

**A GENERAL SALES TAX ON
SERVICES IN NEVADA**
Fiscal Impacts & Stability

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A GENERAL SALES TAX ON SERVICES IN NEVADA

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INTRODUCTION AND OVERVIEW

It is well known that the 78th (2015) session of the Nevada Legislature was dominated by a discussion of state revenues and taxes. Ultimately, the Nevada Revenue Plan was adopted with its centerpiece being the new Commerce Tax. During the session, extensive talks were held regarding the possibility of instituting a general sales tax on services in Nevada with a tabling of this issue until the next 79th Session.

In order to facilitate reasoned discussion, the University of Nevada-Las Vegas (“UNLV”) commissioned this white paper to identify the potential state-level fiscal impact of a sales tax on “service-sector” businesses and to identify important, yet more complicated, issues of tax stability. Subject to the assumptions identified in the analysis, this research provides the basis for future conversation on these issues for the Legislature and Nevada policymakers.

The Consultant Team on this effort is comprised UNLV economist Alan Schlottmann, RCG Economics, LLC (“RCG”) and Marcus Conklin of Strategies 360 (“Conklin”). This is the same research team that has jointly conducted research on public finance issues facing Nevada for a decade.

The research presented below consists of two sections. Section I is focused on potential revenue estimates associated with a sales tax on services. A broader consideration of state tax revenue stability is provided in Section II.

In Section I, we identify the potential state-level fiscal effects of a sales tax on “service-sector” on businesses, and we provide estimates of service industry-wide gross revenues for FY 2014 for NACIS sectors ranging from 3-6 digits obtained by the U.S. Census Bureau’s Economic Census reports (2002, 2007 and 2012). The estimates of resulting tax revenue assume a two-percent sales tax as currently allocated to the Nevada General Fund.

The potential revenues associated with taxing a broad range of services in Nevada are significant, and are in the annual range of \$777M. As discussed in detail below, these estimates assume, for example, a uniform rate of taxation across all individual service

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sectors with no changes in business behavior. *In this regard, they should be interpreted as a starting point for further analysis and discussion.*

It is important to note that estimates of tax revenue herein are not an actual company-level analysis. That is, the revenues associated with a sales tax on services in this report are estimated at the industry-level by applying average historical ratios to the most recent data for Nevada. Specifically, all calculations, including estimated revenues and tax yields, are calculated at the industry aggregate level.

In Section II, we explore with new research the extent to which the broad taxation of services affects the stability of a state revenue system. This is accomplished by comparing revenue growth over time among states, which vary significantly in the extent to which services are taxed.

The trend in revenue growth from sales taxes reveals several insights on whether a general sales tax on services affects the stability of revenues. It is interesting to note that, in general, the evidence suggests that current sales taxes have become less responsive to economic growth over time. This observation, if true, helps to explain the constant concern over taxes and revenues. However, these results also suggest that a sales tax on services does not represent a “magic bullet” to state public finances.

The evidence does suggest that the existing tax “portfolio” in state revenue structures clearly appears to interact with sales taxes on services. These considerations are not simply arithmetic in nature but involve policy decisions on the progressivity of state taxes and the existence of other taxes. For example, Nevada has eschewed taxing necessities, such as groceries, pharmaceuticals, rents, etc. given concerns over progressivity and impacts on lower-income households.

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SECTION I: FISCAL IMPACTS-REVENUE ESTIMATES

As noted above in Section I, we have identified the potential state-level fiscal impact of a sales tax on “service-sector” businesses

Methodology, Data & Limiting Assumptions

In order to estimate the tax revenue from a sales tax on service-sector industries, an estimate of the size of the tax-base is needed. In this case, the tax-base consists of total gross revenues from businesses within industries considered to be part of the “service sector.” Due to limitations, 2012 is the most recent year for these data.

To provide an estimate of tax revenues for more recent years, the Consultant Team elected to use a historically based payroll/revenue ratio to approximate the gross business revenues for Nevada sectors. For example, the Offices of Physicians sector has a historical average payroll/revenue ratio of 38 percent meaning that 38 percent of the industry’s Nevada revenue went to payrolls. For the purposes of this study, the historical average payroll/revenue ratio, by industry, is assumed to remain constant. It is also assumed to be representative of individual businesses in each industry. Using payrolls to estimate revenues is a generally accepted industry practice and has been used by RCG in previous studies to determine the impact of the proposed Margins Tax.¹

The most recent complete fiscal year of payroll data from the Nevada Department of Employment, Training, and Rehabilitation’s (“DETR”) Quarterly Census of Employment and Wages (“QCEW”) is FY 2014 (July 2014-June 2015). As noted above, to estimate gross business revenues for FY 2014, the Consultant Team collected payroll and gross revenue data for Nevada, by North American Industry Classification System (“NAICS”) sector, from each of the U.S. Census Bureau’s Economic Census datasets. For the purposes of this study, historical revenue for individual sectors is defined as the Economic Census’ figures for

¹ *Nevada Margin Tax Impact Analysis*. RCG Economics. August 2014.

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“Value of sales, shipments, receipts, revenue, or business done”² and an industry’s payroll is defined as the “Annual Payroll” data also reported by the Economic Census.³

Using the Census data, the Consultant Team calculated an historical average of each sector’s payroll/revenue ratio for 2002, 2007 and 2012. In some cases, due to data disclosure issues, only two years of data were available to create the average payroll/revenue ratio. This historical average was matched with available NAICS sectors found in the FY 2014 Nevada payroll data from DETR to provide an approximate level of gross business revenue for FY 2014.

The approximated gross revenues for FY 2014 are available for a total of 97 service-based sectors in Nevada, ranging in detail from three to six digits, based on data availability. For example, in the case of Couriers and Messengers, data were available at the three-digit level (NAICS 492) and for Barber Shops it was available at the six-digit level (NAICS 812111). The more digits, the more specific industry data, with six digits being the most detailed and specific industry classification available. NAICS 492, Couriers and Messengers, has many sub-sectors within it (for example 4921 is Couriers and Express Delivery and 4922 is Local Messengers and Local Delivery). However, due to data limitations this detailed level of data is unavailable for certain sectors.

The 2007 Federation of Tax Administrators survey of individual states⁴ was used to determine which NAICS sectors within Nevada should be considered part of the services industry and would; therefore, potentially be subject to a sales tax on services. When choosing which industries are to be taxed, there are two different approaches: selective (some services) or comprehensive (all possible services). The Consultant Team elected to use the Tax Administrators list as published and not alter it. Therefore, the Consultant Team chose the comprehensive approach rather than “subjectively” selecting a list of services, which should be taxed; therefore, not assuming that any existing tax on services, such as live entertainment, was eliminated from the analysis.⁵ Because of the comprehensive

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²http://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=category&id=category.en./ECN/ECN/2012_US/00A1.MEASURE.RCPTOT#main_content

³http://factfinder.census.gov/faces/affhelp/jsf/pages/metadata.xhtml?lang=en&type=category&id=category.en./ECN/ECN/2012_US/00A1.MEASURE.PAYANN#main_content

⁴ <http://old.taxadmin.org/fta/pub/services/services.html>

⁵ For example, Nevada does currently tax “Live Entertainment Services” through the LET, which is an ongoing topic regarding potential revisions. This does point out the additional consideration that arises when debating the creation of new taxes, especially a sales tax on services, i.e., states often times

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approach used to create the estimates presented herein, both business-to-business, as well as point-of-sale services are included herein. As discussed in the *Policy Implications and Recommendations* section below, this may not be the ideal set of industries to tax. The decision to generate tax yield estimates using a comprehensive approach should not be seen as a recommendation that an all-inclusive tax on services is ideal for Nevada. Rather, this approach was chosen due to facilitate presenting and interpreting results.

Because the Federation of Tax Administrators survey was based on 2007 NAICS codes, a NAICS “crosswalk” was used to ensure the data from 2002 and 2012 were appropriately matched. Because the NAICS codes have changed over time, it was necessary to ensure that data from different years was matched appropriately with data from more recent years. For example, the NAICS code for solar power generation changed from 221119 in 2007 to 221114 in 2012. Failing to account for this change would have led to faulty results. That is why the cross tabulation process was used.

The results of this study are also limited by the exclusion of “Non-employer value of sales, shipments, receipts, revenue, or business done.” Non-employers are excluded due to the lack of historical payroll data for these firms, which is essential to forecast revenues for FY 2014. Because of this limitation, the business and tax revenue projections for each sector underestimate the potential sales tax yield for some service sectors.

