



PAULDING COUNTY
SCHOOL DISTRICT
Focused on Learning

SPLOST Renewal Referendum 2014



SPLOST FORECAST

	Calendar Years					
	2016	2017	2018	2019	2020	2021
January		1,430,679	1,478,993	1,527,658	1,576,591	1,630,385
February		1,451,750	1,500,776	1,550,158	1,599,812	1,654,398
March		1,381,691	1,428,350	1,475,349	1,522,606	1,574,558
April	1,267,978	1,322,862	1,375,868	1,427,447	1,477,943	
May	1,345,864	1,404,119	1,460,381	1,515,128	1,568,726	
June	1,381,677	1,441,483	1,499,242	1,555,446	1,610,470	
July	1,321,605	1,378,880	1,434,182	1,487,986	1,540,653	
August	1,315,531	1,372,542	1,427,590	1,481,147	1,533,572	
September	1,357,647	1,416,484	1,473,294	1,528,566	1,582,669	
October	1,334,706	1,396,389	1,455,277	1,512,041	1,567,194	
November	1,347,894	1,410,187	1,469,656	1,526,982	1,582,679	
December	1,272,121	1,330,912	1,387,038	1,441,141	1,493,707	
Total	11,945,023	16,737,979	17,390,647	18,029,051	18,656,623	4,859,341
Growth Rate			3.90%	3.67%	3.48%	

SUMMARY

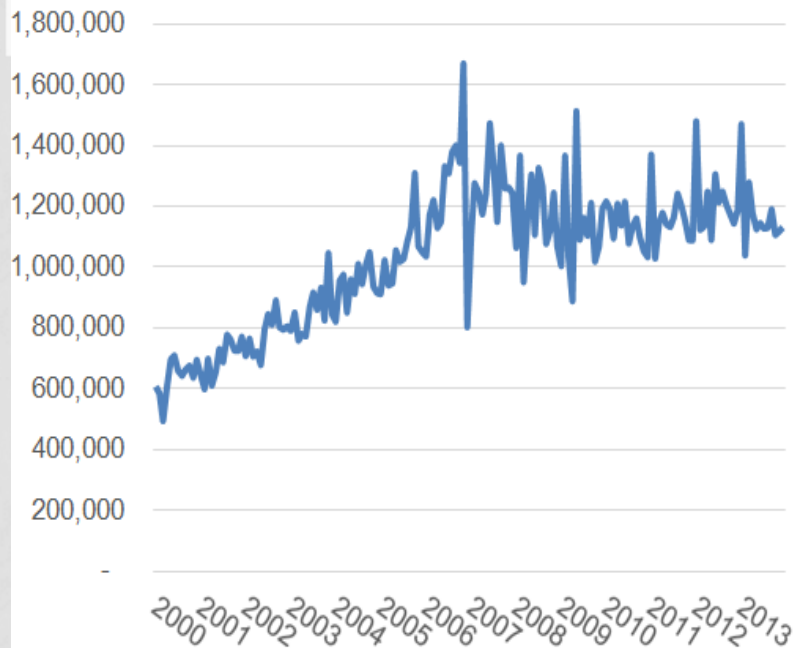
- Objective – Develop monthly revenue estimate for elost tax collections using total elost tax revenue for Paulding County
- Historical elost data used – January 2000 through December 2013
Forecast period from April 2016 through March 2021
- Forecast was estimated using quarterly sums of monthly data
- Adjustments were included for the introduction of the elimination of the sales tax on motor vehicles and for the elimination of sales on inputs used in the manufacturing and agriculture industries
- The forecast scenario was developed using forecasted county population growth provided by the Georgia Office of Planning and Budget

