# NASHVILLE & MIDDLE TENNESSEE COUNTY TRANSPORTATION REVENUE FORECASTS

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## Table of Contents

1.	Introduction	1
2.	Tax Base Forecasts for Individual Counties	3
	CHEATHAM COUNTY	5
	DAVIDSON COUNTY	9
	DICKSON COUNTY	13
	MAURY COUNTY	17
	MONTGOMERY COUNTY	21
	ROBERTSON COUNTY	25
	RUTHERFORD COUNTY	29
	SUMNER COUNTY	33
	WILLIAMSON COUNTY	37
	WILSON COUNTY	41
3.	County Revenue Forecast Model	45
	CHEATHAM COUNTY TAX RATE SCENARIOS	48
	DAVIDSON COUNTY TAX RATE SCENARIOS	53
	DICKSON COUNTY TAX RATE SCENARIOS	58
	MAURY COUNTY TAX RATE SCENARIOS	63
	MONTGOMERY COUNTY TAX RATE SCENARIOS	68
	ROBERTSON COUNTY TAX RATE SCENARIOS	73
	RUTHERFORD COUNTY TAX RATE SCENARIOS	78
	SUMNER COUNTY TAX RATE SCENARIOS	83
	WILLIAMSON COUNTY TAX RATE SCENARIOS	88
	WILSON COUNTY TAX RATE SCENARIOS	93
4.	Autonomous Vehicles and Local Tax Revenues	98
	Introduction	98
	Time Horizon	98
	Sales Tax	99
	Wheel Tax	100
	Hotel Tax	101
	Property Tax	101
	Conclusion	102

5.	Data	103
	Property Tax	103
	Sales Tax	103
	Wheel Tax	103
	Hotel Tax	104

#### 1. Introduction

The Nashville area seeks to undertake major transportation improvements given the region's rapid economic growth, significantly increasing congestion, and the expectation that enhanced transportation services would spur even greater growth. This report focuses on one aspect of this challenging issue – how financing could be generated – by developing the capacity to forecast revenue for Nashville area counties. The revenues potentially could be used to finance major transportation improvements. The report concentrates on four major tax instruments: sales tax, property tax, hotel/motel tax, and wheel tax. The revenue estimating capacity is developed for 10 counties: Cheatham, Davidson, Dickson, Maury, Montgomery, Robertson, Rutherford, Sumner, Williamson, and Wilson counties.

The analysis recognizes that each county may choose a different mix of the four tax instruments to finance its transportation needs. As a result, we do not prepare actual revenue estimates because these depend on the tax rates that counties adopt. Instead, we estimate the tax base that each county can expect for each tax source over the next 30 years. This approach permits each county to estimate the tax revenues that would result from each possible tax proposal. Simply, the tax bases can be multiplied by their respective tax rates (which can vary by tax source) to yield the expected tax revenues. The County Revenue Forecast Model (CRFM) was created to permit easy calculation of the expected tax revenues given a particular tax rate. The CRFM is housed on the Tableau Public Server and can be accessed with Internet access. Use of the tool is discussed in Section 3 of the report.

A long-term forecasting capacity is developed here because the intent is to forecast up to 30 years into the future. Forecasting tools were selected that provide the best long-term forecast without specifically focusing on the ability to forecast the short term, such as revenues collected in 2018. Our tax base forecasts are best seen as the tax base expected on average during any particular year. Further, no attempt is made to estimate how business cycles will cause the tax base in some years to grow faster or slower than average, though business cycles should be expected over such a long-time horizon.

Forecasts are generally based on historical experiences, but forecasts over such long-time horizons provide unique challenges as the overall economic, demographic, and other environments can change radically across 30 years. Technological changes could also affect tax revenues and transportation uses. For example, the development of autonomous cars, and car sharing more broadly, provides an example that is likely to influence this 30-year time period. Development of the actual transportation infrastructure plan could also influence how tax revenues perform. We are unable to adapt the forecast to account for these unique changes, so we recommend that forecasts be updated regularly with additional data on actual experience with tax collections and as more is known about the specific behavioral shifts that are expected over such a long-term horizon. We do

include a discussion of autonomous cars and the general direction of the industry to provide some background for the reader.

The report is broken into four sections after this introduction. First, we discuss the basic forecasting approach used for each tax and present sections on the forecast for each county for each tax. Second, we offer a brief section on the CRFM and forecasting model and present examples for the forecast model for each county for each tax. Third, we discuss development of autonomous vehicles and how they could alter tax revenues. Finally, we include descriptions of the data used to prepare the forecasts.

## 2. Tax Base Forecasts for Individual Counties

This section provides 30-year tax base forecasts for each county for each tax. The tax base is the value used to determine tax liabilities. The base is in dollar terms for property (total assessed value), sales (total taxable sales), and hotel/motel (total room receipts) taxes. The wheel tax base is the number of taxable vehicles. The following paragraphs briefly document how the forecasts were prepared and the remainder of this section provides tables of tax base forecasts for each county.

Statistical estimates using econometric models were used to develop county-level tax forecasts based on historical county tax data and national economic trends. Forecasts of the various factors in the estimated equations were then used to forecast the tax base. A total of 40 models were created to estimate each of the four taxes (sales, property, hotel, and wheel tax) for each of the 10 counties (Cheatham, Davidson, Dickson, Maury, Montgomery, Robertson, Rutherford, Sumner, Williamson, and Wilson). All projections are presented in terms of the tax base (in nominal terms), which when multiplied by a potential tax rate will provide tax revenue forecasts. The CRFM was developed to convert the tax base forecasts into tax revenues based on selected tax rates. Section three of the report describes how to use the CRFM.

Our revenue estimates incorporate all behavioral changes to tax rates and structures that are built into the historical tax data. However, we cannot account for behavioral responses that could occur as a county makes large changes in its tax structure relative to other counties in the region or relative to broader tax structures across the state and nation. Thus, the forecast model's reliability should be expected to diminish as tax rate changes increase.

**Sales Tax.** Projections for the sales tax base were estimated as a function of the historical sales tax base in the county, a yearly time trend, and data on national payroll employment and nominal gross domestic product (GDP). Forecasts prepared by IHS Global Insights are used to develop projections for the next 30 years for the sales tax and all other taxes.<sup>1</sup>

**Property Tax.** Property tax base, measured as the total assessed property value in each county, was estimated as a function of historical property assessment values; a yearly time trend; dummy variables to indicate the property reassessment periods for each county (reassessment periods were defined as the time between two county reassessments, and ranged from once every four years to once every seven years); as well as historical data on national consumer spending, annual housing starts, and the national stock of housing. The reassessment dummy variables are included to capture growth in the property tax base because of reappraisal of existing properties. We exclude the impact of these dummy variables from our forecast so that our tax base forecasts only measure growth in the property tax base due to the introduction of new properties and not revaluations. No allowances were

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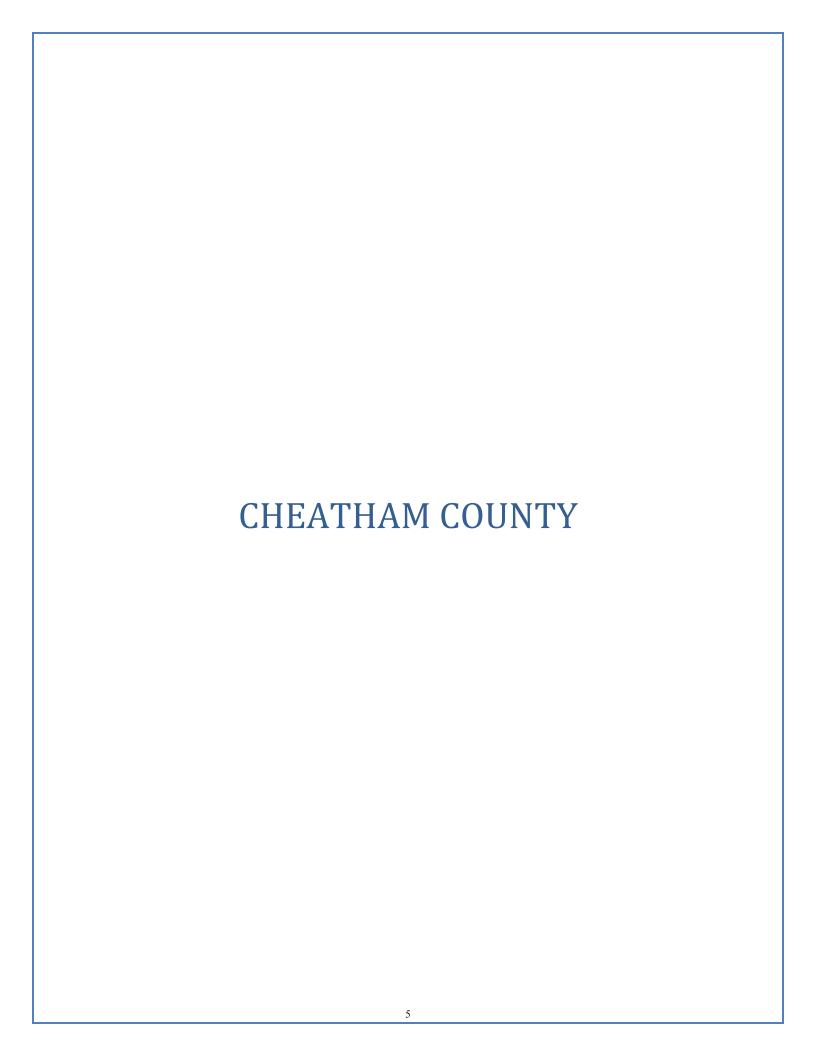
<sup>&</sup>lt;sup>1</sup> The sales tax revenue forecast does not account for additional tourist development zones or sports authorities tax rates.

made for non-compliance with the property tax. The nominal tax rate paid on property will fall across the course of the 30 years as certified rates are set.<sup>2</sup>

**Hotel/Motel Tax.** Hotel tax base projections were estimated as a function of the historical county-wide hotel tax base, yearly time trends, and historical data on national payroll employment, nominal GDP, and consumer spending on accommodations and food services.

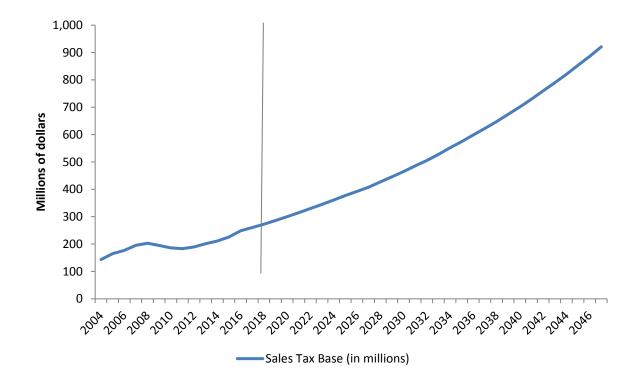
Wheel Tax. Finally, econometric estimates of the wheel tax base, as measured by the number of registered vehicles, were prepared as a function of the historical number of registered vehicles in the county, a yearly time trend, and historical data on national vehicle sales and housing starts. Housing starts were included as an additional explanatory variable to better capture changes in consumer spending of big ticket items.

<sup>2</sup> The calculation of the certified tax rate is intended to offset the effect of property reappraisals on property tax payments.

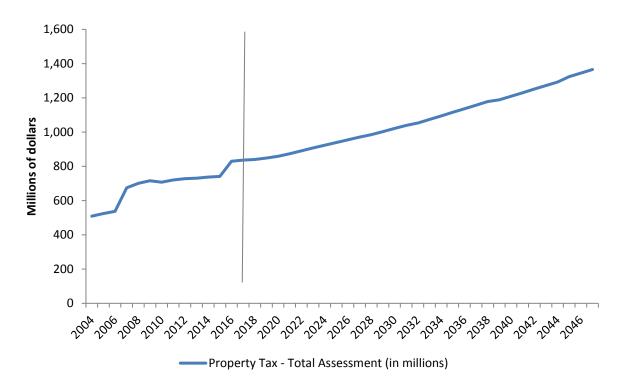


## **Cheatham County Tax Forecast**

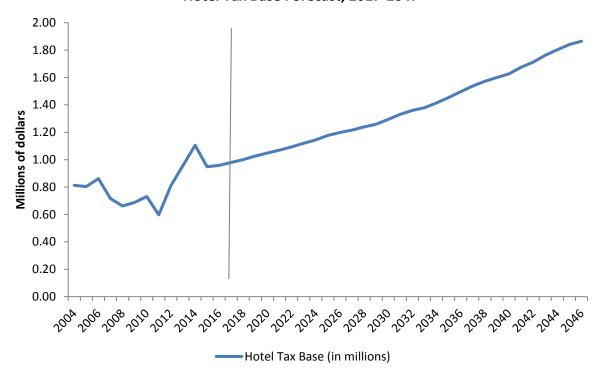
		Histori	cal Data				Fore		Compound Annual Growth Rates				
	2004	2009	2014	2016	2021	2026	2031	2036	2041	2047	2004-2016 2009-2016 2 CAGR (%) CAGR (%)		2016-2047 CAGR (%)
Sales Tax Base (in millions)	143.67	195.04	211.28	248.51	314.73	392.65	485.63	598.84	730.19	921.01	4.67	3.52	4.32
Property Tax - Total Assessment (in millions)	509	716	737	830	874	955	1,039	1,136	1,230	1,366	4.16	2.13	1.62
Hotel Tax Base (in millions)	N/A	0.66	0.96	0.95	1.05	1.18	1.29	1.45	1.63	1.86	N/A	5.26	2.20
Wheel Tax - Number of Registered Cars N/A: Data not available	N/A	38,187	40,755	41,667	44,249	47,154	50,077	52,991	55,971	60,361	N/A	1.25	1.20



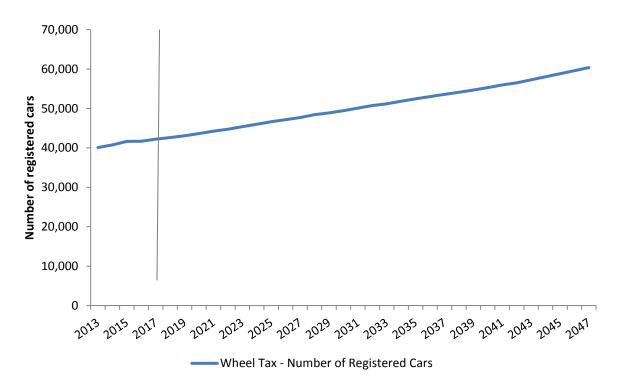
Property Tax - Total Assessment Forecast, 2017-2047

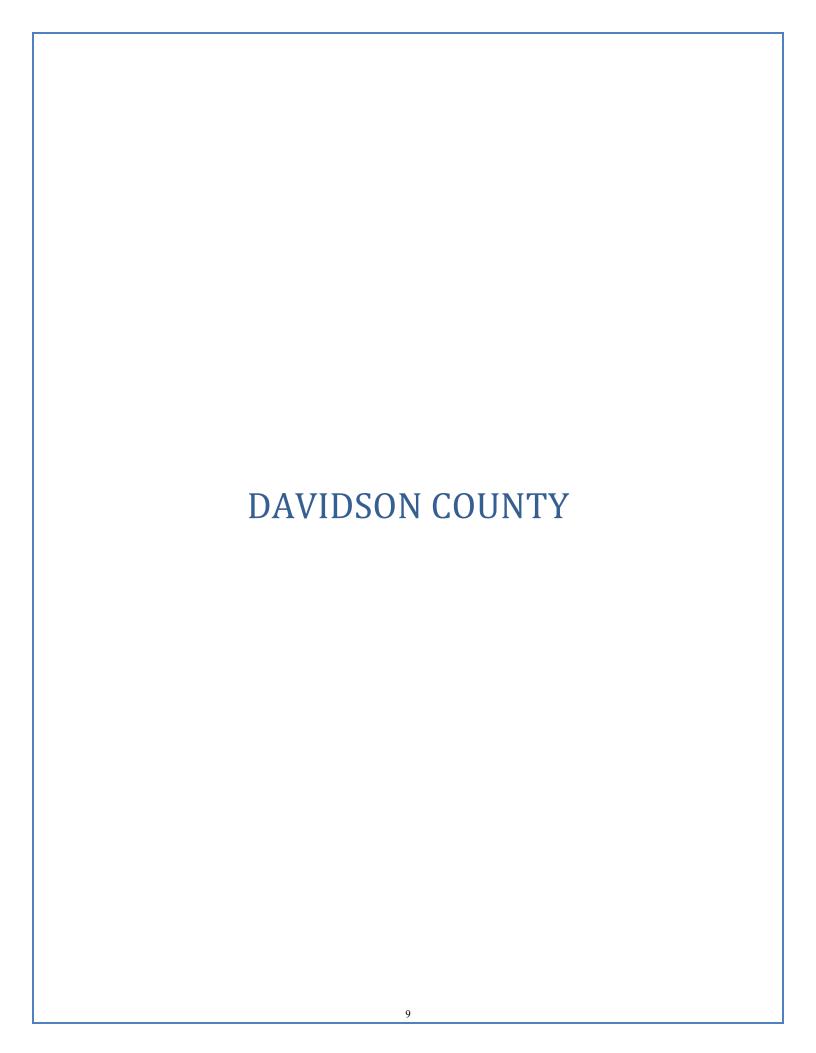


## Hotel Tax Base Forecast, 2017-2047



Wheel Tax, Number of Registered Cars Forecast, 2017-2047

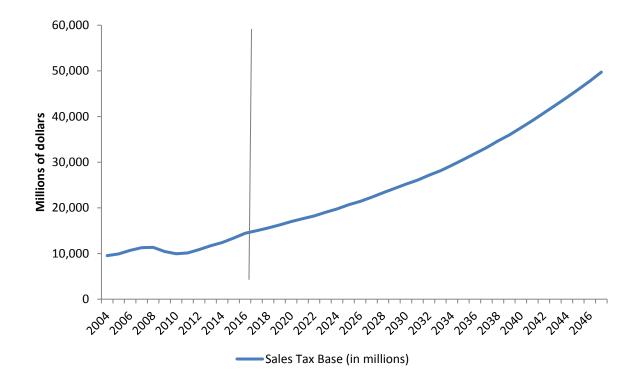




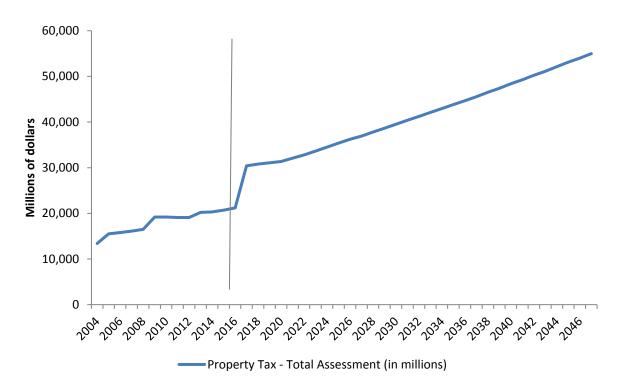
## **Davidson County Tax Forecast**

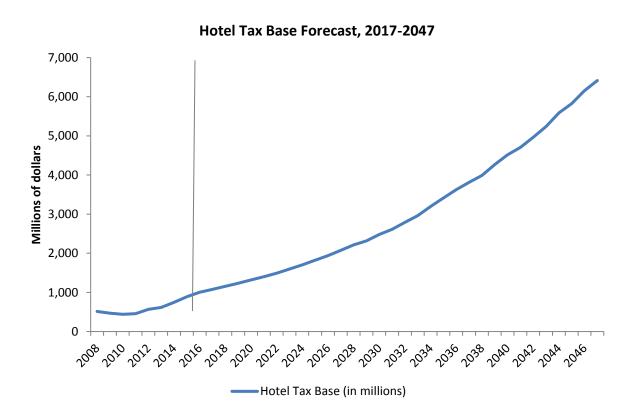
		Histori	cal Data				Fore	ecast			Compound Annual Growth Rates			
	2004	2009	2014	2016	2021	2026	2031	2036	2041	2047	2004-2016 CAGR (%)	2009-2016 CAGR (%)	2016-2047 CAGR (%)	
Sales Tax Base (in millions)	9,533.69	10,434.71	12,398.59	14,431.47	17,617.02	21,395.97	26,070.95	31,877.65	39,097.88	49,738.01	3.52	4.74	4.07	
Property Tax - Total Assessment (in millions)	13,400	19,200	20,300	21,200	32,072	36,224	40,376	44,672	49,253	54,980	3.9	1.43	3.12	
Hotel Tax Base (in millions)	N/A	468.33	748.33	1,005.00	1,400.46	1,940.98	2,611.10	3,626.79	4,702.69	6,413.90	N/A	11.53	6.16	
Wheel Tax - Number of Registered Cars	N/A	422,894	446,296	483,219	527,618	568,951	615,280	663,285	715,602	783,172	N/A	1.92	1.57	

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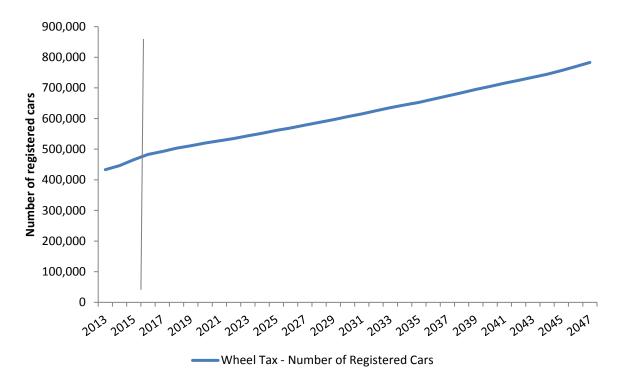


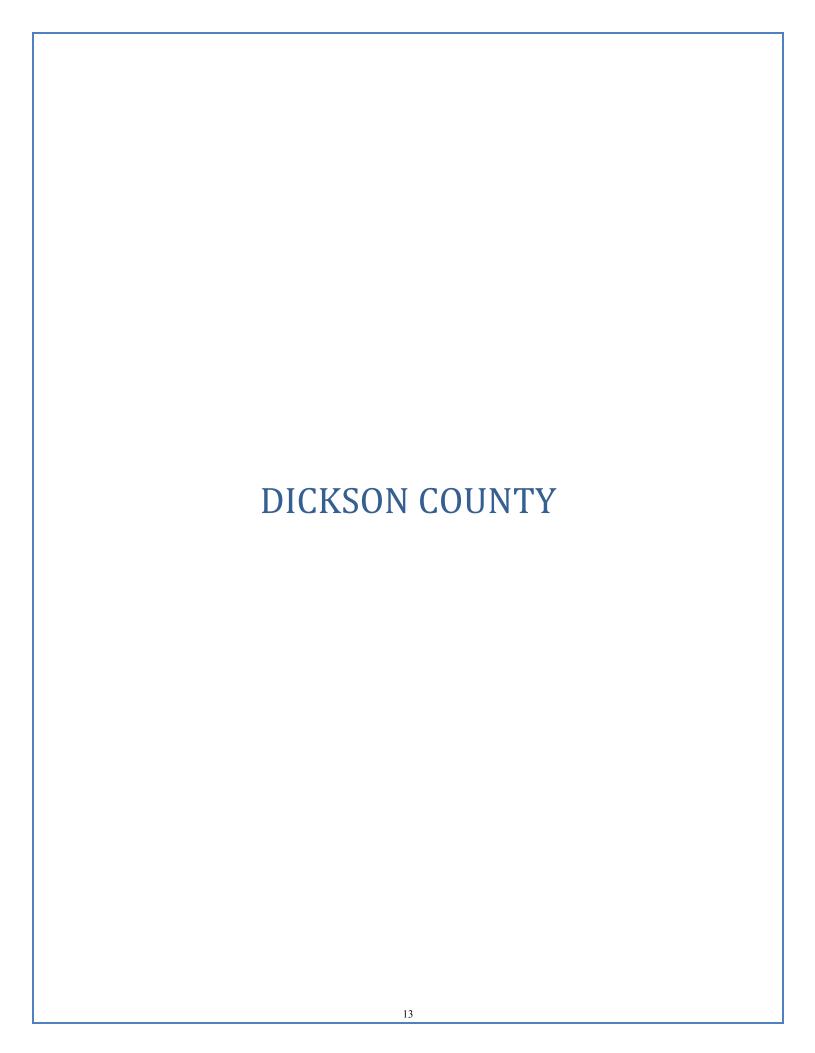
Property Tax - Total Assessment Forecast, 2017-2047





Wheel Tax, Number of Registered Cars Forecast, 2017-2047

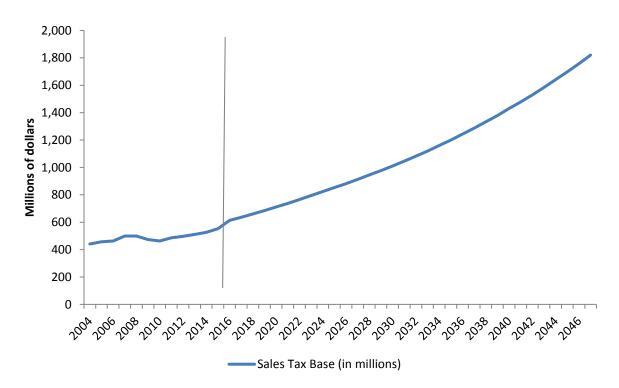




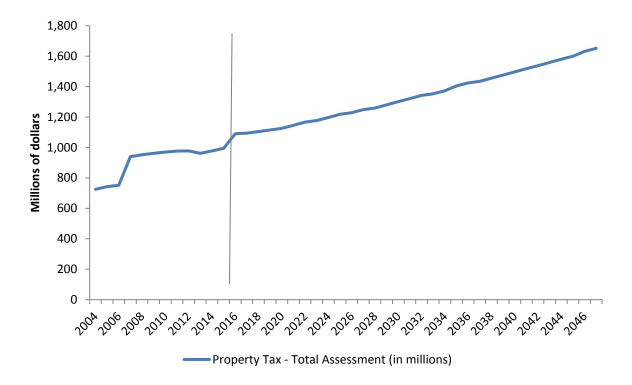
## **Dickson County Tax Forecast**

		Histori	ical Data				Fore	Compound Annual Growth Rates					
	2004	2009	2014	2016	2021	2026	2031	2036	2041	2047	2004-2016 CAGR (%)	2009-2016 CAGR (%)	2016-2047 CAGR (%)
Sales Tax Base (in millions)	440.84	473.29	526.38	614.06	737.59	881.13	1,045.81	1,243.60	1,478.34	1,820.14	2.80	3.79	3.57
Property Tax - Total Assessment (in millions)	725	962	977	1,090	1,146	1,228	1,321	1,425	1,517	1,652	3.46	1.80	1.35
Hotel Tax Base (in millions)	N/A	6.08	9.35	12.30	15.64	18.72	22.54	26.50	30.73	36.43	N/A	10.58	3.57
Wheel Tax - Number of Registered Cars	N/A	41,440	43,876	46,165	51,697	56,428	60,307	63,682	66,551	69,235	N/A	1.55	1.32

