The Vermont Lottery
May 31, 2018
Report and Recommendations to the Governor

I. INTRODUCTION

Governor Phil Scott has requested that the Vermont Lottery provide responses and recommendations following a media report of potential fraud among lottery players. In that report, six individuals that were represented as employees or agents won nine top prizes from instant tickets during a five-year period. The report also highlighted two individuals, also represented as agent's employees that won at a high frequency.

II. BACKGROUND

In 1976, a referendum was held regarding the establishment of a state-run lottery. Public Act No. 82 established the Vermont Lottery Commission during the 1977 session of the General Assembly. The Lottery's stated purpose in the enabling legislation was to "produce the maximum amount of net revenue consonant with the dignity of the state and the general welfare of the people." In 1978 the Vermont Lottery Commission was granted $250,000 seed money. It took the lottery seven months from inception of the lottery to produce the first ticket and eighteen months to pay back the $250,000.

The first game (Green Mountain Game) went on sale February 14, 1978. The first instant ticket (Scratch 'N Match) went on sale June 20, 1978. The first online game (Pick 3) launched November 10, 1980.

From February 1978 to July 1998, all profits generated by the Vermont Lottery were dedicated for use by the state's General Fund. In July 1998, the Vermont Legislature mandated that all profits from the Vermont Lottery go to the state's Education Fund. Today the Vermont Lottery continues to be run by a small, efficient staff of professionals consisting of 21 full-time employees, with oversight from five commissioners, who are appointed by the Governor and approved by the Vermont Senate. It is still one of the smallest staffs of any lottery in the United States.

The Vermont Lottery remains committed to contributing all proceeds to the Education Fund, while also strongly communicating the importance of responsible gaming.

History of Lottery Games
1978

Instant Tickets: June 1978 - Present

1980-1990
Tri-State Pick 3: November 1980 - present (became a Tri-State game June 1995)
Tri-State Pick 4: September 1985 - present (became a Tri-State game June 1995)
Tri-State Megabucks: September 1985 - present

1990-2000
Lotto Vermont: May 1990 - June 1995
Tri-State Cash 5: April 1992 - June 1995
Tri-State 5 Card Cash: June 1995 - September 1997
Tri-State WinCash: September 1997 - February 2002

2000-2010
Tri-State Cash Lotto: February 2002 - November 2003
Powerball: July 2003 - present
Tri-State Heads or Tails: November 2003 - June 2005
Tri-State Triple Play: June 2005 - January 2007
Tri-State Paycheck: January 2007 - January 2009
Tri-State Weekly Grand: January 2009 - April 2011
Hot Lotto: July 2009 - May 2014

2010-Present
Tri-State Weekly Grand Extra: April 2011 - March 2012
Lucky for Life: March 2012 - present
Mega Millions: January 2010 - present
Tri-State Gimme 5: May 2013 - present

The Vermont Lottery participates in the TriState Lotto compact with Maine and New Hampshire to offer various TriState games and is also a member of the Multi State Lottery Association (MUSL). As a member of MUSL, the Lottery offers Powerball, Mega Millions and Lucky For Life.

The Vermont Lottery has over 650 agents or stores where the lottery tickets are sold. The agents' stores consist of gas stations, convenience stores, grocery stores and drug stores. For report purposes, it is estimated that there are 10 employees at each store, and that there are approximately 6,500 individuals employed by the lottery agents throughout the state of Vermont. As with the general public, employees, who are 18 and older, are permitted to purchase lottery tickets and claim prizes.

It is expected that some of these 6,500 or so employees will win some prizes from the millions of instant tickets that that are sold each year from the 650 outlets. These tickets earned players prizes totaling between $60-80 million annually over the last ten years. From 2011 through 2017, the Lottery awarded more than 35,000 individual winning prizes of $500 or more. In addition, the Lottery gives out several million individual prizes that were less than $500 each.

Games:

Instant Tickets

Instant tickets, or "scratch tickets," are produced and printed by Pollard Banknote in Lansing, Michigan. Pollard is one of the leading suppliers of instant tickets for over 30 years and serves over 60 lottery and charitable gaming organizations worldwide.

Below is a link to a video that gives you a brief overview of the manufacturing process for the instant scratch tickets sold by the Vermont Lottery. The length of the video is 5:43.

Pollard Manufacturing Video

As seen in the video, each instant ticket is printed on ticket stock and with industry-standard security features. These features are designed to prevent counterfeiting and individuals from covertly piercing the latex covering. Each ticket has a bar code and a serial number. These items ensure that a player can independently determine if the ticket is a winner. The serial numbers and barcode are used to scan a ticket for inventory and cash payouts, much like a supermarket scanner. They also assist with the tracking of inventory, location of the ticket, where it was sold from and when it was received.

The prize payouts for each game are predetermined by Vermont Lottery employees and typically pay out an average of 62-74% of the ticket quantity or run. More importantly, the location of winning tickets is not known by anyone at the Lottery or Pollard.

The amounts of the prizes vary and are determined by the price point for each ticket and the amount of the tickets that will be sold. The size of the prizes varies from $1 up to $250,000 or more.

A high-tier prize is any prize $500 or higher. The $500 level requires a claim form to be completed. All high-tier prizes are paid by check. In addition to the Vermont Lottery, People's United Bank can process payments up to $5,000.

The Lottery keeps records of all prizes that are paid out for $500 or more, which is the level that the Lottery will verify that the winner is not delinquent with child support payments or criminal restitution. The Lottery also maintains records for any claim that is less than $500 when a check has been issued for payment by the Vermont Lottery or People's United Bank.

"Online"/Terminal Tickets

The term "online" within the lottery industry and throughout this report does not mean online in the popular sense and it has nothing to do with the Internet. Online refers to games that are sold from a terminal of the lottery gaming vendor. Online or terminal tickets are printed from the terminal at the time of purchase. The online/terminal tickets can be TriState draw games, such as Megabucks, Pick 3 or Pick 4, or they can be part of larger multi-state games, such as Powerball or Mega Millions.

Pick3/Pick4 are online draw games: These games are sold in Maine, New Hampshire and Vermont. A player purchases a ticket and selects the numbers for the ticket or the computer will randomly generate the numbers for the ticket. A player can bet from 50 cents to $5 per ticket and select different types of number formations: Box, Straight, Front Pair, Middle Pair, etc. – that can earn a larger prize if the numbers are drawn in a particular order. Each different number formation requires an additional payment of $.50 to $5. For Pick 4, the four-digit number can only be selected a maximum number of 8 times for each draw. Because the maximum value of a ticket is limited to $5, a player needs to purchase multiple tickets with the same numbers to bet a larger amount of money.

