# NSSF® REPORT HUNTER EDUCATION GRADUATES' PROCLIVITY TO PURCHASE A LICENSE





# **Hunter Education Project**

Hunter Education Graduates' Proclivity to Purchase a License after Graduation

**Produced by:** 

Southwick Associates, Inc.

PO Box 6435
Fernandina Beach, FL 32035
Ph (904) 277 – 9765 • Fax (904) 261-1145

Prepared for the:

**The National Shooting Sports Foundation** 

## Acknowledgements

This study was funded by the National Shooting Sports Foundation (NSSF). Jim Curcuruto, the NSSF's Research Director, led the project and assisted in recruiting many of the state hunter education programs that participated in this effort. Appreciation is also extended to Wayne East of the International Hunter Education Association (IHEA) for his contributions towards developing the project's concept and contents, and assistance in recruiting state hunter education programs. The authors and the NSSF wish to thank all participating state hunter education programs for their time, data and input regarding this project, and anticipate the results will be used by states to help increase the percentage of hunter education graduates who continue to hunt after earning their certification. Regardless of the contributions of the many individuals and agencies in making this report a success, the authors remain responsible for all contents herein.

## **Executive Summary:**

The purpose of this study was to identify the percentage of hunter education graduates who purchase a license after completing their training, and how often they continue to purchase in subsequent years. The results are intended to help the hunting community understand if and where intervention efforts may be needed to maintain hunting participation among newer hunters.

Twelve state wildlife agencies participated in this project based on their willingness and ability to share hunter education and license sales data. The analysis consisted of profiling the hunter education class of 2006 and their subsequent license buying habits over the following six years (2006 to 2011). This was done by first examining each state's 2006 hunter education graduate database, then cross-matching each graduate's record to the state's license sales database. By comparing the two databases, trends and profiles were developed. Results for each state are presented within this report. Major highlights observed across all states include:

- A significant percentage of hunter education graduates will not buy a hunting license after graduating:
  - The percentage of graduates who purchased at least one hunting license from 2006 to 2011 averaged 67.7% among the 12 states analyzed.
  - Some graduates may have taken hunter education training for reasons other than to hunt, but others may need assistance towards making the leap to becoming an active hunter.
  - Those who graduated in June and the warmer months are the greatest percentage of graduates who never purchased a license. Only three states showed months in the fall/winter that held the highest percentage of graduates who never purchased a license.
- Hunting participation rates drop significantly soon after graduation:
  - From 2006 to 2011, the pool of graduates who bought hunting licenses shrunk by 34.5%.
  - o After six years, only 44% of graduates were observed buying a license.
  - In most states, but not all, those who graduated between the ages of 16 to 24
    were less likely to buy a license six years after graduating. This is not surprising
    given the transient nature of young people, but efforts to retain them as
    hunters may provide long term conservation benefits.
  - Similarly, younger people in college or military lifestyles are more likely to stop renewing their licenses within six years of graduating.
  - Graduates from highly urbanized areas showed the greatest drop-out rates, indicating a greater need for intervention efforts.
- One measure used to track each class's post-graduation participation rate is the percent of
  potential man-years of license sales actually received by each state. For example, each
  graduate has the potential to buy a license in each of the six years following graduation. If all
  hunters bought a license in only half those years, the state reached 50% of that class's
  license buying potential.
  - The average percent of sales received over the six year period for all of the states was 42.1%.
  - The lowest rate was 26.1% (Virginia) and the highest was 55.8% (Montana).
  - This measurement can be used as a base for states to track their efforts to retain hunter education graduates as active hunters.

## **Table of Contents**

Acknowled	dgements	ii
Executive S	Summary	iii
Introductio	on	1
Methodolo	ogy	1
Overall Stu	udy Results	3
Western F	Region	10
	Montana	11
	Nevada	19
	Utah	27
	Washington	35
Midwest Region		38
	Michigan	39
	Missouri	45
	Nebraska	56
Southeast	t Region	67
	Georgia	68
	Kentucky	76
	Virginia	84
Northeast	t	92
	Maine	93
	Vermont	103
Appendix I	: LifeMode and Urbanization Descriptions	112
Annendix II: Detailed State Tables		118

#### Introduction:

The purpose of this study was to identify the percentage of hunter education graduates who purchase a license after completing their training, and how often they continue to purchase in subsequent years. The results are intended to help the hunting community understand if and where intervention efforts may be needed to maintain hunting participation among newer hunters.

A key assumption is used throughout this analysis: the purchase of a hunting license assumes the individual actually hunted. While exceptions likely exist and an unknown proportion of hunting license buyers is expected to have not hunted, this issue likely does not affect the overall findings and interpretations in this report.

## Methodology:

This study involved cross-examining states' hunter education and hunting license databases. In regard to state databases, there is not much commonality between states. With different data formats, variables and rules (age requirements, Families Afield exemptions, etc.), there were few or no economies of scale in processing multiple states at one time. Each state had to be analyzed separately.

Each state's analysis examined 2006 graduates and their purchasing habits over the next six years (2006 to 2011). By tracking six years of history, it was possible to identify trends regarding dropout rates and compare behavior differences between different segments of graduates. Plus, considering the qualitative questions raised in reviewing the results of this project, opportunities exist to contact these individuals regarding the reasons for their continued or limited hunting participation.

This study began with identifying the selected states to be involved. Each state was then contacted to learn if they had the necessary data and were willing to participate. After hunter education and license sales data were received from the states, they were reviewed for completeness and usability. In most states, a small amount of hunter education graduates had to be dropped due to missing data. Once data were cleaned and prepared for analysis, Microsoft Access™ was used to match each state's hunter education data with their hunting license data to develop a history of each graduate's license buying behavior. Some states provided a unique identification number matching their hunter education and license records. In states where there were no identification numbers, one was created using the first two letters of the graduate's first name, the last name and the date of birth, all combined. All three fields are included in both data sets making it possible to link the two. A small room for error occurs in cases such as twins with the same first two letters of the first name such as "Christie" and "Charlie." Also, additional error may be introduced when some graduates were reported as having never bought a license but actually may have moved out of state. These sources of potential error are expected to be minimal and not affect the findings and interpretations in this report.

Profiles were developed for graduates who have or have not bought a hunting license since graduating. Graduate participation was analyzed and reported using several different approaches including overall participation, age, lifestyle segments, types of licenses purchased, monthly graduation dates, Tapestry® and other data unique to each state when available (big game vs. small game, bow hunting certification, etc.). Tapestry and demographic profiles of all graduates were developed using ESRI's Community Coder™ software. Tapestry data permit segregating hunter education graduates into

segments that share common lifestyle characteristics, such as being young and single, or in a working class family in urban areas, etc.

Results for all states combined are presented within, followed by state-specific findings. The results for are organized by region to help states within each region – but not analyzed in this report – to gain a general idea of the post hunter education license buying habits of their graduates.

## **Overall Study Results:**

The average percent of hunter education graduates from all 12 states that purchased at least one hunting license from 2006 to 2011 was 67.7% (Table 1). The state with the highest percent of graduates who purchased at least one license in the six possible years was Montana with 82.8%. The state that had the least amount of hunter education graduates purchase a license in the six possible years was Virginia with 43.0%.

Table 1. Percentage of graduates who purchased at least a single hunting license from 2006 to 2011, by State and Region

State/Region	Percent	
<u>West</u>		
Montana	82.8%	
Nevada	70.1%	
Utah	78.1%	
Washington	58.8%	
<u>Midwest</u>		
Michigan	76.7%	
Missouri	70.3%	
Nebraska	63.6%	
<u>Southeast</u>		
Georgia	65.3%	
Kentucky	53.0%	
Virginia	43.0%	
<u>Northeast</u>		
Maine	70.9%	
Vermont	80.5%	
Average (not weighted) 67.7%		

The rate of renewing hunting licenses falls quickly. From 2006 to 2011, for those graduates who bought a license after graduating, 34.5% stopped buying by 2011 (Table 2). A decrease was expected, considering many younger hunter education graduates would be expected to move out of state, join the military or engage in similar life changing events after high school. The magnitude of the decrease was surprising. The only state that showed a positive increase in the number of graduates who purchased licenses as the six years went by was Utah with a 5.4% increase. The state that showed the largest percent decrease in change was Kentucky (-53.4%). Precise reasons for the decreases cannot be deduced from the data and can only be speculated. Follow-up surveys might help to answer these questions.

Considering that only 67.7% of graduates bought a license within six years of graduation, and a 34.5% decrease was experienced among this group, by the end of the six year review period, only about 44% of graduates were observed buying licenses, indicating a significant retention issue. There is a chance some of the missing graduates may return later in life to hunt, but the percentage is expected to be low, given known recreational participation patterns.

Table 2. Percentage change of 2006 graduates purchasing a hunting license through 2011

State	Porcent Change
State	Percent Change
<u>West</u>	
Montana	-38.3%
Nevada	-46.5%
Utah	5.4%
Washington	-49.1%
<u>Midwest</u>	
Michigan	-34.6%
Missouri	-44.4%
Nebraska	-0.9%
<u>Southeast</u>	
Georgia	-32.1%
Kentucky	-53.4%
Virginia	-38.0%
<u>Northeast</u>	
Maine	-35.8%
Vermont	-46.2%
Average	-34.5%

Each graduate has the potential to buy a license in a maximum of six years after completing a course. If a state's graduates buy a license in all six years, that state reached 100% of its sales potential. However a state where graduates only bought in three of six years only reached 50% of its sales potential. The average percent of the total sales potential reached from 2006 through 2011 from all 12 states is 42.1%. The highest sales potential was found in Montana with 55.8%. The lowest was Virginia (26.1%). These estimates were adjusted to account for years when younger graduates were not required to have a license to hunt, and only include years when graduates were of age when a license is required. Though it is difficult to make claims for an entire region based on the results in just a few states, the Southeast appears to have the lowest rate of license purchasing among its graduates. Reasons why cannot be determined in the data.

Table 3. Percent of total sales potential reached from 2006 to 2011

State	Percent
<u>West</u>	
Montana	55.8%
Nevada	40.8%
Utah	47.7%
Washington	34.6%
<u>Midwest</u>	
Michigan	49.0%
Missouri	46.2%
Nebraska	40.7%
<u>Southeast</u>	
Georgia	35.8%
Kentucky	27.4%
Virginia	26.1%
<u>Northeast</u>	
Maine	48.5%
Vermont	52.6%
Average	42.1%

Younger graduates were more likely to disappear from hunting license purchasing records over the six year review period. Out of the eleven states who were able to provide date of birth information, the rate of renewing licenses dropped the most among 16 - 24 year-olds from 2006 to 2011 (Table 4). Of those states, Montana had the highest percent decrease with 68.3%. In Kentucky, the age category of "10 - 15" year-olds held the highest percent decrease of 64.5%. Younger people were expected to renew licenses at lower rates, considering after high school is a common time for people to leave the state for college, military or work purposes. But, in some states older graduates dropped out faster, such as in Maine where the category showing the highest percent decrease was among "25-35" year-olds with a 46.1% decline. The data are unable to report the reasons why the declines occur, or if participation rates increase beyond the six year examination period.

Table 4. Age category with largest decrease in renewal rates from 2006 to 2011

State	Category	Percent
<u>West</u>		
Montana	16 - 24	-68.3%
Nevada	16 - 24	-54.8%
Utah	16 - 24	-24.8%
Washington	n/a	n/a
<u>Midwest</u>		
Michigan	16 - 24	-60.5%
Missouri	16 - 24	-55.8%
Nebraska	16 - 24	-39.6%
<u>Southeast</u>		
Georgia	25 - 35	-33.8%
Kentucky	10 - 15	-64.5%
Virginia	16 - 24	-62.5%
<u>Northeast</u>		
Maine	25 - 35	-46.1%
Vermont	16 - 24	-49.4%

The data also permitted identifying which age categories were less likely to purchase a license at least once. Of the 11 states that were able to provide date of birth information, five had the highest percentage of never purchasing a license within the "16-24" age range (Table 5). Three states were in the "10-15" range, two were in the age category of "25-35", and only Vermont experienced lowest rates in the "Older than 35" category.

Table 5. Age Category with largest percent who never purchased a license by state from 2006 - 2011

State	Category	Percent
<u>West</u>		
Montana	25 - 35	33.1%
Nevada	16 - 24	38.5%
Utah	16 - 24	32.6%
Washington	n/a	n/a
<u>Midwest</u>		
Michigan	16 - 24	34.1%
Missouri	16 - 24	37.3%
Nebraska	10 - 15	40.0%
<u>Southeast</u>		
Georgia	25 - 35	37.0%
Kentucky	10 - 15	55.8%
Virginia	16 - 24	59.6%
<u>Northeast</u>		
Maine	10 - 15	34.8%
Vermont	Older than 35	22.1%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups consist of people who share an experience such as being born in the same time

period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The LifeMode group that has the lowest rate of license renewals among all graduates was the "Scholars and Patriots" (Table 6). This segment group has shared traits of youth, with the attendant lower incomes, and atypical environments such as college life or military service. Therefore, given the transient nature of this age cohort, it is not surprising their rate of disappearing from state license records is high. Details are available for each state in the next section, and provide insights about each state's hunter education customers.

Table 6. LifeMode group with largest percent change

State	Group	Percent
<u>West</u>		
Montana	Scholars and Patriots	-68.1%
Nevada	Scholars and Patriots	-85.7%
Utah	Scholars and Patriots	-47.2%
Washington	n/a	n/a
<u>Midwest</u>		
Michigan	n/a	n/a
Missouri	Scholars and Patriots	-56.3%
Nebraska	Solo Acts	-51.2%
<u>Southeast</u>		
Georgia	Metropolis	-45.6%
Kentucky	Scholars and Patriots	-78.3%
Virginia	Solo Acts	-52.3%
<u>Northeast</u>		
Maine	Global Roots	-75.0%
Vermont	Global Roots	-75.0%

Urbanization summary groups are people who share a location, from the largest cities to the most remote regions of the U.S. These areas, such as urban, suburban, and rural, are further divided based on income with segments tagged with an "I" typically having higher incomes than those marked with a "II". The Urbanization groups that have the highest percent decrease among all graduates in the majority of the states are "Principle Urban Centers II" and "Principle Urban Centers I" (Table 7). These segment groups represent the aspiring populations of the country's largest cities. Residents live in apartments instead of single-family homes and take public transportation instead of driving. In some cases, it may be possible that these people want to hunt, but due to their urban location, they find access to be a particularly inhibiting factor. Surveys would be required to learn more about the reasons behind their decreasing renewal rates.

Table 7. Urbanization group with largest percent decrease in license buying rates within the class of 2006

State	Group	Percent	
<u>West</u>			
Montana	Urban Outskirts II	-53.6%	
Nevada	Principle Urban Centers I	-100.0%	
Utah	Principle Urban Centers II	-83.3%	
Washington	n/a	n/a	
<u>Midwest</u>			
Michigan	n/a	n/a	
Missouri	Principle Urban Centers II	-71.4%	
Nebraska	Principle Urban Centers I -100.0		
<u>Southeast</u>			
Georgia	Urban Outskirts II	-42.3%	
Kentucky	Metro Cities I	-77.6%	
Virginia	Principle Urban Centers II	-100.0%	
<u>Northeast</u>			
Maine	Metro Cities II	-44.4%	
Vermont	Metro Cities II	-56.2%	

In many states, it was possible to segment graduates based on their month of graduation. June graduates were less likely to buy a license (Table 9). Only three states experienced lower license buying rates among their fall/winter percentage of graduates. Hunter education enrollees who sign up for reasons other than hunting (such as concealed carry permits) may be more inclined to sign up for summer classes, or, for those enrollees who were interested in hunting, by the time hunting season arrived, they may have lost interest and found other ways to spend their fall days. Surveys would be required to know for sure and to identify potential ways to improve hunting and license purchase rates.

Table 8. Month of graduation with highest percent of graduates who did not purchase a license within six years.

State	Month	Percent
<u>West</u>		
Montana	September	19.6%
Nevada	June	49.6%
Utah	April	26.1%
Washington	n/a	n/a
<u>Midwest</u>		
Michigan	June	34.8%
Missouri	December	55.0%
Nebraska	June	53.1%
<u>Southeast</u>		
Georgia	June	65.8%
Kentucky	March	72.9%
Virginia	December	61.1%
<u>Northeast</u>		
Maine	May	79.2%
Vermont	June	52.0%

The remainder of this report presents state-specific results.

## Individual State Results – Western Region

#### Montana

#### **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Montana's 2006 hunter education class was tracked over six years. In all, this class had 6,633 graduates, with 6,631 records usable for the analysis. Highlights include:

- When compared to the other states in the study, Montana is ranked 1<sup>st</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Montana is ranked 7<sup>th</sup> out of the 12 states when looking at the percent change in the number of 2006 hunter education graduates who purchased a hunting license during this six year buying period.
- Within the six year period, the year that held the highest percentage of graduates purchasing a license was 2006 with 73.5% of the graduating class purchasing a license. Over the six year period, the number of graduates who purchased a license decreased 38.3%.
   Reasons for the decrease would need to be determined via direct surveys of recent graduates.
- From the hunter education class of 2006, 5,145 (82.8%) purchased at least one license during the six year period of 2006-2011. Of the 6,211 hunter education graduates required to purchase a license due to age requirements in 2006, 1,066 never purchased a license, representing 17.2% of the total class.
- Of these graduates, the 10-15 year-old age group represented the largest portion of the class, with 81.0% of all graduates.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Montana achieved 55.8% of the 2006 class's total sales potential over the six year period, the highest rates seen in all states examined. Efforts to encourage greater hunting participation among hunter education graduates would boost license dollars and excise tax revenues that benefit wildlife conservation.

#### Introduction to Montana's data:

Montana provides specific landowner licenses. These are in the form of a free cooperator license and are issued only to individuals enrolled in Montana's Block Management program. The cooperator license comes in a resident and nonresident version, and both are a combination license that includes a conservation stamp (prerequisite in Montana to all hunting, fishing, and trapping license purchases), upland bird, deer, elk, and fishing. Youth and senior permits also include migratory bird privileges. So, for example, the landowner cooperator could request the license be issued to their child who just completed a hunter education course. Montana's licenses were not broken down into big game or small game results as small game licenses are not required/offered in Montana. Youth aged 12 – 17 years who have completed hunter education are entitled to receive a Resident Youth Combination

Sports License free of charge. The youth combo license, which normally costs \$25, includes Montana's conservation, deer, elk, upland game bird, state lands, and fishing licenses.

#### **Results:**

The 2006 hunter education class in Montana provided a total of 6,633 graduates, with 6,631 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2006 with 73.5% of the graduating class doing so. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined only license sales records. During the six year span, the average age of those who continued to hunt increased 4.6 years, which indicates that drop-out rates are likely generally consistent across age categories of recent hunter education graduates (Table 1). In total, over the course of the six years, the number of graduates who continued to purchase a license decreased 38.3%.

Table 1. 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates	6,631			
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age
2006 <sup>1</sup>	4,563	73.5%	-	20.5
2007 <sup>2</sup>	4,236	63.9%	-7.2%	22.7
2008	3,802	57.3%	-10.2%	24.2
2009	3,495	52.7%	-8.1%	24.4
2010	3,049	46.0%	-12.8%	24.6
2011	2,814	42.4%	-7.7%	25.1
Change from 2006 to 2011			-38.3%	

Most graduates did not buy a license each year. In fact, only about one-quarter bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 5,145 purchased at least one license during the six year period from 2006 through 2011, or 82.8%, compared to the 73.5% who bought in the first year they were eligible to buy a license. Over the six year period, 17.2% were never identified as having bought a license. Of those who did purchase a license, over a third of all graduates (34.8%) purchased in each of the six years.

12

<sup>&</sup>lt;sup>1</sup> A total of 420 graduates were excluded from analysis based on age requirements.

<sup>&</sup>lt;sup>2</sup> A total of 2 graduates were excluded from analysis based on age requirements.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006-2011	Number of HE Graduates	Percent	Of those who bought licenses
0	1,066	17.2%	-
1	827	13.3%	16.1%
2	655	10.5%	12.7%
3	556	9.0%	10.8%
4	593	9.5%	11.5%
5	723	11.6%	14.1%
6	1,791	28.2%	34.8%
Total	6,211 <sup>3</sup>	_	
Total of those who purchased at			
least once	5,145	82.8%	

In the Class of 2006, the age category that represented the largest portion of graduates was the 10-15 year-old segment, representing 81.0% of the class, or 5,370 graduates (Table 3). The average age in this age group is 12.5.

Table 3. 2006 Hunter Education Graduates, by Age Category

Age	Number of Graduates	Average Age	%
10 to 15	5,370	12.5	81.0%
16-24	651	18.6	9.8%
25-35	148	30.1	2.2%
35 and older	462	47.4	7.0%
Total	6,631		100.0%

In the 10 to 15 year-old age group, 13.9% never purchased a license. Within the same age group, 64.0% purchased at least three years out of the possible six. Of all graduates, 59.4% purchased a license at least three years out of the six possible, indicating younger graduates have a greater interest in hunting compared to older graduates (Table 4).

13

<sup>&</sup>lt;sup>3</sup> A total of 420 graduates were excluded from analysis due to age requirements based on their 2006 age.

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following Certification, by Age Category.

	Number of	Number of years purchased a license, 2006- 2011		
Years of Age	Graduates	None	One - Two	Three - Six
10 to 15	5,370	13.9%	22.0%	64.0%
16-24	651	28.6%	37.6%	33.8%
25-35	148	33.1%	31.1%	35.8%
35 and older	462	31.4%	18.6%	50.0%
Total	6,631	17.0%	23.5%	59.4%

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 4,563 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license decreased by 1,749, or 38.3%. The age category with the largest decline was 16 to 24 year-olds representing a 68.3% decrease (Table 5). Lifestyle factors might be affecting participation. At this age, over a six year time span, graduates might be more likely to move on to college, military or jobs out of state, thus reducing their probability of buying a hunting license.

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought licenses from 2006 to 2011.

	Number of	Year of Purchase		Change	
Age	Graduates	2006	2011	N	%
10 to 15	5,370	3,803	2,460	(1,343)	-35.3%
16-24	651	401	127	(274)	-68.3%
25-35	148	84	43	(41)	-48.8%
35 and older	462	275	184	(91)	-33.1%
Total	6,631	4,563	2,814	(1,749)	-38.3%

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Montana achieved from its 2006 hunter education graduates through 2011 represented 55.8% of the total sales potential (Table 6). A total of 21,959 licenses-years were sold to graduates out of a possible 39,364 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Montana ranked 1<sup>st</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

Actual Sales	Sales Potential	Percent of Potential Reached
21,959	39,364	55.8%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups consist of people who share an experience such as being born in the same time period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The "American Quilt" segment group represents the largest portion of the 2006 hunter education class with 30.8% of all graduates (Table 7). This group represents America's small towns and rural areas. It represents a more diverse microcosm of small-town life. In terms of license buying trends, "Factories and Farms" graduates had the lowest rate of decline in buying licenses, with a decrease of 25.2% from 2006 to 2011. The segment group with the largest decrease in purchases was "Scholars and Patriots" with a drop of 68.1%. This group is typically comprised of youth in an ever-changing environment such as college life or military service. Every LifeMode group saw decreases regarding the number of graduates purchasing a license from 2006 to 2011, indicating substantial decreases in hunting participation among all types of hunters in the six years following graduation.

Table 7. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by LifeMode Group.

	Number of	% of 2006	Year of I	Purchase	Cha	nge
Category	Graduates	Grads	2006	2011	N	%
American Quilt	2,045	30.8%	1,433	877	(556)	-38.8%
Factories and Farms	809	12.2%	531	397	(134)	-25.2%
Family Portrait	111	1.7%	83	50	(33)	-39.8%
Global Roots	46	0.7%	36	16	(20)	-55.6%
High Hopes	322	4.9%	227	117	(110)	-48.5%
High Society	310	4.7%	220	150	(70)	-31.8%
Metropolis	131	2.0%	70	38	(32)	-45.7%
No Classification	462	7.0%	306	184	(122)	-39.9%
Scholars and Patriots	120	1.8%	69	22	(47)	-68.1%
Senior Styles	907	13.7%	627	363	(264)	-42.1%
Solo Acts	82	1.2%	50	32	(18)	-36.0%
Traditional Living	629	9.5%	445	269	(176)	-39.6%
Upscale Avenues	657	9.9%	466	299	(167)	-35.8%
Total	6,631	100.0%	4,563	2,814	(1,749)	-38.3%

Urbanization summary groups are people who share a location, from the largest cities to the most rural farms. Common areas such as urban, suburban, etc. are divided based on income. Segments tagged with an "I" are typically the higher income earners in these specific areas, while those marked with a "II" are generally lower income areas within each segment. Not surprisingly, Montana hunter education graduates generally come from less urbanized regions of the state. The group with the largest purchasing change from 2006 to 2011 was Urban Outskirts II. This group represents high-density suburban neighborhoods in metropolitan areas. Rural II showed the smallest decrease in purchasing from 2006 to 2011 with 28.8% (Table 8). Individuals within this group live in the country with very low population density. In general, Montana graduates from more urbanized areas are more likely to stop purchasing licenses than graduates from more rural areas, though the differences were not that significant and likely do not warrant developing intervention efforts unique to each group. See Appendix at the end of this report for full description list of all urbanization summary groups.

Table 8. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by Urban Classification Group.

	Number of	% of 2006	Year of P	urchase	Cha	nge
Category	Graduates	Grads	2006	2011	N	%
No Classification	462	7.0%	306	184	(122)	-39.9%
Principle Urban Centers II	5	0.1%	4	2	(2)	-50.0%
Metro Cities I	156	2.4%	111	64	(47)	-42.3%
Metro Cities II	289	4.4%	197	110	(87)	-44.2%
Urban Outskirts I	286	4.3%	201	108	(93)	-46.3%
Urban Outskirts II	249	3.8%	151	70	(81)	-53.6%
Suburban Periphery I	491	7.4%	344	221	(123)	-35.8%
Suburban Periphery II	825	12.4%	566	346	(220)	-38.9%
Small Towns	618	9.3%	435	252	(183)	-42.1%
Rural I	2,277	34.3%	1,599	995	(604)	-37.8%
Rural II	973	14.7%	649	462	(187)	-28.8%
Total	6,631	100.0%	4,563	2,814	(1,749)	-38.3%

The month with the highest rate of graduation for the hunter education course in Montana was September with 1,693 graduates, or 25.5% (Table 9). Graduates who never purchased a license were more likely to graduate in September when 19.6% of all September graduates never bought, followed by October (18.9%), (Figure 1). The months with the youngest graduates were December at 12.0 years old, followed by January and February where the average age was 13.2 years old in both months. Older graduates are more common in June (Figure 2). September and October graduates were less likely to purchase licenses, for reasons not determined in this study.

