### Memorandum

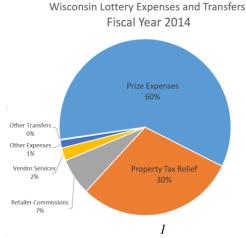
To: Dr. John Yinger From: Rory Tikalsky Date: May 6, 2016 Re: Wisconsin Lottery

### **Summary:**

The Wisconsin Lottery remains unique among its peers in providing tax relief to homeowners totaling \$3.5 billion over the past 25 years. Its program structure provides 30% of all revenue towards tax relief, 60% to prizes, and 10% to administration. Wisconsin presents as average among its peers with \$31 in revenue per capita, raising \$570 million in FY2014. Demographic research reveals significant race related differences in lottery participation and spending. Although restricted, advertising for the lottery presents a challenging administrative gray area. Recommendations focus on restructuring the Wisconsin Lottery towards more equitable tax relief, addressing racial trends, and realigning advertisement to better fit intended outcomes.

### **Background:**

The Wisconsin Lottery was established in 1987 through an amendment to the state constitution. The constitution declares that lottery revenue is to be set aside for property tax relief. Since its creation, the lottery has raised over \$3.5 billion for property tax relief in Wisconsin. The Wisconsin Lottery is statutorily constrained to allocate funds in two ways: at least 50% must be allocated to prize money and no more than 15% may be allocated towards administrative expenses. For FY2014, cash paid for prizes totaled \$337.5 million, transfers for property tax relief totaled \$168.4 million and retailer commissions and incentives totaled \$39 million. For FY2014, the allocation



is within statutory limits (See Figure 1).3 Revenues increased by 0.5% from FY2013-FY2014.3

In FY2010, out of 43 states with lotteries, Wisconsin ranked 29<sup>th</sup> in revenue per capita at \$31. Its neighbors Minnesota and Illinois raised \$17 and \$50 per capita, ranked 41<sup>st</sup> and 21<sup>st</sup>, respectively. <sup>4</sup> Its implicit tax rate is approximately 54.1%, ranked 12<sup>th</sup> nationally compared to the national average of 48.5%. <sup>5</sup> Only two other states use lottery earnings to offset property taxes, South Dakota and Pennsylvania. South Dakota eliminated the provision of funds from the lottery for property tax relief in 2015, but during the previous 28 years it provided \$1.9 billion property tax relief. <sup>6</sup> Pennsylvania provides property tax relief funding through the lottery on a much more limited basis, providing rebates to disabled and elderly renters and home owners, who receive rebates up to \$650 per year. <sup>7</sup> It is important to note that many other states transfer

<sup>&</sup>lt;sup>1</sup> "Wisconsin Lottery." About the Lottery. Wisconsin Lottery, n.d. Web. 23 Mar. 2016. <a href="https://www.wilottery.com/about.aspx">https://www.wilottery.com/about.aspx</a>>.

<sup>&</sup>lt;sup>2</sup> Wis. Stat. § 25.75(3)

<sup>&</sup>lt;sup>3</sup> Legislative Audit Bureau. "Wisconsin Lottery: Financial Audit." *Wisconsin State Legislature*. State of Wisconsin, July 2015. Web. 23 Mar. 2016. <a href="http://legis.wisconsin.gov/lab/reports/15-9full.pdf">http://legis.wisconsin.gov/lab/reports/15-9full.pdf</a>>.

<sup>&</sup>lt;sup>4</sup> Duncan, Kevin, Alex Raut, and Joseph Henchman. "Lottery Tax Rates Vary Greatly By State." Tax Foundation, 29 Mar. 2012. Web. 23 Mar. 2016. <a href="http://taxfoundation.org/article/lottery-tax-rates-vary-greatly-state">http://taxfoundation.org/article/lottery-tax-rates-vary-greatly-state</a>.

<sup>&</sup>lt;sup>5</sup> Yinger, John. "Lecture 10: Revenue From Government Monopoly." Maxwell School, Syracuse, NY. Mar. 2016. Lecture.

<sup>&</sup>lt;sup>6</sup> "Where the Money Goes." South Dakota Lottery. State of South Dakota, n.d. Web. 23 Mar. 2016. <a href="https://lottery.sd.gov/about/where/">https://lottery.sd.gov/about/where/</a>.

