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Yavapai County Jail District Sales Tax: An Estimate of Non-Resident Contributions

October 2015

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Executive Summary

This report estimates the size of non-resident contributions to Yavapai County's jail district sales tax revenue for the current fiscal year and over a 25-year time horizon. Using a model based on data from the Arizona Department of Revenue, the Arizona Office of Tourism, the Yavapai County Assessor's Office, as well as methodological inputs from T.J. Salant's reports, it estimates a baseline, as well as a low to high range for non-resident percentage contributions to Yavapai County's jail district sales tax revenue.

Following a careful review of the literature, we verified that T. J. Salant did indeed find that visitors paid 30%-35% of the sales taxes collected in Navajo and Coconino Counties, based on data from the early 1990's. However, our own review reveals some questions about the methodology employed by Salant, and we found alternative data sources that were not available in the early 1990's. Regardless, an application of Salant's methodology to the current jail tax base in Yavapai County yields estimates of the visitor share of payments to the order of half of the shares estimated for Navajo and Coconino Counties in the original Salant papers.

Using an approach that employs the methodology above and making use of all currently available data for Yavapai County, we find that non-residents currently contribute about 15% of Yavapai County's jail district sales tax revenue, with a range of 12% to 18% from low to high.

Separate analysis indicates that future baseline non-resident contributions to the jail tax will be between 16-17% during fiscal years 2016-2040. Low projected estimates range between 12-14%, while high estimates are between 18-20%.

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1. Introduction and Background

In November 2014, Yavapai County residents rejected a Board of Supervisors' proposal to increase the county's jail district sales tax from one-quarter cent to a half-cent, and to extend the authorization for an additional 20 years. The increase and extension was intended to pay for the continued operation of the county's jail in Camp Verde, and to construct a new jail facility in the Prescott area.

The Prescott area has been without a jail since spring 2009, when a 130-bed facility built in 1980 was closed to save costs. However, approximately 65% of the population in Yavapai County resides in the Prescott area, and a corresponding number of arrests occur in the Prescott area as well. Closure of the Prescott area jail has drastically increased the costs for Prescott-area municipalities who are currently forced to drive prisoners 45 miles to a Camp Verde jail completed in 2003. Approximately 65% of the Camp Verde jail's inmates currently originate from the Prescott side of the county, and the county now spends approximately \$1 million a year on transporting prisoners to and from Prescott courts.

Factoring in the safety and security needs created by inmate classification, the Camp Verde Jail is currently operating at its design capacity of 600. The County is currently engaged in a Jail Planning and Needs Assessment Study.

The current quarter-cent jail district sales tax remains in force until 2020. It currently generates about \$7.8 million of the jail district's \$17.1 million annual budget. Another \$7.2 million of the jail district budget comes from the county's "maintenance of effort."

In the absence of a sales tax increase, Yavapai County is expected to suffer a \$1.5 million to \$2.5 million annual shortfall in the jail budget within 5 years, even after a maximization of property taxes. Prior to the November 2014 ballot, County officials warned the electorate that the loss of the one-quarter cent sales tax and the need for new jail capacity could necessitate significant county budget cuts should the proposed sales tax increase and extension not be authorized.

It has been estimated that visitors to Yavapai pay about one-third of the current sales taxes. This estimate is based on an analysis of other Arizona counties performed in 1999.

2. Objective of the Analysis and Methodology

The primary purpose of this report is to estimate the amount of Yavapai County sales tax revenue resulting from tourism and other non-resident sales in the county. This will enable the Yavapai County Board of Supervisors to determine to what extent the burden of funding Yavapai County jails could be shared inside and outside the county.

The 1999 Yavapai County analysis was based in part on an extrapolation of four separate studies of sales tax revenues for Santa Cruz, Navajo, Coconino, and Pinal counties, produced by TJ Salant in the 1990s. In Section 3, we present a critique of Salant and discuss the relevance of an application of her methods to Yavapai County. In Section 4, we review a recent tourism and travel report with relevant information and data for our current study. Section 5 describes another useful data source containing data on primary and non-primary residences in Yavapai County. Section 6 discusses historical data and provides our estimates for non-resident contributions to Yavapai County's sales tax revenue by taxable business categories. Conclusions are offered in Section 7.