Due to data disclosure issues, 13 service-sector industries present in Nevada were not able to be included in the analysis. According to the Census Bureau, data for these sectors were “not collected at this level of detail for multi-establishment firms, not available or comparable, or withheld to avoid disclosing data for individual companies.”⁶ Table I-1 provides a breakdown of the sectors that were excluded from this report. Due to this exclusion, the total tax yield projections herein may be underestimated in the range of 1.8% to 2.7%.⁷ As is well known, Nevada sales taxes reflect progressive taxation policy and

may already tax selected services (such as entertainment). So, the distinction of adding a new type of sales tax is not as simple as choosing either a comprehensive or selective approach. In Nevada’s case, policymakers will need to decide whether to: apply a new sales tax in addition to current taxes, apply a new sales tax and eliminate some current taxes, or not apply a new sales tax to the services already taxed, and maintain the current taxes.

http://tax.nv.gov/FAQs/Live_Entertainment_Tax_FAQ%E2%80%99s/

⁶ http://www.census.gov/econ/census/help/methodology_disclosure/symbols_glossary.html

⁷ Due to the limited data at this level of detail, it is difficult to provide an estimate as to how significant each excluded sector is to the total GDP of Nevada. However, many of the excluded sectors are considered part of “Miscellaneous Services”, which the Tax Foundation estimates represents

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have not been applied to necessities such as groceries, pharmaceuticals, rents, etc. Therefore, in our opinion, it is highly unlikely that a general sales tax on services would be layered on top of existing ad valorem taxes, such as those paid by utilities, specifically for NAICS 2211.⁸

Table I-1: Excluded Service-Sector Industries

NAICS	Industry
522	Credit Intermediation & Related Activity
524	Insurance Carriers & Related Activities
2211	Power Generation and Supply
5171	Wired Telecommunications Carriers
22121	Natural Gas Distribution
22131	Water Supply and Irrigation Systems
49312	Refrigerated Warehousing and Storage
51212	Motion Picture and Video Distribution
51721	Wireless Telecommunications Carriers
323122	Prepress services
488991	Packing and Crating
519190	All Other Information Services
711212	Racetracks

Source: Census Bureau Economic Census, RCG Economics

Two final assumptions that must be addressed are the issues of tax avoidance and tax evasion. The results of this analysis assume that business owners will freely pay the full amount they are taxed (zero tax avoidance and/or evasion). Tax evasion is illegal, however, it commonly occurs, and because of this, tax revenues are reduced. Some examples of tax evasion tactics include:

- Deliberately under-reporting income or revenue such as a business owner choosing to not report some portion of revenue
- Businesses not reporting cash transactions made by customers
- Claiming personal expenses of the owner and/or employees as business expenses

approximately 1.75 percent. <http://taxfoundation.org/article/simplifying-nevadas-taxes-framework-future>, Figure 7. Pg. 13. Using employment figures as a proxy for output from Nevada Department of Employment, Training, and Rehabilitation (DETR) and an estimate for utility employment, this figure could be 2.7% (excluding government); *Economy in Brief*, December 2015.

⁸ These taxes are shown at http://tax.nv.gov/LocalGovt/CA_Prop/Utility_and_Transportation/

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It is also assumed that consumers and businesses will not change their purchasing behavior by seeking ways to avoid paying a sales tax on services (zero tax avoidance). Tax avoidance is legal. Having to pay a tax can incentivize individuals to find a way to receive a good or service without having to pay the tax. Some examples of tax avoidance include:

- Choosing to drive your vehicle into a different jurisdiction (county or even state) to receive vehicle repairs
- Outsourcing accounting or other personal finance services to individuals in different jurisdictions to avoid a sales tax on services; conversely, bringing in-house a service a firm previously outsourced
- Donating to charity or contributing to a personal IRA to help reduce income tax burden
- Buying a product online versus buying a product at a retail out in hopes of avoiding sales and use tax

Within the literature there is no standard assumption regarding the rate of avoidance or evasion for either of these phenomenon, and it is also likely that these rates vary greatly both over time and by geography. In light of this, the Consultant Team was unable to account for these phenomenon within the results. However, the reader is free to make any assumption and reduce the total findings by a factor he or she chooses to be appropriate.

Results

The results presented herein should be understood as a “best case scenario” in light of the limiting assumptions listed above. For the purposes of understanding the fiscal impact a sales tax on services would have for the Nevada General Fund, the Consultant Team chose to study the results of an effective tax rate of two percent, which is the current state sales and use tax for goods that is appropriated to the Nevada General Fund.⁹ In practice, the effective sales tax rate could potentially vary across the different jurisdictions throughout Nevada. However, this would not affect the two percent that may be levied by the State.

⁹ Nevada Revised Statutes 372.

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Since tax rates on services, if enacted, may well turn out to vary by industry in any real-world scenario, the uniform rate assumption may not hold. The reader can adjust the tables below with her or his own set of assumptions. For example, the Nevada Legislature may find it appropriate to enact differential rates on different services, such as vehicle repair services compared to entertainment services. It is also possible that the effective tax rate may also apply differently to different businesses within the same industry, such as the difference in tax and license fees for restricted and unrestricted gaming licenses in Nevada.¹⁰ All of these issues simply point out the very important fact that implementation of taxation on services is not a simple “yes-no” decision.¹¹

Table I-2 below provides a breakdown of every NAICS sector that was categorized as a service-sector industry in Nevada, as well as the annual estimated tax revenue yield and the average calculated tax burden per establishment per industry using the methodology above.

Based on the estimated revenues created from the FY 2014 DETR payroll data, the total tax revenue that would have been collected by the State of Nevada from applicable service industries, assuming a constant two-percent sales tax and in consideration of the data limitations, is estimated at \$777,175,000, with an average burden per establishment of \$25,000.¹²

Additionally, if the service sectors profiled herein had been taxed in FY 2014, then total General Fund collections would have increased from \$3.065 Billion to \$3.842 Billion (25 percent increase).¹³ This comes to an increase of approximately \$274 per capita (2014 Nevada population 2.83 million). In comparison, the two percent sales and use tax collections for goods totaled \$931.3 Million (\$329 per capita) in FY 2014. If all services had been taxed at the same rate as goods, the per capita state two-percent sales tax burden per Nevadan in FY 2014 would have totaled approximately \$603 (55 percent goods and 45 percent services). Nevada is generally seen as having high sales tax collections per capita (the Tax Foundation ranked Nevada as 8th overall in state and local sales tax collections for

¹⁰ <http://gaming.nv.gov/index.aspx?page=94>

¹¹ For example, as presented in testimony in the last legislative session by Alan Schlottmann, lower-income households utilize automotive repair services (as a percentage of income) more than higher-income households.

¹² It is important to stress that these estimates are strictly for a two-percent sales tax on the sectors used herein. This sales tax is assumed to be assessed in addition to any other tax, such as the Live Entertainment of Gaming Taxes, that the sectors herein are subject to.

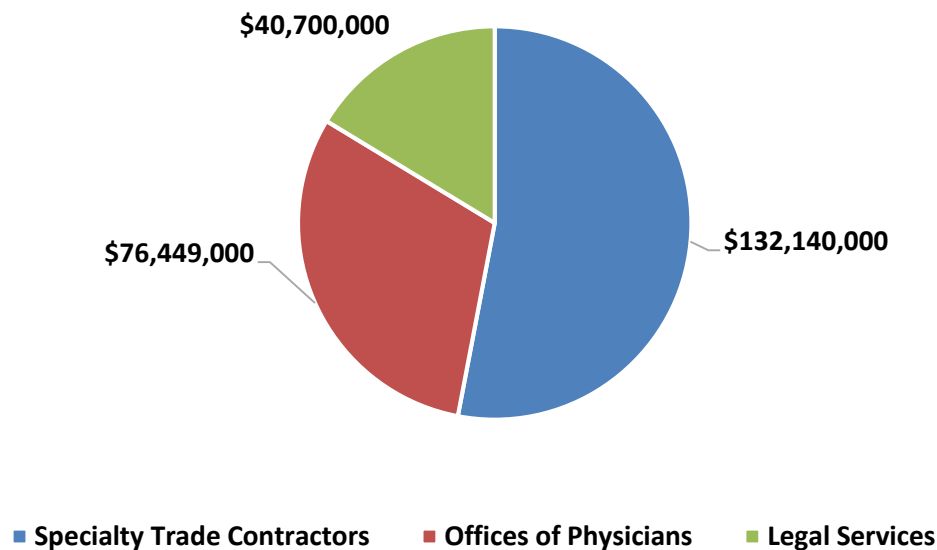
¹³ https://www.leg.state.nv.us/interim/77th2013/Committee/NonLeg/EcForum/Other/FY2014/FY2014_GF_Revenue_Status_Report_August_2014.pdf

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2012).¹⁴ However, this figure is particularly deceptive for Nevada, because of the large amount of taxable spending by tourists who do not get factored into the population count. However, also using states with significant tourism sectors, such as Florida, California and Texas as rough indicators, this increase in per capita sales tax collections would be in the range of 18% to 21%.¹⁵

The top three NAICS sectors that would have generated the largest yield with a sales tax on services in Nevada in FY 2014 are: NAICS 238— Specialty Trade Contractors (\$132,140,000), NAICS 6211— Offices of Physicians (\$76,449,000) and NAICS 5411—Legal Services (\$40,700,000).