<sup>&</sup>lt;sup>7</sup> "Property Tax/Rent Rebate Program." *Pennsylvania Department of Revenue.* State of Pennsylvania, n.d. Web. 23 Mar. 2016. <a href="http://www.revenue.pa.gov/generaltaxinformation/propertytaxrentrebateprogram/pages/default.aspx">http://www.revenue.pa.gov/generaltaxinformation/propertytaxrentrebateprogram/pages/default.aspx</a>.

lottery earnings into their general fund, which indirectly but substantially reduces property tax burden in those states. However, Wisconsin is the only state which explicitly provides property tax relief to homeowners financed through its lottery system.

As stated in the Wisconsin Constitution: "The net proceeds of the state lottery shall be deposited in the treasury of the state, to be used for property tax relief for residents of this state as provided by law." To this end, the Lottery and Gaming Tax Credit was created. By rule this credit only applies to the primary residence of the home owner. Initially, the Wisconsin Supreme Court ruled that this specification was inconsistent with the uniformity clause of the Wisconsin Constitution, which states that there is only one class of property and that the burden of taxation must be as equal as possible among that class. A 1999 constitutional amendment approved by voters allowed for special allocation to primary residences.

In FY2013, the average credit was \$113 (See Figure 2). The credit is calculated based on the local tax rate and the lesser of the market value of the property or the credit base (See Equation 1). The credit base serves as a cap on the credit, and is determined by the Department of Revenue annually at a level to allow for full disbursement of lottery proceeds. The base was set at \$11,000 for FY2014. The resulting structure of the credit is proportional through the first \$11,000 of property value and then flat, resulting in a generally progressive structure *within* the target group. The exclusion of renters creates ambiguity towards the tax structure of the program, suggesting a less progressive result than perceived at a first glance, since lower income citizens tend to rent. Property tax relief provided through the lottery artificially lowers the tax share of homeowners. The result of

Lottery =	Gross Full V Tax Rate for School Dist	Lesser of Cred Base or Fai Market Value			
	Equa	tion 1			
	Credit	Average	Total		
	Base	Credit	Credits		
2005(06)	\$9,400	\$81	\$119.9		
2006(07)	11,600	96	144.7		
2007(08)	10,100	85	129.6		
2008(09)	9,000	77	118.1		
2009(10)	8,100	74	113.2		
2010(11)	8,700	85	129.2		
2011(12)	9,000	89	134.8		
2012(13)	9,200	94	141.5		
2013(14)	10,900	113	168.8		
2014(15)*	11,000	113	170.1		
	Figur	·e 2			

a reduced tax share is an increased demand for public services which are funded by local property taxes, the majority of which funds education.

Two studies focused on understanding who plays the Wisconsin Lottery, published in 1995 and 2006, revealed insights into the demographics of the Wisconsin Lottery. Researchers at the Institute for Research on Poverty at the University of Wisconsin-Madison found<sup>12</sup> that lower income Wisconsinites spend a higher proportion of their income on lottery games, although not a larger absolute number. In terms of education, those with the lowest and highest education were less likely to play, while those with intermediate levels were more likely to play. Among the more educated, college graduates on average spent the lowest percentage of income as well as fewest dollars playing the lottery. Men were more likely to play the lottery and spent more on it, and the elderly were least likely to play. Among lottery players, controlling for income, there is

<sup>9</sup> Pickart, Joseph A. "Understanding Wisconsin Property Taxes – And How to Reduce Your Tax Burden." Whyte Hirschboeck Dudek S.C., n.d. Web. 23 Mar. 2016. <a href="http://www.whdlaw.com/files/CondoLawResources/PropertyTaxes.pdf">http://www.whdlaw.com/files/CondoLawResources/PropertyTaxes.pdf</a>>.

<sup>&</sup>lt;sup>8</sup> Wisconsin Constitution Article IV, Section 24(6)(a)

<sup>10</sup> North Dakota Legislative Council. "Wisconsin Property Tax Relief Programs." North Dakota Legislative Branch. State of North Dakota, n.d. Web. 23 Mar. 2016. <a href="http://www.legis.nd.gov/files/resource/committee-memorandum/19216.pdf">http://www.legis.nd.gov/files/resource/committee-memorandum/19216.pdf</a>?20160321112836>.

