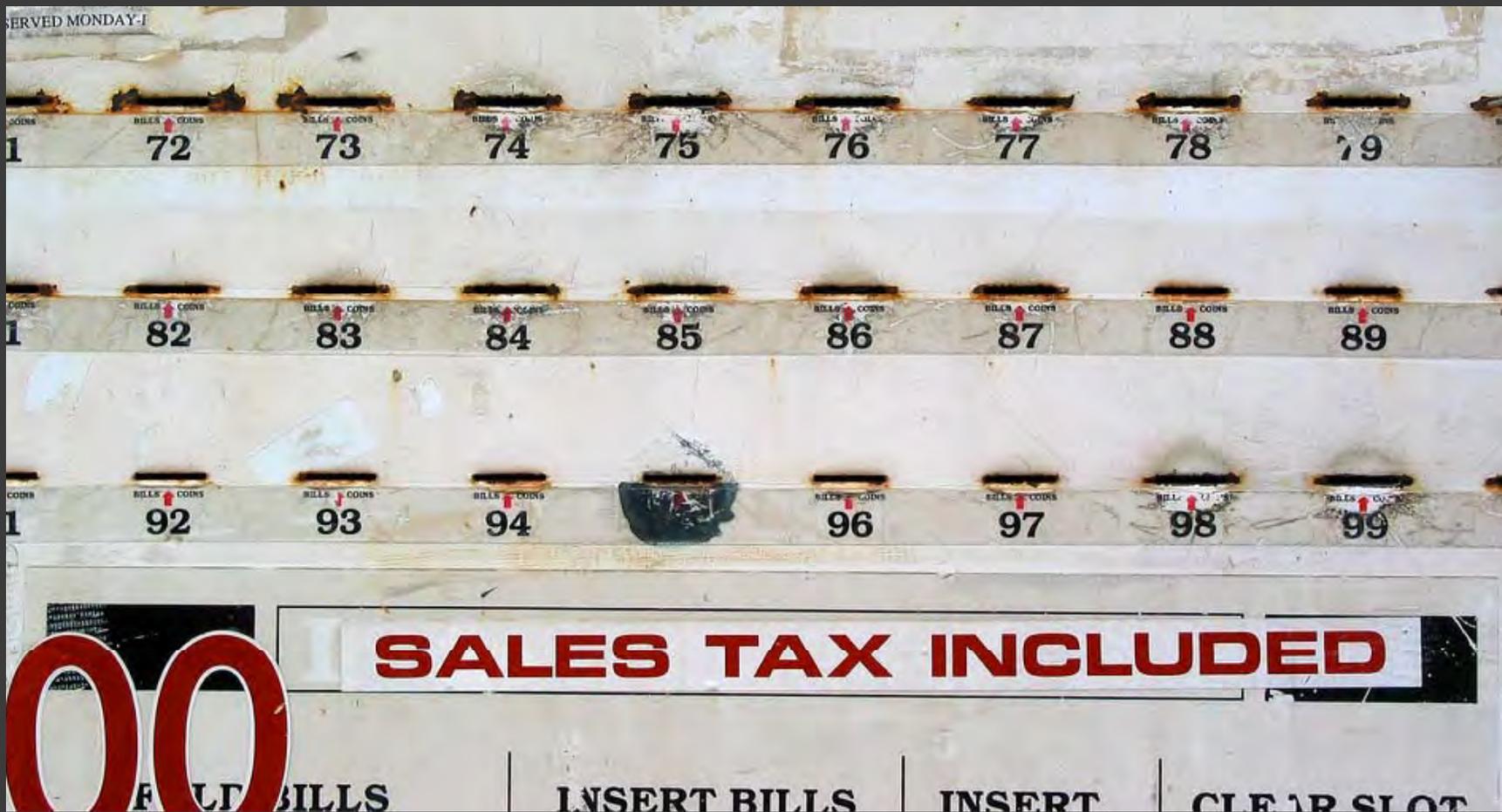


So, how can we forecast sales taxes under these near recession conditions?



## FORECASTING SALES TAX

1. How much did you slow down during the 2001-03 recession? How much did you grow in the last three distributions?
2. Build a multi-state econometric model
3. Try using our “simple sales tax estimator system”



The “simple” sales tax system mimics a complicated model in less than 10 calculations

# LOCAL TAX 1% SYSTEM

- 50% Population based on each city's share of population: grows with the Statewide wage growth, 1/10th of the change in residential construction and an individual city's population change
- 50% Point-of-Sale: grows with county wages +- change in county residential construction and +- change in the misery index
- 4th Quarter Statewide wages rose 8.1%
- Utah residential construction down 30.7% in the second half of 2007
- 1/2 of difference between State's population and city population (-0.8% to 3.6% for 7 cities)
- County wages grew 5.1% to 8.6% in the 4th quarter of 2007
- Off 29% July thru December 2007 for the 7 cities
- Misery Index up 1%, car sales flat



Layton, Utah

# LAYTON CITY

50% Population based on each city's share of population: grows with the **Statewide wage growth**, **residential construction change / 10**, and a **city's population change**

50% Point-of-sale: grows with **county wages +- change in county residential construction/10**

● Wage growth of 8.1%

● -30.7% / 10 residential construction decline = -3.1%

● -0.5% (1/2 difference between State population growth and Layton's)