Figure I-1: Top 3 Total Sales & Use Tax Revenue NAICS Service Industries: 2014



Sources: U.S. Census Bureau Economic Census, NV DETR 2014 QCEW, calculated by RCG Economics.

Section I

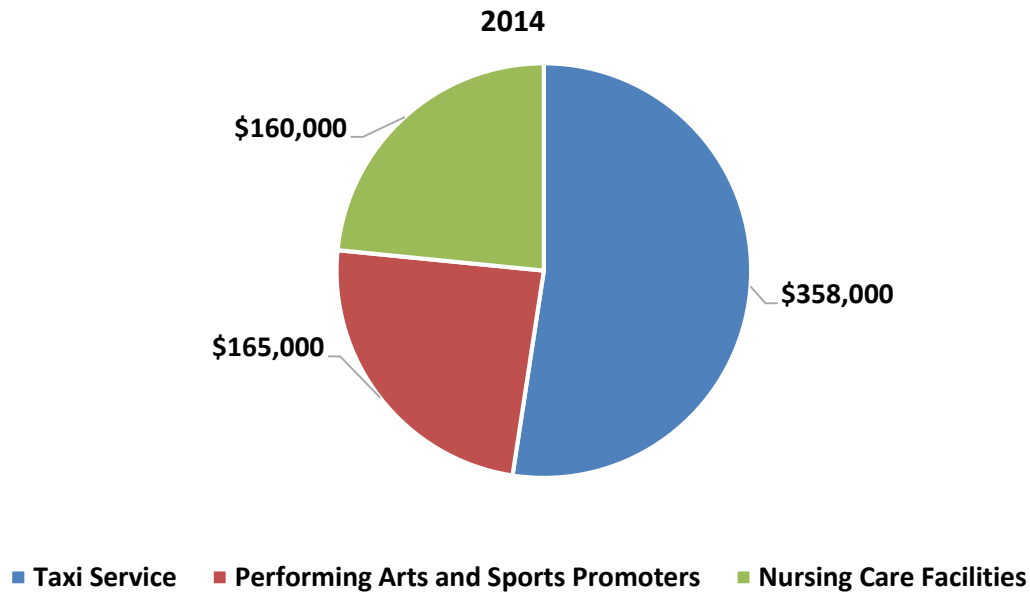
The top three NAICS sectors that would have had the highest average tax burden per establishment are: NAICS 48531—Taxi Service (\$358,000/establishment), NAICS 7113—Performing Arts and Sports Promoters (\$165,000/establishment) and NAICS 62311—Nursing Care Facilities (\$160,000/establishment).

¹⁴ <http://taxfoundation.org/blog/map-state-and-local-general-sales-tax-collections-capita>

¹⁵ This assumes, of course, that no other changes to existing sales taxes take place, such as reducing the rate of existing sales taxes to partially offset these impacts on Nevada households.

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Figure I-2: Top 3 Average Sales & Use Tax Burden per Establishment NAICS Service Industries:



Sources: U.S. Census Bureau Economic Census, NV DETR 2014 QCEW, calculated by RCG Economics.

An interesting take away from the analysis is that approximately \$116,000,000 (15 percent) of the total sales and use tax revenue estimate herein comes from medical services-related industries (NAICS: 6211, 6212, 6215, and 62311). In general, many states choose to exclude medical services from the tax-base¹⁶. If Nevada were to do the same, the total sales tax on services yield would have been approximately \$661,000,000 in 2014 down from the \$777,175,000 noted above, a 15-percent drop.

Table I-2 below illustrates the hypothetical 2014 sales and use tax burden per service industry while Table I-3 below illustrates the hypothetical average sales and use tax burden per establishment by industry.

¹⁶ "...based on state and local law...most taxable states do not impose tax on professional services [such as medical services]. A professional service implies a service being performed by a recognized professional, or a service that requires extensive knowledge and expertise of a professional nature." Schlesinger, Phil. *The Taxability of Services*. CCH. pg. 4.

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Table I-2: Estimated 2014 Sales & Use Tax Burden per Service Industry: 2014

NAICS	Industry	Projected Tax Revenues @ 2%
238	Specialty Trade Contractors	\$132,140,000
6211	Offices of Physicians	\$76,449,000
5411	Legal Services	\$40,700,000
72111	Hotels (except Casino Hotels) and Motels	\$38,702,000
5619	Other Support Services	\$28,511,000
811	Repair and Maintenance	\$28,472,000
54133	Engineering Services	\$26,368,000
5312	Offices of Real Estate Agents & Brokers	\$25,241,000
6212	Offices of Dentists	\$19,495,000
485	Transit and Ground Passenger Transport	\$18,362,000
7113	Performing Arts and Sports Promoters	\$16,985,000
5412	Accounting and Bookkeeping Services	\$15,441,000
492	Couriers and Messengers	\$14,241,000
7111	Performing Arts Companies	\$14,183,000
541511	Custom Computer Programming Services	\$14,143,000
32311	Printing	\$13,375,000
56132	Temporary Help Services	\$12,613,000
5313	Activities Related to Real Estate	\$12,080,000
56173	Landscaping Services	\$12,058,000
6215	Medical and Diagnostic Laboratories	\$10,971,000
56172	Janitorial Services	\$10,059,000
62311	Nursing Care Facilities	\$9,429,000
48531	Taxi Service	\$9,230,000
56199	All Other Support Services	\$8,540,000
532111	Passenger Car Rental	\$7,349,000
561612	Security Guards and Patrol Services	\$6,948,000
5112	Software Publishers	\$6,741,000
811111	General Automotive Repair	\$6,479,000
561422	Telemarketing Bureaus	\$6,144,000
518210	Data Processing and Related Services	\$5,776,000
54138	Testing Laboratories	\$5,595,000
54194	Veterinary Services	\$5,463,000
52231	Mortgage and Nonmortgage Loan Brokers	\$5,455,000
71391	Golf Courses and Country Clubs	\$5,427,000
5322	Consumer Goods Rental	\$4,503,000
541191	Title Abstract and Settlement Offices	\$4,402,000
8112	Electronic Equipment Repair/Maintenance	\$4,342,000
54131	Architectural Services	\$4,280,000
49311	General Warehousing and Storage	\$4,088,000
7112	Spectator Sports	\$4,069,000
71121	Spectator Sports	\$4,069,000
81219	Other Personal Care Services	\$3,950,000
54181	Advertising Agencies	\$3,823,000
81119	Other Automotive Repair and Maintenance	\$3,414,000
53113	Mini-warehouses and Self-Storage Units	\$3,403,000