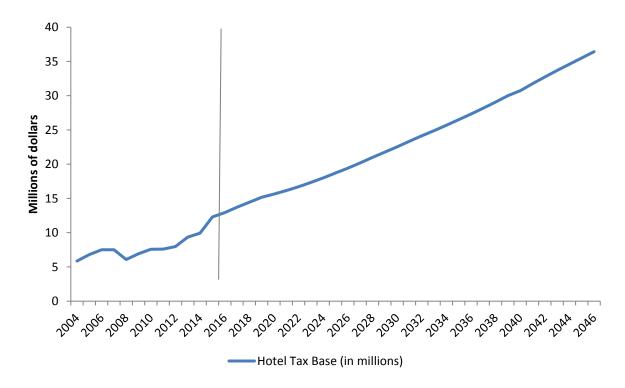
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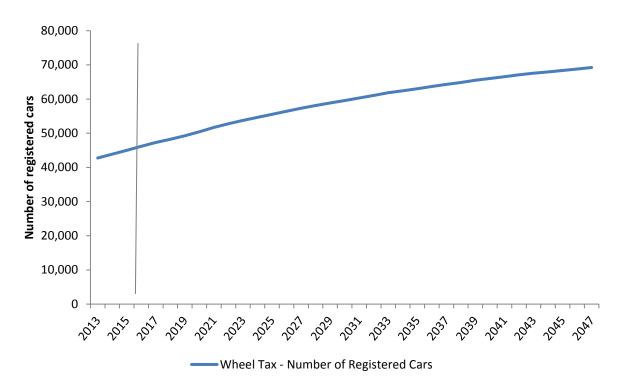
Property Tax - Total Assessment Forecast, 2017-2047

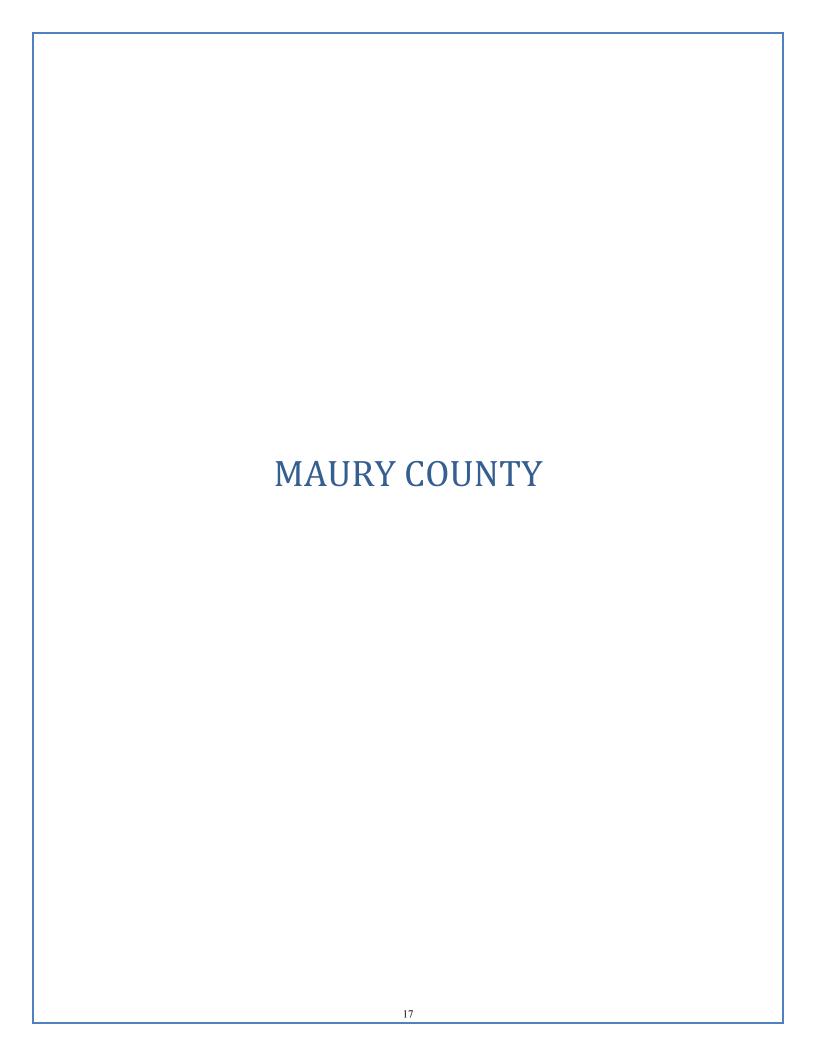


#### Hotel Tax Base Forecast, 2017-2047



## Wheel Tax, Number of Registered Cars, 2017-2047

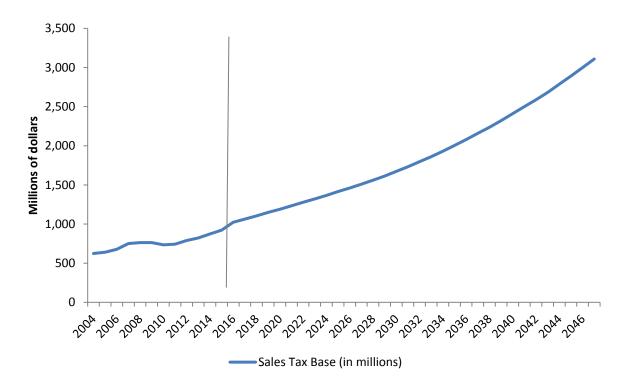




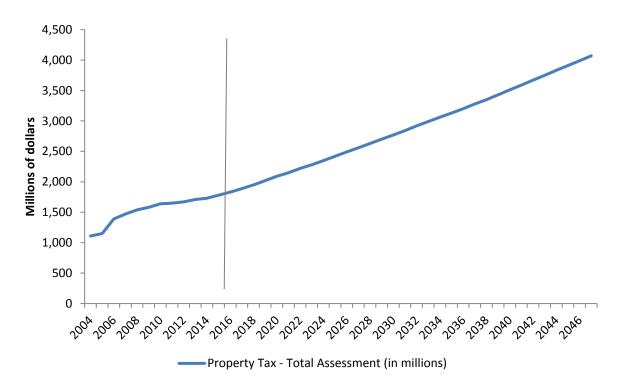
## **Maury County Tax Forecast**

		Histor	ical Data				Fore		Compound Annual Growth Rates				
	2004	2009	2014	2016	2021	2026	2031	2036	2041	2047	2004-2016 CAGR (%)	2009-2016 CAGR (%)	2016-2047 CAGR (%)
Sales Tax Base (in millions)	623.81	762.27	873.02	1,022.41	1,232.64	1,460.36	1,732.63	2,079.15	2,499.93	3,108.83	4.20	4.28	3.65
Property Tax - Total Assessment (in millions)	1,110	1,580	1,730	1,830	2,150	2,490	2,840	3,200	3,590	4,070	4.25	2.12	2.61
Hotel Tax Base (in millions)	N/A	7.63	10.10	16.87	22.78	32.17	43.72	58.22	70.32	89.00	N/A	11.99	5.51
Wheel Tax - Number of Registered Cars	N/A	73,951	76,729	83,139	92,089	98,823	104,875	111,529	118,617	127,971	N/A	1.69	1.40

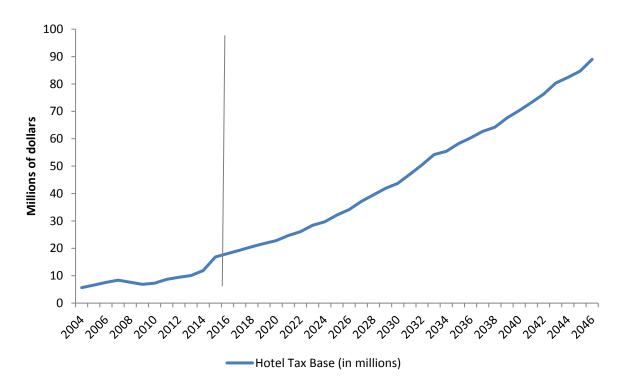
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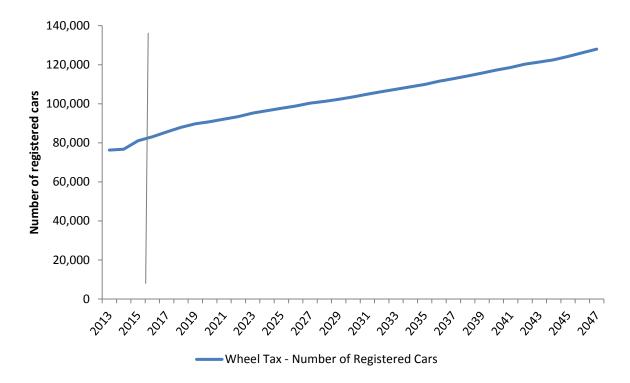
Property Tax - Total Assessment Forecast, 2017-2047

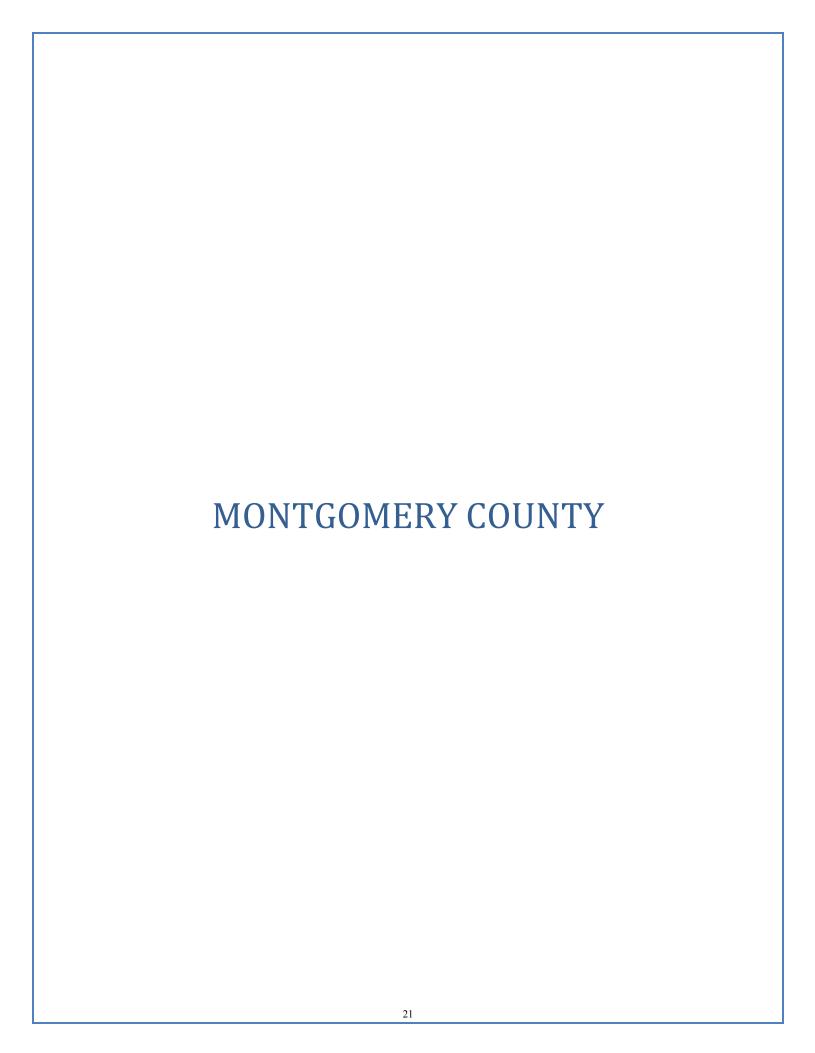


Hotel Tax Base Forecast, 2017-2047



Wheel Tax, Number of Registered Cars Forecast, 2017-2047

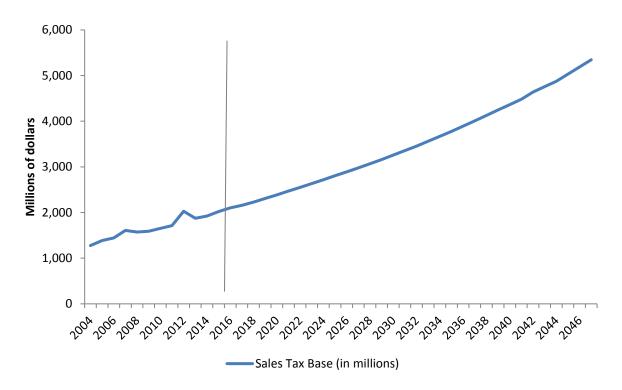




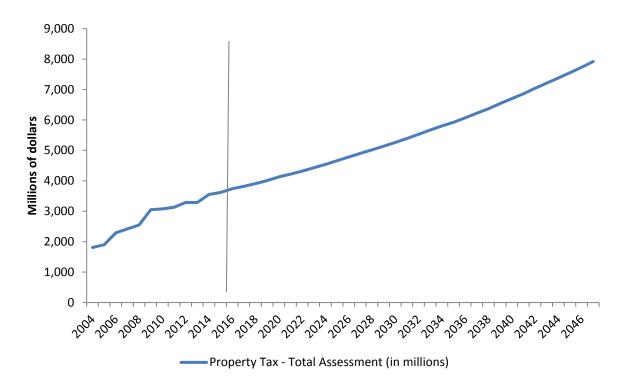
## **Montgomery County Tax Forecast**

		Histor	ical Data				Fore		Compound Annual Growth Rates				
	2004	2009	2014	2016	2021	2026	2031	2036	2041	2047	2004-2016 2009- CAGR (%) CAGR		2016-2047 CAGR (%)
Sales Tax Base (in millions)	1,276.93	1,590.92	1,924.87	2,100.27	2,468.72	2,889.35	3,357.15	3,891.78	4,481.44	5,346.28	4.23	4.05	3.06
Property Tax - Total Assessment (in millions)	1,810	3,050	3,550	3,740	4,220	4,780	5,390	6,070	6,860	7,920	6.23	2.96	2.45
Hotel Tax Base (in millions)	N/A	42.60	52.12	58.68	68.52	78.52	92.76	111.06	133.74	167.15	N/A	4.68	3.43
Wheel Tax - Number of Registered Cars	N/A	139,530	154,101	161,500	178,249	201,703	223,786	242,833	262,639	282,772	N/A	2.11	1.82

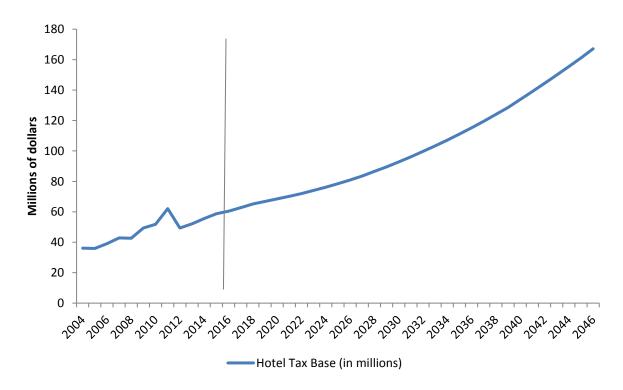
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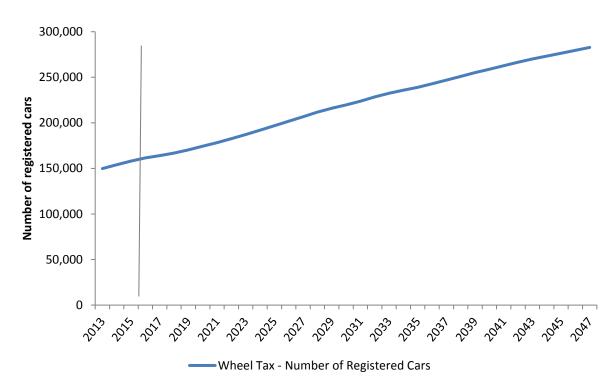
Property Tax - Total Assessment Forecast, 2017-2047

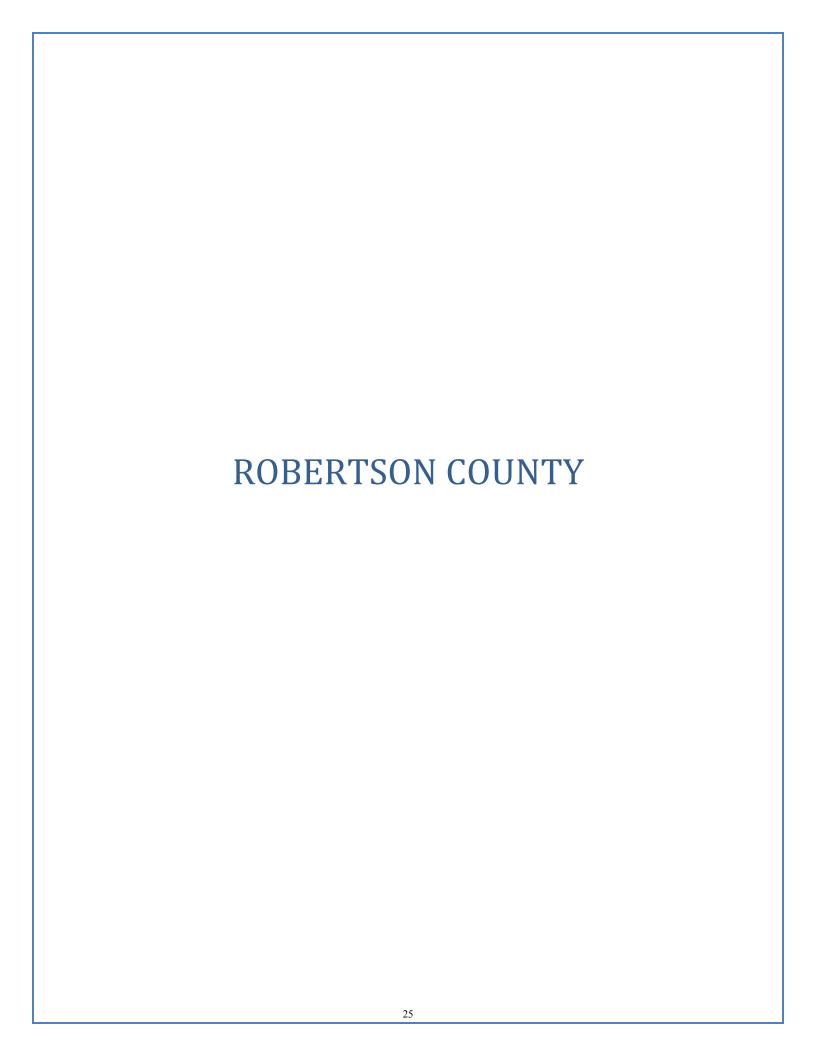


Hotel Tax Base Forecast, 2017-2047



Wheel Tax, Number of Registered Cars Forecast, 2017-2047

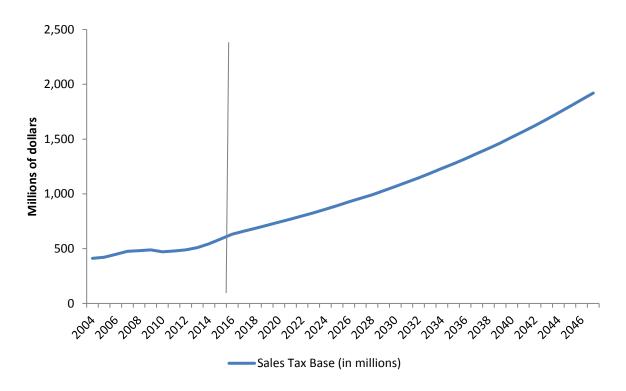




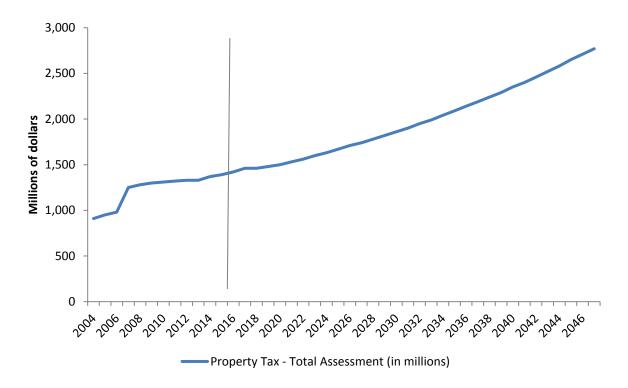
## **Robertson County Tax Forecast**

		Histor	ical Data				Fore	Compound Annual Growth Rates					
	2004	2009	2014	2016	2021	2026	2031	2036	2041	2047	2004-2016 CAGR (%)	2009-2016 CAGR (%)	2016-2047 CAGR (%)
Sales Tax Base (in millions)	411.64	489.21	544.73	632.41	769.49	926.31	1,107.03	1,320.27	1,569.14	1,920.11	3.64	3.74	3.65
Property Tax - Total Assessment (in millions)	910	1,300	1,370	1,420	1,530	1,710	1,900	2,140	2,400	2,770	3.78	1.27	2.18
Hotel Tax Base (in millions)	N/A	4.25	6.72	8.62	12.39	17.25	23.52	31.29	40.34	52.75	N/A	10.65	6.02
Wheel Tax - Number of Registered Cars	N/A	57,061	58,277	62,608	68,631	73,227	77,100	81,268	85,316	90,098	N/A	1.33	1.18

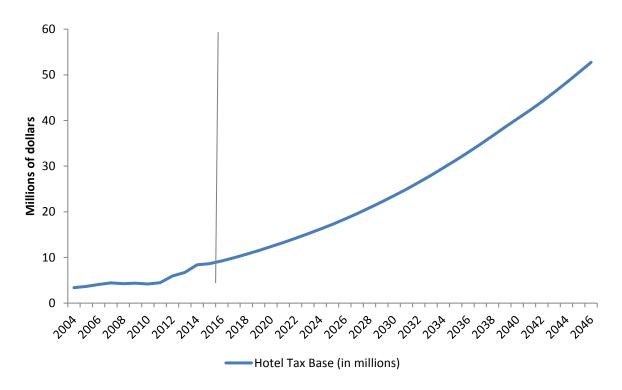
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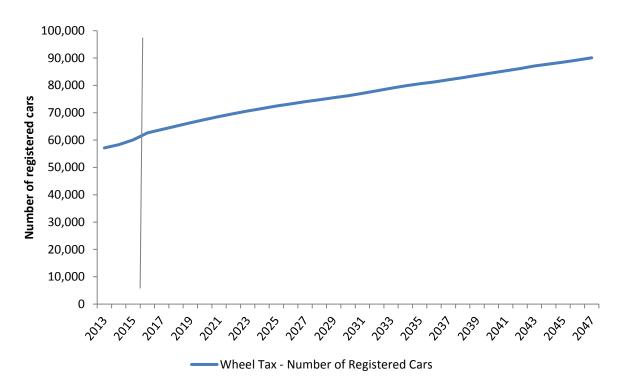
Property Tax - Total Assessment Forecast, 2017-2047

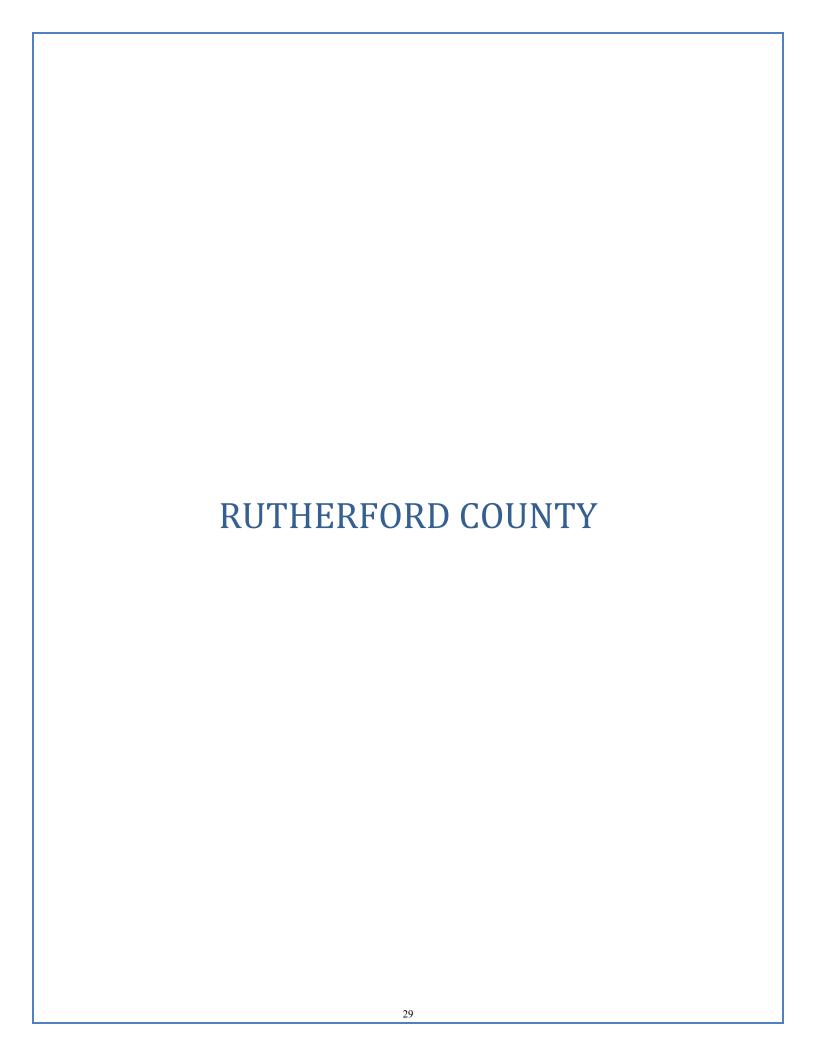


#### Hotel Tax Base Forecast, 2017-2047



Wheel Tax, Number of Registered Cars Forecast, 2017-2047

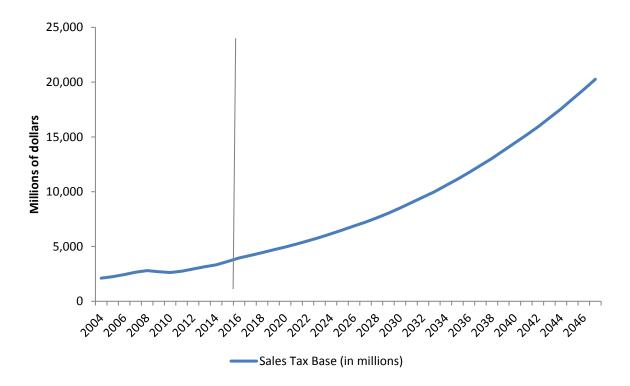




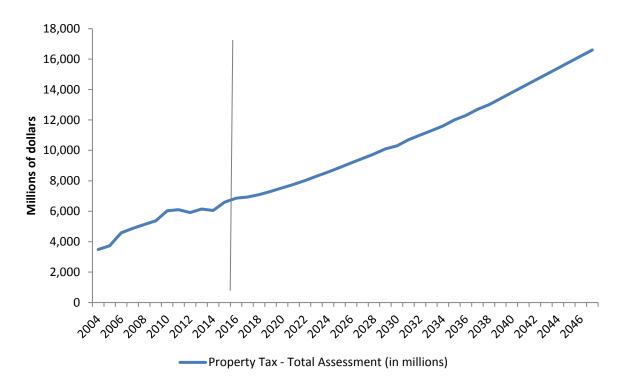
#### **Rutherford County Tax Forecast**

		Histor	ical Data				For	Compound Annual Growth Rates					
	2004	2009	2014	2016	2021	2026	2031	2036	2041	2047	2004-2016 CAGR (%)	2009-2016 CAGR (%)	2016-2047 CAGR (%)
Sales Tax Base (in millions)	2,111.41	2,702.85	3,330.43	3,957.59	5,225.53	6,872.69	9,009.28	11,751.23	15,169.77	20,261.97	5.38	5.60	5.41
Property Tax - Total Assessment (in millions)	3,490	5,370	6,050	6,860	7,770	9,170	10,700	12,300	14,200	16,600	5.79	3.56	2.89
Hotel Tax Base (in millions)	N/A	37.28	62.02	54.97	79.78	109.50	144.08	184.74	232.64	301.20	N/A	5.70	5.64
Wheel Tax - Number of Registered Cars	N/A	180,975	192,767	213,070	239,193	269,604	299,786	333,740	363,510	401,630	N/A	2.36	2.07