There are two draws each day, seven days per week for Pick 3 and Pick 4. The Vermont Lottery has no role in awarding prizes for Pick 3 and Pick 4. The draws are managed and conducted independently by the New Hampshire Lottery under the supervision of a Certified Public Accounting firm. Each draw has three witnesses in addition to the independent accountant. The draws are conducted in a draw room that is under lock and key, and only opened at the time to conduct the draw. The room has video cameras to record each draw. In addition, there is a pre-test draw done to ensure that the numbers are coming up randomly and that the draw machine is operating properly. A post-test draw is conducted to ensure that the machine is operating properly, and the numbers were drawn randomly.

Pick 3/Pick 4 draw games are appealing to players because the odds are designed to be better than most games and for a small bet of 50 cents, a player has a chance to win $104, and it offers some of the best odds for the player. If a player selects a ticket with a maximum of $5 bet, then the winning amount would be $1,040. If the player selected multiple $5 tickets with the same numbers, then each ticket could win $1,040.

The lottery is a game of chance. Playing the games is not a “skill,” nor do games rely on the outcome of a sporting event. Every game is designed to have a predetermined number of winners before the game is pulled from the market.

There are approximately 60 new instant ticket games introduced each year at different price points. All games have multiple winners and there will be multiple winners claimed during the life of the game. The length of time that the ticket is on the market varies by price point, time of the year, and popularity of the ticket graphics and/or game.

Since July 2010, the Vermont Lottery has had sales of more than $850 million and awarded prizes of more than $548 million.

From 2011 through 2017, over approximately 35,000 prizes, ranging from $500 to $5 million, were awarded:

○ Prizes greater than $200,000	14
○ Prizes at $200,000	10
○ Prizes between $150,000-$199,999	13
○ Prizes between $100,000-$149,999	32
○ Prizes between $75,000 - $99,999	9
○ Prizes between $50,000- $74,999	208
○ Prizes between $40,000-$49,999	32
○ Prizes between $30,000-$39,999	27
○ Prizes between $25,000-$29,999	106
○ Prizes between $20,000-$24,999	295
○ Prizes between $15,000-$19,999	237
○ Prizes between $10,000-$14,999	450
○ Prizes between $5,000-$9,999	1,229
○ Prizes between $500-$4,999	32,763

Employees

In Vermont there is no state statute that prohibits an employee of an agent or an agent from playing the lottery. When a claim of $500 or more is being processed, Lottery staff will ask winners, under penalties of perjury, "Are you a Vermont Lottery retailer, related to one, or do you work at a location that sells Vermont Lottery tickets?" The responses to these questions are associated with the player. The information is used by the Vermont Lottery Security to review agent winnings and unusual claim patterns.

In addition, Lottery retailers throughout the state place their own restrictions on employees, such as, only permitting employees to play the lottery during their off-duty hours.

Vermont Lottery employees and family members are not permitted to play the Vermont Lottery, multi-state games or TriState games within Vermont. The prohibition for family members only extends to family members that reside within the same household. Therefore, employee's siblings, adult children, ex-spouses, etc., are all permitted to play the lottery if they do not live in the same household.

In June 2017, the North American Association of State and Provincial Lotteries (NASPL) conducted a poll of US member lotteries to determine the limitations that were placed on employees of lottery retailers. Responses were obtained from 44 US lotteries. Three states placed restrictions on employees from playing instant tickets:

- **Arizona**: Lottery rules state retailers may not play during work hours. Also, retailers and their employees are asked to declare their winnings on a claim form for any prizes of $600 or more. Lottery staff will review the claim.
- **New Hampshire**: As part of the state's lottery retailer agreement, retailers and retailer's staff shall not play lottery games during their working hours.

- **Indiana:** Retailer employees and relatives living in the same household may not make lottery purchases where they work.

Ticket Security

Pollard is the instant ticket vendor and is the second largest manufacturer of instant tickets in the world. Below are some of the non-confidential procedures that are utilized to ensure that the tickets produced for each game are not compromised. There are certain security measures that are confidential for several reasons to include trade secrets and countermeasure prevention. However, these methods include: imager security, printer security, game design, prize distribution, and validation and redemption security.

Pollard's security measures

Facility security

Access control: key activities in the production of instant games are physically and electronically separate. For example, Game Generation and Computer Operations groups are separate from one another within the facility. Those groups are separate from the groups responsible for creating fonts and auditing game data. Separate servers make it practically impossible for any individuals to gain access to data or information for which they do not have access privilege.

Employees receive access only to the areas they must be in to perform their jobs.

Secure validation files -

Files of winning validation numbers are provided to the Vermont Lottery. These files identify winning tickets by validation number and prize amount, however, no location information is supplied to the Lottery. Without the necessary computer files, there is nothing in the validation number that identifies a ticket as a winner or non-winner.

Redemption security

Barcodes used to identify the game and to encode the book number, ticket number and validation number are securely imaged at the same time as the variable game data.

- **ANTI-COUNTERFEITING SAFEGUARDS**
  Pollard's tickets are created with advanced anti-counterfeiting and validation-security features, which minimize and prevent successful attempts at compromise. Their labs perform an exhaustive variety of experiments on the printed tickets to ensure the performance of these security features.

  The first spool of every game is subject to a full security evaluation. If the lab identifies any print flaw that may impact security, they generate an electronic Lab Inspection report that is then tracked to ensure an action has been performed.

Five methods of testing are conducted: mechanical, electrical, chemical, optical and environmental.

1. Mechanical Methods

These typically involve the use of tools or objects to compromise a ticket's security, including:

- Lifting and replacing scratch-off using various tools, such as razor blades, paint scrapers, scalpels, etc.
- Microsurgery or micro-scratching to read game data.
- Tape-assisted lifting, spray varnish, or chemical solvent-assisted lifting methods are also used in attempts to lift the scratch-off material without obvious signs of tampering.

2. Electrical Methods

Using electrostatic testing in combination with various chemicals, Lab personnel determine whether it is possible to read game data through the scratch-off material by running an electric charge over the ticket surface.

3. Chemical Methods

Pollard's lab tests tickets by simulating invasion attempts and allowing common commercial compounds in liquid or vapor forms to make contact with the tickets. Invasion tactics using these chemicals should ideally result in tickets that are substantially damaged, making ticket invasion attempts obvious.

4. Optical Methods

Lab personnel use high-intensity light through various filters, as well as ultraviolet light, to determine whether game data may be seen through the ticket or the protective overprints.

5. Environmental Methods

Tickets undergo tests in various environmental conditions—such as humidity and thermal tests—to determine ticket reaction. The lab also carefully scrutinizes all products for flaws or discrepancies in certain components, which might allow for picking out or identifying winning tickets.

- **TICKET STORAGE SECURITY**

  Pollard has secure storage areas for the tickets which are located within their facility based on their stage in production. The areas are locked, restricted-access rooms requiring card key for entry, and are constantly monitored under CCTV surveillance. Ticket stock with "live" game data is covered with multiple layers of voided stock ensuring no live tickets are visible.