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NAICS	Industry	Projected Tax Revenues @ 2%
532412	Other Heavy Machinery Rental and Leasing	\$3,335,000
812331	Linen Supply	\$3,311,000
56144	Collection Agencies	\$3,290,000
48532	Limousine Service	\$3,074,000
71399	All Other Amusement and Recreation	\$2,963,000
54185	Display Advertising	\$2,808,000
48121	Nonscheduled Air Transportation	\$2,804,000
56151	Travel Agencies	\$2,758,000
52393	Investment Advice	\$2,586,000
81299	All Other Personal Services	\$2,525,000
812112	Beauty Salons	\$2,443,000
54184	Media Representatives	\$2,408,000
56141	Document Preparation Services	\$2,322,000
52392	Portfolio Management	\$2,115,000
811192	Car Washes	\$2,094,000
81232	Dry-cleaning and Laundry Services	\$1,659,000
56179	Other Services to Buildings & Dwellings	\$1,653,000
56174	Carpet and Upholstery Cleaning Services	\$1,527,000
56171	Exterminating and Pest Control Services	\$1,523,000
541213	Tax Preparation Services	\$1,199,000
54143	Graphic Design Services	\$1,170,000
81221	Funeral Homes and Funeral Services	\$1,146,000
561439	Other Business Service Centers	\$1,007,000
81291	Pet Care (except Veterinary) Services	\$878,000
561613	Armored Car Services	\$794,000
81292	Photofinishing	\$695,000
7212	RV Parks and Recreational Camps	\$681,000
54141	Interior Design Services	\$665,000
56145	Credit Bureaus	\$646,000
561492	Court Reporting and Stenotype Services	\$615,000
71311	Amusement and Theme Parks	\$613,000
56131	Employment Placement Agencies	\$610,000
54137	Other Surveying and Mapping Services	\$592,000
532112	Passenger Car Leasing	\$514,000
71393	Marinas	\$498,000
81293	Parking Lots and Garages	\$494,000
54189	Other Services Related to Advertising	\$440,000
811198	All Other Automotive Repair/Maintenance	\$411,000
213112	Support Activities, Oil/Gas Operations	\$410,000
81231	Coin-Operated Laundries and Drycleaners	\$375,000
54136	Geophysical Surveying & Mapping Services	\$334,000
81149	Other Household Goods Repair/Maintenance	\$285,000
532411	Transportation Equipment Rental/Leasing	\$283,000
71395	Bowling Centers	\$261,000
812111	Barber Shops	\$163,000
71312	Amusement Arcades	\$161,000

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NAICS	Industry	Projected Tax Revenues @ 2%
213115	Support Activities, Nonmetallic Minerals	\$121,000
53222	Formal Wear and Costume Rental	\$118,000
81143	Footwear and Leather Goods Repair	\$108,000
53223	Video Tape and Disc Rental	\$65,000
561421	Telephone Answering Services	\$62,000
72119	Other Traveler Accommodation	\$54,000
TOTAL		\$777,175,000

Sources: U.S. Census Bureau Economic Census, NV DETR 2014 QCEW, calculated by RCG Economics.

Table I-3: Estimated 2014 Average Sales & Use Tax Burden per Establishment: 2014

NAICS	Industry	Average Burden Per Establishment
48531	Taxi Service	\$358,000
7113	Performing Arts and Sports Promoters	\$165,000
62311	Nursing Care Facilities	\$160,000
812331	Linen Supply	\$139,000
485	Transit and Ground Passenger Transport	\$105,000
71311	Amusement and Theme Parks	\$102,000
72111	Hotels (except Casino Hotels) and Motels	\$89,000
81292	Photofinishing	\$79,000
532112	Passenger Car Leasing	\$79,000
492	Couriers and Messengers	\$76,000
561613	Armored Car Services	\$74,000
7111	Performing Arts Companies	\$73,000
32311	Printing	\$70,000
71391	Golf Courses and Country Clubs	\$66,000
7112	Spectator Sports	\$65,000
71121	Spectator Sports	\$65,000
532111	Passenger Car Rental	\$60,000
48532	Limousine Service	\$60,000
532412	Other Heavy Machinery Rental and Leasing	\$59,000
5112	Software Publishers	\$58,000
48121	Nonscheduled Air Transportation	\$51,000
54138	Testing Laboratories	\$50,000
6215	Medical and Diagnostic Laboratories	\$48,000
54185	Display Advertising	\$48,000
71393	Marinas	\$47,000
532411	Transportation Equipment Rental/Leasing	\$45,000
561422	Telemarketing Bureaus	\$43,000
54133	Engineering Services	\$40,000
56144	Collection Agencies	\$37,000
52231	Mortgage and Nonmortgage Loan Brokers	\$36,000
541191	Title Abstract and Settlement Offices	\$35,000
238	Specialty Trade Contractors	\$34,000

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NAICS	Industry	Average Burden Per Establishment
561612	Security Guards and Patrol Services	\$34,000
56145	Credit Bureaus	\$33,000
6211	Offices of Physicians	\$31,000
54184	Media Representatives	\$31,000
54131	Architectural Services	\$30,000
213115	Support Activities, Nonmetallic Minerals	\$30,000
81221	Funeral Homes and Funeral Services	\$26,000
54194	Veterinary Services	\$25,000
5619	Other Support Services	\$24,000
5322	Consumer Goods Rental	\$24,000
81293	Parking Lots and Garages	\$23,000
518210	Data Processing and Related Services	\$22,000
54181	Advertising Agencies	\$22,000
5411	Legal Services	\$21,000
561439	Other Business Service Centers	\$21,000
213112	Support Activities, Oil/Gas Operations	\$21,000
5312	Offices of Real Estate Agents & Brokers	\$20,000
71395	Bowling Centers	\$20,000
71312	Amusement Arcades	\$20,000
71399	All Other Amusement and Recreation	\$19,000
56173	Landscaping Services	\$18,000
6212	Offices of Dentists	\$17,000
8112	Electronic Equipment Repair/Maintenance	\$17,000
81219	Other Personal Care Services	\$17,000
811	Repair and Maintenance	\$16,000
56132	Temporary Help Services	\$16,000
56151	Travel Agencies	\$16,000
52392	Portfolio Management	\$16,000
811192	Car Washes	\$16,000
54136	Geophysical Surveying & Mapping Services	\$16,000
81119	Other Automotive Repair and Maintenance	\$15,000
53113	Mini-warehouses and Self-Storage Units	\$15,000
52393	Investment Advice	\$15,000
7212	RV Parks and Recreational Camps	\$14,000
541511	Custom Computer Programming Services	\$13,000
56172	Janitorial Services	\$13,000
811111	General Automotive Repair	\$13,000
81299	All Other Personal Services	\$12,000
81143	Footwear and Leather Goods Repair	\$12,000
5412	Accounting and Bookkeeping Services	\$11,000
5313	Activities Related to Real Estate	\$11,000
49311	General Warehousing and Storage	\$11,000
56174	Carpet and Upholstery Cleaning Services	\$11,000
561492	Court Reporting and Stenotype Services	\$11,000
54143	Graphic Design Services	\$10,000
53222	Formal Wear and Costume Rental	\$10,000

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NAICS	Industry	Average Burden Per Establishment
56199	All Other Support Services	\$9,000
81232	Dry-cleaning and Laundry Services	\$9,000
56171	Exterminating and Pest Control Services	\$9,000
54137	Other Surveying and Mapping Services	\$9,000
811198	All Other Automotive Repair/Maintenance	\$9,000
81231	Coin-Operated Laundries and Drycleaners	\$8,000
56141	Document Preparation Services	\$7,000
56179	Other Services to Buildings & Dwellings	\$7,000
81291	Pet Care (except Veterinary) Services	\$7,000
54141	Interior Design Services	\$7,000
812112	Beauty Salons	\$6,000
56131	Employment Placement Agencies	\$6,000
54189	Other Services Related to Advertising	\$6,000
812111	Barber Shops	\$6,000
72119	Other Traveler Accommodation	\$6,000
81149	Other Household Goods Repair/Maintenance	\$5,000
541213	Tax Preparation Services	\$4,000
53223	Video Tape and Disc Rental	\$4,000
561421	Telephone Answering Services	\$3,000
OVERALL AVERAGE		\$25,000

Policy Implications & Recommendations

- Section I
▪ Sales taxes on services are mainly paid by local residents as opposed to tourists/visitors. Additionally taxed purchases by local residents and households will be related to lower disposable incomes. This decrease may lead to reductions in other types of taxable spending or investments. Therefore, it may reduce tax revenue from other sources. This may result in an offsetting affect where the taxable base grows, but sales tax revenues do not.
- Some sectors may not be attractive to tax, such as the medical sector, due to the political nature of raising the price of services that are seen as being “necessities.”
- Business-to-business services¹⁷ may also not be attractive political options to tax because the taxation on these “inputs” may cause tax “pyramiding.” Mazerov noted that “Pyramiding” occurs when an input is subject to a sales tax when purchased by the

¹⁷ Business-to-business sales refer to sales that are conducted between companies, rather than between a company and consumers. Some examples include: accounting services, copier repairs, payroll processing, advertising, transportation, legal, warehousing/storage, etc.