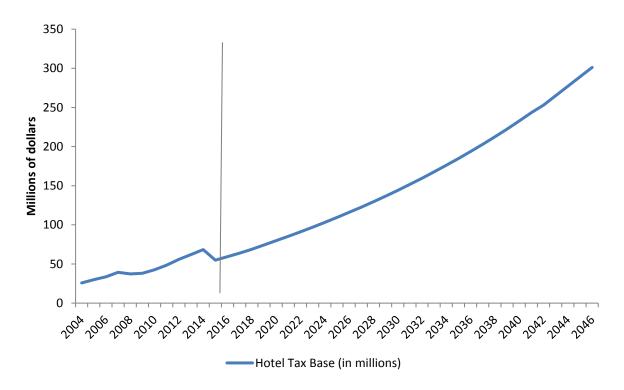
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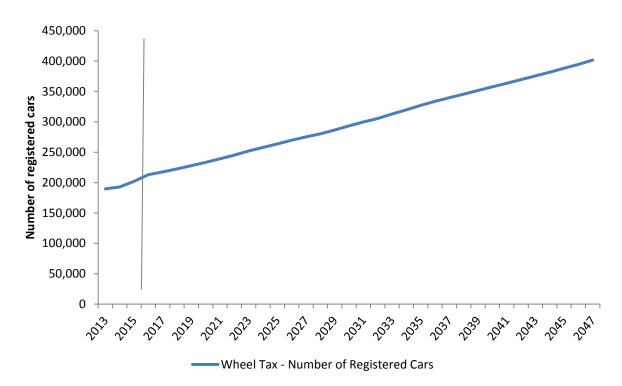
Property Tax - Total Assessment Forecast, 2017-2047

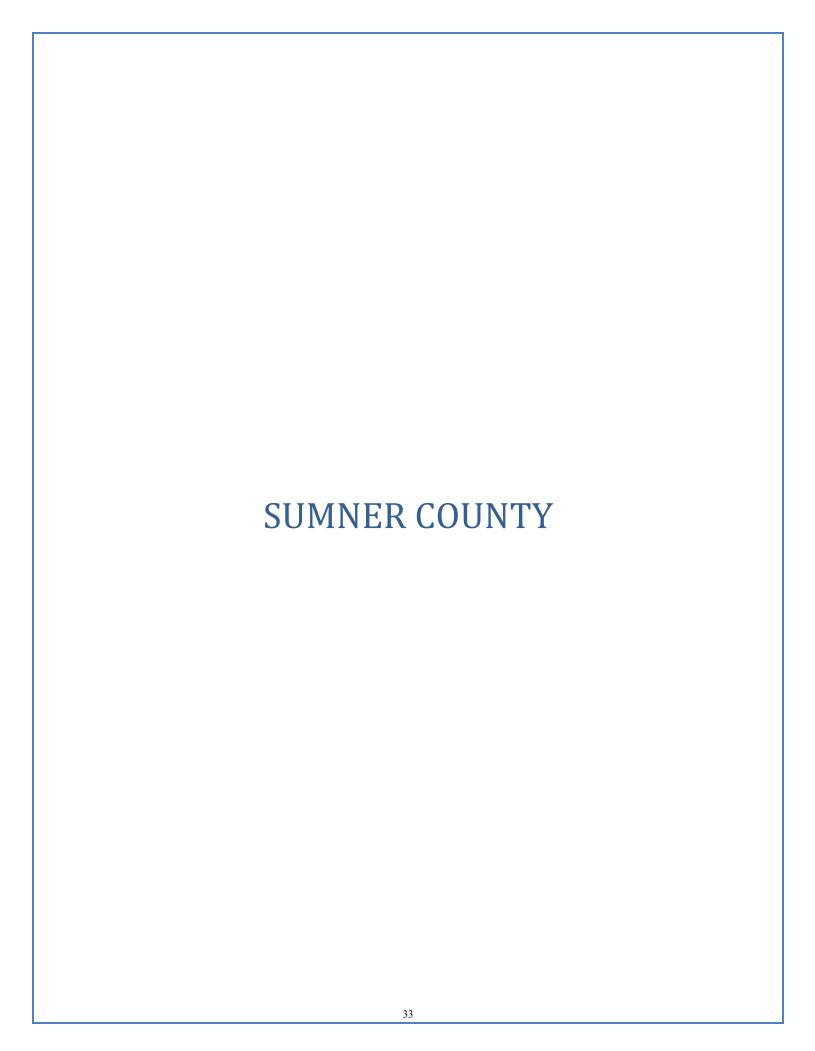


Hotel Tax Base Forecast, 2017-2047



Wheel Tax, Number of Registered Cars Forecast, 2017-2047



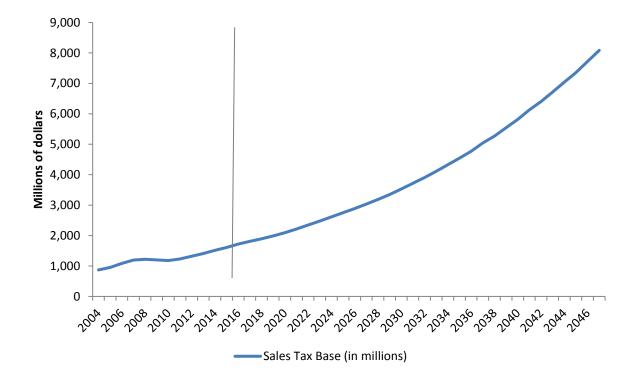


#### **Sumner County Tax Forecast**

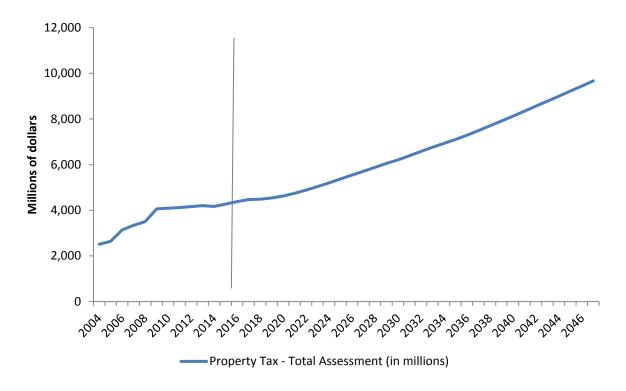
		Histor	ical Data				Fore	ecast			Compound	Annual Grov	wth Rates
												2009-2016	
	2004	2009	2014	2016	2021	2026	2031	2036	2041	2047	CAGR (%)	CAGR (%)	CAGR (%)
Sales Tax Base (in millions)	871.75	1,198.41	1,514.24	1,720.95	2,216.50	2,888.72	3,715.37	4,769.11	6,131.72	8,084.78	5.83	5.31	5.12
Property Tax - Total Assessment (in millions)	2,510	4,060	4,170	4,380	4,740	5,540	6,390	7,290	8,340	9,670	4.75	1.09	2.59
Hotel Tax Base (in millions)	N/A	7.84	9.92	12.82	17.34	23.80	32.13	41.95	54.61	68.38	N/A	7.27	5.55
Wheel Tax - Number of Registered Cars	N/A	121,026	131,275	140,348	157,078	173,307	190,729	209,253	230,025	254,387	N/A	2.14	1.94

N/A: Data not available

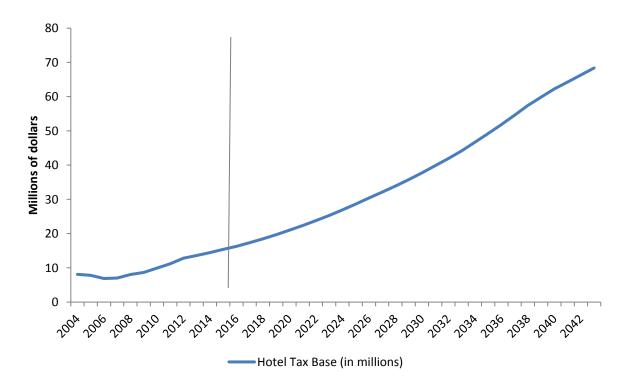
## Sales Tax Base Forecast, 2017-2047



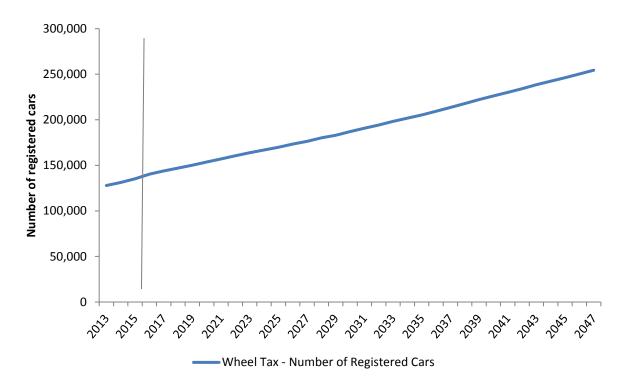
Property Tax - Total Assessment Forecast, 2017-2047

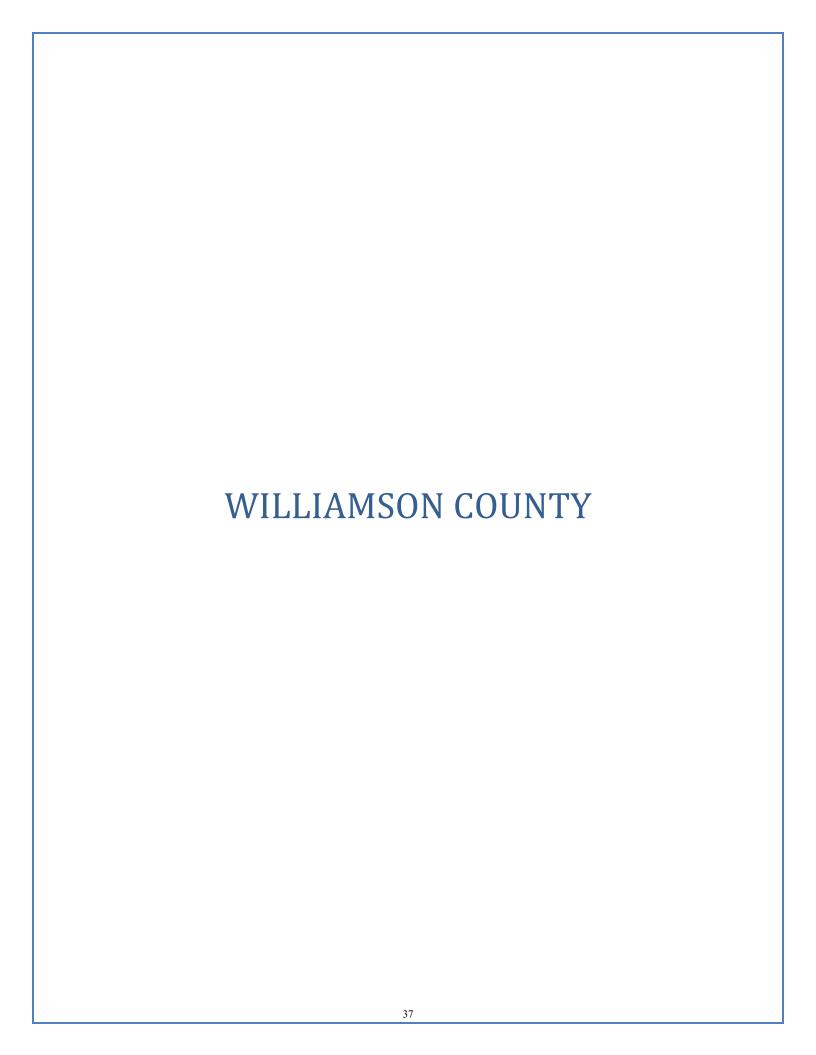


Hotel Tax Base Forecast, 2017-2047



#### Wheel Tax, Number of Registered Cars Forecast, 2017-2047



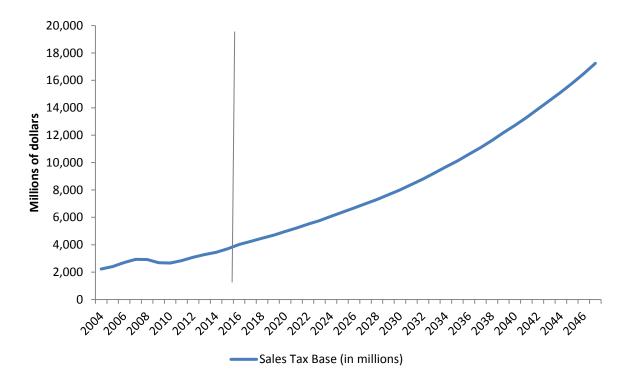


## **Williamson County Tax Forecast**

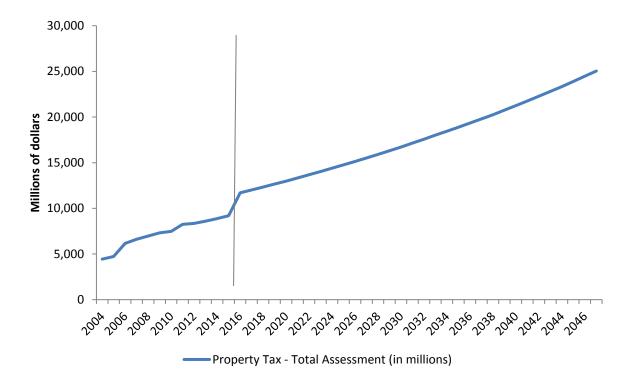
Historical Data						Forecast					Compound Annual Growth Rates		
	2004	2009	2014	2016	2021	2026	2031	2036	2041	2047	2004-2016 CAGR (%)	2009-2016 CAGR (%)	2016-2047 CAGR (%)
Sales Tax Base (in millions)	2,226.69	2,690.44	3,441.01	4,018.54	5,226.05	6,687.24	8,403.04	10,602.79	13,286.48	17,246.03	5.04	5.90	4.81
Property Tax - Total Assessment (in millions)	4,440	7,310	8,880	11,700	13,320	15,127	17,150	19,340	21,757	25,040	8.41	6.95	2.48
Hotel Tax Base (in millions)	N/A	60.17	95.28	124.29	172.66	236.80	307.04	387.31	477.61	602.03	N/A	10.92	5.22
Wheel Tax - Number of Registered Cars	N/A	147,543	162,707	177,424	201,125	218,582	231,328	244,430	255,798	271,390	N/A	2.67	1.38

N/A: Data not available

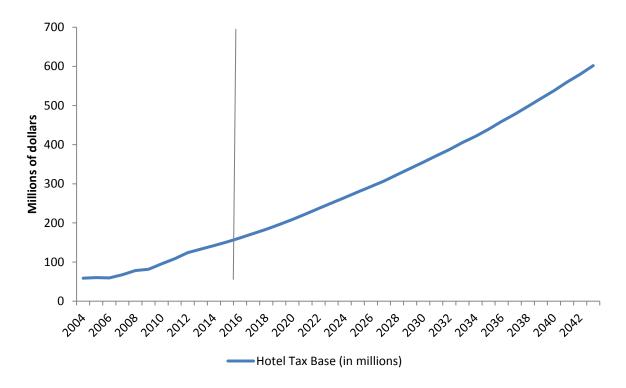
#### Sales Tax Base Forecast, 2017-2047



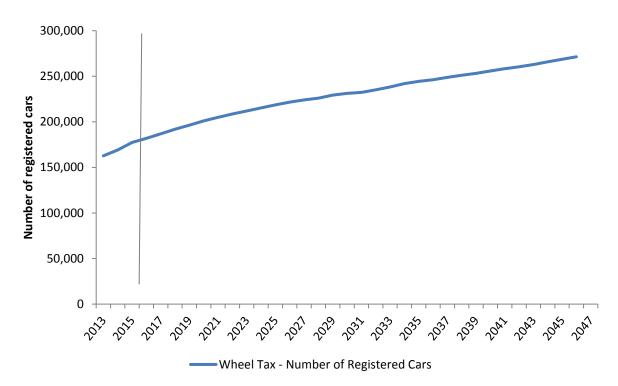
Property Tax - Total Assessment Forecast, 2017-2047

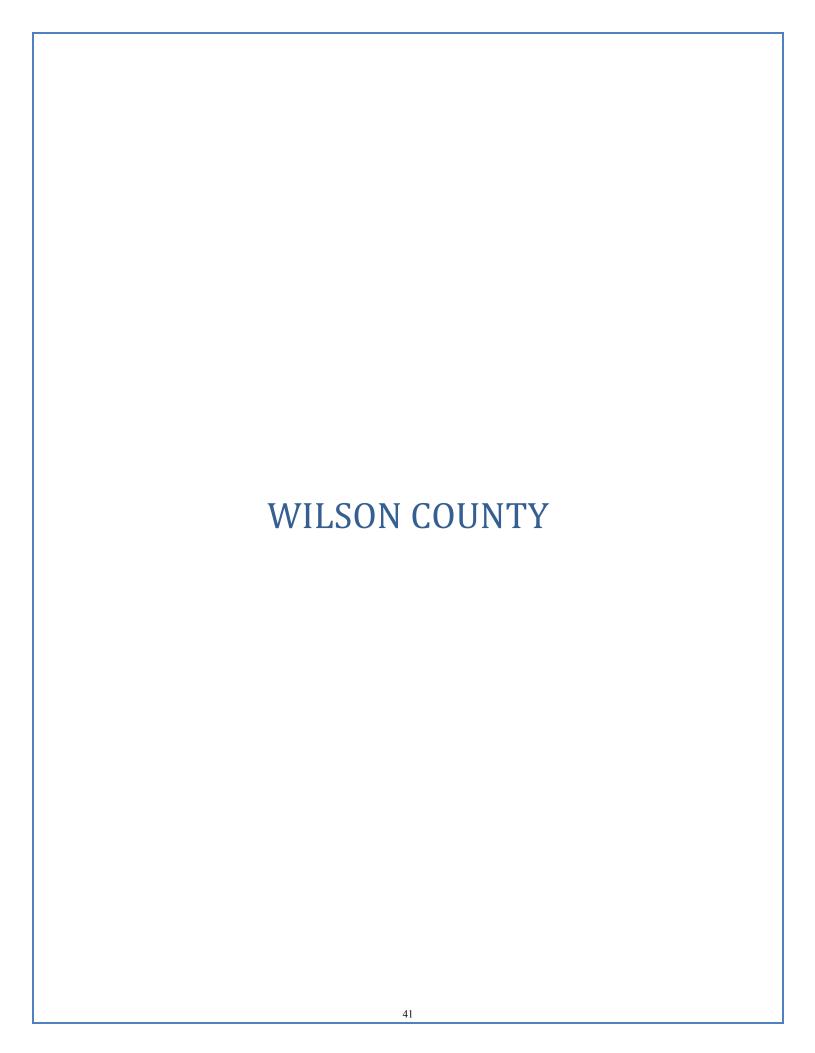


Hotel Tax Base Forecast, 2017-2047



## Wheel Tax, Number of Registered Cars Forecast, 2017-2047



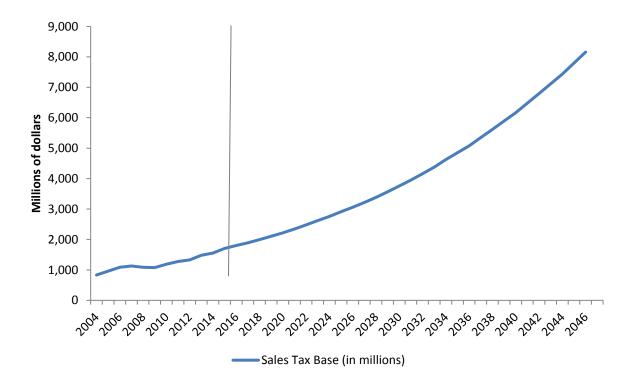


### **Wilson County Tax Forecast**

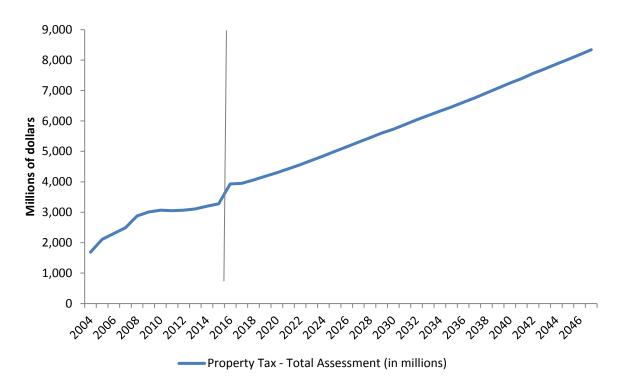
		Histori	ical Data				Fore	cast			Compound	Annual Grov	wth Rates
	2004	2009	2014	2016	2021	2026	2031	2036	2041	2047	2004-2016 CAGR (%)	2009-2016 CAGR (%)	2016-2047 CAGR (%)
Sales Tax Base (in millions)	766.47	1,088.71	1,479.26	1,707.34	2,219.80	2,909.70	3,757.23	4,849.50	6,163.85	8,158.03	6.90	6.64	5.17
Property Tax - Total Assessment (in millions)	1,690	3,010	3,200	3,930	4,430	5,150	5,880	6,610	7,390	8,340	7.29	3.88	2.46
Hotel Tax Base (in millions)	N/A	22.03	34.24	47.06	66.21	90.65	117.54	148.78	184.78	233.59	N/A	11.45	5.30
Wheel Tax - Number of Registered Cars	N/A	92,583	98,767	108,975	123,076	137,930	155,052	173,548	194,072	216,111	N/A	2.36	2.23

N/A: Data not available

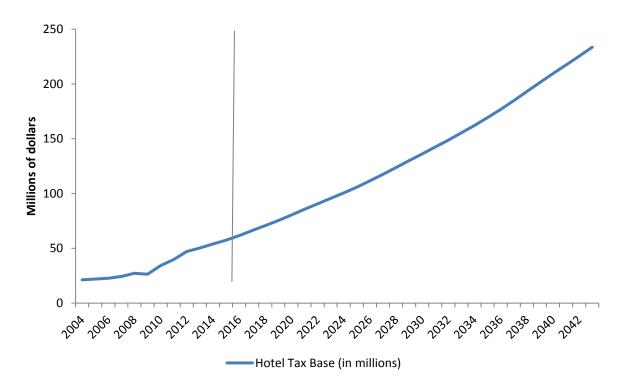
#### Sales Tax Base Forecast, 2017-2047



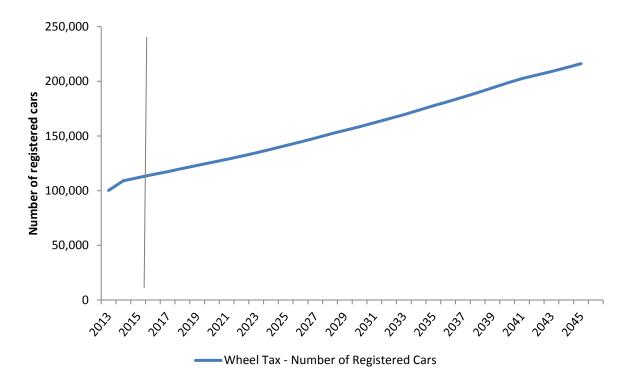
Property Tax - Total Assessment Forecast, 2017-2047



Hotel Tax Base Forecast, 2017-2047



Wheel Tax, Number of Registered Cars Forecast, 2017-2047



# 3. County Revenue Forecast Model

This section presents the County Revenue Forecast Model tool that allows all 10 counties to estimate their tax revenues for each year. The CRFM tool can be found <a href="here">here</a> and used from anywhere that has Internet access. A screen shot of the table seen by the user is on page 46 of the report.

Users begin by selecting one of the 10 counties from the drop-down schedule at the top left of the table. Then, users can choose any or all of the four tax sources by inputting a tax rate for the respective tax. Sales tax rates are limited to 0 to 2.75 percent, property tax rates to 0 to 150 cents, hotel/motel tax rates to 0 to 3 percent and wheel tax rates to 0 to \$175 per vehicle. **The model defaults to the maximum tax rate if the user imposes a rate above these limits.** Decisions on these ranges are consistent with the IMPROVE Act and practical tax rate choices. No allowances were made for non-compliance with the property tax.

Our revenue estimates incorporate all behavioral changes to tax rates and structures that are built into the historical tax data. However, we cannot account for behavioral responses that could occur as a county makes large changes in its tax structure relative to other counties in the region or relative to broader tax structures across the state and nation. Thus, the forecast model's reliability should be expected to diminish as tax rate changes increase.

The user inserts the tax rate(s) and the revenues are estimated for the entire 30-year window and are totaled at the bottom of the page. Revenues are also totaled across tax sources so it is possible to use one to four of the taxes and find the total revenue forecasted for each year and the total for the 30 years (the fifth column of the table). The output is listed either in millions of dollars or thousands of dollars depending on the particular tax source. A title for the particular scenario can be entered at the top of the table to allow users to keep track of multiple scenarios.

The model does not save scenarios but the user can download either the image or a PDF file to save the output from any tax plan. The user clicks on the icon at the bottom of the page and follows the very simple instructions to create a copy. We recommend that users create a PDF file from the output. Either a portrait or landscape version can be saved but we recommend the landscape version because it fits nicely on the page. The user can save the PDF file by right clicking anywhere on the PDF and using the "save as" command in the drop-down screen.

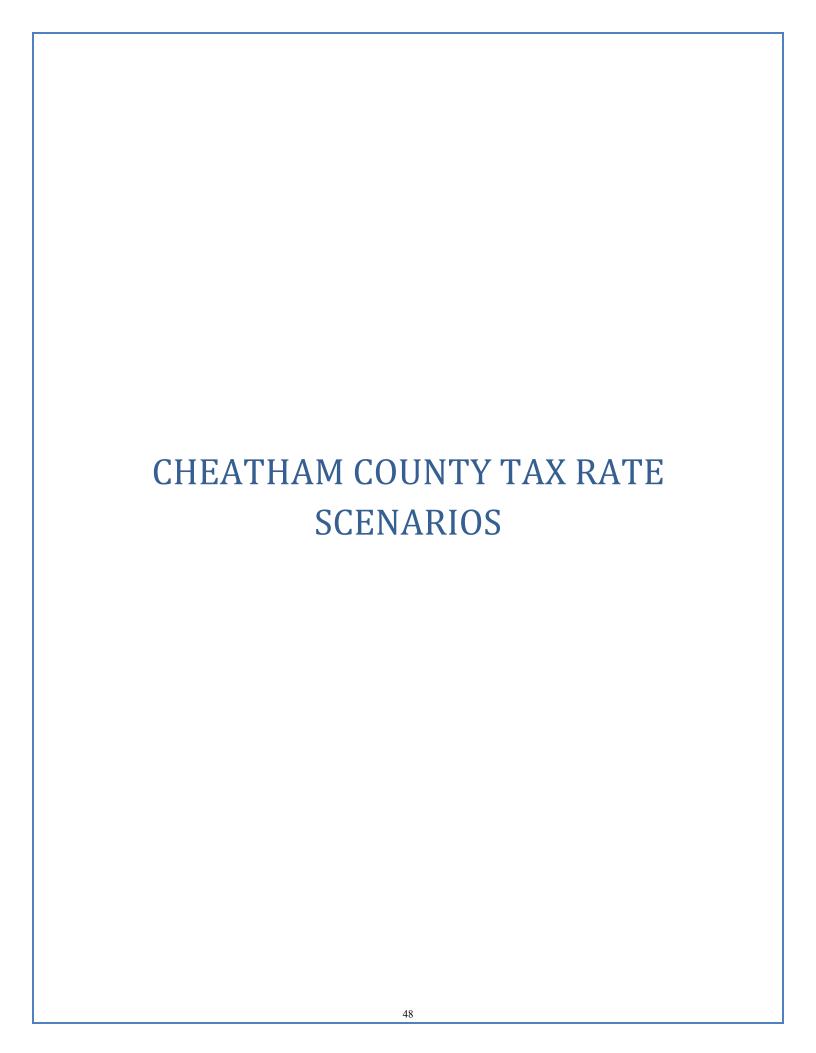
The screen shot on page 47 illustrates the PDF output for Cheatham County based on a scenario where it would impose a 0.5 percent sales tax, a 10 cents property tax, a 1.5 percent hotel/motel tax, and a \$5 wheel tax for transportation tax purposes. This screen is provided only as an example and is not meant to suggest any policy of interest to Cheatham County nor a policy that we recommend.