Legislative Fiscal Bureau. "State Property Tax Credits." *Wisconsin State Legislature*. State of Wisconsin, Jan. 2015. Web. 23 Mar. 2016. <a href="https://docs.legis.wisconsin.gov/misc/lfb/informational\_papers/january\_2015/0021\_state\_property\_tax\_credits\_informational\_paper\_21.pdf">https://docs.legis.wisconsin.gov/misc/lfb/informational\_papers/january\_2015/0021\_state\_property\_tax\_credits\_informational\_paper\_21.pdf</a>>.

<sup>&</sup>lt;sup>12</sup> Piliavin, Irving, and Josh Rossol. "Gambling in Wisconsin." *Institute for Research on Poverty*. University of Wisconsin, Apr. 1995. Web. 23 Mar. 2016. <a href="http://www.irp.wisc.edu/publications/sr/pdfs/sr63.pdf">http://www.irp.wisc.edu/publications/sr/pdfs/sr63.pdf</a>>.

no significant difference among races below \$20,000. With incomes above \$20,000, African Americans played three times more often than Caucasians and out-spent them by an estimated \$60.33 to just \$13.73 per month (the difference between African Americans and Caucasians is statistically significant at p=.01).<sup>13</sup>

The second study focused on public perceptions of the Wisconsin Lottery and was performed by the Wisconsin Department of Revenue in 2006. <sup>14</sup> The study found that tax relief (74%) and General State Fund (49%) were most commonly cited benefits of the lottery. When asked to cite advantages of the lottery, chance to win money (41%) and tax relief (21%) were the most common answers. When asked about disadvantages, difficulty of winning (39%) and negative impacts on people (23%) were most common. (Responses were ±5.3% at 95% confidence.)

Lottery perception and participation is driven by advertising choices by the Wisconsin Lottery and retailers it contracts with. Wisconsin statutes prohibit the Wisconsin Lottery from promotional advertising which "is for the purpose of inducing persons to purchase lottery tickets." However, this restriction does not prevent advertising for informational purposes which describes information about the location of sale, pricing, prizes, rules, or winning numbers of the lottery. Such advertising is having a significant effect, with players of the lottery having higher ad awareness than non-players (51% vs 36%).

### **Recommendations:**

<u>Extension to Renters</u>: The current structure of the Wisconsin Lottery presents concerns of equity across income levels. Its design overlooks the economic incidence of property taxes on renters. The current structure of the Lottery and Gaming Tax Credit favors middle income homeowners and penalizes renters who are often lower income. In the spirit of the uniformity clause of the Wisconsin Constitution, I recommend expanding property tax relief from the Wisconsin Lottery to renters in order to equalize the property tax.

Extension to renters should be performed through the existing tax relief system for renters as part of the state income tax return. The Homestead Tax Credit<sup>16</sup> is a refundable credit which acts as a circuit breaker mechanism to relieve the burden of property taxes on low income homeowners and renters. It provided relief to 223,000 filers in FY2014 and its average credit was \$525. Expanding lottery tax relief to an additional 223,000 households would decrease the average credit from \$113 to \$98.

A rebate which maintains a proportional ratio of tax relief as a percentage of total property tax paid with a cap would maintain consistency with the design of the Lottery Gaming and Tax Credit while also providing equivalent tax relief for renters. The credit would consist of a 0.875% rebate on the property tax burden of renters as determined by the Homestead Tax Credit. To maintain consistency with the design of the Lottery and Gaming Tax Credit, it would have a cap which limits the rebate to rent paid up to the value of the credit base.

Renter's Credit = 0.035 \* 0.25 \* Minimum(Total Annual Rent, Credit Base)

<sup>&</sup>lt;sup>13</sup> See attached tables in appendix for more detailed results of the survey.

<sup>&</sup>lt;sup>14</sup> Wisconsin Department of Revenue Lottery Division. "Wisconsin Lottery and Lottery Advertising Tracking Study Results." State of Wisconsin VendorNet System. State of Wisconsin, Summer 2006. Web. 23 Mar. 2016. <a href="http://vendornet.state.wi.us/vendornet/wais/docs/10931\_5.PDF">http://vendornet.state.wi.us/vendornet/wais/docs/10931\_5.PDF</a>.