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business and then, effectively, a second time when the business passes the cost of the input into the selling price of a good or service that is also subject to sales tax.”¹⁸ This pyramiding can increase the cost to household consumers of retail or other service oriented products which can cause cost of living to increase.¹⁹

- Taxation of business-to-business services can disproportionately affect smaller businesses. Including a tax on business-to-business services alters the incentives of the business owner to opt for vertical integration of the services being provided. For example, if legal services become taxed, it may be in the best interest of a business to hire a staff lawyer rather than contract work from a separate firm. In many cases, small businesses are unable to absorb this cost whereas larger businesses generally have access to more resources to account for this.
- Like any other tax, business-to-business taxes can reduce Nevada’s potential for economic growth, because customers who choose to buy retail goods made in Nevada may have to pay a higher price due to increased cost of business compared to the same retail good produced in a competing state without a tax on business to business services. A sales tax on services may also affect Nevada’s competitive position for potential economic development. New businesses may not choose to relocate to Nevada given the tax, particularly if it increases their costs of doing business if business-to-business services are also taxed.
- A sales tax on common household services may disproportionately affect lower-income residents. “Taxing services such as housing, utilities, and other necessities, can actually make the sales tax more regressive [a higher burden placed on lower-income households] because these services are basic staples of consumer spending,” and “...low-income taxpayers spend a higher share of their income on goods and services

¹⁸ Mazerov, Michael. *Expanding Sales Taxation of Services: Options and Issues*. Center on Budget and Policy Priorities. July 2009. Pg. 25. See also “What’s Wrong with Taxing Business Services.” Council on State Taxation. 2013.

¹⁹ The Federation of Tax Administrators has identified 44 services that are currently exempted from Nevada’s sales tax that could be considered either business inputs or consumer services depending on who the final purchaser is. For example, both a business as well as an individual consumer could purchase window cleaning or interior decorating services. Because of this, the possibility of avoiding tax pyramiding, and the issues related to it, becomes increasingly difficult to accomplish. The Tax Foundation. <http://taxfoundation.org/article/simplifying-nevadas-taxes-framework-future>, Table 4. Pg. 35.

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than do wealthier taxpayers.”²⁰ Lower-income residents are more likely to repair older goods, like cars or appliances, rather than purchase a new replacement. Every time a technician or mechanic repairs these goods the household’s tax burden increases, which may hinder its ability to better to save and invest. For example, Nevada does not tax food bought at a grocery store, which is viewed as a necessity. Given this concept, would it be appropriate to tax services that are proportionately used more by lower income households and that may be viewed as “necessities” like automobile repairs? And if so, should such services be taxed at a lower rate than services that are used more by other segments of the population?

- A tax on services will not be the only tax that low-income households are required to pay. The effects of choosing a regressive tax policy are not independent of the other taxes already collected by a state. Policymakers may find it appropriate to adjust tax rates (such as property tax), license fees (occupational or business), or offer other tax credits, for lower-income households in order to reduce their total tax burden.
- Sales taxes on services primarily purchased by households that are not seen as “necessary services” (e.g., personal trainers, personal instruction (cooking classes, golf, adult education courses), gym memberships, personal storage and moving companies etc.) may be the most politically neutral services to choose to levy a tax on.²¹ However, in many cases, these industries have a high concentration of small businesses. Increasing their tax burden can hinder their potential for future growth, as well as decrease the demand for their services.
- A sales tax on services would increase the responsibilities and duties of the Nevada Department of Taxation. This increased workload would likely carry new additional overhead costs associated with the expanded operations of the department. The tax would also create compliance costs for the businesses newly subjected to the tax (cost of hiring accountants, necessary computer equipment to track sales, etc.). An exact estimate of the total costs associated with the expanded bureaucratic role, as well as the costs of compliance by the businesses, for Nevada was not part of this analysis and is bit readily available. However, researchers in Washington State have estimated that the

²⁰ “Should Sales Taxes Apply to Services?” Institute on Taxation and Economic Policy. July 2011. Pg. 1.

²¹ *Op cit.* Mazerov. Appendix 1.

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total cost to retail businesses from collecting sales taxes is 4.23 percent of total state and local sales tax collections when weighted by number of taxpayers.²² It must be stressed that this figure likely understates the total monetary cost from expanding the tax base, because it only takes into account the costs of compliance businesses are responsible for and does not provide an estimate of the increased workload of Department of Taxation workers.

- Sales taxes on services have had a generally varied history throughout the U.S. Only a few states either exempt all services from a sales tax or impose a sales tax on all services.²³ For the most part, states fall in between the two extreme cases taxing some services while allowing exceptions to others. According to the Federation of Tax Administrators (FTA), “states have been reluctant to undertake a broad based expansion of the sales tax base since several states have repealed such expansions shortly after enactment.”²⁴

Four states (Florida, Massachusetts, Maryland, and Michigan) each quickly repealed their respective “broad based” sales taxes on services following their enactment. Each of the four state governments repealed their sales taxes on services either, because it was determined that, in light of the newly levied taxes, local businesses became less competitive compared to out-of-state competitors (Florida and Massachusetts) or because taxpayers fought for their repeal (Maryland and Michigan). More states have repealed these “broad-based” sales taxes on services than the number of states who have chosen to keep their sales tax (Hawaii and New Mexico.)²⁵

²²Department of Revenue, Washington State. *Retailers' Cost of Collecting and Remitting Sales Tax Study*. The cost is significantly greater for smaller retailers in that the total cost is 1.42 percent when weighted by dollar amount (due, for example, to big-box stores). Thus, it might likely be necessary for Nevada to increase the tax collection allowance for retailers from its current low level.

http://dor.wa.gov/content/aboutus/statisticsandreports/retailers_cost_study/default.aspx

²³ *Op cit.* Schlesinger

²⁴ Federation of Tax Administrators. *FTA Survey of Services Taxation – Update, 2008* as quoted in *Sales Tax on Services Policy Brief*. California Taxpayers Association. January 2013 pg. 4

²⁵ *Sales Tax on Services Policy Brief*. California Taxpayers Association. January 2013 pg. 4 In the case of New Mexico, the tax is more a gross receipts tax rather than a general sales tax on services.

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SECTION II: REVENUE STABILITY

Section I above focused on determining potential revenue increases in Nevada by expanding a general sales tax to services. These estimates are based on estimates of service industry-wide gross revenues for FY 2014. The estimates of resulting tax revenue assumed a uniform two-percent sales tax as currently allocated to the Nevada General Fund.

These estimates of tax revenue are significant and are in the annual range of \$777M. However, as discussed in detail in the report, these estimates do involve decisions on the progressive nature of the Nevada tax system and potential changes in behavior. In this regard, they should be interpreted as a starting point for further analysis and discussion.

The second section of this report accepts the basic conclusion that a general sales tax on services would significantly increase state revenues; but this section also deals with a different issue. Specifically, while it is important to understand how much a sales tax on services would add to Nevada's General Fund, it is equally important to understand what impact such an expansion would have on the overall growth of sales tax as a source of revenue over time with changes in the level of the economy (that is, it's stability). Observations on this impact are the focus of Section II.

For readers not interested in the technical details detailed in this section, a summary of the results are outlined below, based on new research on the extent to which the broad taxation of services affects the stability of a state's revenue system:

- The results suggest, at best, that there is a quite weak relationship between revenue stability and the number of services that are taxed.
- It is important to note that the evidence suggests, in general, that current sales taxes have become less responsive to economic growth over time.
- States with broad sales taxes on services have also suffered with this lack of responsiveness.

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- These considerations are not simply arithmetic in nature but involve policy decisions on the progressivity of state taxes and the existence of other taxes. For example, Nevada has eschewed taxing necessities, such as groceries, pharmaceuticals, rents, etc. given concerns over progressivity and the impacts on lower-income households.
- In terms of revenue stability, our research suggests that a sales tax on services is not a “magic bullet” for improving tax revenue stability independent of other taxes in the system. In simple terms, the topic of taxes will remain a complex topic of public policy discussion.