Pages 48 through 97 illustrate four tax scenarios for each of the four taxes for each of the 10 counties. Each scenario was estimated using the CRFM for the respective county.

County F	County Revenue Forecast Mode	lodel	Scenario Title:		
County Name Select from list Cheatham	Sales Tax Rate (percent) : Enter a between 0 and .0275 0.00%	Property Tax Rate (cents) Enter value between 0 and 150 0	Hotel Tax Rate (percent) Enter value between 0 and .03 0.00%	Wheel Tax Rate (dollars) Enter value between 0 and 175 \$0.00	
Year	Sales Tax Revenue (Million \$)	Property Tax Revenue (Million \$)	Hotel Tax Revenue (Thousand \$)	Wheel Tax Revenue (Thousand \$)	Total Tax Revenue (Million \$)
2018	0.0\$	0.0\$	\$0.0	0.0\$	\$0.0
2019	0.0\$	\$0.0	\$0.0	\$0.0	\$0.0
2020	0.0\$	0.0\$	\$0.0	\$0.0	\$0.0
2021	0.0\$	0.0\$	\$0.0	0.0\$	\$0.0
2022	0.0\$	0.0\$	\$0.0	0.0\$	\$0.0
2023	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2024	0.0\$	0.0\$	\$0.0	0.0\$	\$0.0
2025	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2026	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2027	0.0\$	0.0\$	\$0.0	0.0\$	\$0.0
2028	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2029	0.0\$	0.0\$	\$0.0	0.0\$	\$0.0
2030	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
TE02 46	0.0\$	0.0\$	\$0.0	0.0\$	\$0.0
2032	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2033	0.0\$	80.0	0.0\$	0.0\$	0.0\$
2034	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2035	0.0\$	0.0\$	\$0.0	0.0\$	\$0.0
2036	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2037	0.0\$	0.0\$	\$0.0	0.0\$	\$0.0
2038	0.0\$	\$0.0	0.0\$	0.0\$	0.0\$
2039	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2040	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2041	0.0\$	0.0\$	\$0.0	0.0\$	\$0.0
2042	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2043	0.0\$	\$0.0	\$0.0	0.0\$	\$0.0
2044	0.0\$	\$0.0	0.0\$	0.0\$	0.0\$
2045	0.0\$	80.0	0.0\$	0.0\$	0.0\$
2046	0.0\$	\$0.0	0.0\$	0.0\$	0.0\$
2047	80.0	0.0\$	\$0.0	0.0\$	0.0\$
	\$0.0	0.0\$	\$0.0	0.0\$	0.0\$

NSTRATION ONLY	W.L. C. T.C.
Scenario Title: FOR DEMONSTRATION	(T ) - + - Q H   - + -
t Model	(+++++++++++++++++++++++++++++++++++++
County Revenue Forecast Model	(1

<b>County Name</b> Select from list Cheatham	Sales Tax Rate (percent) Enter a between 0 and .0275 0.50%	<b>Property Tax Rate (cents)</b> Enter value between 0 and 150 10	Hotel Tax Rate (percent) Enter value between 0 and .03 1.50%	Wheel Tax Rate (dollars) Enter value between 0 and 175 \$5.00	
Year	Sales Tax Revenue (Million \$)	Property Tax Revenue (Million \$)	Hotel Tax Revenue (Thousand \$)	Wheel Tax Revenue (Thousand \$)	Total Tax Revenue (Million \$)
2018	\$1.4	\$0.8	\$14.7	\$213.1	\$2.4
2019	\$1.4	\$0.8	\$15.0	\$215.3	\$2.5
2020	\$1.5	6.0\$	\$15.4	\$218.1	\$2.6
2021	\$1.6	6.0\$	\$15.7	\$221.2	\$2.7
2022	\$1.6	6.0\$	\$16.0	\$223.7	\$2.8
2023	\$1.7	6.0\$	\$16.4	\$226.9	\$2.9
2024	\$1.8	6.0\$	\$16.8	\$229.9	\$3.0
2025	\$1.9	6.0\$	\$17.2	\$233.1	\$3.1
2026	\$2.0	\$1.0	\$17.7	\$235.8	\$3.2
2027	\$2.0	\$1.0	\$18.0	\$238.5	\$3.3
2028	\$2.1	\$1.0	\$18.2	\$242.0	\$3.4
2029	\$2.2	\$1.0	\$18.6	\$244.3	\$3.5
2030	\$2.3	\$1.0	\$18.9	\$247.1	\$3.6
2031	\$2.4	\$1.0	\$19.4	\$250.4	\$3.7
2032	\$2.5	\$1.1	\$20.0	\$253.6	\$3.9
2033	\$2.6	\$1.1	\$20.4	\$255.9	\$4.0
2034	\$2.8	\$1.1	\$20.7	\$259.1	\$4.1
2035	\$2.9	\$1.1	\$21.2	\$262.2	\$4.3
2036	\$3.0	\$1.1	\$21.8	\$265.0	\$4.4
2037	\$3.1	\$1.2	\$22.4	\$267.9	\$4.6
2038	\$3.2	\$1.2	\$23.1	\$270.5	\$4.7
2039	\$3.4	\$1.2	\$23.6	\$273.3	\$4.9
2040	\$3.5	\$1.2	\$24.0	\$276.4	\$5.0
2041	\$3.7	\$1.2	\$24.4	\$279.9	\$5.2
2042	\$3.8	\$1.3	\$25.1	\$282.4	\$5.4
2043	\$3.9	\$1.3	\$25.7	\$286.4	\$5.5
2044	\$4.1	\$1.3	\$26.4	\$290.2	\$5.7
2045	\$4.3	\$1.3	\$27.0	\$294.1	\$5.9
2046	\$4.4	\$1.3	\$27.6	\$297.9	\$6.1
2047	\$4.6	\$1.4	\$28.0	\$301.8	\$6.3
	\$81.9	\$32.3	\$619.5	\$7,656.0	\$122.5

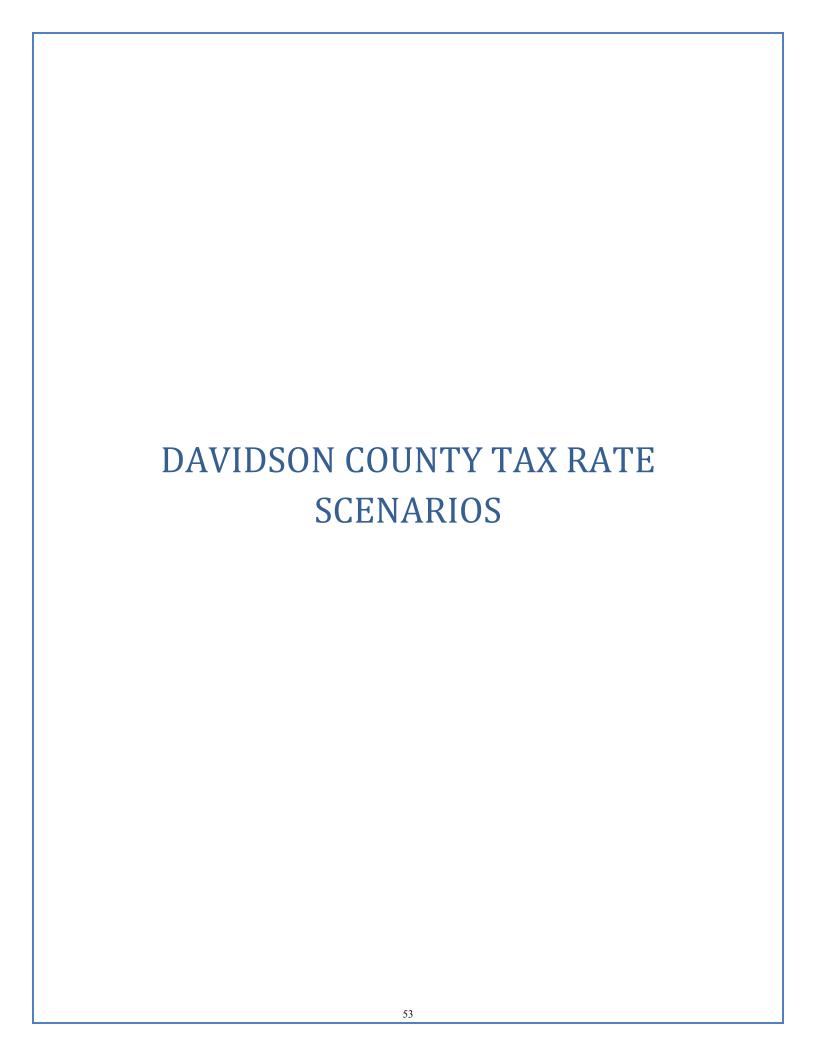


	Sales Tax Revenue	Sales Tax Revenue .50% Rate	Sales Tax Revenue .75% Rate	Sales Tax Revenue 1% Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$0.7	\$1.4	\$2.0	\$2.7
2019	\$0.7	\$1.4	\$2.1	\$2.9
2020	\$0.8	\$1.5	\$2.3	\$3.0
2021	\$0.8	\$1.6	\$2.4	\$3.1
2022	\$0.8	\$1.6	\$2.5	\$3.3
2023	\$0.9	\$1.7	\$2.6	\$3.5
2024	\$0.9	\$1.8	\$2.7	\$3.6
2025	\$0.9	\$1.9	\$2.8	\$3.8
2026	\$1.0	\$2.0	\$2.9	\$3.9
2027	\$1.0	\$2.0	\$3.1	\$4.1
2028	\$1.1	\$2.1	\$3.2	\$4.3
2029	\$1.1	\$2.2	\$3.3	\$4.5
2030	\$1.2	\$2.3	\$3.5	\$4.7
2031	\$1.2	\$2.4	\$3.6	\$4.9
2032	\$1.3	\$2.5	\$3.8	\$5.1
2033	\$1.3	\$2.6	\$4.0	\$5.3
2034	\$1.4	\$2.8	\$4.1	\$5.5
2035	\$1.4	\$2.9	\$4.3	\$5.7
2036	\$1.5	\$3.0	\$4.5	\$6.0
2037	\$1.6	\$3.1	\$4.7	\$6.2
2038	\$1.6	\$3.2	\$4.9	\$6.5
2039	\$1.7	\$3.4	\$5.1	\$6.7
2040	\$1.8	\$3.5	\$5.3	\$7.0
2041	\$1.8	\$3.7	\$5.5	\$7.3
2042	\$1.9	\$3.8	\$5.7	\$7.6
2043	\$2.0	\$3.9	\$5.9	\$7.9
2044	\$2.1	\$4.1	\$6.2	\$8.2
2045	\$2.1	\$4.3	\$6.4	\$8.5
2046	\$2.2	\$4.4	\$6.6	\$8.9
2047	\$2.3	\$4.6	\$6.9	\$9.2

	Property Tax Revenue 10 Cents Rate	Property Tax Revenue 20 Cents Rate	Property Tax Revenue 30 Cents Rate	Property Tax Revenue 40 Cents Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$0.8	\$1.7	\$2.5	\$3.4
2019	\$0.9	\$1.7	\$2.6	\$3.4
2020	\$0.9	\$1.7	\$2.6	\$3.4
2021	\$0.9	\$1.8	\$2.6	\$3.5
2022	\$0.9	\$1.8	\$2.7	\$3.6
2023	\$0.9	\$1.8	\$2.7	\$3.6
2024	\$0.9	\$1.9	\$2.8	\$3.7
2025	\$0.9	\$1.9	\$2.8	\$3.8
2026	\$1.0	\$1.9	\$2.9	\$3.8
2027	\$1.0	\$1.9	\$2.9	\$3.9
2028	\$1.0	\$2.0	\$3.0	\$3.9
2029	\$1.0	\$2.0	\$3.0	\$4.0
2030	\$1.0	\$2.0	\$3.1	\$4.1
2031	\$1.0	\$2.1	\$3.1	\$4.2
2032	\$1.1	\$2.1	\$3.2	\$4.2
2033	\$1.1	\$2.2	\$3.2	\$4.3
2034	\$1.1	\$2.2	\$3.3	\$4.4
2035	\$1.1	\$2.2	\$3.4	\$4.5
2036	\$1.1	\$2.3	\$3.4	\$4.6
2037	\$1.2	\$2.3	\$3.5	\$4.6
2038	\$1.2	\$2.4	\$3.5	\$4.7
2039	\$1.2	\$2.4	\$3.6	\$4.8
2040	\$1.2	\$2.4	\$3.6	\$4.8
2041	\$1.2	\$2.5	\$3.7	\$4.9
2042	\$1.3	\$2.5	\$3.8	\$5.0
2043	\$1.3	\$2.5	\$3.8	\$5.1
2044	\$1.3	\$2.6	\$3.9	\$5.2
2045	\$1.3	\$2.7	\$4.0	\$5.3
2046	\$1.3	\$2.7	\$4.0	\$5.4
2047	\$1.4	\$2.7	\$4.1	\$5.5

	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue
	.5% Rate	1% Rate	1.5% Rate	2% Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$4.9	\$9.8	\$14.7	\$19.6
2019	\$5.0	\$10.0	\$15.0	\$20.0
2020	\$5.1	\$10.3	\$15.4	\$20.5
2021	\$5.2	\$10.5	\$15.7	\$21.0
2022	\$5.3	\$10.7	\$16.0	\$21.4
2023	\$5.5	\$10.9	\$16.4	\$21.9
2024	\$5.6	\$11.2	\$16.8	\$22.4
2025	\$5.7	\$11.4	\$17.2	\$22.9
2026	\$5.9	\$11.8	\$17.7	\$23.5
2027	\$6.0	\$12.0	\$18.0	\$24.0
2028	\$6.1	\$12.2	\$18.2	\$24.3
2029	\$6.2	\$12.4	\$18.6	\$24.8
2030	\$6.3	\$12.6	\$18.9	\$25.2
2031	\$6.5	\$12.9	\$19.4	\$25.9
2032	\$6.7	\$13.3	\$20.0	\$26.6
2033	\$6.8	\$13.6	\$20.4	\$27.2
2034	\$6.9	\$13.8	\$20.7	\$27.6
2035	\$7.1	\$14.1	\$21.2	\$28.3
2036	\$7.3	\$14.5	\$21.8	\$29.1
2037	\$7.5	\$15.0	\$22.4	\$29.9
2038	\$7.7	\$15.4	\$23.1	\$30.8
2039	\$7.9	\$15.7	\$23.6	\$31.5
2040	\$8.0	\$16.0	\$24.0	\$32.0
2041	\$8.1	\$16.3	\$24.4	\$32.5
2042	\$8.4	\$16.7	\$25.1	\$33.5
2043	\$8.6	\$17.1	\$25.7	\$34.2
2044	\$8.8	\$17.6	\$26.4	\$35.3
2045	\$9.0	\$18.0	\$27.0	\$36.0
2046	\$9.2	\$18.4	\$27.6	\$36.8
2047	\$9.3	\$18.6	\$28.0	\$37.3

	Wheel Tax Revenue	Wheel Tax Revenue	Wheel Tax Revenue	Wheel Tax Revenue
	\$5 Tax Rate	\$10 Tax Rate	\$15 Tax Rate	\$20 Tax Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$213.10	\$426.20	\$639.30	\$852.40
2019	\$215.30	\$430.60	\$645.90	\$861.20
2020	\$218.10	\$436.20	\$654.30	\$872.30
2021	\$221.20	\$442.50	\$663.70	\$885.00
2022	\$223.70	\$447.40	\$671.00	\$894.70
2023	\$226.90	\$453.90	\$680.80	\$907.80
2024	\$229.90	\$459.80	\$689.70	\$919.60
2025	\$233.10	\$466.20	\$699.30	\$932.50
2026	\$235.80	\$471.50	\$707.30	\$943.10
2027	\$238.50	\$476.90	\$715.40	\$953.80
2028	\$242.00	\$484.10	\$726.10	\$968.10
2029	\$244.30	\$488.50	\$732.80	\$977.10
2030	\$247.10	\$494.20	\$741.40	\$988.50
2031	\$250.40	\$500.80	\$751.10	\$1,001.50
2032	\$253.60	\$507.20	\$760.80	\$1,014.40
2033	\$255.90	\$511.70	\$767.60	\$1,023.50
2034	\$259.10	\$518.20	\$777.40	\$1,036.50
2035	\$262.20	\$524.30	\$786.50	\$1,048.60
2036	\$265.00	\$529.90	\$794.90	\$1,059.80
2037	\$267.90	\$535.80	\$803.80	\$1,071.70
2038	\$270.50	\$541.00	\$811.60	\$1,082.10
2039	\$273.30	\$546.60	\$819.80	\$1,093.10
2040	\$276.40	\$552.90	\$829.30	\$1,105.70
2041	\$279.90	\$559.70	\$839.60	\$1,119.40
2042	\$282.40	\$564.70	\$847.10	\$1,129.50
2043	\$286.40	\$572.80	\$859.10	\$1,145.50
2044	\$290.20	\$580.50	\$870.70	\$1,161.00
2045	\$294.10	\$588.30	\$882.40	\$1,176.50
2046	\$297.90	\$595.80	\$893.70	\$1,191.60
2047	\$301.80	\$603.60	\$905.40	\$1,207.20

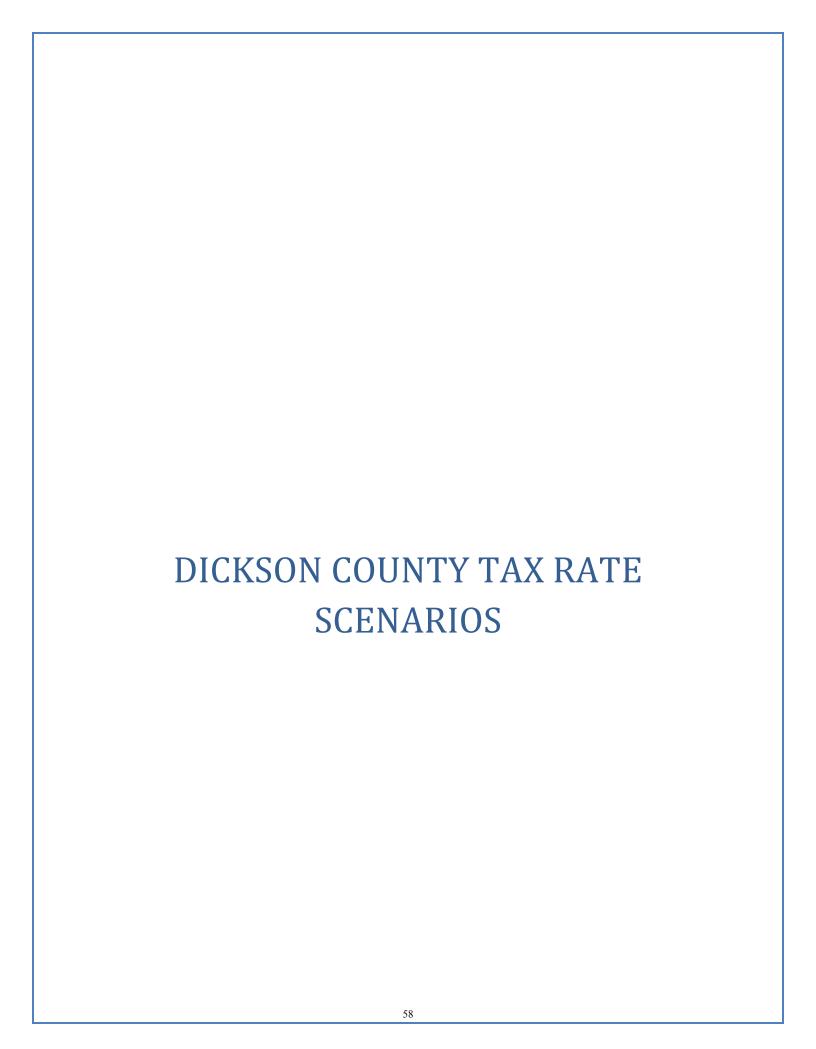


	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue
	.25% Rate	.50% Rate	.75% Rate	1% Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$39.0	\$78.0	\$117.0	\$156.0
2019	\$40.6	\$81.3	\$121.9	\$162.5
2020	\$42.5	\$84.9	\$127.4	\$169.8
2021	\$44.0	\$88.1	\$132.1	\$176.2
2022	\$45.6	\$91.2	\$136.8	\$182.4
2023	\$47.6	\$95.2	\$142.8	\$190.4
2024	\$49.4	\$98.9	\$148.3	\$197.7
2025	\$51.6	\$103.3	\$154.9	\$206.6
2026	\$53.5	\$107.0	\$160.5	\$214.0
2027	\$55.8	\$111.6	\$167.4	\$223.2
2028	\$58.2	\$116.5	\$174.7	\$232.9
2029	\$60.6	\$121.2	\$181.8	\$242.4
2030	\$63.0	\$125.9	\$188.9	\$251.9
2031	\$65.2	\$130.4	\$195.5	\$260.7
2032	\$67.9	\$135.8	\$203.7	\$271.6
2033	\$70.3	\$140.7	\$211.0	\$281.3
2034	\$73.4	\$146.7	\$220.1	\$293.5
2035	\$76.5	\$152.9	\$229.4	\$305.8
2036	\$79.7	\$159.4	\$239.1	\$318.8
2037	\$83.0	\$166.0	\$249.0	\$331.9
2038	\$86.7	\$173.3	\$260.0	\$346.6
2039	\$89.9	\$179.9	\$269.8	\$359.7
2040	\$93.8	\$187.6	\$281.4	\$375.3
2041	\$97.7	\$195.5	\$293.2	\$391.0
2042	\$102.0	\$204.0	\$306.0	\$408.1
2043	\$106.2	\$212.3	\$318.5	\$424.6
2044	\$110.5	\$221.0	\$331.5	\$442.0
2045	\$114.9	\$229.8	\$344.7	\$459.5
2046	\$119.4	\$238.9	\$358.3	\$477.8
2047	\$124.3	\$248.7	\$373.0	\$497.4

	Property Tax Revenue	Property Tax Revenue	Property Tax Revenue	Property Tax Revenue
	10 Cents Rate	20 Cents Rate	30 Cents Rate	40 Cents Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$30.8	\$61.6	\$92.4	\$123.1
2019	\$31.1	\$62.1	\$93.2	\$124.3
2020	\$31.4	\$62.7	\$94.1	\$125.4
2021	\$32.1	\$64.1	\$96.2	\$128.3
2022	\$32.8	\$65.6	\$98.4	\$131.2
2023	\$33.7	\$67.3	\$100.9	\$134.6
2024	\$34.5	\$69.0	\$103.5	\$138.0
2025	\$35.4	\$70.7	\$106.1	\$141.5
2026	\$36.2	\$72.5	\$108.7	\$144.9
2027	\$36.9	\$73.9	\$110.8	\$147.8
2028	\$37.8	\$75.6	\$113.4	\$151.2
2029	\$38.7	\$77.3	\$116.0	\$154.6
2030	\$39.5	\$79.0	\$118.6	\$158.1
2031	\$40.4	\$80.8	\$121.1	\$161.5
2032	\$41.2	\$82.5	\$123.7	\$164.9
2033	\$42.1	\$84.2	\$126.3	\$168.4
2034	\$43.0	\$85.9	\$128.9	\$171.8
2035	\$43.8	\$87.6	\$131.4	\$175.3
2036	\$44.7	\$89.3	\$134.0	\$178.7
2037	\$45.5	\$91.1	\$136.6	\$182.1
2038	\$46.5	\$93.1	\$139.6	\$186.1
2039	\$47.4	\$94.8	\$142.2	\$189.6
2040	\$48.4	\$96.8	\$145.2	\$193.6
2041	\$49.3	\$98.5	\$147.8	\$197.0
2042	\$50.3	\$100.5	\$150.8	\$201.0
2043	\$51.1	\$102.2	\$153.3	\$204.5
2044	\$52.1	\$104.2	\$156.4	\$208.5
2045	\$53.1	\$106.2	\$159.4	\$212.5
2046	\$54.0	\$108.0	\$161.9	\$215.9
2047	\$55.0	\$110.0	\$164.9	\$219.9

	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue
	.5% Rate	1% Rate	1.5% Rate	2% Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$5,773.0	\$11,546.0	\$17,319.1	\$23,092.1
2019	\$6,160.4	\$12,320.8	\$18,481.2	\$24,641.6
2020	\$6,591.0	\$13,182.0	\$19,773.0	\$26,364.0
2021	\$7,002.3	\$14,004.6	\$21,006.8	\$28,009.1
2022	\$7,453.9	\$14,907.9	\$22,361.8	\$29,815.7
2023	\$7,987.6	\$15,975.3	\$23,962.9	\$31,950.5
2024	\$8,523.6	\$17,047.2	\$25,570.8	\$34,094.4
2025	\$9,109.2	\$18,218.3	\$27,327.5	\$36,436.7
2026	\$9,704.9	\$19,409.8	\$29,114.7	\$38,819.6
2027	\$10,376.5	\$20,753.0	\$31,129.5	\$41,506.0
2028	\$11,077.9	\$22,155.9	\$33,233.8	\$44,311.8
2029	\$11,579.8	\$23,159.5	\$34,739.3	\$46,319.1
2030	\$12,401.9	\$24,803.9	\$37,205.8	\$49,607.7
2031	\$13,055.5	\$26,111.0	\$39,166.6	\$52,222.1
2032	\$13,957.7	\$27,915.3	\$41,873.0	\$55,830.6
2033	\$14,814.7	\$29,629.3	\$44,444.0	\$59,258.6
2034	\$15,985.0	\$31,970.0	\$47,955.0	\$63,940.0
2035	\$17,059.2	\$34,118.4	\$51,177.6	\$68,236.8
2036	\$18,133.9	\$36,267.9	\$54,401.8	\$72,535.7
2037	\$19,055.1	\$38,110.3	\$57,165.4	\$76,220.6
2038	\$19,937.4	\$39,874.8	\$59,812.2	\$79,749.6
2039	\$21,333.0	\$42,666.0	\$63,999.0	\$85,332.0
2040	\$22,587.4	\$45,174.8	\$67,762.2	\$90,349.6
2041	\$23,513.5	\$47,026.9	\$70,540.4	\$94,053.9
2042	\$24,816.1	\$49,632.2	\$74,448.4	\$99,264.5
2043	\$26,200.9	\$52,401.7	\$78,602.6	\$104,803.4
2044	\$27,932.7	\$55,865.5	\$83,798.2	\$111,730.9
2045	\$29,122.7	\$58,245.3	\$87,368.0	\$116,490.7
2046	\$30,773.9	\$61,547.8	\$92,321.8	\$123,095.7
2047	\$32,069.5	\$64,139.0	\$96,208.5	\$128,278.0