Cautions

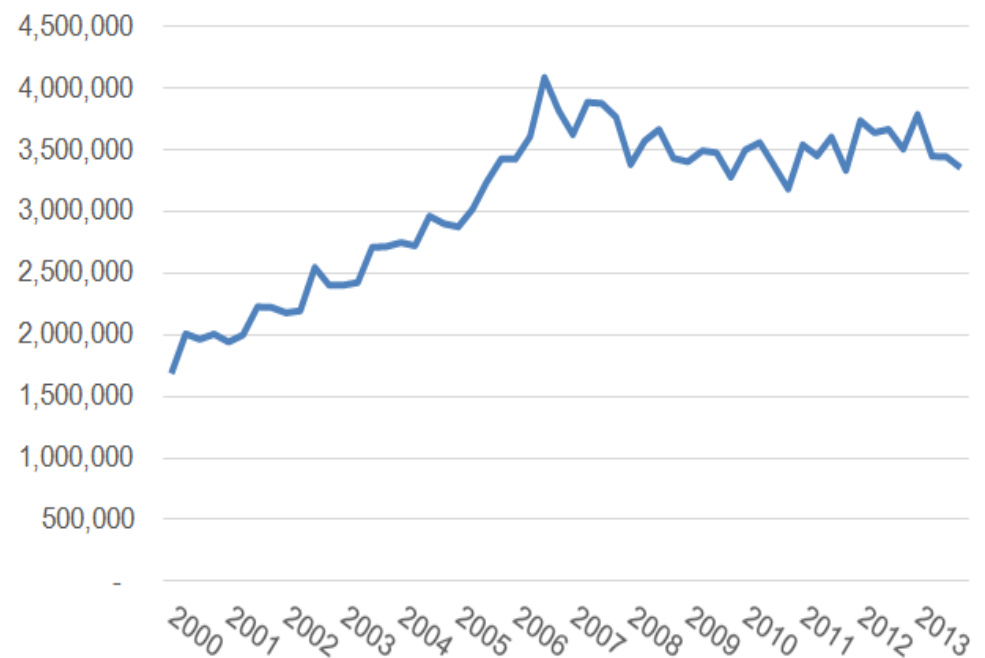
- This forecast is for anticipated revenue collections that will begin more than two years from the time the forecast was made and extend for an additional five years. This time lag and the long duration of the forecast adds a great deal of uncertainty to the forecast.
- Paulding County experienced extremely high population growth during the 2000s. The Great Recession resulted in minimal growth for several years. The forecast anticipates that population growth will recover but grow more slowly than during the early years of the 2000s. Deviations in population growth from this forecast will cause revenue collections to deviate as well.
- Georgia instituted significant changes to the sales tax base beginning in January 2013. The forecast adjusts for these changes. However, the limited time in which these changes have been in effect add further uncertainty to the forecast.

Historical Data – Monthly Data is Very Volatile

Monthly Distributions, 2000-2013



Quarterly Distributions, 2000-2013



- Monthly data was aggregated to quarterly totals due to this volatility
- Forecast model was developed using quarterly data and then allocated to month's based on historical shares of quarterly total revenue.

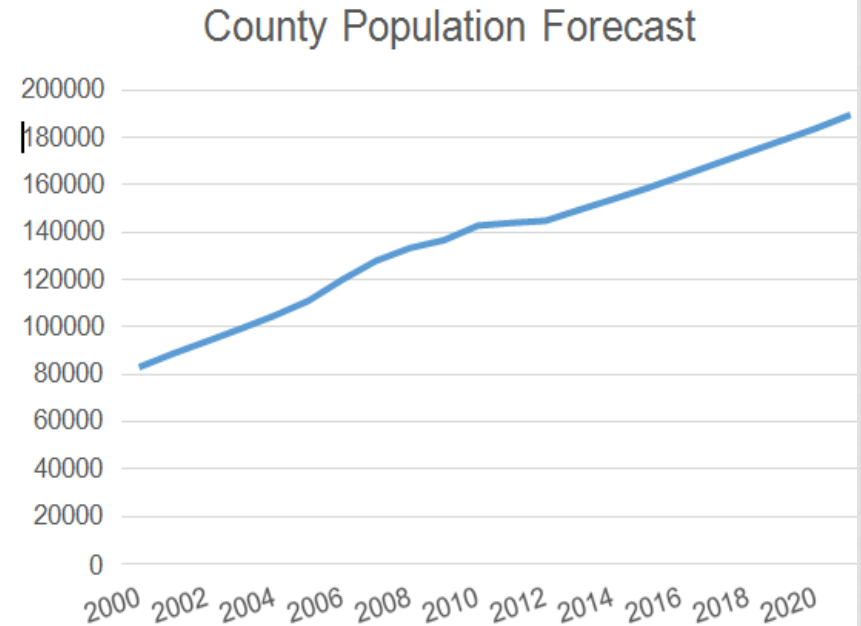
Disaggregation of Quarterly Forecasts to Monthly