Table 9. 2006 Hunter Education Graduates By Month Of Course Completion

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduated Who Never Purchased	Percent Of Total Who Never Purchased A License	Average Age Of Graduates Who Never Purchased a License
January	12	13.2	0	0.0%	n/a
February	44	13.2	3	6.8%	12.7
March	1,358	15.4	221	16.3%	17.7
April	1,,296	15.0	189	14.6%	17.8
May	720	16.2	113	15.7%	20.1
June	77	18.0	11	14.3%	24.6
July	137	16.7	22	16.1%	20.9
August	280	14.4	50	17.9%	15.3
September	1,693	16.8	332	19.6%	19.7
October	986	16.4	186	18.9%	20.8
November	27	15.4	2	7.4%	28.0
December	1	12.0	0	0.0%	n/a

Figure 1. Number of Graduates who completed the Hunter Education Course by Month

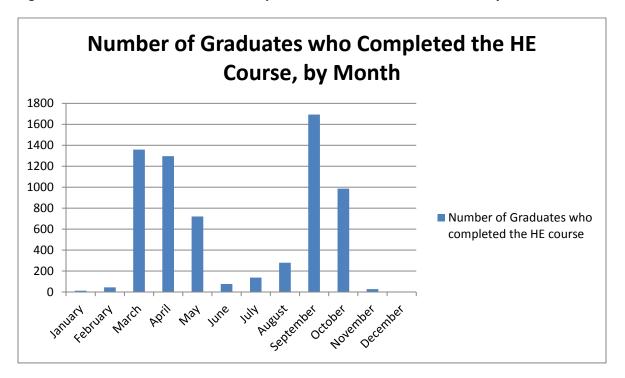
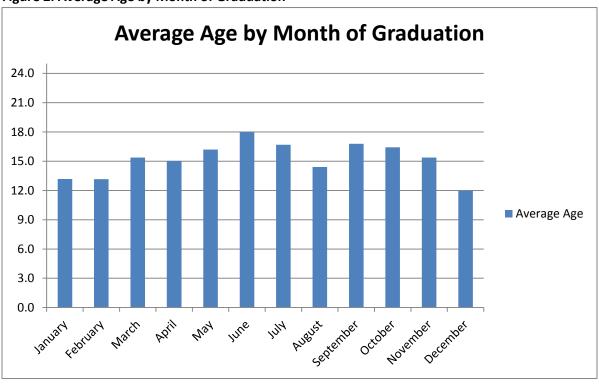


Figure 2. Average Age by Month of Graduation







#### Nevada

#### **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Nevada's 2006 hunter education class was tracked over six years. In all, this class had 3,806 graduates, with 3,782 records usable for analysis. Highlights include:

- When compared to the other states in the study, Nevada is ranked 7<sup>th</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Nevada is ranked 10<sup>th</sup> out of the 12 states when looking at the percent change in the number of 2006 hunter education graduates who purchased a hunting license in this six year buying period.
- The 2006 hunter education class in Nevada had 3,806 graduates, with 3,782 records usable for analysis. Within the six year period, 2006 was the year that held the highest percentage of graduates purchasing a license (57.4%). Over the six year period, the number of graduates who purchased a license decreased 46.5%.
- From the hunter education class of 2006, 2,513 (70.1%) purchased at least one license during the six year period of 2006 to 2011. Of the 3,584 hunter education graduates required to purchase a license due to age requirements in 2006, 1,071 never purchased a license, representing 29.9% of the total class.
- Of these graduates, the 10-15 year-old age group represented the largest portion of the class, with 44.9% of all graduates.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Nevada achieved 41.2% of the 2006 class's total sales potential over the six year period. Efforts to encourage greater hunting participation among hunter education graduates would boost license dollars and excise tax revenues that benefit wildlife conservation.

#### Introduction to Nevada's data:

Children under the age of 12 may not hunt big game in Nevada. Any person 12 years of age or older, who hunts game birds or game mammals in Nevada is required to have a hunting license or combination hunting and fishing license. Nevada has youth hunting licenses available for children (ages 12-15 years old). A hunting license is not required to hunt unprotected wild birds (English house sparrows and European starlings) or unprotected mammals (black-tailed jackrabbit, ring-tailed cat, badger, raccoon, coyote, skunk, weasel and ground squirrel).

#### **Results:**

The 2006 hunter education class in Nevada provided a total of 3,806 graduates, with 3,782 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2006 with 57.4% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using only license sales. During the six year span, the average age of those who continued to hunt decreased 0.2 years (Table 1). In total, over the course of the six years, the number of graduates who purchased a license decreased 46.5%.

Table 1. 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates		3,782		
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age
2006 <sup>4</sup>	2,058	57.4%	-	24.0
2007 <sup>5</sup>	1,861	49.9%	-9.6%	23.1
2008	1,607	42.5%	-13.6%	22.6
2009	1,404	37.1%	-12.6%	22.8
2010	1,223	32.3%	-12.9%	23.2
2011	1,102	29.1%	-9.9%	23.8
Change from 2006 to 2011		_	-46.5%	·

Most graduates do not buy a license each year. In fact, only about one-quarter bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 2,513 purchased at least one license during the six year period from 2006 through 2011, or 70.1%, compared to the 57.4% who bought in the first year they were eligible to buy a license. Over the six year period, 29.9% were never identified as having bought a license. Of those who did purchase a license, less than a quarter of all graduates (21.7%) purchased one in each of the six years.

20

<sup>&</sup>lt;sup>4</sup> A total of 358 graduates were excluded from analysis based on age requirements.

<sup>&</sup>lt;sup>5</sup> A total of 53 graduates were excluded from analysis based on age requirements.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006-2011	Number of HE Graduates	Percent	Of those who bought licenses
0	1,071	29.9%	-
1	557	15.5%	22.2%
2	375	10.5%	14.9%
3	349	9.7%	13.9%
4	324	9.0%	12.9%
5	362	10.1%	14.4%
6	546	15.2%	21.7%
Total	<sup>6</sup> 3,584		
Total of those who purchased at			
least once	2,513	70.1%	

In the Class of 2006, the age category that represented the largest portion of graduates was the 10-15 year-old segment, representing 44.9% of the class, or 1,697 graduates (Table 3). The average age in this age group is 12.8.

**Table 3. 2006 Hunter Education Graduates, by Age Category** 

Age	Number of Graduates	Average Age	%
10 to 15	1,697	12.8	44.9%
16-24	618	19.5	16.3%
25-35	711	29.9	18.8%
Older than 35	756	43.8	20.0%
Total	3,782		100.0%

In the 10 to 15 year-old age group, 28.0% never purchased a license. Within the same age group, 51.3% purchased at least three years out of the possible six. Of all graduates, 44.8% purchased a license at least three years out of the six possible, indicating younger graduates have a greater interest in hunting compared to older graduates (Table 4).

21

 $<sup>^{6}</sup>$  A total of 358 graduates were excluded from analysis due to age requirements based on their 2006 age.

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following Certification, by Age Category.

	Number of	Number of years purchased a license, 2006-2011		
Years of Age	Graduates	None	One - Two	Three - Six
10 to 15	1,697	28.0%	20.7%	51.3%
16-24	618	38.5%	31.6%	29.9%
25-35	711	28.8%	29.1%	42.1%
35 and older	756	28.7%	26.1%	45.2%
Total	3,782	30.0%	25.1%	44.8%

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 2,058 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license decreased by 956 purchases, or 46.5%. The age category with the largest decline was 16 to 24 year-olds representing a 54.8% decrease. Lifestyle factors might be affecting participation. At this age, over six years, graduates might be more likely to move on to college, military or jobs out of state, thus reducing their probability of buying a hunting license.

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought Licenses from 2006 to 2011.

	Number of Year of Purchase		Year of Purchase		ange
Age	Graduates	2006	2011	N	%
10 to 15	1,697	906	527	(379)	-41.8%
16-24	618	305	138	(167)	-54.8%
25-35	711	412	187	(225)	-54.6%
35 and older	756	435	250	(185)	-42.5%
Total	3,782	2,058	1,102	(956)	-46.5%

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Nevada achieved from its 2006 hunter education graduates through 2011 represented 41.2% of the total sales potential (Table 6). A total of 9,255 licenses-years were sold to graduates out of a possible 22,441 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Nevada is ranked 7<sup>th</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

	Actual Sales	Sales Potential	Percent of Potential Reached
I	9,255	22,441	41.2%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups are people who share an experience such as being born in the same time period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The "American Quilt" segment group represents the largest portion of the 2006 hunter education class with 21.5% of all graduates (Table 7). This group represents America's small towns and rural areas. It represents a more diverse microcosm of small-town life. In terms of license buying trends "Metropolis" graduates had the lowest rate of decline in buying licenses, with a decrease of 16.7% from 2006 to 2011. The residents within this group live and work in America's cities. They primarily live in older, single-family homes or row houses. The segment group with the largest decrease in purchases was "Scholars and Patriots" with a drop of 85.7%. The make-up of this group is typically comprised of youth in an ever-changing environment such as college life or military service. Every LifeMode group saw decreases regarding the number of graduates purchasing a license from 2006 to 2011, indicating substantial decreases in hunting participation among all types of hunters in the six years following graduation.

Table 7. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by LifeMode Group.

	Number of	% of 2006	Year of P	urchase	Cha	nge
Category	Graduates	Grads	2006	2011	N	%
American Quilt	815	21.5%	364	223	(141)	-38.7%
Factories and Farms	81	2.1%	31	12	(19)	-61.3%
Family Portrait	26	0.7%	426	237	(189)	-44.4%
Global Roots	289	7.6%	37	7	(30)	-81.1%
High Hopes	69	1.8%	78	33	(45)	-57.7%
High Society	747	19.8%	412	239	(173)	-42.0%
Metropolis	58	1.5%	6	5	(1)	-16.7%
No Classification	230	6.1%	136	72	(64)	-47.1%
Scholars and Patriots	16	0.4%	14	2	(12)	-85.7%
Senior Styles	518	13.7%	158	74	(84)	-53.2%
Solo Acts	626	16.6%	32	11	(21)	-65.6%
Traditional Living	138	3.6%	105	44	(61)	-58.1%
Upscale Avenues	169	4.5%	259	142	(117)	-45.2%
Total	3,782	100.0%	2,058	1,101	(957)	-46.5%

Urbanization summary groups are people who share a location, from the largest cities to the most rural farms. Common areas such as urban, suburban, etc. are divided based on income. Segments tagged with

an "I" are typically the higher income earners in these specific areas, while those marked with a "II" are generally lower income areas within each segment. Not surprisingly, Nevada hunter education graduates generally come from less urbanized regions of the state. The group with the largest purchasing change from 2006 to 2011 was Principle Urban Centers I. This group represents the most affluent populations of the country's largest metropolitan areas. Rural I showed the smallest decrease in purchasing from 2006 to 2011 with 34.0% (Table 8). These individuals represent small, nonfarm settlements, some of which are developing in suburban fringe areas. See Appendix at the end of the report for full description list of all urbanization summary groups.

Table 8. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by Urban Classification Group.

	Number of	% of 2006	Year of P	Year of Purchase		ange
Category	Graduates	Grads	2006	2011	N	%
No Classification	230	6.1%	136	72	(64)	-47.1%
Principle Urban Centers I	11	0.3%	4	0	(4)	-100.0%
Principle Urban Centers II	12	0.3%	6	2	(4)	-66.7%
Metro Cities I	355	9.4%	174	88	(86)	-49.4%
Metro Cities II	265	7.0%	135	55	(80)	-59.3%
Urban Outskirts I	253	6.7%	134	58	(76)	-56.7%
Urban Outskirts II	24	0.6%	14	5	(9)	-64.3%
Suburban Periphery I	1,511	40.0%	809	468	(341)	-42.2%
Suburban Periphery II	190	5.0%	105	46	(59)	-56.2%
Small Towns	289	7.6%	174	81	(93)	-53.4%
Rural I	561	14.8%	318	210	(108)	-34.0%
Rural II	81	2.1%	49	17	(32)	-65.3%
Total	3,782	100.0%	2,058	1,102	(956)	-46.5%

The month with the highest rate of graduation for the hunter education course in Nevada was April with 906 graduates, or 23.9% (Table 9). Graduates who never purchased a license were more likely to graduate in June when 49.6% of all June graduates never bought, followed by August (43.9%), (Figure 1). The months with the youngest graduates were April at 19.9 years old, followed by June at 22.2 years old. Older graduates are more common in July (Figure 2). June and August graduates were less likely to purchase licenses, for reasons not determined in this study.

Table 9. 2006 Hunter Education Graduates By Month Of Course Completion

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduated Who Never Purchased	Percent Of Total Who Never Purchased A License	Average Age Of Graduates Who Never Purchased a License
January	173	25.4	61	35.3%	24.0
February	356	22.4	84	23.6%	23.8
March	803	21.5	193	24.0%	22.4
April	906	22.5	218	24.1%	19.9
May	65	25.6	27	41.5%	28.5
June	135	25.2	67	49.6%	22.2
July	78	26.1	29	37.2%	28.5
August	228	24.2	100	43.9%	24.8
September	296	25.0	102	34.5%	24.2
October	426	24.3	130	30.5%	23.3
November	157	25.7	58	36.9%	26.7
December	159	22.7	66	41.5%	22.8

Figure 1. Number of Graduates who completed the Hunter Education Course by Month

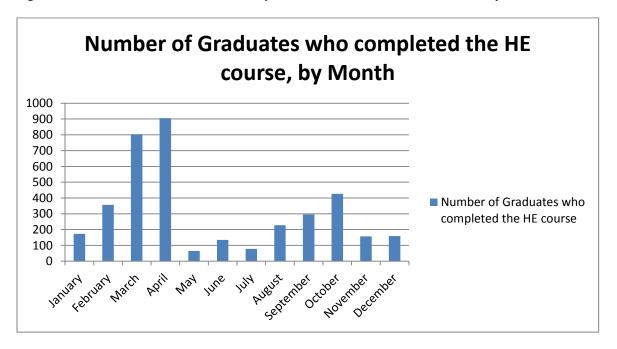


Figure 2. Average Age by Month of Graduation

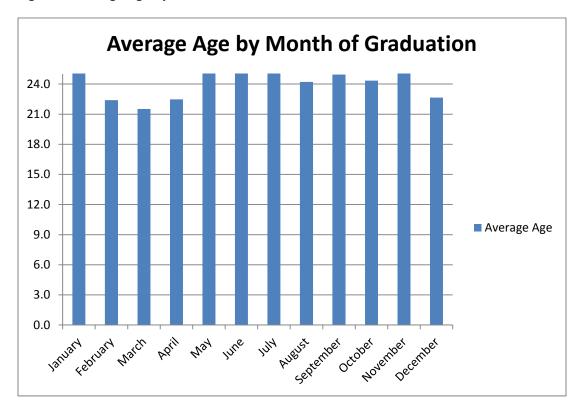
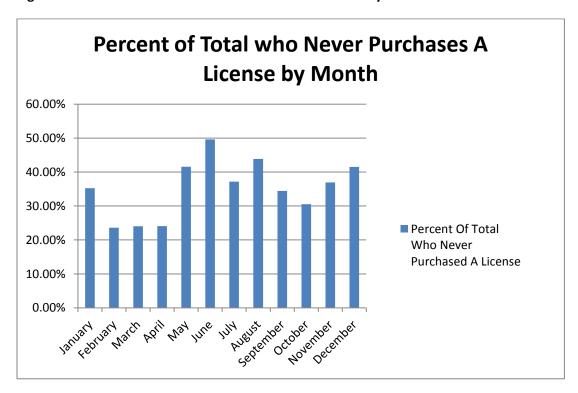


Figure 3. Percent of Total who Never Purchases A License by Month



#### Utah

#### **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Utah's 2006 hunter education class was tracked over the six years. In all, this class had 9,325 graduates, with 9,005 records usable for the analysis. Highlights include:

- When compared to the other states in the study, Utah is ranked 3<sup>rd</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Utah is ranked 1<sup>st</sup> out of the 12 states when looking at the percent change in the number of 2006 hunter education graduates who purchased a hunting license in this six year buying period.
- Within the six year period, the year that held the highest percentage of graduates purchasing a license was 2008 with 53.5% of the graduating class purchasing a license.
   Over the six year period, the number of graduates who purchased a license increased 5.4%.
- From the hunter education class of 2006, 7,030 (78.1%) purchased at least one license during the six year period of 2006-2011. Of the 9,005 hunter education graduates, 1,975 never purchased a license, representing 21.9% of the graduate class.
- Of these graduates, the 10-15 year-old age group represented the largest portion of the class, with 63.0% of all graduates.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Utah achieved 47.7% of the 2006 class's total sales potential over the six year period. Efforts to encourage greater hunting participation among hunter education graduates would boost license dollars and excise tax revenues that benefit wildlife conservation.

#### Introduction to Utah's data:

To hunt big game in Utah a hunter must be at least 12 years old. Youth hunters under the age of 16 must be accompanied by a parent, legal guardian or other responsible person 21 years old or older, who is approved by parent/legal guardian. There is no age restriction to hunt small game; however they must have passed hunter education in order to purchase the appropriate license. All hunters must possess either a valid Basic Hunting License or a Combination License before purchasing a more specific hunting permit. A Basic Hunting License is required to hunt Utah game animals. A Combination License is a combined Basic Hunting and Fishing License that is valid for 365 days from the date of purchase. In addition to either of these two licenses, an additional hunting permit is required to hunt many game animals.

#### **Results:**

The 2006 hunter education class in Utah provided a total of 9,325 graduates, with 9,005 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2008 with 53.5% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using only license sales records During the six year span, the average age of those who continued to hunt decreased 1.7 years, indicating younger hunters were less likely to discontinue hunting (Table 1). In total, over the course of the six years, the number of graduates who purchased a license increased 5.4%.

Table 1, 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates	9,005					
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age		
2006	3,726	41.4%	-	18.3		
2007	4,337	48.2%	16.4%	17.4		
2008	4,817	53.5%	11.1%	17.1		
2009	4,642	51.5%	-3.6%	16.8		
2010	4,309	47.9%	-7.2%	16.6		
2011	3,926	43.6%	-8.9%	16.6		
Change from 2006 to 2011			5.4%			

Most graduates do not buy a license each year. In fact, less than one-fifth bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 7,030 purchased at least one license during the six year period from 2006 through 2011, or 78.1%, compared to the 41.4% who bought in the first year they were eligible to buy a license. Over the six year period, 21.9% were never identified as having bought a license.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006- 2011	Number of HE Graduates	Percent	Of those who bought licenses
0	1,975	21.9%	-
1	1,183	13.1%	16.8%
2	971	10.8%	13.8%
3	955	10.6%	13.6%
4	1,198	13.3%	17.0%
5	1,363	15.1%	19.4%
6	1,360	15.1%	19.3%
Total	9,005		
Total of those who purchased at least once	7,030	78.1%	_

In the Class of 2006, the age category that represented the largest portion of graduates was the 10-15 year-old segment, representing 63.0% of the class, or 5,674 graduates (Table 3). The average age in this age group is 12.8 years old.

Table 3. 2006 Hunter Education Graduates, by Age Category

_	Number of	Average	
Age	Graduates	Age	%
10 to 15	5,674	12.8	63.0%
16-24	1,510	18.5	16.8%
25-35	1,210	30.7	13.4%
35 and older	611	46.9	6.8%
Total	9,005		100.0%

In the 10 to 15 year-old age group, 17.5% never purchased a license. Within the same age group, 60.8% purchased at least three years out of the possible six. Of all graduates, 54.1% purchased a license at least three years out of the six possible, indicating younger graduates have a greater interest in hunting compared to older graduates (Table 4).

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following Certification. by Age Category.

, ,	•	Number of years purchased a license, 2006-				
	Number of		2011			
Years of Age	Graduates	None One - Two Three -				
10 to 15	5,674	17.5%	21.7%	60.8%		
16-24	1,510	32.6%	29.6%	37.7%		
25-35	1,210	27.0%	27.1%	45.9%		
35 and older	611	26.2%	24.4%	49.4%		
Total	9,005	21.9%	23.9%	54.1%		

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 3,726 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license increased by 200 license purchases, or 5.4%. The age category with the largest decline was 16 to 24 year-olds representing a 24.8% decrease (Table 5). Lifestyle factors might be affecting participation. At this age, over six years, graduates might be more likely to move on to college, military or jobs out of state, thus reducing their probability of buying a hunting license.

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011

	Number of	Year of Purchase		Cha	ange
Age	Graduates	2006	2011	N	%
10 to 15	5,674	2,320	2,826	506	21.8%
16-24	1,510	580	436	(144)	-24.8%
25-35	1,210	536	428	(108)	-20.1%
35 and older	611	290	236	(54)	-18.6%
Total	9,005	3,726	3,926	200	5.4%

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Utah achieved from its 2006 hunter education graduates through 2011 represented 47.7% of the total sales potential (Table 6). A total of 25,757 licenses-years were sold to graduates out of a possible 54,030 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Utah ranked 5<sup>th</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

		Percent of Potential
Actual Sales	Sales Potential	Reached
25,757	54,030	47.7%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups are people who share an experience such as being born in the same time period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The "Family Portrait" segment group represents the largest portion of the 2006 hunter education class with 30.6% of all graduates (Table 7). This group has the fastest-growing population. Youth, family life, and the presence of children are the common characteristics among those in this group. In terms of license buying trends "American Quilt" graduates had the highest percent change of those who purchased a license with an increase of 31.5% from 2006 to 2011. These individuals represent America's small towns and rural areas. The segment group with the largest decrease in purchases was "Scholars and Patriots" with a drop of 47.2%. The make-up of this group is typically comprised of youth in an ever-changing environment such as college life or military service.

Table 7. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by LifeMode Group.

	Number of	% of 2006	Year of P	Year of Purchase		nge
Category	Graduates	Grads	2006	2011	N	%
American Quilt	1,115	12.4%	406	534	128	31.5%
Factories and Farms	504	5.6%	218	255	37	17.0%
Family Portrait	2,760	30.6%	1,134	1,177	43	3.8%
Global Roots	149	1.7%	67	47	(20)	-29.9%
High Hopes	512	5.7%	201	168	(33)	-16.4%
High Society	1,309	14.5%	567	564	(3)	-0.5%
Metropolis	24	0.3%	13	8	(5)	-38.5%
No Classification	477	5.3%	207	260	53	25.6%
Scholars and Patriots	87	1.0%	36	19	(17)	-47.2%
Senior Styles	250	2.8%	107	103	(4)	-3.7%
Solo Acts	73	0.8%	28	22	(6)	-21.4%
Traditional Living	593	6.6%	248	263	15	6.0%
Upscale Avenues	1,152	12.8%	494	506	12	2.4%
Total	9,005	100.0%	3,726	3,926	200	5.4%

Urbanization summary groups are people who share a location, from the largest cities to the most rural farms. Common areas such as urban, suburban, etc. are divided based on income. Segments tagged with an "I" are typically the higher income earners in these specific areas, while those marked with a "II" are generally lower income areas within each segment. In Utah, group with the largest purchasing change from 2006 to 2011 was Principle Urban Centers II with an 83.3% decrease. The content of this group represent the aspiring populations of the country's largest cities. Rural II showed the largest increase in purchasing from 2006 to 2011 with 37.6% (Table 8). Individuals within this group live in the country with very low population density. In general, Utah graduates that come from more rural areas and are less likely to stop purchasing licenses than graduates from more urban areas. See Appendix at the end of the report for full description list of all urbanization summary groups.

Table 8. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by Urban Classification Group.

	Number of	% of 2006	Year of Purchase		Cha	nge
Category	Graduates	Grads	2006	2011	N	%
No Classification	477	5.3%	207	260	53	25.6%
Principle Urban Centers I	10	0.1%	4	3	(1)	-25.0%
Principle Urban Centers II	12	0.1%	6	1	(5)	-83.3%
Metro Cities I	749	8.3%	319	283	(36)	-11.3%
Metro Cities II	509	5.7%	202	153	(49)	-24.3%
Urban Outskirts I	972	10.8%	428	409	(19)	-4.4%
Urban Outskirts II	58	0.6%	23	17	(6)	-26.1%
Suburban Periphery I	3178	35.3%	1325	1377	52	3.9%
Suburban Periphery II	501	5.6%	208	205	(3)	-1.4%
Small Towns	152	1.7%	70	60	(10)	-14.3%
Rural I	2029	22.5%	793	964	171	21.6%
Rural II	358	4.0%	141	194	53	37.6%
Total	9,005	100.0%	3,726	3,926	200	5.4%

The month with the highest rate of graduation for the hunter education course in Utah was January with 1,203 graduates, or 13.3% (Table 9). Graduates who never purchased a license were more likely to graduate in April when 26.1% of all April graduates never bought, followed by May (24.8%),(Figure 1). One possible explanation is that most hunting seasons are coming to a close or are not open and these graduates have to wait until an opportunity arises to hunt. This time gap may allow for a loss of interest and provides graduates ample time to adopt other activities. The months with the youngest graduates were April and November, both at 17.2 years old. Older graduated are more common in December (20.1%).

**Table 9. Hunter Education Graduates By Month Of Course Completion** 

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduated Who Never Purchased	Percent Of Total Who Never Purchased A License	Average Age Of Graduates Who Never Purchased a License
January	1,203	18.1	235	19.5%	18.6
February	1,104	18.3	267	24.2%	19.5
March	777	16.9	192	24.7%	18.7
April	601	17.2	157	26.1%	20.0
May	471	17.3	117	24.8%	19.3
June	442	17.5	105	23.8%	18.7
July	408	18.4	95	23.3%	20.8
August	892	18.5	152	17.0%	20.9
September	1,117	16.4	215	19.3%	19.1
October	670	18.7	164	24.5%	19.8
November	556	17.2	119	21.4%	19.2
December	764	20.1	157	20.6%	21.0

Figure 1. Number of Graduates who completed the Hunter Education Course by Month

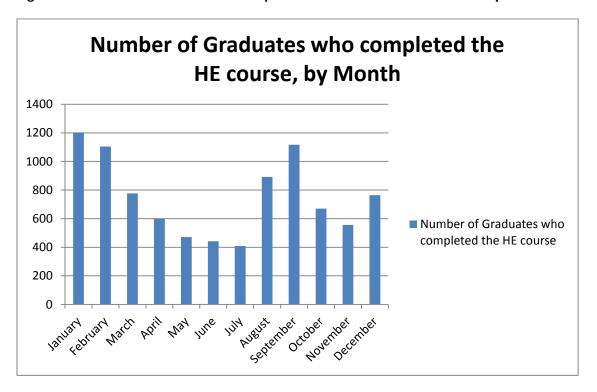


Figure 2. Average Age by Month of Graduation

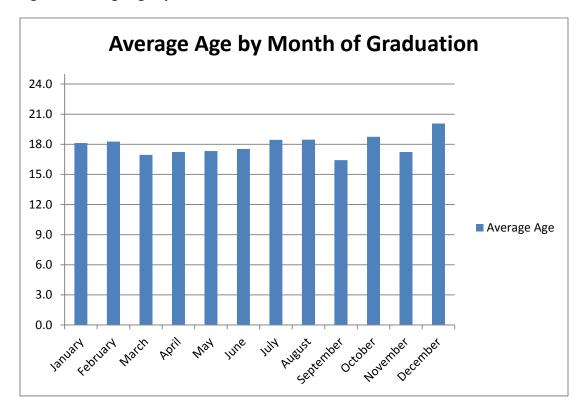


Figure 3. Percent of Total who Never Purchases A License by Month



## Washington

## **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Washington's 2006 hunter education class was tracked over six years. In all, this class had 11,937 graduates with all usable for the analysis. Highlights include:

- When compared to the other states in the study, Washington is ranked 10<sup>th</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Washington is ranked 11<sup>th</sup> out of 12 states when looking at the smallest percent change in the number of 2006 hunter education graduates who purchased a hunting license during this six year buying period.
- Within the six year period, the year that held the highest percentage of graduates purchasing a license was 2006 with 47.6% of the graduating class purchasing a license.
   Over the six year period, the number of graduates who purchased a license decreased 49.1%. Reasons for the decrease would need to be determined via direct surveys of recent graduates.
- From the hunter education class of 2006, 7,020 (58.8%) graduates purchased at least one license during the six year period of 2006-2011. Of the 11,937 hunter education graduates, 4,917 never purchased a license, representing 41.2% of the 2006 graduate class.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Washington achieved 34.6% of the 2006 class's total sales potential over the six year period. Efforts to encourage greater hunting participation among hunter education graduates would boost license dollars and excise tax revenues that benefit wildlife conservation.

## Introduction to Washington's data:

There is no minimum age to purchase a license in Washington; however each individual must first pass the hunter education course to be eligible to hunt.

Washington's data were limited, and did not provide date of birth or address records. Therefore analysis based on LifeMode characterizations (address/zip code information) and ages were not conducted.

#### **Results:**

The 2006 hunter education class in Washington provided a total of 11,937 graduates. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2006 with 47.6% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using only license sales records. In total, over the course of the six years, the number of graduates who purchased a license decreased 49.1%.