Year	Wheel Tax Revenue \$5 Tax Rate (Thousand \$)	Wheel Tax Revenue \$10 Tax Rate (Thousand \$)	Wheel Tax Revenue \$15 Tax Rate (Thousand \$)	Wheel Tax Revenue \$20 Tax Rate (Thousand \$)
2018	\$2,515.7	\$5,031.3	\$7,547.0	\$10,062.6
2019	\$2,556.9	\$5,113.8	\$7,670.7	\$10,227.6
2020	\$2,599.4	\$5,198.7	\$7,798.1	\$10,397.4
2021	\$2,638.1	\$5,276.2	\$7,914.3	\$10,552.4
2022	\$2,673.4	\$5,346.9	\$8,020.3	\$10,693.8
2023	\$2,718.9	\$5,437.8	\$8,156.7	\$10,875.5
2024	\$2,759.1	\$5,518.3	\$8,277.4	\$11,036.5
2025	\$2,806.3	\$5,612.6	\$8,418.9	\$11,225.2
2026	\$2,844.8	\$5,689.5	\$8,534.3	\$11,379.0
2027	\$2,892.5	\$5,785.1	\$8,677.6	\$11,570.2
2028	\$2,938.0	\$5,875.9	\$8,813.9	\$11,751.8
2029	\$2,982.9	\$5,965.8	\$8,948.7	\$11,931.6
2030	\$3,030.9	\$6,061.9	\$9,092.8	\$12,123.7
2031	\$3,076.4	\$6,152.8	\$9,229.2	\$12,305.6
2032	\$3,127.5	\$6,254.9	\$9,382.4	\$12,509.9
2033	\$3,176.9	\$6,353.8	\$9,530.6	\$12,707.5
2034	\$3,222.0	\$6,444.0	\$9,666.0	\$12,888.0
2035	\$3,264.2	\$6,528.4	\$9,792.6	\$13,056.8
2036	\$3,316.4	\$6,632.9	\$9,949.3	\$13,265.7
2037	\$3,366.8	\$6,733.7	\$10,100.5	\$13,467.3
2038	\$3,420.0	\$6,840.1	\$10,260.1	\$13,680.1
2039	\$3,475.8	\$6,951.6	\$10,427.3	\$13,903.1
2040	\$3,525.5	\$7,051.0	\$10,576.4	\$14,101.9
2041	\$3,578.0	\$7,156.0	\$10,734.0	\$14,312.0
2042	\$3,622.7	\$7,245.5	\$10,868.2	\$14,491.0
2043	\$3,674.9	\$7,349.8	\$11,024.7	\$14,699.6
2044	\$3,724.1	\$7,448.3	\$11,172.4	\$14,896.6
2045	\$3,783.6	\$7,567.2	\$11,350.7	\$15,134.3
2046	\$3,847.7	\$7,695.3	\$11,543.0	\$15,390.7
2047	\$3,915.9	\$7,831.7	\$11,747.6	\$15,663.4

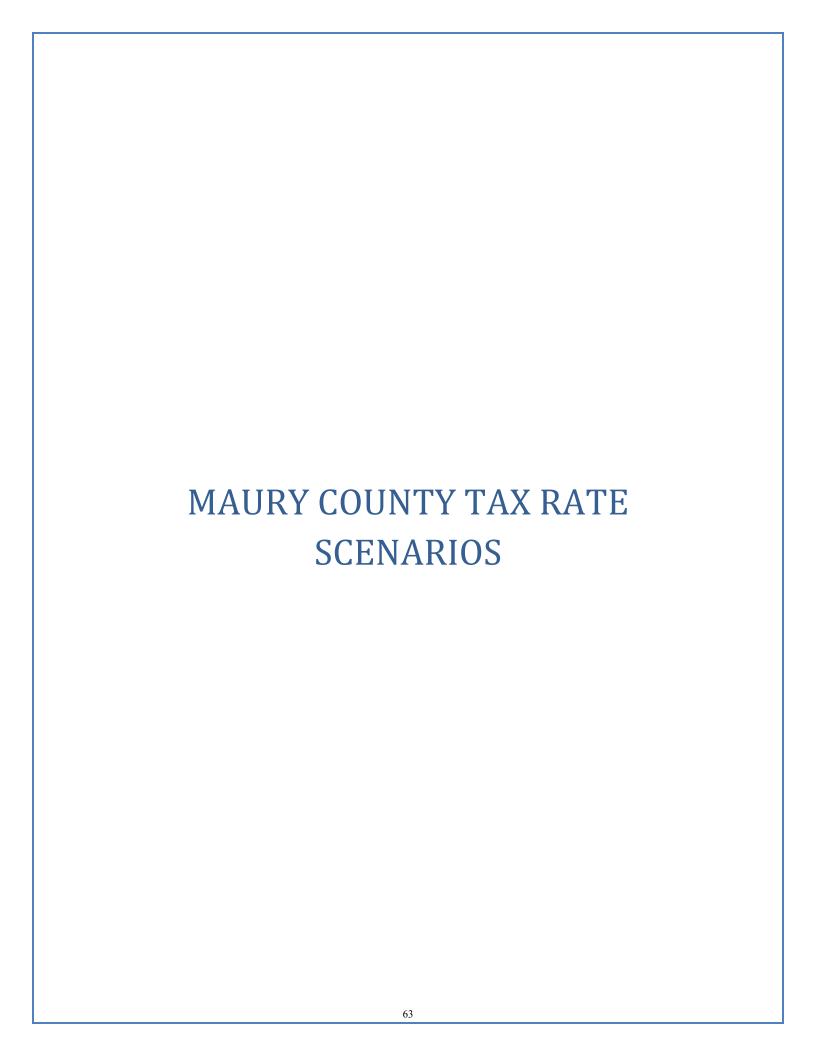


	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue
	.25% Rate	.50% Rate	.75% Rate	1% Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$1.7	\$3.3	\$5.0	\$6.6
2019	\$1.7	\$3.4	\$5.1	\$6.9
2020	\$1.8	\$3.6	\$5.3	\$7.1
2021	\$1.8	\$3.7	\$5.5	\$7.4
2022	\$1.9	\$3.8	\$5.7	\$7.7
2023	\$2.0	\$4.0	\$6.0	\$7.9
2024	\$2.1	\$4.1	\$6.2	\$8.2
2025	\$2.1	\$4.3	\$6.4	\$8.5
2026	\$2.2	\$4.4	\$6.6	\$8.8
2027	\$2.3	\$4.6	\$6.8	\$9.1
2028	\$2.4	\$4.7	\$7.1	\$9.4
2029	\$2.4	\$4.9	\$7.3	\$9.8
2030	\$2.5	\$5.1	\$7.6	\$10.1
2031	\$2.6	\$5.2	\$7.8	\$10.5
2032	\$2.7	\$5.4	\$8.1	\$10.8
2033	\$2.8	\$5.6	\$8.4	\$11.2
2034	\$2.9	\$5.8	\$8.7	\$11.6
2035	\$3.0	\$6.0	\$9.0	\$12.0
2036	\$3.1	\$6.2	\$9.3	\$12.4
2037	\$3.2	\$6.4	\$9.6	\$12.9
2038	\$3.3	\$6.7	\$10.0	\$13.3
2039	\$3.4	\$6.9	\$10.3	\$13.8
2040	\$3.6	\$7.2	\$10.7	\$14.3
2041	\$3.7	\$7.4	\$11.1	\$14.8
2042	\$3.8	\$7.6	\$11.5	\$15.3
2043	\$4.0	\$7.9	\$11.9	\$15.8
2044	\$4.1	\$8.2	\$12.3	\$16.4
2045	\$4.2	\$8.5	\$12.7	\$17.0
2046	\$4.4	\$8.8	\$13.2	\$17.6
2047	\$4.6	\$9.1	\$13.7	\$18.2

	Property Tax Revenue 10 Cents Rate	Property Tax Revenue 20 Cents Rate	Property Tax Revenue 30 Cents Rate	Property Tax Revenue 40 Cents Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$1.1	\$2.2	\$3.3	\$4.4
2019	\$1.1	\$2.2	\$3.3	\$4.5
2020	\$1.1	\$2.3	\$3.4	\$4.5
2021	\$1.1	\$2.3	\$3.4	\$4.6
2022	\$1.2	\$2.3	\$3.5	\$4.7
2023	\$1.2	\$2.4	\$3.5	\$4.7
2024	\$1.2	\$2.4	\$3.6	\$4.8
2025	\$1.2	\$2.4	\$3.7	\$4.9
2026	\$1.2	\$2.5	\$3.7	\$4.9
2027	\$1.2	\$2.5	\$3.7	\$5.0
2028	\$1.3	\$2.5	\$3.8	\$5.0
2029	\$1.3	\$2.6	\$3.8	\$5.1
2030	\$1.3	\$2.6	\$3.9	\$5.2
2031	\$1.3	\$2.6	\$4.0	\$5.3
2032	\$1.3	\$2.7	\$4.0	\$5.4
2033	\$1.4	\$2.7	\$4.1	\$5.4
2034	\$1.4	\$2.7	\$4.1	\$5.5
2035	\$1.4	\$2.8	\$4.2	\$5.6
2036	\$1.4	\$2.8	\$4.3	\$5.7
2037	\$1.4	\$2.9	\$4.3	\$5.7
2038	\$1.5	\$2.9	\$4.4	\$5.8
2039	\$1.5	\$3.0	\$4.4	\$5.9
2040	\$1.5	\$3.0	\$4.5	\$6.0
2041	\$1.5	\$3.0	\$4.6	\$6.1
2042	\$1.5	\$3.1	\$4.6	\$6.2
2043	\$1.6	\$3.1	\$4.7	\$6.2
2044	\$1.6	\$3.2	\$4.7	\$6.3
2045	\$1.6	\$3.2	\$4.8	\$6.4
2046	\$1.6	\$3.3	\$4.9	\$6.5
2047	\$1.7	\$3.3	\$5.0	\$6.6

	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue
	.5% Rate	1% Rate	1.5% Rate	2% Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$68.6	\$137.2	\$205.7	\$274.3
2019	\$72.3	\$144.6	\$216.9	\$289.1
2020	\$75.9	\$151.7	\$227.6	\$303.4
2021	\$78.2	\$156.4	\$234.6	\$312.8
2022	\$80.8	\$161.6	\$242.4	\$323.2
2023	\$83.5	\$167.1	\$250.6	\$334.1
2024	\$86.7	\$173.4	\$260.1	\$346.8
2025	\$90.0	\$180.0	\$270.0	\$360.0
2026	\$93.6	\$187.2	\$280.8	\$374.5
2027	\$97.2	\$194.4	\$291.6	\$388.8
2028	\$101.0	\$201.9	\$302.9	\$403.8
2029	\$104.9	\$209.8	\$314.8	\$419.7
2030	\$108.9	\$217.7	\$326.6	\$435.5
2031	\$112.7	\$225.4	\$338.1	\$450.8
2032	\$116.7	\$233.4	\$350.1	\$466.8
2033	\$120.7	\$241.4	\$362.1	\$482.8
2034	\$124.5	\$249.0	\$373.5	\$498.1
2035	\$128.5	\$256.9	\$385.4	\$513.8
2036	\$132.5	\$265.0	\$397.5	\$530.0
2037	\$136.6	\$273.2	\$409.8	\$546.4
2038	\$140.9	\$281.9	\$422.8	\$563.7
2039	\$145.4	\$290.8	\$436.1	\$581.5
2040	\$150.1	\$300.2	\$450.3	\$600.4
2041	\$153.6	\$307.3	\$460.9	\$614.6
2042	\$158.8	\$317.6	\$476.4	\$635.2
2043	\$163.8	\$327.5	\$491.3	\$655.0
2044	\$168.5	\$337.0	\$505.5	\$674.0
2045	\$173.0	\$346.1	\$519.1	\$692.1
2046	\$177.6	\$355.1	\$532.7	\$710.3
2047	\$182.2	\$364.3	\$546.5	\$728.7

	Wheel Tax Revenue \$5 Tax Rate	Wheel Tax Revenue \$10 Tax Rate	Wheel Tax Revenue \$15 Tax Rate	Wheel Tax Revenue \$20 Tax Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$241.1	\$482.2	\$723.4	\$964.5
2019	\$246.4	\$492.8	\$739.2	\$985.7
2020	\$252.3	\$504.6	\$756.9	\$1,009.1
2021	\$258.5	\$517.0	\$775.5	\$1,033.9
2022	\$264.0	\$527.9	\$791.9	\$1,055.9
2023	\$268.8	\$537.5	\$806.3	\$1,075.1
2024	\$273.2	\$546.4	\$819.6	\$1,092.8
2025	\$277.8	\$555.6	\$833.4	\$1,111.2
2026	\$282.1	\$564.3	\$846.4	\$1,128.6
2027	\$286.5	\$573.0	\$859.4	\$1,145.9
2028	\$290.6	\$581.3	\$871.9	\$1,162.5
2029	\$294.3	\$588.7	\$883.0	\$1,177.4
2030	\$297.9	\$595.8	\$893.7	\$1,191.7
2031	\$301.5	\$603.1	\$904.6	\$1,206.1
2032	\$305.3	\$610.6	\$916.0	\$1,221.3
2033	\$309.3	\$618.6	\$927.9	\$1,237.2
2034	\$312.2	\$624.4	\$936.5	\$1,248.7
2035	\$315.2	\$630.5	\$945.7	\$1,261.0
2036	\$318.4	\$636.8	\$955.2	\$1,273.6
2037	\$321.5	\$643.0	\$964.5	\$1,286.0
2038	\$324.3	\$648.6	\$972.9	\$1,297.2
2039	\$327.5	\$655.0	\$982.5	\$1,310.0
2040	\$330.2	\$660.5	\$990.7	\$1,321.0
2041	\$332.8	\$665.5	\$998.3	\$1,331.0
2042	\$335.5	\$670.9	\$1,006.4	\$1,341.9
2043	\$337.8	\$675.7	\$1,013.5	\$1,351.3
2044	\$339.8	\$679.5	\$1,019.3	\$1,359.1
2045	\$341.8	\$683.5	\$1,025.3	\$1,367.1
2046	\$343.8	\$687.7	\$1,031.5	\$1,375.4
2047	\$346.2	\$692.3	\$1,038.5	\$1,384.7

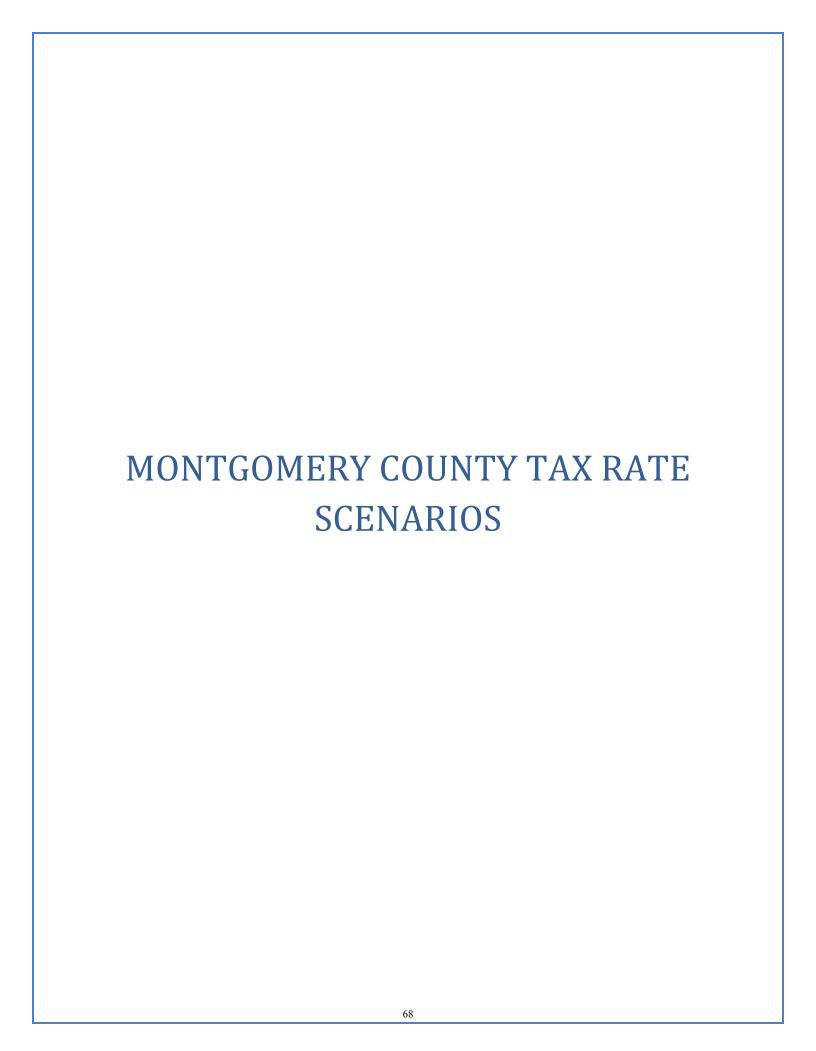


	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue
	.25% Rate	.50% Rate	.75% Rate	1% Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$2.8	\$5.5	\$8.3	\$11.0
2019	\$2.9	\$5.7	\$8.6	\$11.5
2020	\$3.0	\$5.9	\$8.9	\$11.9
2021	\$3.1	\$6.2	\$9.2	\$12.3
2022	\$3.2	\$6.4	\$9.6	\$12.8
2023	\$3.3	\$6.6	\$9.9	\$13.2
2024	\$3.4	\$6.8	\$10.2	\$13.7
2025	\$3.5	\$7.1	\$10.6	\$14.2
2026	\$3.7	\$7.3	\$11.0	\$14.6
2027	\$3.8	\$7.5	\$11.3	\$15.1
2028	\$3.9	\$7.8	\$11.7	\$15.6
2029	\$4.0	\$8.1	\$12.1	\$16.1
2030	\$4.2	\$8.4	\$12.5	\$16.7
2031	\$4.3	\$8.7	\$13.0	\$17.3
2032	\$4.5	\$9.0	\$13.5	\$18.0
2033	\$4.7	\$9.3	\$14.0	\$18.6
2034	\$4.8	\$9.7	\$14.5	\$19.3
2035	\$5.0	\$10.0	\$15.0	\$20.0
2036	\$5.2	\$10.4	\$15.6	\$20.8
2037	\$5.4	\$10.8	\$16.2	\$21.6
2038	\$5.6	\$11.2	\$16.8	\$22.4
2039	\$5.8	\$11.6	\$17.4	\$23.2
2040	\$6.0	\$12.1	\$18.1	\$24.1
2041	\$6.2	\$12.5	\$18.7	\$25.0
2042	\$6.5	\$12.9	\$19.4	\$25.9
2043	\$6.7	\$13.4	\$20.1	\$26.8
2044	\$7.0	\$13.9	\$20.9	\$27.9
2045	\$7.2	\$14.5	\$21.7	\$28.9
2046	\$7.5	\$15.0	\$22.5	\$30.0
2047	\$7.8	\$15.5	\$23.3	\$31.1

	Property Tax Revenue	Property Tax Revenue	Property Tax Revenue	Property Tax Revenue
	10 Cents Rate	20 Cents Rate	30 Cents Rate	40 Cents Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$2.0	\$3.9	\$5.9	\$7.8
2019	\$2.0	\$4.0	\$6.1	\$8.1
2020	\$2.1	\$4.2	\$6.3	\$8.4
2021	\$2.2	\$4.3	\$6.5	\$8.6
2022	\$2.2	\$4.4	\$6.7	\$8.9
2023	\$2.3	\$4.6	\$6.8	\$9.1
2024	\$2.4	\$4.7	\$7.1	\$9.4
2025	\$2.4	\$4.8	\$7.3	\$9.7
2026	\$2.5	\$5.0	\$7.5	\$10.0
2027	\$2.6	\$5.1	\$7.7	\$10.2
2028	\$2.6	\$5.3	\$7.9	\$10.5
2029	\$2.7	\$5.4	\$8.1	\$10.8
2030	\$2.8	\$5.5	\$8.3	\$11.1
2031	\$2.8	\$5.7	\$8.5	\$11.4
2032	\$2.9	\$5.8	\$8.8	\$11.7
2033	\$3.0	\$6.0	\$9.0	\$12.0
2034	\$3.1	\$6.1	\$9.2	\$12.2
2035	\$3.1	\$6.3	\$9.4	\$12.5
2036	\$3.2	\$6.4	\$9.6	\$12.8
2037	\$3.3	\$6.6	\$9.8	\$13.1
2038	\$3.4	\$6.7	\$10.0	\$13.4
2039	\$3.4	\$6.9	\$10.3	\$13.7
2040	\$3.5	\$7.0	\$10.5	\$14.0
2041	\$3.6	\$7.2	\$10.8	\$14.4
2042	\$3.7	\$7.3	\$11.0	\$14.7
2043	\$3.8	\$7.5	\$11.3	\$15.0
2044	\$3.8	\$7.7	\$11.5	\$15.3
2045	\$3.9	\$7.8	\$11.7	\$15.6
2046	\$4.0	\$8.0	\$12.0	\$16.0
2047	\$4.1	\$8.1	\$12.2	\$16.3

	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue
	.5% Rate	1% Rate	1.5% Rate	2% Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$96.6	\$193.1	\$289.7	\$386.3
2019	\$102.9	\$205.8	\$308.8	\$411.7
2020	\$108.8	\$217.6	\$326.4	\$435.1
2021	\$113.9	\$227.8	\$341.7	\$455.6
2022	\$123.5	\$246.9	\$370.4	\$493.9
2023	\$130.4	\$260.8	\$391.2	\$521.6
2024	\$142.0	\$284.1	\$426.1	\$568.2
2025	\$148.6	\$297.2	\$445.7	\$594.3
2026	\$160.9	\$321.7	\$482.6	\$643.5
2027	\$170.6	\$341.3	\$511.9	\$682.5
2028	\$185.5	\$370.9	\$556.4	\$741.8
2029	\$197.5	\$395.0	\$592.5	\$790.0
2030	\$209.5	\$419.0	\$628.5	\$837.9
2031	\$218.6	\$437.2	\$655.8	\$874.4
2032	\$235.2	\$470.4	\$705.6	\$940.8
2033	\$252.6	\$505.2	\$757.9	\$1,010.5
2034	\$271.1	\$542.1	\$813.2	\$1,084.2
2035	\$277.0	\$553.9	\$830.9	\$1,107.9
2036	\$291.1	\$582.2	\$873.4	\$1,164.5
2037	\$301.5	\$603.0	\$904.5	\$1,206.1
2038	\$313.5	\$627.0	\$940.5	\$1,254.1
2039	\$321.0	\$642.1	\$963.1	\$1,284.2
2040	\$338.0	\$676.0	\$1,014.1	\$1,352.1
2041	\$351.6	\$703.2	\$1,054.8	\$1,406.4
2042	\$366.0	\$731.9	\$1,097.9	\$1,463.8
2043	\$381.2	\$762.4	\$1,143.7	\$1,524.9
2044	\$401.7	\$803.4	\$1,205.1	\$1,606.8
2045	\$411.9	\$823.7	\$1,235.6	\$1,647.4
2046	\$423.4	\$846.8	\$1,270.1	\$1,693.5
2047	\$445.0	\$890.0	\$1,335.1	\$1,780.1

	Wheel Tax Revenue \$5 Tax Rate	Wheel Tax Revenue \$10 Tax Rate	Wheel Tax Revenue \$15 Tax Rate	Wheel Tax Revenue \$20 Tax Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$439.7	\$879.4	\$1,319.1	\$1,758.7
2019	\$448.7	\$897.3	\$1,346.0	\$1,794.6
2020	\$453.9	\$907.7	\$1,361.6	\$1,815.5
2021	\$460.4	\$920.9	\$1,381.3	\$1,841.8
2022	\$467.3	\$934.6	\$1,401.9	\$1,869.2
2023	\$476.2	\$952.5	\$1,428.7	\$1,904.9
2024	\$482.4	\$964.7	\$1,447.1	\$1,929.5
2025	\$488.5	\$976.9	\$1,465.4	\$1,953.8
2026	\$494.1	\$988.2	\$1,482.4	\$1,976.5
2027	\$501.4	\$1,002.9	\$1,504.3	\$2,005.7
2028	\$506.2	\$1,012.4	\$1,518.6	\$2,024.8
2029	\$511.3	\$1,022.5	\$1,533.8	\$2,045.0
2030	\$517.6	\$1,035.3	\$1,552.9	\$2,070.6
2031	\$524.4	\$1,048.8	\$1,573.1	\$2,097.5
2032	\$531.2	\$1,062.4	\$1,593.6	\$2,124.8
2033	\$537.0	\$1,074.1	\$1,611.1	\$2,148.1
2034	\$543.3	\$1,086.5	\$1,629.8	\$2,173.1
2035	\$549.5	\$1,099.0	\$1,648.5	\$2,198.1
2036	\$557.6	\$1,115.3	\$1,672.9	\$2,230.6
2037	\$564.3	\$1,128.6	\$1,692.8	\$2,257.1
2038	\$571.1	\$1,142.2	\$1,713.3	\$2,284.4
2039	\$578.4	\$1,156.8	\$1,735.3	\$2,313.7
2040	\$586.5	\$1,172.9	\$1,759.4	\$2,345.8
2041	\$593.1	\$1,186.2	\$1,779.3	\$2,372.3
2042	\$601.3	\$1,202.7	\$1,804.0	\$2,405.3
2043	\$606.9	\$1,213.7	\$1,820.6	\$2,427.5
2044	\$612.6	\$1,225.1	\$1,837.7	\$2,450.3
2045	\$621.3	\$1,242.5	\$1,863.8	\$2,485.1
2046	\$630.6	\$1,261.2	\$1,891.8	\$2,522.3
2047	\$639.9	\$1,279.7	\$1,919.6	\$2,559.4

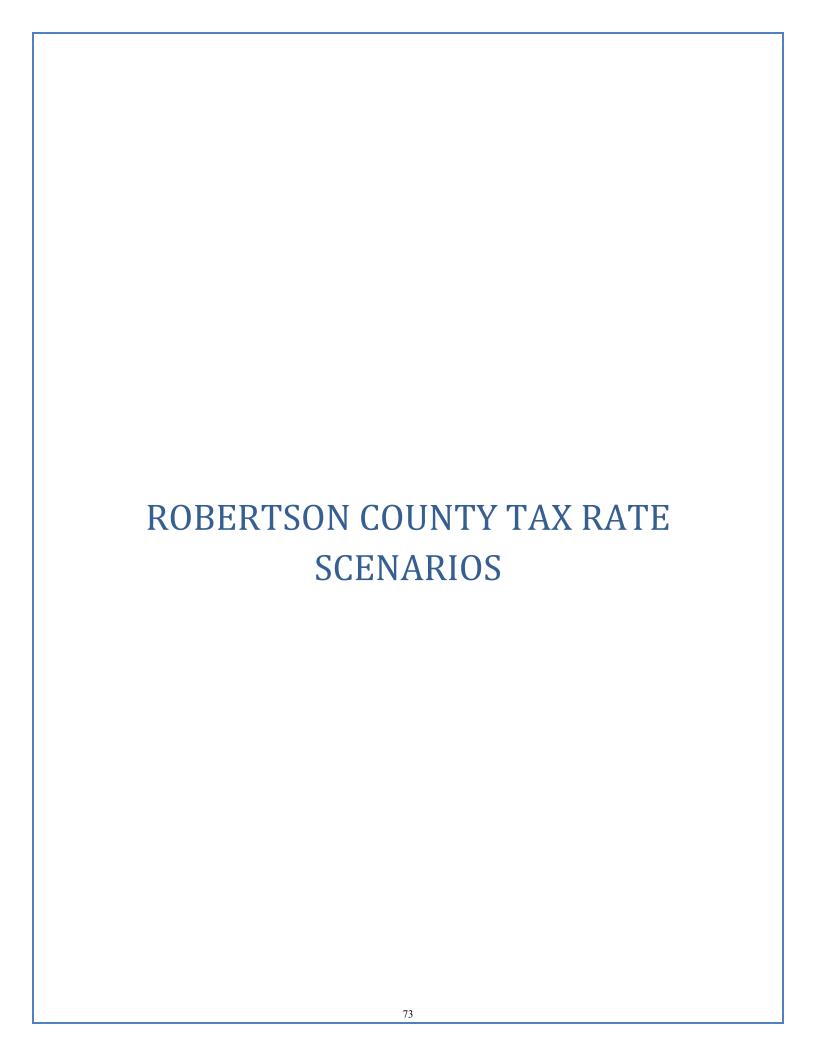


	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue
	.25% Rate	.50% Rate	.75% Rate	1% Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$5.6	\$11.1	\$16.7	\$22.3
2019	\$5.8	\$11.5	\$17.3	\$23.1
2020	\$6.0	\$11.9	\$17.9	\$23.9
2021	\$6.2	\$12.3	\$18.5	\$24.7
2022	\$6.4	\$12.8	\$19.1	\$25.5
2023	\$6.6	\$13.2	\$19.8	\$26.3
2024	\$6.8	\$13.6	\$20.4	\$27.2
2025	\$7.0	\$14.0	\$21.1	\$28.1
2026	\$7.2	\$14.4	\$21.7	\$28.9
2027	\$7.4	\$14.9	\$22.3	\$29.8
2028	\$7.7	\$15.4	\$23.0	\$30.7
2029	\$7.9	\$15.8	\$23.7	\$31.6
2030	\$8.1	\$16.3	\$24.4	\$32.6
2031	\$8.4	\$16.8	\$25.2	\$33.6
2032	\$8.6	\$17.3	\$25.9	\$34.6
2033	\$8.9	\$17.8	\$26.7	\$35.6
2034	\$9.2	\$18.3	\$27.5	\$36.7
2035	\$9.4	\$18.9	\$28.3	\$37.8
2036	\$9.7	\$19.5	\$29.2	\$38.9
2037	\$10.0	\$20.0	\$30.1	\$40.1
2038	\$10.3	\$20.6	\$31.0	\$41.3
2039	\$10.6	\$21.2	\$31.8	\$42.5
2040	\$10.9	\$21.8	\$32.7	\$43.6
2041	\$11.2	\$22.4	\$33.6	\$44.8
2042	\$11.6	\$23.2	\$34.8	\$46.4
2043	\$11.9	\$23.8	\$35.7	\$47.6
2044	\$12.2	\$24.4	\$36.6	\$48.7
2045	\$12.6	\$25.2	\$37.7	\$50.3
2046	\$13.0	\$25.9	\$38.9	\$51.9
2047	\$13.4	\$26.7	\$40.1	\$53.5

