



ARIZONA LICENSED BEVERAGE ASSOCIATION

Media Contact: Dave Delos, President, Arizona Licensed Beverage Association (ALBA) :

An Answer to Arizona's Education Funding Crisis -- Without Raising Taxes

Study Says Expanded Gaming Could Produce Over \$1 Billion for Arizona

ALBA commissioned this study several years ago in response to Arizona's recession at the time. The research was conducted by the late Dr. Gary Anders, professional economist and professor of economics at the W.P. Carey School of Business at Arizona State University, in collaboration with his wife, Dr. Kathleen Anders. In light of the current education funding issue and future revenue shortages, ALB believes it is worthwhile to revisit the finding of this study, which remain relevant and applicable.

"This study is a systematic analysis by a professional economist," "Now that we have sound documentation for a possible billion-dollar income source, we have a solid basis for further exploration and discussion."

"Gaming is one of the most profitable and strictly regulated industries in the United States."

- *Dr. Gary Anders*

A copy of the complete Anders study accompanies this news release or can be read at www.albainc.org

Estimating the Economic Impact of Limited Video Gaming in Arizona

Anders  Consulting
April 2010

EXECUTIVE SUMMARY

Estimating the Economic Impacts of Limited Video Gaming in Arizona

Today gaming is one of the most profitable and strictly regulated industries in the United States. At the end of 2009, legalized gambling took place in all but two states (e.g., Hawaii and Utah). Currently, the opportunities for legal gambling include: charitable gambling (48 states), lotteries (43 states), pari-mutuel (43 states), Indian/Tribal casinos (32 states), commercial casinos, (15 states); racinos (12 states), limited video gaming, (7 states) and sports betting (4 states). These numbers suggest a shift from gambling as a morally suspect activity to greater acceptance of a public policy that fosters gambling. Indeed, gambling can be expected to increase as states continue to enact gaming-enabling legislation in an effort to increase revenue. Not including Nevada six states: Illinois; Louisiana; Montana; Oregon; South Dakota; and West Virginia have adopted limited video gaming. Because of the size of the current and future deficits the State of Arizona may be forced to consider also adopting limited video gaming. Such a policy would involve allowing liquor serving establishments to offer a limited number of video games. This study examines the various approaches and revenue sharing arrangements adopted by these six states and uses this framework to estimate the potential net economic impact for Arizona. Based on the experiences of other states the estimated revenues raised from limited video gaming in Arizona would be determined by four factors: the expected revenues per video gaming machines, the number of video gaming machines, the tax rate, and the impact on existing gaming revenues. Using the range of these variables our estimates indicate that it is possible for the state to capture sizeable net benefits even after adjusting for corresponding reductions in lottery and Indian casino contributions.

Introduction

Arizona's fiscal crisis will necessitate that the state's leadership find new sources of revenue to cover looming budget shortfalls.¹ Proposals have been made by Arizona racetrack owners to allow casino games at horse and dog tracks. Income from games would be taxed at 45 percent and raise millions in state revenues.² This is not a new idea, voters rejected Proposition 201 in 2002, yet given the state's deficits, the idea has been revived. If it is, and Arizona joins other states that allow race track casinos, the "poison pill" provision of Arizona's gaming compacts would be invoked and tribes would no longer have to abide by current limits on the number of slot machines or casinos. As a result, there would be new and expanded gaming throughout Arizona.

This study was undertaken at the request of Arizona Licensed Beverage Association (ALBA). Allowing table games and slots at the tracks is intended to revitalize the dog and horse racing industry. Yet, this is not the only industry that has been hurt in recent years. Arizona's tavern owners have felt the effects of changes in state laws and would be further impacted if a racino proposal is approved. Revenues for these small businesses are down 25% to 30% as a result of the 2007 Smoke-Free Arizona Act and laws with increasingly stiffer penalties for driving under the influence.³ If expanded gaming is under review, it is important that the public and legislature also consider supporting these Arizona small businesses – and the badly needed employment opportunities that they provide.

According to the results of a survey undertaken by ALBA, approximately 72% of 173 licensed liquor serving establishments reported that their revenues were down in 2009.

Other states have enacted laws that do just this. In their view, gaming is an economic development tool, not only for Indian tribes and corporations, but also for small business owners. Carefully regulated, small-scale gaming is meant to provide a revenue stream for state and local governments and to provide additional income to legal residents who own businesses licensed

to sell alcohol. In Section I, these states' gaming policies will be examined and a comparable gaming proposal for Arizona discussed. Section II develops projections for the likely revenues and impacts of expanded gaming. Section III offers concluding remarks and related public policy considerations. The objective of this study is to examine benchmarks from alternative approaches toward gaming across states and to quantify the economic impact if a similar policy was implemented in Arizona. It is hoped that this will stimulate informed debate about a broadened set of options available to Arizona policy makers.

¹ Arizona state lawmakers are considering budget cuts of \$705 million for FY 2010, which ends June 30th and \$2.1 billion for FY 2011. Mary Jo Pitzl, "Budget work to start up," *The Arizona Republic*, February, 28 2010, B1.

² Lucy Dadayan and Robert Ward, "For the first time, a smaller jackpot: Trends in state revenues from gambling," *Fiscal Studies*, "September 21, 2009, (Albany, NY: Nelson A. Rockefeller Institute of Government).

³ Bill Weigel, President, Arizona Licensed Beverage Association. Telephone interview, March 3, 2010. Survey data from: Fred Mallaire, "State Outreach Licensee Survey Results," *The Beverage Analyst*, December 2009, 5, (Phoenix, AZ: Arizona Licensed Beverage Association).

I. State Policies Toward Gambling Overview

Today gambling is one of the most highly profitable and strictly regulated industries in the United States. At the end of 2009, legalized commercial gambling took place in all but two states (i.e., Hawaii and Utah). Currently, the opportunities for legal gambling include charitable gambling (48 states), lotteries (43 states), pari-mutuel (43 states), Indian tribal casinos (32 states), commercial casinos, (15 states); racinos (12 states), limited video gaming, (7 states) and sports betting (4 states)⁴. These numbers clearly indicate a shift from gambling as a morally suspect activity to greater acceptance of a public policy that has adopted state regulated gaming. Indeed, these figures are expected to further increase as states continue to enact gaming-enabling legislation in an effort to increase tax revenues⁵.

A discussion of why this change has occurred is beyond the scope of this paper. However, the fact that American states are facing a combined budget gap of \$136.1 billion for FY 2010-2012. is definitely a contributing factor.⁶ Another may be states' promotion of lotteries. State operated lotteries have become a standard component of state fiscal systems and their spread in the 1980s is thought to have paved the way for more public acceptance of gambling.⁷ For example, in Arizona, lottery sales were estimated at \$473 million and \$20 million was spent on advertising.⁸ When states are encouraging citizens to gamble on their own games, labeling gambling as morally wrong would appear hypocritical. Moreover, raising revenues from gaming is less politically difficult than raising revenues from other sources (e.g., income or sales taxes) Much like sumptuary taxes, or "sin taxes", on alcoholic beverage and tobacco products, such a tax generally elicits minimal protest from consumers as it is perceived a voluntary burden.⁹

Receipts from lotteries and other types of gaming are typically dedicated by state lawmakers for valuable state programs such as education and social services. Nationwide, revenues from legally sanctioned gambling represented 2.1 to 2.5 percent of states' own-source revenues from 1998 through 2007.¹⁰ While this amount may seem small, it can be significant when elected officials are facing difficult to close budget gaps, increases in demand for state services, and extended forecasts of shortfalls in revenues.