3. Salant Critique

Our review of the Salant papers suggests that different methodological approaches were undertaken for the counties of study. For Navajo and Pinal Counties, Salant assumes that the "visitor" sales tax activity is determined by seasonal visitors to the counties and consumers from neighboring counties. Assuming considerable non-permanent resident visitors frequent the counties, Salant attributes high season¹ taxable sales transactions to non-permanent resident visitors. In Pinal County, Salant assumes that there are two types of non-residents - winter visitors ("snowbirds") who stay longer and are responsible for a larger share of non-resident spending, and all other visitors.

Salant first obtains taxable sales activity by county, segmented by business activity, and observed monthly throughout a calendar year. The potential visitor categories of business activity include amusements, retail, restaurant and bar, hotel/motel, and personal property - these comprise the

¹ Pinal in the winter and Navajo in the summer

exportable tax base. Salant attributes all of hotel/motel activity to visitors, and attributes portions of the other categories to visitors based on observed seasonal variation in the flow of revenues. Salant also bases some of her assumptions for Navajo County on the results of surveys of major retailers and restaurants and bars. She treats utilities separately and claims no share of contracting is attributable to visitors to the counties.

Table 1 depicts Salant’s findings for Pinal County and Table 2 presents comparable apportionments by business activity for Navajo County.

Table1: Pinal County- Non-Resident Contributions to Taxable Sales

Taxable Activities and Business Classifications	Do Non-Residents Participate?	Proportion Attributed to Non-Residents
Utilities	Yes	28%
Communications	No	
Publishing	No	
Job Printing	No	
Restaurants and Bars	Yes	28% for winter visitors 15-25% for all other visitors
Amusements	Yes	28% for winter visitors 15-25% for all other visitors
Rentals of Personal Property	Yes (part)	80%
Contracting	No	
Retail	Yes	3.5% for winter visitors 15-25% for all other visitors
Hotel/Motel	Yes	80%
Other Taxable Activities	No	
Total Non-Resident Contribution, out of All Taxable Sales: 19 to 25%		

Source: Salant, 1991

Table 2: Navajo County- Non-Resident Contributions to Taxable Sales

Taxable Activities and Business Classifications	Do Non-residents Participate?	Percentage Attributed to non-residents
Utilities	Yes	25%
Communications	No	
Publishing	No	
Job Printing	No	
Restaurants and Bars	Yes	48%
Amusements	Yes	77%
Rentals of Personal Property	Yes (part)	38%
Contracting	No	
Retail	Yes	30%
Hotel/Motel	Yes	98%
Other Taxable Activities	No	
Total Non-Resident Contribution, out of Exportable Taxable Sales: 31 to 34%		
Total Non-Resident Contribution, out of All Taxable Sales: 29 to 32%		

Source: Salant, 1993

The seasonal methodology Salant employs tends to have an upward bias since she assigns the percentage increase observed in the “high seasons” to year-round revenue based on the assumption that once the share of seasonal visitors is identified, it can be applied to the entire year. A more conservative estimate would equate the impact of visitors with only the seasonal increment, and assume that visitors have virtually no impact for the remaining part of the year.

Salant’s approach to Coconino County is based on a completely different methodology. First she identifies the possible visitor business activity categories as amusements, retail, restaurant and bar, hotel/motel, and personal property. She then draws upon a paper written in 1981 by Hogan and McPheters to estimate total visitor expenditures by assuming 34% of total visitor spending is allocated to hotel/motel. Based on this analysis, Salant ascertains that “visitors” share of total taxable sales activity is 30% of the total. Recognizing that hotel/motel visitors do not comprise all the visitor spending in the county, Salant adds 5% to the 30% estimate to arrive at her figure. There is little basis for the 5% estimate for the non-hotel motel visitors.

The Salant papers therefore offer some potential in estimating the share of taxable sales taxes for Yavapai County but some of the assumptions made, particularly in the Coconino report, are open to question; and the characteristics of Yavapai County do not match the three counties studied by Salant.

We believe that examining seasonal patterns in restaurant and bar sales, amusements, and some of the other business activities could be a fruitful avenue. However, visitors who maintain non-permanent residences in Yavapai County likely frequent their residences at unknown rates that vary substantially by homeowner. Further, these non-permanent resident visitors will likely consume utilities and purchase contracting goods and services and some share of retail.