- **DELIVERY SECURITY**

  Pallets of sealed cartons are stored within a secure area. Tickets are shipped from Pollard to the Vermont Lottery in "exclusive-use" trucks equipped with GPS tracking. Pollard employees load the truck, sealing the truck with a uniquely numbered seal. A bill of lading, which includes the seal number, is then sent to the Lottery so that it can be confirmed when broken upon delivery.

Distribution and packing from the Lottery:

Each box of tickets is off-loaded from the pallet in a defined order. Ticket books are randomly pulled from the boxes and packed in bags/boxes to fulfill Agent's orders. The majority of the tickets are shipped via UPS and the remaining tickets are shipped in person by a Lottery Field Sales Representative. There is no person in Vermont or at the manufacturing facility that knows the location of a box or book containing a winning ticket or a top-prize ticket. The winners are randomly placed among the ticket run (ticket quantities or run vary from 180,000 to 600,000) for one game and blindly distributed throughout the state to the 650 agent locations. Not every store is guaranteed of receiving a winning ticket or a mid- or top-tier prize, but every game will award 62%-74% of its sales to winning tickets. The only guarantee is that no one knows where the winning tickets are or where the winning tickets are going.

- Distributions of winners- games are distributed throughout the state in no order. Tickets from the same box will end up in multiple locations.

- A person must go to the store to purchase the ticket from an agent. This is a random and unpredictable event.

The tickets are tracked electronically throughout the delivery and sales process, much like a UPS or FedEx package. The tickets do not have a cash value until they are activated by a bar code scanner. Each night, the agents are advised to deactivate their entire inventory to prevent theft. Stolen tickets can be flagged to avoid cashing stolen tickets and preventing monetary loss for the lottery or agent.

Lottery Agent Security

On the inventory tracking system, the lottery tickets are described as "In-transit" until the tickets are scanned received by the agent. The tickets are not activated by the agent until the tickets are placed in the display counter and are ready for sale. Each evening or at the close of business, the tickets should be deactivated by the agent to avoid monetary loss to the agent or the lottery.

Director of Security

The Vermont Lottery has a Director of Security who is primarily responsible for ensuring the games offered by the lottery are in compliance with the laws and rules governing the industry. These rules are in place to ensure that each player has a fair chance to win the game that they chose to play.

The Agent Compliance Program (ACP) - ACP is a program that is operated by lottery security and staff that gives us an inside look to determine if agents/employees are processing sales and wins appropriately. This program is to determine if agents are halving tickets (buying winners at a discount) or redeeming a winning ticket for less than its value.

The lottery validation database for our gaming system for agent wins- Using our gaming system, a report of agent wins is compiled. Unusual validation patterns are looked for, as well as, high-value wins and high-frequency of wins by agents. If unusual patterns are discovered, an interview will be conducted. If the player is a store owner, the system is checked against nonsufficient funds (NSF) to determine if the agent owes large amount of monies to the lottery.

An Outstanding Prize Report is compiled- This report tracks how much of a game's tickets were sold and how many prizes remain in each game. This report is also monitored to ensure that agents are not holding back books of tickets. If a retailer/agent has a book or books of those tickets and has not been selling or activating them, it raises a red flag and the Director of Security will further investigate.

A High-Tier Winner's Analysis is conducted- This report shows all winners over $599.00. The report is analyzed to see repeat winners and where the winners are validating, checking to see if a person may have a gambling problem and used to determine if one area is getting more than the usual wins.

Altered Tickets- In a case where an instant ticket appears to have been altered, security is asked to validate the ticket. An altered ticket is one that appears to have been manipulated to make it a winner. A damaged ticket will also be reviewed more closely. Instant tickets are bearer instruments, meaning the prize is paid to the individual that signs the back of the ticket. Most commonly, an altered ticket is when a player signs the ticket and scratches out the name and/or address. There could be legitimate reasons for a signature to be altered on the back of a ticket, such as: inadvertent slip of the pen, began signature in wrong spot, or cashing ticket for family member that previously signed the ticket. At times, players are altering a ticket to avoid paying prize money for back child support or criminal restitution.

When an altered ticket is presented, staff will notify security to the situation. An interview is conducted to see who, when and where the ticket was purchased to verify the rightful owner. Using the gaming system computer, the Lottery can determine approximately when and where the ticket was purchased. Determining who purchased can be done through the agent that sold the ticket, viewing their security cameras, if available. If the name that has been scratched out is visible enough to determine the owner, that person is required to claim the ticket, if the person cannot be verified the ticket is void and cannot be claimed.

Lottery Security will refer matters to local or state law enforcement when a player or agent/employee is involved with lottery ticket transaction that becomes criminal. Often law enforcement will contact the Lottery to determine where a ticket was purchased and to narrow down the purchase time by reviewing validation records. The lottery gaming system allows for security staff to mark tickets as lost or stolen. The lottery gaming system is set up to alert staff when a stolen or lost ticket has a validation attempt when marked.

Ticket Checkers

Each agent location has a visual ticket checker installed. The ticket checker equipment permits the player to independently verify if they have a winning ticket prior to presenting the ticket to the clerk. In addition, the agents have an audible and visual ticket checker at each counter. If a ticket has a win below $500 the screen will display the winning amount. If the claim is $500 or more, the screen will advise the player to take the ticket to the Vermont Lottery and it will print out claim instructions for the player.

Messages displayed on the Check-A-Ticket (CAT) and WinStation (ITVM) when cashing tickets are below:

Tier	Hardware	Message
High ($500+)	CAT	☺ Winner! Please take to clerk
High ($500+)	ITVM	Winner! Sign the back of the ticket. File claim at Lottery
Low (< $500)	CAT	$XX Winner!
Low (< $500)	ITVM	$XX Winner! Sign the back of the ticket and take it to a Lottery agent for payment.
Very Low (< ~$50) [ITVM Only]	ITVM	Congratulations, your ticket is a $XX.00 winner! *Take your ticket to a Lottery agent to receive cash OR *Scan your ticket again to receive credit to purchase more tickets in this machine.

The Lottery does not have its ticket checkers display the winning amounts of $500 or greater for player safety reasons. Not displaying the larger winning amounts will help deter potential ticket theft from someone watching the screen behind the player.

III. REVIEW

Store Owner and "Employees" highlighted in the article for usually large wins:

Richard Dente

Dente won a $50,000 ticket in November 2014. The reporter for the article was furnished documents from 2005 to 2018 and the records showed that Dente first won an instant scratch ticket back in 2005 for $500 and from 2005 to March of 2018, a 13-year period; he won a total of $54,500 in scratch tickets. One winning ticket of $50,000 was responsible for approximately 92% of his instant ticket prize money. From 2011 to 2017, there were 208 prizes awarded from $50,000 to $74,999.