Results

The relationship between growth (and decline) in tax revenues and the economy is fundamentally synonymous with structural soundness. Imagine the promise of a better education system or infrastructure enhancements built on increased revenue only to be thwarted by deficient revenue growth year-over-year. In fact, much of the supportive literature regarding sales tax on services assumes one of the benefits being better long-run growth rates (Mazerov, July 2009).²⁶ As a hypothesis, this seems to reflect common sense. If consumers and businesses are spending more of their income on services, the expansion of this tax-base should mean we are capturing a greater percentage of taxable transactions and; thus, less growth erosion would occur. As noted above, in terms of revenue stability, our research suggests that a sales tax on services is not a remedy for improving tax revenue stability which is independent of other taxes in the system. In simple terms, the topic of taxes will remain a complex topic of public policy discussion.²⁷

Over the years, the Consultant Team has written several times on the growth and volatility of Nevada’s tax system, both generally and specifically. Sales taxes in our work, as well as the work of other researchers, exhibited sound growth and moderate volatility. This suggests that sales taxes are a good component in a state’s tax “portfolio.” This section builds on some of that work and provides new insights into Nevada’s sales tax performance, as well as that of a set of selected other states.

²⁶ Mazerov (2009), op.cit.

²⁷ For example, current trends in internet sales and e-commerce are expected to continue, new internet products for home services (such as computerized tax preparation), etc. will affect sales of both good and services.

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Empirical research on tax stability is really an attempt to determine how much volatility exists in state revenue collections with the ups-and-downs of the economy. These measurements are given the term “elasticity”, which is really a summary measure of the ups-and-downs between tax revenues and a state’s economy. Generally, elasticity is based on the estimated relationship between state tax revenue and state personal income, as the proxy for the economy. The measurement of so-called elasticity attempts to estimate the amount of a potential tax revenue increase given increases in personal income.

How is elasticity utilized to suggest the responsive of tax revenues to growth in the economy? Suppose tax revenues and the economy grew in a perfectly synchronous manner. In this case, the value of elasticity in the tables below would have a value of 1 (if you will a perfect match). Elasticity above 1 would; therefore, indicate that tax revenue may well grow faster than the overall economy. Elasticity below 1 would indicate that tax revenue grows slower than the economy.

The importance of understanding this should not be understated. Taxes that grow slower than the economy will quite likely not be able to keep up with the demand for services, leaving the state with the inherent tension of a budget shortfall, even in times of substantial economic growth. Such structural deficiency places a state’s political structure into a constant position of debate over tax policy.²⁸

In an effort to understand the benefits of expanding Nevada’s sales tax base to services, we estimated basic sales tax revenue elasticities for each of the states that collect sales taxes, and compared it with the base number of common services taxed by each state.²⁹

The estimated results are presented below in four steps.

- First, In Table II-1, an estimate of tax elasticity for a wide-range of states is presented (45 states based upon data availability). This estimate is generally derived

²⁸ For example, changes in the composition of population can exacerbate these issues as they relate to programs for school age children, social services for at-risk populations, senior services, etc.

²⁹ Reliable and comparable data on state sales taxes generally mingle various direct sales taxes and indirect sales taxes (such as an excise tax or specific gross receipts taxes) into the general category of sales taxes. For a discussion of the estimation approach see R. Alison Felix “*The Growth and Volatility of State Tax Revenue Sources in the Tenth District*”, Economic Review, Federal Reserve Bank of Kansas City, 2008, pp. 63-68.

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from data over the period of 1951-2014 (or from the date when specific state data became available).

- Second, also presented in Table II-1, a more recent (1980-2014) set of elasticity estimates for Nevada and selected states, are estimated. These later estimates identify an underlying (negative) trend in the response of sales tax revenues to the economy compared to the estimates over the entire period.
- Third, in order to verify the results presented in Table II-1 and our conclusions, we calculated a set of more complex responses to identify if the suggested trend does hold over time in a dynamic sense. These results are first presented for Nevada in Chart II-1.
- Finally, and fourth, we then compared Nevada to four other states with varying levels of sales taxes on services, as illustrated in Chart II-2 and Chart II-3 for two different time periods. Although complex, these estimates also confirm our conclusions from Table II-1.

For a wide-range of states, Table II-1 below presents the elasticity estimates of tax revenue associated with state economic growth. The 45 states are arranged (in Column 1) by the magnitude of estimated difference in the value of the sales tax elasticity during the most recent period (1980-2014, Column 5).

Table II-1: Elasticity Estimates by State: FY 1951 – FY 2014

Column 1 Ranking (Column 5)	Column 2 State	Column 3 First Year of Series	Column 4 Elasticity All Years to 2014	Column 5 Elasticity 1980-2014	Column 6 Difference Between Periods	Column 7 # of Services
1	MI	1951	1.05	1.29	0.24	3
2	WY	1951	1.16	1.19	0.03	21
3	ND	1951	1.16	1.15	-0.01	9
4	NE	1968	1.15	1.15	-0.01	26
5	KS	1951	1.13	1.14	0.01	27
6	AR	1951	1.14	1.11	-0.03	28
7	OH	1951	1.19	1.03	-0.16	22
8	TX	1962	1.26	1.02	-0.24	25
9	ID	1966	1.13	1.01	-0.12	9

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10	SD	1951	1.16	1.01	-0.15	40
11	HI	1955	1.07	0.99	-0.08	39
12	KY	1961	1.02	0.99	-0.02	6
13	NC	1951	1.07	0.98	-0.09	10
14	NJ	1967	1.17	0.97	-0.20	26
15	IA	1951	1.10	0.96	-0.14	35
16	IN	1951	1.12	0.96	-0.17	7
17	MS	1951	1.12	0.96	-0.16	21
18	NV	1956	1.17	0.95	-0.23	9
19	OK	1951	1.09	0.94	-0.15	11
20	RI	1951	1.19	0.94	-0.25	2
21	VT	1970	1.08	0.93	-0.15	9
22	TN	1951	1.17	0.93	-0.24	25
23	MN	1968	1.18	0.92	-0.26	23
24	FL	1951	1.17	0.91	-0.25	22
25	VA	1967	1.00	0.89	-0.11	4
26	CA	1951	1.08	0.89	-0.19	3
27	MD	1951	1.15	0.89	-0.26	8
28	MA	1967	1.25	0.88	-0.37	0
29	GA	1951	1.00	0.88	-0.12	11
30	AZ	1951	1.08	0.87	-0.21	13
31	PA	1954	1.22	0.87	-0.35	14
32	LA	1951	1.06	0.84	-0.22	19
33	WI	1962	1.32	0.84	-0.48	31
34	WA	1951	1.05	0.82	-0.23	21
35	ME	1952	1.15	0.82	-0.33	2
36	AL	1951	0.95	0.80	-0.15	9
37	CO	1951	0.97	0.80	-0.17	2
38	NY	1966	1.03	0.79	-0.24	23
39	IL	1951	1.03	0.77	-0.26	3
40	SC	1952	1.05	0.76	-0.30	12
41	UT	1951	1.09	0.74	-0.34	25
42	NM	1951	1.08	0.74	-0.34	39
43	MO	1951	1.06	0.61	-0.45	8
44	CT	1951	1.19	0.60	-0.59	23
45	WV	1951	0.90	0.53	-0.37	37
Annual Average			1.11	0.91	-0.20	

Sources: See footnote 30.

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As shown in Table II-1 (Column 4), over the entire period, most states (including Nevada) have a sales tax revenue response to economic growth that exceeds one (1), with an overall average of 1.11, indicating revenue growth exceeding economic growth.³⁰ However, this estimated response generally falls significantly in the 1980-2014 period (Column 5), indicating a weakening (or lowering) in the response rate of sales tax revenue growth to economic growth. Accordingly, sales tax elasticity falls to less than 1.0 to 0.91 between 1980 and 2014.

It is important to note that there is not an obvious pattern in the estimates between the values of the tax revenue response (as measured by the value of the elasticity) and the number of services that are taxed. Frankly, we expected to see some correlation between states with higher values of elasticity and those with more services in their portfolios.³¹ One can hardly miss the fact that Massachusetts has the least number of services at zero and the highest basic sales tax revenue elasticity, while South Dakota has one of the highest number of taxed services and the lowest basic sales tax revenue elasticity. Excluding Massachusetts and South Dakota, various statistical measure, such as a correlation coefficient only suggest, at best, that there is a very weak, positive correlation between the sales tax revenue elasticity and the number of services that are taxed.³²

The findings above are important in that they reinforce the discussion in Section I of this report that a general sales tax on services may well raise revenue but is not necessarily a simple “obvious” solution to problems with state fiscal structure.