<sup>15</sup> Wis. Stat. § 565.01(4r)

<sup>&</sup>lt;sup>16</sup> Wisconsin Department of Revenue. "The Homestead Tax Credit Program." Wisconsin Department of Revenue, 24 Mar. 2015. Web. 6 May 2016. <a href="https://www.revenue.wi.gov/ra/homestead/14hmsted.pdf">https://www.revenue.wi.gov/ra/homestead/14hmsted.pdf</a>>.

The median renter would receive a refundable credit of \$82.09. Using the FY2014 credit base, any renter who paid over \$11,000 in annual rent would have a capped credit of \$96.25. Detailed analysis justifying the calculation of the renter's credit can be found in the appendix.

<u>Further Research</u>: Demographic research reveals divergent trends in lottery play among minorities in Wisconsin. These trends should be of special concern to state run organizations who must be careful not to exploit minority groups. Current available research is over twenty years old and out of date. Furthermore, such research does not reveal the determinants of race related differences in lottery play and spending. I recommend creation of grant funding from lottery proceeds for new research on lottery participation and the determinants of race related trends. This research will empower policymakers to make informed decisions regarding Wisconsin Lottery provision and help resolve factors driving race related divergences observed in current research.

<u>Limitations to Advertising</u>: The first step towards relieving race related effects of the lottery is to rethink its advertising restrictions. With understanding that minorities spend more per capita on the lottery and that those who were exposed to advertising were much more likely to play, the current system risks targeting minority groups. If advertising money is spent targeting those most likely to play, minority groups will be exposed to more advertising, exacerbating race related divergences in lottery play. Current guidelines<sup>17</sup> laid out by the Wisconsin Lottery regarding advertising make no mention of targeted advertising. I propose an addition to current guidelines which prohibits advertising whose targeting is determined by a protected class. Advertising should be distributed in media most widely consumed, not niche publications which focus on specific audiences.

#### **Conclusion:**

The Wisconsin Lottery continues to provide millions of dollars in tax relief each year to Wisconsinites. However, the program falls short of its potential in providing tax relief by excluding renters. Extension of the lottery's tax relief to renters through the Homestead Tax Credit will realign the lottery to provide relief to lower income groups most burdened by taxation. Concerning trends in minority play of the lottery necessitates further analysis to avoid exploitation. Research grant funding and further restrictions on advertising focused on preventing targeting minority groups are a necessary first step in managing race related divergences. Overall, the Wisconsin Lottery presents as a well-designed program which achieves its goals. Small changes to the program will help maximize the effectiveness of its tax relief and refine its advertisement towards good governance practices.

<sup>17</sup> Wisconsin Department of Revenue Lottery Division. "Product Information Restrictions and Lottery Rules and Guidelines." State of Wisconsin VendorNet System. 21 Jan. 2010. Web. 6 May 2016. <a href="http://vendornet.state.wi.us/vendornet/wais/docs/14689\_2.DOC">http://vendornet.state.wi.us/vendornet/wais/docs/14689\_2.DOC</a>.

## **Appendix:**

### Percentage of Wisconsin Residents Who Played the Wisconsin Lottery in Prior Year, by Demographic Characteristics (1989, 1991, and 1995 statewide samples)