⁴ Lucy Dadayan and Robert Ward, "For the first time, a smaller jackpot: Trends in state revenues from gambling," *Fiscal Studies*, "September 21, 2009, (Albany, NY: Nelson A. Rockefeller Institute of Government).

⁵ National Conference of State Legislatures, "Legalized gambling in the United States 2009," November 18, 2009. <http://www.ncsl.org/default.aspx?tabid=19164>.

⁶ National Governors Association, "Fiscal Update February 2010," 2. <http://www.nga.org/Files/pdf/1002FISCALUPDATE.PDF>.

⁷ John Mikesell, *Fiscal Administration: Analysis and Applications in the Public Sector, Seventh Edition*, 480 (Belmont, CA: Thomson. 2007).

⁸ Joint Legislative Budget Committee, "FY 2010 JLBC Baseline Book Arizona State Lottery Commission Arizona," 3. <http://www.azleg.gov/jlbc/10recbk/lot.pdf>.

⁹ Mikesell, *op. cit.*, 381; 482.

¹⁰ Dadayan & Ward, *op. cit.*, 19.

Limited Video Gaming

Six states have legalized video gaming machines (VGM), beyond casinos and racinos, in bars, taverns, restaurants and other establishments that have liquor licenses¹¹. These states are listed in Table 1. As illustrated, Illinois is the most recent state to legalize video poker machines while Louisiana, Oregon, Montana, South Dakota and West Virginia have had video gaming for at least a decade. Nevada, not shown in the table, legalized such gaming in the 1930s. Yet, unlike Nevada, video gaming machines in the states listed here, are not located in general access areas but limited, to licensed establishments where on-premise consumption of alcohol is allowed.

Table 1
States with VGMs in Licensed Establishments
Where on-premise consumption of alcohol is sold in 2009

State	Year VGMs Legalized	Types of VGMs	Number of VGMs	State Tax Rate or Fee
Illinois	2009	Video poker & Other video games authorized by control board	Up to 5 machines per establishment 45,000 machines allowed statewide	30% tax on gross machine income
Louisiana	1991	Video poker & other card games approved by lottery commission	2,282 establishments 13,601 machines statewide	Franchise fee of 26% of gross machine income
Montana	1985	Video poker, keno and bingo	Up to 20 machines per establishment 1,675 establishments 17,300 machines statewide	15% tax on gross machine income
Oregon	1992	Video poker and line games	2,263 retailers 12,365 machines statewide	77% of gross machine income to state; average commission of 23% to retailers
South Dakota	1989	Video Poker, blackjack, keno and bingo	Up to 10 machines per establishment 1,387 retailers 8,998 machines statewide	Gross machine income is divided between the state and machine operators on a 50/50 split
West Virginia	2001	Video poker & other games approved by lottery commission	1,618 establishments 7,960 machines statewide. Up to 9000 machines allowed	2% of gross machine income for state administrative costs; 30%-50% of gross machine income to state; balance to retailers, percentage adjusted quarterly

By law, video gaming terminals in these licensed establishments may not be slot machines. That is, they cannot dispense coins or cash. Instead they are electronic gaming machines that, upon

¹¹ Illinois also allows VGMs in licensed truck stops and fraternal/veteran organizations. Louisiana allows VGM in licensed truck stops. Illinois Gaming Board, "Video Gaming." <http://www.igb.state.il.us/VideoGaming/index.html>. Louisiana Constitution. "Chapter 6. Video Draw Poker Control Law." <http://www.legis.state.la.us/lss/lss.asp?doc=8499.3>

the insertion of cash, allow the player to bet on the outcome of a video game and receive free games, bonus games, or credits that may be redeemed for cash. Each video gaming terminal must meet minimum standards set by the state in terms of technical specifications and pay out percentages. Most states monitor the receipts of the machines and players' winnings through a state controlled, centralized communication network that receives VGM data electronically. This streamlines record keeping and strengthens oversight.

Comprehensive state regulation of limited video gaming mitigates some of the social problems associated with gambling. Restricting the location to establishments licensed to serve alcohol enforces age restrictions on gambling which is typically 21 years of age, or the state's drinking age. States require terminals to be in sight of an employee, or in a partitioned area to further exclude underage individuals from gambling. To receive a liquor license, a business owner must first be examined and approved by a state regulatory body. Background checks help to ensure that licensed establishments are operated by individuals of good character. Limits on the dollar amount of bets (e.g., \$2.00) and pay out winnings can also lower the incidence of crime. This is further vetted by requiring that payout winnings over a certain dollar amount (e.g., \$100) be paid by check.

Sources of State Revenues

All of the states shown in Table 1 derive video gaming revenues from gross machine income, which is cash in (sales) minus cash-out (prizes). However, as shown, the percentages states retain vary considerably, ranging from 15% to 77%.

Oregon keeps the highest percentage, approximately 77% of gross machine revenue. This amount varies slightly according to a tiered structure based upon retailer sales. Retailers receive the balance paid in the form of a commission. Unlike most states, Oregon owns the machines. Licensed retailers are awarded a six year contract to operate them. Limited video gaming is also distinctive insofar as the state offers a wide variety of games, including line games (e.g., machine games where symbols are lined up to win).¹² The games are approved and regulated by the Oregon Lottery Commission and the machines are video lottery terminals (VLTs).

A Video Lottery Terminal is like a Video Gaming Machine except that it is connected to a centralized computer system that determines the outcome of each wager using a random number generator. Although the outcome of each wager is random, VLT operators are able to program in advance the total amount and number of payouts that its central computer system will allow at its connected VLTs. West Virginia and South Dakota also operate and regulate limited video lottery games

¹² Oregon State Lottery, "Comprehensive Annual Financial Report For Fiscal Year Ended June 30, 2009." <http://www.sos.state.or.us/audits/reports/full/2009/2009-28b.pdf>

It is important to note that in all of these states, limited video lottery games are mandated by law to be located only in retailer locations that have a license to sell alcohol. States also administer traditional lottery games (instant ticket scratch-offs and on-line games such as the Powerball jackpot game) that can also be sold in a variety of retail stores. In West Virginia, permits to operate VLT are issued for ten years. Two percent of gross machine income is deposited in the state lottery fund. Then the state share percentage, of between 30 and 50 percent, is taken.¹³ In South Dakota gross machine income is divided between the state and machine operators in a 50/50 split. One-half of one percent (0.5%) of the state's share is retained by the lottery for administration.¹⁴

Montana remains unique in having video gambling machines that are not connected to networks. The lack of networks creates problems as there are fewer video gambling machines and gambling machine components available for stand-alone machines. However, Montana is moving toward on line reporting and an automated accounting system. The state is also unique in allowing live keno, live bingo and sports tabs in establishments licensed to sell alcohol. Taken all together the 15 percent tax on video gaming machine net income is the most significant source of state gambling revenue.¹⁵

States also receive revenue from annual VGM fees paid by operators. These fees vary from \$135 per machine in Oregon to \$1000 per machine in West Virginia. Some states impose additional licensing fees on machine manufacturers and distributors.

In Louisiana, as with Montana and South Dakota, license device owners buy or lease machines from approved vendors. The state does not own the VGMS. Owners of licensed establishment pay various franchise fees according to the type of establishment in which the devices are located. The types of establishments and percentages are: bars and lounges, 26%; restaurants, 26%, hotels/motels, 26%; racetracks, and Off Track Betting, 22.5%, and truck stops 32.5%. Similar to other states, these percentages are applied to gross machine income.¹⁶

The Illinois Video Gaming Act, signed into law on July 13, 2009, allows for up to five video gaming terminals to be placed in licensed retail liquor establishments where “on-premise” consumption of alcohol is served (e.g., bars and restaurants), licensed truck stops, and licensed fraternal and veterans organizations. As with other states video gaming terminals must be

¹³ West Virginia Lottery, “Comprehensive Annual Financial Report For the Fiscal Year Ended June 30, 2009.” <http://www.wvlottery.com/pdf/WVL2009AR-hr.pdf>.