Coconino (*Salant estimates 35% of total sales taxes and 44% of exportable sales taxes are attributable to visitors*): The 1981 paper that allocates 34% of total visitor spending to hotel/motel that is used in Salant's Coconino application appears to be an inappropriate approach to assessing visitor taxable sales activity. Indeed, in thinking about the average hotel/motel customer in Coconino County, it would seem unlikely that the accommodation expenditure would account for only 1/3 of the total visitor expenditure given the transient nature of many Flagstaff visitors who spend a night in the city on their journey on I-40. Further, the large share of visitor expenditure estimated by Salant for Coconino County is driven by the fact that hotels/motels constitute 12% of the total taxable sales tax base in Coconino County. However, hotels/motels constitute less than 4% of the total sales tax base in Yavapai, and less than 3% for the State as a whole. Accordingly application of this methodology to Yavapai data, or any other county for that matter, will clearly lead to a very low share while ignoring those visitors who maintain non - permanent residences in the County.

Navajo (*Salant estimates 31-34% of exportable and 29-32% of total sales taxes are attributable to visitors*): Salant applies an analysis of monthly revenue flows by business activity coupled with the results of survey data to arrive at the estimates of visitor spending depicted in Table 2. The location of significant retail centers in Show Low and Pinetop provide an economic geography that result in considerable visitor retail activity. Based on the survey results, some 15% of new/used car purchases and some 30-35% of large retail store revenue in the county come from non-residents; and people travel from across NE Arizona to shop at essentially the only option in the region. Salant concludes the 25-30% of all retail purchases in Navajo County come from non-residents, which essentially determines her 31-34% overall estimate. However, this high retail allocation to non-residents seems to be a characteristic of Navajo County, and should not be applied generally across the counties.

Pinal (*Salant estimates 19-25% of total sales taxes attributable to visitors*): Salant applies an analysis of monthly revenue flows by business activity to arrive at the estimates of visitor spending depicted in

Table 1. Unlike the Navajo example, Salant finds that visitors account for a relatively small retail share (3.5%) of purchases which reduces the overall share attributable to visitors appreciably.

Although we were unable to obtain the reports, Salant notes in a summary of the Pinal analysis that, based on her other work, the shares attributable to visitors are 12% in Maricopa County, 15% in Pima County and 57% in Santa Cruz County. Clearly the large resident retail purchases in counties with large metro areas dominate estimates of non-resident visitor spending.

Considerable changes in the way consumers shop have taken place since Salant published her estimates. Most importantly, consumers today make considerable purchases online. This tends to reduce ordinary retail collections at traditional brick and mortar outlets. Accordingly, rural residents may be less likely to make trips to regional urban centers to make retail purchases. In addition, it is now possible to obtain estimates of the number of non-resident households that are located in each county. Finally the Arizona office of tourism has retained Dean Runyan and Associates to examine visitor spending by county annually.

4. Tourism and Travel Report by Dean Runyan Associates

The annual tourism and travel report prepared by Dean Runyan and Associates (DRA) at the request of the Arizona Office of Tourism provides information that may be used to estimate the share of sales taxes paid by visitors. DRA use a regional travel impact model developed specifically for estimating the impacts of travel on particular regions across the country. DRA segments travelers by type of accommodation, e.g. hotel/motel, private or vacation home, campground or day travel as depicted in Table 3.

Table 3: Visitor Spending by Type of Accommodation, Yavapai County, 2006-2014, (\$Million)

Visitor Spending	2006	2008	2010	2011	2012	2013	2014
Hotel, Motel	\$230.8	\$234.4	\$209.7	\$221.3	\$245.6	\$259.3	\$280.1
Private Home	\$69.6	\$77.0	\$78.3	\$85.3	\$87.6	\$87.7	\$89.4
Campground	\$11.8	\$13.0	\$12.6	\$13.2	\$13.8	\$13.5	\$14.7
Vacation Home	\$21.9	\$24.2	\$23.9	\$25.0	\$25.6	\$26.1	\$26.9
Day Travel	\$234.7	\$246.0	\$241.4	\$252.3	\$259.8	\$262.1	\$267.1
Total Destination Spending	\$568.8	\$594.6	\$565.9	\$597.1	\$632.4	\$648.7	\$678.2

Source: DRA

They also segment spending by type of purchase, e.g. accommodations, food service, food stores, local transportation and gasoline, arts, entertainment, and recreation, retail, and local air travel as reproduced in Table 4.

