



Investing in Expanded Learning Opportunities (ELOs) in Vermont yields a \$2.18 return on every dollar spent!

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This report explains the research and methodology that Vermont Afterschool, Inc. used to draw that conclusion, by answering the following questions:

- *How many students currently benefit from regular participation in high quality ELOs?*
- *How much of an annual investment would be necessary to provide high quality ELOs to students who would participate in such opportunities but currently do not have access?*
- *How would Vermont's taxpayers benefit in the short-term and long-term from this investment?*
- *How do these savings translate to an overall return on investing in ELOs in Vermont?*

How many students currently benefit from regular participation in high quality expanded learning opportunities?

Answer:

An estimated **8,676** children and youth in Vermont currently participate regularly in high quality ELOs. This is **9.62%** of the total PreK-12 student population in Vermont.

Explanation:

There are currently 90,205 elementary, middle and high school studentsⁱ that attend public schools in Vermont. According to the Afterschool Alliance's 2014 America After 3pm report,ⁱⁱ 21,690 of them currently participate in expanded learning opportunities outside of the school day on a regular basis. However, not all are enrolled in high quality programming opportunities. High quality ELOs are those in which students who participate are most likely to reap academic, social, and behavioral benefits. It is estimated that 40% of the current expanded learning opportunities in Vermont are high quality programs, based on the current number of licensed school age care programs in the state that have high STARSⁱⁱⁱ ratings and the number of such programs in the state.^{iv} Assuming an even distribution of student enrollment among programs, this means that 8,676 children and youth currently participate in

quality opportunities (40% x 90,205), or 9.62% of the total enrolled student population. Table 1 below shows the current school enrollment numbers relevant to this report along with the numbers of students who currently regularly participate in quality expanded learning opportunities.

Table 1: Current Enrollment and Participation Numbers

	Total students enrolled	Current # of students with regular access to ELO (9.62%)	Current # of students without regular access to ELO (90.38%)
All students	90,205	8,676	81,529
High school students	28,019 ^v	2,695	25,324
High school seniors	7,202 ⁵	693	6,509

How much of an annual investment would be necessary to provide high quality ELOs to students who would participate in such opportunities but currently do not have access?

Answer:

A **\$50 million** investment would allow **21,570** additional children and youth to regularly participate in high quality expanded learning opportunities.

Explanation:

In 2014, Vermont's Working Group on Expanded Learning Time defined the length of time that expanded learning opportunities should be open in order for students to have the opportunity to participate on a regular basis and increase their likelihood of gaining the expected benefits. At minimum, programs that operate during the school year should do so for 15 hours per week. Programs that operate during the summer should run for at least 6 weeks and operate for at least 5 days and a total of 40 hours during the week. Children and youth who regularly participate in programs that operate with these dosage levels should be able to fully experience their predicted benefits, such as reduced substance abuse and drug addiction,⁹ increased rates of high school graduation¹⁵ and college attendance,¹⁶ reduced juvenile delinquency⁹ and adult crime,¹⁰ and reduced instances of births to teenagers.⁹

In order to determine the average per pupil operating cost for expanded learning opportunities that operate at these levels, current annual expenditures of programs funded by the 21st Century Community Learning Centers (21C) initiative were obtained.^{vi} Programs were filtered by those that provide 15 hours per week of programming during the school year and 5 days and 40 hours per week for 6 weeks during the summer, and the annual operating

cost was divided by the number of regular attendees to obtain the per pupil operating cost for each program. Regular attendees are defined as those who attended programming for at least 30 days within a reporting period. On average, each 21C site with sufficient operating dosage costs \$2,318 annually per regularly attending participant to run.

The Afterschool Alliance reported that 33% of Vermont's children and youth who do not currently participate in afterschool programming, or 22,610 total students $([90,205 - 21,690] \times 33\%)$ would do so if such an opportunities were available to them. Annually, it would cost \$52,409,864 to provide a sufficient amount of quality ELOs these children and youth $(22,610 \times \$2,318)$.

To simplify the calculations, an investment of \$50 million in expanded learning opportunities in Vermont was assumed. This means that an additional 21,570 additional children and youth could be served by quality programming on a regular basis $(\$50 \text{ million} / \$2,318)$. Overall, this would mean that 30,246 of all Vermont's PreK - 12 students would have the opportunity to be served regularly by quality ELO programming $(8,676 + 21,570)$. This is 33.53% of students overall $(30,246 / 90,205)$. Table 2 below shows the current student enrollment numbers relevant to this report along the breakdown of how many of each group would be able to regularly attend quality ELOs based on this assumption of a \$50 million investment.