	Property Tax Revenue	Property Tax Revenue	Property Tax Revenue	Property Tax Revenue
	10 Cents Rate	20 Cents Rate	30 Cents Rate	40 Cents Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$3.9	\$7.8	\$11.7	\$15.6
2019	\$4.0	\$8.0	\$12.0	\$16.0
2020	\$4.1	\$8.3	\$12.4	\$16.5
2021	\$4.2	\$8.4	\$12.7	\$16.9
2022	\$4.3	\$8.6	\$13.0	\$17.3
2023	\$4.4	\$8.9	\$13.3	\$17.7
2024	\$4.5	\$9.1	\$13.6	\$18.2
2025	\$4.7	\$9.3	\$14.0	\$18.6
2026	\$4.8	\$9.6	\$14.3	\$19.1
2027	\$4.9	\$9.8	\$14.7	\$19.6
2028	\$5.0	\$10.0	\$15.1	\$20.1
2029	\$5.1	\$10.3	\$15.4	\$20.6
2030	\$5.3	\$10.5	\$15.8	\$21.0
2031	\$5.4	\$10.8	\$16.2	\$21.6
2032	\$5.5	\$11.1	\$16.6	\$22.1
2033	\$5.7	\$11.3	\$17.0	\$22.7
2034	\$5.8	\$11.6	\$17.4	\$23.2
2035	\$5.9	\$11.8	\$17.8	\$23.7
2036	\$6.1	\$12.1	\$18.2	\$24.3
2037	\$6.2	\$12.4	\$18.7	\$24.9
2038	\$6.4	\$12.7	\$19.1	\$25.5
2039	\$6.5	\$13.1	\$19.6	\$26.2
2040	\$6.7	\$13.4	\$20.1	\$26.8
2041	\$6.9	\$13.7	\$20.6	\$27.4
2042	\$7.0	\$14.1	\$21.1	\$28.2
2043	\$7.2	\$14.4	\$21.6	\$28.8
2044	\$7.4	\$14.8	\$22.1	\$29.5
2045	\$7.6	\$15.1	\$22.7	\$30.2
2046	\$7.7	\$15.5	\$23.2	\$30.9
2047	\$7.9	\$15.8	\$23.8	\$31.7

	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue
	.5% Rate	1% Rate	1.5% Rate	2% Rate
Year				
	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$313.4	\$626.9	\$940.3	\$1,253.8
2019	\$325.9	\$651.8	\$977.7	\$1,303.6
2020	\$334.1	\$668.2	\$1,002.3	\$1,336.4
2021	\$342.6	\$685.2	\$1,027.7	\$1,370.3
2022	\$350.7	\$701.4	\$1,052.1	\$1,402.8
2023	\$359.6	\$719.2	\$1,078.8	\$1,438.4
2024	\$370.1	\$740.2	\$1,110.4	\$1,480.5
2025	\$380.7	\$761.5	\$1,142.2	\$1,523.0
2026	\$392.6	\$785.2	\$1,177.7	\$1,570.3
2027	\$404.7	\$809.4	\$1,214.1	\$1,618.8
2028	\$417.9	\$835.7	\$1,253.6	\$1,671.5
2029	\$432.8	\$865.7	\$1,298.5	\$1,731.3
2030	\$447.6	\$895.1	\$1,342.7	\$1,790.2
2031	\$463.8	\$927.6	\$1,391.4	\$1,855.2
2032	\$480.8	\$961.5	\$1,442.3	\$1,923.1
2033	\$498.7	\$997.4	\$1,496.1	\$1,994.8
2034	\$516.6	\$1,033.3	\$1,549.9	\$2,066.6
2035	\$535.6	\$1,071.2	\$1,606.7	\$2,142.3
2036	\$555.3	\$1,110.6	\$1,665.8	\$2,221.1
2037	\$575.8	\$1,151.6	\$1,727.4	\$2,303.2
2038	\$597.4	\$1,194.8	\$1,792.2	\$2,389.6
2039	\$620.0	\$1,239.9	\$1,859.9	\$2,479.9
2040	\$642.9	\$1,285.8	\$1,928.7	\$2,571.6
2041	\$668.7	\$1,337.4	\$2,006.1	\$2,674.8
2042	\$695.3	\$1,390.6	\$2,085.9	\$2,781.1
2043	\$722.1	\$1,444.2	\$2,166.3	\$2,888.4
2044	\$749.5	\$1,498.9	\$2,248.4	\$2,997.8
2045	\$777.2	\$1,554.3	\$2,331.5	\$3,108.6
2046	\$805.9	\$1,611.7	\$2,417.6	\$3,223.5
2047	\$835.7	\$1,671.5	\$2,507.2	\$3,343.0

	Wheel Tax Revenue \$5 Tax Rate	Wheel Tax Revenue \$10 Tax Rate	Wheel Tax Revenue \$15 Tax Rate	Wheel Tax Revenue \$20 Tax Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$834.4	\$1,668.8	\$2,503.3	\$3,337.7
2019	\$851.8	\$1,703.6	\$2,555.3	\$3,407.1
2020	\$871.5	\$1,743.0	\$2,614.5	\$3,485.9
2021	\$891.2	\$1,782.5	\$2,673.7	\$3,565.0
2022	\$913.0	\$1,826.1	\$2,739.1	\$3,652.2
2023	\$936.0	\$1,872.1	\$2,808.1	\$3,744.1
2024	\$960.0	\$1,920.1	\$2,880.1	\$3,840.1
2025	\$984.4	\$1,968.8	\$2,953.2	\$3,937.6
2026	\$1,008.5	\$2,017.0	\$3,025.5	\$4,034.1
2027	\$1,033.4	\$2,066.8	\$3,100.1	\$4,133.5
2028	\$1,058.9	\$2,117.8	\$3,176.6	\$4,235.5
2029	\$1,079.9	\$2,159.7	\$3,239.6	\$4,319.5
2030	\$1,098.1	\$2,196.3	\$3,294.4	\$4,392.6
2031	\$1,118.9	\$2,237.9	\$3,356.8	\$4,475.7
2032	\$1,142.1	\$2,284.1	\$3,426.2	\$4,568.2
2033	\$1,162.2	\$2,324.3	\$3,486.5	\$4,648.6
2034	\$1,179.0	\$2,358.0	\$3,537.0	\$4,716.0
2035	\$1,195.2	\$2,390.3	\$3,585.5	\$4,780.7
2036	\$1,214.2	\$2,428.3	\$3,642.5	\$4,856.7
2037	\$1,234.2	\$2,468.5	\$3,702.7	\$4,937.0
2038	\$1,254.3	\$2,508.7	\$3,763.0	\$5,017.4
2039	\$1,275.5	\$2,550.9	\$3,826.4	\$5,101.9
2040	\$1,294.1	\$2,588.2	\$3,882.3	\$5,176.5
2041	\$1,313.2	\$2,626.4	\$3,939.6	\$5,252.8
2042	\$1,332.8	\$2,665.5	\$3,998.3	\$5,331.1
2043	\$1,350.6	\$2,701.1	\$4,051.7	\$5,402.3
2044	\$1,366.4	\$2,732.9	\$4,099.3	\$5,465.8
2045	\$1,381.7	\$2,763.4	\$4,145.1	\$5,526.8
2046	\$1,397.5	\$2,795.0	\$4,192.5	\$5,590.0
2047	\$1,413.9	\$2,827.7	\$4,241.6	\$5,655.4

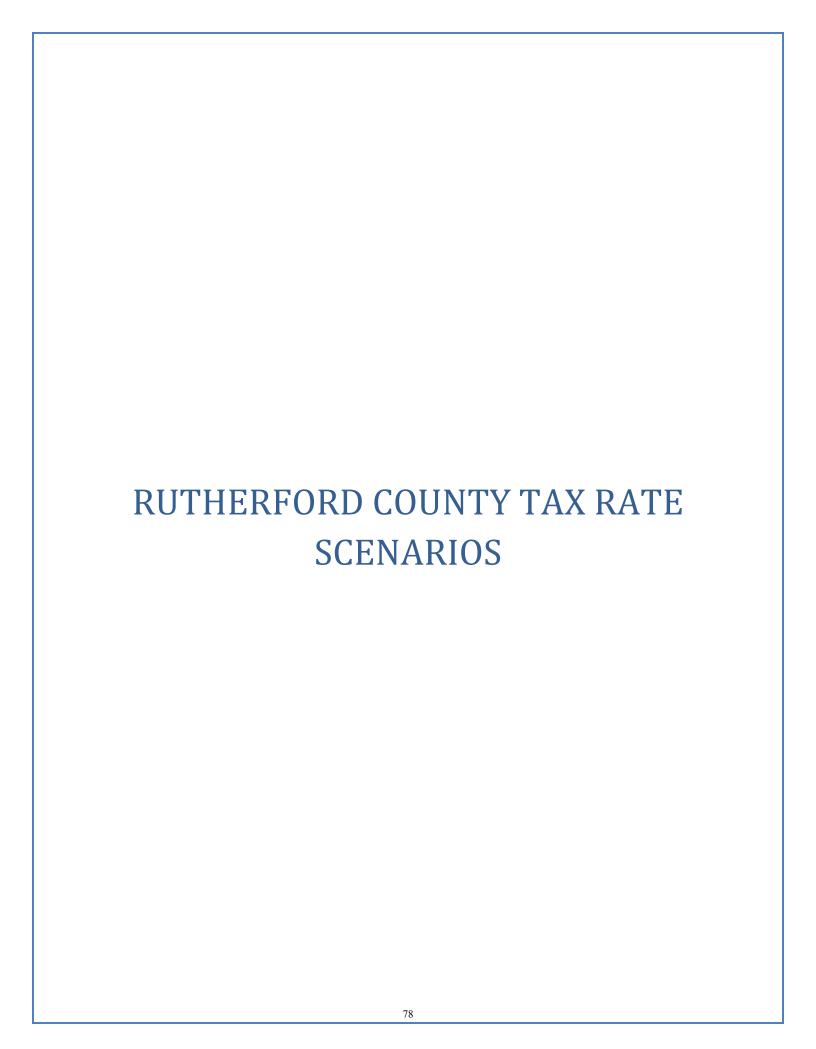


	Sales Tax Revenue .25% Rate	Sales Tax Revenue .50% Rate	Sales Tax Revenue .75% Rate	Sales Tax Revenue 1% Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$1.7	\$3.4	\$5.1	\$6.9
2019	\$1.8	\$3.6	\$5.4	\$7.1
2020	\$1.9	\$3.7	\$5.6	\$7.4
2021	\$1.9	\$3.8	\$5.8	\$7.7
2022	\$2.0	\$4.0	\$6.0	\$8.0
2023	\$2.1	\$4.1	\$6.2	\$8.3
2024	\$2.1	\$4.3	\$6.4	\$8.6
2025	\$2.2	\$4.5	\$6.7	\$8.9
2026	\$2.3	\$4.6	\$6.9	\$9.3
2027	\$2.4	\$4.8	\$7.2	\$9.6
2028	\$2.5	\$5.0	\$7.4	\$9.9
2029	\$2.6	\$5.1	\$7.7	\$10.3
2030	\$2.7	\$5.3	\$8.0	\$10.7
2031	\$2.8	\$5.5	\$8.3	\$11.1
2032	\$2.9	\$5.7	\$8.6	\$11.5
2033	\$3.0	\$5.9	\$8.9	\$11.9
2034	\$3.1	\$6.2	\$9.2	\$12.3
2035	\$3.2	\$6.4	\$9.6	\$12.8
2036	\$3.3	\$6.6	\$9.9	\$13.2
2037	\$3.4	\$6.8	\$10.3	\$13.7
2038	\$3.5	\$7.1	\$10.6	\$14.1
2039	\$3.7	\$7.3	\$11.0	\$14.6
2040	\$3.8	\$7.6	\$11.4	\$15.2
2041	\$3.9	\$7.8	\$11.8	\$15.7
2042	\$4.1	\$8.1	\$12.2	\$16.2
2043	\$4.2	\$8.4	\$12.6	\$16.8
2044	\$4.3	\$8.7	\$13.0	\$17.4
2045	\$4.5	\$9.0	\$13.5	\$18.0
2046	\$4.6	\$9.3	\$13.9	\$18.6
2047	\$4.8	\$9.6	\$14.4	\$19.2

	Property Tax Revenue 10 Cents Rate	Property Tax Revenue 20 Cents Rate	Property Tax Revenue 30 Cents Rate	Property Tax Revenue 40 Cents Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$1.5	\$2.9	\$4.4	\$5.8
2019	\$1.5	\$3.0	\$4.4	\$5.9
2020	\$1.5	\$3.0	\$4.5	\$6.0
2021	\$1.5	\$3.1	\$4.6	\$6.1
2022	\$1.6	\$3.1	\$4.7	\$6.2
2023	\$1.6	\$3.2	\$4.8	\$6.4
2024	\$1.6	\$3.3	\$4.9	\$6.5
2025	\$1.7	\$3.3	\$5.0	\$6.7
2026	\$1.7	\$3.4	\$5.1	\$6.8
2027	\$1.7	\$3.5	\$5.2	\$7.0
2028	\$1.8	\$3.6	\$5.3	\$7.1
2029	\$1.8	\$3.6	\$5.5	\$7.3
2030	\$1.9	\$3.7	\$5.6	\$7.4
2031	\$1.9	\$3.8	\$5.7	\$7.6
2032	\$2.0	\$3.9	\$5.9	\$7.8
2033	\$2.0	\$4.0	\$6.0	\$8.0
2034	\$2.0	\$4.1	\$6.1	\$8.2
2035	\$2.1	\$4.2	\$6.3	\$8.4
2036	\$2.1	\$4.3	\$6.4	\$8.6
2037	\$2.2	\$4.4	\$6.6	\$8.8
2038	\$2.2	\$4.5	\$6.7	\$9.0
2039	\$2.3	\$4.6	\$6.9	\$9.2
2040	\$2.4	\$4.7	\$7.1	\$9.4
2041	\$2.4	\$4.8	\$7.2	\$9.6
2042	\$2.5	\$4.9	\$7.4	\$9.8
2043	\$2.5	\$5.0	\$7.6	\$10.1
2044	\$2.6	\$5.2	\$7.7	\$10.3
2045	\$2.7	\$5.3	\$8.0	\$10.6
2046	\$2.7	\$5.4	\$8.1	\$10.8
2047	\$2.8	\$5.5	\$8.3	\$11.1

	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue
	.5% Rate	1% Rate	1.5% Rate	2% Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$49.8	\$99.5	\$149.3	\$199.0
2019	\$53.5	\$107.0	\$160.5	\$214.1
2020	\$57.6	\$115.2	\$172.7	\$230.3
2021	\$61.9	\$123.9	\$185.8	\$247.7
2022	\$66.4	\$132.7	\$199.1	\$265.5
2023	\$71.0	\$142.0	\$213.0	\$284.0
2024	\$75.9	\$151.8	\$227.7	\$303.6
2025	\$81.0	\$162.0	\$243.0	\$324.0
2026	\$86.2	\$172.5	\$258.7	\$345.0
2027	\$92.1	\$184.1	\$276.2	\$368.3
2028	\$98.0	\$196.1	\$294.1	\$392.2
2029	\$104.3	\$208.6	\$312.9	\$417.3
2030	\$110.9	\$221.7	\$332.6	\$443.4
2031	\$117.6	\$235.2	\$352.7	\$470.3
2032	\$124.7	\$249.4	\$374.1	\$498.8
2033	\$132.2	\$264.3	\$396.5	\$528.6
2034	\$140.0	\$280.0	\$420.0	\$560.0
2035	\$148.2	\$296.4	\$444.6	\$592.8
2036	\$156.4	\$312.9	\$469.3	\$625.8
2037	\$165.0	\$330.0	\$495.0	\$660.0
2038	\$174.0	\$348.0	\$521.9	\$695.9
2039	\$183.1	\$366.2	\$549.3	\$732.5
2040	\$192.7	\$385.4	\$578.1	\$770.8
2041	\$201.7	\$403.4	\$605.1	\$806.8
2042	\$210.9	\$421.8	\$632.6	\$843.5
2043	\$220.6	\$441.2	\$661.8	\$882.4
2044	\$230.8	\$461.6	\$692.4	\$923.2
2045	\$241.5	\$483.0	\$724.6	\$966.1
2046	\$252.5	\$505.1	\$757.6	\$1,010.1
2047	\$263.7	\$527.5	\$791.2	\$1,054.9

	Wheel Tax Revenue	Wheel Tax Revenue	Wheel Tax Revenue	Wheel Tax Revenue
	\$5 Tax Rate	\$10 Tax Rate	\$15 Tax Rate	\$20 Tax Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$325.4	\$650.7	\$976.1	\$1,301.5
2019	\$331.7	\$663.5	\$995.2	\$1,327.0
2020	\$337.3	\$674.6	\$1,012.0	\$1,349.3
2021	\$343.2	\$686.3	\$1,029.5	\$1,372.6
2022	\$348.3	\$696.7	\$1,045.0	\$1,393.3
2023	\$353.2	\$706.5	\$1,059.7	\$1,413.0
2024	\$357.7	\$715.4	\$1,073.1	\$1,430.8
2025	\$362.3	\$724.6	\$1,086.9	\$1,449.2
2026	\$366.1	\$732.3	\$1,098.4	\$1,464.5
2027	\$370.1	\$740.2	\$1,110.3	\$1,480.4
2028	\$373.6	\$747.3	\$1,120.9	\$1,494.6
2029	\$377.5	\$754.9	\$1,132.4	\$1,509.8
2030	\$381.0	\$762.1	\$1,143.1	\$1,524.2
2031	\$385.5	\$771.0	\$1,156.5	\$1,542.0
2032	\$390.2	\$780.5	\$1,170.7	\$1,561.0
2033	\$394.8	\$789.6	\$1,184.4	\$1,579.2
2034	\$399.1	\$798.1	\$1,197.2	\$1,596.3
2035	\$403.0	\$806.0	\$1,209.0	\$1,612.0
2036	\$406.3	\$812.7	\$1,219.0	\$1,625.4
2037	\$410.3	\$820.6	\$1,230.8	\$1,641.1
2038	\$414.2	\$828.4	\$1,242.5	\$1,656.7
2039	\$418.5	\$837.0	\$1,255.5	\$1,674.0
2040	\$422.6	\$845.2	\$1,267.9	\$1,690.5
2041	\$426.6	\$853.2	\$1,279.7	\$1,706.3
2042	\$430.9	\$861.9	\$1,292.8	\$1,723.7
2043	\$435.6	\$871.1	\$1,306.7	\$1,742.2
2044	\$439.1	\$878.2	\$1,317.3	\$1,756.3
2045	\$442.5	\$885.1	\$1,327.6	\$1,770.1
2046	\$446.2	\$892.5	\$1,338.7	\$1,785.0
2047	\$450.5	\$901.0	\$1,351.5	\$1,802.0

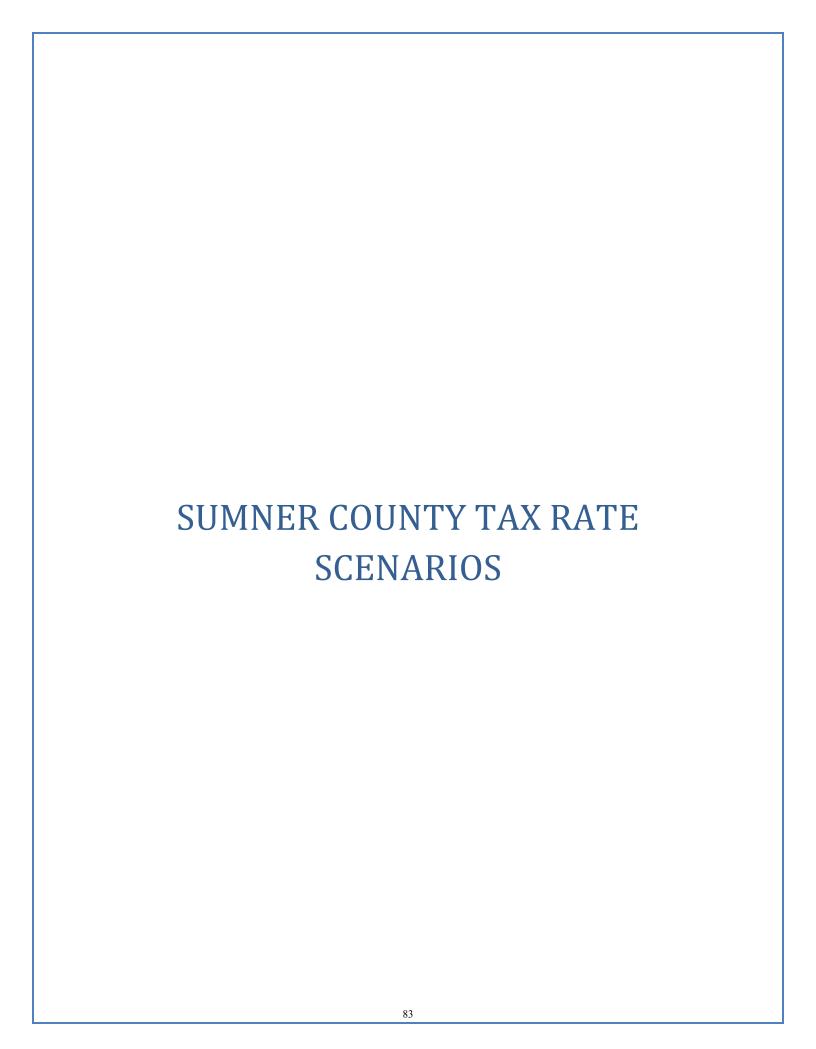


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	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue
	.25% Rate	.50% Rate	.75% Rate	1% Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$11.1	\$22.2	\$33.3	\$44.4
2019	\$11.7	\$23.5	\$35.2	\$46.9
2020	\$12.4	\$24.7	\$37.1	\$49.5
2021	\$13.1	\$26.1	\$39.2	\$52.3
2022	\$13.8	\$27.6	\$41.4	\$55.2
2023	\$14.6	\$29.1	\$43.7	\$58.3
2024	\$15.4	\$30.8	\$46.2	\$61.6
2025	\$16.3	\$32.6	\$48.9	\$65.2
2026	\$17.2	\$34.4	\$51.5	\$68.7
2027	\$18.1	\$36.1	\$54.2	\$72.3
2028	\$19.1	\$38.1	\$57.2	\$76.2
2029	\$20.1	\$40.2	\$60.4	\$80.5
2030	\$21.3	\$42.6	\$63.8	\$85.1
2031	\$22.5	\$45.0	\$67.6	\$90.1
2032	\$23.8	\$47.5	\$71.3	\$95.1
2033	\$25.0	\$50.0	\$75.0	\$100.1
2034	\$26.4	\$52.9	\$79.3	\$105.8
2035	\$27.9	\$55.7	\$83.6	\$111.5
2036	\$29.4	\$58.8	\$88.1	\$117.5
2037	\$31.0	\$62.0	\$92.9	\$123.9
2038	\$32.6	\$65.2	\$97.7	\$130.3
2039	\$34.4	\$68.7	\$103.1	\$137.5
2040	\$36.1	\$72.3	\$108.4	\$144.6
2041	\$37.9	\$75.8	\$113.8	\$151.7
2042	\$39.8	\$79.6	\$119.4	\$159.2
2043	\$41.8	\$83.7	\$125.5	\$167.4
2044	\$43.9	\$87.8	\$131.7	\$175.6
2045	\$46.1	\$92.2	\$138.3	\$184.5
2046	\$48.3	\$96.7	\$145.0	\$193.4
2047	\$50.7	\$101.3	\$152.0	\$202.6

	Property Tax Revenue	Property Tax Revenue	Property Tax Revenue	Property Tax Revenue
	10 Cents Rate	20 Cents Rate	30 Cents Rate	40 Cents Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$7.1	\$14.2	\$21.3	\$28.4
2019	\$7.3	\$14.6	\$21.9	\$29.2
2020	\$7.5	\$15.1	\$22.6	\$30.1
2021	\$7.8	\$15.5	\$23.3	\$31.1
2022	\$8.0	\$16.0	\$24.1	\$32.1
2023	\$8.3	\$16.6	\$24.9	\$33.2
2024	\$8.6	\$17.2	\$25.7	\$34.3
2025	\$8.9	\$17.7	\$26.6	\$35.5
2026	\$9.2	\$18.3	\$27.5	\$36.7
2027	\$9.5	\$18.9	\$28.4	\$37.9
2028	\$9.8	\$19.5	\$29.3	\$39.0
2029	\$10.1	\$20.2	\$30.3	\$40.4
2030	\$10.3	\$20.6	\$30.9	\$41.2
2031	\$10.7	\$21.4	\$32.1	\$42.8
2032	\$11.0	\$22.0	\$33.0	\$44.0
2033	\$11.3	\$22.6	\$33.9	\$45.2
2034	\$11.6	\$23.2	\$34.8	\$46.4
2035	\$12.0	\$24.0	\$36.0	\$48.0
2036	\$12.3	\$24.6	\$36.9	\$49.2
2037	\$12.7	\$25.4	\$38.1	\$50.8
2038	\$13.0	\$26.0	\$39.0	\$52.0
2039	\$13.4	\$26.8	\$40.2	\$53.6
2040	\$13.8	\$27.6	\$41.4	\$55.2
2041	\$14.2	\$28.4	\$42.6	\$56.8
2042	\$14.6	\$29.2	\$43.8	\$58.4
2043	\$15.0	\$30.0	\$45.0	\$60.0
2044	\$15.4	\$30.8	\$46.2	\$61.6
2045	\$15.8	\$31.6	\$47.4	\$63.2
2046	\$16.2	\$32.4	\$48.6	\$64.8
2047	\$16.6	\$33.2	\$49.8	\$66.4