Table 4: Visitor Spending by Type of Purchase, Yavapai County, 2006-2014, (\$Million)

Visitor Spending	2006	2008	2010	2011	2012	2013	2014
Accommodations	\$114.9	\$121.3	\$104.4	\$109.7	\$122.8	\$131.1	\$144.8
Food Service	\$109.4	\$113.7	\$115.7	\$120.0	\$127.2	\$132.5	\$139.9
Food Stores	\$37.8	\$41.5	\$40.6	\$43.1	\$44.5	\$45.3	\$47.6
Local Tran. & Gas	\$60.2	\$73.6	\$66.5	\$81.0	\$85.7	\$84.9	\$84.4
Arts, Ent. & Rec.	\$165.5	\$166.3	\$160.4	\$163.0	\$168.4	\$170.9	\$176.0
Retail Sales	\$80.6	\$77.8	\$77.5	\$79.4	\$81.9	\$83.0	\$84.7
Visitor Air Tran.	\$0.5	\$0.4	\$0.8	\$1.0	\$1.8	\$1.0	\$0.8
Total Destination Spending	\$568.9	\$594.6	\$565.9	\$597.2	\$632.3	\$648.7	\$678.2

Source: DRA

DRA estimates that visitors to Yavapai County spent \$678.1 million on these the categories listed in Table 4 in FY 2014. A significant portion of this spending was allocated to items in the taxable sales tax base including accommodation spending, restaurant and bars, and retail. Indeed, DRA estimates spending on accommodations that actually exceeds the entire TPT hotel/motel base in the county. Moreover, DRA estimates spending on arts, entertainment, and recreation that is approximately 5 times higher than the taxable base for amusements in the county. DRA is likely capturing expenditures on services in this category and it is also possible that some of this activity shows up in retail.

In Table 5 we reproduce DRA estimates for sales taxes paid by visitors as a share of the total for state sales taxes. Since the county sales tax base is the same as that of the State, with the exception of use taxes, these estimates can serve as an independent estimate of the share of sales taxes paid by visitors to Yavapai County. The estimate from DRA is 13.3% but DRA assumes visitors do not account for any spending on utilities, contracting, communications or personal property. Given the large share of vacation homes in the county, this assumption is unrealistic.

Table 5: State Transaction Privilege Taxes Generated by Travel Spending, FY 2014 (\$Millions)

	Total	Travel	Percent
Yavapai County	\$150.0	\$20.0	13.3%

Source: DRA

5. Data on Households from the Yavapai County Assessor

Yavapai County's Assessor's Office collects data on parcels by type of residential use - primary or non-primary residence. Hence we are able to augment Salant's seasonal variation methodology with actual non-resident homeownership information for Yavapai County. The data are depicted in Table 6.

Table 6: Yavapai County, Single Use Properties by Legal Class, FY 2014

Legal Class	Number of Parcels	Median Cash Value	Mean Cash Value
Primary Residence	70,850	\$141,286	\$173,568
Non-Primary Residence	8,406	\$134,532	\$181,238

Source: Yavapai County Assessor's Office

Approximately 11.8% of residential properties in Yavapai County are classified as non-primary residences and their average value is somewhat higher than that of primary residences.

6. Current Estimates Methodology

A reasonable estimate of the share of sales tax revenue paid by non-permanent resident visitors to Yavapai County can be obtained by using a portion of the methodology applied by Salant, estimates of non-permanent resident households in Yavapai County from the Yavapai County Assessor, estimates of

visitor spending compiled by Dean Runyan and Associates, and estimates of out-of-state student expenditures.

6.1. Historical Tax Revenue in Yavapai County- Total Sales Tax and Jail District Sales Tax

Taxable transactions are classified in the following business classifications or taxable activities: utilities, communications, publishing, job printing, restaurants and bars, amusements, rentals of personal property, contracting, retail, hotel/motel, and other taxable activities.

Historical data on total sales tax revenue for Yavapai County for the last 5 fiscal years (FY 2010-FY 2014) is depicted in Table 7.