Demographic		Percentage Who Played Wisconsin Lottery					
Characteristic		1989		1	991	1995	
	A						
Α.	Annual family income (pretax)	45.0*	(75)	40.54	(50)	26.244	(205)
	\$0-\$9,999	45.3*	(75)	42.5*	(56)	36.2**	(205)
	\$10,000-\$19,999	47.7*	(111)	69.1*	(84)	37.5**	(210)
	\$20,000-\$29,999	71.3*	(94)	68.2*	(66)	52.3**	(244)
	\$30,000-\$39,999	61.8*	(89)	69.3*	(75)	58.4**	(234)
	\$40,000-\$49,999	62.2*	(45)	75.9*	(58)	62.4**	(244)
	\$50,000 or more <sup>a</sup>	69.9*	(82)	62.0*	(129)	_	
	\$50,000-\$59,999ª					65.4**	(176)
	\$60,000-\$69,999ª	_		_		62.2**	(127)
	\$70,000-\$79,999ª					55.2**	(83)
	\$80,000-\$89,999ª	_		_		68.5**	(67)
	\$90,000-\$99,999ª	_				46.8**	(37)
	\$100,000 or more <sup>a</sup>			_		56.9**	(89)
В.	Marital status	60 7±	(00)	547	(117)	56 N**	(421)
	Single	68.7*	(99)	54.7	(117)	56.0**	(431)
	Married	60.1*	(308)	63.1	(306)	55.5**	(1177)
	Divorced/Separated	55.4*	(55)	68.8	(77)	56.4**	(309)
	Widowed	30.9*	(65)	56.1	(41)	33.3**	(156)
٦.	Age						
•	18–25	70.8*	(65)	61.4*	(70)	57.1**	(228)
	26–30	80.3*	(71)	77.6*	(58)	57.6**	(209)
	31–35	66.7*	(81)	62.1*	(66)	63.9**	(264)
	36-40	59.4*	(64)	70.7*	(58)	53.5**	(248)
	41–45	62.5*	(32)	60.3*	(58)	61.3**	(254)
				73.7*			
	46–50	57.5*	(40)		(38)	60.4**	(185)
	51-60	54.7*	(53)	58.3*	(72)	54.0**	(241)
	61–70	44.1*	(59)	62.5*	(56)	46.6**	(244)
	71+	21.0*	(62)	37.3*	(59)	28.2**	(205)
٥.	Education						
	Less than high school	38.1*	(63)	54.2*	(59)	47.9**	(206)
	High school graduate	61.2*	(134)	65.7*	(131)	57.0**	(487)
	Some post-high school education	56.8*	(132)	64.1*	(142)	61.4**	(502)
	College associate arts degree	77.9*	(95)	71.8*	(78)	60.5**	(232)
	College graduate	49.5*	(103)	53.1*	(128)	46.3**	(534)
Det	nographic		Percentage	Who Playe	d Wiscons	in Lotterv	
Characteristic		1989			1991		95
3.	Does other gambling?						
	Yes	72.5*	(261)	72.4*	(268)	83.6**	(1048)
	No	43.8*	(264)	50.2*	(265)	22.4**	(1030)
,							
₹.	Gender Male	58.4	(238)	65.3	(262)	59.8**	(878)
	Female	58.4 57.8	(238)	58.2	(282)	50.0**	(1208)

Source: Telephone interviews conducted by authors.

**Note**: Number of sample members (unweighted) answering question/giving an answer is in parentheses; not all sample members responded to all questions.

<sup>&</sup>lt;sup>a</sup> Breakdown of income brackets above \$50,000 not available for 1989 and 1991 datasets.

<sup>\*</sup> Differences across groups within sample are statistically significant at p=.05.

<sup>\*\*</sup> Differences across groups within sample are statistically significant at p=.01.

### Average Monthly Lottery Expenditures of Wisconsin Lottery Players, by Demographic Characteristics (1989, 1991, and 1995 statewide samples)