Table 1. 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates		11,937	
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year
2006	5,679	47.6%	-
2007	4,932	41.3%	-13.2%
2008	4,224	35.4%	-14.4%
2009	3,777	31.6%	-10.6%
2010	3,271	27.4%	-13.4%
2011	2,893	24.2%	-11.6%
Change from 2006 to 2011			-49.1%

Most graduates do not buy a license each year. In fact, less than one-fifth bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 7,020 purchased at least one license during the six year period from 2006 through 2011, or 58.8% (Table 2); compared to the 47.6% who bought in the first year they were eligible to buy a license. Of the 11,937 hunter education graduates, 4,917 never purchased a license, representing 41.2% of the graduate total. Of those who did purchase a license, less than a quarter (23.8%) purchased one in each year.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006- 2011	Number of HE Graduates	Percent	Of those who bought licenses
0	4,917	41.2%	-
1	1,413	11.8%	20.1%
2	1,186	9.9%	16.9%
3	944	7.9%	13.4%
4	899	7.5%	12.8%
5	905	7.6%	12.9%
6	1,673	14.0%	23.8%
Total	11,937		
Total of those who purchased at least once	7,020	58.8%	

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Washington achieved from its 2006 hunter education graduates through 2011 represented 34.6% of the total sales potential (Table 3). A total of 24,776 licenses-years were sold to graduates out of a possible 71,622 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Washington ranked 10<sup>th</sup> in regard to selling the greatest proportion of its potential license sales.

Table 3. Percent Of Revenue Achieved By Graduates Purchasing A License.

		Percent of Potential
Actual Sales	Sales Potential	Reached
24,776	71,622	34.6%

# Individual State Results - Midwest Region

## Michigan

### **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Michigan's 2006 hunter education class was tracked over six years. In all, this class had 31,891 graduates, with 30,915 records usable for the analysis. Highlights include:

- When compared to the other states in the study, Michigan is ranked 4<sup>th</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Michigan is ranked 4<sup>th</sup> out of the 12 states when looking at the smallest percent change in the number of 2006 hunter education graduates who purchased a hunting license in this six year buying period.
- Within the six year period, the year that held the highest percentage of graduates purchasing a license was 2006 with 59.4% of the graduating class purchasing a license.
   Over the six year period, the number of graduates who purchased a license decreased 34.6%. Reasons for the decrease would need to be determined via direct surveys of recent graduates.
- From the hunter education class of 2006, 23,701 (76.7%) graduates purchased at least one license during the six year period of 2006-2011. Of the 30,915 hunter education graduates, 7,214 never purchased a license, representing 23.3% of the 2006 graduating class.
- Of these graduates, the 10-15 year-old age group represented the largest portion of the class, with 75.6% of all graduates.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Michigan achieved 49.0% of the 2006 class's total sales potential over the six year period.

## Introduction to Michigan's data:

In order to purchase a regular hunting license, all hunters born on or after January 1, 1960, must present their hunter safety certificate, previous hunting license or sign their license in the presence of the license agent. Your signature certifies that you meet the residency and hunter safety requirements to purchase the license. This also applies to hunters who intend to hunt furbearers under a fur harvester license. Hunter safety is required if you want to purchase any Michigan hunting license, or if you are planning an out-of-state hunting trip. Michigan hunter education address data were unavailable, therefore analysis based on their LifeMode and Urbanization groups were not conducted.

#### **Comments:**

One has to wonder whether Michigan's economy had something to do with the license purchase frequency (Table 2 in Michigan's results). Years 3 and 4 (2009 and 2010) were very tough economically; especially in Michigan with the auto industry collapse, and possibly a parent wouldn't choose to spend money on a hunting license. The percent of Michigan HE graduates who purchased a license in 2011 increased to almost the same rate as the first year (2006), and Michigan's economy is slowly coming back.

#### **Results:**

The 2006 hunter education class in Michigan provided a total of 31,891 graduates, with 30,915 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2006 with 59.4% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using only license sales records. During the six year span, the average age of those who continued to hunt remained the same with little fluctuation year to year (Table 1). In total, over the course of the six years, the number of graduates who purchased a license decreased 34.6%.

Table 1. 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates		30,915		
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age
2006	18,367	59.4%	-	17.4
2007	16,954	54.8%	-7.7%	17.0
2008	15,844	51.3%	-6.5%	16.9
2009	14,628	47.3%	-7.7%	17.1
2010	13,034	42.2%	-10.9%	17.3
2011	12,009	38.8%	-7.9%	17.4
Change from 2006 to 2011			-34.6%	

Most graduates do not buy a license each year. In fact, only about one-quarter bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 23,701 purchased at least one license during the six year period from 2006 through 2011, or 76.7%, compared to the 59.4% who bought in the first year they were eligible to buy a license. Over the six year period, 23.3% were never identified as having bought a license. Of those who did purchase a license, less than a third (30.0%) purchased one in each year.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006-2011	Number of HE Graduates	Percent	Of those who bought licenses
0	7,214	23.3%	-
1	4,040	13.1%	17.0%
2	3,284	10.6%	13.9%
3	2,936	9.5%	12.4%
4	2,897	9.4%	12.2%
5	3,432	11.1%	14.5%
6	7,112	23.0%	30.0%
Total	30,915		
Total of those who purchased	23,701	76.7%	

In the Class of 2006, the age category that represented the largest portion of graduates was the 10-15 year-old segment, representing 75.6% of the class, or 23,364 graduates (Table 3). The average age in this age group is 12.4 years old.

**Table 3. 2006 Hunter Education Graduates, by Age Category** 

Age	Number of Graduates	Average Age	%
10 to 15	23,364	12.4	75.6%
16-24	2,795	18.0	9.0%
25-35	1,286	30.2	4.2%
Older than 35	3,470	45.4	11.2%
Total	30,915		100.0%

In the 10 to 15 year-old age group, 20.6% never purchased a license. Within the same age group, 55.7% purchased at least three years out of the possible six. Of all graduates, 53.0% purchased a license at least three years out of the six possible, indicating younger graduates have a greater interest in hunting compared to older graduates (Table 4).

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following Certification, by Age Category.

	Number of	Number of years purchased a license, 2006-2011			
Years of Age	Graduates	None One - Two Three - S			
10 to 15	23,364	20.6%	23.7%	55.7%	
16-24	2,795	34.1%	33.2%	32.7%	
25-35	1,286	29.5%	25.1%	45.3%	
Older than 35	3,470	30.6%	15.6%	53.7%	
Total	30,915	23.3%	23.7%	53.0%	

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 18,367 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license decreased by 6,358 or 34.6%. The age category with the largest decline was 16 to 24 year-olds representing a 60.5% decrease. Lifestyle factors might be affecting participation. At this age, over six years, graduates might be more likely to move on to college, military or jobs out of state, thus reducing their probability of buying a hunting license.

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011

	Number of	Year of Purchase 2006 2011		Cha	inge
Age	Graduates			N	%
10 to 15	23,364	13,979	9,412	(4,567)	-32.7%
16-24	2,795	1,508	595	(913)	-60.5%
25-35	1,286	763	418	(345)	-45.2%
Older than 35	3,470	2,117	1,584	(533)	-25.2%
Total	30,915	18,367	12,009	(6,358)	-34.6%

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Michigan achieved from its 2006 hunter education graduates through 2011 represented 49.0% of the total sales potential (Table 6). A total of 90,836 licenses-years were sold to graduates out of a possible 185,490 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Michigan ranked 3<sup>rd</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

		<b>Percent of Potential</b>
Actual Sales	Sales Potential	Reached
90,836	185,490	49.0%

The month with the highest rate of graduation for the hunter education course in Michigan was September with 9,848 graduates, or 31.9% (Table 7). The months with the youngest graduates were August at 16.7 years old, followed by June where the average age was 17.0 years old. Older graduates are more common in January (Figure 2). Graduates who never purchased a license were more likely to graduate in June where 34.8% of all June graduates never bought, followed by January (29.6%). One possible explanation is that most hunting seasons are coming to a close or are not open and these graduates have to wait until an opportunity arises to hunt. This time gap may allow for a loss of interest and provides graduates ample time to adopt other activities.

**Table 7. Hunter Education Graduates By Month Of Course Completion** 

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduated Who Never Purchased	Percent Of Total Who Never Purchased A License	Average Age Of Graduates Who Never Purchased a License
January	425	19.1	126	29.6%	19.7
February	604	18.8	160	26.5%	19.5
March	1,736	18.7	426	24.5%	19.8
April	2,112	18.0	529	25.0%	20.3
May	1,441	17.9	412	28.6%	19.1
June	655	17.0	228	34.8%	17.5
July	900	17.5	238	26.4%	17.5
August	5,963	16.7	1,144	19.2%	19.0
September	9,848	17.1	2,147	21.8%	19.7
October	4,952	17.4	1,243	25.1%	18.9
November	2,082	17.3	507	24.4%	18.9
December	197	17.9	54	27.4%	18.7

Figure 1. Number of Graduates who completed the Hunter Education Course by Month

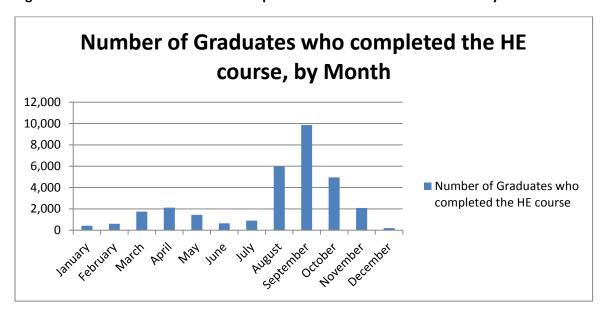


Figure 2. Average Age by Month of Graduation

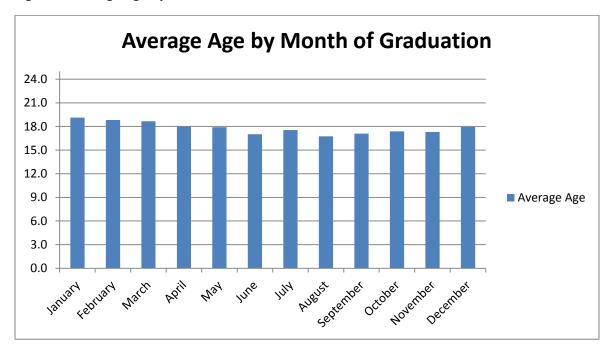
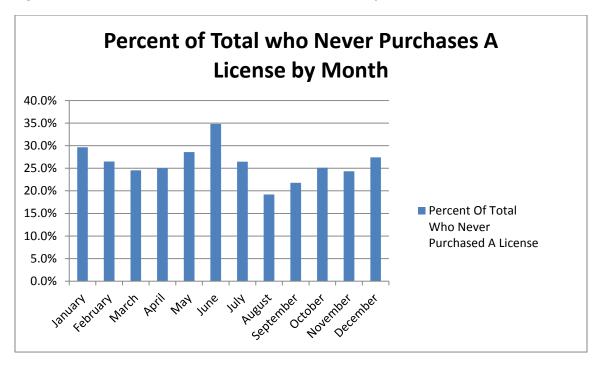


Figure 3. Percent of Total who Never Purchases A License by Month



## Missouri

## **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Missouri's 2006 hunter education class was tracked over six years. In all, this class 28,008 graduates, with 27,952 records usable for the analysis. Highlights include:

- When compared to the other states in the study, Missouri is ranked 6<sup>th</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Missouri is ranked 8<sup>th</sup> out of 12 states when looking at the smallest percent change in the number of 2006 hunter education graduates who purchased a hunting license in this six year buying period.
- As with most states, the greatest proportion of graduates bought a license in the first year. Over the six year period, the number of graduates who purchased a license decreased 44.4%. Reasons for the decrease would need to be determined via direct surveys of recent graduates.
- From the hunter education class of 2006, 19,774 (70.3%) purchased at least one license during the six year period of 2006-2011. Of the 27,952 hunter education graduates, 8,295 never purchased a license, representing 29.7% of the total class.
- Of these graduates, the 10-15 year-old age group represented the largest portion of the class, with 50.8% of all graduates.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Missouri achieved 46.2% of the 2006 class's total sales potential over the six year period. Efforts to encourage greater hunting participation among hunter education graduates would boost license dollars and excise tax revenues that benefit wildlife conservation.
- Only 10.1% of certified bow hunters failed to purchase a hunting license after graduation, compared to 29.7% of students who took the standard hunter education course, indicating participation in bowhunting certification is more common among people with a higher level of interest in hunting.
- From 2006 to 2011, the percent of all graduates who purchased a big game license decreased 47.1%. The age segment that had the highest decrease in purchasing big game licenses is 16 to 24 year-olds, at 48.1%. Increases were not seen in any age group. The age group with the least decline was 35 and older (-34.3%). Compared to small game license buyers, there were 59.4% more big game license buyers in 2011. Trends in small game license buyers showed increases, but this was due to different big and small game licensing requirements for youth as described next.

#### Introduction to Missouri's data:

Landowners in Missouri do not need a license to fish or to hunt small game on their property; however, they do need a license to hunt deer or turkey. These licenses are available to landowners at no cost. Youth are defined as age 15 or younger. Youths do not need a license to fish or hunt small game, but they do need a license to fish for trout, or hunt deer and turkey. When youths are required to buy a license, prices are reduced by half. This half-price license policy for youths has been in place since 2009. For youths who had not completed a hunter education program, Missouri had a permit called the Youth Deer & Turkey hunting permit, which was available from 1999 through early 2009. This permit was available to hunters from age 6 to 11 for \$17.00 and allowed them to hunt spring turkey, fall turkey, and firearms deer. Youth hunters who successfully completed a course could buy the regular adult permit (at the regular adult cost) and hunt without restriction. The changes to these regulations presented challenges in tracking hunting participation among 2006 graduates across the 2009 regulation changes, but by carefully matching each year's hunting license buyer by age to the regulations specific to that year, it was possible to successfully monitor participation rates by the Class of 2006.

#### **Comments:**

Unlike many other states, Missouri has a significant number of public and private schools, especially rural schools that have the Hunter Education Certification Course as part of a class's curriculum. This means a lot of students take and graduate from the course that do not come from a hunting background or family and never follow into hunting. This automatically decreases our graduates purchase ratio.

#### **Results:**

The 2006 hunter education class in Missouri provided a total of 28,008 graduates, with 27,952 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2006 with 63.9% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using only license sales records. During the six year span, the average age of those who continued to hunt only rose 1.3 years. In total, over the course of the six years, the number of graduates who purchased a license decreased 44.4%.

Table 1. 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates		27,952		
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age
2006	17,866	63.9%	-	22.2
2007	14,127	50.5%	-20.9%	22.5
2008	12,837	45.9%	-9.1%	22.7
2009	12,130	43.4%	-5.5%	23.2
2010	10,542	37.7%	-13.1%	23.2
2011	9,929	35.5%	-5.8%	23.5
Change from 2006 to 2011			-44.4%	

Most graduates do not buy a license each year. In fact, only about one-quarter bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 19,657 purchased at least one license during the six year period from 2006 through 2011, or 70.3%, compared to the 63.9% who bought in the first year they were eligible to buy a license. Over the six year period, 29.7% were never identified as having bought a license. Of those who did purchase a license, 32.3% purchased in each of the six years.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification

Number of years purchased a license, 2006-2011	Number of HE graduates	Percent	Of those who bought licenses
0	8,295	29.7%	-
1	3,197	11.4%	16.3%
2	2,485	8.9%	12.6%
3	2,334	8.4%	11.9%
4	2,288	8.2%	11.6%
5	3,008	10.8%	15.3%
6	6,345	22.7%	32.3%
Total	27,952		
Total of those who purchased	19,657	70.3%	

In the Class of 2006, the age category that represented the largest portion of graduates was the 10-15 year-old segment, representing 50.8% of the class, or 14,196 graduates (Table 3). The average age in this age group is 12.7 years old.

Table. 3 2006 Hunter Education Graduates, by Age Category

	Number of	Average	
Age	Graduates	Age	%
10 to 15	14,196	12.7	50.8%
16-24	5,319	18.8	19.0%
25-35	2,821	29.3	10.1%
35 and older	5,616	44.6	20.1%
Total	27,952		100.0%

In the 10 to 15 year-old age group, 28.4% never purchased a license. Within this same age group, 51.8% purchased at least three years out of the six. Of all graduates, 50.0% purchased a license at least three years out of the six possible, indicating younger graduates have a greater interest in hunting compared to older graduates (Table 4).

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following Certification, by Age Category.

	Number of	Number of years purchased a license, 2006-2011				
Age	Graduates	None One - Two Three – Six				
10 to 15	14,196	28.4%	19.7%	51.8%		
16-24	5,319	37.3%	25.3%	37.5%		
25-35	2,821	26.8%	24.1%	49.1%		
35 and older	5,616	27.1%	15.2%	57.7%		
Total	27,952	29.7%	20.3%	50.0%		

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 17,866 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license decreased by 7,937, or 44.4%. The age category with the largest decline was 16 to 24 year-olds representing a 55.8% decrease. Lifestyle factors might be affecting participation. At this age, over six years, graduates might be more likely to move on to college, military or jobs out of state, thus reducing their probability of buying a hunting license.

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought licenses from 2006 to 2011

	Number	Year of P	urchase	Change		
	of					
Age	Graduates	2006	2011	N	%	
10 to 15	14,196	9,306	5,062	(4,244)	-45.6%	
16-24	5,319	2,956	1,307	(1,649)	-55.8%	
25-35	2,821	1,862	968	(894)	-48.0%	
35 and older	5,616	3,742	2,592	(1,150)	-30.7%	
Total	27,952	17,866	9,929	(7,937)	-44.4%	

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales Missouri achieved from its 2006 hunter education graduates through 2011 represented 46.2% of the total sales potential (Table 6.) A total of 77,431 license-years were sold to graduates out of a possible 167,712 license-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Missouri ranked 6<sup>th</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

		Percent of
Actual Sales	<b>Sales Potential</b>	<b>Potential Reached</b>
77,431	167,712	46.2%

Compared to graduates who only took the hunter education course, graduates who also earned bow hunting certification were more likely to purchase a hunting license following graduation from the course. Only 10.1% of certified bow hunters failed to purchase a hunting license after graduation, compared to 29.7% of students who only took the hunter education course. Fifty-eight percent, or 238, of the 407 hunter education graduates who also earned bow hunting certification purchased a hunting license in all six years (Table 7), compared to 22.7% of all standard graduates (Table 2).

**Table 7. License Purchase Frequency By 2006 Bow Hunting Certified Graduates** 

	Number of	
Number of years purchased a	HE	% of Graduates Who Bought
license, 2006-2011	Graduates	a License
0	41	10.1%
1	17	4.2%
2	13	3.2%
3	17	4.2%
4	31	7.6%
5	50	12.1%
6	238	58.5%
Total	407	100.0%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups are people who share an experience such as being born in the same time period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The "Factories and Farms" segment group represents the largest portion of the 2006 hunter education class with 23.3% of all graduates (Table 8). This group represents rural life and small towns, employed primarily in manufacturing or agriculture fields. In general, most hunter education graduates in Missouri come from medium to lower income segments. In terms of license buying trends, "Traditional Living" graduates had the second largest decrease of those who purchased a license, with 52.7% fewer buying licenses in 2011 compared to 2006. The segment group with the largest decrease was "Scholars and Patriots" with a drop of 56.3% of license buyers (Table 8). The make-up of this group is typically comprised of youth in an ever-changing environment such as college life or military service. Overall, the difference in hunting participation over time does not vary significantly based on lifestyle segments, indicating that motivations driving hunting generally overcome other lifestyle characteristics. Every LifeMode group saw decreases regarding the number of graduates purchasing a license from 2006 to 2011, indicating substantial decreases in hunting participation among all types of hunters in the six years following graduation.

Table 8. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by LifeMode Group

	Number of	% of 2006	Year of P	Year of Purchase		nge
Category	Graduates	Grads	2006	2011	N	%
American Quilt	5,806	20.8%	3,862	2,142	(1,720)	-44.5%
Factories and Farms	6,521	23.3%	4,447	2,586	(1,861)	-41.8%
Family Portrait	1,791	6.4%	1,004	525	(479)	-47.7%
Global Roots	109	0.4%	68	37	(31)	-45.6%
High Hopes	1,074	3.8%	650	334	(316)	-48.6%
High Society	1,919	6.9%	1,056	629	(427)	-40.4%
Metropolis	198	0.7%	116	64	(52)	-44.8%
No Classification	654	2.3%	440	264	(176)	-40.0%
Scholars and Patriots	275	1.0%	160	70	(90)	-56.3%
Senior Styles	4,623	16.5%	3,028	1,703	(1,325)	-43.8%
Solo Acts	204	0.7%	109	53	(56)	-51.4%
Traditional Living	2,159	7.7%	1,299	614	(685)	-52.7%
Upscale Avenues	2,619	9.4%	1,627	908	(719)	-44.2%
Total	27,952	100.0%	17,866	9,929	(7,937)	-44.4%

Urbanization summary groups are people who share a location, from the largest cities to the most rural farms. Common areas such as urban, suburban, etc. are divided based on income. Segments tagged with an "I" are typically the higher income earners in these specific areas, while those marked with a "II" are generally lower income areas within each segment. Missouri hunter education graduates generally come from less urbanized regions of the state. In the transition urban outskirt zones, graduates tend to come from higher income neighborhoods. The group with the largest purchasing change from 2006 to 2011 was Principle Urban Centers II with a 71.4% decrease. This group represents the larger cities with a young and diverse population. Suburban Periphery II had the second largest decrease with a 50.2% decline. The content of this group embodies urban clusters in smaller cities within metropolitan areas. Metro Cities II saw the third highest decrease with a 49.7% loss in purchases (Table 9). This category represents neighborhoods in transition, starter homes, and retirees. In general, Missouri graduates from more urbanized areas are more likely to stop purchasing licenses than graduates from more rural areas, though the differences were not that significant and likely do not warrant developing intervention efforts unique to each group. See Appendix at the end of the report for full description list of all urbanization summary groups.

Table 9. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by Urban Classification Group

	Number of	% of 2006	Year of F	Year of Purchase		nge
Category	Graduates	Grads	2006	2011	N	%
No Classification	654	2.3%	440	264	(176)	-40.0%
Principle Urban Centers I	31	0.1%	6	5	(1)	-16.7%
Principle Urban Centers II	29	0.1%	14	4	(10)	-71.4%
Metro Cities I	958	3.4%	506	276	(230)	-45.5%
Metro Cities II	968	3.5%	590	297	(293)	-49.7%
Urban Outskirts I	2,044	7.3%	1,183	598	(585)	-49.5%
Urban Outskirts II	733	2.6%	461	246	(215)	-46.6%
Suburban Periphery I	3,222	11.5%	1,863	1,032	(831)	-44.6%
Suburban Periphery II	3,276	11.7%	1,974	984	(990)	-50.2%
Small Towns	3,691	13.2%	2,450	1,385	(1,065)	-43.5%
Rural I	6,554	23.4%	4,356	2,490	(1,866)	-42.8%
Rural II	5,792	20.7%	4,023	2,348	(1,675)	-41.6%
Total	27,952	100.0%	17,866	9,929	(7,937)	-44.4%

From 2006 to 2011, the percent of graduates who purchased a small game license increased 81.7%, compared to a decrease of 47.1% of those who purchased a big game license during the same period (Table 10). The increase in small game license buyers in 2009 thru 2011 is likely a result of graduates who were younger than sixteen in prior years, turning sixteen where a small game license is required.

Table 10. 2006 Hunter Education Graduates Who Purchased A Small Or Big Game License, by Year

	Small Gar	me License B	uyers	Big Ga	me License B	Buyers
	Number of			Number of		
	Graduates	Number		Graduates	Number	
	Required To	of	% Of Those	Required To	of	% Of Those
Purchase	Purchase A	License	Required To	Purchase A	License	Required To
Year	License	Buyers	Buy	License	Buyers	Buy
2006	13,756	2,063	15.0%	27,952	17,456	62.4%
2007	15,436	1,936	12.5%	27,952	13,684	49.0%
2008	18,083	1,724	9.5%	27,952	12,455	44.6%
2009	21,251	3,745	17.6%	27,952	11,246	40.2%
2010	25,066	3,357	13.4%	27,952	9,856	35.3%
2011	27,940	3,749	13.4%	27,952	9,232	33.0%
Change from 2006 to 2011		81.7%			-47.1%	

The average age of 2006 hunter education graduates who purchased a small game license decreased from 2006 to 2011 confirming that younger graduates are interested in small game licenses to some uncertain level. The average age of graduates who purchased a big game license increased throughout the six years (Table 11), warranting older graduates are more interested in hunting and purchasing big game licenses.

Table 11. Average Age of Graduates by Type of License Purchased

	Small Game License Buyers	Big Game License Buyers
Purchase Year	Average Age	Average Age
2006	30.1	22.1
2007	28.8	22.4
2008	28.2	22.6
2009	28.4	23.0
2010	27.0	23.1
2011	25.5	23.4

The total number of big game license buyers from the 2006 hunter education class fell by 8,224 from 2006 to 2011, or 47.1%. The age segment that had the highest decrease of all graduates in purchasing big game licenses was the 16 to 24 year-old group, at 58.4%. The age group with the least decline was 35 and older, with a 34.3% decrease (Table 12).

Table 12. Change in Big Game license purchasing by 2006 Hunter Education graduates, by Age

	Number of	Year of Purchase		Change		
Age	Graduates	2006	2011	N	%	
10 to 15	14,196	9,225	4,789	(4,436)	-48.1%	
16-24	5,319	2,825	1,175	(1,650)	-58.4%	
25-35	2,821	1,775	883	(892)	-50.3%	
35 and older	5,616	3,631	2,385	(1,246)	-34.3%	
Total	27,952	17,456	9,232	(8,224)	-47.1%	

The amount of graduates who purchased a small game license increased by 81.7%, or 1,686 license buyers (Table 13). The age group with the highest percent change in graduates purchasing a license was the 10 to 15 year-olds with an increase of 370.7%. This was driven by unique licensing requirements in Missouri for small game, as compared to big game. In comparison to big game purchases where all age groups saw a decline in participation, even the "35 and older" group increased their small game license purchases over the six years. The reasons for this increase are uncertain, although some could speculate it is to be afield with their children.

Table 13. Change in Small Game license purchasing by 2006 Hunter Education graduates, by Age

	Number of	Year of Purchase		Change		
Age	Graduates	2006	2011	N	%	
10 to 15	14,196	372	1,751	1,379	370.7%	
16-24	5,319	497	422	(75)	-15.1%	
25-35	2,821	379	360	(19)	-5.0%	
35 and older	5,616	815	1,216	401	49.2%	
Total	27,952	2,063	3,749	1,686	81.7%	

The month with the highest rate of graduation for the hunter education course in Missouri was October with 7,425 graduates, or 26.6% (Table 14). Graduates who never purchased a license were more likely to graduate in December when 55.0% of all December graduates never bought, followed by May (54.6%), then January and February at 43.4% and 41.6%, respectively (Figure 1). One possible explanation is that most hunting seasons are coming to a close and these graduates have to wait until an opportunity arises to hunt. This time gap may allow for a loss of interest and provides graduates ample time to adopt other activities. The months with the youngest graduates were May and June at 18.8 and 17.4 years old, respectively. Older graduates are more common in July and January.