**Table 7: State Tax Revenue Generated from Yavapai County, by Business Classification, FY2010-
FY2014²**

Yavapai County	Sales Tax Revenue				
Business Classifications	2010	2011	2012	2013	2014
Utilities	\$15,535,564	\$15,581,057	\$15,979,421	\$16,134,752	\$16,269,970
Communications	\$5,634,606	\$4,501,849	\$4,788,580	\$4,655,483	\$4,627,906
Publishing	\$128,089	\$136,079	\$139,235	\$136,930	\$157,857
Job Printing	\$220,318	\$183,360	\$203,994	\$172,171	\$268,540
Restaurants and Bars	\$12,712,487	\$13,060,869	\$13,713,640	\$14,287,281	\$15,304,402
Amusements	\$1,311,703	\$1,312,119	\$1,338,856	\$1,351,910	\$1,588,254
Rentals of Personal Property	\$2,317,554	\$2,043,313	\$2,113,000	\$2,482,055	\$2,790,164
Contracting (All)	\$14,853,208	\$12,526,463	\$14,309,841	\$17,163,790	\$18,053,515
Retail	\$59,692,669	\$61,331,457	\$64,798,139	\$69,406,920	\$74,123,332
Hotel/Motel	\$4,697,122	\$5,015,129	\$5,352,484	\$5,923,868	\$6,574,749
Other Taxable Activities	\$8,415,722	\$10,654,698	\$9,913,856	\$9,283,853	\$10,210,505
TOTAL	\$125,519,042	\$126,346,393	\$132,651,046	\$140,999,013	\$149,969,194

Source: AZDOR

Historical data on the jail district sales tax revenue in Yavapai County is displayed in Table 8:

² The numbers represent transaction privilege, use and severance taxes collected by the State of Arizona, generated from Yavapai County taxable activities. Only a small portion of this revenue is distributed to Yavapai County.

Table 8: Jail District Sales Tax Revenue, Yavapai County, FY2008-FY2015

Fiscal Years	Jail Tax Revenue
2008	\$7,952,863
2009	\$6,829,627
2010	\$5,908,756
2011	\$5,850,290
2012	\$6,199,337
2013	\$6,653,214
2014	\$7,072,702
2015	\$7,474,794

Source: AZDOR Annual Reports and interviews with DOR staff for 2015

6.2. The Four Components: Tourists, Vacation Home Residents, Cross County Shoppers and Students

Visitor spending can be classified by type of visitor. Traditional tourist activity occurs in Yavapai County as visitors come from around the State and outside the State to visit Prescott, Cottonwood, Sedona and enjoy the amenities of the county. Second, a considerable number of non-permanent resident households are maintained in the county as vacation homes. Third, the county realizes some spending activity from residents of neighboring counties in places, e.g. Sedona, where local residents find it advantageous to consume products in Yavapai County. Finally, out-of-state college students enrolled at Yavapai County colleges- Embry Riddle, Prescott College and Yavapai College- also spend in the local economy. Estimates of student spending were made by combining current enrollment figures with out-of-county shares and with estimates of per capita student spending obtained in a survey conducted in 2004 at the University of Arizona. The survey numbers were escalated to allow for inflation. The spending patterns of all four of these groups will be considered in the estimates compiled below.

6.2.1. Estimating the Non-Resident Portions- Baseline, High, and Low -and Related Assumptions

Table 9 depicts the sales tax business activity categories and aggregate tax revenue for 2014. The Table reveals that retail activity accounts for nearly half of overall activity in the county. Utilities, restaurant and bar, and contracting revenues account for approximately 10-12% each, while the remainder accrues to the smaller categories.

Table 9: State Tax Revenue Generated from Yavapai County, by Business Classification Shares, FY2014³

Business Classifications	Tax Revenue	Percentage
Utilities	\$16,269,970	10.8%
Communications	\$4,627,906	3.1%
Publishing	\$157,857	0.1%
Job Printing	\$268,540	0.2%
Restaurants and Bars	\$15,304,402	10.2%
Amusements	\$1,588,254	1.1%
Rentals of Personal Property	\$2,790,164	1.9%
Contracting (All)	\$18,053,515	12.0%
Retail	\$74,123,332	49.4%
Hotel/Motel	\$6,574,749	4.4%
Other Taxable Activities	\$10,210,505	6.8%
TOTAL	\$149,969,194	100.0%

Source: AZDOR

Table 10 provides estimates of the share of each business activity that is attributable to visitors, including the range of estimates discussed below.