Results: Dynamic Estimates

Recent research on state tax systems has suggested that tax revenue responses might have been higher and more robust in earlier periods (specifically, before the year 2000) than in

³⁰ The estimation of basic sales tax revenue elasticities follows the approach used by the Federal Reserve in research such as Felix (2008), *op.cit.* Sales tax data is provided by the United States Census and personal income data is provided by the Bureau of Economic Analysis. Data regarding the number of services taxed per state are taken from Mazerov (2009), *op.cit.* Primary data ranges from 1956-2014. The number of services taxed represents broad categories rather than counts of each individual subservice. Thus, for example, coin-operated laundries, general laundry services, dry cleaning establishments, etc. are not separate categories.

³¹ A correlation coefficient is a measure of the strength of a potential relationship between two items of interest.

³² Correlation coefficients can be substantially impacted by outliers (that is, by the extreme values in a set of data of interest). The removal of outliers allows for a more accurate understanding of the relationship between the two variables.

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more recent periods (post-year 2000). Given the lack of a strong relationship in Table II-1 between tax revenue growth and the number of services taxed, the Consultant Team estimated a more dynamic estimate of “elasticity” for Nevada and four other comparison states with various levels of service taxation (see Table II-1 for Hawaii, South Dakota, Colorado and California).³³

Why does this matter? The traditional tax revenue elasticity estimate shown in Table II-1 is a constant number that is assumed applicable in any year. However, if the actual tax revenue response started out higher and was subject to a declining trend over time, the current value would be smaller (in simple terms, the “average” shown in Table II-1 is too high and not reflective of actual (lower) current revenue growth). Recent research on the revenue tax response among states with income taxes does suggest current values of the income tax elasticity are actually lower than long-run average values. If so, then it is not surprising that states, which rely on income tax collections can experience unanticipated shortfalls and overstate revenue forecasts.

The results of this analysis are presented below. First, we present a diagram of results for Nevada. Second, two comparative diagrams for all five states are presented.³⁴ One diagram is for the period from 1976, while the second diagram focuses on the more recent period from the year 2000 given concern over potential changes in the response of state revenue growth.

Nevada

In some ways, Nevada’s elasticity trend is actually the tale of two different public finance stories. The data range for Nevada is from 1956 through 2014, and the historical elasticity over the entire period as derived in Table II-1 is 1.17. In the diagram below, this historical elasticity is shown as the straight line at the value of 1.17.

³³ This estimation is based upon so-called “rolling regressions” and then a five-period rolling average to smooth out the plot and viewing of the trends. This method simply starts with a point in time and then drops the oldest year and adds a new year in a continuous cycle. For example, if the data period is 1955 to 2014, then estimation would calculate elasticity for 1955 to 1974, 1956 to 1975, 1957 to 1976 and so on until 1995 to 2014 is reached. While each individual measurement may be statistically less robust, the aggregate of the measurements are substantially instructive and statistically viable.

³⁴ As noted, the four states used for comparison represent much different levels of service taxation and/or are in the same geographical area as Nevada

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Earlier in the time period, from 1976 to roughly 1992, the measurement of elasticity proved to be fairly stable, at approximately 1.28. After 1993, there is a steady decline in the elasticity. This decline is substantial, falling from roughly 1.28 at the peak to below .83 at the trough. Clearly, Nevada's historical elasticity is not constant. It certainly appears to be the case that current revenue or future revenue measurements suggest lower revenue growth than using a traditional (historical) estimate of sales tax revenue elasticity.

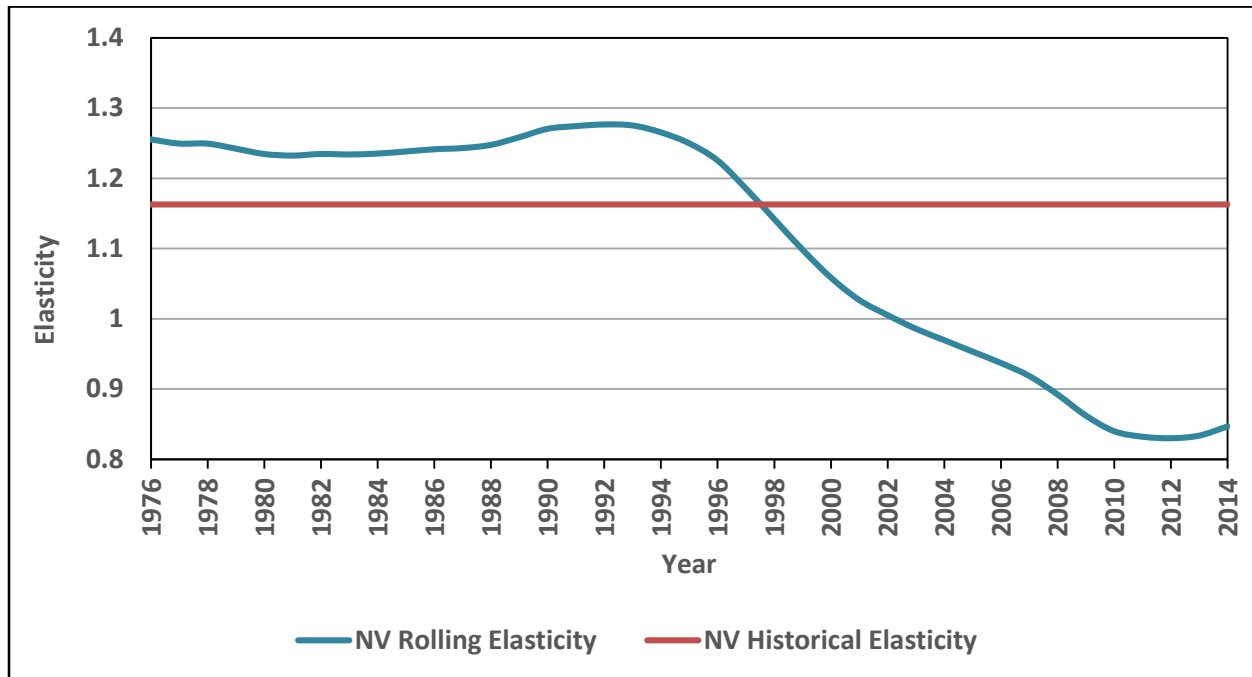
The analysis above is an initial attempt to understand underlying trends in sales tax revenue growth. In terms of interpreting these results, it seems instructive to consider the following points:

- First, in 1979, Nevada removed food purchased for home consumption from the sales tax-base. From a tax policy standpoint, food purchases are necessary household expenditures and it is generally considered that taxing groceries is quite regressive with respect to lower-income households. This policy decision could explain the substantial break that appears around the end of 1993 and, in addition, it may reflect the point at which the 1979 shift in the base reversed the stable trend.
- This highlights the importance of existing policy decisions and the potential tradeoffs that exist. In general, Nevada policymakers have avoided applying a sales tax to such items as groceries, pharmaceutical prescriptions and rents. This reflects reasonable concerns over progressive tax policy in Nevada.
- These results also confirm the well-known trends in national consumption patterns that over the same period Nevadans have changed their spending habits, incorporating more services into their purchases. While the purchase of goods, even on a per capita basis may still be rising, as a percentage of personal income, it may be falling. In other words, income growth may be outpacing spending growth on goods. If so, this reflects national trends that consumers may be spending more of their income in areas that are not taxed, such as services.
- If the relative growth in sales tax revenues (elasticity) is falling, then this may help explain the persistent struggle over tax policy (and public sector budgets) in Nevada.

See Chart II-1 below.

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Chart II-1: Nevada Sales Tax Revenue Elasticity, FY 1976 – FY 2014



A Five-State Comparison

Two charts are presented below illustrating the trends in the measured values of sales tax revenue elasticity for Nevada (Chart II-2) and compared to other four selected states (Hawaii, California, Colorado and South Dakota), Chart II-3. One chart is similar to the one for Nevada presented above in that it begins in 1976, while the second chart focuses on the FY 2000-FY 2014 period.

Overlaying the trends in sales tax elasticity in following two charts allows several observations.