Table 2: Projected Numbers with additional investment of \$50 million toward quality ELO

	Total Enrolled	Projected # of students with regular access to ELO (33.53%)	Projected # of students without regular access to ELO (66.47%)
Total students	90,205	30,246	59,959
High school students	28,019	9,395	18,624
High school seniors	7,202	2,415	4,787

How would Vermont's taxpayers benefit in the short-term and long-term from this investment?

Answer:

A \$50 million investment would result in various short-term and long-term benefits to Vermont taxpayers that would total of approximately **\$108,826,195 annually**. That's a **net savings of \$58,826,195**. Table 3 below shows the savings breakdown.

Table 3: Estimated annual savings based on \$50 million investment in expanded learning opportunities

Drug and alcohol addiction	
Short term annual savings: fewer students addicted	\$3,616,963
Long term annual savings: fewer adults addicted	\$36,975,251
School retention, dropouts and high school graduation rate	
Short term annual savings: fewer retention cases	\$1,797,399
Short term annual cost: fewer high school dropouts	-\$749,111
Long term annual savings: higher graduation rate	\$11,815,308
Short term annual cost: more college attendees	-\$72,033
Juvenile and adult crime	
Short term annual savings: juvenile crime	\$251,893
Short term annual savings: youth vandalism	\$11,143
Long term annual savings: adult crime	\$55,138,103
Short term annual savings: Births to teens	\$41,279

Explanation for each:**Drug and alcohol addiction**

According to the 2013 Youth Risk Behavior Survey (YRBS)^{vii} administered in Vermont, 33% of high school students admitted to consuming at least one alcoholic beverage in the past 30 days, 13% admitted to smoking cigarettes, 24% admitted to smoking marijuana, and 9% admitted to using other drugs at least once in the past 30 days. Because we cannot assume mutual exclusivity, it can be stated that at any given time, at least 33% of high school students have recently used drugs or alcohol. According to the National Center on Addiction and Substance Abuse (CASA) at Columbia University, one in three high school students that currently uses drugs or alcohol meets the medical criteria for addiction.^{viii} Therefore, it can be concluded that 11% ($33\% \times 33.33\%$) of Vermont's current high school students are addicted to drugs and/or alcohol. Currently, there are an estimated 28,019 high school students in Vermont⁵ which means that 3,082 ($28,019 \times 11\%$) are likely addicted to substances.

With a \$50 million increase in funding to ELO in the state, 9,395 high school students would have the opportunity to regularly participate in quality expanded learning opportunities. Newman et al. found that afterschool supervision can reduce the risk of addiction to drugs and/or alcohol by 50%.^{ix} Therefore, these 9,395 high school students' risk of being addicted to drugs or alcohol would drop to 5.5% ($50\% \times 11\%$). Therefore, 517 of these students would likely be addicted to substances. In contrast, the remaining 18,624 high school students who would not gain increased access to ELOs would still experience an 11% likelihood of succumbing to substance addiction, for a total of 2,048 students. Therefore, with increased

access to quality ELO, a total of 2,565 students would likely be addicted to drugs and alcohol (517 + 2,048) as opposed to the 3,082 who are likely be addicted currently. That means that an increase of \$50 million toward ELO funding in the state would likely prevent at least 517 Vermont high school students from addiction to drugs and/or alcohol (3,082 - 2,565).

The CASA study also found that the immediate costs of substance-related juvenile justice on the national level are \$14 billion based on 2 million high school students currently addicted substances. Therefore, the average cost of drug addiction per addicted high school student is \$7,000 (\$14 billion / 2 million). A decrease of 517 Vermont students being addicted to substances would lead to an annual savings of \$3,616,963 (\$7,000 x 517).

In the long term, high school drug addicts are more likely than their non-addicted peers to becoming substances abusers as adults. In fact, according to the CASA study, 25% of Americans who began using addictive substances before age 18 who will be addicted as adults. As it currently stands, 770 of Vermont's current high school students will likely become drug addicts or alcoholics in their adult lives (25% x 3,082). Contrastly, with a \$50 million increase in funding to ELO, 641 high school students will likely be addicted to substances as adults (25% x 2,565). That is a difference of 129 students. By looking at one cohort of students, such as current high school seniors, who make up approximately 25% of the population of high school students, it can be assumed that in any given year, 33 fewer students who leave high school (25% x 129) will become adults addicted to drugs and/or alcohol.