Julie Messier

Per the article Messier was a clerk at Rinkers. The reporter requested and was furnished records from 2005 to March of 2018. Messier first won an instant scratch game December 2008, and our records indicate she first won a prize in 2007. The article highlighted two large prizes that Messier won:

February 2012 $50,000

July 2012 $20,000

Based on the records of the lottery, Messier has been playing the lottery for at least 10 years and has won two top prizes. Messier has not won a game's top prize since July 2012. Messier was one of 208 people that won a prize of $50,000 -$74,999 from 2011-2017; Messier was also one of 295 people that won a prize from between $20,000-$24,999 from 2011-2017.

A chart with the breakdown of Messier's wins as compared to the prizes $500 and up paid out by Rinkers. The article did not include a $4.8 million prize that was awarded to a player from Rinkers in 2011.

Winning instant tickets sold by Rinker's				
	Prizes $500 and up			
	Ticket Count	Amount	Messier Wins	Messier Prize % of high tier
2011	10	$4,882,100	$3,000	0.06%
2012	13	$81,000	$73,500	90.74%
2013	4	$11,500	$1,000	8.70%
2014	3	$55,000	0	0.00%
	Totals	$5,029,600	$77,500	1.54%

The article mentions that Messier won $78,500 from 13 tickets over a 19-month period when she worked at Rinkers. The article doesn't provide the dates for the period that were reviewed. Based on a review of Lottery records from February of 2012 to October of 2013, Messier won 13 times with 3 of the wins coming from stores other than Rinkers.

As mentioned earlier, the Vermont Lottery does certain analytical reviews to determine if there are any unusual winning patterns that would potentially indicate theft or fraud. The previous Security Director, Michael Ferrant, spoke with Messier on one occasion when she came to the Lottery Office to claim a prize. Ferrant cannot recall the exact date of when he spoke to Messier. Messier advised him that she plays a lot and wins a lot because she got lucky. Ferrant advised former Executive Director Greg Smith that he spoke with Messier about her winnings. Smith did not have a clear recollection of the matter but does not believe that he spoke to the owner of Rinkers. Smith felt that having the Security Director speak to Messier about the winning pattern was sufficient.

From 2011 through 2017, a seven-year period, Messier won 37 different times totaling almost $100,000 from tickets sold from approximately 14 different locations. Of the $100,000, Messier won $70,000 on two tickets. The total that Messier won from Rinkers, the store where she was employed, was $77,500

Messier was interviewed by Rachek and advised that she has been playing the lottery since when was 18, which is approximately 32 years. These two prizes were the only time that she has won the top prize in all the years that she has been playing. Messier plays a lot and plays all the time. Messier uses the Outstanding Prize List to select games to play. Messier wins enough to keep "rolling." Rolling is investing the winnings in additional tickets.

Messier claims that she never played during work hours when she worked at Rinkers. Messier also advised that she won at many other places besides Rinkers and she is still winning when not working at any convenience stores that sell lottery tickets.

Philip Stark is a statistician that reviewed Messier's winning history. His comments are further discussed later in the report. Rachek spoke to Stark concerning his calculations on Messier's winnings from 2011 and 2016. Stark developed an optimization problem to determine how much individuals would need to spend to win as frequently as Messier did.

Based on his calculations, and if the odds for each game furnished to him by the author were correct, then Messier would have had to spend $363,000 to have a 1 in 1 million chance to win as often as she did from 2011 to 2016. Stark did not take into consideration the changing odds of a game and when a player focuses on the outstanding prize list.

Penny Durant

It was reported in the article that Durant worked in the bottle redemption room of D&L Beverage for approximately 2 years from 2012 to 2014 prior to the store being sold. However, when Durant was interviewed by the Lottery, Durant indicated that she has not worked for D&L for approximately 10 years. When Durant did work for D&L, it was as the redemption center manager and she did not sell lottery tickets or work behind a cash register. Durant also mentioned that her sister, Shelly, has not worked for M&M (successor store to M&M) for approximately 2-3 years. It was reported in the article that Durant worked as an employee of an agent at the time that she won a top prize.

Regardless of when Durant worked at D&L, it is not clear why Durant was included in the article's schedule of agents or employees that won top prizes. On June 26, 2015, Durant won one $50,000 prize from a scratch ticket game. Durant was not employed by any agent at the time of this purchase and purchased the ticket from a store location in Stowe, not the store where she was previously employed. Furthermore, the store that Durant worked at years ago is no longer in business.

Durant was interviewed by Security Director Brian McLaughlin. Durant advised that she is a daily player and purchases tickets from all over at a variety of stores. Durant estimated that she spends approximately $50 per day on the lottery.

A review of the lottery records show that Durant first claimed a lottery prize in 2008 and indicate that Durant plays primarily Pick 4. As described earlier in the report, Pick 4 is a Tristate online game where a player selects 4 numbers to play. Pick 4 is not an instant ticket game. The odds for winning Pick 4 are among the best of the lottery games. The game is limited to a $5 bet per ticket and a max of 8 tickets of the same numbers per draw. If a player wants to bet more than a $5 bet per set of four numbers, which Durant often does, the player needs to purchase more than one ticket. There are 14 draws per week conducted by the New Hampshire Lottery. Durant routinely plays multiple tickets with the same 4 numbers per each draw entered. Therefore, when Durant's numbers win she will win multiple tickets at a time, but each ticket plays the same four numbers.

When totaling Durant's wins, the article's calculations included 15 cancelled claims that totaled $14,520. The article claimed that Durant was particularly lucky in 2017 when she won 19 times:

- 2017- Three of the claims were cancelled leaving a total of 16 actual claims. During this period Durant won on an instant ticket and an online/terminal game for two wins; the remaining 14 wins were Pick 4 wins (multiple tickets with the same numbers played) that were won on 6 draws. Durant won a total of 8 times during 2017 not at the pace that the article states.

- 2016- Durant was credited with 25 wins, one win was a $500 instant ticket, and the remaining wins were Pick 4. Of the 24 wins: 4 were cancelled and the remaining 20 wins were played on multiple tickets won at 8 draws throughout the year.

To illustrate this further the article states that on December 13, 2017 was especially lucky because Durant won $26,040 from three separate Pick 4 tickets. What the article doesn't state is that Durant won on three tickets, but each ticket played the same numbers. It is a draw game (not an instant ticket); only one set of numbers can win each draw. Due to the $5 max for each bet type per ticket, Durant needed to purchase three tickets for that draw. When the one set of numbers were drawn, Durant wins on all three, if they weren't drawn, then she loses on all three. If the maximum per bet type for each ticket was $15, then Durant would have been able to place all her bets on one ticket.

Rachek has reviewed Durant's actual claim forms from 2015 to 2017 and DURANT routinely plays the same 4 numbers on multiple tickets for each draw. When totaling Durant's wins in the article, the author lists each winning ticket separately as described above. To someone not familiar with the draw game or the method that Durant plays, it appears that Durant wins more frequently.

Based on the Lottery records from 2011 to 2016 Durant won almost $203,000 on 59 claims. The article stated that Durant won 91 times because the article did not consider multiple tickets won on the same draw. In 2017 Durant won approximately $92,000 on 8 claims. The bulk for 2017 came on one claim for three tickets of the same number that paid a total of $78,120.