¹⁴ South Dakota Department of Revenue and Regulation, “Annual Report 2009,” 37. http://www.state.sd.us/drr2/publications/annrpt/2009_annual%20_report.pdf.

¹⁵ Montana Department of Justice Gambling Control Division, “Gambling Statistics and Reports.” <http://www.doj.mt.gov/gaming/statisticsreports.asp#reports>.

¹⁶ Louisiana State Police, “Video Gaming Division, Laws and Regulations.” <http://www.lsp.org/gaming/regulations.html>.

located in an area that is restricted to persons over the drinking age (e.g., 21 years in Illinois); each establishment must possess a valid liquor license issued by the liquor control board; and the state tax, 30%, is imposed on the gross income from each video gaming terminal.¹⁷

Uses of State Revenue

The Video Gaming Act in Illinois was signed into law July 2009. Administrative rules for implementation are still being formulated; however, the legislature expects \$375 million from a 30 percent tax on gross machine income for construction programs in Illinois. Specifically, 5/6th of the amount is to be deposited into a Capital Project Fund and the remaining 1/6th will be deposited into a Local Government Video Gaming Distributive Fund to support local government operations.¹⁸ This revenue figure is said to be “conservative” by some economists, who estimate that “the average revenue experience from other states could justify revenues of nearly \$540 million.”¹⁹ The act also establishes annual licensure fees for machine operators, and manufacturers. Seventy-five percent of these fees will support the administration of the Video Gaming Act and 25 percent will support programs for the treatment of compulsive gambling.²⁰

**Program Areas Receiving
Over 50% of States
Limited Gaming Revenues**

Illinois	Capital Projects
Louisiana	State General Fund
Montana	State General Fund
Oregon	Education
South Dakota	Property Tax Relief
West Virginia	Education & Economic Development

Louisiana collected franchise fees of \$193 million on gross machine income of \$633 million in FY 2009.²¹ This amount reflects a franchise fee of 26 percent of gross machine income generated in restaurants, bars, lounges, hotels and motels. It also includes fees of 32.5 percent of gross machine income from machines in licensed truck stops.

State law allocates revenue to a variety of special funds including: 1 percent not to exceed \$500,000 to compulsive and

problem gaming, 25 percent not to exceed \$5.4 million to the state’s district attorneys office; and various percentages to municipalities and to parishes and their sheriffs for the purpose of enforcing gaming laws. The amount of the distribution is based upon the proportion of the total

¹⁷ Illinois Gaming Board, “Video Gaming.” <http://www.igb.state.il.us/VideoGaming/index.html>

¹⁸ Illinois Municipal League, “Information on the Video Gaming Act.” <http://legal.iml.org/page.cfm?key=2457>.

¹⁹ Donna Arduin, Arthur B. Laffer, and Wayne H. Winegarden, “The Estimated Revenues from a New Video Gaming Tax in Illinois,” Arduin, Laffer & Moore Econometrics, July 2009, 3.

²⁰ Illinois Gaming Board, *op. cit.*

²¹ Note: This amount. does not include \$7.3 million in fees and \$40 million in gross machine income from limited video gaming in Off Track Betting establishments . Louisiana State Police, Video Gaming Division, “Revenue Report, June 2009.” <http://www.lsp.org/gsrr.nsf?OpenDatabase&Start=1&Count=30&Expand=2>.

amount of fees, the municipality/parish contributes to the statewide total. Yet, for the year ended June 30, 2009, 70 percent, \$136 million, was deposited into the state’s general fund.²²

Montana allows business operators to retain 85 percent of gross machine income (GMI). In FY 2009, video gambling machine gross income tax collections of 15 percent totaled \$62,054,050. These tax collections are deposited into the state’s general fund. Forty-five percent of receipts from annual permit fees of \$220 per machine are distributed to the local government where the machine is located. Fifty five percent goes to the Gambling Special Revenue Fund.²³

In Oregon, limited video lottery gaming and the traditional lottery are accounted for as a single enterprise fund. In FY 2009, limited video lottery game sales totaled \$787 million or 71.5 percent of \$1.1 billion in total lottery sales. Two hundred fourteen million was paid to retailers in commissions, \$187 million of this amount were commissions to limited video lottery operators.²⁴ By law, no more than 16% of the Lottery’s total annual sales may be used for administrative costs (game vendor expenses, commissions to retailers who sell Lottery products and Lottery operating expenses). Currently, the Lottery operating expenses are less than 4% of its total annual sales.²⁵

FY 2009 Limited Video Gaming		
	<i>GMI or</i>	
<i>State</i>	<i>State Tax Revenues</i>	<i>Commissions Paid to Business Operators</i>
Louisiana	\$193million	\$440 million
Montana	\$62 million	\$352 million
Oregon	\$787 million	\$187 million
South Dakota	\$109 million	\$109 million
West Virginia	\$210 million	\$202 million

Oregonians voted to approve the broad categories that may receive Oregon Lottery funds, and have approved constitutional amendments allowing Lottery funds to be used for economic development (1984), public education (1995) and natural resource programs (1998). During the FY 2007-2009 biennium, 67% of all Lottery profits went to public education.²⁶

Revenue from South Dakota’s limited video lottery is divided between the state and machine operators on a 50/50 split. One-half of one percent (0.5%) of the state’s share is retained by the lottery for administration. In FY 2009, the states share of gross machine income was \$109

²² Louisiana Gaming Control Board, “Revenue Report, June 2009.” <http://lgcb.dps.louisiana.gov/igcb.nsf/d8805955b3ee279586256e9b0049dc26/9d0a91aa9921fa38862575fa006>.

²³Montana Department of Justice, Gaming Regulation, “Video Gambling Machine Tax Collections 1999 to the present.” <http://www.doj.mt.gov/gaming/statisticsreports/taxcollections/annual.pdf>.

²⁴ Brent Walth, “Oregon eyes taverns' and bars' video lottery profits,” *The Oregonian*, August 17, 2009. Also: Oregon State Lottery, “Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2009.” <http://www.oregonlottery.org/About/docs/2009cafr.pdf>.

²⁵ Oregon Lottery, “History: A look back at the Oregon Lottery.” <http://www.oregonlottery.org/About/Lottery101/History.aspx>

²⁶ Oregon Lottery, “How lottery funds are allocated.” <http://www.oregonlottery.org/About/Lottery101/HowareFundsAllocated.asp>.

million plus \$214,000 for administration. All of the state's limited video lottery revenue is distributed to the Property Tax Reduction Fund.²⁷

