

Frackonomics 221: St Tammany as the Jobs Goose

St Tammany Jobs Growth Analysis



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Summary

This report examines the jobs growth in St Tammany from 1999 to 2013 compared to Louisiana Regional Labor Market Areas (RLMA) 3, 4, and 7, the oil patch. Using Louisiana Workforce Commission data, St Tammany's rate of job growth was significantly higher than these regions:

- St Tammany jobs grew at a rate 50X Region 7, the Haynesville Shale area
- St Tammany jobs grew at a rate 4X the combined rate of Region 3, 4, and 7
- St Tammany added 13X more jobs than the entire Region 7 (25,000 vs. 2,000)

This report shows St Tammany's jobs growth to be superior to these 3 oil and gas regions.

It recommends St Tammany's government officials unequivocally reject any oil and gas extraction activity in St Tammany as not in the best, long term economic interests of its citizens.

Introduction

"Jobs" is the mantra of the oil and gas extraction industry. Their claim is they provide good paying jobs and this then translates to regional economic progress through jobs multipliers and additional indirect spending. It is stated so loudly and so often by, for example, the Louisiana Oil and Gas Association (LOGA)¹ that it seems an accepted fact: oil and gas extraction jobs bring long term jobs prosperity to an area. Unsaid is the implication that those areas without oil and gas extraction jobs will suffer economically and fall behind in the parish, region, and states "jobs races".

Louisiana has been conducting an experiment to evaluate this proposition. St Tammany is a virtually unique parish in Louisiana: it has no oil and gas extraction activity due to an accident of geology. Past attempts to vertical drill for oil and gas have not been successful and so St Tammany has had to develop without the benefits (or costs) of direct oil and gas extraction activity and monies and has instead relied on suburban, mixed, light industrial development alone. This is in stark contrast to most areas of Louisiana that are heavily invested in oil and gas extraction and associated activities. Perhaps the most oil and gas centric are Regional Labor Management Areas 3, 4, and 7²: these three geographically diverse regions extract most of the Louisiana's gas and close to half the oil.

Using these regions as a jobs growth model for oil and gas extraction and comparing these to St Tammany provides an opportunity to examine the oil and gas industry's fable that adding oil and gas extraction jobs, that is, actually drilling and commercially extracting oil and gas, is an effective, long term jobs development strategy for any region with oil or gas in the ground.

¹ Baton Rouge Advocate, October , 25, 2014, Griggs

² See Appendix 1 for listing of RLMA parishes

Methodology

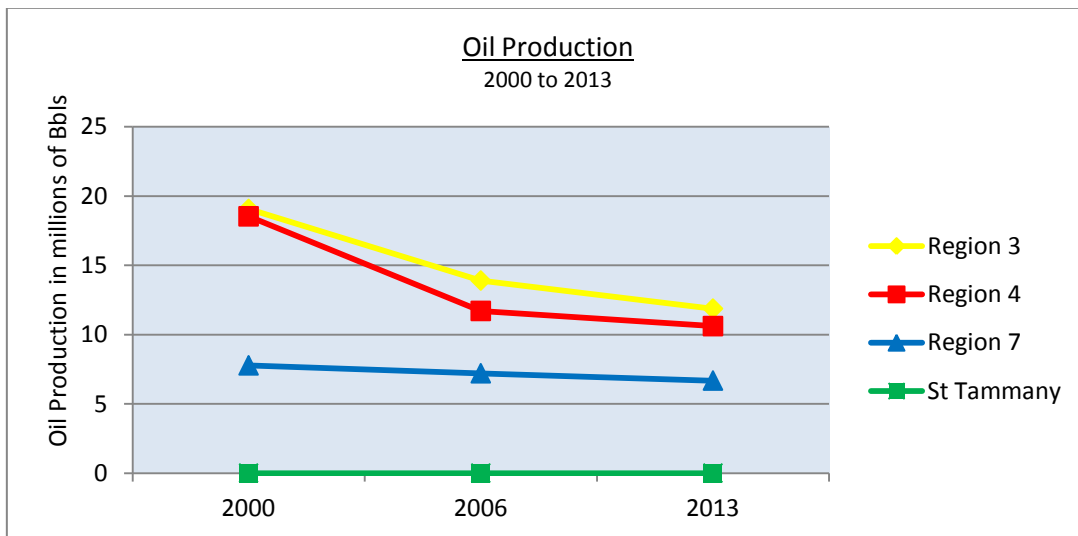
The yearly jobs data used in this analysis are from Louisiana Workforce Commission (LWC), available online, in the *Employment & Wages Annual Report Archive* section. The period of 1999 to 2013 was chosen primarily for ease of comparison with current data. This longer time frame also allows for short term trends to stabilize so that the longer term impacts of any short term jobs activity can become evident.