Mark Kittell

As reported Kittell was the owner of Central Beverage. Kittell won a large scratch ticket prize of $50,000 on February 9, 2016. This was one of 208 prizes of $50,000 to $74,999 awarded by the lottery from 2011-2017. According to Lottery records requested and furnished to the reporter, Kittell claimed his first win in 2007. As far back as the Lottery records go back for Kittell, Kittell has never won more than 2 prizes in a year. Kittel did win a $10,000 top prize in a scratch game in January 2018. In the 7 years preceding this payout there were approximately 450 prizes between $10,000-$14,999. Since 2007, Kittel has won two top prizes for a total of $60,000. Below is a breakdown of the prizes won by Kittell as a percentage of the large ($500 or more) prizes won at his store. Aside from the one top prize in 2016, Kittell wins are a relatively small percentage from his store.

See chart below:

	Prizes $500 and up			
	Count	Amount	Kittell Wins	Kittell Prize % of high tier
2011	19	$15,000	$1,000	6.67%
2012	16	$82,500	$1,000	1.21%
2013	18	$30,555	$500	1.64%
2014	25	$36,655	$6,000	16.37%
2015	23	$23,000	0	0.00%
2016	16	$77,000	$55,000	71.43%
Total		$264,710	$63,500	23.99%

Kittell was interviewed by Rachek and advised the following: Kittell does play the lottery and that he tends to play the high value tickets at an effort to win a larger prize. Kittell says if he knew the secret code to the lottery, he would no longer be working. Kittell gambles at casinos and has won and lost money gambling. Kittell estimates that he spends $20 per week on lottery tickets, mostly instant scratch tickets. However, during the holiday season, Kittell's spending will spike because his theory is that the payouts are better for holiday tickets. Big winners are clustered toward the people that play the most.

Peter Marshall

As reported in the article, Marshall was not an employee of a lottery agent at the time of his claim of a $175,000 top prize in a scratch game and this was disclosed towards the end of the article. I am unsure why he was included with the other agents/employees highlighted in the article or why his winning was classified as employee winnings. At the time of his purchase, Marshall was no longer employed by a lottery agent and his previous employer no longer owned the store and his winning ticket was not purchased from the store where he previously worked. From a review of Lottery records, Marshall claimed his first prize in 2010 from the Lottery. Since 2010 until the present, Marshall has won one top prize. From 2011 to 107 there were 13 prizes awarded between $150,000-$199,999.

Marshall was interviewed by Rachek and advised that he worked for one of his brother's two businesses in Waterbury. Marshall was the truck driver and manager of the bottle redemption/trash hauling side of the business. Marshall never sold lottery tickets and never worked as a cashier. The convenience store was a separate business but owned by Marshall's brother. Marshall's brother sold the business to Maplewoods.

After the business was sold Marshall won $175,000 from a different store in a different town. It was the Cumberland Farms in Northfield and it was just good luck that Marshall won. Marshall bought the ticket on a whim. Marshall's truck needed a quart of oil and Marshall went into the store to buy the oil and picked up the winning ticket.

Marshall still works in the bottle redemption and trash hauling business.

Elisha Steele

According to the article, Steele was employed for a period of time at Schoolhouse Grocer and from 2012 until 2013 won $13,500. The store closed in 2013. In July of 2013, the article states that Steele won two tickets for $10,000 each for a total of $20,000 playing the game Double Deuces. However, after reviewing the claim detail, Steele had only one $10,000 win. The first claim was cancelled. The lottery will cancel a claim for various reasons, such as misspelling on a check, or misaligned printing on a check. A claim is voided because of an administrative error, not because of player error or a ticket issue, the Lottery will issue a new claim for the same ticket.

In July of 2014, Steele won a top prize of $200,000 from Gouger's Market & Deli located in Brattleboro. Steele was not employed at Gouger's (or ever employed at Gouger's) when she won the $200,000. There are no states that restrict an employee from purchasing a lottery ticket from a different store from where they are employed. Steele's largest win was not purchased from a store where she worked. No state lottery that restricts employee play would have prohibited Steele's top prize purchase.

In summary, Steele won 5 tickets since 2011. The largest winning ticket representing $200,000 was not purchased from the store where she was employed or ever employed, and that win represented 93% of the money that Steele won.

Below is a chart of Steele's winnings:

Game	Name		Amount	Agent	Date
HIT $500	ELISHA	STEELE	$500	SCHOOLHOUSE GROCERY	4/11/2011
$50 GRAND	ELISHA	STEELE	$2,500	SCHOOLHOUSE GROCERY	8/2/2012
A GOOD DEAL	ELISHA	STEELE	$1,000	SCHOOLHOUSE GROCERY	1/9/2012
DOUBLE DEUCES	ELISHA	STEELE	$10,000	SCHOOLHOUSE GROCERY	7/2/2013
20X	ELISHA	STEELE	$200,000	GOUGER`S MARKET & DELI	7/28/2014
	Total		$214,000		

There were two additional, lottery agents that were mentioned later in the article that were also highlighted for having large wins:

George Azur II

George Azur is the current owner of Little G's. Little G's lottery license was suspended in February of 2018 for failure to pay lottery ticket proceeds to the Lottery. George Azur currently owes the state of Vermont $11,000 and is no longer permitted to sell lottery tickets.

The article outlines that the Azur family won $43,000 between 2011 to 2016 for 92% of the store winnings. However, Lottery records reviewed indicate that the store winners totaled approximately $59,000 during this same period. Therefore, the Azur's winning represented approximately 63% of the store winnings.

The Baker Family

Buzzy's Beverage & Redemption Center located in Newport is currently owned by Benjamin Baker who purchased the store from his father, Buzzy, back in 2008. Buzzy and his wife Kathleen no longer own or work at the store and do not live in the same household as their adult son. Kathleen cashed a $50,000 winning ticket in September 2016. The ticket was purchased by Buzzy, but he did not feel well enough to go claim the ticket. Buzzy and Kathleen do not reside in the same household as Benjamin Baker. This win would not be classified as an agent/employee win.

IV. FINDINGS

The Vermont Lottery Commission operates and always operated within the Vermont State statutes and regulations, as well as following all industry standards and procedures. This is to ensure that Vermonters that choose to play the lottery can do so with the knowledge and assurance that the Lottery games are not compromised in any way.

The article never explicitly states what advantages a store owner/employee has with purchasing a ticket, however it does describe scams that occurred in other states without offering evidence that it has ever occurred within Vermont. The article does not offer any evidence that any of the winners have done anything illegal or fraudulent in winning but claims that the dream of winning is more likely "if you own or work at one of the state's lottery agents."