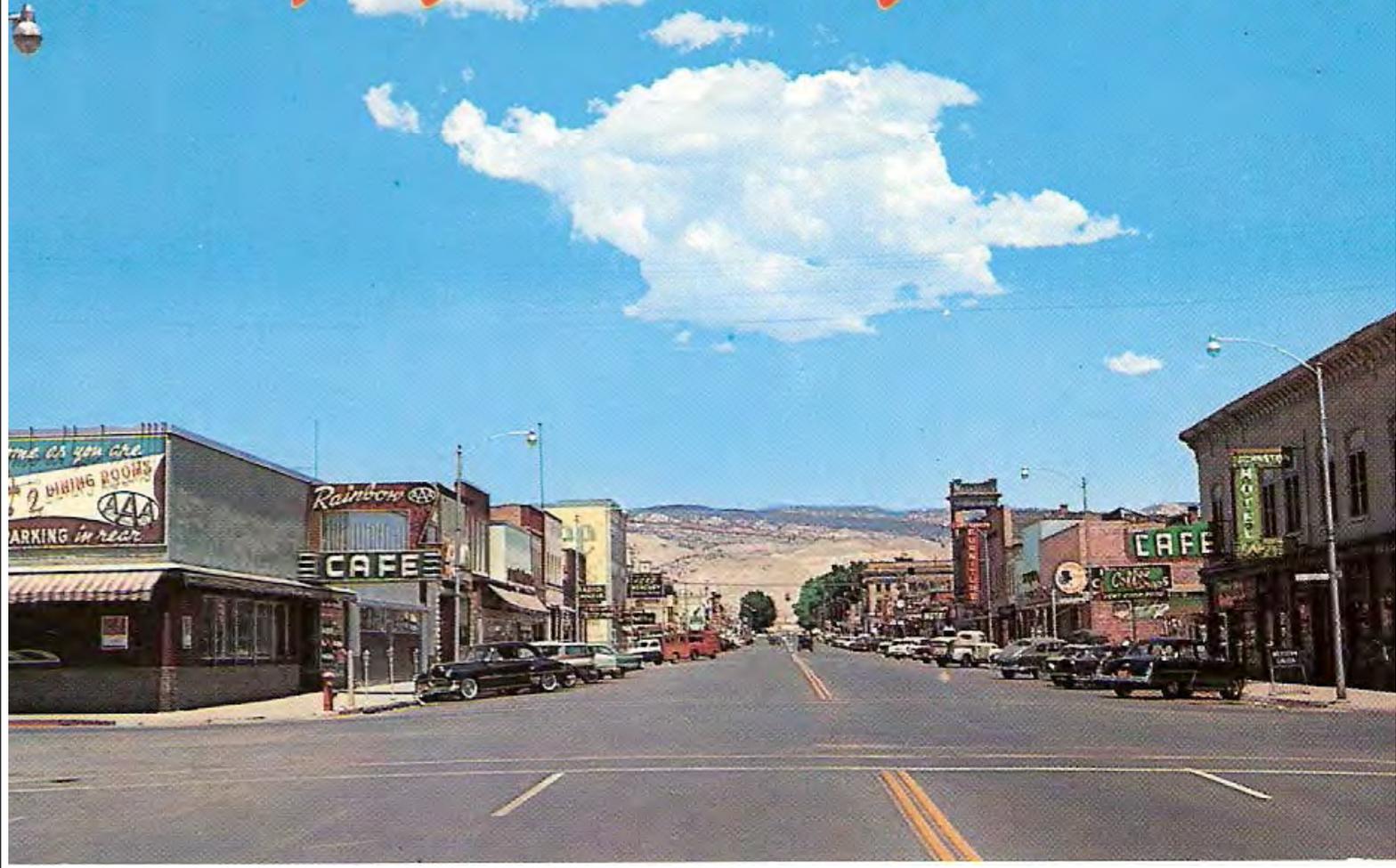
● = 4.5% x 50% = 2.25%

● Davis County wages grew 5.1% Davis County residential construction -44%/10 = -4.4%

● = 0.7% x 50% = 0.35%

● 2.25% + 0.35% = 2.6% (actual 2.6%)

*Greetings from Richfield, Utah*



Richfield Utah

# RICHFIELD CITY

50% Population based on each city's share of population: grows with the **Statewide wage growth**, **residential construction change / 10**, and a **city's population change**

50% Point-of-sale: grows with **county wages +- change in county residential construction/10**

● Utah wage growth of 8.1%

● -30.7% / 10 Utah residential construction decline = -3.1%

● -0.7% (1/2 difference between State population growth and Richfield's)

● = 4.3% x 50% = 2.15%

● Sevier County wages grew 7.5%

● Sevier County residential construction - 30%/10 = -3%

● = 4.5% x 50% = 2.25%

● 2.15% + 2.25% = 4.4% (actual 3.6%)



West Jordan, Utah

# WEST JORDAN CITY

50% Population based on each city's share of population: grows with the **Statewide wage growth**, **residential construction change / 10**, and a **city's population change**

50% Point-of-sale: grows with **county wages +- change in county residential construction/10**

● Utah wage growth of 8.1%

●  $-30.7\% / 10$  Utah residential construction decline =  $-3.1\%$

●  $+0.3\%$  (1/2 difference between State population growth and Richfield's)

●  $= 5.3\% \times 50\% = 2.65\%$

● Salt Lake County wages grew 8.2%

● Salt Lake County residential construction -  $32.9\%/10 = -3.3\%$

●  $= 4.9\% \times 50\% = 2.45\%$

●  $2.65\% + 2.45\% = 5.1\%$  (actual 18.7%)

## CONCLUSION

OK, the “simple” sales tax estimator system isn’t that simple.

But it does mimic a complicated econometric model in less than 10 calculations.