According to a 2009 study by the Journal of Quantitative Criminology,^x the lifetime cost of heavy drug use for adults ranges from \$964,330 to \$1,262,813.^{xi} It can be assumed that the lifetime cost for one cohort of substances abusers is roughly equivalent to the annual cost of all of the cohorts of drug abusers alive today. Therefore, a \$32,019,805 - \$41,930,696 long-term annual savings in treatment of drug and alcohol abusers as a result of a \$50 million increase in funding of expanded learning opportunities is likely (\$964,330 x 33 and \$1,262,813 x 33). This is an average savings of \$36,975,251.

School retention, dropouts and high school graduation rate

It is estimated that without increased access to quality expanded learning opportunities, the retention rate for Vermont is 1.15%.^{xii} A study done in 2002 on California's After School Learning and Safe Neighborhoods Partnership Program concluded that regular participation in ELOs can reduce a student's risk of retention by 53.4%.^{xiii} This means that for students who regularly have access to such opportunities, their risk of retention in any given year is reduced to 0.54% (1.15% x [1-53.4%]). With the current state of ELOs in Vermont, it is predicted that 987 students will be retained during any given year (8,676 x 0.54% + 81,529 x 1.15%). With \$50 million in additional funding for ELOs allocated to Vermont, 854 students would be retained during any given school year (30,246 x 0.54% + 59,959 x 1.15%). This means that 133 fewer students would be retained in any given year (987 - 854). The Vermont Agency of Education reports spending \$13,524 annually per pupil.^{xiv} Therefore, this reduction in retention would save the state approximately \$1,798,000 per year (\$13,524 x 133).

Increased access to expanded learning opportunities would not only reduce retention but also prevent dropouts and therefore slightly increase education spending. The current dropout rate in Vermont for students in grades 9-12 is 2.68%.⁵ This means that 751 high school students drop out during any given year ($28,019 \times 2.68\%$). Students that regularly participate in quality ELOs reduce their risk of dropping out by 22%.^{xv} That means that for the 9,395 high school students who would have access to quality ELOs, their dropout rate would be 2.09% ($2.68\% - [1-22\%]$), making for a total of 196 dropouts. Of the 18,624 remaining high school students, 499 would likely drop out ($18,624 \times 2.68\%$) for a total of 695 dropouts ($196 + 499$). Therefore, an investment of \$50 million in ELO would reduce the number of high school dropouts by 56 students annually ($751 - 695$). This means that Vermont taxpayers would spend an additional \$757,344 to keep students enrolled that may have otherwise dropped out.

A reduced dropout rate also means a higher graduation rate, which would lead to greater long-term savings for the state. At 92.48%, Vermont has one of the highest graduation rates in the country.⁵ Even at this high rate, the remaining 7.52% of high school seniors don't all necessarily drop out of high school. Many remain enrolled in the school system, due to either retention or school transfer. The best way to assess the number of Vermont's high school seniors that do not graduate high school (become "dropouts") is by looking at the number that neither graduated nor remain enrolled. This rate, which represents the number of seniors that potentially dropped out was 3.69% in 2013.⁵ Since regular participation in quality ELOs reduces the likelihood of dropping out by 22%, the dropout rate for high school seniors with these opportunities would become 2.88% ($3.69\% \times [1-22\%]$).

Currently, 266 seniors are likely to drop out of high school in any given year ($7,202 \times 3.69\%$). With an additional investment of \$50 million in expanded learning opportunities for the state, 2,415 seniors with increased ELO access would have a decreased dropout rate of 2.88% and the remaining 4,787 would have a dropout rate of 3.69%. This means that 246 total students would drop out ($2,415 \times 2.88\% + 4,787 \times 3.69\%$) which is a reduction of 20 students annually ($266 - 246$).

According to the 2009 study by the Journal of Quantitative Criminology,¹⁰ a high school dropout is likely to impose a cost onto society of between \$482,165 and \$723,247¹¹ over a lifetime due to a lack of "higher wages and productivity, [...] non-market productivity, [...] child development and nurturing, health status, social cohesion, charitable giving, etc." (p. 45). Therefore, a reduction of 20 dropouts annually would result in a lifetime savings of between \$9,452,246 and \$14,178,369 for any particular cohort of students ($\$482,165 \times 20$ and $\$723,247 \times 20$). Assuming that the lifetime savings for one cohort of reduced high school dropouts is roughly equivalent to one year's worth of savings for all of the cohorts of high school dropouts alive today, it can be assumed that the long term annual savings from the reduced dropout rate of high school seniors is \$9,452,246 - \$14,178,369. This is an average long term annual savings of \$11,815,308.