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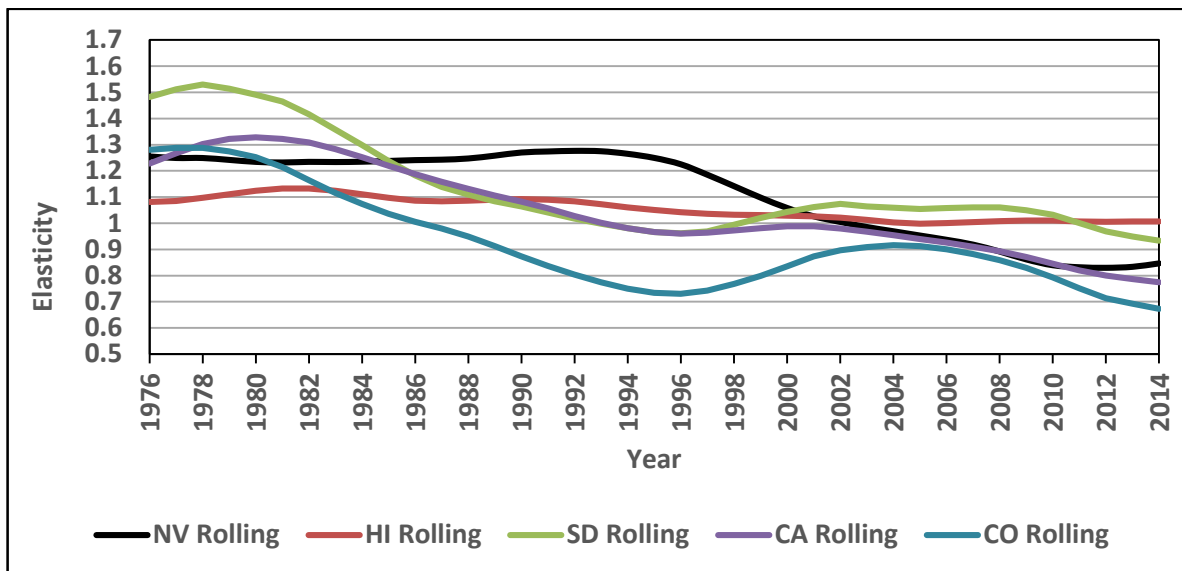
- First, it is important to note a general declining trend in sales tax revenue elasticities among the states beginning in FY 1977. In this regard, Nevada is not unique but follows a similar trend even if the actual levels differ among states.
- Generally, the states' eroding tax bases have been a topic of substantial research over recent years, and this result herein lends some credibility to the argument of such a decline. Regardless of differing policies, no state was able to avoid some decline during this period. However, there was a substantial difference between

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states on the size of the peak-to-trough decline. Hawaii stands out as having the smallest drop from peak-to-trough.

- There appears to be some developing stability for Nevada and Hawaii in the post-2000-2014 chart. However, it is very important to note that Hawaii (and South Dakota) includes sales taxes on items, such as groceries, a policy rejected in Nevada due to concerns over progressivity.³⁵
- These results reinforce the observation that simply taxing services has not kept states from experiencing slower sales tax revenue growth over time. It is clear that taxing services has not been the “cure” for state revenue to achieve high growth independent of other policy decisions, such as the level of the tax rates, deciding on the definition of services, the general items to include in a sales tax and questions of fairness within a progressive tax system.

Chart II-2: Sales Tax Revenue Elasticity-All Selected States, FY 1976 – FY 2014



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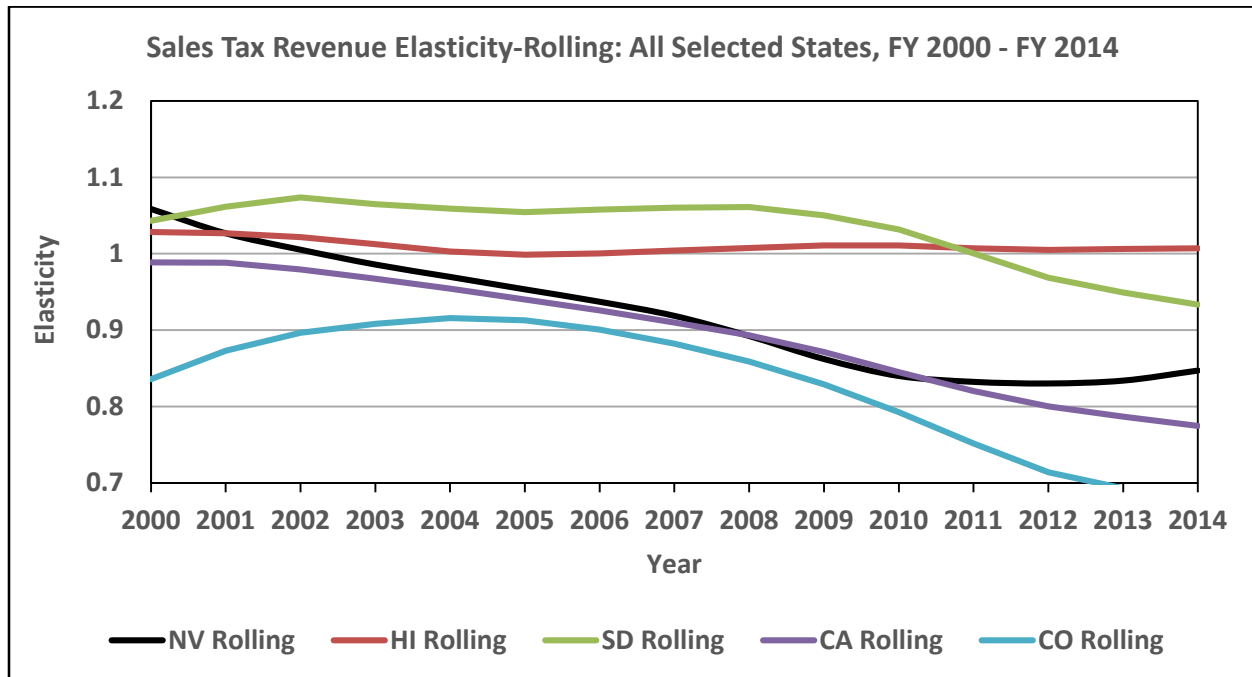
³⁵ During recessionary downturns, taxing “necessities” will, of course, provide sales tax revenues. These policy decisions can become complicated rather quickly. For example, in a state with an income tax should there be an offset adjustment on income tax returns for sales taxes (on groceries, etc.) for lower-income households, how much of an exemption, what is the mechanism to change the exemption amount over time, what is the definition of a lower-income household, etc.

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Chart II-3: Sales Tax Revenue Elasticity-All Selected States, FY 2000 – FY 2014



Conclusions

This research provides a point of departure for policymakers as they consider the complex issue of a general sales tax on services in Nevada.

The issues identified in this report point to the very important fact that implementing a tax on services is not a simple “yes-no” decision. As an overall conclusion, this report shows that a sales tax on services does not represent a “panacea” to state public finances.

In the first section of the report we identified the potential state-level “yield” of a sales tax on “service-sector” businesses, based on estimates of service industry-wide gross revenues for FY 2014. The estimates of resulting tax revenue assumed a uniform two-percent sales tax as currently allocated to the Nevada General Fund. We also identified some of the complex issues in implementing and defining such a tax.

The estimates of tax revenue are significant and are in the annual range of \$777M. However, as discussed in detail in the report, these estimates do involve decisions on the progressive nature of the Nevada tax system, and potential changes in behavior. In this regard, they should be interpreted as a starting point for further analysis and discussion.

A GENERAL SALES TAX ON SERVICES IN NEVADA

In the second section of the report, we explored with new research the extent to which the broad taxation of services impacts the stability of a state's revenue system. This is an issue separate from the level of new revenue generated by a general sales tax on services. Estimates of stability are really an attempt to determine how much volatility exists in state revenue collections with the ups-and-downs of the economy. These measurements are given the term "elasticity", which is really a summary measure of the ups-and-downs between tax revenues and a state's economy.

The results suggest, at best, that that there is a quite weak correlation between the sales tax revenue elasticity and the number of services that are taxed. It is interesting to note that the evidence suggests, in general, that current sales taxes have become less responsive to economic growth over time. Importantly, states with broad sales taxes on services have also suffered in this declining trend. These results strongly suggest that a general sales tax on services will not solve cyclical problems of revenue due to changes in the economy.

These considerations are not simply arithmetic in nature but involve policy decisions on the progressivity of state taxes and the existence of other taxes. For example, Nevada has eschewed taxing necessities such as groceries, pharmaceuticals, rents, etc. given concerns over progressivity and the impacts on lower-income households.

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