The article highlighted six individuals as "store owners or employees" as winning the highest payouts possible from a scratch ticket. Below is the chart that was printed within the article:

SMALL GAMES, BIG WINNERS

The following store owners or employees, identified through a review of records by VTDigger, won the highest payout possible from a scratch ticket in a particular game during the 5-year period that was examined. (The listing includes the date, winning amount, game and consolidated odds.)

Richard Dente
Nov. 4 2014 — $50,000 — Holiday Magic — 1:50,000

Julie Messier
Feb., 21 2012 — $50,000 — Winter Wonderbucks — 1:33,333
July 30, 2012 — $20,000 — Money for Words — 1:33,333

Penny Durant
June 26, 2015 — $50,000 — Platinum Payout — 1:66,666

Mark Kittell
Feb. 9, 2016 — $50,000 — Lionshare — 1:66,666

Peter Marshall
Feb. 29, 2016 — $175,000 — Ultimate Riches — 1:70,000

Elisha Steele
July 28, 2014 — $200,000 — 20x — 1:90,000
July 2, 2013 — $10,000 — Double Deuces – 1: 27,273
July 2, 2013 — $10,000 — Double Deuces – 1:27,273

- Dente and Kittell both owned stores and as the article highlights each won a top prize. Dente won one top prize in 40 years as a lottery agent and Kittell won one top prize in 22 years as a lottery agent.
- Messier worked for an agent at the time of some of her wins. During her interview, Messier advised that she plays all over before during and after her employment at Rinkers. The Lottery records confirmed her continued playing habits.
- Durant and Marshall did not work for a retailer at the times of their wins, both were sold lottery tickets, and both purchased their tickets from a store where each had never worked.
- Elisha Steele won two top prizes. One of the two reported $10,000 win was a voided claim. Steele had only one $10,000 win. Claims are voided if there is an administrative error with processing a claim check, such as, a typographical or printing error. The $200,000 win was purchased from a store, Gouger's, where Steele never worked.

The chart below takes the amounts reported in the article and separates the wins by individuals that purchased their tickets either as a non-employee (Durant and Marshall) or from a store where they never worked (Steele, Durant and Marshall). In fact, there is not a state lottery, including Indiana, in the United States that would have prohibited any of these three players from purchasing their tickets. Both New Hampshire and Arizona would have permitted Messier's purchase because it was made outside of business hours. The article drastically overstated, by approximately 70% or $435,000, the amount won by "Agents/Employees":

		Per Article	**Agent Wins**	**Non-Agent Wins/Void**
Richard Dente	11/4/2014	$50,000	$50,000	
Julie Messier	2/21/2012	$50,000	$50,000	
	7/30/2012	$20,000	$20,000	
Penny Durant	6/26/2015	$50,000		$50,000
Mark Kittell	2/9/2016	$50,000	$50,000	
Peter Marshall	2/29/2016	$175,000		$175,000
Elisha Steele	7/28/2014	$200,000		$200,000
	7/2/2013	$10,000	voided	$10,000
	7/2/2013	$10,000	$10,000	
		$615,000	**$180,000**	$435,000

The article's definition of an employee is not limited to a person that works or owns a store that sells lottery tickets. It also classifies as an employee: individuals that were former employees, and relatives of the store owners/employees that do not reside in the same household. The article also included in its calculations winning tickets that were purchased from stores that were not their place of employment. The article explains that certain states prohibit employees from playing. Of the 44 lotteries that responded to a survey, there are two that restrict employees from playing during their work hours but do permit employees to play outside of those restricted hours. One state prohibits players from purchasing tickets from the store where they work. For the period under discussion to the present, Vermont has no such restrictions. The article incudes in its findings employee purchases from stores at locations other than the store where they work, relatives of employees and former employees. All these purchases would be permitted by all lotteries within the United States. In addition, the Baker winning ticket of $50,000 would still be permitted with the passing of the proposed Ancel/Wright Amendment.

If the amendment proposed by Representatives Ancel and Wright was passed and applied retroactively to the "Agent" winnings outlined in the article, $435,000 in winning tickets would still be permitted to be purchased and claimed post-amendment.

There has not been any perceived advantage demonstrated or inferred by agent/employee playing an online/terminal game from the store where they are employed. All terminal/online games have a drawing that is conducted outside of Vermont that is administered by another lottery. Each of these drawings has specific draw policies in place and are observed by independent auditors. The numbers from each draw are selected by a computerized random number generator or from draw balls randomly selected. It is unlikely that any agent/employee would be able to independently manipulate the outcome of one of the multi-state drawings.

- **Messier Wins**

Messier's winning patterns were noticed by lottery security several years prior to the article. Messier's winnings were discovered during analytical reviews conducted by security. The contact was not documented, and it does not appear that there was additional follow-up investigation with the agent to ensure that Messier was complying with the agent's, Rinkers, restrictions on playing the lottery only during off-duty hours. Messier's recent interview confirms that she does play and win at various stores throughout the state. She is no longer employed as an agent and has not won a top prize since 2012. Messier continues to play utilizing the outstanding prize list to help determine what instant games to play. Messier's current wins would not be classified as agent wins.

Statistician Stark's mathematical calculation challenges the likelihood of Messier winning as often as she did, but not necessarily the dollar value of the prizes that she won. Stark's calculations do not consider Messier's playing habit of utilizing the outstanding prize list to focus on games that have a higher percentage of games sold, but still have a larger number of outstanding prizes remaining. Stark believes that this playing system would impact the odds and his calculation, but in his opinion the frequency of wins is still unlikely without a form of cheating.

Stark believes that in cases like this it would be the storekeeper cheating the player by possibly not returning a winning ticket to a player and keeping the ticket for him/herself to cash. However, his theory does not explain Messier's continued winning after her employment as a clerk ended or Messier winning at different stores while employed at Rinkers.

Below is a chart of Messier's winnings, since Messier's employment at Vermont Lottery agents ended:

Date	Game	Name		Amount	Agent
3/19/15	CASH AND GOLD	JULIE	MESSIER	$500	CHAMPLAIN FARMS GULF
4/17/15	$200 000 JACKPOT	JULIE	MESSIER	$500	CHAMPLAIN FARMS
6/23/15	CASINO CASH	JULIE	MESSIER	$500	MAPLEWOOD LTD
7/1/15	MONEY! MONEY! MONEY!	JULIE	MESSIER	$500	CHAMPLAIN FARMS GULF
7/24/15	CASINO CASH	JULIE	MESSIER	$500	McCULLOUGH`S QUICK STOP
2/22/16	TRI-STATE JACKPOT	JULIE	MESSIER	$500	CHAMPLAIN FARMS GULF
2/29/16	LIONS SHARE	JULIE	MESSIER	$500	CHAMPLAIN FARMS GULF
2/29/16	ULTIMATE RICHES	JULIE	MESSIER	$500	CHAMPLAIN FARMS GULF
3/3/16	FORTUNE	JULIE	MESSIER	$500	BOB`S M & M BEVERAGE RANDOLPH
3/14/16	ULTIMATE RICHES	JULIE	MESSIER	$5,000	BOB`S M & M BEVERAGE RANDOLPH
5/13/16	ULTIMATE RICHES	JULIE	MESSIER	$500	CHAMPLAIN FARMS
8/17/16	50X THE CASH	JULIE	MESSIER	$500	SANDRI INC #268
9/6/16	50X THE CASH	JULIE	MESSIER	$500	CHAMPLAIN FARMS GULF
9/22/16	50X THE CASH	JULIE	MESSIER	$500	M & N MINI-MART
1/11/17	WINTER BUCKS	JULIE	MESSIER	$500	McCULLOUGH`S QUICK STOP
5/1/17	$200000 WINNINGS	JULIE	MESSIER	$5,000	M & N MINI-MART
7/11/17	ROYAL WIN	JULIE	MESSIER	$500	SIMON`S MONTPELIERSTORE & DELI
7/31/17	BEARS SHARE	JULIE	MESSIER	$500	HANNAFORD SUPERMARKET #8129
8/25/17	EMERALD 7S	JULIE	MESSIER	$700	MAPLEWOOD CONVENIENCE STORES INC
10/11/17	POWER 5S	JULIE	MESSIER	$555	CHAMPLAIN FARMS

Messier has continued to win while no longer working as a clerk. As she explained in her interview she plays a lot and plays all over focusing on the Outstanding Prize List. At times, her winnings are clustered in the same game within a close period of time from different stores. This appears to demonstrate that she is utilizing, and at times successfully, the Outstanding Prize list to choose her game.

- **Durant**

A review of the Lottery records and Durant's interviews confirmed Durant's playing habits. Durant admitted to spending a sizeable amount of money on the purchase of lottery tickets, primarily winning at Pick 4. As discussed earlier in the report, the amount of "wins" that Durant had from Pick 4 games was overstated, due to many of the wins coming from the same numbers on multiple tickets pulled from the same draw.

- **Lottery Agents**

  Per the Agent Agreement, agents are required to generate lottery sales of at least $250 per quarter to remain an agent. There were two stores mentions in the article, Alburg Village Store and Morgan's East Store. Both outlets decided to stop selling lottery tickets because they were not earning enough from the sales to continue. It was each store's decision to stop selling. It was not the Lottery's decision.

- **Statisticians**

  The article interviews two different statisticians throughout the article quoting odds and the improbability of winning the top prize ticket. As mentioned earlier in the report, the lottery gives out many prizes to thousands of winners. Every game will pay winners. I am not offering an opinion on the mathematical theory used by the statisticians or if it the calculations accurately reflect a player's spending habits.

  In the article, Jeff Rosenthal, a University of Toronto statistics professor, disclosed that he could not analyze Vermont's data in detail due to the limited scope of the reports furnished to him. However, he did state that the odds of winning $100 more than once are highly unlikely. During this period, the Lottery has records of more than 800 players winning more than twice and winning more than $7,500.

  Rosenthal discussed his findings on Durant with Rachek. Rosenthal advised that he would need to redo his computation if Durant won fewer times than the 74, the amount used in his calculation. There could be a difference in the outcome of the calculation with the change in wins. Rosenthal would also need to increase the amount spent on ticket purchases if multiple tickets with the same numbers were played for each drawing. Rosenthal also advised for his calculation that the specific bet (straight, box, box-24, etc.) on the Pick 4 game was an estimate. Rosenthal did not have the original tickets available to definitively show him what specific bet was made. Rosenthal was furnished other players' win data, in addition to Durant's, by the reporter but may have been too busy to look at those statistics and calculate the player's spend amount.

  Rosenthal explained that the statistics will only take you so far. Additional steps are necessary to determine if someone is cheating the system to explain an unusual pattern of winning. Is the employee holding back winning tickets from the customer or attempting to avoid child restitution or criminal restitution?

  Rosenthal thought that Durant's use of the outstanding prize list to target games that were mostly sold was a smart way to play the lottery. If a player is winning too much or has an unusual pattern of winning also depends on how much that player spends on tickets. It was noted earlier that Durant estimated that she spends $50/day on lottery tickets. Rosenthal thought that $50 per day was a sizeable amount to play on the lottery.

  Rosenthal offered to redo his calculation, if he were furnished more accurate information and if he has the time available. Rachek emailed Rosenthal Durant's wins for 2016. In this spreadsheet, Rosenthal was given the type of ticket purchased, amount bet, and odds for each bet.

Rosenthal completed a supplemental report on Durant's winnings from his previous analysis that was completed for the reporter and appeared in the article. The supplemental analysis looked at the winnings for 2016, a year that Durant won 9 different times. Rosenthal was furnished the correct odds for each winning ticket, instead of an estimate. Rosenthal calculated that Durant would need to spend $19,500 per year to have a 1% chance to win 9 times during the year. For Durant to have a 50% chance to win 9 times during the year, Rosenthal estimated that Durant would need to spend $48,000 per year on lottery tickets.

Rosenthal's calculation is below on next page:

JEFFREY ROSENTHAL'S REPORT FOR DANIEL RACHEK ABOUT THE DURANT LOTTERY WINS

* This is supplemental to my previous analysis for Katy Savage.

* It is based on data provided to me by Daniel Rachek on May 23, 2018.

* This data concerns Penny Durant's Vermont lottery wins for just one year, 2016, considered to be a "typical" year for her.

* It combines together cases where Durant purchased multiple tickets to the same draw on the same day with the same numbers.

* According to this new combined 2016 data, Penny Durant is recorded as winning 8 PICK4 lottery prizes, each for over one thousand dollars total, each with the "Box-24" option at odds of 1/417, plus one ULTIMATE RICHES prize of $500 at odds of 1/909.

* The (combined) ticket prices for these 9 wins were, respectively, $20 $20 $20 $20 $10 $10 $5 $10 $5, so the average amount spent for each of these wins was $13.33.

* To facilitate analysis, I combine the one ULTIMATE RICHES prize together with the 8 PICK4 prizes, to get a total of 9 prizes each with odds of 1/417 or less. (Since the ULTIMATE RICHES odds are worse than this, this combination is "generous" to Durant in the sense of requiring her to spend slightly LESS than she really would have.) I also take the amount spent each time to be the mean $13.33.

* The question is: How much would Durant have had to spend on lottery tickets, to have at least a certain chance of winning at least this many of these prizes in 2016?

* In general, if you buy "N" tickets each with probability "p" of winning, then the probability of winning at least "w" of them can be computed by the "R" command:

```
pbinom(w-1, N, p, lower.tail=FALSE)
```

* Then, the number of purchases required to have a one percent chance of winning at least "w" of them, is equal to the smallest value of "N" for which the above command gives at least 0.01. And, the amount of money required for this is equal to the above number of purchases required, times the average amount spent per ticket.

* In this case, we have w=9, and p=1/417.