Table 14. Hunter Education Graduates By Month Of Course Completion

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduates who never Purchased	Percent of Total who never Purchased a License	Average age of Graduates who never Purchased a License
January	901	24.5	391	43.4%	23.1
February	1,670	21.8	694	41.6%	20.8
March	3,611	22.3	1,014	28.6%	22.3
April	2144	23.0	730	34.6%	22.8
May	592	18.8	323	54.6%	18.0
June	477	17.4	193	40.5%	16.0
July	530	25.0	145	27.4%	24.3
August	2,585	23.0	555	21.5%	23.4
September	4,439	22.7	1,031	23.2%	23.2
October	7,425	21.7	1,842	24.8%	22.0
November	2,523	20.7	797	31.6%	20.2
December	1,055	19.9	580	55.0%	19.9

Figure 1. Number of Graduates who Graduated by Month in 2006

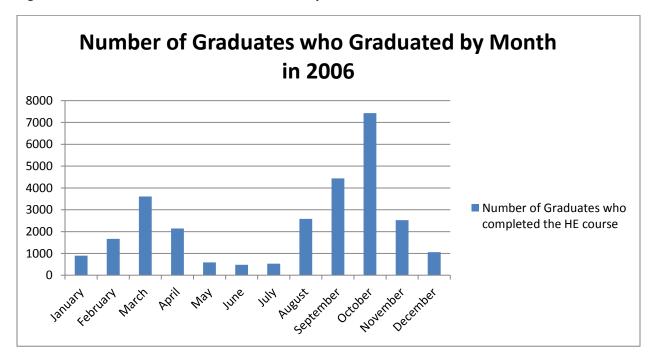


Figure 2. Average Age by Month of Graduation

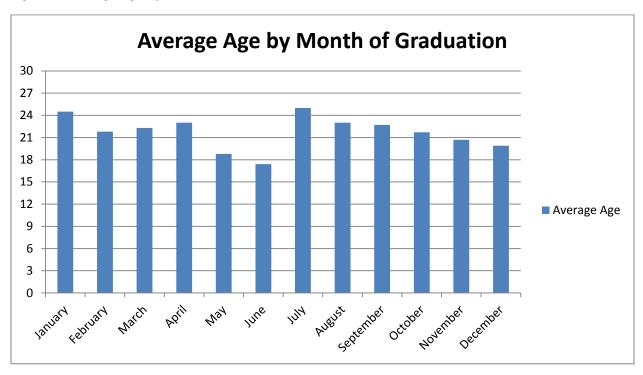




Figure 3. Percent of Total Who Never Purchased a License, By Month

## Nebraska

## **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Nebraska's 2006 hunter education class was tracked over six years. In all, this class had 8,321 graduates, with 8,313 records usable for the analysis. Highlights include:

- When compared to the other states in the study, Nebraska is ranked 9<sup>th</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Nebraska is ranked 2<sup>nd</sup> out of 12 states when looking at the smallest percent change in the number of 2006 hunter education graduates who purchased a hunting license in this six year buying period.
- Within the six year period, the year that held the highest percentage of graduates purchasing a license was 2007 with 44.1% of the graduating class purchased a license.
   Over the six year period, the number of graduates who purchased a license decreased 0.9%. Reasons for the decrease would need to be determined via direct surveys of recent graduates.
- From the hunter education class of 2006, 5,286 (63.6%) graduates purchased at least one license during the six year period of 2006-2011. Of the 8,313 hunter education graduates, 3,027 never purchased a license, representing 36.4% of the total class.
- Of these graduates, the 10-15 year-old age group represented the largest portion of the class, with 63.5% of all graduates.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Nebraska achieved 40.7% of the 2006 class's total sales potential over the six year period. Efforts to encourage greater hunting participation among hunter education graduates would boost license dollars and excise tax revenues that benefit wildlife conservation.
- Only 16.8% of certified archery students failed to purchase a hunting license after graduation, compared to 36.4% of students who took the standard hunter education course, indicating participation in bowhunting certification is more common among people with a higher level of interest in hunting.
- From 2006 to 2011, the percent of graduates who purchased a big game license decreased 3.5% from 2006 to 2011. The age segment of graduates that had the highest decrease in purchasing big game licenses was 16 to 24 year-olds, at a 33.9%. Compared to small game license buyers, there were 34.9% more big game license buyers in 2011. Trends in small game license buyers showed increases, but this was due to different big and small game licensing requirements for youth.

#### Introduction to Nebraska's data:

Landowners and immediate family who live on the land they own or lease may hunt upland game birds (except turkey), squirrels, rabbits and furbearers (within a hunting season) on that land within regulations without obtaining a Nebraska hunting permit. No resident under age 16 is required to purchase a hunting license for upland game birds (except turkey), squirrels, rabbits and furbearers (within a hunting season). All non-residents must obtain a permit, no matter their age.

Overall, nine records were excluded from analysis. When analyzing monthly graduation date, 381 records were omitted within analysis as result of missing information; however the same records provided unimpaired data for the remaining fields studied.

#### **Results:**

The 2006 hunter education class in Nebraska provided a total of 8,321 graduates, with 8,313 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2007 with 44.1% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using only license sales records. During the six year span, the average age of those who continued to hunt decreased 2.8 years, indicating younger hunters were less likely to discontinue hunting (Table 1). In total, over the course of the six years, the number of graduates who purchased a license decreased 0.9%.

Table 1. 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates		8,313		
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age
2006	3,202	38.5%	-	22.1
2007	3,662	44.1%	14.4%	20.3
2008	3,535	42.5%	-3.5%	19.9
2009	3,436	41.3%	-2.8%	19.7
2010	3,315	39.9%	-3.5%	19.3
2011	3,174	38.2%	-4.3%	19.3
Change from 2006 to 2011			-0.9%	

Most graduates do not buy a license each year. In fact, only about one-fifth bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 5,286 purchased at least one license during the six year period from 2006 through 2011, or 63.6%, compared to the 38.5% who bought in the first year they were eligible to buy a license. Over the six year period, 36.4% were never identified as having bought a license. Of those who did purchase a license, less than a third of all graduates (29.5%) purchased one in each of the six years.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006-2011	Number of HE Graduates	Percent	Of those who bought licenses
0	3,027	36.4%	-
1	916	11.0%	17.3%
2	714	8.6%	13.5%
3	629	7.6%	11.9%
4	603	7.3%	11.4%
5	863	10.4%	16.3%
6	1,561	18.8%	29.5%
Total	8,313		
Total of those who purchased	5,286	63.6%	

In the Class of 2006, the age category that represented the largest portion of graduates was the 10-15 year-old segment, representing 63.5% of the class, or 5,276 graduates (Table 3). The average age in this age group is 12.7 years old.

Table 3. 2006 Hunter Education Graduates, by Age Category

Age	Number of Graduates	Average Age	%
10 to 15	5,276	12.7	63.5%
16-24	1,414	19.1	17.0%
25-35	705	28.3	8.5%
35 and older	918	45.8	11.0%
Total	8,313		100.0%

In the 10 to 15 year-old age group, 40.0% never purchased a license. Within the same age group, 40.8% purchased at least three years out of the possible six. Of all graduates, 44.0% purchased a license at least three years out of the six possible, indicating older graduates have a greater interest in hunting compared to older graduates (Table 4).

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following Certification, by

Age Category.

	Number of				
Years of Age	Graduates				
10 to 15	5,276	40.0%	19.2%	40.8%	
16-24	1,414	33.9%	22.6%	43.4%	
25-35	705	21.4%	19.9%	58.7%	
35 and older	918	30.8%	17.2%	52.0%	
Total	8,313	36.4%	19.6%	44.0%	

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 3,202 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license decreased by 28, or 0.9%. The age category with the largest decline was 16 to 24 year-olds representing a 39.6% decrease. Lifestyle factors might be affecting participation. At this age, over six years, graduates might be more likely to move on to college, military or jobs out of state, thus reducing their probability of buying a hunting license. The only age category that had an increase in graduates purchasing a license was 10 to 15 year-olds (37%).

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought licenses from 2006 to 2011

	Number Year of Purchase		Change		
	of				
Age	Graduates	2006	2011	N	%
10 to 15	5,276	1,463	2,005	542	37.0%
16-24	1,414	742	448	(294)	-39.6%
25-35	705	476	323	(153)	-32.1%
35 and older	918	521	398	(123)	-23.6%
Total	8,313	3,202	3,174	(28)	-0.9%

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Nebraska achieved from its 2006 hunter education graduates through 2011 represented 40.7% of the total sales potential (Table 6). A total of 20,324 licenses-years were sold to graduates out of a possible 49,878 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Nebraska ranked 8<sup>th</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

	Actual Sales	Sales Potential	Percent of Potential Reached
ĺ	20.324	49.878	40.7%

Compared to graduates who only took the hunter education course, graduates who also earned archery certification were more likely to purchase a hunting license following graduation from the course. Only 16.8% of certified archery hunters failed to purchase a hunting license after graduation, compared to 36.4% of students who only took the hunter education course. Forty-one percent, or 787, of the 1,945 hunter education graduates who also earned archery certification purchased a hunting license in all six years (Table 7), compared to 18.8% of all standard graduates (Table 2).

Table 7. License Purchase Frequency By 2006 Archery Certified Graduates.

Number of years purchased a license, 2006-2011	Number of HE Graduates	% of Graduates Who Bought a License
0	326	16.8%
1	128	6.6%
2	148	7.6%
3	134	6.9%
4	149	7.7%
5	273	14.0%
6	787	40.5%
Total	1,945	100.00%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups are people who share an experience such as being born in the same time period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The "Factories and Farms" segment group represents the largest portion of the 2006 hunter education class with 35.9% of all graduates (Table 8). This group represents rural life and small towns, employed primarily in manufacturing or agriculture fields. In general, most hunter education graduates in Nebraska come from medium to lower income segments. In terms of license buying trends "Factories and Farms" graduates had the highest positive percent change of those who purchased a license with an increase of 15.3% from 2006 to 2011. The segment group with the largest decrease in purchases was "Solo Acts" with a drop of 51.2%. The make-up of this group is typically a younger population preferring city lifestyles. Every LifeMode group saw decreases, except "Senior Styles" and "Factories and Farms," regarding the number of graduates purchasing a license from 2006 to 2011, indicating substantial decreases in hunting participation among all types of hunters in the six years following graduation.

Table 8. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by LifeMode Group.

	Number of	% of 2006	Year of P	Year of Purchase		nge
Category	Graduates	Grads	2006	2011	N	%
American Quilt	342	4.1%	130	121	(9)	-6.9%
Factories and Farms	2,982	35.9%	1,196	1,379	183	15.3%
Family Portrait	588	7.1%	239	194	(45)	-18.8%
Global Roots	87	1.0%	30	20	(10)	-33.3%
High Hopes	270	3.2%	115	92	(23)	-20.0%
High Society	730	8.8%	248	210	(38)	-15.3%
Metropolis	42	0.5%	11	7	(4)	-36.4%
No Classification	161	1.9%	69	66	(3)	-4.3%
Scholars and Patriots	94	1.1%	38	24	(14)	-36.8%
Senior Styles	1,222	14.7%	455	467	12	2.6%
Solo Acts	95	1.1%	41	20	(21)	-51.2%
Traditional Living	892	10.7%	331	289	(42)	-12.7%
Upscale Avenues	808	9.7%	299	285	(14)	-4.7%
Total	8,313	100.0%	3,202	3,174	(28)	-0.9%

Urbanization summary groups are people who share a location, from the largest cities to the most rural farms. Common areas such as urban, suburban, etc. are divided based on income. Segments tagged with an "I" are typically the higher income earners in these specific areas, while those marked with a "II" are generally lower income areas within each segment. Not surprisingly, Nebraska hunter education graduates generally come from less urbanized regions of the state. The group with the largest purchasing change from 2006 to 2011 was Principle Urban Centers I with a 100% decrease. The content of this group represent the prosperous majority of the major city populations. Principle Urban Centers II had the second largest decrease with a 33.3% decline. This group represents the larger cities with a young and diverse population. Rural II showed the largest increase in purchasing from 2006 to 2011 with 16.2% (Table 9). Individuals within this group live in the country with very low population density. In general, Nebraska graduates come from more rural areas and are less likely to stop purchasing licenses than graduates from more urban areas, though the differences were not that significant and likely do not warrant developing intervention efforts unique to each group.

Table 9. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by Urban Classification Group.

	Number of	% of 2006	Year of Purchase		Cha	ange
Category	Graduates	Grads	2006	2011	N	%
No Classification	161	1.9%	69	66	(3)	-4.3%
Principle Urban Centers I	2	0.0%	2	0	(2)	-100.0%
Principle Urban Centers II	30	0.4%	12	8	(4)	-33.3%
Metro Cities I	356	4.3%	145	115	(30)	-20.7%
Metro Cities II	290	3.5%	123	86	(37)	-30.1%
Urban Outskirts I	1,025	12.3%	381	306	(75)	-19.7%
Urban Outskirts II	126	1.5%	48	37	(11)	-22.9%
Suburban Periphery I	999	12.0%	346	308	(38)	-11.0%
Suburban Periphery II	813	9.8%	294	260	(34)	-11.6%
Small Towns	847	10.2%	314	341	27	8.6%
Rural I	1,066	12.8%	422	432	10	2.4%
Rural II	2,598	31.3%	1,046	1,215	169	16.2%
Total	8,313	100.0%	3,202	3,174	(28)	-0.9%

From 2006 to 2011, the percent of graduates who purchased a small game license increased 38.2%, compared to a decrease of 3.5% of those who purchased a big game license during the same period (Table 10). <u>Please note</u>: In Nebraska, youth under the age of 16 are not required to purchase a license for small game; they do however always need to purchase a license for big game species.

Table 10. 2006 Hunter Education Graduates Who Purchased A Small Or Big Game License, by Year

	Small Game License Buyers			Big Game License Buyers		
	Number of			Number of		
	Graduates		o/ of =1	Graduates		
Demakasa	Required To	Number of	% Of Those	Required To	Number of	% Of Those
Purchase Year	Purchase A License	License	Required To	Purchase A License	License	Required To
rear	License	Buyers	Buy	License	Buyers	Buy
2006	3,037	1,272	41.9%	8,313	2,797	33.6%
2007	3,541	1,229	34.7%	8,313	3,284	39.5%
2008	4,275	1,132	26.5%	8,313	3,204	38.5%
2009	5,495	1,213	22.1%	8,313	3,066	36.9%
2010	7,573	1,539	20.3%	8,313	2,896	34.8%
2011	8,293	1,758	21.2%	8,313	2,700	32.5%
Change from						
2006 to 2011		38.2%			-3.5%	

The average age of 2006 hunter education graduates who purchased a small game license decreased from 2006 to 2011 confirming that younger graduates are interested in small game licenses to some uncertain level. The average age of graduates who purchased a big game license decreased at a slower rate throughout the six years (Table 11).

Table 11. Average Age of Graduates by Type of License Purchased

	Small Game License Buyers	Big Game License Buyers	
Purchase Year	Average Age	Average Age	
2006	28.8	21.2	
2007	28.4	19.4	
2008	27.7	19.1	
2009	25.7	19.1	
2010	21.7	19	
2011	20.3	19	

The total number of big game license buyers within the 2006 hunter education class fell by 97 from 2006 to 2011, or -3.5%. The age segment that had the highest decrease among all graduates in purchasing big game licenses was the 16 to 24 year-old group at a 33.9%. The age group 10 to 15 year-olds showed an increase of 22.0% (Table 12).

Table 12. Change in Big Game license purchasing by 2006 Hunter Education graduates, by age

	Number of	Year of Purchase		Change	
Age	Graduates	2006	2,011	N	%
10 to 15	5,276	1413	1,724	311	22.0%
16-24	1,414	576	381	(195)	-33.9%
25-35	705	415	282	(133)	-32.0%
35 and older	918	393	313	(80)	-20.4%
Total	8,313	2,797	2,700	(97)	-3.5%

The number of graduates who purchased a small game license increased by 38.2%, or 486 license buyers (Table 13). The age segment with the highest percent change among all graduates was the 10 to 15 year-olds with an increase of 897.1%. This was driven by unique licensing requirements in Nebraska for small game, as compared to big game.

Table 13. Change in Small Game license purchasing by 2006 Hunter Education graduates, by age

	Number of	Year of Purchase		Change	
Age	Graduates	2006	2,011	N	%
10 to 15	5,276	104	1,037	933	897.1%
16-24	1,414	487	268	(219)	-45.0%
25-35	705	306	197	(109)	-35.6%
35 and older	918	375	256	(119)	-31.7%
Total	8,313	1,272	1,758	486	38.2%

The month with the highest rate of graduation for the hunter education course in Nebraska was October with 2,002 graduates, or 24.1% (Table 14). Graduates who never purchased a license were more likely to graduate in June when 53.1% of all June graduates never bought, followed by May (46.7%), then January and December at 46.4% and 43.7%, respectively. One possible explanation is that most hunting seasons are coming to a close and these graduates have to wait until an opportunity arises to hunt. This time gap may allow for a loss of interest and provides graduates ample time to adopt other activities. The month with the youngest graduates was June (16.1). Older graduates were more common in March or November.

**Table 14. Hunter Education Graduates By Month Of Course Completion** 

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduated who Never Purchased	Percent Of Total who Never Purchased a License	Average Age of Graduates who Never Purchased a License
January	153	19.4	71	46.4%	18.0
February	573	19.8	228	39.8%	19.8
March	708	20.0	293	41.4%	18.7
April	494	17.8	187	37.9%	17.0
May	199	19.1	93	46.7%	16.5
June	113	16.1	60	53.1%	14.5
July	224	17.3	96	42.9%	17.0
August	962	18.3	289	30.0%	16.6
September	1,758	18.1	555	31.6%	16.9
October	2,002	17.8	734	36.7%	16.8
November	437	20.0	140	32.0%	18.1
December	309	19.0	135	43.7%	18.5

Figure 1. Number of Graduates who completed the Hunter Education Course by Month

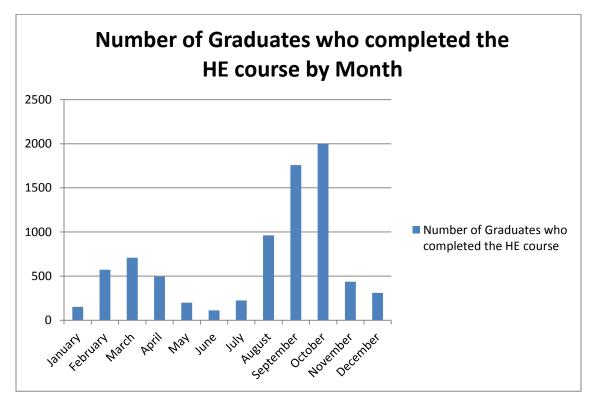
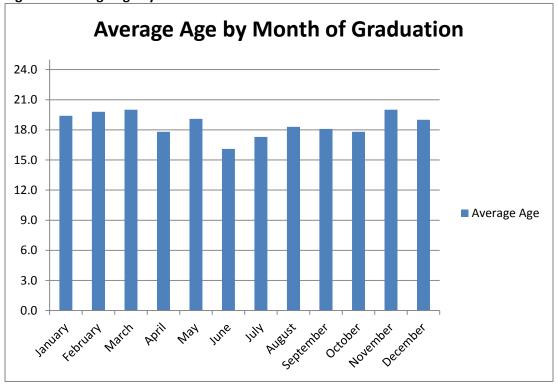
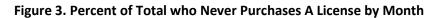
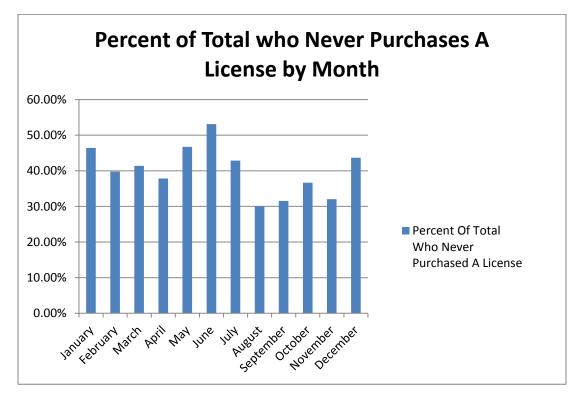


Figure 2. Average Age by Month of Graduation







# Individual State Results – Southeast Region

# Georgia

#### **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Georgia's 2006 hunter education class was tracked over six years. In all, this class had 14,030 graduates, with 13,836 records usable for the analysis. Highlights include:

- When compared to the other states in the study, Georgia is ranked 8<sup>th</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Georgia is ranked 3<sup>rd</sup> out of the 12 states when looking at the smallest percent change in the number of 2006 hunter education graduates who purchased a hunting license in this six year buying period.
- Within the six year period, the year that held the highest percentage of graduates purchasing a license was 2006 with 43.5% of the graduating class purchasing a license.
   Over the six year period, the number of graduates who purchased a license decreased 32.1%. Reasons for the decrease would need to be determined via direct surveys of recent graduates.
- From the hunter education class of 2006, 9,040 (65.3%) graduates purchased at least one license during the six year period of 2006 to 2011. Of the 13,836 hunter education graduates, 4,796 never purchased a license, representing 34.7% of the 2006 graduate class.
- Of these graduates, the 10-15 year-old age group represented the largest portion of the class, with 40.9% of all graduates.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Georgia achieved 35.8% of the 2006 class's total sales potential over the six year period. Efforts to encourage greater hunting participation among hunter education graduates would boost license dollars and excise tax revenues that benefit wildlife conservation.

# Introduction to Georgia's data:

Resident and non-resident hunters born on or after Jan. 1, 1961 must successfully complete a hunter education course prior to purchasing a hunting license. Hunter education courses certified or mandated by any state wildlife agency or Canadian province are accepted. Hunter education is not required to purchase an Apprentice Hunting License or a Three-day Hunting & Fishing license. Hunter education is not required to hunt on one's own land or land of a parent or guardian (blood or dependent relationship) residing in the same household.

All children under sixteen years of age shall be accompanied by and under direct supervision of an adult eighteen years of age or older when hunting. It is unlawful for an adult to permit their child or

ward (under age 16) to hunt without adult supervision. Exception: Hunters 12–15 years old may hunt unsupervised after successfully completing a hunter education course.

## **Results:**

The 2006 hunter education class in Georgia provided a total of 14,030 graduates, with 13,836 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2006 with 43.5% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using just license sales records. During the six year span, the average age of those who continued to hunt increased 1.2 years (Table 1). In total, over the course of the six years, the number of graduates who purchased a license decreased 32.1%.

Table 1. 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates		13,836		
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age
2006	6,021	43.5%	-	16.3
2007	5,882	42.5%	-2.3%	14.9
2008	5,126	37.0%	-12.9%	17.5
2009	4,478	32.4%	-12.6%	16.9
2010	4,122	29.8%	-7.9%	17.2
2011	4,089	29.6%	-0.8%	17.5
Change from 2006 to 2011			-32.1%	

Most graduates do not buy a license each year. In fact, only about one-fifth bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 9,040 purchased at least one license during the six year period from 2006 through 2011, or 65.3%, compared to the 43.5% who bought in the first year they were eligible to buy a license. Over the six year period, 34.7% were never identified as having bought a license. Of those who did purchase a license, less than a third (29.2%) purchased one in each of the six years.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006-2011	Number of HE Graduates	Percent	Of those who bought licenses
0	4,796	34.7%	-
1	1,324	9.6%	14.6%
2	983	7.1%	10.9%
3	1,232	8.9%	13.6%
4	1,026	7.4%	11.3%
5	1,832	13.2%	20.3%
6	2,643	19.1%	29.2%
Total	13,836		
Total of those who purchased at			
least once	9,040	65.3%	

In the Class of 2006, the age category that represented the largest portion of graduates was the 10-15 year-old segment, representing 40.9% of the class, or 5,662 graduates (Table 3). The average age in this age group is 13.2 years old.

Table 3. 2006 Hunter Education Graduates, by Age Category

Age	Number of Graduates	Average Age	%
10 to 15	5,662	13.2	40.9%
16-24	4,525	18.6	32.7%
25-35	1,713	30.0	12.4%
35 and older	1,936	44.2	14.0%
Total	13,836		100.0%

In the 10 to 15 year-old age group, 33.0% never purchased a license. Within the same age group, 50.8% purchased at least three years out of the possible six. Of all graduates, 48.7% purchased a license at least three years out of the six possible, indicating younger graduates have a greater interest in hunting compared to older graduates (Table 4). Interestingly, the age category that had the highest frequency of purchasing a license at least three years out of the possible six was 35 and older (53.5%).

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following Certification, by Age Category.

	Number of	Number of years purchased a license, 2006-2011		
Years of Age	Graduates	None	One - Two	Three - Six
10 to 15	5,662	33.0%	16.2%	50.8%
16-24	4,525	35.0%	16.1%	48.9%
25-35	1,713	37.0%	21.7%	41.3%
35 and older	1,936	33.6%	12.9%	53.5%
Total	13,836	34.7%	16.7%	48.7%

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 6,021 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license decreased by 1,932, or 32.1%. The age category with the largest decline was 25 to 35 year-olds representing a 42.4% decrease. Lifestyle factors might be affecting participation. At this age, over six years, graduates might be more likely to move on to college, military or jobs out of state, thus reducing their probability of buying a hunting license.

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011

	Number of Year of Purchase Change		Year of Purchase		nge
Age	Graduates	2006	2011	N	%
10 to 15	5,662	3,105	2,109	(996)	-32.1%
16-24	4,525	1,011	669	(342)	-33.8%
25-35	1,713	946	545	(401)	-42.4%
35 and older	1,936	959	766	(193)	-20.1%
Total	13,836	6,021	4,089	(1,932)	-32.1%

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Georgia achieved from its 2006 hunter education graduates through 2011 represented 35.8% of the total sales potential (Table 6). A total of 29,718 licenses-years were sold to graduates out of a possible 83,016 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Georgia ranked 9<sup>th</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

		Percent of Potential
<b>Actual Sales</b>	Sales Potential	Reached
29,718	83,016	35.8%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups are people who share an experience such as being born in the same time period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The "American Quilt" segment group represents the largest portion of the 2006 hunter education class with 27.7% of all graduates (Table 7). This group represents rural life from small towns and villages to farms. The segment group with the largest decrease in purchases was "Metropolis" with a drop of 45.6%. The residents in this group live and work in America's cities. They live in older, single-family homes or row houses. Every LifeMode group saw decreases regarding the number of graduates purchasing a license from 2006 to 2011, indicating substantial decreases in hunting participation among all types of hunters in the six years following graduation.

Table 7. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by LifeMode Group.

	Number of	% of 2006	Year of Purchase		Cha	nge
Category	Graduates	Grads	2006	2011	N	%
American Quilt	3,837	27.7%	1,923	1,339	(584)	-30.4%
Factories and Farms	3,665	26.5%	2,108	1,471	(637)	-30.2%
Family Portrait	1,510	10.9%	608	398	(210)	-34.5%
Global Roots	147	1.1%	37	28	(9)	-24.3%
High Hopes	315	2.3%	107	84	(23)	-21.5%
High Society	1,315	9.5%	402	234	(168)	-41.8%
Metropolis	187	1.4%	90	49	(41)	-45.6%
No Classification	335	2.4%	102	62	(40)	-39.2%
Scholars and Patriots	228	1.6%	43	38	(5)	-11.6%
Senior Styles	539	3.9%	202	112	(90)	-44.6%
Solo Acts	116	0.8%	43	32	(11)	-25.6%
Traditional Living	393	2.8%	123	74	(49)	-39.8%
Upscale Avenues	1,249	9.0%	233	168	(65)	-27.9%
Total	13,836	100%	6,021	4,089	(1,932)	-32.1%

Urbanization summary groups are people who share a location, from the largest cities to the most rural farms. Common areas such as urban, suburban, etc. are divided based on income. Segments tagged with an "I" are typically the higher income earners in these specific areas, while those marked with a "II" are generally lower income areas within each segment. Not surprisingly, Georgia hunter education graduates generally come from less urbanized regions of the state. The group with the largest purchasing change from 2006 to 2011 was "Urban Outskirts II" with a decrease of 42.3%. This group is comprised of high-density suburban neighborhoods in metropolitan areas. The "Suburban Periphery II" group showed the smallest decrease in purchasing from 2006 to 2011 with a decrease of 18.4% (Table 8). Individuals within this group are more likely to be found in urban clusters of smaller cities in metropolitan areas. See Appendix at the end of the report for full description list of all urbanization summary groups.

Table 8. Change in the Percent of 2006 Graduates who bought through 2011, by Urban Group.