Table 10: Percentage of Tax Revenue Attributed to Non-Residents, Yavapai County, FY2014

Business Classifications	Baseline	Low	High
Utilities	9.1%	6.6%	11.6%
Communications	5.6%	3.6%	7.6%
Publishing	0.0%	0.0%	0.0%
Job Printing	0.0%	0.0%	0.0%
Restaurants and Bars	34.6%	22.1%	47.1%
Amusements	70.0%	59.0%	81.0%
Rentals of Personal Property	10.9%	13.8%	16.3%
Contracting	7.5%	5.0%	10.0%
Retail	8.1%	6.6%	9.6%
Hotel/Motel	98.0%	96.0%	100.0%
Other Taxable Activities	0.0%	0.0%	0.0%
Percentage of exportable tax revenue that can be attributed to non-residents	16.2%	13.1%	19.4%
Percentage of total tax revenue that can be attributed to non-residents	15.0%	12.0%	18.0%

³ The numbers represent transaction privilege, use and severance taxes collected by the State of Arizona, generated from Yavapai County taxable activities. Only a small portion of this revenue is distributed to Yavapai County.

Utilities share: Data from the county assessor suggests that 11.8% of resident households are maintained as vacation homes, and that the median value of these homes is slightly higher than average. Since seasonal visitors do not occupy the residences year-round, and commercial/industrial use is responsible for a portion of utility revenue, we assume that 7.5% of utility revenue may be attributable to non-residents, with 5% a low estimate and 10% a high estimate. Students account for an additional 1.6% of utility revenue, bringing the totals to a baseline of 9.1%, a low of 6.6% and a high of 11.6%.

Communications share: Data from the county assessor suggests that 11.8% of resident households are maintained as vacation homes, and that the median value of these homes is slightly higher than average. Since seasonal visitors do not occupy the residences year round, and it is unlikely that many maintain land lines from companies based in Yavapai County, we assume that 4% of communications tax revenue may be attributable to non-residents, with 2% a low estimate and 6% a high estimate. We estimate that students account for an additional 1.6% of communications revenue, bringing the totals to a baseline of 5.6%, a low of 3.6% and a high of 7.6%.

Restaurant and Bar Revenue: Using Salant's seasonal method, we obtain an estimate of 20% of restaurant and bar revenue that may be attributable to visitors. In contrast the DRA report suggests that as much as 45% of taxable restaurant and bar sales may be attributable to county visitors. We assume that the actual number is central to these two estimates at 32.5%, with the DRA estimate used as the high and the Salant estimate used as the low. If we include expenditures made by students, which are estimated at 2.1%, the shares of restaurant and bar revenue paid by non-residents total 34.6% for the baseline, with a low of 22.1% and a high of 47.1%.

Amusements: Salant's method yields an estimate of 54% attributable to visitors, while the DRA report suggests that \$176 million was spent on arts, entertainment, and recreation in the county by visitors in 2014. The entire amusements category totals less than \$32 million. Clearly some of the expenditure estimated by DRA falls outside the taxable amusements category. However, the DRA estimates suggest that a much higher portion of amusements may indeed be attributable to visitors taking tours and other recreational activities. Accordingly we estimate 65% of the amusement category may be attributable to

visitors ,with a low estimate based on the Salant 54% figure and a high estimate of 76%. Adding student expenditures to the estimates, the totals are 70% for the baseline estimates, with a low of 59% and a high of 81%.

Personal Property: Salant estimates that 38% of personal property receipts are attributable to out of county visitor car rentals. Furthermore, she argues that the car rental portion of this tax category, which makes up 36.2% of the total, is the only component to which non-residents contribute. Without comparable data for Yavapai County, we use 38% as the baseline estimate, with 30% low and 45% high. Applying these rates to 36.2% of the personal property tax base results in a baseline percentage of 13.8%, a low of 10.9% and a high of 16.3%. Students are not assumed to contribute to this category.