A note on “jobs” definition: Per the Louisiana Workforce Commission, a Louisiana “job” is counted if the employer by law has to pay Louisiana taxes. So, for example, if a drilling mud subcontractor from Houston sends 3-4 employees temporarily to a drilling site in Oil City, Louisiana, they would not pay Louisiana taxes and therefore their jobs would not be counted by the LWC. Conversely, the LWC would count the job from a Shreveport casing supplier who hires a new person to handle the influx of new orders AND PAYS LOUISIANA INCOME TAXES on the new employee’s wages. In short, the LWC counts “real” Louisiana jobs, not transitory or temporary service jobs based outside Louisiana.

Oil and Gas Production

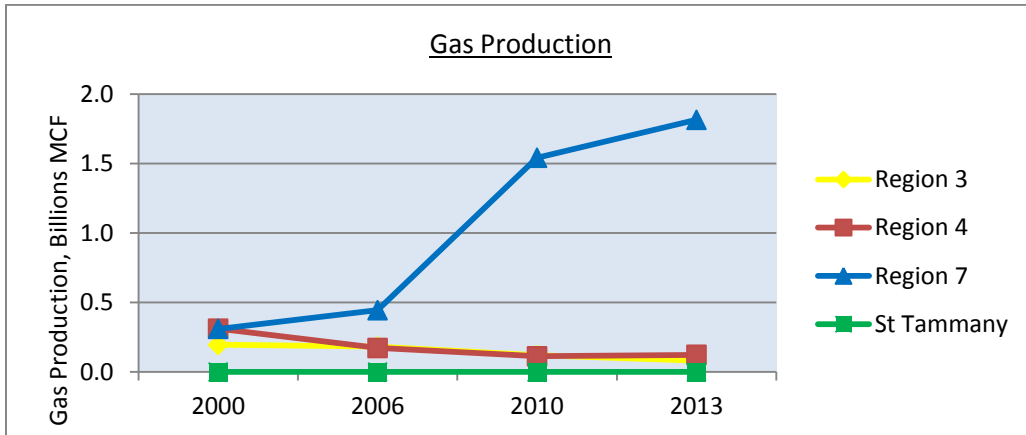
RLMA Regions 3, 4, and 7 provide about 40% of Louisiana’s oil and over 75% (2013) of Louisiana’s natural gas production. St Tammany, in contrast, extracts no oil or natural gas. These data are shown graphically in Figures 1 and 2³.