<u>Monthly Share of Quarter Total</u>			
Quarter 1 -	<u>Max</u>	<u>Min</u>	<u>Average</u>
January	39.58%	29.51%	33.55%
February	40.41%	27.43%	34.05%
March	35.96%	28.13%	32.40%
Quarter 2 -			
April	34.25%	25.43%	31.74%
May	43.31%	29.92%	33.68%
June	37.88%	30.99%	34.58%
Quarter 3 -			
July	36.15%	30.87%	33.08%
August	34.93%	29.64%	32.93%
September	36.10%	29.38%	33.99%
Quarter 4 -			
October	38.19%	30.40%	33.75%
November	43.73%	31.18%	34.08%
December	36.36%	21.05%	32.17%

- Minimum, maximum and average share of quarterly revenue was computed over 2000-2013
- Average is used to allocate quarterly forecast of revenue to monthly level
- Spread between minimum and maximum indicative of high monthly volatility

Paulding County Forecasted Growth

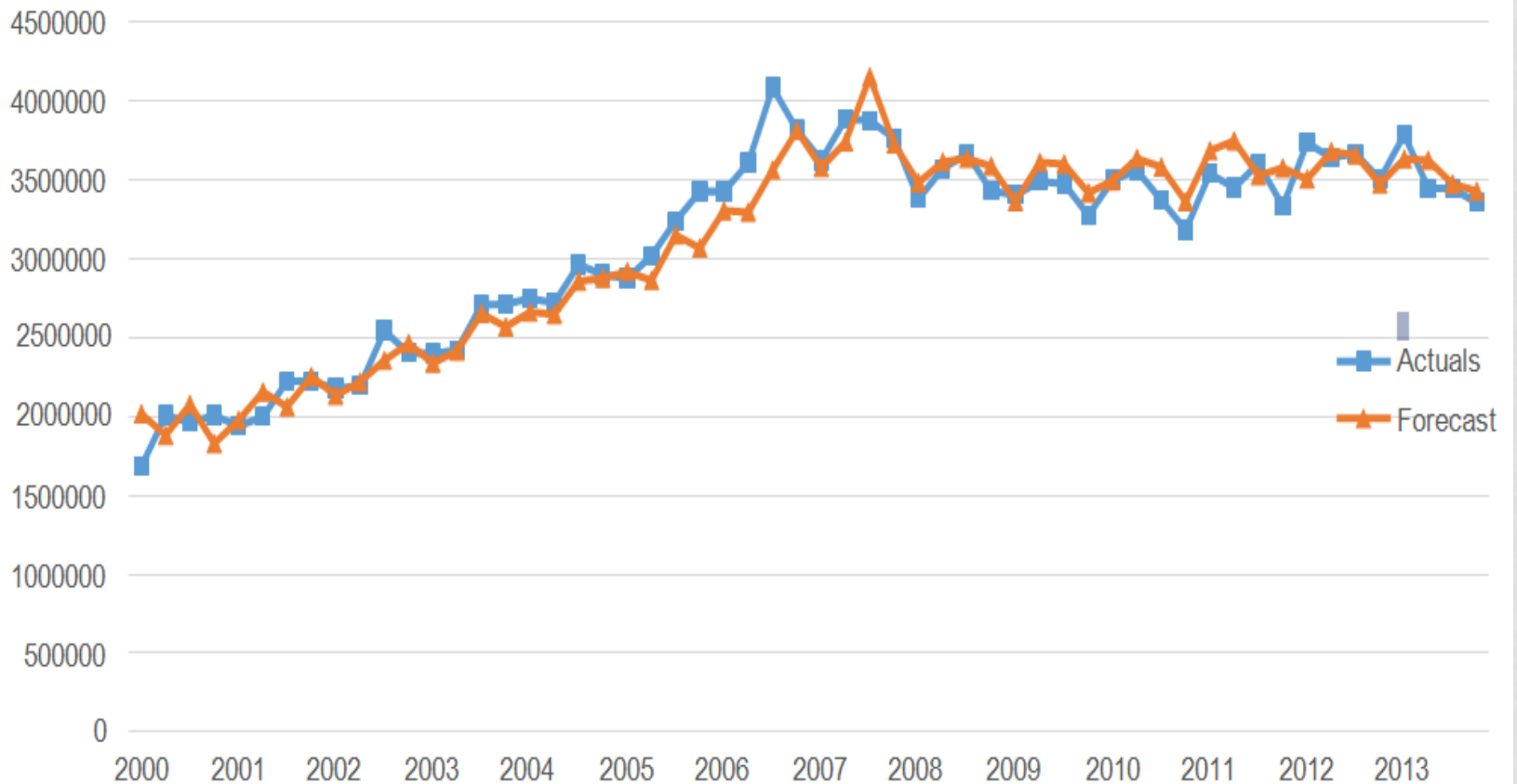
	Annual Growth			
	ELOST	Population	ELOST	Population
Historicals				
2000	7,662,384	83,004		
2001	8,388,730	88,590	9.48%	6.73%
2002	9,323,609	93,888	11.14%	5.98%
2003	10,249,899	99,199	9.93%	5.66%
2004	11,335,827	104,820	10.59%	5.67%
2005	12,565,116	111,084	10.84%	5.98%
2006	14,943,788	119,959	18.93%	7.99%
2007	15,155,991	127,903	1.42%	6.62%
2008	14,052,178	133,300	-7.28%	4.22%
2009	13,653,235	136,655	-2.84%	2.52%