	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue
	.5% Rate	1% Rate	1.5% Rate	2% Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$319.9	\$639.7	\$959.6	\$1,279.4
2019	\$344.3	\$688.7	\$1,033.0	\$1,377.3
2020	\$371.8	\$743.5	\$1,115.3	\$1,487.1
2021	\$398.9	\$797.8	\$1,196.7	\$1,595.6
2022	\$426.9	\$853.8	\$1,280.6	\$1,707.5
2023	\$455.3	\$910.6	\$1,365.9	\$1,821.1
2024	\$485.0	\$969.9	\$1,454.9	\$1,939.9
2025	\$515.7	\$1,031.4	\$1,547.2	\$2,062.9
2026	\$547.5	\$1,095.0	\$1,642.6	\$2,190.1
2027	\$579.7	\$1,159.4	\$1,739.0	\$2,318.7
2028	\$613.0	\$1,225.9	\$1,838.9	\$2,451.8
2029	\$647.6	\$1,295.2	\$1,942.8	\$2,590.4
2030	\$683.4	\$1,366.8	\$2,050.2	\$2,733.6
2031	\$720.4	\$1,440.8	\$2,161.3	\$2,881.7
2032	\$758.7	\$1,517.4	\$2,276.1	\$3,034.8
2033	\$798.1	\$1,596.3	\$2,394.4	\$3,192.5
2034	\$838.7	\$1,677.5	\$2,516.2	\$3,354.9
2035	\$880.5	\$1,761.0	\$2,641.5	\$3,522.1
2036	\$923.7	\$1,847.4	\$2,771.1	\$3,694.8
2037	\$968.3	\$1,936.6	\$2,904.9	\$3,873.2
2038	\$1,014.5	\$2,029.1	\$3,043.6	\$4,058.1
2039	\$1,062.3	\$2,124.7	\$3,187.0	\$4,249.3
2040	\$1,112.0	\$2,223.9	\$3,335.9	\$4,447.9
2041	\$1,163.2	\$2,326.4	\$3,489.7	\$4,652.9
2042	\$1,216.8	\$2,433.7	\$3,650.5	\$4,867.4
2043	\$1,265.0	\$2,530.1	\$3,795.1	\$5,060.1
2044	\$1,325.3	\$2,650.6	\$3,975.8	\$5,301.1
2045	\$1,385.5	\$2,771.0	\$4,156.5	\$5,542.1
2046	\$1,445.8	\$2,891.5	\$4,337.3	\$5,783.0
2047	\$1,506.0	\$3,012.0	\$4,518.0	\$6,024.0

	Wheel Tax Revenue	Wheel Tax Revenue	Wheel Tax Revenue	Wheel Tax Revenue
Vaar	\$5 Tax Rate	\$10 Tax Rate	\$15 Tax Rate	\$20 Tax Rate
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)
2018	\$1,113.5	\$2,227.0	\$3,340.5	\$4,454.0
2019	\$1,139.6	\$2,279.1	\$3,418.7	\$4,558.2
2020	\$1,167.0	\$2,334.0	\$3,501.1	\$4,668.1
2021	\$1,196.0	\$2,391.9	\$3,587.9	\$4,783.9
2022	\$1,226.3	\$2,452.7	\$3,679.0	\$4,905.4
2023	\$1,259.9	\$2,519.9	\$3,779.8	\$5,039.7
2024	\$1,288.8	\$2,577.6	\$3,866.4	\$5,155.3
2025	\$1,319.0	\$2,638.1	\$3,957.1	\$5,276.1
2026	\$1,348.0	\$2,696.0	\$4,044.1	\$5,392.1
2027	\$1,376.1	\$2,752.2	\$4,128.2	\$5,504.3
2028	\$1,401.6	\$2,803.3	\$4,204.9	\$5,606.5
2029	\$1,432.4	\$2,864.8	\$4,297.3	\$5,729.7
2030	\$1,467.6	\$2,935.3	\$4,402.9	\$5,870.6
2031	\$1,498.9	\$2,997.9	\$4,496.8	\$5,995.7
2032	\$1,527.8	\$3,055.5	\$4,583.3	\$6,111.1
2033	\$1,565.1	\$3,130.2	\$4,695.4	\$6,260.5
2034	\$1,598.5	\$3,197.0	\$4,795.4	\$6,393.9
2035	\$1,635.7	\$3,271.5	\$4,907.2	\$6,543.0
2036	\$1,668.7	\$3,337.4	\$5,006.1	\$6,674.8
2037	\$1,699.3	\$3,398.6	\$5,097.9	\$6,797.2
2038	\$1,727.3	\$3,454.6	\$5,181.8	\$6,909.1
2039	\$1,757.8	\$3,515.7	\$5,273.5	\$7,031.3
2040	\$1,789.1	\$3,578.2	\$5,367.2	\$7,156.3
2041	\$1,817.5	\$3,635.1	\$5,452.6	\$7,270.2
2042	\$1,847.5	\$3,694.9	\$5,542.4	\$7,389.9
2043	\$1,877.9	\$3,755.7	\$5,633.6	\$7,511.4
2044	\$1,908.1	\$3,816.1	\$5,724.2	\$7,632.2
2045	\$1,940.7	\$3,881.4	\$5,822.1	\$7,762.8
2046	\$1,973.2	\$3,946.5	\$5,919.7	\$7,893.0
2047	\$2,008.2	\$4,016.3	\$6,024.5	\$8,032.6

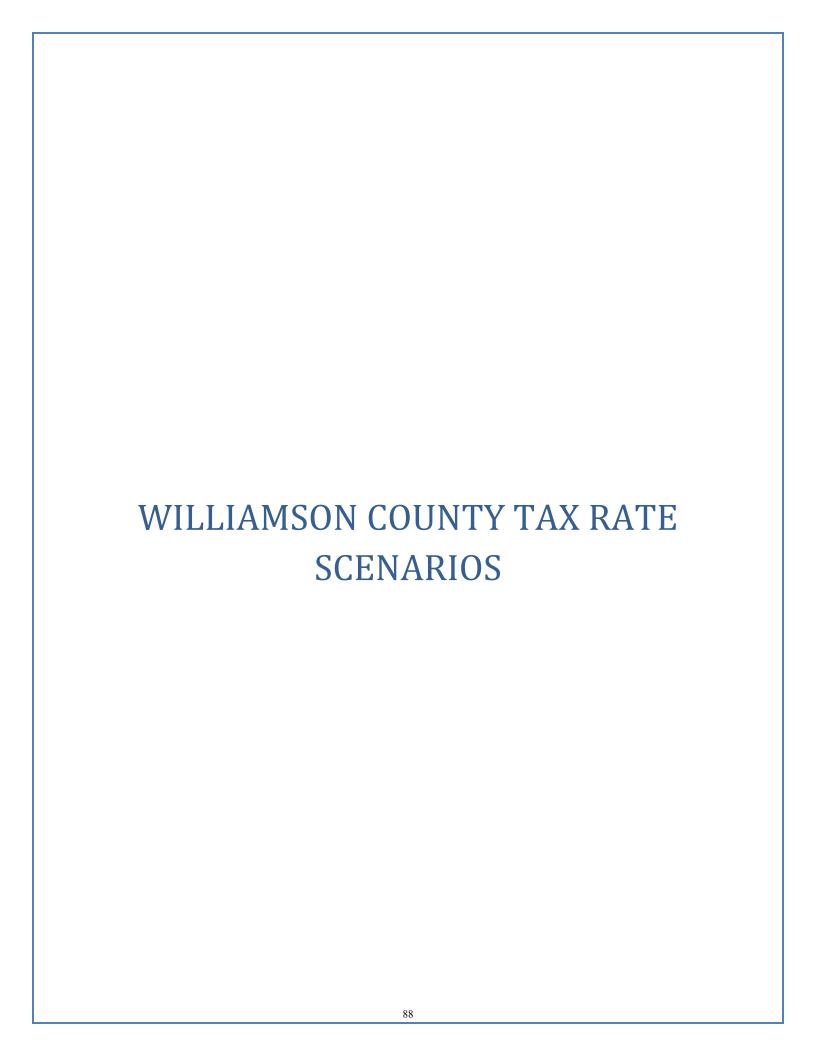


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	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue
	.25% Rate	.50% Rate	.75% Rate	1% Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$4.7	\$9.5	\$14.2	\$18.9
2019	\$5.0	\$10.0	\$14.9	\$19.9
2020	\$5.2	\$10.5	\$15.7	\$20.9
2021	\$5.5	\$11.1	\$16.6	\$22.2
2022	\$5.9	\$11.7	\$17.6	\$23.4
2023	\$6.2	\$12.4	\$18.6	\$24.8
2024	\$6.5	\$13.1	\$19.6	\$26.1
2025	\$6.9	\$13.8	\$20.6	\$27.5
2026	\$7.2	\$14.4	\$21.7	\$28.9
2027	\$7.6	\$15.2	\$22.8	\$30.3
2028	\$8.0	\$15.9	\$23.9	\$31.9
2029	\$8.4	\$16.8	\$25.1	\$33.5
2030	\$8.8	\$17.6	\$26.5	\$35.3
2031	\$9.3	\$18.6	\$27.9	\$37.2
2032	\$9.8	\$19.5	\$29.3	\$39.1
2033	\$10.3	\$20.6	\$30.8	\$41.1
2034	\$10.8	\$21.6	\$32.5	\$43.3
2035	\$11.4	\$22.7	\$34.1	\$45.4
2036	\$11.9	\$23.8	\$35.8	\$47.7
2037	\$12.6	\$25.2	\$37.8	\$50.4
2038	\$13.2	\$26.3	\$39.5	\$52.7
2039	\$13.9	\$27.7	\$41.6	\$55.4
2040	\$14.5	\$29.1	\$43.6	\$58.1
2041	\$15.3	\$30.7	\$46.0	\$61.3
2042	\$16.0	\$32.0	\$48.0	\$64.0
2043	\$16.8	\$33.6	\$50.4	\$67.2
2044	\$17.6	\$35.2	\$52.8	\$70.4
2045	\$18.4	\$36.8	\$55.2	\$73.6
2046	\$19.3	\$38.6	\$57.9	\$77.2
2047	\$20.2	\$40.4	\$60.6	\$80.8

	Property Tax Revenue	Property Tax Revenue	Property Tax Revenue	Property Tax Revenue	
	10 Cents Rate	20 Cents Rate	30 Cents Rate	40 Cents Rate	
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)	
2018	\$4.5	\$9.0	\$13.4	\$17.9	
2019	\$4.5	\$9.1	\$13.6	\$18.2	
2020	\$4.6	\$9.2	\$13.9	\$18.5	
2021	\$4.7	\$9.5	\$14.2	\$19.0	
2022	\$4.9	\$9.8	\$14.6	\$19.5	
2023	\$5.0	\$10.1	\$15.1	\$20.2	
2024	\$5.2	\$10.4	\$15.6	\$20.8	
2025	\$5.4	\$10.7	\$16.1	\$21.5	
2026	\$5.5	\$11.1	\$16.6	\$22.2	
2027	\$5.7	\$11.4	\$17.1	\$22.8	
2028	\$5.9	\$11.8	\$17.6	\$23.5	
2029	\$6.1	\$12.1	\$18.2	\$24.2	
2030	\$6.2	\$12.4	\$18.6	\$24.8	
2031	\$6.4	\$12.8	\$19.2	\$25.6	
2032	\$6.6	\$13.2	\$19.7	\$26.3	
2033	\$6.8	\$13.5	\$20.3	\$27.0	
2034	\$6.9	\$13.9	\$20.8	\$27.7	
2035	\$7.1	\$14.2	\$21.3	\$28.4	
2036	\$7.3	\$14.6	\$21.9	\$29.2	
2037	\$7.5	\$15.0	\$22.5	\$30.0	
2038	\$7.7	\$15.4	\$23.1	\$30.8	
2039	\$7.9	\$15.8	\$23.7	\$31.6	
2040	\$8.1	\$16.2	\$24.4	\$32.5	
2041	\$8.3	\$16.7	\$25.0	\$33.4	
2042	\$8.6	\$17.1	\$25.7	\$34.2	
2043	\$8.8	\$17.6	\$26.3	\$35.1	
2044	\$9.0	\$18.0	\$27.0	\$36.0	
2045	\$9.2	\$18.4	\$27.7	\$36.9	
2046	\$9.4	\$18.9	\$28.3	\$37.8	
2047	\$9.7	\$19.3	\$29.0	\$38.7	

	Hotel Tax Revenue .5% Rate	Hotel Tax Revenue 1% Rate	Hotel Tax Revenue Hotel Tax Revenue 1.5% Rate 2% Rate		
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)	
2018	\$72.4	\$144.8	\$217.2	\$289.6	
2019	\$76.9	\$153.8	\$230.7	\$307.6	
2020	\$81.5	\$163.1	\$244.6	\$326.1	
2021	\$86.7	\$173.4	\$260.0	\$346.7	
2022	\$92.3	\$184.6	\$276.9	\$369.2	
2023	\$98.4	\$196.9	\$295.3	\$393.8	
2024	\$105.0	\$210.0	\$315.0	\$420.0	
2025	\$111.8	\$223.7	\$335.5	\$447.3	
2026	\$119.0	\$238.0	\$357.0	\$475.9	
2027	\$126.6	\$253.1	\$379.7	\$506.3	
2028	\$134.6	\$269.2	\$403.8	\$538.4	
2029	\$143.2	\$286.3	\$429.5	\$572.6	
2030	\$151.9	\$303.8	\$455.7	\$607.6	
2031	\$160.7	\$321.3	\$482.0	\$642.7	
2032	\$169.6	\$339.2	\$508.8	\$678.4	
2033	\$178.9	\$357.9	\$536.8	\$715.7	
2034	\$188.8	\$377.6	\$566.3	\$755.1	
2035	\$199.1	\$398.2	\$597.2	\$796.3	
2036	\$209.8	\$419.5	\$629.3	\$839.0	
2037	\$221.0	\$441.9	\$662.9	\$883.8	
2038	\$233.5	\$467.0	\$700.4	\$933.9	
2039	\$246.2	\$492.4	\$738.6	\$984.8	
2040	\$259.3	\$518.7	\$778.0	\$1,037.3	
2041	\$273.0	\$546.1	\$819.1	\$1,092.2	
2042	\$287.2	\$574.4	\$861.7	\$1,148.9	
2043	\$299.3	\$598.7	\$898.0	\$1,197.4	
2044	\$311.3	\$622.7	\$934.0	\$1,245.4	
2045	\$321.4	\$642.7	\$964.1	\$1,285.5	
2046	\$331.7	\$663.3	\$995.0	\$1,326.6	
2047	\$341.9	\$683.8	\$1,025.7	\$1,367.6	

Wheel Tax Revenue		Wheel Tax Revenue	Wheel Tax Revenue	Wheel Tax Revenue	
	\$5 Tax Rate	\$10 Tax Rate	\$15 Tax Rate	\$20 Tax Rate	
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)	
2018	\$735.3	\$1,470.5	\$2,205.8	\$2,941.0	
2019	\$750.8	\$1,501.5	\$2,252.3	\$3,003.1	
2020	\$768.7	\$1,537.4	\$2,306.1	\$3,074.8	
2021	\$785.4	\$1,570.8	\$2,356.2	\$3,141.6	
2022	\$802.7	\$1,605.5	\$2,408.2	\$3,211.0	
2023	\$819.0	\$1,637.9	\$2,456.9	\$3,275.9	
2024	\$834.4	\$1,668.7	\$2,503.1	\$3,337.4	
2025	\$849.0	\$1,697.9	\$2,546.9	\$3,395.8	
2026	\$866.5	\$1,733.1	\$2,599.6	\$3,466.1	
2027	\$881.6	\$1,763.2	\$2,644.8	\$3,526.4	
2028	\$901.2	\$1,802.4	\$2,703.6	\$3,604.7	
2029	\$915.1	\$1,830.1	\$2,745.2	\$3,660.2	
2030	\$934.9	\$1,869.7	\$2,804.6	\$3,739.4	
2031	\$953.6	\$1,907.3	\$2,860.9	\$3,814.6	
2032	\$971.2	\$1,942.4	\$2,913.6	\$3,884.8	
2033	\$991.6	\$1,983.2	\$2,974.8	\$3,966.3	
2034	\$1,009.0	\$2,017.9	\$3,026.9	\$4,035.9	
2035	\$1,026.1	\$2,052.2	\$3,078.3	\$4,104.4	
2036	\$1,046.3	\$2,092.5	\$3,138.8	\$4,185.1	
2037	\$1,067.5	\$2,135.0	\$3,202.5	\$4,270.0	
2038	\$1,088.4	\$2,176.7	\$3,265.1	\$4,353.5	
2039	\$1,111.0	\$2,222.0	\$3,332.9	\$4,443.9	
2040	\$1,130.5	\$2,260.9	\$3,391.4	\$4,521.9	
2041	\$1,150.1	\$2,300.3	\$3,450.4	\$4,600.5	
2042	\$1,170.7	\$2,341.3	\$3,512.0	\$4,682.6	
2043	\$1,192.5	\$2,384.9	\$3,577.4	\$4,769.8	
2044	\$1,211.9	\$2,423.7	\$3,635.6	\$4,847.5	
2045	\$1,230.9	\$2,461.9	\$3,692.8	\$4,923.8	
2046	\$1,250.9	\$2,501.7	\$3,752.6	\$5,003.4	
2047	\$1,271.9	\$2,543.9	\$3,815.8	\$5,087.7	

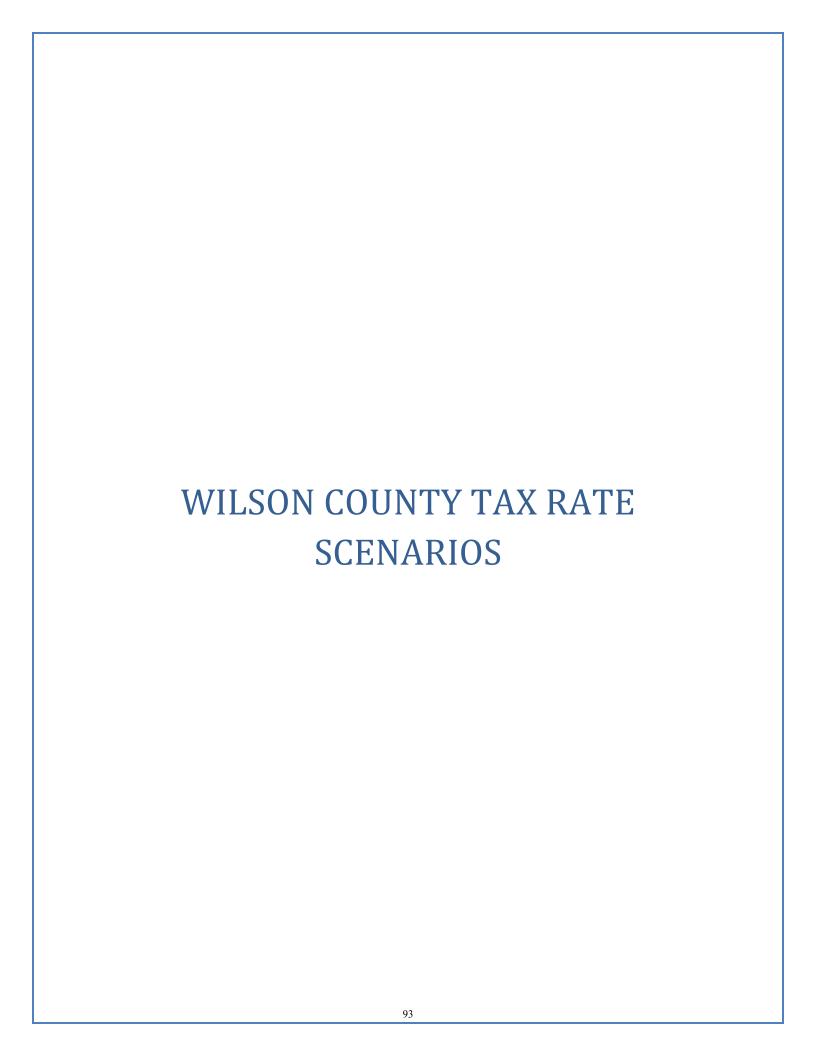


	I				
	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue	
	.25% Rate	.50% Rate	.75% Rate	1% Rate	
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)	
2018	\$11.2	\$22.4	\$33.5	\$44.7	
2019	\$11.7	\$23.5	\$35.2	\$46.9	
2020	\$12.4	\$24.8	\$37.2	\$49.6	
2021	\$13.1	\$26.1	\$39.2	\$52.3	
2022	\$13.7	\$27.5	\$41.2	\$55.0	
2023	\$14.4	\$28.8	\$43.2	\$57.6	
2024	\$15.2	\$30.4	\$45.5	\$60.7	
2025	\$15.9	\$31.9	\$47.8	\$63.8	
2026	\$16.7	\$33.4	\$50.2	\$66.9	
2027	\$17.5	\$35.0	\$52.5	\$70.0	
2028	\$18.3	\$36.5	\$54.8	\$73.0	
2029	\$19.1	\$38.3	\$57.4	\$76.6	
2030	\$20.0	\$40.0	\$60.1	\$80.1	
2031	\$21.0	\$42.0	\$63.0	\$84.0	
2032	\$22.0	\$44.0	\$66.0	\$88.0	
2033	\$23.1	\$46.2	\$69.3	\$92.4	
2034	\$24.2	\$48.4	\$72.6	\$96.8	
2035	\$25.3	\$50.6	\$75.9	\$101.2	
2036	\$26.5	\$53.0	\$79.5	\$106.0	
2037	\$27.7	\$55.4	\$83.2	\$110.9	
2038	\$29.0	\$58.1	\$87.1	\$116.1	
2039	\$30.5	\$60.9	\$91.4	\$121.9	
2040	\$31.8	\$63.6	\$95.4	\$127.1	
2041	\$33.2	\$66.4	\$99.6	\$132.9	
2042	\$34.8	\$69.5	\$104.3	\$139.0	
2043	\$36.3	\$72.6	\$108.9	\$145.2	
2044	\$37.8	\$75.7	\$113.5	\$151.3	
2045	\$39.5	\$79.0	\$118.5	\$157.9	
2046	\$41.2	\$82.5	\$123.7	\$165.0	
2047	\$43.1	\$86.2	\$129.3	\$172.5	

	Property Tax Revenue 10 Cents Rate	Property Tax Revenue 20 Cents Rate	Property Tax Revenue 30 Cents Rate	Property Tax Revenue 40 Cents Rate
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)
2018	\$12.3	\$24.7	\$37.0	\$49.3
2019	\$12.7	\$25.3	\$38.0	\$50.6
2020	\$13.0	\$26.0	\$38.9	\$51.9
2021	\$13.3	\$26.6	\$40.0	\$53.3
2022	\$13.7	\$27.4	\$41.0	\$54.7
2023	\$14.0	\$28.1	\$42.1	\$56.1
2024	\$14.4	\$28.8	\$43.2	\$57.6
2025	\$14.8	\$29.5	\$44.3	\$59.0
2026	\$15.1	\$30.3	\$45.4	\$60.5
2027	\$15.5	\$31.0	\$46.5	\$62.1
2028	\$15.9	\$31.8	\$47.7	\$63.6
2029	\$16.3	\$32.6	\$48.9	\$65.2
2030	\$16.7	\$33.4	\$50.1	\$66.9
2031	\$17.1	\$34.3	\$51.4	\$68.6
2032	\$17.6	\$35.1	\$52.7	\$70.3
2033	\$18.0	\$36.0	\$54.1	\$72.1
2034	\$18.4	\$36.9	\$55.3	\$73.8
2035	\$18.9	\$37.8	\$56.7	\$75.6
2036	\$19.3	\$38.7	\$58.0	\$77.4
2037	\$19.8	\$39.6	\$59.4	\$79.2
2038	\$20.3	\$40.5	\$60.8	\$81.0
2039	\$20.8	\$41.5	\$62.3	\$83.0
2040	\$21.3	\$42.5	\$63.8	\$85.0
2041	\$21.8	\$43.5	\$65.3	\$87.0
2042	\$22.3	\$44.6	\$66.8	\$89.1
2043	\$22.8	\$45.6	\$68.4	\$91.2
2044	\$23.3	\$46.7	\$70.0	\$93.3
2045	\$23.9	\$47.8	\$71.7	\$95.6
2046	\$24.5	\$48.9	\$73.4	\$97.9
2047	\$25.0	\$50.1	\$75.1	\$100.2

Hotel Tax Revenue		Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue	
	.5% Rate	1% Rate	1.5% Rate	2% Rate	
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)	
2018	\$709.4	\$1,418.8	\$2,128.3	\$2,837.7	
2019	\$756.8	\$1,513.6	\$2,270.4	\$3,027.2	
2020	\$809.1	\$1,618.2	\$2,427.3	\$3,236.4	
2021	\$863.3	\$1,726.6	\$2,589.9	\$3,453.3	
2022	\$919.8	\$1,839.6	\$2,759.3	\$3,679.1	
2023	\$980.5	\$1,961.0	\$2,941.5	\$3,922.0	
2024	\$1,043.5	\$2,087.0	\$3,130.6	\$4,174.1	
2025	\$1,113.8	\$2,227.5	\$3,341.3	\$4,455.0	
2026	\$1,184.0	\$2,368.0	\$3,552.0	\$4,736.0	
2027	\$1,254.2	\$2,508.5	\$3,762.7	\$5,016.9	
2028	\$1,324.5	\$2,648.9	\$3,973.4	\$5,297.9	
2029	\$1,394.7	\$2,789.4	\$4,184.1	\$5,578.8	
2030	\$1,464.9	\$2,929.9	\$4,394.8	\$5,859.8	
2031	\$1,535.2	\$3,070.4	\$4,605.5	\$6,140.7	
2032	\$1,615.5	\$3,230.9	\$4,846.4	\$6,461.8	
2033	\$1,695.7	\$3,391.4	\$5,087.2	\$6,782.9	
2034	\$1,776.0	\$3,552.0	\$5,328.0	\$7,104.0	
2035	\$1,856.3	\$3,712.5	\$5,568.8	\$7,425.1	
2036	\$1,936.5	\$3,873.1	\$5,809.6	\$7,746.1	
2037	\$2,026.8	\$4,053.7	\$6,080.5	\$8,107.4	
2038	\$2,107.1	\$4,214.2	\$6,321.3	\$8,428.4	
2039	\$2,197.4	\$4,394.8	\$6,592.2	\$8,789.7	
2040	\$2,297.8	\$4,595.5	\$6,893.3	\$9,191.0	
2041	\$2,388.1	\$4,776.1	\$7,164.2	\$9,552.2	
2042	\$2,488.4	\$4,976.8	\$7,465.2	\$9,953.6	
2043	\$2,588.7	\$5,177.5	\$7,766.2	\$10,354.9	
2044	\$2,689.1	\$5,378.1	\$8,067.2	\$10,756.3	
2045	\$2,799.4	\$5,598.9	\$8,398.3	\$11,197.8	
2046	\$2,899.8	\$5,799.6	\$8,699.4	\$11,599.1	
2047	\$3,010.2	\$6,020.3	\$9,030.5	\$12,040.6	