	Number of	% of 2006	2006 Year of Purchase		Cha	nge
Category	Graduates	Grads	2006	2011	N	%
No Classification	335	2.4%	82	62	(20)	-24.4%
Principle Urban Centers I	42	0.3%	3	2	(1)	-33.3%
Principle Urban Centers II	27	0.2%	5	3	(2)	-40.0%
Metro Cities I	517	3.7%	81	64	(17)	-21.0%
Metro Cities II	466	3.4%	167	110	(57)	-34.1%
Urban Outskirts I	715	5.2%	235	148	(87)	-37.0%
Urban Outskirts II	252	1.8%	104	60	(44)	-42.3%
Suburban Periphery I	2,355	17.0%	1,082	652	(430)	-39.7%
Suburban Periphery II	708	5.1%	293	239	(54)	-18.4%
Small Towns	882	6.4%	383	252	(131)	-34.2%
Rural I	3,985	28.8%	1,827	1,235	(592)	-32.4%
Rural II	3,552	25.7%	1,759	1,262	(497)	-28.3%
Total	13,836	100.0%	6,021	4,089	(1,932)	-32.1%

The month with the highest rate of graduation for the hunter education course in Georgia was September with 2,884 graduates, or 20.8% (Table 9). Graduates who never purchased a license were more likely to graduate in March when 72.9% of all March graduates never bought, followed by June (65.8%), (Figure 1). One possible explanation is that most hunting seasons are coming to a close and these graduates have to wait until an opportunity arises to hunt. This time gap may allow for a loss of interest and provides graduates ample time to adopt other activities. The months with the youngest graduates were June at 18.5 years old, followed by May where the average age was 20.5 years old. Older graduates are more common in January.

Table 9. 2006 Hunter Education Graduates By Month Of Course Completion

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduated Who Never Purchased	Percent Of Total Who Never Purchased A License	Average Age Of Graduates Who Never Purchased a License
January	417	25.2	122	29.3%	19.7
February	589	22.2	279	47.4%	16.4
March	737	21.3	537	72.9%	17.8
April	210	22.8	118	56.2%	15.6
May	214	20.5	129	60.3%	13.7
June	445	18.5	293	65.8%	17.3
July	788	20.8	388	49.2%	17.8
August	2,505	21.5	982	39.2%	18.2
September	2,884	20.8	682	23.7%	17.5
October	2,821	21.4	610	21.6%	20.2
November	1,593	21.3	422	26.5%	19.3
December	633	21.7	234	37.1%	21.9

Figure 1. Number of Graduates who completed the Hunter Education Course by Month

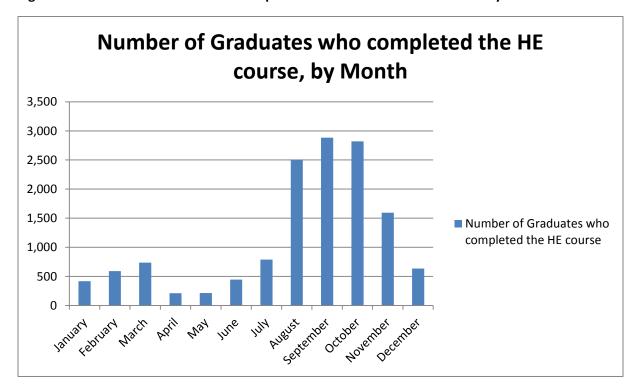
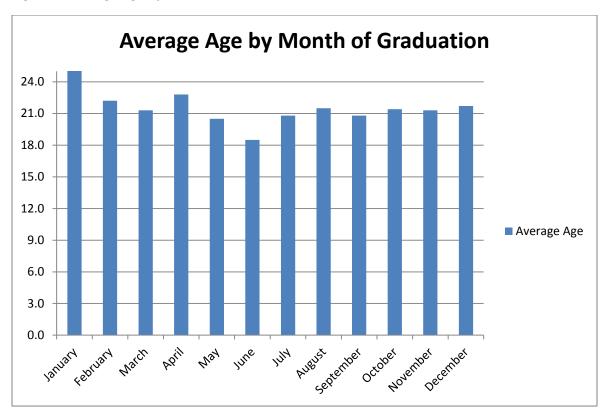
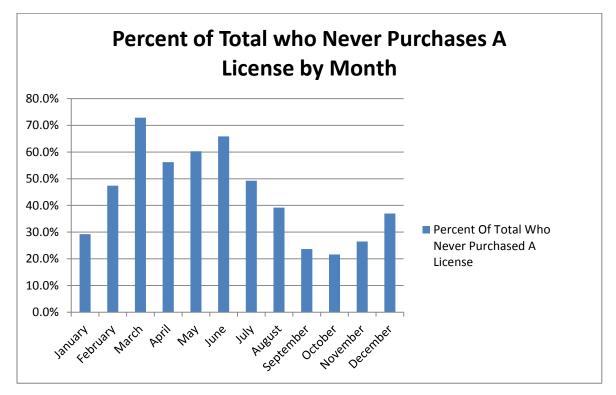


Figure 2. Average Age by Month of Graduation







# Kentucky

## **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Kentucky's 2006 hunter education class was tracked over six years. In all, this class had 14,199 graduates, with 13,599 records usable for the analysis. Highlights include:

- When compared to the other states in the study, Kentucky is ranked 11<sup>th</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Kentucky is ranked 12<sup>th</sup> out of the 12 states when looking at the smallest percent change in the number of 2006 hunter education graduates who purchased a hunting license during this six year buying period.
- Within the six year period, the year that held the highest percentage of graduates purchasing a license was 2006 with 52.5% of the graduating class purchasing a license.
   Over the six year period, the number of graduates who purchased a license decreased 53.4%. Reasons for the decrease would need to be determined via direct surveys of recent graduates.
- From the hunter education class of 2006, 5,165 (53.0%) graduates purchased at least one license during the six year period of 2006-2011. Of the 9,745 hunter education graduates required to purchase a license due to age requirements in 2006, 4,580 never purchased a license, representing 47.0% of the 2006 graduate class.
- Of these graduates, the 10-15 year-old age group represented the largest portion of the class, with 62.4% of all graduates.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Kentucky achieved 27.4% of the 2006 class's total sales potential over the six year period. Efforts to encourage greater hunting participation among hunter education graduates would boost license dollars and excise tax revenues that benefit wildlife conservation.

# Introduction to Kentucky's data:

Resident landowners, their live-in dependents, and tenants on their land are not required to purchase a license or permits if/when hunting on their property. Resident landowners are required to purchase a license to hunt on other properties or support the Department. Youths are exempted from hunting license requirements until age 12, when they must purchase a youth (or "junior") hunting, youth combo hunting/fishing, or youth sportsman (hunting, fishing, turkey and deer tag included) license.

#### **Comments:**

One factor that undoubtedly affects hunter education to hunter "conversion rate" is the proportion of our hunter education graduates that were certified as part of one of the summer camp programs, which take place June-August. Kentucky certifies 2,000-2,500 on average at the camps. This also relates to the findings that the timeframe of the course matters; summer graduates are probably least likely to hunt because of the proportion taking hunter education at one of our camps.

#### **Results:**

The 2006 hunter education class in Kentucky provided a total of 14,199 graduates, with 13,599 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2006 with 52.5% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using only license sales records During the six year span, the average age of those who continued to hunt increased 4.6 years, which indicates that drop-out rates are likely generally consistent across age categories of recent hunter education graduates (Table 1). In total, over the course of the six years, the number of graduates who purchased a license decreased 53.4%.

2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates		13,599		
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age
2006 <sup>7</sup>	5,119	52.5%	-	20.5
2007 <sup>8</sup>	4,313	35.7%	-15.7%	22.7
2008	3,306	24.3%	-23.3%	24.2
2009	3,043	22.4%	-8.0%	24.4
2010	2,726	20.0%	-10.4%	24.6
2011	2,387	17.6%	-12.4%	25.1
Change from 2006 to 2011			-53.4%	

Most graduates do not buy a license each year. In fact, only about twelve percent bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 5,165 purchased at least one license during the six year period from 2006 through 2011, or 53.0%, compared to the 52.5% who bought in the first year they were eligible to buy a license. Over the six year period, 47.0% were never identified as having bought a license. Of those who did purchase a license, less than a quarter (22.2%) purchased in each of the six years.

77

<sup>&</sup>lt;sup>7</sup> A total of 3854 graduates were excluded from analysis based on age requirements.

 $<sup>^{\</sup>rm 8}$  A total of 1518 graduates were excluded from analysis based on age requirements.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006-2011	Number of HE Graduates	Percent	Of those who bought licenses
0	4,580	47.0%	-
1	1,370	14.1%	26.5%
2	725	7.4%	14.0%
3	625	6.4%	12.1%
4	576	5.9%	11.1%
5	723	7.4%	14.0%
6	1,146	11.8%	22.2%
Total	9,745 <sup>9</sup>		
Total of those who purchased at		_	
least once	5,165	53.0%	

In the Class of 2006, the age category that represented the largest portion of graduates was the 10-15 year-old segment, representing 62.4% of the class, or 8,480 graduates (Table 3). The average age in this age group is 12.0 years old.

Table 3. 2006 Hunter Education Graduates, by Age Category

Age	Number of Graduates	Average Age	%
10 to 15	8,480	12.0	62.4%
16-24	1,605	18.9	11.8%
25-35	1,368	30.3	10.1%
35 and older	2,146	45.0	15.8%
Total	13,599		100.0%

In the 10 to 15 year-old age group, 55.8% never purchased a license. Within the same age group, 20.9% purchased at least three years out of the possible six. Of all graduates, 26.6% purchased a license at least three years out of the six possible, indicating older graduates have a greater interest in hunting compared to younger graduates (Table 4).

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following Certification, by Age Category.

	Number of	Number of years purchased a license, 2000 2011		
Years of Age	Graduates	None	One - Two	Three - Six
10 to 15	8,480	55.8%	23.3%	20.9%
16-24	1,605	51.7%	20.6%	27.7%
25-35	1,368	47.0%	14.6%	38.4%
35 and older	2,146	48.2%	11.3%	40.5%
Total	13,599	53.2%	20.2%	26.6%

<sup>9</sup> A total of 3,854 graduates were excluded from analysis due to age requirements based on their 2006 age.

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 5,119 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license decreased by 2,732, or 53.4%. The age category with the largest decline was 10 to 15 year-olds representing a 64.5% decrease. Lifestyle factors might be affecting participation. At this age, over six years, graduates might be more likely to move on to college, military or jobs out of state, thus reducing their probability of buying a hunting license.

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought licenses from 2006 to 2011

	Number of	Year of F	urchase	Cha	nge
Age	Graduates	2006	2011	N	%
10 to 15	8,480	3,065	1,088	(1,977)	-64.5%
16-24	1605	597	280	(317)	-53.1%
25-35	1368	602	353	(249)	-41.4%
35 and older	2146	855	666	(189)	-22.1%
Total	13,599	5,119	2,387	(2,732)	-53.4%

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Kentucky achieved from its 2006 hunter education graduates through 2011 represented 27.4% of the total sales potential (Table 6). A total of 20,894 licenses-years were sold to graduates out of a possible 76,222 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Kentucky ranked 11<sup>th</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

Actual Sales	Sales Potential	Percent of Potential Reached
20,894	76,222	27.4%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups are people who share an experience such as being born in the same time period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The "Factories and Farms" segment group represents the largest portion of the 2006 hunter education class with 42.5% of all graduates (Table 7). This group represents rural life and small towns, employed primarily in manufacturing or agriculture fields. In terms of license buying trends "Factories and Farms" graduates had the lowest rate of decline in buying licenses, with a decrease of 45.5% from

2006 to 2011. The segment group with the largest decrease in purchases was "Metropolis" with a drop of 87.2%. The residents in this group live and work in America's cities. They live in older, single-family homes or row houses. Every LifeMode group saw decreases regarding the number of graduates purchasing a license from 2006 to 2011, indicating substantial decreases in hunting participation among all types of hunters in the six years following graduation.

Table 7. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by LifeMode Group.

	Number of	% of 2006	Year of	Purchase	Cha	nge
Category	Graduates	Grads	2006	2011	N	%
American Quilt	2,432	17.9%	887	445	(442)	-49.8%
Factories and Farms	5,785	42.5%	2,142	1,167	(975)	-45.5%
Family Portrait	540	4.0%	203	61	(142)	-70.0%
Global Roots	77	0.6%	20	10	(10)	-50.0%
High Hopes	382	2.8%	125	53	(72)	-57.6%
High Society	686	5.0%	295	75	(220)	-74.6%
Metropolis	94	0.7%	39	5	(34)	-87.2%
No Classification	291	2.1%	99	50	(49)	-49.5%
Scholars and Patriots	170	1.3%	23	5	(18)	-78.3%
Senior Styles	1,078	7.9%	434	180	(254)	-58.5%
Solo Acts	99	0.7%	39	12	(27)	-69.2%
Traditional Living	746	5.5%	298	108	(190)	-63.8%
Upscale Avenues	1,219	9.0%	515	216	(299)	-58.1%
Total	13,599	100.0%	5,119	2,387	(2,732)	-53.4%

Urbanization summary groups are people who share a location, from the largest cities to the most rural farms. Common areas such as urban, suburban, etc. are divided based on income. Segments tagged with an "I" are typically the higher income earners in these specific areas, while those marked with a "II" are generally lower income areas within each segment. Not surprisingly, Kentucky hunter education graduates generally come from less urbanized regions of the state. The group with the largest purchasing change from 2006 to 2011 was Metro Cities I with a decrease of 77.6%. This group is comprised of upscale homeowners who live in densely populated cities. Rural II showed the smallest decrease in purchasing from 2006 to 2011 with 42.4% (Table 8). Individuals within this group live in the country with very low population density. In general, Kentucky graduates from more urbanized areas are more likely to stop purchasing licenses than graduates from more rural areas, though the differences were not that significant and likely do not warrant developing intervention efforts unique to each group.

Table 8. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by Urban Classification Group.

	Number of	% of 2006	Year of P	urchase	Cha	nge
Category	Graduates	Grads	2006	2011	N	%
No Classification	291	2.1%	99	50	(49)	-49.5%
Principle Urban Centers I	2	0.0%	0	0	-	0.0%
Principle Urban Centers II	8	0.1%	4	1	(3)	-75.0%
Metro Cities I	283	2.1%	107	24	(83)	-77.6%
Metro Cities II	410	3.0%	135	52	(83)	-61.5%
Urban Outskirts I	808	5.9%	325	101	(224)	-68.9%
Urban Outskirts II	218	1.6%	82	31	(51)	-62.2%
Suburban Periphery I	1,091	8.0%	447	140	(307)	-68.7%
Suburban Periphery II	1,128	8.3%	436	162	(274)	-62.8%
Small Towns	734	5.4%	290	127	(163)	-56.2%
Rural I	3,151	23.2%	1247	578	(669)	-53.6%
Rural II	5,475	40.3%	1947	1121	(826)	-42.4%
Total	13,599	100.0%	5,119	2,387	(2,732)	-53.4%

The month with the highest rate of graduation for the hunter education course in Kentucky was September with 2,222 graduates, or 16.3% (Table 9). Graduates who never purchased a license were more likely to graduate in December when 61.1% of all December graduates never bought, followed by May (59.4%). The months with the youngest graduates were June at 12.5 years old, followed by July where the average age was 13.9 years old. Older graduates are more common in January (Figure 2).

Table 9. 2006 Hunter Education Graduates By Month Of Course Completion

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduated Who Never Purchased	Percent Of Total Who Never Purchased A License	Average Age Of Graduates Who Never Purchased a License
January	90	26.3	49	54.4%	24.9
February	271	23.6	144	53.1%	21.6
March	1,855	22.2	1,063	57.3%	20.7
April	690	21.0	399	57.8%	19.5
May	355	18.9	211	59.4%	17.6
June	1528	12.5	695	45.5%	12.7
July	1522	13.9	748	49.2%	14.0
August	2,091	22.6	1,206	57.7%	21.7
September	2,222	21.6	1,181	53.2%	20.1
October	1,943	20.9	995	51.2%	19.0
November	821	21.1	418	50.9%	19.6
December	211	21.9	129	61.1%	20.9



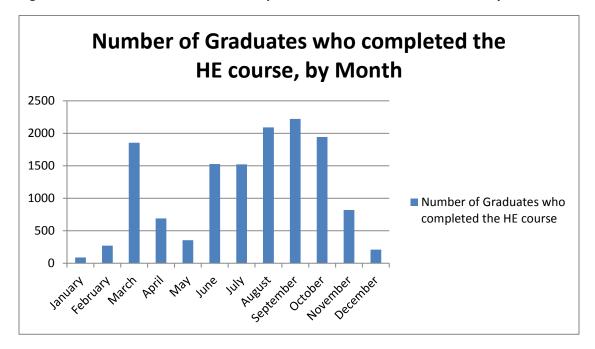
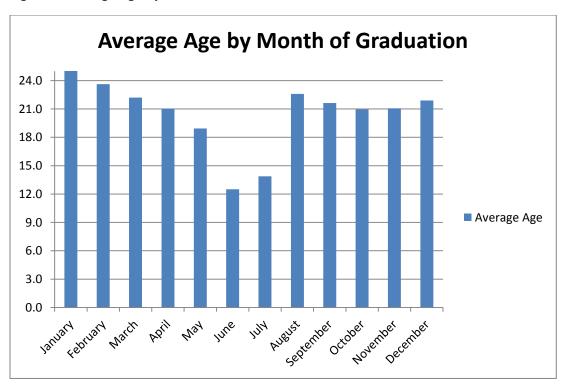
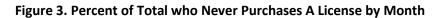
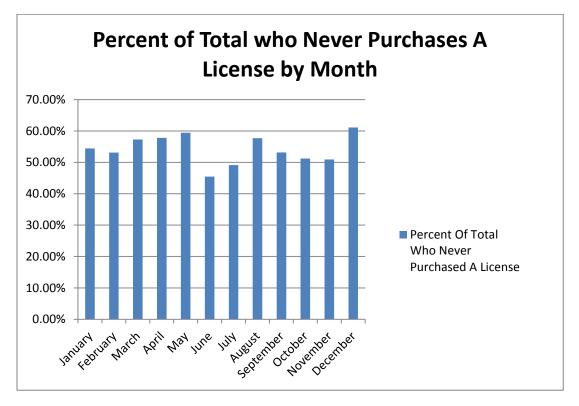


Figure 2. Average Age by Month of Graduation







# Virginia

# **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Virginia's 2006 hunter education class was tracked over six years. In all, this class had 13,868 graduates, with 13,547 records usable for the analysis. Highlights include:

- When compared to the other states in the study, Virginia is ranked 12<sup>th</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Virginia is ranked 6<sup>th</sup> out of the 12 states when looking at the smallest percent change in the number of 2006 hunter education graduates who purchased a hunting license in this six year buying period.
- Within the six year period, the year that held the highest percentage of graduates purchasing a license was 2006 with 35.2% of the graduating class purchasing a license.
   Over the six year period, the number of graduates who purchased a license decreased 38.0%. Reasons for the decrease would need to be determined via direct surveys of recent graduates.
- From the hunter education class of 2006, 5,361 (43.0%) graduates purchased at least one license during the six year period of 2006-2011. Of the 12,460 hunter education graduates required to purchase a license due to age requirements in 2006, 7,099 never purchased a license, representing 57.0% of the 2006 graduate class.
- Of these graduates, the 10-15 year-old age group represented the largest portion of the class, with 53.8% of all graduates.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Virginia achieved 26.1% of the 2006 class's total sales potential over the six year period. Efforts to encourage greater hunting participation among hunter education graduates would boost license dollars and excise tax revenues that benefit wildlife conservation.

## **Introduction to Virginia's data:**

All persons, except those listed below, must purchase the proper licenses before hunting or trapping. Where exempt, the exemption means the individual is exempt from the basic hunting license, bear, deer, turkey license, archery license, crossbow license, muzzleloading license, and Virginia Migratory Waterfowl Conservation Stamp. Resident or non-resident landowners, their spouses, their children and grandchildren and the spouses of such children and grandchildren, or the landowner's parents, resident or nonresident, do not need a license to hunt, trap or fish (on inland waters) within the

boundaries of their own lands. Tenants, on the land they rent and occupy, are not required to have a license, but must have the written permission of the landowner. Persons that lease property and do not permanently reside there are not exempt from license requirements.

Residents, 65 years of age and over, do not need a license to hunt or trap on private property in their county or city of residence. Resident hunters under the age of 12 are not required to have a hunting license or hunter education. Nonresident hunters under the age of 12 need a hunting license. All hunters under the age of 12 may not hunt unless accompanied and directly supervised by a licensed adult.

#### **Results:**

The 2006 hunter education class in Virginia provided a total of 13,868 graduates, with 13,547 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2006 with 35.2% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using just license sales records. During the six year span, the average age of those who continued to hunt decreased 0.4 years (Table 1). In total, over the course of the six years, the number of graduates who purchased a license decreased 38.0%.

Table 1. 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates		13,547		
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age
2006 <sup>10</sup>	4,389	35.2%	-	25.4
2007 <sup>11</sup>	3,800	28.7%	-13.4%	25.0
2008	3,628	26.8%	-4.5%	24.4
2009	3,299	24.3%	-9.1%	24.6
2010	2,990	22.1%	-9.4%	25.0
2011	2,723	20.1%	-8.9%	25.0
Change from 2006 to 2011			-38.0%	

Most graduates do not buy a license each year. In fact, only about twelve percent bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 5,361 purchased at least one license during the six year period from 2006 through 2011, or 43.0%, compared to the 35.2% who bought in the first year they were eligible to buy a license. Over the six year period 57.0% were never identified as having bought a license. Of those who did purchase a license, less than a third (28.4%) purchased one in each of the six years.

<sup>11</sup> A total of 303 graduates were excluded from analysis based on age requirements to purchase a license.

85

 $<sup>^{10}</sup>$  A total of 1087 graduates were excluded from analysis based on age requirements to purchase a license.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006-2011	Number of HE Graduates	Percent	Of those who bought licenses
0	7,099	57.0%	-
1	1,121	9.0%	20.9%
2	820	6.6%	15.3%
3	605	4.9%	11.3%
4	629	5.0%	11.7%
5	665	5.3%	12.4%
6	1,521	12.2%	28.4%
Total	12,460 <sup>12</sup>		_
Total of those who purchased at		_	
least once	5,361	43.0%	

In the Class of 2006, the age category that represented the largest portion of graduates was the 10-15 year-old segment, representing 53.8% of the class, or 7,283 graduates (Table 3). The average age in this age group is 12.7 years old.

Table 3. 2006 Hunter Education Graduates, by Age Category

Age	<b>Number of Graduates</b>	Average Age	%
10 to 15	7,283	12.7	53.8%
16-24	1,621	18.6	12.0%
25-35	1,026	30.7	7.6%
35 and older	3,617	47.5	26.7%
Total	13,547		100.0%

In the 10 to 15 year-old age group, 58.4% never purchased a license. Within the same age group, 27.0% purchased at least three years out of the possible six. Of all graduates, 27.2% purchased a license at least three years out of the six possible (Table 4).

86

 $<sup>^{12}</sup>$  A total of 1087 graduated were excluded from analysis due to age requirements based on their 2006 age.

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following Certification, by Age Category.

	Number of	Number of years purchased a license 2006-2011		
Years of Age	Graduates	None	One - Two	Three - Six
10 to 15	7,283	58.4%	14.6%	27.0%
16-24	1,621	59.6%	22.0%	18.4%
25-35	1,026	55.5%	18.4%	26.1%
35 and older	3,617	56.1%	12.3%	31.8%
Total	13,547	57.7%	15.2%	27.2%

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 4,389 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license decreased by 1,666 or 38.0%. The age category with the largest decline was 16 to 24 year-olds representing a 62.5% decrease (Table 5). Lifestyle factors might be affecting participation. At this age, over six years, graduates might be more likely to move on to college, military or jobs out of state, thus reducing their probability of buying a hunting license.

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought licenses from 2006 to 2011

	Number	Year of Purchase		Change	
	of				
Age	Graduates	2006	2011	N	%
10 to 15	7,283	2,133	1,421	(712)	-33.4%
16-24	1,621	517	194	(323)	-62.5%
25-35	1,026	360	212	(148)	-41.1%
35 and older	3,617	1,379	896	(483)	-35.0%
Total	13,547	4,389	2,723	(1,666)	-38.0%

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Virginia achieved from its 2006 hunter education graduates through 2011 represented 26.1% of the total sales potential (Table 6). A total of 20,829 licenses-years were sold to graduates out of a possible 79,892 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Virginia ranked 12<sup>th</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

		Percent of
Actual Sales	Sales Potential	Potential Reached
20,829	79,892	26.1%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups are people who share an experience such as being born in the same time period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The "Factories and Farms" segment group represents the largest portion of the 2006 hunter education class with 24.6% of all graduates (Table 7). This group represents rural life and small towns, employed primarily in manufacturing or agriculture fields. In terms of license buying trends "Scholars and Patriots" graduates had no change from 2006 to 2011. The segment group with the largest decrease in purchases was "Solo Acts" with a drop of 52.3%. The residents in this group are primarily singles who prefer city life. Many are young, just starting out in more densely populated U.S. neighborhoods. Every LifeMode group saw decreases, except "Scholars and Patriots," regarding the number of graduates purchasing a license from 2006 to 2011, indicating substantial decreases in hunting participation among all types of hunters in the six years following graduation.

Table 7. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by LifeMode Group.

	Number of	% of 2006	Year of P	urchase	Cha	nge
Category	Graduates	Grads	2006	2011	N	%
American Quilt	2,359	17.4%	732	477	(255)	-34.8%
Factories and Farms	3,334	24.6%	983	626	(357)	-36.3%
Family Portrait	667	4.9%	238	129	(109)	-45.8%
Global Roots	60	0.4%	22	11	(11)	-50.0%
High Hopes	213	1.6%	75	40	(35)	-46.7%
High Society	1,929	14.2%	716	408	(308)	-43.0%
Metropolis	90	0.7%	37	18	(19)	-51.4%
No Classification	743	5.5%	286	212	(74)	-25.9%
Scholars and Patriots	135	1.0%	11	11	-	0.0%
Senior Styles	1,048	7.7%	284	174	(110)	-38.7%
Solo Acts	167	1.2%	44	21	(23)	-52.3%
Traditional Living	905	6.7%	269	161	(108)	-40.1%
Upscale Avenues	1,897	14.0%	692	435	(257)	-37.1%
Total	13,547	100.0%	4,389	2,723	(1,666)	-38.0%

Urbanization summary groups are people who share a location, from the largest cities to the most rural farms. Common areas such as urban, suburban, etc. are divided based on income. Segments tagged with an "I" are typically the higher income earners in these specific areas, while those marked with a "II" are generally lower income areas within each segment. Virginia hunter education graduates generally come from less urbanized regions of the state. The group with the largest purchasing change from 2006 to 2011 was Principle Urban Centers II with a decrease of 100.0%. This group represents the aspiring populations of the country's largest cities. Urban Outskirts II showed the smallest decrease in purchasing

from 2006 to 2011 with 20.5% (Table 8). Individuals within this group represent high-density suburban neighborhoods in metropolitan areas. See Appendix at the end of this report for full description list of all urbanization summary groups.

Table 8. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by Urban Classification Group.

	Number of	% of 2006	Year of Purchase		Cha	nge
Category	Graduates	Grads	2006	2011	N	%
No Classification	743	5.5%	286	212	(74)	-25.9%
Principle Urban Centers I	84	0.6%	16	6	(10)	-62.5%
Principle Urban Centers II	16	0.1%	5	0	(5)	-100.0%
Metro Cities I	677	5.0%	240	114	(126)	-52.5%
Metro Cities II	372	2.7%	122	69	(53)	-43.4%
Urban Outskirts I	657	4.8%	249	148	(101)	-40.6%
Urban Outskirts II	179	1.3%	39	31	(8)	-20.5%
Suburban Periphery I	2,477	18.3%	879	509	(370)	-42.1%
Suburban Periphery II	1,322	9.8%	414	259	(155)	-37.4%
Small Towns	465	3.4%	126	63	(63)	-50.0%
Rural I	3,561	26.3%	1211	773	(438)	-36.2%
Rural II	2,994	22.1%	802	539	(263)	-32.8%
Total	13,547	100.0%	4,389	2,723	(1,666)	-38.0%

The month with the highest rate of graduation for the hunter education course in Virginia was October with 4,577 graduates, 33.8% (Table 9). The months with the youngest graduates were May at 13.6 years old, followed by January where the average age was 16.5 years old. Older graduates are more common in March. Graduates who never purchased a license were more likely to graduate in May where 79.2% of the graduates never bought a license, followed by June (77.1%). Figure 3 below, shows the months from January through June, all have high percentages of graduates who never purchased a license. One possible explanation is that most hunting seasons are coming to a close or there is nothing available to hunt, and these graduates have to wait until an opportunity arises to hunt. This time gap may allow for a loss of interest and provides graduates ample time to adopt other activities.