Figure 1



³ See Appendix 2 for plotted data

Figure 2

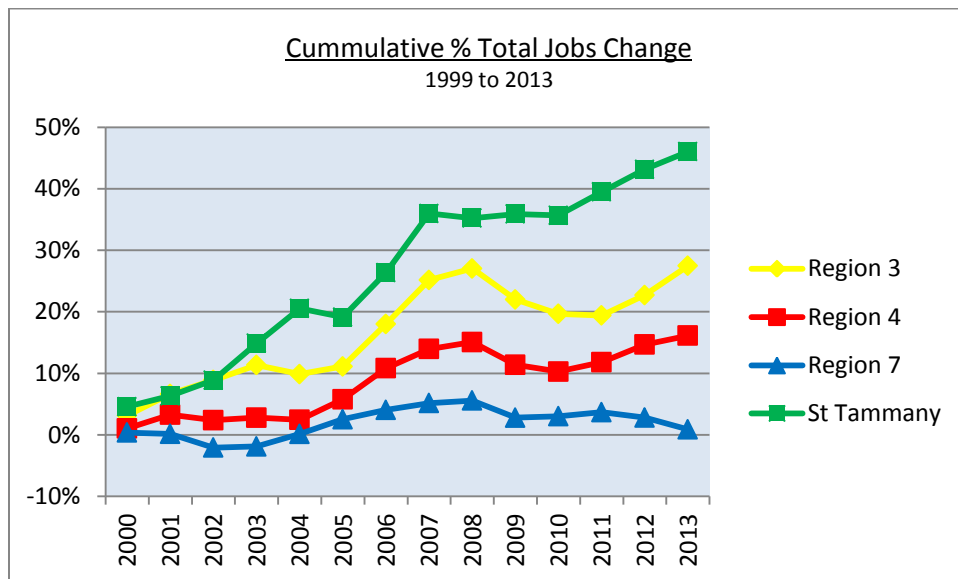


A jobs growth comparison of Regions 3, 4, and 7 vs. St Tammany will provide a way to compare regions with extensive oil and gas extraction industry vs. a parish with no oil and gas extraction.

Overall Jobs Growth

Figure 3 shows the cumulative overall jobs⁴ growth rate for St Tammany and RLMA 3, 4, and 7 from 1999 to 2013. For this 14 year period St Tammany Parish, with no oil or gas extraction industry, had a significantly higher jobs growth rate.

Figure 3



⁴ See Appendix 3 for additional data

St Tammany’s overall jobs growth rate of 46.1% for this 14 year period is:

- 167 % greater than second place Region 3 (27.5%)
- 286 % greater than third place Region 4 (16.1%)
- 50X greater than fourth place Region 7 (0.9%)
- 16X the rate for Louisiana (2.5%)

For additional perspective the average year to year jobs data show:

- Regions 3,4,and 7’s avg. combined jobs growth rate was: 0.82%/yr
- St Tammany’s avg. jobs growth rate was 4X higher at: 3.29%/yr

In the absolute, St Tammany added 25,453 jobs during this 14 year period. That was about 15% more than all of Region 3’s added jobs (21,860) and about 13X the added jobs in all of Region 7 (1,969).

Figure 2 (above) shows the tremendous increase in natural gas output from 2006 to 2013 in Region 7 as a result of the Haynesville Shale play. Table 1 compares the jobs performance and the gas production data for this period:

Table 1

Entity	2006	2013	Difference	% Change
Region 7 Jobs	232,753 jobs	225,671 jobs	-7,082 jobs	- 3.0%
Region 7 Gas	0.445 Billion MCF	1.816 Billion MCF	+1.371 Billion MCF	+ 408%
St Tammany	69,824 jobs	80,708 jobs	+10,884 jobs	+15.6%

At the same time that Region 7 was increasing natural gas output about 400%, the number of jobs in Region 7 declined about 7,000. Thus, **the enormous increase in natural gas production associated with the Haynesville Shale had no measurable positive impact on overall jobs growth in Region 7**. Note that during this same period, St Tammany parish, with no oil or gas extraction or Haynesville Shale play, added about 11,000 jobs, an increase of +15.6%.

With these data in mind let’s re-examine the recent oil and gas spokesperson’s comment regarding the addition of 57,000 jobs in the Haynesville Shale play from 2009 to 2013.⁵ The data in Table 1 clearly show that this is not the case. If there were 57,000 added jobs in Region 7 they were not jobs that were counted by the LWC. It is certainly possible that legions of temporary contractors were required to increase natural gas production in Region 7, but as the LWC numbers show, very few of these temporary work activities resulted in permanent, real jobs for the workers of Louisiana in Region 7.