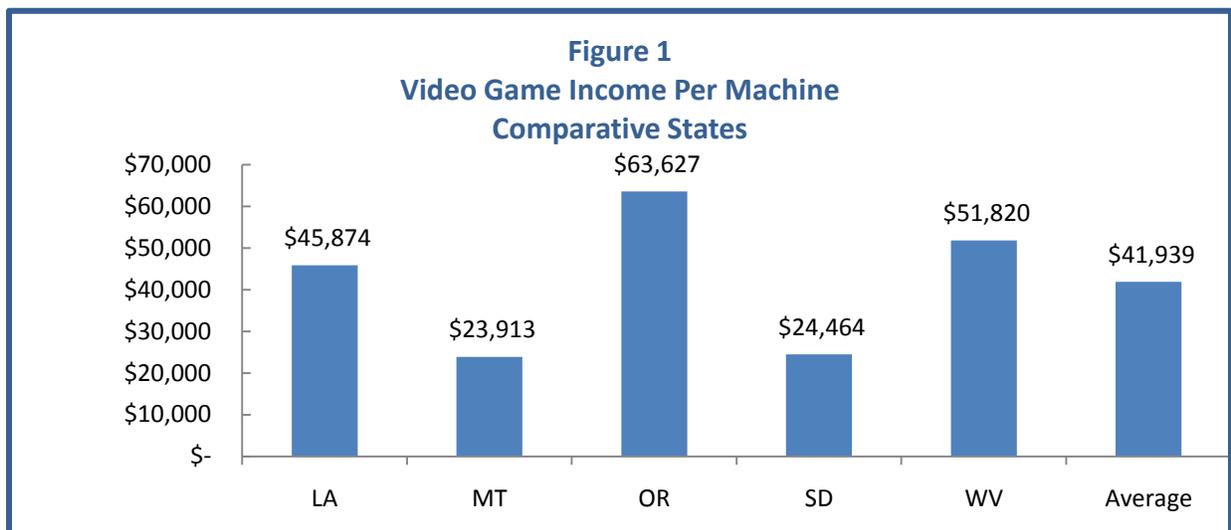
In West Virginia, two percent of gross machine income is taken for administrative costs before other state distributions are made. In FY 2009, this amounted to \$8,249,000 leaving a gross profit to the state of \$404,240,000. Fifty percent of this amount was paid in commissions to businesses that operated the machines, two percent was distributed to municipalities and counties, and the remaining limited video lottery revenues were deposited in the state's excess lottery revenue fund for legislative appropriations. In FY 2009, the legislature appropriated \$27 million from this fund for higher education, "Promise Scholarships" available to West Virginia high school students. Funds were also appropriated for senior citizens, tourism and economic development bonds.²⁸

II. ESTIMATED IMPACT OF LIMITED VIDEO GAMING IN ARIZONA

Based on the experiences of other states that have legalized video gaming, the estimated economic impact of limited video gaming in Arizona would be determined by four factors: (1) the expected revenues per video gaming machine, (2) the number of video gaming machines, (3) the tax rate and (4) the impact on existing state revenue sources.

ESTIMATED REVENUE PER MACHINE

In the states that have legalized video gaming machines, the total revenues per machine in 2009 varied from a low of \$24 thousand in Montana to a high of \$64 thousand in Oregon, see Figure 1



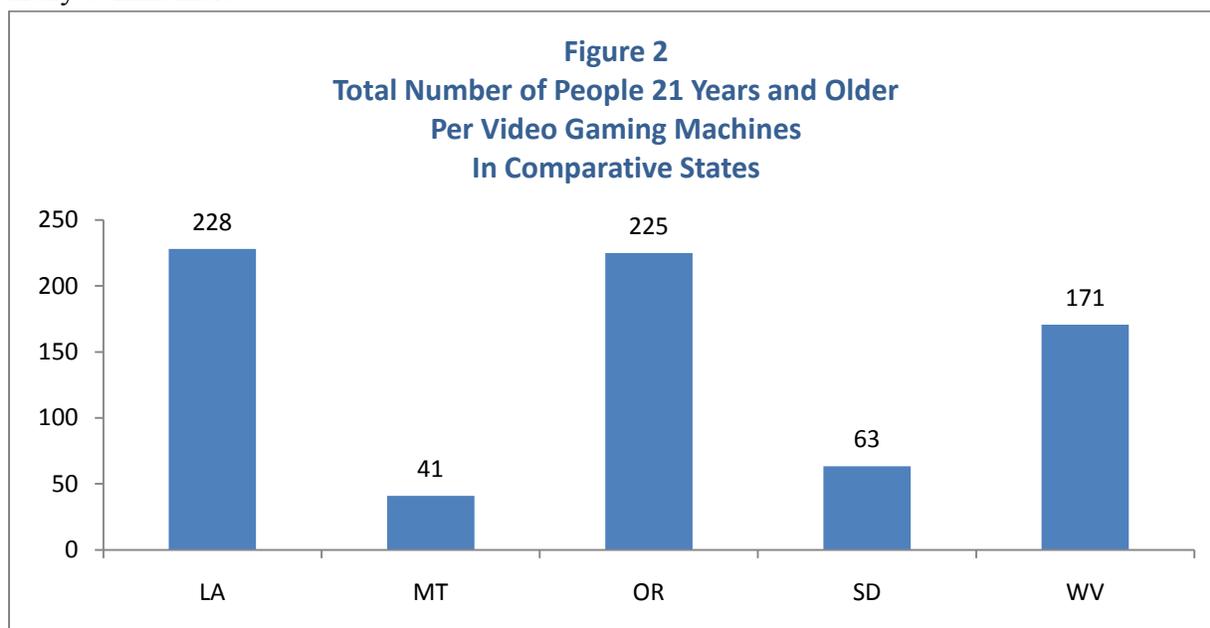
²⁷ South Dakota, Department of Revenue & Regulation, "Annual Report 2009," 36-38. http://www.state.sd.us/drr2/publications/annrpt/2009_annual%20_report.pdf.

²⁸ Finance and Administration Division, "West Virginia Lottery Comprehensive Annual Financial Report for the Fiscal Year ended June 30, 2009." <http://www.wvlottery.com/pdf/WVL2009AR-hr.pdf>.

On average, video gaming machines earned slightly less than \$42,000 per machine in 2009. While the average or mean revenue per machine is a useful measure, it is important to also understand the extent to which individual values vary from this mean. Figure 1 illustrates different values across the states (e.g., Oregon). The standard deviation is a calculation of the average distance of values in a distribution from the arithmetic mean of the distribution. Based upon the values in Figure 1, one standard deviation below the mean of \$42,000 in revenue per machine is \$26,000 per machine. One standard deviation above the mean equals \$58,000 in revenue per machine. These numbers are used as the reasonable low and reasonable high estimates of revenue. Using these estimates, the aggregate income will depend upon the total number of machines approved in Arizona.