Table 9. 2006 Hunter Education Graduates By Month Of Course Completion

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduated Who Never Purchased	Percent Of Total Who Never Purchased A License	Average Age Of Graduates Who Never Purchased a License
January	173	16.5	116	67.1%	15.6
February	115	22.5	86	74.8%	20.8
March	993	28.1	608	61.3%	27.6
April	332	20.3	254	76.5%	19.5
May	24	13.6	19	79.2%	12.4
June	218	17.6	168	77.1%	17.0
July	223	25.5	119	53.4%	26.4
August	2,133	26.2	1141	53.5%	27.2
September	2,846	24.7	1538	54.0%	25.0
October	4,577	22.1	2659	58.1%	21.8
November	1,570	23.9	898	57.2%	23.8
December	343	25.1	204	59.5%	25.7

Figure 1. Number of Graduates who completed the Hunter Education Course by Month

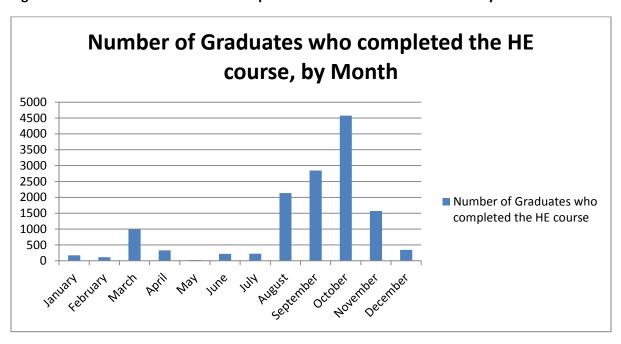


Figure 2. Average Age by Month of Graduation

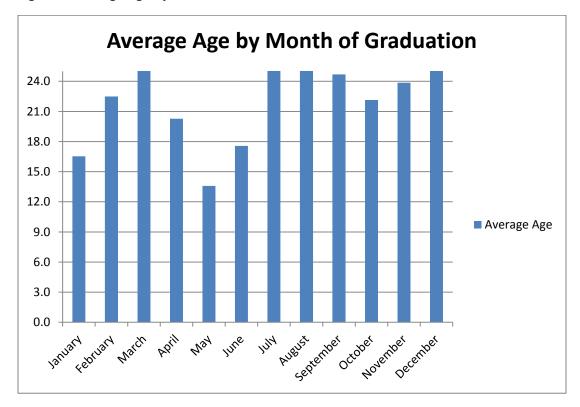
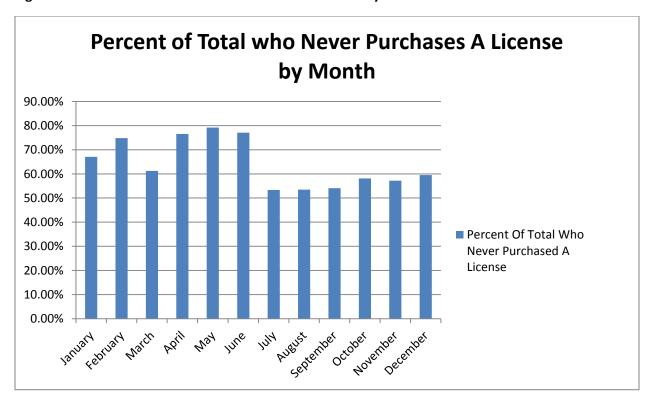


Figure 3. Percent of Total who Never Purchases A License by Month



# Individual State Results - Northeast Region

# Maine

## **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Maine's 2006 hunter education class was tracked over six years. In all, this class had 6,000 graduates, with 5,870 records usable for the analysis. Highlights include:

- When compared to the other states in the study, Maine is ranked 5<sup>th</sup>out of the12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Maine is ranked 5<sup>th</sup>out of the 12 states when looking at the smallest percent change in the number of 2006 hunter education graduates who purchased a hunting license in this six year buying period.
- Within the six year period, the year that held the highest percentage of graduates purchasing a license was 2006 with 61.4% of the graduating class purchasing a license.
   Over the six year period, the number of graduates who purchased a license decreased 35.8%. Reasons for the decrease would need to be determined via direct surveys of recent graduates.
- From the hunter education class of 2006, 4,160 (70.9%) purchased at least one license during the six year period of 2006 to 2011. Of the 5,870 hunter education graduates, 1,710 never purchased a license, representing 29.1% of the total class.
- Of these graduates, the 16-24 year-old age group represented the largest portion of the class, with 33.6% of all graduates.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Maine achieved 48.5% of the 2006 class's total sales potential over the six year period.
- From 2006 to 2011, the percent of graduates who purchased a big game license decreased 35.9% from 2006 to 2011. The age segment of graduates that had the highest decrease in purchasing big game licenses from 2006 to 2011 is 25 to 35 year-olds at 46.1%. Compared to small game license buyers, there were 14% more big game license buyers in 2011.

#### Introduction to Maine's data:

Anyone 10 years of age and over must obtain a license to hunt wild birds or wild animals (except Maine resident landowners may hunt without a license on land they own and reside on provided the land exceeds 10 acres in size and is used exclusively for agricultural purposes). Children under 10 years of age are not allowed to hunt. Hunters between the ages of 10 and 15 must possess a Junior License. Hunters 16 years of age and over must possess an adult license to hunt. (NOTE: A Junior License holder who turns 16 may hunt with that Junior License for the remainder of the year, but must complete a hunter safety course prior to hunting without adult supervision. Hunters 16 years of age and over

wishing to hunt with bow and arrow during the Special or Expanded Archery Seasons must obtain and archery license and the appropriate expanded archery permits.

#### **Results:**

The 2006 hunter education class in Maine provided a total of 6,000 graduates, with 5,870 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2006 with 61.4% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using only license sales records. During the six year span, the average age of those who continued to hunt increased 0.8 years (Table 1). In total, over the course of the six years, the number of graduates who purchased a license decreased 35.8%.

Table 1. 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates		5,870		
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age
2006	3,603	61.4%	-	24.4
2007	3,216	54.8%	-10.7%	25.0
2008	2,893	49.3%	-10.0%	24.9
2009	2,600	44.3%	-10.1%	25.2
2010	2,453	41.8%	-5.7%	25.2
2011	2,313	39.4%	-5.7%	25.2
Change from 2006 to 2011			-35.8%	

Most graduates do not buy a license each year. In fact, only about one-quarter bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 4,160 purchased at least one license during the six year period from 2006 through 2011, or 70.9%, compared to the 61.4% who bought in the first year they were eligible to buy a license. Over the six year period, 29.1% were never identified as having bought a license. Of those who did purchase a license, over a third of all graduates (38.2%) purchased one in each of the six years.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006-2011	Number of HE Graduates	Percent	Of those who bought licenses
0	1,710	29.1%	-
1	597	10.2%	14.4%
2	516	8.8%	12.4%
3	475	8.1%	11.4%
4	427	7.3%	10.3%
5	554	9.4%	13.3%
6	1,591	27.1%	38.2%
Total	5,870		
Total of those who purchased at			
least once	4,160	70.9%	

In the Class of 2006, the age category that represented the largest portion of graduates was the 16-24 year-old segment, representing 33.6% of the class, or 1,971 graduates (Table 3). The average age in this age group is 18.2 years old.

Table 3. 2006 Hunter Education Graduates, by Age Category

Age	Number of Graduates	Average Age	%
10 to 15	1,871	12.7	31.9%
16-24	1,971	18.2	33.6%
25-35	661	30.0	11.3%
35 and older	1,367	47.3	23.3%
Total	5,870		100.0%

In the 10 to 15 year-old age group, 34.8% never purchased a license. Within the same age group, 50.2% purchased at least three years out of the possible six. Of all graduates, 51.9% purchased a license at least three years out of the six possible (Table 4).

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following

Certification, by Age Category.

	Number of	Number of years purchased a license, 2006-2011				
Years of Age	Graduates	None	One - Two	Three - Six		
10 to 15	1,871	34.8%	15.0%	50.2%		
16-24	1,971	23.6%	22.5%	53.9%		
25-35	661	28.7%	24.8%	46.4%		
35 and older	1,367	29.6%	16.5%	54.0%		
Total	5,870	29.1%	19.0%	51.9%		

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 3,603 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license decreased by 1,290 license buyers, or 35.8%. The age category with the largest decline was 25 to 35 year-olds representing a 46.1% decrease.

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011

	Number of	Year of Purchase		Cha	inge
Age	Graduates	2006	2011	N	%
10 to 15	1,871	1,035	730	(305)	-29.5%
16-24	1,971	1,356	772	(584)	-43.1%
25-35	661	397	214	(183)	-46.1%
35 and older	1,367	815	597	(218)	-26.7%
Total	5,870	3,603	2,313	(1,290)	-35.8%

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Maine achieved from its 2006 hunter education graduates through 2011 represented 48.5% of the total sales potential (Table 6). A total of 17,078 licenses-years were sold to graduates out of a possible 35,220 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Maine ranked 4<sup>th</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

Actual Sales	Sales Potential	Percent of Potential Reached
17,078	35,220	48.5%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups are people who share an experience such as being born in the same time period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The "American Quilt" segment group represents the largest portion of the 2006 hunter education class with 37.8% of all graduates (Table 7). This group represents America's small towns and rural areas. In terms of license buying trends "High Hopes" graduates had the lowest rate of decline in buying licenses, with a decrease of 29.8% from 2006 to 2011. These residents are a mix of married couples, single parents, and singles who seek the "American Dream" of homeownership and a rewarding job. The segment group with the largest decrease in purchases was "Global Roots" with a drop of 75%. The individuals who make-up of this group are ethnically diverse, young, earn modest incomes, and tend to rent in multiunit buildings. Every LifeMode group saw decreases regarding the number of graduates purchasing a license from 2006 to 2011, indicating substantial decreases in hunting participation among all types of hunters in the six years following graduation.

Table 7. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by LifeMode Group.

	Number of	% of 2006	Year of Purchase		Cha	nge
Category	Graduates	Grads	2006	2011	N	%
American Quilt	2,218	37.8%	1,431	934	(497)	-34.7%
Factories and Farms	725	12.4%	449	289	(160)	-35.6%
Family Portrait	9	0.2%	8	5	(3)	-37.5%
Global Roots	25	0.4%	16	4	(12)	-75.0%
High Hopes	151	2.6%	94	66	(28)	-29.8%
High Society	173	2.9%	106	70	(36)	-34.0%
Metropolis	56	1.0%	30	21	(9)	-30.0%
No Classification	317	5.4%	181	103	(78)	-43.1%
Scholars and Patriots	24	0.4%	13	6	(7)	-53.8%
Senior Styles	793	13.5%	457	290	(167)	-36.5%
Solo Acts	81	1.4%	47	29	(18)	-38.3%
Traditional Living	547	9.3%	325	197	(128)	-39.4%
Upscale Avenues	751	12.8%	446	299	(147)	-33.0%
Total	5,870	100.0%	3,603	2,313	(1,290)	-35.8%

Urbanization summary groups are people who share a location, from the largest cities to the most rural farms. Common areas such as urban, suburban, etc. are divided based on income. Segments tagged with an "I" are typically the higher income earners in these specific areas, while those marked with an "II" are

generally lower income areas within each segment. Not surprisingly, Maine hunter education graduates generally come from less urbanized regions of the state. The only group with an increase in purchasing change from 2006 to 2011 was Principle Urban Centers I having increased 25% (Table 8). The content of this group represent the prosperous majority of the major city populations. Metro Cities II had the largest decrease with a 44.4% decline. These individuals are found in larger cities and densely populated neighborhoods. See Appendix at the end of this report for full description list of all urbanization summary groups.

Table 8. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by Urban Classification Group.

	Number of	% of 2006	Year of Purchase		Cha	nge
Category	Graduates	Grads	2006	2011	N	%
No Classification	317	5.4%	181	103	(78)	-43.1%
Principle Urban Centers I	15	0.3%	4	5	1	25.0%
Principle Urban Centers II	6	0.1%	5	4	(1)	-20.0%
Metro Cities I	90	1.5%	41	26	(15)	-36.6%
Metro Cities II	146	2.5%	90	50	(40)	-44.4%
Urban Outskirts I	307	5.2%	186	120	(66)	-35.5%
Urban Outskirts II	227	3.9%	134	80	(54)	-40.3%
Suburban Periphery I	304	5.2%	193	130	(63)	-32.6%
Suburban Periphery II	529	9.0%	309	202	(107)	-34.6%
Small Towns	445	7.6%	245	151	(94)	-38.4%
Rural I	2,532	43.1%	1632	1069	(563)	-34.5%
Rural II	952	16.2%	583	373	(210)	-36.0%
Total	5,870	100.0%	3,603	2,313	(1,290)	-35.8%

From 2006 to 2011, the percent of graduates who purchased a small game license decreased 41.5%, compared to a decrease of 35.9% of those who purchased a big game license during the same period (Table 9).

Table 9. 2006 Hunter Education Graduates Who Purchased A Small Or Big Game License, by Year

	Small G	ame License B	uyers	Big Game License Buyers			
Purchase Year	Number of Graduates Required To Purchase A License	Number of License Buyers	% Of Those Required To Buy	Number of Graduates Required To Purchase A License	Number of License Buyers	% Of Those Required To Buy	
2006	5,870	3,365	57.3%	5,870	3,592	61.2%	
2007	5,870	2,961	50.4%	5,870	3,204	54.6%	
2008	5,870	2,620	44.6%	5,870	2,885	49.1%	
2009	5,870	2,298	39.1%	5,870	2,588	44.1%	
2010	5,870	2,137	36.4%	5,870	2,445	41.7%	
2011	5,870	1,970	33.6%	5,870	2,301	39.2%	
Change from 2006							
to 2011		-41.5%			-35.9%		

The average age of 2006 hunter education graduates who purchased a license increased slightly from 2006 to 2011 for both big game and small game (Table 10).

Table 10. Average Age of Graduates by Type of License Purchased

	Small Game License Buyers	Big Game License Buyers	
Purchase Year	Average Age	Average Age	
2006	24.4	24.4	
2007	25.2	24.9	
2008	25.1	24.9	
2009	25.4	25.2	
2010	25.3	25.2	
2011	25.2	25.1	

The total number of big game licenses buyers within the 2006 hunter education class fell by 1,291 purchases from 2006 to 2011, or 35.9%. The age segment that had the highest decrease of all graduates in purchasing big game licenses was 25 to 35 year-olds, at a 46.1%. The age group 10 to 15 year-olds showed a decrease of 29.7% (Table 11).

Table 11. Change in Big Game license purchasing by 2006 Hunter Education graduates, by age

	Number of	Year of	Purchase	Change	
Age	Graduates	2006	2,011	N	%
10 to 15	1,871	1,035	728	(307)	-29.7%
16-24	1,971	1,350	769	(581)	-43.0%
25-35	661	397	214	(183)	-46.1%
35 and older	1,367	810	590	(220)	-27.2%
Total	5,870	3,592	2,301	(1,291)	-35.9%

The amount of graduates who purchased a small game license decreased 41.5%, or by 1,395 license buyers (Table 12). The age with the highest percent change was the 25 to 35 year-olds with a decrease of 45.6%.

Table 12. Change in Small Game license purchasing by 2006 Hunter Education graduates, by age

	Number of	Year of Purchase		Change	
Age	Graduates	2006	2,011	N	%
10 to 15	1,871	924	536	(388)	-42.0%
16-24	1,971	1,283	703	(580)	-45.2%
25-35	661	388	211	(177)	-45.6%
35 and older	1,367	770	520	(250)	-32.5%
Total	5,870	3,365	1,970	(1,395)	-41.5%

The month which held the highest number of graduates from Maine was October with 2,241 graduates or 38.2% (Table 13). Graduates who never purchased a license were more likely to graduate in June when 52% never bought, followed by May (51.3%). One possible explanation is that most hunting seasons are not open and these graduates have to wait several months to hunt. This time gap may allow for a loss of interest and provides graduates ample time to adopt other activities. The months with the youngest graduates were June and July at 17 and 19.1 years old, respectively. Older graduates were more common in December (Figure 2).

**Table 13. Hunter Education Graduates By Month Of Course Completion** 

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduated Who Never Purchased	Percent Of Total Who Never Purchased A License	Average Age Of Graduates Who Never Purchased a License
January	46	29.5	10	21.7%	32.1
February	116	26.5	27	23.3%	27.8
March	337	26.8	100	29.7%	28.9
April	624	26.4	204	32.7%	25.8
May	197	24.0	101	51.3%	21.4
June	181	17.0	94	52.0%	16.3
July	281	19.1	90	32.0%	17.7
August	409	23.2	142	34.7%	22.2
September	1,393	25.3	384	27.6%	25.5
October	2,241	24.6	538	24.0%	26.1
November	28	24.3	14	50.0%	26.9
December	17	31.1	6	35.3%	28.3

Figure 1. Number of Graduates who completed the Hunter Education Course by Month

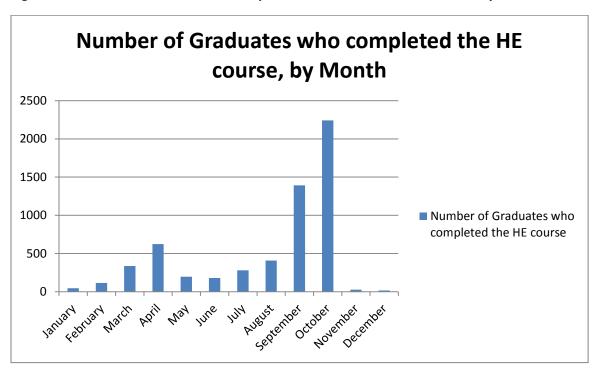


Figure 2. Average Age by Month of Graduation

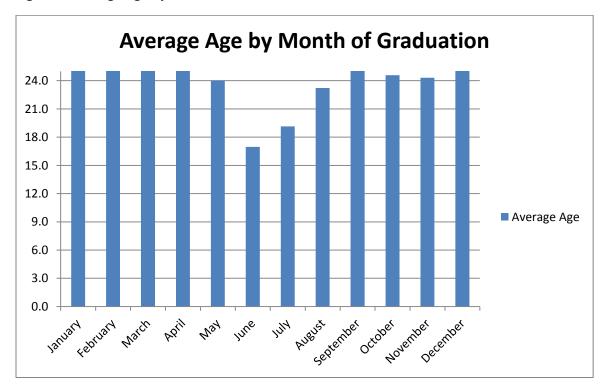
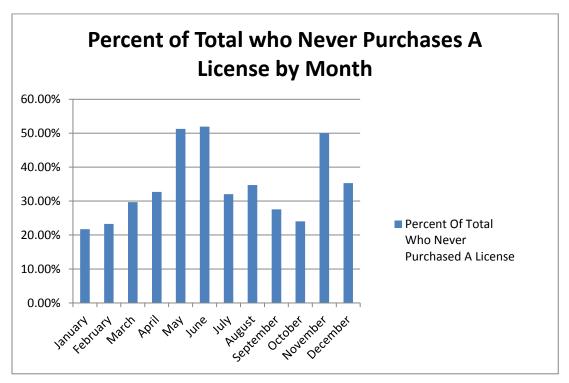


Figure 3. Percent of Total who Never Purchases A License by Month



# Vermont

#### **Executive Summary:**

The purpose of this analysis was to determine the percentage of hunter education graduates who go on to buy hunting licenses, identify associated trends, and identify the segments of graduates more or less likely to actually hunt. State hunting license and hunter education records were used to conduct this assessment. To accomplish this project, the license buying habits of Montana's 2006 hunter education class was tracked over six years. In all, this class had 4,730 graduates, with 4,335 records usable for the analysis

- When compared to the other states in the study, Vermont is ranked 2<sup>nd</sup> out of the 12 states regarding the percentage of graduates who purchased at least a single hunting license from 2006 to 2011. Plus, Vermont is ranked 6<sup>th</sup> out of the 12 states when looking at the smallest percent change in the number of 2006 hunter education graduates who purchased a hunting license in this six year buying period.
- Within the six year period, the year that held the highest percentage of graduates purchasing a license was 2006 with 66.0% of the graduating class purchasing a license.
   Over the six year period, the number of graduates who purchased a license decreased 46.2%. Reasons for the decrease would need to be determined via direct surveys of recent graduates.
- From the hunter education class of 2006, 3,490 (80.5%) graduates purchased at least one license during the six year period of 2006 to 2011. Of the 4,335 hunter education graduates, 845 never purchased a license, representing 19.5% of the 2006 graduate class.
- Of these graduates, the 10-15 year-old age group represented the largest portion of the class, with 64.5% of all graduates.
- Only 15.9% of certified archery students failed to purchase a hunting license after graduation, compared to 19.5% of students who took the standard hunter education course, indicating participation in bowhunting certification is more common among people with a higher level of interest in hunting.
- One measure used to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually received by each state. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. Adjustments were made to account for years when younger graduates were not required to buy a license. Vermont achieved 52.6% of the 2006 class's total sales potential over the six year period.

#### Introduction to Vermont's data:

There is no minimum age required to purchase a license, however you must have passed the hunter safety course in order to hunt game in Vermont. Youth hunting licenses are available for youth under 18 years of age. An applicant for a hunting or combination license must present either a previous or current hunting or combination license from any state or Canadian province, or a certificate or a letter of proof showing satisfactory completion of an approved hunter safety course from Vermont or any other state or province.

A person under age 16 must have his or her parent or guardian sign in the presence of an issuing agent to obtain a hunting license.

#### **Comments:**

Lifetime licenses purchased before 2006 may not have been accounted for. If youth lifetime licenses were purchased when an individual was of a young age, then, when the child became of age, they took the hunter education class, the record of lifetime licenses would not have shown in the subsequent years because the individual would have purchased it prior to 2006.

#### **Results:**

The 2006 hunter education class in Vermont provided a total of 4,730 graduates, with 4,335 records usable for analysis. Within the six year period, the year that held the highest percentage of graduates purchasing a license was in 2006 with 66.0% of the graduating class. In each following year, some 2006 graduates would not renew their license, either out of a lack of interest, having moved out of state, or other factors than cannot be determined using just license sales records. During the six year span, the average age of those who continued to hunt increased 0.3 years. However the average age didn't show a pattern of increase or decrease throughout the six years (Table 1). In total, over the course of the six years, the number of graduates who purchased a license decreased 46.2%.

Table 1. 2006 Hunter Education Graduates Who Purchased A License, By Year

Number of 2006 HE Graduates		4,335		
Year	Number of HE Graduates That Purchased A License	% of Graduates Who Bought a License	Percent Change over Previous Year	Average Age
2006	2,861	66.0%	-	20.3
2007	2,717	62.7%	-5.0%	19.8
2008	2,186	50.4%	-19.5%	19.9
2009	2,154	49.7%	-1.5%	19.6
2010	2,227	51.4%	3.4%	19.7
2011	1,540	35.5%	-30.8%	20.6
Change from 2006 to 2011		-	-46.2%	

Most graduates do not buy a license each year. In fact, less than one-fifth bought a license in all six years after graduating. Many will not buy a license the first year they are eligible or buy in all six years, but will buy at some point (Table 2). From the hunter education class of 2006, 3,490 purchased at least one license during the six year period from 2006 through 2011, or 80.5%, compared to 66.0% who bought in the first year they were eligible to buy a license. Over the six year period, 19.5% were never identified as having bought a license. Of those who did purchase a license, less than a quarter (23.2%) purchased one in each year.

Table 2. License Purchase Frequency By 2006 Hunter Education Graduates Following Certification.

Number of years purchased a license, 2006-2011	Number of HE Graduates	Percent	Of those who bought licenses
0	845	19.5%	-
1	415	9.6%	11.9%
2	446	10.3%	12.8%
3	479	11.0%	13.7%
4	620	14.3%	17.8%
5	719	16.6%	20.6%
6	811	18.7%	23.2%
Total	4,335		
Total of those who purchased	3,490	80.5%	

In the Class of 2006, the age category that represented the largest portion of graduates was the 10-15 year-old segment, representing 64.5% of the class, or 2,794 graduates (Table 3). The average age in this age group is 12.4 years old.

Table 3. 2006 Hunter Education Graduates, by Age Category

		_	
	Number of	Average	0/
Age	Graduates	Age	%
10 to 15	2,794	12.4	64.5%
16-24	484	18.9	11.2%
25-35	329	30.6	7.6%
Older than 35	728	45.6	16.8%
Total	4,335		100.0%

In the 10 to 15 year-old age group, 19.5% never purchased a license. Within the same age group, 61.4% purchased at least three years out of the possible six. Of all graduates, 60.6% purchased a license at least three years out of the six possible, indicating younger graduates have a greater interest in hunting compared to older graduates (Table 4).

Table 4. License Purchase Frequency by 2006 Hunter Education Graduates Following Certification, by Age Category.

	Number of	Number of	years purchase 2006-2011	d a license,
Years of Age	Graduates	None	One - Two	Three - Six
10 to 15	2,794	19.5%	19.1%	61.4%
16-24	484	15.9%	23.1%	61.0%
25-35	329	19.1%	19.8%	61.1%
Older than 35	728	22.1%	20.5%	57.4%
Total	4,335	19.5%	19.9%	60.6%

The rate at which graduates continue to hunt does vary by age (Table 5). In 2006, 2,861 graduates purchased a license. From 2006 to 2011 the amount of graduates who purchased a license decreased by 1,321 or 46.2%. The age category with the largest decline was 16 to 24 year-olds representing a 49.4% decrease. Lifestyle factors might be affecting participation. At this age, over six years, graduates might be more likely to move on to college, military or jobs out of state, thus reducing their probability of buying a hunting license.

Table 5. Change in the Percent of 2006 Hunter Education Graduates who bought licenses from 2006 to 2011

	Number of	Year of	Year of Purchase		inge
Age	Graduates	2006	2011	N	%
10 to 15	2,794	1,803	958	(845)	-46.9%
16-24	484	342	173	(169)	-49.4%
25-35	329	225	127	(98)	-43.6%
Older than 35	728	491	282	(209)	-42.6%
Total	4,335	2,861	1,540	(1,321)	-46.2%

One way to track each class's post-graduation participation rate and contribution to conservation is the percent of potential man-years of license sales actually achieved. For example, each graduate has the potential to buy a license in each of the six years following graduation. If all hunters bought a license in only half those years, the state reached 50% of that class's license buying potential. The total sales that Vermont achieved from its 2006 hunter education graduates through 2011 represented 52.6% of the total sales potential (Table 6). A total of 13,685 licenses-years were sold to graduates out of a possible 26,010 licenses-years. This calculation included an adjustment to account for younger hunters who may not have needed a license. A license-year is measured when a graduate buys at least one hunting privilege within a given year. Compared to the other 12 states examined, Vermont ranked 2<sup>nd</sup> in regard to selling the greatest proportion of its potential license sales.

Table 6. Percent Of Revenue Achieved By Graduates Purchasing A License.

		Percent of Potential
Actual Sales	Sales Potential	Reached
13,685	26,010	52.6%

Compared to graduates who only took the hunter education course, graduates who also earned bow hunting certification were more likely to purchase a hunting license following graduation from the course. Only 15.9% of certified bow hunters failed to purchase a hunting license after graduation, compared to 19.5% of students who only took the hunter education course. Twenty-seven percent, or 207, of the 766 hunter education graduates who also earned bow hunting certification purchased a hunting license in all six years (Table 7), compared to 18.7% of all standard graduates (Table 2).

Table 7. License Purchase Frequency By 2006 Bow Hunting Certified Graduates.