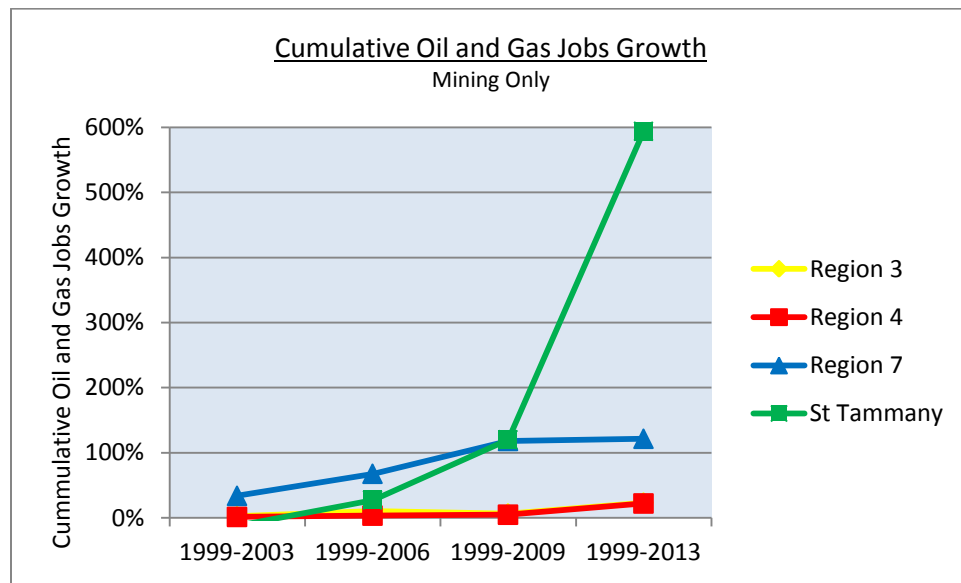
⁵ Baton Rouge Advocate, October , 25, 2014, Griggs

Mining Jobs

The Louisiana Workforce Commission's online state level reports of oil and gas jobs are reported in 3 categories: Mining (sub Codes 211,213), Manufacturing (sub Code 324), and Transportation (sub Code 486). Unfortunately, at the smaller Region and Parish levels, due to small base confidentiality concerns, these sub codes are not directly reported online. However, about 80% of all Region and Parish level oil and gas jobs are reported in the Code 21 Mining category so it is possible to utilize these data as a proxy for total oil and gas jobs. In the following comparative analysis of oil and gas job activity in the Regions and St Tammany the Code 21 Mining number will be used⁶.

Figure 4 shows a plot of the cumulative oil and gas jobs growth⁷ from 1999 to 2013 for St Tammany and Regions 3, 4, and 7:

Figure 4



Note that over this period:

- St Tammany grew oil and gas jobs at a significantly higher rate than Regions 3, 4, or 7, the oil patch.
- St Tammany parish added almost (94%) as many oil and gas jobs as the entire Region 3.
- While Table 1 shows Haynesville Shale Region 7 was LOSING 7,000 overall jobs from 2006 to 2013, Figure 4 shows that during this same period Region 7 was ADDING at least 1,500 Mining/oil and gas jobs (+32%).

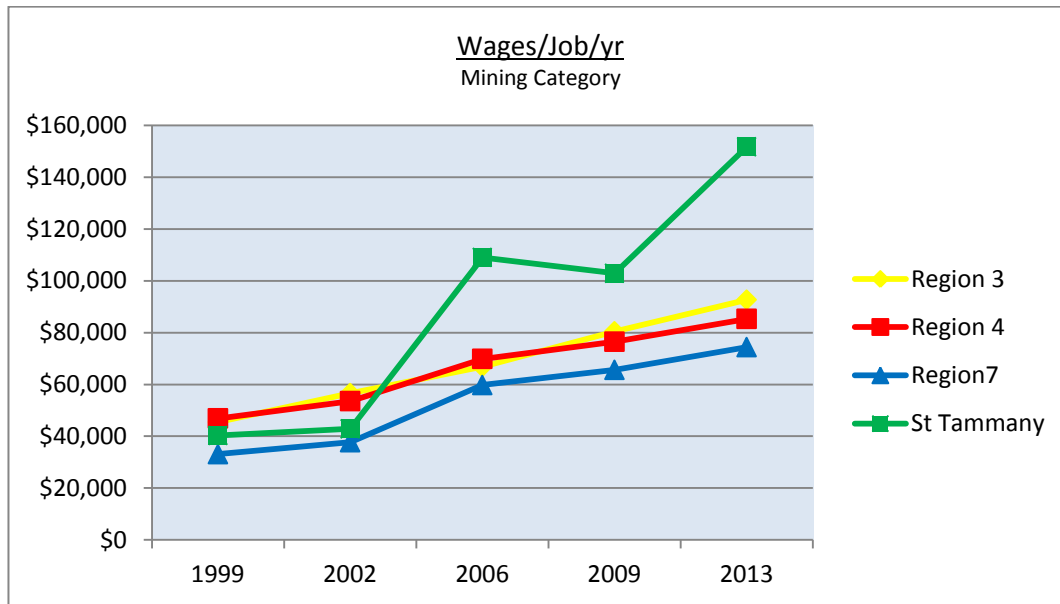
⁶ It is possible to better estimate total oil and gas jobs. However, for comparative purposes the use of Mining is sufficient. See Appendix 4 for further detail.