Demographic Characteristic		Monthly Lottery Expenditures						
		1989		1	1991		95	
Α.	Annual family income (pretax)							
	\$0-\$9,999	\$8.32	(36)	\$11.60	(23)	\$9.30**	(58)	
	\$10,000-\$19,999	\$12.73	(55)	\$12.35	(55)	\$8.78**		
	\$20,000-\$29,999	\$9.14	(68)	\$20.27	(42)	\$10.32**		
	\$30,000-\$39,999	\$10.55	(58)	\$19.95	(48)	\$20.90**		
	\$40,000-\$49,999	\$6.55	(29)	\$13.00	(42)	\$10.32**	, ,	
	\$50,000-\$59,999	\$18.50	(24)	\$19.11	(22)	\$21.73**	(107)	
	\$60,000 or more <sup>a</sup>	\$10.89	(28)	\$10.11	(56)	_	, ,	
	\$60,000-\$69,999ª		(/	, <u> </u>	( /	\$12.66**	(80)	
	\$70,000-\$79,999ª			_		\$11.41**	(43)	
	\$80,000-\$89,999a	_		_		\$5.69**	(44)	
	\$90,000-\$99,999ª	_		_		\$16.15**	(15)	
	\$100,000 or more <sup>a</sup>	_				\$14.41**	(49)	
	+200,000 of more					Ψ	()	
В.	Marital status							
	Single	\$10.59	(72)	\$5.46	(60)	\$10.95	(217)	
	Married	\$9.80	(189)	\$17.10	(178)	\$13.90	(615)	
	Divorced/Separated	\$10.28	(18)	\$18.27	(52)	\$19.12	(155)	
	Widowed	\$14.64	(37)	\$5.60	(21)	\$9.98	(47)	
		42	( )	42.00	()	*****	( , ,	
C.	Age							
	18-25	\$11.87	(48)	\$4.28	(39)	\$11.46	(118)	
	26-30	\$7.79	(57)	\$10.26	(42)	\$14.78	(111)	
	31-35	\$14.90	(57)	\$17.19	(41)	\$9.98	(166)	
	36-40	\$10.50	(39)	\$23.97	(38)	\$11.63	(126)	
	41-45	\$7.84	(21)	\$12.92	(33)	\$13.74	(142)	
	46–50	\$10.13	(24)	\$14.41	(26)	\$19.87	(101)	
	51-60	\$8.07	(29)	\$14.43	(38)	\$16.91	(123)	
	61-70	\$10.65	(26)	\$20.80	(34)	\$16.24	(102)	
	71+	\$10.07	(15)	\$8.71	(19)	\$6.65	(46)	
	7.7	420.07	(15)	Ψ0.7.1	()	+ 3.32	( /	
ο.	Education							
	Less than high school	\$15.25	(25)	\$15.54	(27)	\$16.58**	(74)	
	High school graduate	\$8.46	(83)	\$23.31	(79)	\$22.59**	(252)	
	Some post-high school education	\$14.08	(79)	\$12.64	(85)	\$11.23**	(287)	
	College associate arts degree	\$10.58	(75)	\$10.51	(53)	\$12.50**	(128)	
	College graduate	\$6.55	(54)	\$8.22	(66)	\$7.81**	(231)	
		+3.00	(3.)		\/	7.177	·/	
<b>\</b> -	no cuculic		,	Monthler T -44	w. Even en	l!trance		
Demographic		Monthly Lottery Expe						
_na	iracter18tic	. 15	Y67 ————		791	199	3	
7	Gender							
٠.		\$13 37*	(146)	\$15 A2	(163)	\$16 57**	(483)	
							(552)	
	mographic aracteristic Gender Male Female					\$16.57** \$10.57**	(	

Source: Telephone interviews conducted by authors.

Note: Number of sample members (unweighted) answering question/giving an answer is in parentheses; not all sample members responded to all questions.

<sup>&</sup>lt;sup>a</sup>Breakdown of income brackets above \$60,000 not available for 1989 and 1991 datasets.

<sup>\*</sup> Differences across groups within sample are statistically significant at p=.05.

<sup>\*\*</sup> Differences across groups within sample are statistically significant at p=.01.

# Racial Differences in Lottery Play and Attitudes of Wisconsin Residents, Controlling for Household Income (1995 sample)

	Earning Less than \$20,000			Earning More than \$20,000		Significant Effects		
	Whites	African- Americans	Whites	African- Americans	Race	Income	Interaction	
Lottery Participation								
Played any game	34.8%	43.2%	57.4%	62.5%		**		
Played scratch-off	35.1%	39.8%	56.5%	57.9%		**		
Played pull-tab	10.6%	4.2%	16.4%	13.5%		**		
Played Megabucks	26.9%	28.0%	48.0%	57.3%		**		
Played SuperCash!	14.4%	19.5%	23.4%	37.5%	**	**		
Played Powerball	31.8%	21.6%	53.4%	58.3%		**	+	
Played Pick-3	4.7%	20.3%	5.3%	37.5%	**	*	++	
Played Money Game 4	1.9%	1.7%	2.2%	11.5%	**	*	++	
Mean yearly play frequency	7.23	5.28	14.32	39.17	**	**	++	
Lottery Expenditures								
Mean dollars spent	\$8.75	\$10.16	\$13.73	\$60.33	**	**	++	
Mean percentage of income	1.33%	.94%	.38%	2.30%	**	**	++	
Attitudes toward Lottery								
Overall lottery attitude <sup>a</sup>	2.27	2.20	2.15	1.91				
Gambling has been problem <sup>b</sup>	3.57	3.35	3.67	3.51	**	**		
Play less b/c lack money <sup>c</sup>	2.78	2.47	3.09	2.77	**	**		
Lottery harmless recreation <sup>c</sup>	2.48	2.22	2.31	2.46			++	
Reduces household moneyb	3.36	3.27	3.52	3.37	*	**		
Spend more than can affordb	3.42	3.25	3.51	3.37				
Causes disagreements <sup>b</sup>	3.42	3.50	3.56	3.37				
Easy way to make money <sup>c</sup>	3.30	2.63	3.36	2.80	**			
Will be rich through lottery	3.36	2.63	3.47	2.77	**			
Can create systems (% yes)	26.0%	37.1%	27.4%	37.5%	*			
Portion of \$100 returned	\$31.70	\$36.05	\$33.51	\$25.33				
Set money aside (% yes)	6.4%	9.1%	7.1%	11.7%				