Number of years purchased a license, 2006-2011	Number of HE Graduates	% of Graduates Who Bought a License
0	122	15.9%
1	53	6.9%
2	62	8.1%
3	62	8.1%
4	102	13.3%
5	158	20.6%
6	207	27.0%
Total	766	100.00%

Hunter education graduates were examined based on their lifestyle characteristics. LifeMode summary groups are people who share an experience such as being born in the same time period or share a trait such as prosperity. Definitions for each LifeMode group are presented in the Appendix at the end of the report. The "American Quilt" segment group represents the largest portion of the 2006 hunter education class with 27.2% of all graduates (Table 8). This group represents America's small towns and rural areas. In terms of license buying trends "Metropolis" graduates had the least change from 2006 to 2011 with a decrease of 32.1%. The individuals within this group live and work in America's cities. The segment group with the largest decrease of those who purchased a license was "Global Roots" with a drop of 75%. Ethnic diversity is common among the individuals within this group. Overall, the difference in hunting participation over time does not vary significantly based on lifestyle segments, indicating that motivations driving hunting generally overcome lifestyle characteristics. Every LifeMode group saw decreases regarding the number of graduates purchasing a license from 2006 to 2011, indicating substantial decreases in hunting participation among all types of hunters in the six years following graduation.

Table 8. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by LifeMode Group.

	Number of	% of 2006	Year of P	urchase	Cha	nge
Category	Graduates	Grads	2006	2011	N	%
American Quilt	1,178	27.2%	797	423	(374)	-46.9%
Factories and Farms	689	15.9%	469	261	(208)	-44.3%
Family Portrait	1	0.0%	0	0	-	n/a
Global Roots	21	0.5%	12	3	(9)	-75.0%
High Hopes	79	1.8%	53	24	(29)	-54.7%
High Society	213	4.9%	115	59	(56)	-48.7%
Metropolis	52	1.2%	28	19	(9)	-32.1%
No Classification	148	3.4%	94	51	(43)	-45.7%
Scholars and Patriots	26	0.6%	19	10	(9)	-47.4%
Senior Styles	274	6.3%	178	97	(81)	-45.5%
Solo Acts	81	1.9%	48	25	(23)	-47.9%
Traditional Living	719	16.6%	485	260	(225)	-46.4%
Upscale Avenues	854	19.7%	563	308	(255)	-45.3%
Total	4,335	100.0%	2,861	1,540	(1,321)	-46.2%

Urbanization summary groups are people who share a location, from the largest cities to the most rural farms. Common areas such as urban, suburban, etc. are divided based on income. Segments tagged with an "I" are typically the higher income earners in these specific areas, while those marked with an "II" are generally lower income areas within each segment. Not surprisingly, Vermont hunter education graduates generally come from less urbanized regions of the state. The group with the largest purchasing change from 2006 to 2011 was Metro Cities II with a decrease of 56.2%. This group is found in larger cities and densely populated neighborhoods. Principle Urban Centers I showed the only increase at 100%, although in comparison to the other groups, the number of graduates is very low (Table 9). Individuals within this group represent the most affluent populations of the country's largest metropolitan areas. The difference between all these groups in purchasing behavior was not significant and likely does not warrant developing intervention efforts unique to each group. See Appendix at the end of this report for full description list of all urbanization summary groups.

Table 9. Change in the Percent of 2006 Hunter Education Graduates who bought from 2006 to 2011, by Urban Classification Group.

	Number of	% of 2006	Year of P	urchase	Cha	nge
Category	Graduates	Grads	2006	2011	N	%
No Classification	148	3.4%	94	51	(43)	-45.7%
Principle Urban Centers I	7	0.2%	1	2	1	100.0%
Principle Urban Centers II	3	0.1%	3	2	(1)	-33.3%
Metro Cities I	95	2.2%	43	24	(19)	-44.2%
Metro Cities II	120	2.8%	73	32	(41)	-56.2%
Urban Outskirts I	297	6.9%	200	101	(99)	-49.5%
Urban Outskirts II	116	2.7%	76	46	(30)	-39.5%
Suburban Periphery I	392	9.0%	239	135	(104)	-43.5%
Suburban Periphery II	626	14.4%	421	221	(200)	-47.5%
Small Towns	77	1.8%	54	26	(28)	-51.9%
Rural I	1,936	44.7%	1297	707	(590)	-45.5%
Rural II	518	11.9%	360	193	(167)	-46.4%
Total	4,335	100.0%	2,861	1,540	(1,321)	-46.2%

The month with the highest rate of graduation for the hunter education course in Vermont was September with 1,328 graduates, or 30.6% (Table 10). The months with the youngest graduates were June at 16.0 years old, followed by July where the average age was 16.2 years old. Graduates who never purchased a license were more likely to graduate in May where 44.4% of all May graduates never bought, followed by December (40%).

**Table 10. Hunter Education Graduates By Month Of Course Completion** 

Month	Number of Graduates who completed the HE course	Average Age	Number of Graduated Who Never Purchased	Percent Of Total Who Never Purchased A License	Average Age Of Graduates Who Never Purchased a License
March	199	22.4	35	17.59%	27.9
April	431	22.7	81	18.79%	25.3
May	9	23.0	4	44.44%	13.3
June	285	16.0	67	23.51%	14.7
July	538	16.2	157	29.18%	16.6
August	630	18.2	140	22.22%	17.6
September	1,328	21.7	203	15.29%	24.9
October	839	21.2	142	16.92%	23.6
November	71	17.3	14	19.72%	18.0
December	5	23.0	2	40.00%	23.0



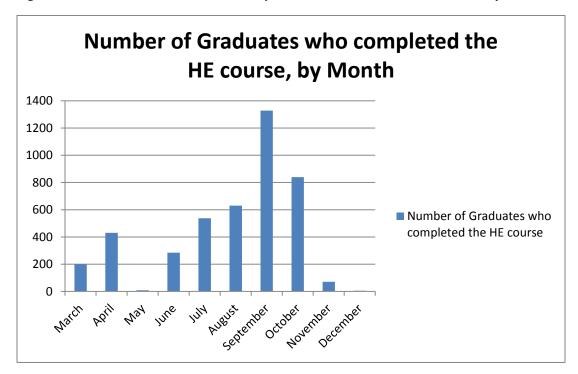
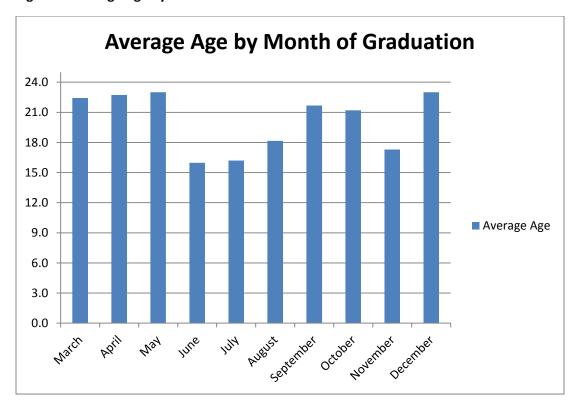
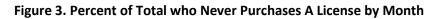


Figure 2. Average Age by Month of Graduation







### Appendix 1:

# LifeMode Group Descriptions

The 65 distinct market segments in Tapestry Segmentation profile the diversity of the American population and provide two ways to summarize and simplify these differences—LifeMode summary groups and Urbanization summary groups. Segments within a LifeMode summary group share an experience such as being born in the same time period or a trait such as affluence. Urbanization summary groups share a locale, from the urban canyons of the largest cities to the rural lanes of villages or farms.

LifeMode Group: L1 High Society Segment Codes: 01, 02, 03, 04, 05, 06, 07 Residents of the seven *High Society* neighborhoods are affluent and well educated. They represent slightly more than 12 percent of all U.S. households but generate nearly one-quarter of the total U.S. income. Employment in high paying positions, such as professional or managerial occupations, is a primary reason why the median household income for this group is \$105,006. Most households are married couple families who live in affluent neighborhoods where the median home value is \$329,603. Although this is one of the least ethnically diverse groups in the United States, it is one of the fastest growing, increasing by more than 2 percent annually since 2000. Residents of *High Society* are affluent and active—financially, civically, and physically. They participate in a wide variety of public activities and sports and travel extensively. Try the Internet or radio instead of television to reach these markets.

LifeMode Group: L2 Upscale Avenues Segment Codes: 09, 10, 11, 13, 16, 17, 18 Prosperity is the overriding attribute shared by the seven segments in *Upscale Avenues*. Residents have earned their success from years of hard work. Similar to the *High Society* segments, many in this group are also well educated with above-average earnings. However, their housing choices reveal their distinct preferences. Urban markets such as *Urban Chic* and *Pacific Heights* favor townhouses and highrises, *Pleasant-Ville* residents prefer single-family homes in suburban neighborhoods, and *Green Acres* residents opt for open spaces. Some have not settled on a home yet, such as the renters among *Enterprising Professionals*; others, such as *Cozy and Comfortable* residents, have been settled for years. The median household income for the group is \$70,720, and their median net worth is \$188,740. Prosperous domesticity also characterizes the lifestyle in *Upscale Avenues*. They invest in their homes; the owners work on landscaping and home remodeling projects, and the renters buy new furnishings and appliances. They play golf, lift weights, go bicycling, and take domestic vacations. Although they are partial to new cars, they also save and invest their earnings.

LifeMode Group: L3 Metropolis Segment Codes: 20, 22, 45, 51, 54, 62 Residents in the six segments of the *Metropolis* group live and work in America's cities. They live in older, single-family homes or row houses built in the 1940s or earlier. Those living in larger cities tend to own fewer vehicles and rely more on public transportation; however, workers in most of the Metropolis segments commute to service-related jobs. The median value of their homes is \$143,320. The *Metropolis* group reflects the segments' diversity in housing, age, and income. For example, ages among the segments range from Generation Xers to retirees; households include married couples with children and single parents with children. Employment status also varies from well-educated professionals to unemployed. The median household income of the group is \$42,109. Their lifestyle is also uniquely urban and media oriented. They like music, especially urban and contemporary formats, which they listen to during their commutes. They watch a variety of TV programs, from news to syndicated sitcoms, and would rather see movies than read books.

LifeMode Group: L4 Solo Acts Segment Codes: 08, 23, 27, 36, 39 Residents of the Solo Acts summary group segments are singles who prefer city life. Many are young, just starting out in more densely populated U.S. neighborhoods; others are well-established singles who have no homeownership or child-rearing responsibilities. Second only to High Society, residents of this group tend to be well-educated, working professionals who are either attending college or already hold a degree. Their incomes reflect their employment experience, ranging from a low median of \$44,112 (Old and Newcomers) among the newest households to approximately \$98,606 (Laptops & Lattes) among established singles. Homeownership is at 28 percent; the median home value is \$242,868. Contrary to modern migration patterns that flow away from the largest cities, Solo Acts' residents are moving into major cities such as New York City; Chicago; Washington, D.C.; Boston; Los Angeles; and San Francisco.

With considerable discretionary income and few commitments, their lifestyle is urban, including the best of city life—dining out, attending plays and concerts, and visiting museums—and, for a break from constant connectivity, extensive travel domestically and abroad.

### LifeMode Group: L5 Senior Styles Segment Codes: 14, 15, 29, 30, 43, 49, 50, 57, 65 More than

14.4 million households in the nine *Senior Styles* segments comprise one of the largest LifeMode summary groups. As the U.S. population ages, two of the fastestgrowing American markets are found among *The Elders* and the *Silver and Gold* segments. *Senior Styles* segments illustrate the diversity among today's senior markets. Although incomes within this group cover a wide range, the median is \$45,396, attributable mostly to retirement income or Social Security payments. Younger, more affluent seniors, freed of their child-rearing responsibilities, are traveling and relocating to warmer climates. Settled seniors are looking forward to retirement and remaining in their homes. Residents in some of the older, less privileged segments live alone and collect Social Security and other benefits. Their choice of housing depends on their income. This group may reside in single-family homes, retirement homes, or highrises. Their lifestyles can be as diverse as their circumstances, but senior markets do have common traits among their preferences. Golf is their favorite sport; they play and watch golf on TV. They read the newspaper daily and prefer to watch news shows on television. Although their use of the Internet is nearly average, they are more likely to shop through QVC than online.

LifeMode Group: L6 Scholars and Patriots Segment Codes: 40, 55, 63 This summary group is unique in the Tapestry Segmentation system. Their shared traits include youth, with the attendant lower incomes, and atypical environments such as college life or military service. Because of their transient lifestyle and lifestage, their homeownership rate is low. Most live in townhouses or apartments, although one-quarter reside in single-family homes. One segment, *Military Proximity*, is dominated by military life; the other two, *College Towns* and *Dorms and Diplomas*, are predominantly students who are pursuing college degrees. Although most of the residents in the military segment are either on active duty or employed in civilian jobs on military bases, the students tend to work part-time at low-paying jobs to support themselves while attending school. However, low personal income does not inhibit their lifestyles. *Scholars and Patriots* residents' eclectic tastes in sports range from yoga to football. Electronically savvy, they have wireless Internet connections, notebook computers, iPods, and digital cameras.

LifeMode Group: L7 High Hopes Segment Codes: 28, 48 The High Hopes summary group includes Aspiring Young Families and Great Expectations. These residents are a mix of married couples, single parents, and singles who seek the "American Dream" of homeownership and a rewarding job. Most live in single-family houses or multiunit buildings; approximately half own their homes. The median home value is \$122,436. Many would move to a new location for better opportunities. Many are young, mobile, and college educated; one-third are younger than 35 years. The median household income is \$46,167, and the median net worth is \$29,162.

LifeMode Group: L8 Global Roots Segment Codes: 35, 38, 44, 47, 52, 58, 60, 61 Ethnic diversity is the common thread among the eight segments in *Global Roots*; the diversity index stands at 90. *Las Casas* and *NeWest Residents* represent a strong Hispanic influence in addition to a broad mix of cultural and racial diversity found in *Urban Melting Pot* and *International Marketplace*. Typical of new households, *Global Roots*' residents are young, earn modest incomes, and tend to rent in multiunit buildings. Their youth reflects recent immigration trends; half of all households have immigrated to the United States within the past 10 years. Married couples, usually with children; single parents; and people who live alone are typical of the household types in the *Global Roots* segments. Because households with children dominate, it is not surprising that spending is high for baby products, children's clothing, and toys. Residents of *Global Roots* are less likely than other groups to have home PCs but just as likely to use cell phones. They maintain ties with friends and relatives in their countries of origin with foreign travel.

LifeMode Group: L9 Family Portrait Segment Codes: 12, 19, 21, 59, 64 Family Portrait has the fastest-growing population of the LifeMode summary groups, driven primarily by the rapid increase in the *Up and Coming Families* segment. Youth, family life, and the presence of children are the common characteristics across the five markets in *Family Portrait*. The group is also ethnically diverse: more than 30 percent of the residents are of Hispanic descent. The neighborhoods are predominantly composed of homeowners who live in singlefamily homes. Most households include married couples with children who contribute to the group's large household size, averaging more than 3.1 persons per household. Their lifestyle reflects their youth and family orientation—buying infant and children's clothing and toys and visiting theme parks and zoos.

LifeMode Group: L10 Traditional Living Segment Codes: 24, 32, 33, 34 The four segments in *Traditional Living* convey the perception of real middle America—hardworking, settled families. The group's higher median age of 38 years also conveys their lifestage—a number of older residents who are completing their child-rearing responsibilities and anticipating retirement. Even though they're older, many still work hard to earn a modest living. They typically own single-family homes in established, slow-growing neighborhoods. They buy standard, four-door American cars, belong to veterans' clubs and

fraternal organizations, take care of their homes and gardens, and rely on traditional media such as newspapers for their news.

LifeMode Group: L11 Factories and Farms Segment Codes: 25, 37, 42, 53, 56 The segments in the *Factories and Farms* summary group represent rural life—from small towns and villages to farms. Employment in manufacturing and agricultural industries is typical in these small, settled communities across America's breadbasket. Population change is nominal, and the profile is classic. Most households are families, either married couples or married couples with children. By age, the residents of *Factories and Farms* mirror the U.S. distribution, with slightly more retirees. Median household income is a bit lower, almost \$40,524, but so is the home value of \$92,572. Most own their homes. Their lifestyle reflects their locale, emphasizing home and garden care, fishing and hunting, pets, and membership in local clubs.

LifeMode Group: L12 American Quilt Segment Codes: 26, 31, 41, 46 Location in America's small towns and rural areas links the four segments in *American Quilt*. Unlike *Factories and Farms*, this group represents a more diverse microcosm of small-town life, including the largest segment of Tapestry Segmentation, *Midland Crowd*. Manufacturing and agriculture remain part of the local economy, but *American Quilt* also includes workers in local government, service, construction, communication, and utilities. In addition to farmers, *American Quilt* includes the *Rural Resort Dwellers* segment, an older population that is retiring to seasonal vacation spots, and *Crossroads*, young families who live in mobile homes. Households in *American Quilt* are also more affluent, with a median household income of \$45,729, and more are homeowners. However, the rural lifestyle is also evident, with fishing, hunting, and power boats along with a preference for pickups and country music.

# **Urbanization Group Descriptions**

Tapestry Segmentation includes 65 distinctive market segments to profile the diversity of the American population and two ways to summarize and simplify the differences—LifeMode groups and Urbanization groups. Segments within a LifeMode group share an experience such as being born in the same period or a trait such as affluence. Urbanization groups share a locale, from the urban canyons of the largest cities to the rural lanes of villages or farms.

### Urbanization Group: U1 Principal Urban Centers I Segments: 08, 11, 20, 21, 23, 27, 35, 44

*Principal Urban Centers I* represents the most affluent populations of the country's largest metropolitan areas, those with populations of 2.5 million or more. Big-city residents live in apartments instead of single-family homes and take public transportation instead of driving. High population density exemplifies big-city life and its elements such as opportunities for high-paying jobs and paying higher rents and mortgages. Residents are young and just as likely to be single as married. Professional employment is typical, as is diversity. They take frequent vacations to visit family and friends. Foreign travel is important to the foreign-born population in this group. These urbanites embrace the amenities of city life from drinking coffee at the corner Starbucks to visiting museums, going dancing, and dining out. To stay fit, they walk or jog and work out at home or at a fitness club but rarely play team sports. They own the latest in electronics and go online for everything. Because they'd rather go out than stay in, home improvements and furnishings aren't important to them.

### Urbanization Group: U2 Principal Urban Centers II Segments: 45, 47, 54, 58, 61, 64, 65

Principal Urban Centers II represents the aspiring populations of the country's largest cities. This is the youngest (median age of 28.4 years) and most diverse population among the Urbanization groups including many recent arrivals in large "gateway" cities such as New York City, Los Angeles, and Chicago. Although the population density is second only to Principal Urban Centers I, it is still significantly lower. The search for affordable housing has moved these residents away from high-rises and into row houses, duplexes, and relatively lower-density buildings; the median home value is \$151,256. Their lifestyle is characterized not only by their locale but also by their youth and nascent socioeconomic status. Their median household income is \$27,935. They are more likely to use public transportation and less likely to own their homes. Families are also more common in Principal Urban Centers II. Residents are more likely to buy baby goods and groceries than electronic gadgets.

### Urbanization Group: U3 Metro Cities I Segments: 01, 03, 05, 09, 10, 16, 19, 22 Upscale

homeowners who live in densely populated cities characterize the eight segments in *Metro Cities I*. Their distinction lies in their choice of single-family homes in metropolitan cities. They embrace city living with the benefits of suburban single-family homes. *Metro Cities I* and *Suburban Periphery I* residents have the highest income among the Urbanization groups. Both their median net worth and median home value are more than twice that of the national level. Most are older than 35 years. Approximately 60 percent of the households are married couples with and without children. These well-educated residents are avid readers, particularly of novels. They are very active financial investors, are health conscious, and enjoy gardening as well as traveling domestically and abroad. They are also world-class shoppers, buying everything from electric tools and small household appliances to women's shoes and clothing.

#### Urbanization Group: U4 Metro Cities II Segments: 28, 30, 34, 36, 39, 52, 60, 63 Ranked third for

population density behind *Principal Urban Centers I* and *II, Metro Cities II* segments are found in larger cities and densely populated neighborhoods. The eight segments in *Metro Cities II* are neighborhoods in transition that include young starter households and retirees, singleperson households, and families. Most householders rent apartments in multiunit buildings. The young population remains mobile. Many are enrolled in college; most are still trying different jobs. The median household income of this group is \$42,574; however, the disparity of wealth that varies from \$8,892 (*Dorms to Diplomas*) to \$103,158 (*Retirement Communities*) illustrates the wide range of ages and lifestages in *Metro Cities II*. Consumers in this group look for economy and convenience. They prefer to drive four-door sedans, eat fast food, and shop at convenience stores. Because so many residents rent, few are interested in gardening and home improvement projects.

Urbanization Group: U5 Urban Outskirts I Segments: 04, 24, 32, 38, 48 The segments in *Urban Outskirts I* live in higher-density suburban neighborhoods spread across metropolitan areas. Many of these neighborhoods are part of the main hub of social, cultural, and economic activity within the metro area. The proximity of higher-density suburban areas to employment and entertainment venues combines the convenience of access with the advantage of affordable suburban living. The median household income of *Urban Outskirts I* residents is \$57,756, on par with the national median, although the population is slightly younger with a median age of 34 (compared to the national median of 36.9 years). As in established suburban communities, housing is dominated by single-family dwellings but includes rental apartments to accommodate younger households with growing incomes. Owners will tackle do-ityourself home improvement projects such as simple lighting and bathroom upgrades as well as painting and staining. They also enjoy caring for their lawns and gardens. They walk and swim for exercise; occasionally, they go bowling and fishing and play golf. Televisions are ubiquitous; however, residents are just as likely to read a newspaper or listen to the radio for news and entertainment.

Urbanization Group: U6 Urban Outskirts II Segments: 51, 55, 57, 59, 62 The settlement density and housing preferences of *Urban Outskirts II* are similar to *Urban Outskirts I—*high-density suburban neighborhoods in metropolitan areas. However, here the homes are older and the population is younger, with a median age of 31.1 years. Homes can be single-family or multiunit dwellings; nearly half of the housing units were built before 1960. Homes are affordable, with a median home value of \$72,730. Half of the households own their own home, although the younger population is less affluent, with household income approximately half that of the national median. This group includes a variety of household types ranging from the ethnically diverse family households of *Southwestern Families* to the shared and single-person student households found in *College Towns.* They prefer Folger's coffee to Starbucks, current consumption to saving, and shopping at discount retailers instead of patronizing high-end stores.

Urbanization Group: U7 Suburban Periphery I Segments: 02, 06, 07, 12, 13, 14, 15 Moving away from the epicenters of city living, peripheral suburban expansion represents lower-density housing development located in metropolitan and micropolitan statistical areas throughout the United States. *Suburban Periphery I* is the largest Urbanization summary group in Tapestry Segmentation, with the most population and households, in addition to the highest annual growth. Married-couple families dominate, approximately half with children, primarily living in their own single-family homes with two cars. They are more likely to employ a lawn and gardening service, hire a professional cleaning service, and invest in home remodeling and improvement projects. This well-educated group not only shares the top rank for current household income with *Metro Cities I* but has also accumulated the most wealth. Because of the suburban location, the median home value is approximately \$100,000 less than that of *Metro Cities I*. To keep up with the latest trends, they are constantly working on home improvement projects and furnishings. They own a variety of securities investments; many track their investments online frequently, and consult with a financial planner. They upgrade to the latest technology including bigscreen TVs, personal computers, and the necessary software and peripherals. Domestic travel is part of their lifestyle. They watch CNN at home.

# Urbanization Group: U8 Suburban Periphery II Segments: 18, 29, 33, 40, 43, 53 *Suburban Periphery II* incorporates a population density similar to *Suburban Periphery I* but is more likely to be found in urban clusters of

Periphery II incorporates a population density similar to Suburban Periphery I but is more likely to be found in urban clusters of smaller cities in metropolitan areas. Housing is still predominantly owner-occupied, single-family homes but is older and closer to employment. Households are a mix, similar to that of the United States as a whole. More than half are married-couple families; one-quarter are singles who live alone. Although the median household income and home value are below the U.S. median, their median net worth is higher. This is the oldest Urbanization summary group in Tapestry Segmentation, with a median age of 41.4 years, and the highest concentration of householders who are older than 65 years. They like to watch a variety of sports, news, or documentary shows on television; occasionally, they will also watch a movie or primetime drama. They prefer to read newspapers instead of magazines but have an equal preference for fiction or nonfiction books. They prefer domestic sedans.

Urbanization Group: U9 Small Towns Segments: 41, 49, 50 Small towns represent the ideal in American communities— affordable, close-knit, and apart from the hustle and bustle of city life. The *Small Towns* Urbanization summary group is typical. Active members of their communities, residents participate in public activities, fund-raising, and public meetings. They make a modest living, with a median household income of \$39,244, but their earnings are sufficient to afford a single-family or mobile home. Most of the labor force is employed in manufacturing, construction, or retail sectors; many are already retired. *Heartland Communities* is well settled, but *Small Towns* welcomes the ongoing migration of younger *Crossroads* and older *Senior Sun Seekers*. They are less likely to own a credit card; those who do rarely use it. Technology is not an integral part of life for this group. Many still use a dial-up Internet connection; few will shop online or by phone. Because of their location,

satellite TV is preferred, but many households don't subscribe to cable or satellite TV. Favorite pastimes include gardening and lawn care.

Urbanization Group: U10 Rural I Segments: 17, 25, 26, 31 Small, nonfarm settlements, some of which are developing in suburban fringe areas, characterize the neighborhoods of *Rural I*. Married-couple families, many with grown children who have left home, work hard in blue-collar occupations. Some are self-employed with small businesses or farms. Their median age of 40.5 years is slightly older than that of the United States median. Their median household income of \$54,005 enables them to enjoy the comforts of large singlefamily homes with ample land. Do-it-yourselfers, they are proud of their homes and gardens, investing in major home improvement projects and the tools to do the job. Residents of *Rural I* may not be farmers, but they embrace the country lifestyle, from their gardens and pets to their favorite pastimes of hunting and fishing. They drive domestic pickup trucks.

Urbanization Group: U11 Rural II Segments: 37, 42, 46, 56 Rural II countryside is the extreme opposite of urbanization. Low population density characterizes life in the country with its inconveniences such as the need for multiple vehicles and advantages such as affordable single-family homes with land. Most of the population lives in rural farm areas; the rest live in the country or in small villages and work in mining or manufacturing. Residents are slightly older than the U.S. median, with a median age of 39.8 years; some are already retired. Most are homeowners. Residents of Rural II areas are settled; few of them will move. Family and home are central in their lives. Their lifestyles reflect a preference for comfort and practicality—western or work boots to dress shoes, kerosene heaters to espresso/cappuccino makers, recliners to patio furniture, garden tillers to trash compactors.