⁷ See Appendix 4 for actual data

This last observation contradicts the conventional oil and gas thinking about “jobs multipliers”, whereby projections are made about the total jobs impact of adding oil and gas jobs. As the data show for this case, there is no measurable positive multiplier over this 7 year period. Likely there are other, more complicated and powerful forces impacting long term jobs growth in Region 7 and these are influencing the overall jobs loss, simultaneous with the oil and gas industry adding jobs for Haynesville Shale activity. Thus jobs growth (or loss) causation is a complex, conditional process and difficult to accurately predict or assess and therefore any indirect jobs projections should be viewed very critically.

Some additional perspective on the oil and gas jobs added in St Tammany parish: Figure 5 shows the LWC’s data on annual wages for Code 21 Mining jobs (oil and gas jobs) during the 1999 to 2013 period:

Figure 5



Given the absence of oil and gas extraction in St Tammany and the \$150,000/yr salary level for St Tammany’s oil and gas jobs, it is likely these oil and gas jobs are predominantly white collar “suit” jobs, and not skilled drilling rig operator jobs.

While St Tammany has no active oil and gas extraction activity, St Tammany does have oil and gas jobs and accrues the benefits of having these higher paying, permanent jobs within the parish. In 2013 St Tammany’s oil and gas jobs paid a total of \$228,000,000 in wages: likely a good portion of these monies were spent in the local economy.

Overall Population Growth

Jobs growth and population growth have a complicated relationship. Does population growth contribute to jobs growth? Or does jobs growth contribute to population growth? Or both? And under what conditions? Let’s examine the jobs growth and population growth⁸ data for Regions 3, 4, and 7 vs. St Tammany. Table 5 shows the population changes during this period:

Table 5

Population Change, 2000-2013					
	2013	2010	2000	2013-2000	% Change
Region 3	233,077	231,599	217,865	15,212	7.0%
Region 4	649,694	638,768	601,654	48,040	8.0%
Region 7	596,783	590,984	565,069	31,714	5.6%
St. Tammany	242,333	233,740	191,268	51,065	26.7%

Over this 13 year period:

- St Tammany’s population grew: 2.1%/yr
- Combined Region 3,4 and 7 population grew: 0.53%/yr

Undoubtedly, many factors⁹ contributed to the much higher population growth in St Tammany relative to the oil patch regions, but we can conclude oil and gas extraction activity was not a contributing factor in St Tammany’s higher population growth.

Arranging the Figure 3 data for jobs growth and the Table 5 data for population growth for Regions 3, 4, 7, Louisiana, and St Tammany in descending population growth order we see:

Table 3

Overall Population and Jobs Growth

Entity	Population Growth 2000-2013	Jobs Growth 1999 -2013
St Tammany	26.7%	46.1%
Region 4	8.0%	16.1%
Region 3	7.0%	27.5%
Region 7	5.6%	0.9%