Contracting: Data from the county assessor suggest that 11.8% of resident households are maintained as vacation homes, and that the median value of these homes is slightly higher than average. Since seasonal visitors do not occupy the residences year-round, and commercial/industrial use is responsible for a portion of utility revenue, we assume that 7.5% of utility revenue may be attributable to non-residents, with 5% a low estimate and 10% a high estimate. It would be sensible to use the low estimate if it was observed that vacation home building and remodeling is occurring at a slower pace than permanent resident home building and remodeling. The higher estimate would apply if the vacation home building/remodeling is occurring at a faster pace. Students are not assumed to incur any significant spending in this category.

Retail: DRA estimates that approximately 5.8% of total Yavapai retail transactions are attributable to non-permanent residents. In addition, residents of Sedona who live in Coconino County comprise approximately 1.5% of the total Yavapai County population⁴. It would be reasonable to assume that these residents make a significant share of their expenditures in Yavapai County given the locations of the retail outlets in the cities of Sedona and Cottonwood. The baseline estimate we use for retail, before adding student expenditures, is 7.5% of the total, with 6% a low estimate and 9% a high estimate of retail expenditures attributable to visitors. Including students- who are estimated to contribute .6% to the retail category- the baseline will be 8.1%, the low 6.6% and the high 9.6%.

⁴ The US Census Bureau's 2014 population estimate for Sedona is 10,176, with 7,268 living in Yavapai County

Hotel/Motel: Logically a high share of hotel/motel receipts is attributable to visitors. Based on Salant and DRA data, we use 98% as a baseline estimate, 96% for a low estimate and 100% as a high estimate. Students are not assumed to contribute to this category.

There is no reason to believe that visitor spending accounts for any consequential revenue in the remaining minor categories. Hence, our baseline estimate for the visitor share of total sales tax revenues in Yavapai County is 15%, with a range of 12% to 18%.

6.2.2. Caveats and Comparisons with Other Reports

Our methodology provides a baseline, a conservative low, and a high estimate of non-resident contributions to Yavapai County sales taxes. Unfortunately, a lack of precise data makes it difficult to estimate non-resident contributions in several categories. For example, the U.S. Census Bureau does not collect data on the number of non-residents, which would be a very useful input to our model.

Comparisons with other Arizona counties are difficult to make as they differ in terms of size, climate, tourist attractions and vacation home ownership. For example, DRA estimates that state transaction privilege taxes generated by tourism spending, while averaging 10.3% for the State, range from 30% in Coconino County to 9% in Maricopa County. The high estimate for Coconino County is based on the high share of hotel/motel receipts in the sales tax base, which is some 3-4 times higher than the State average.

Salant's estimates, while offering useful insights and methodological approaches, are based on outdated tourism and consumer trends, and hence should be interpreted with caution. Shopping patterns, tourism spending and vacation home ownership trends have all changed since the reports were written in the 1990s. Nevertheless, a strict application of Salant's methodology to current Yavapai data today will yield numbers very close to the estimates formulated in this report using our own independent methodology.

7. Conclusions

Based on careful investigation of appropriate and related methodologies for Yavapai County, including current data from several sources, we find that non-resident contributions to sales tax revenue are more modest than one might conclude from reading the Salant research papers - especially her analysis of Coconino and Navajo Counties.

After carefully reviewing the Salant reports, we believe that only limited parts of her methodology are applicable in a contemporary study for Yavapai County. This is due to critical differences between the counties studied by Salant compared to Yavapai County, the time that has elapsed since her reports were published in the 1990s, and the subsequent changes in consumer and tourist behavior that have taken place.

Other studies, like DRA, also find high percentages of non-resident contributions, such as 30% for Coconino County in 2014. However, DRA estimate the percentage of non-resident sales tax contributions for Yavapai County at 13.3% in 2014.

While there is indeed a body of literature that suggests visitor shares of sales tax payments can approach 35% in some counties, our own conclusions, based on a careful review of the literature and application of appropriate methodology applied to appropriate data, are that non-residents currently contribute 15% to Yavapai County's jail district sales tax revenue, with a range of 12% to 18% from low to high.

Separate analysis indicates that future baseline non-resident contributions to the jail tax will be between 16-17% during fiscal years 2016-2040. Low projected estimates range between 12-14%, while high estimates are between 18-20%.

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Appendix: Map of Yavapai County