There is a small cost to the state that is associated with an increased number of high school graduates: the cost related to increased college attendance. Currently, 6,660 high school seniors are expected to graduate each year ($7,202 \times 92.48\%$). With increased access to ELO, more seniors would graduate each year because fewer would drop back and fewer would be retained. As stated earlier, the dropout rate would decrease to 2.88%. The current high school

senior retention rate is 3.83%.⁵ With increased access to ELO, the rate would become 1.78%.^{xvi} Therefore, the expected graduation rate for seniors with access to quality expanded learning opportunities would be 95.34% (100% - 1.78% - 2.88%). 2,415 high school seniors would be able to regularly participate in quality programs and could have a graduation rate of 95.34% while 4,787 would continue to have an expected graduation rate of 92.48%. Therefore, a total of 6,729 high school seniors would be predicted to graduate ($2,415 \times 95.34\% + 4,787 \times 92.48\%$). This is an increase of 69 graduates (6,729 - 6,660).

Of these 69 graduates, 58.8% would be probably enroll in college.^{xvii} Of these who enroll, 49.75% would probably enroll in a public institution located in Vermont^{xviii} and would therefore have some tuition covered by state taxpayers. This means that taxpayers would pay for an additional 20 students to attend college annually ($69 \times 58.8\% \times 49.75\%$). Average in-state tuition for Vermont colleges is currently \$14,275,^{xix} which accounts for 80% of college revenue, while Vermont taxpayers bear the additional 20%^{xx} of that revenue. Therefore, state taxpayers pay an average of \$3,569 per in-state college attendee annually ($\$14,275 \times [20\% / 80\%]$). So an additional 69 high school graduates would cost taxpayers \$72,033 annually based on their predicted college enrollment patterns ($\$3,569 \times 20$).

Juvenile and adult crime

Calculations^{xxi} of FBI arrest statistics^{xxii} for the years 2009-2011; victim costs^{xxiii} associated with each of the crimes; and annual incarceration costs, probation costs, and case management costs of juvenile crimes^{xxiv} reveal that the the average annual cost of juvenile crime in Vermont in recent years has been \$4,819,513. This cost does not include murders because they occur rarely and increase the cost dramatically, therefore skewing the average annual cost.

According to the Office of Juvenile Justice and Delinquency Prevention, 62.35% of all juvenile crimes occur on school days.^{xxv} Newman et al. found that a quarter of all juvenile crime committed on school days could be eliminated if the juvenile crime rate for the period from 3 to 8 pm was reduced to school-hour crime levels.⁹ Therefore, it can be assumed that with access to quality supervision during after school hours through expanded learning opportunities, 15.59% of all juvenile crime could be eliminated ($62.35\% \times 25\%$). With an investment of \$50 million to ELO in Vermont, which would allow for 33.53% of Vermont's students to attend high quality programs after the school day, it can be assumed that 5.2% of all juvenile crime would be eliminated ($33.53\% \times 15.59\%$). This would save Vermont \$251,893 annually ($5.2\% \times \$4,819,513$).

Youth vandalism is not considered a criminal offense but is still a financial burden to the state. Each act of vandalism costs the state around \$400.^{xxvi} On average, 124 people under the age of 18 are arrested every year for committing an act of vandalism,^{xxvii} costing the state an estimated \$49,600 ($\400×124). Participation in high quality expanded learning opportunities is predicted to reduce the instances of youth vandalism by 33%.⁹ With 33.53% of Vermont students predicted to be able to regularly participate in such activities with a \$50 million investment, that means 28 acts of youth vandalism arrests could be prevented each year ($124 \times 33\% \times 33.53\%$), saving Vermont \$11,143 ($\$400 \times 28$). This is a low prediction since

there are an unknown number of youth vandalism incidents that do not become arrests but still incur a cost to school budgets due to the necessary cleanup and repair.

Youth that drop out of high school end up costing the state between \$1,492,415 and \$4,132,841¹¹ over the course of each of their lifetimes due to engagement in criminal activity.¹⁰ (These amounts take into account the fact that not all high school dropouts become criminal offenders later in life). As stated earlier, a \$50 million investment in expanded learning opportunities would prevent 20 Vermont high school students in any given cohort (such as high school seniors) from dropping out annually. Therefore, a reduction of 20 dropouts annually would result in a lifetime savings of between \$29,256,953 and \$81,019,254 for that particular cohort ($\$1,492,415 \times 20$ and $\$4,132,841 \times 20$). Assuming that the lifetime savings for one cohort of reduced high school dropouts is roughly equivalent to one year's worth of savings for all of the cohorts of high school dropouts alive today, it can be assumed that the long term annual savings in crime related expenses would be \$29,256,953 - \$81,019,254. This is an average long term annual savings of \$55,138,103.