	Wheel Tax Revenue Wheel Tax Re		Wheel Tax Revenue \$20 Tax Rate		
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)	
2018	\$933.9	\$1,867.8	\$2,801.6	\$3,735.5	
2019	\$959.7	\$1,919.3	\$2,879.0	\$3,838.6	
2020	\$981.9	\$1,963.8	\$2,945.8	\$3,927.7	
2021	\$1,005.6	\$2,011.2	\$3,016.9	\$4,022.5	
2022	\$1,025.0	\$2,050.1	\$3,075.1	\$4,100.1	
2023	\$1,042.7	\$2,085.3	\$3,128.0	\$4,170.7	
2024	\$1,059.5	\$2,119.0	\$3,178.5	\$4,238.0	
2025	\$1,076.4	\$2,152.9	\$3,229.3	\$4,305.7	
2026	\$1,092.9	\$2,185.8	\$3,278.7	\$4,371.6	
2027	\$1,107.7	\$2,215.5	\$3,323.2	\$4,430.9	
2028	\$1,120.1	\$2,240.2	\$3,360.4	\$4,480.5	
2029	\$1,130.4	\$2,260.7	\$3,391.1	\$4,521.4	
2030	\$1,146.5	\$2,293.0	\$3,439.6	\$4,586.1	
2031	\$1,156.6	\$2,313.3	\$3,469.9	\$4,626.6	
2032	\$1,161.7	\$2,323.4	\$3,485.1	\$4,646.8	
2033	\$1,175.3	\$2,350.7	\$3,526.0	\$4,701.4	
2034	\$1,191.4	\$2,382.7	\$3,574.1	\$4,765.5	
2035	\$1,210.1	\$2,420.3	\$3,630.4	\$4,840.6	
2036	\$1,222.2	\$2,444.3	\$3,666.5	\$4,888.6	
2037	\$1,231.0	\$2,461.9	\$3,692.9	\$4,923.8	
2038	\$1,244.1	\$2,488.3	\$3,732.4	\$4,976.5	
2039	\$1,255.6	\$2,511.2	\$3,766.7	\$5,022.3	
2040	\$1,266.0	\$2,531.9	\$3,797.9	\$5,063.8	
2041	\$1,279.0	\$2,558.0	\$3,837.0	\$5,116.0	
2042	\$1,291.4	\$2,582.8	\$3,874.2	\$5,165.6	
2043	\$1,301.7	\$2,603.4	\$3,905.1	\$5,206.8	
2044	\$1,314.6	\$2,629.2	\$3,943.8	\$5,258.4	
2045	\$1,329.5	\$2,659.0	\$3,988.5	\$5,318.0	
2046	\$1,343.2	\$2,686.4	\$4,029.5	\$5,372.7	
2047	\$1,356.9	\$2,713.9	\$4,070.8	\$5,427.8	



	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue	Sales Tax Revenue	
	.25% Rate	.50% Rate	.75% Rate	1% Rate	
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)	
2018	\$4.7	\$9.5	\$14.2	\$18.9	
2019	\$5.0	\$10.0	\$15.0	\$20.0	
2020	\$5.3	\$10.5	\$15.8	\$21.1	
2021	\$5.5	\$11.1	\$16.6	\$22.2	
2022	\$5.9	\$11.7	\$17.6	\$23.5	
2023	\$6.2	\$12.4	\$18.6	\$24.8	
2024	\$6.5	\$13.1	\$19.6	\$26.2	
2025	\$6.9	\$13.8	\$20.7	\$27.6	
2026	\$7.3	\$14.5	\$21.8	\$29.1	
2027	\$7.6	\$15.3	\$22.9	\$30.6	
2028	\$8.0	\$16.1	\$24.1	\$32.2	
2029	\$8.5	\$16.9	\$25.4	\$33.9	
2030	\$8.9	\$17.8	\$26.8	\$35.7	
2031	\$9.4	\$18.8	\$28.2	\$37.6	
2032	\$9.9	\$19.8	\$29.6	\$39.5	
2033	\$10.4	\$20.8	\$31.2	\$41.6	
2034	\$10.9	\$21.9	\$32.8	\$43.8	
2035	\$11.6	\$23.1	\$34.7	\$46.2	
2036	\$12.1	\$24.2	\$36.4	\$48.5	
2037	\$12.7	\$25.4	\$38.1	\$50.8	
2038	\$13.4	\$26.7	\$40.1	\$53.5	
2039	\$14.0	\$28.1	\$42.1	\$56.2	
2040	\$14.7	\$29.5	\$44.2	\$58.9	
2041	\$15.4	\$30.8	\$46.2	\$61.6	
2042	\$16.2	\$32.4	\$48.6	\$64.8	
2043	\$17.0	\$34.0	\$51.0	\$68.0	
2044	\$17.8	\$35.6	\$53.4	\$71.2	
2045	\$18.6	\$37.2	\$55.7	\$74.3	
2046	\$19.5	\$39.0	\$58.5	\$78.0	
2047	\$20.4	\$40.8	\$61.2	\$81.6	

	Property Tax Revenue	operty Tax Revenue   Property Tax Revenue   Property Tax Revenue		Property Tax Revenue	
	10 Cents Rate	20 Cents Rate	30 Cents Rate	40 Cents Rate	
Year	(Million \$)	(Million \$)	(Million \$)	(Million \$)	
2018	\$4.1	\$8.1	\$12.2	\$16.2	
2019	\$4.2	\$8.4	\$12.5	\$16.7	
2020	\$4.3	\$8.6	\$12.9	\$17.2	
2021	\$4.4	\$8.9	\$13.3	\$17.7	
2022	\$4.6	\$9.1	\$13.7	\$18.2	
2023	\$4.7	\$9.4	\$14.1	\$18.8	
2024	\$4.9	\$9.7	\$14.5	\$19.4	
2025	\$5.0	\$10.0	\$15.0	\$20.0	
2026	\$5.2	\$10.3	\$15.4	\$20.6	
2027	\$5.3	\$10.6	\$15.9	\$21.2	
2028	\$5.5	\$10.9	\$16.3	\$21.8	
2029	\$5.6	\$11.2	\$16.8	\$22.4	
2030	\$5.7	\$11.5	\$17.2	\$22.9	
2031	\$5.9	\$11.8	\$17.6	\$23.5	
2032	\$6.0	\$12.1	\$18.1	\$24.2	
2033	\$6.2	\$12.4	\$18.5	\$24.7	
2034	\$6.3	\$12.6	\$19.0	\$25.3	
2035	\$6.5	\$12.9	\$19.4	\$25.8	
2036	\$6.6	\$13.2	\$19.8	\$26.4	
2037	\$6.8	\$13.5	\$20.3	\$27.0	
2038	\$6.9	\$13.8	\$20.8	\$27.7	
2039	\$7.1	\$14.2	\$21.2	\$28.3	
2040	\$7.2	\$14.5	\$21.7	\$29.0	
2041	\$7.4	\$14.8	\$22.2	\$29.6	
2042	\$7.6	\$15.1	\$22.7	\$30.2	
2043	\$7.7	\$15.4	\$23.1	\$30.8	
2044	\$7.9	\$15.7	\$23.6	\$31.5	
2045	\$8.0	\$16.0	\$24.1	\$32.1	
2046	\$8.2	\$16.4	\$24.5	\$32.7	
2047	\$8.3	\$16.7	\$25.0	\$33.4	

Hotel Tax Revenue		Hotel Tax Revenue	Hotel Tax Revenue	Hotel Tax Revenue	
	.5% Rate	1% Rate	1.5% Rate	2% Rate	
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	(Thousand \$)	
2018	\$269.7	\$539.3	\$809.0	\$1,078.7	
2019	\$287.5	\$574.9	\$862.4	\$1,149.8	
2020	\$307.7	\$615.4	\$923.1	\$1,230.8	
2021	\$331.0	\$662.1	\$993.1	\$1,324.1	
2022	\$353.8	\$707.5	\$1,061.3	\$1,415.1	
2023	\$377.2	\$754.4	\$1,131.6	\$1,508.8	
2024	\$401.7	\$803.4	\$1,205.1	\$1,606.8	
2025	\$428.2	\$856.4	\$1,284.5	\$1,712.7	
2026	\$453.2	\$906.5	\$1,359.7	\$1,812.9	
2027	\$478.0	\$956.0	\$1,434.0	\$1,912.0	
2028	\$502.4	\$1,004.7	\$1,507.1	\$2,009.5	
2029	\$528.9	\$1,057.9	\$1,586.8	\$2,115.8	
2030	\$557.9	\$1,115.9	\$1,673.8	\$2,231.7	
2031	\$587.7	\$1,175.4	\$1,763.1	\$2,350.8	
2032	\$618.7	\$1,237.3	\$1,856.0	\$2,474.6	
2033	\$650.1	\$1,300.1	\$1,950.2	\$2,600.3	
2034	\$680.7	\$1,361.4	\$2,042.1	\$2,722.8	
2035	\$711.9	\$1,423.9	\$2,135.8	\$2,847.8	
2036	\$743.9	\$1,487.8	\$2,231.6	\$2,975.5	
2037	\$776.9	\$1,553.7	\$2,330.6	\$3,107.4	
2038	\$811.1	\$1,622.2	\$2,433.3	\$3,244.4	
2039	\$846.5	\$1,693.1	\$2,539.6	\$3,386.2	
2040	\$883.6	\$1,767.2	\$2,650.8	\$3,534.4	
2041	\$923.9	\$1,847.8	\$2,771.7	\$3,695.5	
2042	\$965.5	\$1,931.0	\$2,896.5	\$3,862.0	
2043	\$1,006.7	\$2,013.3	\$3,020.0	\$4,026.7	
2044	\$1,047.3	\$2,094.7	\$3,142.0	\$4,189.3	
2045	\$1,086.8	\$2,173.7	\$3,260.5	\$4,347.3	
2046	\$1,126.8	\$2,253.6	\$3,380.4	\$4,507.2	
2047	\$1,167.9	\$2,335.9	\$3,503.8	\$4,671.8	

	Wheel Tax Revenue \$5 Tax Rate	Wheel Tax Revenue \$10 Tax Rate	/heel Tax Revenue   Wheel Tax Revenue   V \$10 Tax Rate   \$15 Tax Rate		
Year	(Thousand \$)	(Thousand \$)	(Thousand \$)	\$20 Tax Rate (Thousand \$)	
2018	\$573.9	\$1,147.7	\$1,721.6	\$2,295.5	
2019	\$587.1	\$1,174.2	\$1,761.3	\$2,348.4	
2020	\$601.7	\$1,203.3	\$1,805.0	\$2,406.7	
2021	\$615.4	\$1,230.8	\$1,846.1	\$2,461.5	
2022	\$629.7	\$1,259.3	\$1,889.0	\$2,518.6	
2023	\$643.5	\$1,287.0	\$1,930.5	\$2,574.0	
2024	\$657.5	\$1,314.9	\$1,972.4	\$2,629.9	
2025	\$672.9	\$1,345.7	\$2,018.6	\$2,691.4	
2026	\$689.7	\$1,379.3	\$2,069.0	\$2,758.6	
2027	\$706.5	\$1,412.9	\$2,119.4	\$2,825.8	
2028	\$722.7	\$1,445.5	\$2,168.2	\$2,890.9	
2029	\$740.1	\$1,480.3	\$2,220.4	\$2,960.6	
2030	\$759.0	\$1,518.0	\$2,277.1	\$3,036.1	
2031	\$775.3	\$1,550.5	\$2,325.8	\$3,101.0	
2032	\$792.5	\$1,584.9	\$2,377.4	\$3,169.9	
2033	\$810.5	\$1,620.9	\$2,431.4	\$3,241.8	
2034	\$829.2	\$1,658.3	\$2,487.5	\$3,316.7	
2035	\$847.2	\$1,694.5	\$2,541.7	\$3,388.9	
2036	\$867.7	\$1,735.5	\$2,603.2	\$3,471.0	
2037	\$888.2	\$1,776.4	\$2,664.7	\$3,552.9	
2038	\$907.3	\$1,814.6	\$2,721.9	\$3,629.3	
2039	\$927.9	\$1,855.8	\$2,783.7	\$3,711.6	
2040	\$948.0	\$1,895.9	\$2,843.9	\$3,791.8	
2041	\$970.4	\$1,940.7	\$2,911.1	\$3,881.4	
2042	\$992.0	\$1,984.0	\$2,976.0	\$3,968.0	
2043	\$1,012.3	\$2,024.6	\$3,036.9	\$4,049.2	
2044	\$1,029.0	\$2,058.1	\$3,087.1	\$4,116.2	
2045	\$1,045.0	\$2,090.0	\$3,135.0	\$4,180.1	
2046	\$1,062.1	\$2,124.2	\$3,186.3	\$4,248.4	
2047	\$1,080.6	\$2,161.1	\$3,241.7	\$4,322.2	

# 4. Autonomous Vehicles and Local Tax Revenues

#### Introduction

The day is fast approaching that self-driving cars are no longer merely a concept, but an integral part of our daily lives. Self-driving cars, known formally as autonomous vehicles (AVs), will impact many facets of the economy, only one of which is tax revenues. The required technological gains appear to be occurring rapidly, and governments should be planning for the range of impacts. Fortunately, many state and local governments are beginning to anticipate some of the effects. This section reviews the most overlooked area – the effects that AVs will have on local government revenues.

#### Time Horizon

We believe that AVs will impact our forecast well before the end of the 30-year forecast window used here. Most researchers and automakers predict that the commercial availability of fully automated vehicles (level 4-5, see Figure 1) is imminent, with predictions ranging from 2018 to 2030 (Lewis et al, 2017).<sup>1</sup>

**Figure 1: Levels of Driving Automation** 

	SAE Level	Name	Steering, acceleration, deceleration	Monitoring driving environment	Fallback performance of dynamic driving task	System capability (driving modes)
ient	0	<b>No automation</b> the full-time performance by the human driver of all aspects of the dynamic driving task, even when enhanced by warning or intervention systems	2	•	<u>•</u>	n/a
Human monitors environment	1	Driver assistance the driving mode-specific execution by a driver assistance system of either steering or acceleration/deceleration using information about the driving environment and with the expectation that the human driver perform all remaining aspects of the dynamic driving task.	<b>≗</b> ≘	•	2	Some driving modes
	2	Partial automation the driving mode-specific execution by one or more driver assistance systems of both steering and acceleration/deceleration using information about the driving environment and with the expectation that the human driver perform all remaining aspects of the dynamic driving task		•	2	Some driving modes
ronment	3	Conditional automation the driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task with the expectation that the human driver will respond appropriately to a request to intervene	æ	<b>₽</b>	2	Some driving modes
Car monitors environment	4	High automation the driving mode-specific performance by an automated driving system of all aspects of the dynamic driving task, even if a human driver does not respond appropriately to a request to intervene	æ	<b>≅</b>		Some driving modes
Carm	5	Full automation the full-time performance by an automated driving system of all aspects of the dynamic driving task under all roadway and environmental conditions that can be managed by a human driver				All driving modes

Source: Ranft et al, 2016<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Lewis, P., Rogers, G. & Turner, S. (2017). Beyond Speculation Automated Vehicles and Public Policy. Eno Center for Transportation Policy. Retrieved from <a href="https://www.enotrans.org/wp-content/uploads/2017/04/AV">https://www.enotrans.org/wp-content/uploads/2017/04/AV</a> FINAL-1.pdf
<sup>2</sup> Ranft. F. et al. (2016). *Freeing the Road*. "Shaping the Future of Autonomous Vehicles."

Furthermore, Litman (2014) predicts that AVs will account for 50 percent of all vehicles sales by the end of our 30- year horizon.<sup>3</sup> Figure 2 shows Litman's predictions for AV's share of sales, travel, and fleet.

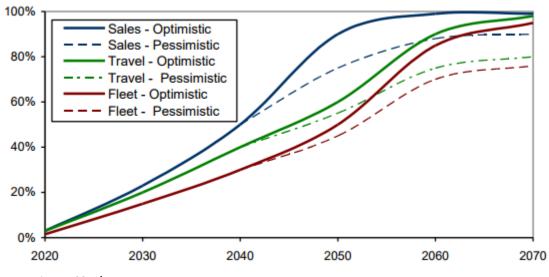


Figure 2: Autonomous Vehicle Sales, Fleet and Travel Projections

Source: Litman, 2014<sup>4</sup>

Our forecasts are not adjusted for the implications of AVs, but the remainder of this section discusses likely implications for the revenue outcome. Effects on tax revenues (and the economy generally) are particularly difficult to estimate during the transition that could be long and depend on such factors as the rate of technology development, rate of adoption, and propensity for car sharing. We make no attempt to discuss the broader effects that AVs can have on the overall economy, and therefore tax revenues. Still, the likely scenario is that AVs will reduce local tax revenues in Tennessee.

#### Sales Tax

The total value of vehicle sales is a key component of the state sales tax base, though the single-article cap (currently \$1,600 / item for the studied 10 counties) limits the implications for the local option sales tax. Even so, a major shift in vehicle sales has the potential to significantly impact local sales tax revenue. One view is that the onset of AVs will increase auto sales as miles traveled by vehicles increases. Vehicle miles traveled will rise as individuals make longer trips and as empty AVs drive from one location to another to pick up passengers. For example, Clements and

<sup>&</sup>lt;sup>3</sup> Litman, T. (May 10, 2014) Autonomous Vehicle Implementation Predictions. Victoria Transport Policy Institute. Retrieved from: <a href="http://www.vtpi.org/avip.pdf">http://www.vtpi.org/avip.pdf</a>

<sup>&</sup>lt;sup>4</sup> Ibid.

Kockelman predict that vehicle miles traveled will increase approximately 10 percent. This could increase vehicles sales between 5 percent and 10 percent (Clements & Kockelman, 2017).<sup>5</sup>

But effects on vehicle sales depend on the extent of car sharing and not just miles driven. Vehicle sharing can take place both within and across households. The Boston Consulting group estimates that shared vehicles will account for 23 percent to 26 percent of all miles driven in the United States by 2030 (Boston Consulting Group, 2017). However, the Boston Consulting Group believes that most of the shift to vehicle sharing will be concentrated in large cities with more than 1 million people. As the price of shared AVs decreases, it is likely that more midsized cities with populations between 500,000 – 1 million will also see a dramatic increase in the number of shared AVs. This decrease in cost could also be on the near-term horizon with Morgan Stanley predicting that by 2030 the cost per mile for shared vehicles will be lower than for privately owned vehicles (Morgan Stanley, 2016). This stands in stark contrast to today where the cost per mile for shared vehicles is nearly double the cost of privately owned vehicles (Morgan Stanley, 2016).

The increase in vehicle sharing will lead to fewer privately owned vehicles. Schoettle and Sivak (2015) estimate the number of autonomous vehicles that a household will own by analyzing the number of trips that overlap between members of the same household. They find very little trip overlap within households and also find that AVs could potentially reduce private vehicle ownership by 43 percent once fully adopted.<sup>9</sup>

The greater effect on vehicle sales may come from large companies owning and operating shared vehicles, which could push the costs down and reduce car purchases. So, other estimates of the effects of AVs on private vehicle ownerships are dramatic. Fagnant et al. (2015) found that one shared autonomous vehicle could replace up to 12 privately owned vehicles. The question is how large will the fleets be and how quickly will they be filled. Vehicle purchases for the fleets will offset to some extent the reduction in private vehicles. The net effect on vehicle sales is particularly difficult to anticipate during the transition.

#### Wheel Tax

AVs replacement of vehicles can also have significant effects on the wheel tax and cause local governments to seek other means of taxing AVs. For example, while discussing the budget effects of AVs, The D.C. Policy Center stated that "without new revenue sources designed to fairly charge AVs

<sup>&</sup>lt;sup>5</sup> Clements, L. & Kockelman, K. (2017) Economic Effects of Automated Vehicles. Transportation Research Board.

<sup>&</sup>lt;sup>6</sup> Boston Consulting Group. (2017). By 2030, 25 percent of Miles Driven in US Could Be in Shared Self-Driving Electric Cars [Press Release] Retrieved from <a href="https://www.bcg.com/d/press/10april2017-future-autonomous-electric-vehicles-151076">https://www.bcg.com/d/press/10april2017-future-autonomous-electric-vehicles-151076</a>

<sup>&</sup>lt;sup>7</sup> Morgan Stanley. (2016) Shared Mobility on the Road of the Future. Retrieved from <a href="https://www.morganstanley.com/ideas/car-of-future-is-autonomous-electric-shared-mobility">https://www.morganstanley.com/ideas/car-of-future-is-autonomous-electric-shared-mobility</a> <sup>8</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Schoettle B., Sivak M. (2015). PotentialIimpact of Self-driving Vehicles on Household Vehicle Demand and Usage (Report 2015-3). Ann Arbor: University of Michigan Transportation Research Institute.

<sup>&</sup>lt;sup>10</sup> Fagnant, D. J., Kockelman, K. M., and Bansal, P. (2015) Operations of a shared autonomous vehicle fleet for the Austin, Texas market. Proceedings of the 94th Annual Meeting of the Transportation Research Board (No. 15-1958) and forthcoming in Transportation Research Record.

for their use of public streets, funding for necessary transportation infrastructure and basic District services could be curtailed dramatically" (Leimenstoll, 2017).<sup>11</sup>

If the predictions that AVs will reduce private car ownership by 43 percent or more are accurate and occur without commensurate increases in AVs' fleets, then our forecast for wheel tax revenue would be overestimated. The net reduction in vehicle ownership would lead to a proportional decrease in the revenues collected from the wheel tax.

The shift towards shared vehicle fleets may lead to vehicle ownership being concentrated in a small number of hubs. Thus, it is possible that the vehicle used to transport the residents of one county would not be purchased in that county. Indeed, companies could choose to locate their fleets in counties with lower wheel tax rates. This could lead to an additional reduction in wheel tax revenue that is not captured in our forecast.

#### Hotel Tax

Very few people are talking about the effects of AVs on the hotel industry. Automakers and others have suggested that AVs could reduce the need for business (or tourism related) hotels as more people choose to sleep in their car (Sven Schuwirth, 2015). For example, the Cornell Real Estate Review states that "changes in travel patterns due to AVs may also impact select and limited service hotels. A large percentage of these hotels are in rural locations, adjacent to highway intersections that link major routes. As AVs become more widespread, travelers might decide to let their cars drive them to their final destinations, as they sleep, instead of staying at these hotels overnight" (Henderson & Spencer, 2016). If this prediction is true then rural counties will likely see hotel tax revenues decrease. On the other hand, easier travel may cause people to visit other cities much more frequently.

#### **Property Tax**

The direct impact that AVs will have on property tax revenue is likely minimal, but a series of indirect effects can be imagined. Current research is torn on whether AVs will lead more people to centralize or decentralize (Rodoulis, 2014). The majority seem to believe that there will be a slight increase in decentralization because AVs reduce the costs associated with driving making it less costly to commute (Clements & Kockelman, 2017). However, decongestion of central areas could make cities more compelling places to live. Also, for two reasons, researchers predict that AVs will

<sup>&</sup>lt;sup>11</sup> Leimenstoll, W. (2017) Autonomous Vehicles Could Have a Big Impact on D.C.'s Budget. D.C. Policy Center. Retrieved from <a href="https://www.dcpolicycenter.org/publications/autonomous-vehicles-could-have-a-big-impact-on-d-c-s-budget/">https://www.dcpolicycenter.org/publications/autonomous-vehicles-could-have-a-big-impact-on-d-c-s-budget/</a>

<sup>&</sup>lt;sup>12</sup>Schuwirth, S. (2015) Dezeen Magazine [Interview] Retrieved from <a href="https://www.dezeen.com/2015/11/25/self-driving-driverless-cars-disrupt-airline-hotel-industries-sleeping-interview-audi-senior-strategist-sven-schuwirth/">https://www.dezeen.com/2015/11/25/self-driving-driverless-cars-disrupt-airline-hotel-industries-sleeping-interview-audi-senior-strategist-sven-schuwirth/</a>

<sup>&</sup>lt;sup>13</sup> Henderson, J., & Spencer, J. (2016). Autonomous Vehicles and Commercial Real Estate. *Cornell Real Estate Review*, 14(1), 44-55. Retrieved from http://scholarship.sha.cornell.edu/crer/vol14/iss1/14

<sup>&</sup>lt;sup>14</sup> Rodoulis, S. 2014. The Impact of Autonomous Vehicles on Cities. Retrieved March 17, 2016 from <a href="http://www.lta.gov.sg/ltaacademy/doc/J14Nov\_p12Rodoulis\_AVcities.pdf">http://www.lta.gov.sg/ltaacademy/doc/J14Nov\_p12Rodoulis\_AVcities.pdf</a>

<sup>&</sup>lt;sup>15</sup> Clements, L. & Kockelman, K. (2017) Economic Effects of Automated Vehicles. Transportation Research Board.

lead to a reduction in land use dedicated to parking, especially in urban areas. First, AVs will drop people off and then drive to pick up others, thus eliminating the need for parking. Second, even if individuals desire to park their autonomous vehicles it would be possible to do so in parking lots located further from the city because the AV could drive to a remote parking lot by itself and return to pick up the owner at their request (Anderson et al, 2016). Both of these scenarios lead to a reduction in land use dedicated to parking. With less land dedicated to parking, the opportunity for more housing in densely populated areas becomes possible. This would reduce the cost of living in urban areas. Thus, whether AVs encourage centralization or decentralization will determine which counties see property tax revenue losses or gains.

#### Conclusion

In conclusion, AVs will likely reduce every tax base that we have forecasted, with the possible exception of the property tax. The magnitude is relatively greatest for wheel and sales tax revenues. The extent of this revenue loss will be determined by how quickly AVs gain prominence in the market and how long the transition lasts. With that said, all of the research on AVs impacts on tax revenue is entirely speculative, as it is so early in the development process with no level 4 or 5 vehicles in the market.

<sup>&</sup>lt;sup>16</sup> Anderson, James M., Nidhi Kalra, Karlyn Stanley, Paul Sorensen, Constantine Samaras and Tobi A. Oluwatola (2016). Autonomous Vehicle Technology: A Guide for Policymakers. Santa Monica, CA: RAND Corporation, <a href="https://www.rand.org/pubs/research\_reports/RR443-2.html">https://www.rand.org/pubs/research\_reports/RR443-2.html</a>

## 5. Data

Historical data for each county for each of the four taxes drive the forecasts, so the data collection process focused on collecting a long history of actual tax collections. A variety of sources were used. The data are generally from 1991-2016, except for the hotel tax (2005-2016). Some gaps in the data exist for some counties and some taxes, depending on data retention habits over past years.

### **Property Tax**

The data used for the property tax base forecasts were retrieved from the Tax Aggregate Report prepared by the Comptroller of the Treasury Division of Property Assessments. The Tax Aggregate Report is published annually and contains a wide array of property tax data for Tennessee cities and counties. Specifically, the property tax base is measured with the total property assessments. We also collected certified tax rates from the Tennessee State Board of Equalization. The timing of reappraisals was collected from each County's Trustee.

#### Sales Tax

The Tennessee Department of Revenue provided all of the data used to measure sales tax bases.<sup>17</sup> Year-to-date June Collections Spreadsheets for each year from 1991 to 2017 provided the measure of local sales tax revenues for each fiscal year. The department also provided sales tax rates for each county for each year and revenues collected in cities where the city rate exceeds the county rate (only for 2004-2017). County sales tax revenues (net of the additional city revenue) were divided by the county's sales tax rate to obtain estimates of the sales tax base.

#### Wheel Tax

Data on the total number of motor vehicles registered in each county were collected from two primary sources. First, the Tax Statistics Report issued by the County Technical Assistance Service (CTAS) within the Institute of Public Service at the University of Tennessee contains data on various county revenue sources and the total number of motor vehicles registered in each county. <sup>18</sup>

Second, the Tennessee Department of Revenue provided spreadsheets of taxable motor vehicle registration statistics. These spreadsheets were used with the Department of Revenue's methodology to estimate taxable vehicles.<sup>19</sup>

Lastly, we obtained wheel tax revenue data from the Tennessee Comptroller of the Treasury Division of Local Government Audits' Annual Financial Reports for all counties except Davidson, where we obtained the data from the County Clerk.<sup>20</sup> These reports contain revenue data for both the wheel and hotel taxes.

<sup>&</sup>lt;sup>17</sup> We thank Kirk Johnson from the Department of Revenue for his gracious assistance on this project.

<sup>&</sup>lt;sup>18</sup> CTAS collects motor vehicle data from the Department of Revenue and the Department of Safety for this report.

<sup>&</sup>lt;sup>19</sup> Again, we thank Kirk Johnson for his assistance and direction.

<sup>&</sup>lt;sup>20</sup> The Annual Financial Reports are audits that are performed and maintained by the Division of Local Government Audits.

# Hotel Tax

Hotel tax revenue data were also taken from the Office of the Comptrollers' Annual Financial Reports. These data are divided by the county hotel tax rate to the estimated hotel tax base for each county.