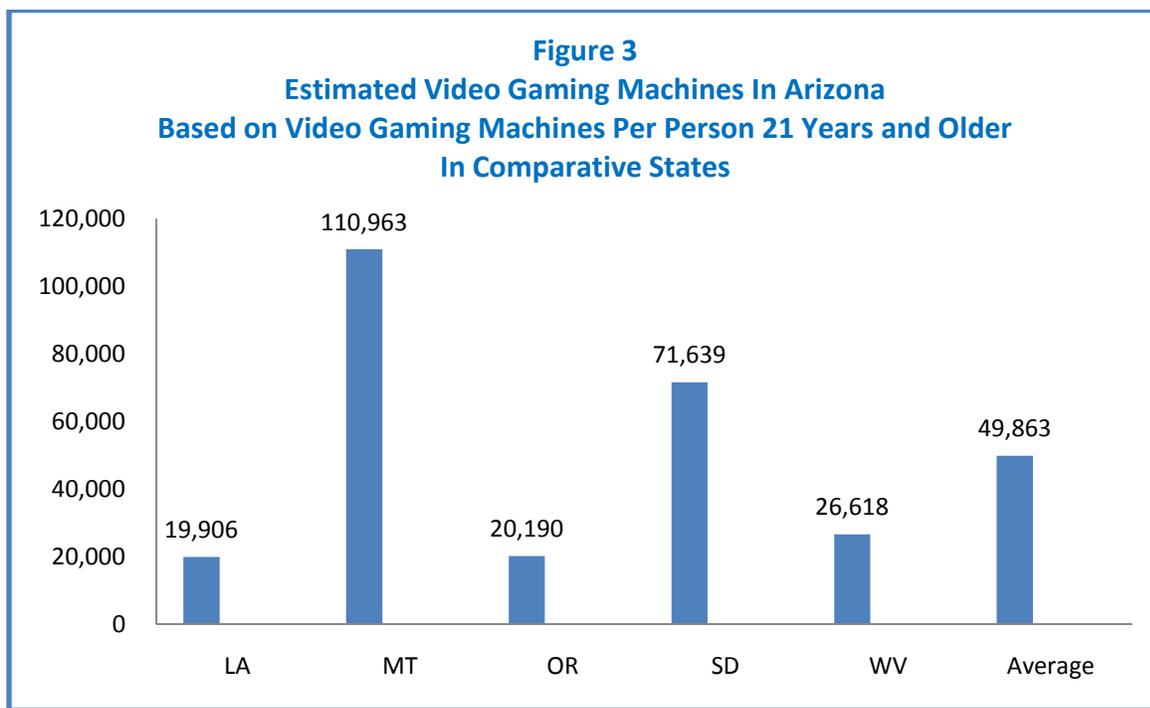
ESTIMATED NUMBER OF MACHINES

The number of machines in states with legalized limited video gaming varied in 2009 from a low of 7,960 in West Virginia to a high of 17,300 in Montana. The population of these states varies considerably as well.²⁹ Figure 2 illustrates the number of people 21 years and older per VGM in comparative states as July 1, 2008, the first day of FY 2009. The range is from 41 adults per VGM in Montana to 228 adults per machine in Louisiana. This is understandable as Louisiana has a higher population density than Montana and has more forms of gaming than any other state in the nation (i.e., riverboat casinos, racetrack casinos, a land based casino, and limited video machine gaming). Moreover, Montana is a more rural state with limited entertainment options in many communities.



²⁹ United States Bureau of the Census, “State Single Year of Age and Sex Population Estimates: April 1, 2000 to July 1, 2008 – RESIDENT.” <http://www.census.gov/popest/states/asrh/stasrh.html>.

In FY 2009, there were 4,541,073 people in Arizona 21 years and older.³⁰ Based on this figure, the total number of video gaming machines in Arizona could range from approximately 20,000 to 111,000 machines (See Figure 3). This is computed by dividing the number of video gaming machines per adult in comparative states into the adult population in Arizona (e.g., 228 VGMs per adult in Louisiana divided into 4,541,073 adults in Arizona). Using the average total number of machines in all of these states, Arizona could support approximately 50,000 video gaming machines.³¹



As with the calculation of revenue per machine, Figure 3 illustrates different values across the states (e.g. Montana). Based upon the values in Figure 3, one standard deviation below the mean of 50,000 VGMs would be 14,000 machines. One standard deviation above the mean equals 86,000 machines. To account for variation in the distribution, these numbers are used as the low and high estimates when calculating limited video gaming tax revenue in Arizona.

³⁰ United States Bureau of the Census, *ibid*.

³¹ A similar methodology was used by Arduin, Laffer & Moore Econometrics to estimate the number of video gaming machines and estimated revenues in Illinois. However, they used total population data per state. We feel the population of those 21 years and older, individuals old enough to gamble, is a better measure. Donna Arduin, Arthur B. Laffer, and Wayne H. Winegarden, "The Estimated Revenues from a New Video Gaming Tax in Illinois," Arduin, Laffer & Moore Econometrics, July 2009.

ESTIMATED TOTAL REVENUE

Based on the range of estimated net income per machine, and the number of machines in use, it is possible to estimate total revenues and the resulting tax that would be generated. Table 2 presents alternative limited video gaming revenues in Arizona based on three different scenarios for the amount of total revenues earned per machine and the total number of machines.

TABLE 2
LIMITED VIDEO GAMING INCOME SCENARIOS BASED ON RANGE OF REVENUES PER MACHINE AND TOTAL NUMBER OF MACHINES

		<u>Machine Income</u>		
		\$26,000	\$42,000	\$58,000
Number of Machines	14,000	\$364,000,000	\$588,000,000	\$812,000,000
	50,000	\$1,300,000,000	\$2,100,000,000	\$2,900,000,000
	86,000	\$2,236,000,000	\$3,612,000,000	\$4,988,000,000

For the revenues per machine, three different scenarios are considered:

- The lowest amount of revenue per machine which is the statistically adjusted low estimate of \$26,000 per machine;
- The average amount of revenue per machine earned by the comparison states, which is \$42,000 and,
- The largest amount of revenue per machine which is the statistically adjusted high estimate of \$58,000.

For the number of machines, three different scenarios are also considered based upon the number of machines per capita in the comparison states scaled to Arizona:

- The smallest number of machines, which is the statistically adjusted low estimate of 14,000 machines;
- The average number of machines which is an average estimate of 50,000 machines; and,
- The largest number of machines which is the statistically adjusted high estimate of 86,000 machines.

Based on the matrix presented above, the range of estimated total machine income from the legalization of limited video gaming machines in Arizona would range between a low \$364 million and a high \$5 billion.

ESTIMATED TAX REVENUES

Tables 3, 4, and 5 illustrate alternative scenarios of tax revenue based upon a 25 percent, 45 percent and 60 percent state tax rate. For the lowest-revenue estimate, the revenues generated would be \$91 million in year one. According to ALBA, there are over 4,500 licensed liquor serving establishment that could potentially want to apply for a limited video gaming permit. The number of VGMs using the low estimate would be approximately three per establishment.

TABLE 3
LIMITED VIDEO GAMING TAX REVENUE BASED ON RANGE OF REVENUES PER MACHINE AND TOTAL NUMBER OF MACHINES

		<u>25% Tax Rate</u>		
			<u>Tax Revenue</u>	
		\$26,000	\$42,000	\$58,000
Number of Machines	14,000	\$91,000,000	\$147,000,000	\$203,000,000
	50,000	\$325,000,000	\$525,000,000	\$725,000,000
	86,000	\$559,000,000	\$903,000,000	\$1,247,000,000

TABLE 4
LIMITED VIDEO GAMING TAX REVENUE BASED ON RANGE OF REVENUES PER MACHINE AND TOTAL NUMBER OF MACHINES

		<u>45% Tax Rate</u>		
			<u>Tax Revenue</u>	
		\$26,000	\$42,000	\$58,000
Number of Machines	14,000	\$163,800,000	\$264,000,000	\$365,400,000
	50,000	\$585,000,000	\$945,000,000	\$1,305,000,000
	86,000	\$1,006,200,000	\$1,624,400,000	\$2,244,600,000

TABLE 5
LIMITED VIDEO GAMING TAX REVENUE BASED ON RANGE OF REVENUES PER MACHINE AND TOTAL NUMBER OF MACHINES

		<u>60% Tax Rate</u>		
			<u>Tax Revenue</u>	
		\$26,000	\$42,000	\$58,000
Number of Machines	14,000	\$218,400,000	\$352,000,000	\$487,200,000
	50,000	\$780,000,000	\$1,260,000,000	\$1,740,000,000
	86,000	\$1,341,600,000	\$2,167,200,000	\$2,992,800,000