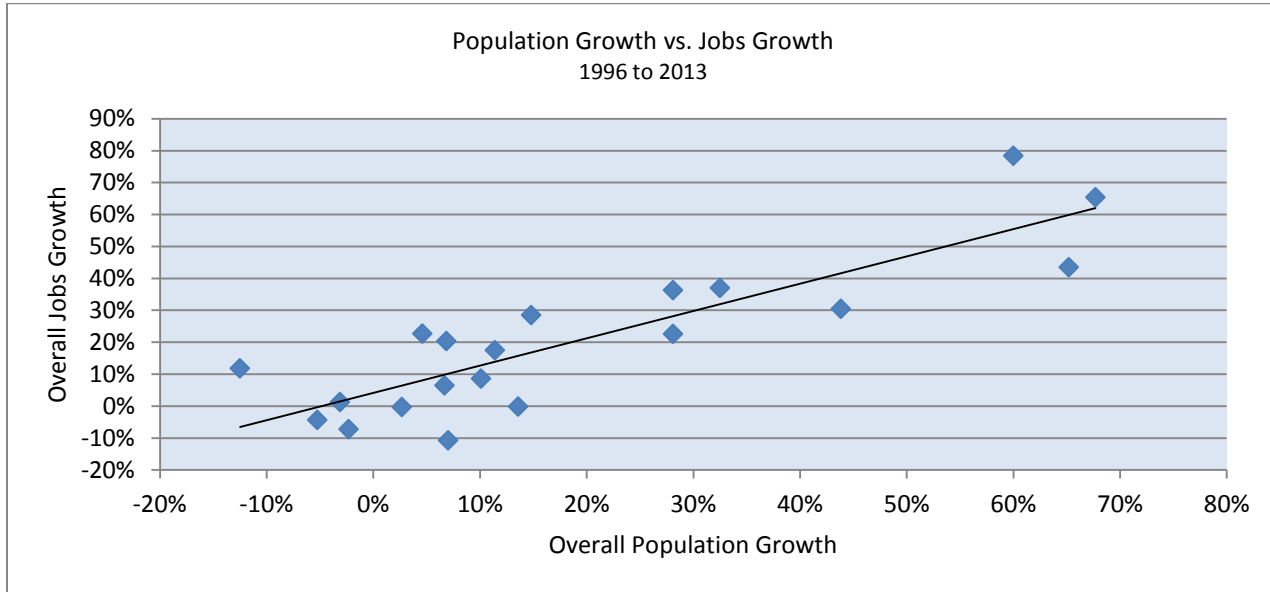
⁸ US Census data in Appendix 5

⁹ Note that the overall “Katrina Effect” on population is not significant: the growth in St Tammany’s population in the decade before Katrina was about 47,000; in the decade of Katrina it was about 42,000

St Tammany has both the highest rate of jobs growth and the highest rate of population growth over this period. In contrast, Region 7, the Haynesville Shale region, has both the lowest population growth and lowest jobs growth. Regions 3 and 4 are somewhat in between.

Figure 5 examines this relationship further: it shows a plot of overall population growth and jobs growth from 1996 to 2013 for St Tammany, Regions 3, 4, and 7, Louisiana, and 19 selected parishes¹⁰ exhibiting a range of jobs growth and population growth values for this period:

Figure 5



These Louisiana data show a positive relationship between population growth and jobs growth¹¹.

One ramification of lower jobs growth and lower population growth is lower sales tax growth as the following recent data demonstrate:

Table 4

Gross Sales Taxes Reported¹², \$Millions

	FY Ending 2010	FY Ending 2013	% Change
St Tammany	71.3	80.4	+ 12.7
Region 3	68.7	76.5	+11.3
Region 4	247.3	264.9	+7.1
Region 7	246.0	184.6	- 25.0
Caddo Parish (Region 7)	141.2	88.1	-37.6

¹⁰ See Appendix 6 for complete list of parishes and values

¹¹ The jobs vs population relationship is expressed as: employment = employment rate x population

¹² Louisiana Department of Revenue, *Annual Tax Collection Reports*, 2010 to 2013

Interestingly, in Region 7, the Haynesville Shale region, while natural gas extraction was increasing dramatically during this period, sales tax receipts were declining 25%,

Children’s Population Growth

An important segment of population growth is that of 0-17 year old children. Table 4 shows the change in children population for St Tammany, Regions 3, 4 and 7, Louisiana, and the USA from 1990 to 2011:

Table 5
Children Population Growth¹³

	1990 Population	2011 Population	Change , Number	Change , %
Region 3	64,439	57,310	-7,129	-11.1%%
Region 4	172,042	162,794	-9,248	-5.4%
Region 7	154,014	143,278	-10,826	-7.0%
Combined 3,4,&7	390,495	363,382	-27,203	-7.0%
Louisiana	1,227,269	1,117,803	-109,466	-8.9%
USA	64,218,512	73,585,872	+ 9,367,360	+14.6%
St Tammany	44,048	59,933	+15,885	+36.1%

These data show a significant decline in the number of children living in the oil patch regions and Louisiana over this 21 year period. St Tammany, in contrast, has a children population growth rate over 2X the national average.

Whether there are some specific conditions in St Tammany that foster children’s population growth or there is some conditions in the oil patch Regions that inhibits children’s population growth, or both, is not clear. How much this decline in children’s population is an important factor in these region’s lower overall population growth is also uncertain. And, finally, exactly how much and in what way this lack of child population growth in the oil patch impacts long term overall jobs growth, economic growth, and other socioeconomic factors in Regions 3, 4, and 7 is also an open question. Directionally lower population growth and declining children’s population would not seem to be positive factors in these regions long term economic futures.