Source: Telephone interviews conducted by authors.

Note: Number of sample members answering question/giving an answer is in parentheses; not all sample members responded to all questions. Whites are from the 1995 statewide sample; African-Americans are from the 1995 African-American sample, augmented by African-Americans in the statewide sample.

### **Renters Credit Calculation:**

Under the terms of the Homestead Tax Credit, renters assume their burden of property taxes to be 25% of total rent paid. Following data<sup>18</sup> from the American Community Survey performed by the Census Bureau, median annual rent in Wisconsin was \$9382 in 2014. Under these data, the median renter paid \$2345 in property taxes annually. Given the median home value for Wisconsin in 2015 was 155,000<sup>19</sup> and the effective average property tax rate of Wisconsin is 2.1% the average homeowner paid \$3255 in property tax in 2015. Receiving \$113 in tax relief meant an average tax relief of 3.5% of total taxes paid.

I suggest we maintain this 3.5% ratio for renters, while using the credit base as a cap. Renters would be eligible for a rebate of 3.5% of the property tax borne by them on rent paid up to the value of the credit base.

 $Renters\ Credit = 0.035*(0.25 = Homestead\ Tax\ Credit\ Adjustment)*Minimum(Total\ Annual\ Rent,\ Credit\ Base)$ 

<sup>\*</sup>Responses scored as 1=strongly in favor, 2=somewhat in favor, 3=none of these, 4=somewhat opposed, 5=strongly opposed.

<sup>&</sup>lt;sup>b</sup>Question asked of lottery players only. Responses scored as 1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree.

<sup>\*</sup>Responses scored as 1=strongly agree, 2=agree, 3=disagree, 4=strongly disagree.

<sup>\*</sup> Difference between whites and African-Americans is statistically significant at p=.05.

<sup>\*\*</sup> Difference between whites and African-Americans is statistically significant at p = .01.

<sup>+</sup> Interaction effect between race and income is statistically significant at p=.05.

<sup>++</sup> Interaction effect between race and income is statistically significant at p=.01.

<sup>18</sup> Engebreth, Ben. "Wisconsin Residential Rent and Rental Statistics." Department of Numbers. Web. 06 May 2016. <a href="http://www.deptofnumbers.com/rent/wisconsin/">http://www.deptofnumbers.com/rent/wisconsin/</a>>.

<sup>19</sup> Wisconsin Realtors Association. "Wisconsin Housing Statistics." Wisconsin Realtors Association. Web. 06 May 2016. <a href="https://www.wra.org/Resources/Property/Wisconsin\_Housing\_Statistics/">https://www.wra.org/Resources/Property/Wisconsin\_Housing\_Statistics/</a>>.

<sup>20</sup> Forward Wisconsin. "Wisconsin Tax Rates." Wisconsin Economic Development Institute, 2015. Web. 6 May 2016. <a href="http://www.forwardwisconsin.com/forward\_docs/uploaded\_documents/resources\_for\_economic/WIStateTaxRates.pdf">http://www.forwardwisconsin.com/forward\_docs/uploaded\_documents/resources\_for\_economic/WIStateTaxRates.pdf</a>.