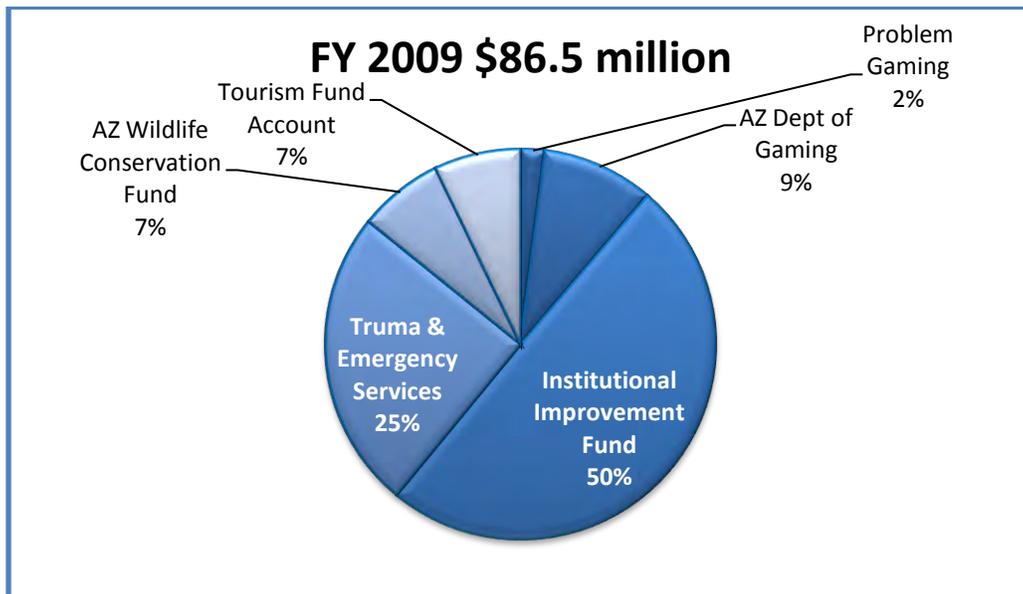
Limited Video Gaming Impact on Existing Revenue Sources

Indian Casinos

Arizona has signed gaming compacts with fifteen tribes. These compacts specify the terms by which these tribes operate twenty-three Class III casinos. Based upon Proposition 202 approved by the voters in November 2002, the Arizona Tribal-State Gaming compacts require tribes to contribute between one to eight percent of their gross gaming revenues (i.e., the difference between gaming wins and losses, before deducting costs and expenses). This is based upon a sliding scale based on casino revenues.

According to the Arizona Department of Gaming, for the period between July 1, 2008 to June 30, 2009 tribes earned \$1.828 billion in aggregate gaming revenue. Of this, the state received \$86,496,770 in tribal contributions plus interest earned³² In accordance with state law, these monies, deposited in the Arizona Benefits Fund, were allocated to various programs according to the percentages shown in Figure 4.³³

FIGURE 4
DISTRIBUTION OF ARIZONA TRIBAL GAMING CONTRIBUTIONS



It has to be pointed out that allowing other parties to offer electronic games will invoke Section 3(H), the “poison pill” provision of the Indian tribal compacts with the state.. As a result, there are three potential impacts on state revenue collected from tribes. First, invalidation of existing limits on the number of slot machines and table games will increase the scale of casino gaming.

³² Mark Brnovich, Director, Arizona Department of Gaming, letter to the Honorable Janice Brewer, Governor of Arizona, September 21, 2009. http://www.gm.state.az.us/tcontributions_pdf/2009FiscalReport.pdf .

³³ *Ibid.*,2.

Two, although casinos are relatively mature industries adding new capacity would likely increase their aggregate gaming revenue even though some cannibalization between casinos would occur.³⁴ Even if aggregate gaming revenue increases, the main effect would still result in a much lower state share because the distribution will fall to .75%.³⁵ Finally, it has been suggested that any new gaming initiative might result in the elimination of tribal contributions altogether.³⁶ Given this, it would be reasonable to assume that future tribal contributions would be negligible.

Arizona Lottery

A recent report from the Arizona Auditor General criticizes the poor performance of the Arizona lottery. Compared to the twenty-eight states included in the study, Arizona's lottery ranked twenty-fourth in per capita revenue.³⁷ In an article published in 2001, Siegel and Anders found strong evidence that competition from Indian casinos was negatively correlated with lottery sales.³⁸ Based on this finding, and the recognition that various forms of gambling may compete with lotteries, it is important to consider the possible impact of limited video gaming on lottery revenues.

To improve performance, the Office of the Auditor General recommends that the Arizona lottery increase the number of establishments that sell lottery tickets, particularly retailers that have higher than average lottery sales, such as restaurants and bars

While the lottery generated \$484.5 million in sales Fiscal Year 2009, the net contribution to the state was \$128 million after deducting payouts, administrative costs, and retailer commissions.³⁹ To improve performance, the Office of the Auditor General recommends that the Arizona lottery increase the number of establishments that sell lottery tickets, particularly retailers that have higher than

average lottery sales, such as restaurants and bars.⁴⁰ It is possible that instead of substitution of lotteries for electronic video gaming, there could be a complementary effect that could boost lottery sales. This argument recognizes the previous displacement that occurred as of result the introduction of Indian casinos and exacerbated by Proposition 202 which increased the number of slot machines allocated to tribal casinos.

³⁴ The Joint Legislative Budget Committee (JLBC) used previous estimates indicating that allowing racinos would divert approximately 10% of Indian casino revenues to horse and dog tracks. Jim Everill, Assistant Director, JLBC (telephone interview, January 27, 2010).

³⁵ "Indian Tribe – State of Arizona Gaming Compact," May, 2002, 18.

http://www.gm.state.az.us/pdf_compacts/compact.final.pdf

³⁶ Howard Consulting Group, Inc, "Estimated Tribal and Track Contributions to the State of Arizona for Three Gaming Initiatives on the November 2002 Ballot," June 26, 2006, 6.

³⁷ Office of the Auditor General, State of Arizona, "Performance Audit and Sunset Review: Arizona State Lottery Commission and Arizona State Lottery." Report No. 10-03, March, 2010, 16.

³⁸ Donald Siegel and Gary Anders (2001). "The Impact of Indian Casinos on State Lotteries: A Case Study of Arizona," *Public Finance Review*, 29(2), 139-147.

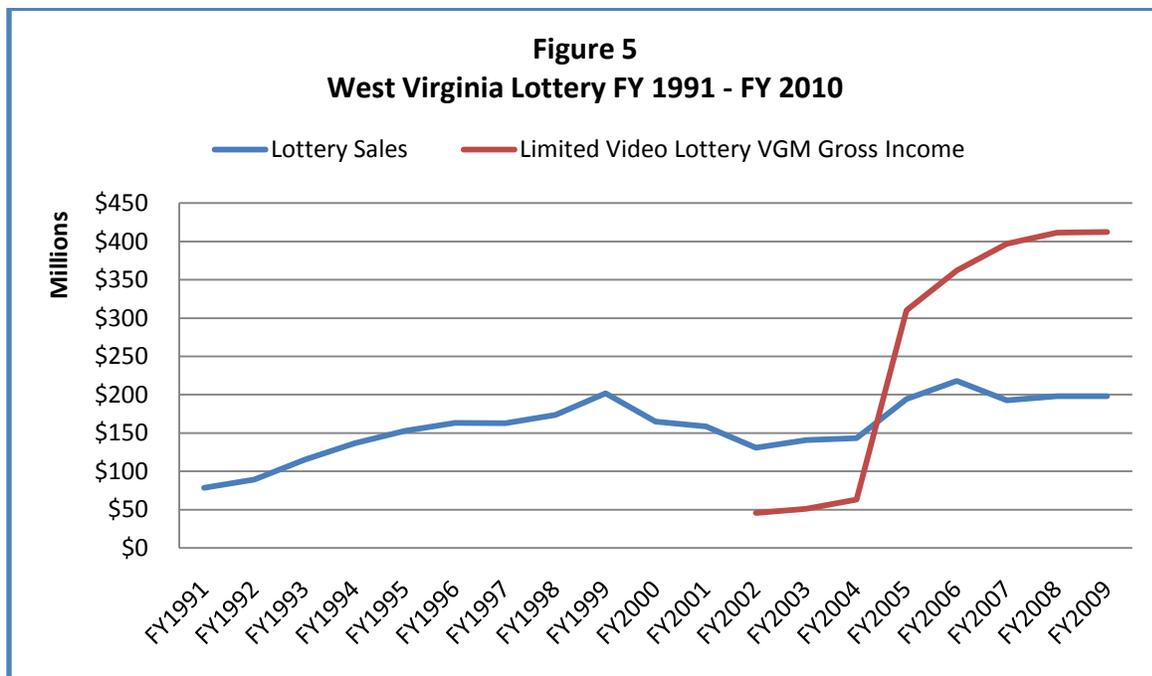
³⁹ Arizona State Lottery, "Financial Statements as of and for the Year Ended June 30, 2009" Phoenix, AZ: State of Arizona., 4-6.