## Appendix 2:

### Montana

**Total Number Of Graduates by Individual Age** 

Total Number Of Graduates by Individual Age					
Age	Number of Graduates	Percent of Total	Age	Number of Graduates	Percent of Total
10	2	0.0%	43	29	0.4%
11	418	6.3%	44	23	0.3%
12	3019	45.5%	45	28	0.4%
13	1182	17.8%	46	21	0.3%
14	509	7.7%	47	18	0.3%
15	240	3.6%	48	21	0.3%
16	150	2.3%	49	14	0.2%
17	121	1.8%	50	14	0.2%
18	79	1.2%	51	14	0.2%
19	65	1.0%	52	10	0.2%
20	89	1.3%	53	14	0.2%
21	86	1.3%	54	10	0.2%
22	26	0.4%	55	10	0.2%
23	17	0.3%	56	8	0.1%
24	18	0.3%	57	10	0.2%
25	11	0.2%	58	9	0.1%
26	13	0.2%	60	9	0.1%
27	12	0.2%	61	3	0.0%
28	11	0.2%	62	3	0.0%
29	4	0.1%	63	2	0.0%
30	13	0.2%	64	5	0.1%
31	16	0.2%	65	5	0.1%
32	10	0.2%	66	8	0.1%
33	12	0.2%	67	6	0.1%
34	17	0.3%	68	3	0.0%
35	29	0.4%	69	1	0.0%
36	15	0.2%	71	1	0.0%
37	24	0.4%	73	2	0.0%
38	26	0.4%	75	2	0.0%
39	23	0.3%	76	1	0.0%
40	19	0.3%	83	1	0.0%
41	31	0.5%	Total	6,631	100.0%
42	19	0.3%			

Total Number of Graduates Who Never Purchased a License By Individual Age

(Over the course of the six years, the graduate never purchased a license in any year)

Age	Number who didn't purchase	Percent of Age
11	63	15.1%
12	299	9.9%
13	221	18.7%
14	108	21.2%
15	58	24.2%
16	34	22.7%
17	32	26.4%
18	27	34.2%
19	12	18.5%
20	26	29.2%
21	27	31.4%
22	11	42.3%
23	8	47.1%
24	9	50.0%
25	2	18.2%
26	4	30.8%
27	5	41.7%
28	4	36.4%
30	6	46.2%
31	5	31.3%
32	3	30.0%
33	4	33.3%
34	7	41.2%
35	9	31.0%
36	5	33.3%
37	10	41.7%
38	6	23.1%
39	10	43.5%
40	7	36.8%
41	10	32.3%
42	5	26.3%
43	7	24.1%
44	3	13.0%
45	6	21.4%
46	8	38.1%
47	7	38.9%
48	7	33.3%
49	2	14.3%
50	2	14.3%

Nevada

Total Number Of Graduates by Individual Age

	Number of	Percent of		Number of	Percent of
Age	Graduates	Total	Age	Graduates	Total
10	53	1.4%	41	53	1.4%
11	145	3.8%	42	48	1.3%
12	599	15.8%	43	55	1.5%
13	420	11.1%	44	61	1.6%
14	251	6.6%	45	52	1.4%
15	229	6.1%	46	42	1.1%
16	135	3.6%	47	9	0.2%
17	82	2.2%	48	10	0.3%
18	58	1.5%	49	10	0.3%
19	52	1.4%	50	13	0.3%
20	41	1.1%	51	11	0.3%
21	58	1.5%	52	11	0.3%
22	60	1.6%	53	10	0.3%
23	56	1.5%	54	11	0.3%
24	76	2.0%	55	6	0.2%
25	61	1.6%	56	11	0.3%
26	70	1.9%	57	10	0.3%
27	67	1.8%	58	6	0.2%
28	63	1.7%	59	6	0.2%
29	78	2.1%	60	3	0.1%
30	54	1.4%	61	5	0.1%
31	63	1.7%	62	3	0.1%
32	73	1.9%	63	4	0.1%
33	60	1.6%	64	2	0.1%
34	61	1.6%	65	1	0.0%
35	61	1.6%	66	6	0.2%
36	59	1.6%	68	2	0.1%
37	60	1.6%	69	2	0.1%
38	56	1.5%	75	1	0.0%
39	63	1.7%	Total	3,782	100.0%
40	54	1.4%			

Total Number of Graduates Who Never Purchased a License By Individual Age (Over the course of the six years, the graduate never purchased a license in any year)

Age	Number who didn't purchase	Percent of Age
10	23	43.4%
11	41	28.3%
12	108	18.0%
13	105	25.0%
14	89	35.5%
15	109	47.6%
16	73	54.1%
17	44	53.7%
18	22	37.9%
19	17	32.7%
20	12	29.3%
21	15	25.9%
22	21	35.0%
23	16	28.6%
24	18	23.7%
25	17	27.9%
26	20	28.6%
27	17	25.4%
28	21	33.3%
29	19	24.4%
30	15	27.8%
31	17	27.0%
32	28	38.4%
33	12	20.0%
34	20	32.8%
35	19	31.1%
36	24	40.7%
37	20	33.3%
38	15	26.8%
39	14	22.2%
40	12	22.2%
41	23	43.4%
42	13	27.1%
43	13	23.6%
44	23	37.7%
45	9	17.3%
46	12	28.6%
48	2	20.0%
49	2	20.0%
50	5	38.5%

Total Number Of Graduates by Individual Age

Utah

Total Itali	Number of	Percent of	-gc	Number of	Percent of
Age	Graduates	Total	Age	Graduates	Total
10	513	5.7%	39	76	0.8%
11	980	10.9%	40	69	0.8%
12	1584	17.6%	41	17	0.2%
13	1044	11.6%	42	20	0.2%
14	995	11.0%	43	18	0.2%
15	558	6.2%	44	16	0.2%
16	328	3.6%	45	17	0.2%
17	175	1.9%	46	8	0.1%
18	159	1.8%	47	14	0.2%
19	134	1.5%	48	16	0.2%
20	103	1.1%	49	13	0.1%
21	110	1.2%	50	8	0.1%
22	153	1.7%	51	8	0.1%
23	179	2.0%	52	9	0.1%
24	169	1.9%	53	7	0.1%
25	163	1.8%	54	4	0.0%
26	138	1.5%	55	15	0.2%
27	128	1.4%	56	8	0.1%
28	114	1.3%	57	6	0.1%
29	128	1.4%	60	1	0.0%
30	99	1.1%	64	3	0.0%
31	100	1.1%	65	1	0.0%
32	107	1.2%	68	1	0.0%
33	79	0.9%	69	1	0.0%
34	85	0.9%	71	1	0.0%
35	69	0.8%	72	1	0.0%
36	87	1.0%	73	1	0.0%
37	84	0.9%	77	1	0.0%
38	80	0.9%	Total	9,005	

Total Number of Graduates Who Never Purchased a License By Individual Age (Over the course of the six years, the graduate never purchased a license in any year)

Age	Number who didn't purchase	Percent of Age
10	58	11.3%
11	120	12.2%
12	241	15.2%
13	205	19.6%
14	220	22.1%
15	151	27.1%
16	108	32.9%
17	61	34.9%
18	54	34.0%
19	52	38.8%
20	45	43.7%
21	32	29.1%
22	46	30.1%
23	50	27.9%
24	45	26.6%
25	43	26.4%
26	40	29.0%
27	38	29.7%
28	26	22.8%
29	27	21.1%
30	30	30.3%
31	37	37.0%
32	24	22.4%
33	20	25.3%
34	27	31.8%
35	15	21.7%
36	18	20.7%
37	33	39.3%
38	18	22.5%
39	17	22.4%
40	22	31.9%
41	5	29.4%
42	5	25.0%
43	2	11.1%
44	3	18.8%
45	4	23.5%
46	2	25.0%
47	3	21.4%
48	4	25.0%
49	3	23.1%
50	2	25.0%

## Michigan

**Total Number Of Graduates by Individual Age** 

	Total Number Of Graduates by Individual Age					
Age	Number of	Percent of	Age	Number of	Percent of	
10	1793	5.8%	50	98	0.3%	
11	3680	11.9%	51	84	0.3%	
12	8088	26.2%	52	92	0.3%	
13	4930	15.9%	53	71	0.2%	
14	3229	10.4%	54	67	0.2%	
15	1644	5.3%	55	52	0.2%	
16	970	3.1%	56	48	0.2%	
17	589	1.9%	57	83	0.3%	
18	362	1.2%	58	22	0.1%	
19	204	0.7%	59	21	0.1%	
20	157	0.5%	60	18	0.1%	
21	148	0.5%	61	9	0.0%	
22	138	0.4%	62	11	0.0%	
23	111	0.4%	63	15	0.0%	
24	116	0.4%	64	12	0.0%	
25	124	0.4%	65	19	0.1%	
26	106	0.3%	66	11	0.0%	
27	116	0.4%	67	18	0.1%	
28	100	0.3%	68	9	0.0%	
29	94	0.3%	69	2	0.0%	
30	118	0.4%	70	1	0.0%	
31	94	0.3%	71	2	0.0%	
32	125	0.4%	72	2	0.0%	
33	140	0.5%	74	1	0.0%	
34	125	0.4%	75	1	0.0%	
35	144	0.5%	76	1	0.0%	
36	211	0.7%	77	7	0.0%	
37	202	0.7%	81	1	0.0%	
38	187	0.6%	82	1	0.0%	
39	226	0.7%	83	1	0.0%	
40	216	0.7%	85	1	0.0%	
41	199	0.6%	87	14	0.0%	
42	257	0.8%	88	1	0.0%	
43	217	0.7%	90	1	0.0%	
44	205	0.7%	91	2	0.0%	
45	193	0.6%	92	1	0.0%	
46	174	0.6%	94	1 2	0.0%	
47	141	0.5%	95	2	0.0%	
48	116	0.4%	96	1	0.0%	
49	117	0.4%	97	4	0.0%	
			Total	30,915	100.0%	

Total Number of Graduates Who Never Purchased a License By Individual Age (Over the course of the six years, the graduate never purchased a license in any year)

Missouri

**Total Number of Graduates by Individual Age** 

	Number of Mumber of	Percent of	<b>U</b> -	Number of	Percent of
Age	Graduates	Total	Age	Graduates	Total
10	12	0.0%	44	322	1.2%
11	2874	10.3%	45	257	0.9%
12	3815	13.6%	46	237	0.8%
13	3168	11.3%	47	202	0.7%
14	2647	9.5%	48	184	0.7%
15	1680	6.0%	49	182	0.7%
16	1307	4.7%	50	159	0.6%
17	1001	3.6%	51	141	0.5%
18	737	2.6%	52	114	0.4%
19	410	1.5%	53	87	0.3%
20	383	1.4%	54	87	0.3%
21	382	1.4%	55	70	0.3%
22	352	1.3%	56	54	0.2%
23	374	1.3%	57	64	0.2%
24	373	1.3%	58	62	0.2%
25	313	1.1%	59	54	0.2%
26	326	1.2%	60	43	0.2%
27	334	1.2%	61	34	0.1%
28	278	1.0%	62	30	0.1%
29	277	1.0%	63	43	0.2%
30	259	0.9%	64	36	0.1%
31	242	0.9%	65	33	0.1%
32	268	1.0%	66	28	0.1%
33	226	0.8%	67	23	0.1%
34	298	1.1%	68	15	0.1%
35	319	1.1%	69	15	0.1%
36	368	1.3%	70	11	0.0%
37	319	1.1%	71	6	0.0%
38	334	1.2%	72	6	0.0%
39	303	1.1%	73	6	0.0%
40	327	1.2%	74	7	0.0%
41	361	1.3%	75	4	0.0%
42	337	1.2%	76	2	0.0%
43	330	1.2%	Total	27,952	

## Graduates Who Never Purchased a License By Individual Age

(Over the course of the six years, the graduate never purchased a license in any year.)

	e of the six years, the graduate never	
Age	Number who did not purchase	Percent of Age
10	9	75.0%
11	587	20.4%
12	919	24.1%
13	974	30.7%
14	961	36.3%
15	623	37.1%
16	526	40.2%
17	462	46.2%
18	346	46.9%
19	143	34.9%
20	115	30.0%
21	99	25.9%
22	71	20.2%
23	99	26.5%
24	98	26.3%
25	67	21.4%
26	84	25.8%
27	76	22.8%
28	74	26.6%
29	77	27.8%
30	67	25.9%
31	70	28.9%
32	79	29.5%
33	61	27.0%
34	97	32.6%
35	83	26.0%
36	93	25.3%
37	97	30.4%
38	112	33.5%
39	97	32.0%
40	88	26.9%
41	82	22.7%
42	82	24.3%
43	79	23.9%
44	75	23.3%
45	75	29.2%

Nebraska

**Total Number Of Graduates by Individual Age** 

	Number of	Percent of		Number of	Percent of
Age	Graduates	Total	Age	Graduates	Total
10	20	0.2%	43	79	1.0%
11	720	8.7%	44	47	0.6%
12	2078	25.0%	45	64	0.8%
13	1220	14.7%	46	47	0.6%
14	734	8.8%	47	48	0.6%
15	504	6.1%	48	53	0.6%
16	346	4.2%	49	47	0.6%
17	221	2.7%	50	34	0.4%
18	158	1.9%	51	26	0.3%
19	102	1.2%	52	27	0.3%
20	110	1.3%	53	26	0.3%
21	114	1.4%	54	18	0.2%
22	107	1.3%	55	13	0.2%
23	130	1.6%	56	18	0.2%
24	126	1.5%	57	17	0.2%
25	96	1.2%	58	11	0.1%
26	126	1.5%	59	7	0.1%
27	111	1.3%	60	2	0.0%
28	107	1.3%	61	5	0.1%
29	98	1.2%	63	4	0.0%
30	27	0.3%	64	1	0.0%
31	35	0.4%	65	4	0.0%
32	25	0.3%	66	3	0.0%
33	19	0.2%	67	1	0.0%
34	25	0.3%	68	1	0.0%
35	36	0.4%	69	2	0.0%
36	35	0.4%	70	1	0.0%
37	51	0.6%	73	1	0.0%
38	38	0.5%	75	1	0.0%
39	39	0.5%	83	1	0.0%
40	44	0.5%	97	1	0.0%
41	54	0.6%	Total	8313	
42	47	0.6%			

Total Number of Graduates Who Never Purchased a License By Individual Age

(Over the course of the six years, the graduate never purchased a license in any year)

	Number who did not	
Age	purchase	Percent of Age
10	15	75.0%
11	255	35.4%
12	705	33.9%
13	556	45.6%
14	369	50.3%
15	213	42.3%
16	145	41.9%
17	83	37.6%
18	57	36.1%
19	42	41.2%
20	32	29.1%
21	23	20.2%
22	33	30.8%
23	30	23.1%
24	35	27.8%
25	24	25.0%
26	26	20.6%
27	22	19.8%
28	20	18.7%
29	13	13.3%
30	6	22.2%
31	10	28.6%
32	6	24.0%
33	8	42.1%
34	8	32.0%
35	8	22.2%
36	15	42.9%
37	15	29.4%
38	16	42.1%
39	17	43.6%
40	15	34.1%
41	12	22.2%
42	16	34.0%
43	27	34.2%
44	15	31.9%
45	20	31.3%

Georgia

Total Number Of Graduates by Individual Age

	Number of	Percent of	-8-	Number of	Percent of
Age	Graduates	Total	Age	Graduates	Total
10	215	1.6%	45	124	0.9%
11	457	3.3%	46	70	0.5%
12	1100	8.0%	47	59	0.4%
13	1469	10.6%	48	57	0.4%
14	1299	9.4%	49	47	0.3%
15	1122	8.1%	50	44	0.3%
16	1237	8.9%	51	37	0.3%
17	853	6.2%	52	36	0.3%
18	575	4.2%	53	25	0.2%
19	366	2.6%	54	31	0.2%
20	335	2.4%	55	27	0.2%
21	310	2.2%	56	23	0.2%
22	277	2.0%	57	13	0.1%
23	285	2.1%	58	13	0.1%
24	287	2.1%	59	13	0.1%
25	219	1.6%	60	13	0.1%
26	201	1.5%	61	8	0.1%
27	166	1.2%	62	9	0.1%
28	160	1.2%	63	6	0.0%
29	153	1.1%	64	8	0.1%
30	129	0.9%	65	10	0.1%
31	130	0.9%	66	8	0.1%
32	134	1.0%	67	5	0.0%
33	136	1.0%	68	5	0.0%
34	142	1.0%	69	6	0.0%
35	143	1.0%	70	1	0.0%
36	158	1.1%	71	3	0.0%
37	148	1.1%	72	5	0.0%
38	149	1.1%	73	1	0.0%
39	137	1.0%	74	2	0.0%
40	121	0.9%	75	1	0.0%
41	136	1.0%	79	1	0.0%
42	122	0.9%	82	1	0.0%
43	121	0.9%	97	1	0.0%
44	131	0.9%	Total	13,836	100.0%

## Total Number of Graduates Who Never Purchased a License By Individual Age

(Over the course of the six years, the graduate never purchased a license in any year)

	Number who didn't purchase	
Age	Number who didn't purchase	Percent of Age
10	71	33.0%
11 12	152	33.3%
	339	30.8%
13	495	33.7%
14	439	33.8%
15	372	33.2%
16	381	30.8%
17	305	35.8%
18	278	48.3%
19	108	29.5%
20	123	36.7%
21	108	34.8%
22	88	31.8%
23	98	34.4%
24	95	33.1%
25	74	33.8%
26	75	37.3%
27	66	39.8%
28	67	41.9%
29	64	41.8%
30	39	30.2%
31	39	30.0%
32	53	39.6%
33	53	39.0%
34	52	36.6%
35	52	36.4%
36	58	36.7%
37	54	36.5%
38	55	36.9%
39	52	38.0%
40	41	33.9%
41	52	38.2%
42	39	32.0%
43	44	36.4%
44	18	13.7%
45	47	37.9%
46	33	47.1%
47	22	37.3%
48	21	36.8%
49	8	17.0%
50	16	36.4%

## Kentucky

**Total Number Of Graduates by Individual Age** 

	Number of	Percent of		Number of	Percent of
Age	Graduates	Total	Age	Graduates	Total
10	1518	11.2%	46	84	0.6%
11	2336	17.2%	47	81	0.6%
12	1992	14.6%	48	65	0.5%
13	1162	8.5%	49	48	0.4%
14	813	6.0%	50	43	0.3%
15	659	4.8%	51	64	0.5%
16	441	3.2%	52	35	0.3%
17	274	2.0%	53	35	0.3%
18	157	1.2%	54	35	0.3%
19	124	0.9%	55	31	0.2%
20	124	0.9%	56	34	0.3%
21	124	0.9%	57	33	0.2%
22	103	0.8%	58	29	0.2%
23	114	0.8%	59	29	0.2%
24	144	1.1%	60	22	0.2%
25	103	0.8%	61	18	0.1%
26	117	0.9%	62	11	0.1%
27	105	0.8%	63	5	0.0%
28	121	0.9%	64	7	0.1%
29	116	0.9%	65	11	0.1%
30	151	1.1%	66	11	0.1%
31	138	1.0%	67	4	0.0%
32	107	0.8%	68	9	0.1%
33	113	0.8%	69	4	0.0%
34	133	1.0%	70	1	0.0%
35	164	1.2%	71	4	0.0%
36	156	1.1%	72	2	0.0%
37	160	1.2%	73	2	0.0%
38	155	1.1%	74	2	0.0%
39	138	1.0%	75	3	0.0%
40	144	1.1%	76	1	0.0%
41	127	0.9%	86	1	0.0%
42	153	1.1%	89	1	0.0%
43	139	1.0%	100	4	0.0%
44	111	0.8%	Total	13,599	
45	94	0.7%			

Total Number of Graduates Who Never Purchased a License By Individual Age (Over the course of the six years, the graduate never purchased a license in any year)

Age	Number who didn't purchase	Percent of Age
10	1378	90.8%
11	1280	54.8%
12	824	41.6%
13	518	45.7%
14	375	47.2%
15	314	50.1%
16	206	49.4%
17	145	53.6%
18	84	56.7%
19	58	48.4%
20	55	45.2%
21	74	60.5%
22	53	51.5%
23	59	53.5%
24	68	48.6%
25	41	40.8%
26	54	47.9%
27	46	46.7%
28	54	46.3%
29	46	40.5%
30	65	45.0%
31	46	36.2%
32	51	47.7%
33	56	50.4%
34	71	55.6%
35	88	56.7%
36	80	52.6%
37	79	51.3%
38	60	41.3%
39	69	50.7%
40	73	52.8%
41	53	41.7%
42	67	43.8%
43	64	47.5%
44	57	54.1%
45	43	47.9%
46	35	45.2%
47	37	48.1%
48	34	55.4%
49	19	45.8%
50	22	55.8%

## Virginia:

**Total Number Of Graduate by Individual Age** 

Total Itali	otal Number Of Graduate by Individual Age  Number of Percent of Number of Percent			Percent of	
Age	Graduates	Total	Age	Graduates	Total
10	303	2.2%	48	133	1.0%
10	303 784	5.8%	48 49	133	0.9%
12					
	2280	16.8%	50	126	0.9%
13	1814	13.4%	51 52	106	0.8%
14 15	1251	9.2%	52 52	101	0.7%
15 16	851	6.3%	53	74 52	0.5%
16	495	3.7%	54 55	52 71	0.4%
17	286	2.1%	55	71	0.5%
18	204	1.5%	56	66	0.5%
19	134	1.0%	57	43	0.3%
20	119	0.9%	58	29	0.2%
21	110	0.8%	59	51	0.4%
22	116	0.9%	60	45	0.3%
23	80	0.6%	61	39	0.3%
24	77	0.6%	62	47	0.3%
25	79	0.6%	63	37	0.3%
26	83	0.6%	64	32	0.2%
27	72	0.5%	65	32	0.2%
28	69	0.5%	66	26	0.2%
29	83	0.6%	67	13	0.1%
30	73	0.5%	68	21	0.2%
31	74	0.5%	69	13	0.1%
32	96	0.7%	70	14	0.1%
33	104	0.8%	71	7	0.1%
34	141	1.0%	72	7	0.1%
35	152	1.1%	73	11	0.1%
36	167	1.2%	74	3	0.0%
37	171	1.3%	75	3	0.0%
38	179	1.3%	76	2	0.0%
39	189	1.4%	77	2	0.0%
40	183	1.4%	79	2	0.0%
41	209	1.5%	80	1	0.0%
42	216	1.6%	81	1	0.0%
43	203	1.5%	83	1	0.0%
44	210	1.6%	84	1	0.0%
45	198	1.5%	87	2	0.0%
46	169	1.2%	Total	13,547	
47	182	1.3%		<u>-</u>	

Total Number of Graduates Who Never Purchased a License By Individual Age

(Over the course of the six years, the graduate never purchased a license in any year)

Age	Number who didn't purchase	Percent of Age
10	192	63.4%
11	519	66.2%
12	1282	56.2%
13	1051	57.9%
14	719	57.5%
15	489	57.5%
16	273	55.2%
17	172	60.1%
18	114	55.9%
19	91	67.9%
20	61	51.3%
21	72	65.5%
22	78	67.2%
23	48	60.0%
24	57	74.0%
25	42	53.2%
26	51	61.4%
27	39	54.2%
28	40	58.0%
29	44	53.0%
30	43	58.9%
31	40	54.1%
32	53	55.2%
33	62	59.6%
34	67	47.5%
35	88	57.9%
36	88	52.7%
37	85	49.7%
38	101	56.4%
39	103	54.5%
40	100	54.6%
41	106	50.7%
42	119	55.1%
43	105	51.7%
44	107	51.0%
45	103	52.0%
46	90	53.3%
47	97	53.3%
48	73	54.9%
49	68	53.5%
50	76	60.3%

Maine

**Total Number Of Graduates by Individual Age** 

	Number of	Percent of	-8-	Number of	Percent of
Age	Graduates	Total	Age	Graduates	Total
10	222	3.8%	46	67	1.1%
11	276	4.7%	47	50	0.9%
12	368	6.3%	48	49	0.8%
13	328	5.6%	49	42	0.7%
14	290	4.9%	50	33	0.6%
15	387	6.6%	51	40	0.7%
16	674	11.5%	52	32	0.5%
17	452	7.7%	53	32	0.5%
18	154	2.6%	54	30	0.5%
19	133	2.3%	55	33	0.6%
20	134	2.3%	56	18	0.3%
21	118	2.0%	57	22	0.4%
22	107	1.8%	58	26	0.4%
23	101	1.7%	59	19	0.3%
24	98	1.7%	60	25	0.4%
25	74	1.3%	61	20	0.3%
26	77	1.3%	62	14	0.2%
27	57	1.0%	63	22	0.4%
28	47	0.8%	64	12	0.2%
29	59	1.0%	65	11	0.2%
30	53	0.9%	66	6	0.1%
31	54	0.9%	67	10	0.2%
32	44	0.7%	68	8	0.1%
33	59	1.0%	69	8	0.1%
34	77	1.3%	70	5	0.1%
35	60	1.0%	71	3	0.1%
36	69	1.2%	72	5	0.1%
37	76	1.3%	73	3	0.1%
38	53	0.9%	74	3	0.1%
39	73	1.2%	75	1	0.0%
40	70	1.2%	76	1	0.0%
41	68	1.2%	77	1	0.0%
42	77	1.3%	82	1	0.0%
43	81	1.4%	85	1	0.0%
44	75	1.3%	89	1	0.0%
45	71	1.2%	Total	5,870	100.0%

Total Number of Graduates Who Never Purchased a License By Individual Age (Over the course of the six years, the graduate never purchased a license in any year)

Age	Number who didn't purchase	Percent of Age
10	77	34.7%
11	91	33.0%
12	130	35.3%
13	126	38.4%
14	92	31.7%
15	135	34.9%
16	148	22.0%
17	87	19.2%
18	43	27.9%
19	36	27.1%
20	40	29.9%
21	27	22.9%
22	38	35.5%
23	19	18.8%
24	27	27.6%
25	17	23.0%
26	21	27.3%
27	18	31.6%
28	15	31.9%
29	16	27.1%
30	19	35.8%
31	19	35.2%
32	12	27.3%
33	17	28.8%
34	22	28.6%
35	14	23.3%
36	21	30.4%
37	26	34.2%
38	18	34.0%
39	16	21.9%
40	18	25.7%
41	12	17.6%
42	21	27.3%
43	17	21.0%
44	23	30.7%
45	20	28.2%
46	16	23.9%
47	15	30.0%
48	13	26.5%
49	13	31.0%
50	14	42.4%

### Vermont

**Total Number Of Graduates by Individual Age** 

Age	Number of	Percent of	Age	Number of	Percent of
	Graduates	Total		Graduates	Total
10	383	8.8%	44	45	1.0%
11	449	10.4%	45	39	0.9%
12	606	14.0%	46	20	0.5%
13	600	13.8%	47	36	0.8%
14	466	10.7%	48	24	0.6%
15	290	6.7%	49	28	0.6%
16	144	3.3%	50	18	0.4%
17	63	1.5%	51	18	0.4%
18	50	1.2%	52	29	0.7%
19	40	0.9%	53	17	0.4%
20	32	0.7%	54	10	0.2%
21	44	1.0%	55	12	0.3%
22	40	0.9%	56	9	0.2%
23	34	0.8%	57	9	0.2%
24	37	0.9%	58	11	0.3%
25	26	0.6%	59	4	0.1%
26	23	0.5%	60	8	0.2%
27	24	0.6%	61	3	0.1%
28	30	0.7%	62	4	0.1%
29	32	0.7%	63	1	0.0%
30	29	0.7%	64	6	0.1%
31	19	0.4%	65	3	0.1%
32	26	0.6%	66	5	0.1%
33	34	0.8%	67	6	0.1%
34	32	0.7%	69	2	0.0%
35	54	1.2%	70	1	0.0%
36	44	1.0%	71	1	0.0%
37	51	1.2%	73	1	0.0%
38	35	0.8%	74	2	0.0%
39	37	0.9%	82	1	0.0%
40	51	1.2%	87	1	0.0%
41	46	1.1%	95	1	0.0%
42	46	1.1%	Total	4,335	100.0%
43	43	1.0%			

**Total Number of Graduates Who Never Purchased a License By Individual Age** (Over the course of the six years, the graduate never purchased a license in any year)

Age	Number who didn't purchase	Percent of Age		
10	50	13.1%		
11	67	14.9%		
12	120	19.8%		
13	136	22.7%		
14	109	23.4%		
15	62	21.4%		
16	28	19.4%		
17	9	14.3%		
18	10	20.0%		
19	7	17.5%		
20	5	15.6%		
21	6	13.6%		
22	4	10.0%		
23	3	8.8%		
24	5	13.5%		
25	3	11.5%		
26	3	13.0%		
27	4	16.7%		
28	5	16.7%		
29	9	28.1%		
30	7	24.1%		
31	2	10.5%		
32	3	11.5%		
33	7	20.6%		
34	9	28.1%		
35	11	20.4%		
36	10	22.7%		
37	12	23.5%		
38	6	17.1%		
39	6	16.2%		
40	14	27.5%		
41	3	6.5%		
42	6	13.0%		
43	10	23.3%		
44	12	26.7%		
45	11	28.2%		
46	2	10.0%		
47	8	22.2%		
48	3	12.5%		
49	7	25.0%		
50	2	11.1%		