2010	13,619,227	142,788	-0.25%	4.49%
2012	13,935,463	143,817	2.32%	0.72%
2013	14,554,506	144,800	4.44%	0.68%
Forecast				
2016		163,602		3.21%
2017		168,688		3.11%
2018		173,774		3.02%
2019		178,860		2.93%
2020		183,946		2.84%
2021		189,508		3.02%



Paulding county population growth is key driver in forecast. Higher projected growth would yield higher future revenue growth.

Statistical Model Fit – Quarterly Data

Actuals and Forecasted, Quarterly Data, 2000-2013



STATISTICAL MODEL - FIT BY YEAR

	Actuals	Fitted	Deviation from Actual	% Deviation
2000	7,662,384	7,809,170	(146,786)	-1.92%
2001	8,388,730	8,451,177	(62,447)	-0.74%
2002	9,323,609	9,177,480	146,129	1.57%
2003	10,249,899	9,979,702	270,197	2.64%
2004	11,335,827	11,048,362	287,465	2.54%
2005	12,565,116	12,007,792	557,324	4.44%
2006	14,943,788	13,983,456	960,332	6.43%
2007	15,155,991	15,210,893	(54,902)	-0.36%
2008	14,052,178	14,323,899	(271,721)	-1.93%
2009	13,653,235	13,997,242	(344,007)	-2.52%
2010	13,619,227	14,080,068	(460,841)	-3.38%
2011	13,935,463	14,544,873	(609,411)	-4.37%
2012	14,554,506	14,323,308	231,198	1.59%
2013	14,040,204	14,166,836	(126,632)	-0.90%
2000-2013	173,480,156	173,104,258	375,898	0.22%