⁴⁰ Office of the Auditor General, *ibid.*, 18.

In a number of states, the impact of limited video gaming on lotteries is not measurable because both forms of gaming were legalized at the same time. For example, Louisiana passed its video lottery program in 1989. This was just one year after the start of its traditional lottery. However, in the first year of operation, 700 establishments were licensed and generated revenues that surpassed projections by nearly \$2.5 million.⁴¹

In South Dakota both limited video gaming and the traditional lottery were legalized in 1989. The number of establishments and terminals in South Dakota grew quickly, leveling off by 1994, but with steady growth to near the current levels of approximately 8,900 terminals in 1,470 establishments across the state. South Dakota lottery officials maintain that “the success of video lottery has grown steadily for 20 years and has proved mutually profitable for the state and its private business partners.”⁴²

West Virginia’s lottery has been in operation for 23 years; whereas its limited video lottery games were approved by its legislature in 2001. Figure 5 illustrates gross lottery sales (total receipts before expenses) and video lottery machine gross income for the past 19 years.⁴³



As can be seen from Figure 5, the traditional lottery did decline after its peak of \$202 million in FY1999. However beginning in FY2003, lottery sales increased every year except FY2007.

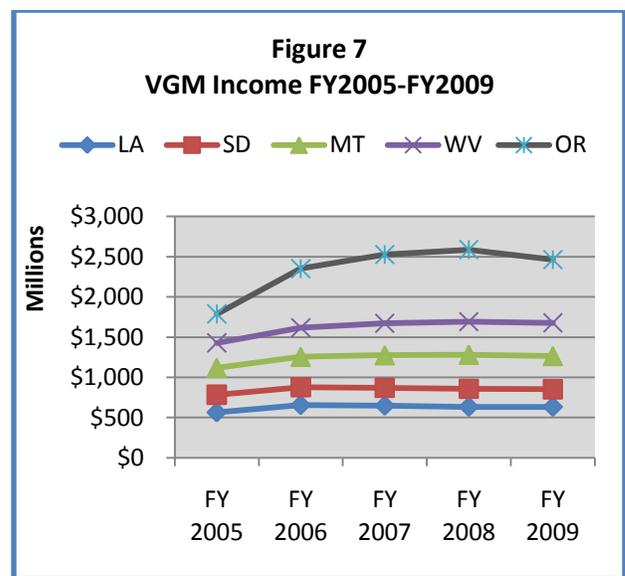
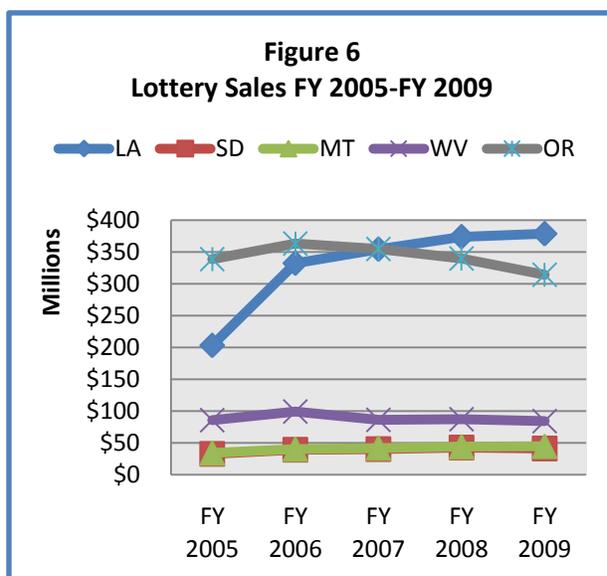
⁴¹ Louisiana Lottery Corporation, “Comprehensive Annual Financial Report for Fiscal Years ended June 30, 2009 and 2008.” <http://www.louisianalottery.com/assets/docs/Financial/LLCRP.pdf>.

⁴² South Dakota Lottery, “SD Lottery Games.” <http://lottery.sd.gov/games/video/>.

⁴³ West Virginia Lottery, “Comprehensive Annual Reports .” <http://www.wvlottery.com/aboutus/annualreports.aspx>.

Overall, traditional lottery sales went up over 150 percent from 1991 to 2009. Limited video gaming machine income experienced a much higher growth rate increasing over 800 percent from its introduction in 2001. In 2009, video lottery income in liquor serving establishments totaled \$412 million, more than double West Virginia’s traditional lottery sales.⁴⁴

All states that have adopted limited video gaming also have state sponsored lotteries. As with West Virginia, limited video gaming in Louisiana and Oregon is part of the lottery and regulated by the state Lottery Commission. In Montana and Louisiana video gaming in liquor serving establishments is a program, independent of the lottery, and regulated, not by the Lottery Commission, but by the Montana Department of Justice Gaming Division and the Louisiana Gaming Control Board respectively. Figure 6 tracks total sales from traditional lottery games from FY 2005 to FY 2009. Figure 7 presents gross machine income from limited video gaming (i.e., cash in the machines minus cash out, prizes) over this same period. Sales trends for both of these forms of gaming, indicate that substitution is less important than creating efficient multiple revenue sources to support state government.



ANTICIPATED ECONOMIC EFFECT ON LIQUOR SERVING ESTABLISHMENTS

The hospitality industry makes a significant economic contribution to the State of Arizona in terms of both employment and taxes. The U.S. Census Bureau estimates 2009 employment in Arizona’s food services and drinking places to be 181,906.⁴⁵ Total sales for restaurants and bars were \$9.1 billion in FY 2009 and transaction privilege taxes on these sales totaled \$454.5

⁴⁴ West Virginia Lottery, “Comprehensive Annual Reports for Year Ended June 30, 2009.": <http://www.wvlottery.com/aboutus/annualreports.aspx>

⁴⁵ U.S. Census Bureau, Center for Economic Studies, Arizona Industry Reports, Quarterly Workforce Indicators. Food Services and Drinking Places, NCAIS code 722, December 17, 2009. <http://lehd.did.census.gov/led/datatools/qwiapp.html>.

million. Although the data include all restaurants (e.g., including fast food franchises), liquor serving establishments makes up a large percent of the total sales. The State of Arizona also receives luxury tax revenues on all alcoholic beverages sold. In FY 2009, Arizona collected over \$64 million in luxury taxes on alcoholic beverages (i.e., \$28.3 million for spirituous, \$13 million for vinuous and \$22.8 million for malt beverages).⁴⁶

Based on experiences in other states, the introduction of limited gaming in these establishments would increase sales, jobs and tax revenues. Montana has had limited video gaming longer than any state. According to Mark Staples, the introduction of electronic games substantially boosted business for bars and taverns through increased traffic and patrons staying longer. In a state with a population of less than less than one million, the 1,641 gaming establishments employ 24,000 workers with an estimated payroll of about \$350 million. In addition to collecting 15% of the gross machine income, the state collects property taxes, income taxes and payroll taxes that add an additional \$250 million to state and local governments.⁴⁷