* It follows that to have even a one percent (1%) chance of winning at least 9 such prizes, Durant would have had to buy at least 1,465 tickets, at a cost of just over $19,500. This is equivalent to spending over $53 per day, every day, for all 366 days in the year 2016.

* However, since 2016 is supposed to be a "typical" year for her, and she was able to achieve similar winnings in other years too, it seems more appropriate to require that she have a fifty percent (50%) chance of winning that many prizes, not just one percent (1%).

* To have a fifty percent (50%) chance of winning at least 9 such prizes, she would have had to buy at least 3,615 tickets, at a cost of just over $48,000. This is equivalent to spending over $131 per day, every day, for all 366 days in the year 2016.

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* SUMMARY: To have a 1% chance of winning so many prizes in 2016 would require spending just over $19,500, or $53 per day. Perhaps more appropriately, to have a 50% chance of winning so many prizes in 2016 would require spending just over $48,000, or $131 per day.

Phillip Stark was also queried regarding how lucky players are. Stark explained that he used an optimization problem that considers the odds of the games won to calculate how much a player would have to spend to win a certain number of times over a period of time. Stark calculated the data for Kittell, Steele, and Messier. Stark believes that the frequency of Messier's wins was unusual.

Stark analyzed the data received for Kittell. Starks comments on Kittell's winnings never made it into the article. Stark thought that Kittell winning 10 times playing 9 games was not a ridiculous amount of money to win. Stark was also given win data for Steele. Stark did not feel that Steele's wins were very suspicious. Stark calculated Steele would need a $2,400 spend to have a 1/10 million chance, and a $75,000 spend to have a 1/1 million chance to win 5 times.

Stark also advised that he did not consider a player's strategy of buying tickets for games that were predominantly sold, but outstanding prizes remained. According to Stark utilizing the outstanding prize list for players could potentially impact the calculation.

Vermont Agent Win Statistics

The Vermont Lottery asks each claimant of $500 if they are a lottery retailer, related to a retailer or an employee. The responses are associated with the individual. The response is not tied to the claim. If an individual wins while they are not an employee and then wins the next year when they are an employee, both wins would be considered agent wins. The same would be true if a winner wins as a clerk of a store, and the next year they win while they are not employed, both winnings would not be considered an agent win.

Currently, the Lottery does not ask the winning agent/employee where they purchased the winning ticket to determine if it was purchased where they were employed (Steele) or if they are a relative of a lottery retailer and live in the same household. Therefore, the claim amounts in the table below are an estimate. The totals include both instant and online tickets. The Vermont Lottery has requested that the gaming vendor modify its program to associate the agent win with the claim instead of the individual. This change will ensure that future queries of agent win totals would be more accurate. The amounts below and the percentages calculated were from all claims where a check was issued to winner. The majority of the claims were $500 and greater. However, there were instances when a check was issued for smaller claims processed.

Below is a chart that has the Agent wins as a percentage of claims and as the total dollar value of prizes paid out to agents:

	Total Agent Wins	Total Claims	Percentage of Agent Wins	Dollar Value of Agent Wins
2011	285	15,015	1.90%	547,316
2012	273	13,253	2.06%	604,832
2013	275	13,868	1.98%	**1,613,534
2014	347	14,006	2.48%	941,208
2015	368	14,991	2.45%	688,850
2016	404	15,791	2.56%	667,388
2017	405	14,158	2.86%	822,657
Average	2,357	101,082	2.33%	
			Total	5,885,785

** the total includes a $1,000,000 Powerball winner, representing 17% of agent wins

The total number of claims paid by the Lottery to agents from 2011-2017 was 2,357, representing 2.33% of the claims. The total dollar value of the agent claims for the same period was $5,885,785 and the total claims (agent and non-agent) were $90.8 million. As a percentage of the total dollar value of claims (instant and online), agents received 6.48%. The rate would be approximately 5.4% without including the million dollar Powerball winner. This percentage also includes 2nd Chance Prizes that were paid out to agents/employees and family members. 2nd Chance Prizes are awarded from a quarterly drawing of non-winning tickets entered by the player. Agents are permitted to enter the drawings.

Security Director Brian Mclaughlin sorted a winner listing from 2011-2017 by individual names and subtotaled each individual's winnings. Mclaughlin then reviewed the list for individuals that won at least $7,500 and had more than one win during this period. There were approximately 880 winners that met those criteria. Mclaughlin then reviewed the multiple winning list to determine how many agents were among the approximate 880 winners. There were approximately 55 agent/employees, approximately 6.25%, that were multiple winners during this period.

The Lottery does not maintain records for wins less than $500, low tier, or smaller wins where a check was not issued. This calculation of agent win percentage 6.48% does not include agent low tier wins, and it also doesn't include the total low tier player winnings. There are two unknowns to consider when deciding if 6.48% is too large of a percentage for agent wins: how many agents/employees and family members play and how much do they spend.

V. RECCOMENDATIONS:

Within my first six months of being in the Executive Director, I have targeted several areas for improvement. These improvements will strengthen the Lottery's verification processes as well as potentially assist the state of Vermont collect additional revenue.

- Employees/Agents-
  - Explore and institute a policy that will require a closer review of agent prizes. Set a standard (ex. 5 in a 12-month period) where the agent/employee that wins multiple times and above a certain amount that will trigger a closer inspection by VLC Security. Utilize a questionnaire for Agent wins to determine if they are complying with store policy on playing.
  - Review all top prizes that are won by everyone (similar to MUSL) greater than $25,000.
  - Adopt a best practice standard that will require Lottery Sales Reps or staff to educate and train retailers on potential issues of agents play while on duty. Essentially endorse and encourage a "No play on Duty" policy.
  - This policy should also encourage employees not to process their own purchases and cash their own tickets
  - Conduct a survey of Lottery retailers for their current practices and determine the number of agents that are currently restricting their employees from playing during work hours; enhancements that they would like to see as the result of a new gaming contract; do they activate/deactivate; have agents had any thefts within the past year- who were the thefts reported to?
  - The Vermont Lottery will explore the possibility of contracting our instant ticket vendor to provide an App that will, among other things, permit players to privately check the winning/losing status of their own tickets.
  - Work with gaming vendor to attach the agent/employee status to each claim, instead of the individual
  - Modify claim form questions
- Anti- ticket discounting policy- Ticket discounting is a problem for some of the larger lotteries/states and are often tied to other crimes typically operated by organized crime groups. Vermont does not appear to have any ticket discounting associated with money laundering operations. Ticket discounting is also performed by individuals and agents to avoid criminal restitution or back up child support payments. Larger Lotteries have used the 20/20 method; flagging players and or agents that have one more than 20 times and more than $20,000 in a 12-month period. A closer look is taken of the players habits. If necessary, a player's ability to cash tickets will be revoked or an agent's license could be suspended.
  - Work with our gaming vendor to set a threshold for a player's winning amount and total wins per 12-month period
  - Have gaming vendor institute an email alert to Vermont Lottery Security for unusual validation patterns