¹³ Annie E Casey Foundation, datacenter.kidscount.org

Conclusions and Recommendations

1. For the 1999 to 2013 period, St Tammany Parish's jobs growth rates for both overall jobs and oil and gas jobs was significantly higher compared to the rates of RLMA Regions 3, 4, or 7, as well as the combined rates of these Regions.
2. St Tammany's jobs growth strategy has been far more successful over the 1999 to 2013 period than the oil patch's strategy, including the Region 7 Haynesville Shale play.
3. St Tammany's overall population growth is likely a contributing factor to its superior jobs growth rate.
4. St Tammany's children population growth rate is leagues above that of the oil patch regions and along with its best in state school system could provide a future competitive jobs growth advantage for the parish.

These data show that an oil and gas jobs growth strategy is inferior and would result in a reduction of long term jobs growth rates and population growth rates in St Tammany. **Therefore it is recommended the elected officials of St Tammany Parish unequivocally reject any oil and gas jobs development plans as inappropriate for the unique economic, social, demographic, and geographical conditions in St Tammany.**

There are no compelling jobs growth reasons for St Tammany's or Louisiana's elected officials to kill the goose laying the (jobs and population) golden eggs.

C.E. Kirby

About the Author: C.E. "Chuck" Kirby has a B.S. in Chemical Engineering from New Jersey Institute of Technology and 35 years of Research and Development work experience. He has been a resident of St Tammany parish since 2009 and retired in St Tammany for its natural beauty and its friendly people.

Previous Reports: *Frackonomics 201: St Tammany and the Wizard*, November 2014

Frackonomics 211: Children and the Wizard, December 2014

Previously Shared: as *Frackonomics 101: Shale and Wall Street: Was the Decline in Natural Gas*

Prices Orchestrated ? by Deborah Rodgers, February 2013

On the Cover: In Aesop's fable, *The Goose That Laid the Golden Eggs*, a farmer's greed and impatience causes him to under appreciate his current prosperity. He then destroys a valuable asset in the mistaken belief that he can get rich quickly.

Appendix 1

Regional Labor Management Areas



RLMA 3 (Houma) Parishes	RLMA 4 (Lafayette) Parishes	RLMA 7 (Shreveport) Parishes
Assumption	Acadia	Bienville
Lafourche	Evangeline	Bossier
Terrebonne	Iberia	Caddo
	Lafayette	Claiborne
	St Landry	Desoto
	St Martin	Lincoln
	St Mary	Natchitoches
	Vermillion	Red River
		Sabine
		Webster

Source: Louisiana Workforce Commission

Appendix 2

Oil and Gas Production

Oil Production	Millions of Barrels		
	2000	2006	2013
Region 3	19.056	13.893	11.866
Region 4	18.526	11.699	10.604
Region 7	7.773	7.203	6.678
St Tammany	0	0	0

Gas Production, Billions of MCF	2000	2006	2010	2013
	Region 3	0.196	0.183	0.121
Region 4	0.312	0.173	0.113	0.124
Region 7	0.311	0.445	1.543	1.816
St Tammany	0	0	0	0

Source: Sonris Lite

Appendix 3

Overall Jobs Growth

Total Jobs	1999	2013	1999-2013	%
Region 3 Houma	79,552	101,412	21,860	27.5%
Region 4 Lafayette	236,541	274,703	38,162	16.1%
Region 7 Shreveport	223,702	225,671	1,969	0.9%
3,4, &7	539,795	601,786	61,991	11.5%
St Tammany	55,255	80,708	25,453	46.1%
Louisiana	1,847,841	1,894,054	46,213	2.5%

Source: Louisiana Workforce Commission

Appendix 4

Mining Jobs

Oil and Gas Jobs (Mining only)	1999-2013				Growth, %
	1999	2006	2013	1999-2013	
Region 3	5,848	6,450	7,218	1,370	23.4%
Region 4	21,341	22,067	26,043	4,702	22.0%
Region 7	2,822	4,732	6,250	3,428	121.5%
St Tammany	218	267	1,502	1,284	589.0%

Mining Jobs vs. Oil and Gas Jobs

The following data from 2007 to 2013 show the relationship between Mining Category Code 21 jobs and total oil and gas jobs, sub Codes 211,213, 324, and 486, using state level data.