The positive economic effects of gaming establishments are further substantiated in a University of Montana study. Researchers found that gaming establishments generated \$1.35 billion in revenue in 2008. Thirty-two percent, \$436 million from gambling activities, thirty percent, \$314 from fuel, twenty percent, \$268 million, from food, and seventeen percent, \$232 million, from alcohol sales.⁴⁸ What is most striking is that total revenue of gaming establishments has grown at an average rate of 4.5 percent per year from 2001-2007.⁴⁹

Related to the positive impact on bars and restaurants is the question of how increased revenues from electronic video games will affect state and local tax collections. Although sales of liquor and food are subject to the same transaction privilege taxes (TPT) as other taxable goods, gaming would generate a greater tax contribution for the state. Assume that \$100 million dollars is earned by VGM. If this amount came directly from local consumer expenditures then the difference would be the state gaming tax rate, say 45% less the state's 5.6% TPT. More realistically, the adoption of VGM would draw from Indian casinos and other forms of gambling including money that would be spent in Las Vegas, Laughlin or on Internet gambling sites. Also, given the importance of tourism industry, there is likely to be a net injection of new money from sales to tourists, "snow birds," and convention visitors.⁵⁰

⁴⁶ Arizona Department of Revenue 2009 Annual Report, 47-48. (Phoenix, AZ: State of Arizona).

⁴⁷ Mark Staples, Attorney for the Montana Tavern Association. Telephone interview with author January 29, 2010.

⁴⁸ John Baldrige and James T. Sylvester, "The Business of Gambling in Montana 2008 Update," *Montana Business Quarterly*, 46(4). Winter 2008.

⁴⁹ *Ibid.*

⁵⁰ For a discussion of how tourism allows states to export gambling see: William R. Eadington, "Contributions of Casino-Style Gambling to Local Economies," *Annals of the American Academy of Political and Social Science* 556 (1998): 53-65.

All of the states in with limited video gaming, with the exception of West Virginia and Illinois, have Class II and Class III Indian casinos. For example, Oregon has nine tribal casinos. A 2009 study using 2007 data found that total tribal revenues including gaming, food and beverage sales, hotels and golf courses was \$596.7 million. Despite competition from state approved VGMs, Indian tribal revenues continued to increase with gaming revenue growing over the past five years by an average of 7.2%. Related to this growth has been the tribes ability to promote visits to casinos by tourists.⁵¹

The more compelling issue then would be the impact on municipalities. While local governments' sales taxes would be the same for food and drinks as other taxable items, these governments would lose their share of taxes diverted to VGMs. Given this, states in our study have made provisions to share limited video gambling tax revenues with local governments. For example, the 2009 Video Gaming Law in Illinois allocates 1/6th of the taxes revenue collected to a Local Government Video Gaming Distributive Fund to support local government operations Louisiana and Oregon share revenues with local governments based upon the amount of limited video gaming tax revenue/franchise fees, the municipality/parish contributes to the statewide total. Other examples across the states, could provide Arizona policy makers with alternative models.

Likewise, cities could opt out of the proposal altogether if there was strong public resistance. In any event, the positive economic benefits could be designed in such a way as to assure a fair distribution for restaurant and tavern owners as well as state and local governments.

CONCLUSION

Arizona's fiscal crisis requires that we generate new sources of revenue while also cutting expenditures. Based upon this research, we find that adopting the average number of 50,000 video gaming machines and using the average revenue per machine, the state could earn between \$525 million and \$1.26 billion per year depending on the specific revenue sharing percentage adopted.

It is necessary to mention that there are legitimate concerns about such a policy. Three of the most frequently cited concerns are promotion of alcohol consumption, the expansion of gambling, and the social cost of problem gambling.

With regard to the issue of providing additional incentives for people to frequent liquor serving establishments, we need to point out that taxes collected on alcoholic products do not indicate

⁵¹ Robert Whelan and Alec Josephson . "The Contributions of Indian Gaming to Oregon's Economy in 2007: A Market and Economic Impact Analysis for the Oregon Tribal Gaming Alliance."(Portland, OR: ECONorthwest, August 14, 2009).
http://www.econw.com/reports/2009_ECONorthwest_Contributions-Indian-Gaming-Oregon-Economy-2007.pdf

that Arizonans are consuming less alcohol. Instead of going out they are drinking in private. Given this, one might ask if it is not better from a public perspective to encourage less private consumption and more visits to bars and restaurants. This would not only support local small businesses and stimulate increased employment, but also provide a social environment and public setting which may provide a more limiting alternative if, as the data indicate, that people will continue to consume alcoholic beverages.

With regard to the moral objection over the promotion of further gambling, there are increasing venues that bring gambling into our communities. For example, the Tohono O'odham tribe is currently moving forward with a plan to develop a large casino near Glendale's sports complex. Despite objections from local communities and even other gaming tribes, the plan to build the casino is gaining political momentum.⁵²

In addition to Indian casinos, there has been an increase in other types of gambling activities including internet based poker, blackjack and sports betting. Internet gambling is a rapidly growing and largely unregulated industry. While federal efforts have been strengthened, the proliferation and popularity of these games has led to increased calls for legalization which could provide more regulation and enforcement. It has been the position of state governments that they typically should choose the forms of gambling to legalize within their own borders. The Internet, however, presents other types of gambling opportunities beyond the scope of state control. The Internet, by its very nature, transcends traditional state boundaries. Given this, perhaps the more salient question is not can we prohibit gambling, but how can we derive the maximum public benefit from the trend toward increased gambling.

Finally, there are legitimate concerns about the effect of increased gambling on the segment of the population with gambling addictions. The scholarly literature contains an extensive set of studies that attempt to estimate the prevalence of problem gambling.⁵³ According to the National Council on Problem Gambling (NCPG) "about 1% of U.S. adults meet the criteria for pathological gambling, and another 2% to 3% would be considered problem gamblers. Regarding the question of whether casinos, lotteries or other type of gambling cause problem gambling, NCPG maintains that the existence of any gambling activity only provides the opportunity to gamble: "It does not in and of itself, create the problem any more than a liquor store would create an alcoholic."⁵⁴

If there is to be a change in Arizona's gambling policy to allow horse and dog tracks to operate slot machines, then state legislators should also consider the potential statewide economic

⁵² Carrie Watters, "Arizona Politics: Association of Tribes Opposes Land Measure," *Arizona Republic*, March 9, 2010, B2.

⁵³ For specific information on Arizona see: Rachel A. Volberg, (2003) *Gambling and Problem Gambling in Arizona: Report to the Arizona Lottery*. Northhampton, MA: Gemini Research, Ltd.

⁵⁴ National Council on Problem Gambling, "FAQs – Problem Gamblers: Do casinos, lotteries and other types of gambling „cause“ problem gambling?" <http://wwwncpgambling.org>.

benefits of adopting limited video gaming. This measure would support our locally owned traditional taverns and restaurants by allowing them to offer low-stakes, small scale gaming entertainment. Such a policy would offer financial benefits for operators, taxpayers, state and local governments. To some extent these benefits would be concentrated in Phoenix, Tucson, and Flagstaff because of the size of these cities populations. Nevertheless the scope of the impact would be statewide because there are bars and restaurants throughout Arizona.

It is possible for the state of Arizona to effectively achieve two goals: One, it would help correct the losses to businesses that have been adversely affected by recent changes in state laws, and two, tap "voluntary" tax revenues to support government services via well regulated, limited video gambling. Within the new framework lawmakers could clearly define a comprehensive regulatory structure addressing licensing, operational controls, law enforcement, taxation, and auditing functions

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