Line	4 Q	1 Q	4Q	4Q
	2007	2009	2010	2013
1 LA Mining only	48,119	50,840	49,595	51,986
2 LA Actual O&G	60,212	62,542	62,451	65,270
3 LAActual O&G/Mining	1.25	1.23	1.26	1.26

Line 3 is the ratio of Louisiana actual oil and gas jobs (sub Codes 211,213,324, and 486) divided by Mining (Code 21). While the precise ratio will vary by region and parish particulars, the 1.25 ratio is a reasonable approximation of the total oil and gas jobs using the broader Mining category. Thus:

$$\text{Oil and gas jobs (estimate)} = \text{Mining} \times 1.25$$

Source: Louisiana Workforce Commission

Appendix 5

Region 3

Parish	2013	2010	2000	2000-2013	Overall %
Assumption	23187	23421	23388	(201)	-0.9%
Lafourche	97141	96,318	89,974	7,167	8.0%
Terrebonne	112749	111,860	104,503	8,246	7.9%
Region 3 tot	233077	231,599	217,865	15,212	7.0%

Region 4

Parish	2013	2010	2000	1990-2013	Overall %
Acadia	62204	61,773	58,861	3,343	5.7%
Evangeline	33578	33984	35434	(1,856)	-5.2%
Iberia	73878	73,240	73,266	612	0.8%
Lafayette	230845	221578	190503	40,342	21.2%
St. Landry	83454	83,384	87,700	(4,246)	-4.8%
St. Martin	52936	52160	48583	4,353	9.0%
St. Mary	53546	54,650	53,500	46	0.1%
Vermilion	59253	57,999	53,807	5,446	10.1%
Region 4 tot	649694	638,768	601,654	48,040	8.0%

Appendix 5 Continued

Total Parish Population

Region 7

Parish	2013	2010	2000	1990-2013	Overall %
Bienville	13981	14,353	15,752	(1,771)	-11.2%
Bossier	123823	116,979	98,310	25,513	26.0%
Caddo	254887	254,969	252,161	2,726	1.1%
Claiborne	16650	17,195	16,851	(201)	-1.2%
De Soto	27083	26,656	25,494	1,589	6.2%
Lincoln	47414	46,735	42,509	4,905	11.5%
Natchitoches	39138	39,566	39,080	58	0.1%
Red River	8894	9,091	9,622	(728)	-7.6%
Sabine	24235	24,233	23,459	776	3.3%
Webster	40678	41,207	41,831	(1,153)	-2.8%
Region 7 tot	596783	590984	565069	31,714	5.6%

Parish	2013	2010	2000	1990-2013	Overall %
St. Tammany	242333	233740	191268	51,065	26.7%

Appendix 6

Population Growth and Jobs Growth 1996 to 2013

parish	1996-	1996-2013	RLMA Region
	2013 pop	jobs	
St Tammany	67.7%	65.4%	1
Ascension	65.2%	43.5%	2
Livingston	60.0%	78.4%	2
Bossier	43.8%	30.5%	7
Tangipahoa	32.5%	37.0%	2
Lafayette	28.1%	36.3%	4
LaSalle	28.1%	22.6%	6
St Charles	14.8%	28.5%	1
Lincoln	13.6%	-0.2%	7
Region 4	11.50%	21.40%	4
E. Baton Rouge	11.4%	17.5%	2
Calcasieu	10.1%	8.6%	7
Region 3	9.40%	39.10%	3
Region 7	7.10%	5.30%	7
Sabine	7.0%	-10.7%	7
Desoto	6.9%	20.4%	7
Natchitoches	6.7%	6.5%	7
Louisiana	5.90%	5.30%	-
St John the Baptist	4.6%	22.7%	1
Caddo	2.7%	-0.3%	7
Claiborne	-2.3%	-7.2%	7
Webster	-3.1%	1.3%	7
Red River	-5.3%	-4.3%	7
Bienville	-12.5%	11.8%	7
pearson coeff.	0.8316037		

Sources: US Census for population data; Louisiana Workforce Commission for jobs data