Births to teens

Births to teen moms are costly to Vermont but can be reduced with increased access to quality expanded learning opportunities. Currently, an estimated 871 births to teen mothers occur each year,^{xxviii} each costing the state approximately \$211^{xxix} and resulting in an annual public cost of \$183,746 ($871 \times \211). Research shows that teens who regularly participate in quality expanded learning opportunities are likely to experience a reduced risk of becoming teen parents by 33%.⁹ This means that 196 births to teens could be prevented annually, based on an assumption of a \$50 million investment to increase ELO, which would benefit approximately 33.53% of teens in the state ($871 \times 33\% \times 33.53\%$). This would result in an estimated annual savings of \$41,279 to Vermont taxpayers ($196 \times \$211$).

How do these savings translate to an overall return on investing in ELOs in Vermont?

Answer:

Investing in Expanded Learning Opportunities (ELOs) in Vermont yields a \$2.18 return on every dollar spent. More than double the initial investment gets returned to taxpayers.

Explanation:

Vermont taxpayers would save approximately \$108,826,195 annually from the savings that occur from reduced instances of drug and alcohol addiction, school retention, dropouts, juvenile and adult crime, births to teens and the benefits associated with higher graduation rates. These savings would occur in the long term for however many years that approximately one third of children and youth in Vermont have access to quality expanded learning opportunities, at a cost of approximately \$50 million per year. Dividing \$108,826,195 by \$50,000,000 yields a return on the dollar estimate of \$2.18.

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- i *Enrollment Reports*. Vermont Agency of Education, 2014. <<http://education.vermont.gov/data/enrollment>>.
- ii *America After 3PM: Afterschool Programs in Demand*. Afterschool Alliance, 2014.
- iii *STARS Providers*. Vermont Department for Children and Families, Agency of Human Services, 2014. <http://dcf.vermont.gov/cdd/stars/list_of_providers>.
- iv The two main types of ELOs in Vermont are those funded by the 21st Century Community Learning Centers initiative (21C) and those that are licensed by the VT Child Development Division. Vermont Afterschool, Inc knows of 459 known program sites in the state and of these, 307 are either 21C, licensed or both. Of programs which are licensed and have received a STARS rating, 60% have a rating of 4 or 5, meaning they are rated as “outstanding.” They are assumed to be quality programs. Assuming this is a representative sample of licensed programs, it was assumed that all 60% of the 264 known licensed programs in Vermont are quality programs, for a total of 159 programs. Of the 43 programs that are 21C but not licensed, 60%, or 26 programs are assumed to be quality expanded learning opportunities. With 185 (129 + 26) known quality ELOs in Vermont, this comprises 40% of known programs in the state. (185 / 459). For now, it cannot be assumed that any non-21C or non-licensed programs meet any type of quality standards.
- v *Dropout & High School Completion*. Vermont Agency of Education, 2014. <<http://education.vermont.gov/data/dropout-and-high-school-completion>>.
- vi The total project expenditure for each currently funded 21C project was obtained through a spreadsheet provided by the VT Agency of Education. A list of sites within each project was obtained from each project's Annual Performance Report which was also provided by VT Agency of Education. For each site, the total number of annual operating hours and the total number of students served were determined from the Annual Performance Report data. The estimated percentage of each project's funding allocated to each site was calculated by using a weighted average determined by each site's annual operating hours and total number of students served. Each site's allocation percentage was used to calculate the annual expenditure for each.
- vii *The 2013 Vermont Youth Risk Behavior Survey*. Vermont Department of Health, 2013. <http://healthvermont.gov/research/yrbs/2013/documents/2013_yrbs_full_report.pdf>
- viii *National Study Reveals: Teen Substance Use America's #1 Public Health Problem*. The National Center on Addiction and Substance Abuse (CASA) at Columbia University, 29 June 2011. <<http://www.casacolumbia.org/newsroom/press-releases/national-study-reveals-teen-substance-use-americas-1-public-health-problem>>.

ix Newman, S.A., Fox, J.A., Flynn, E.A., Christeson, W. *America's After-School-Choice: The Prime Time for Juvenile Crime Or Youth Enrichment and Achievement*. Fight Crime, Invest in Kids. Washington D.C., 2000.

x Cohen, Mark A. 2009. *New Evidence on the Monetary Value of Saving a High Risk Youth*. Journal of Quantitative Criminology Vol. 25, 25-49.

xi These figures were converted to 2014 dollars by using the CPI Inflation Calculator by the US Bureau of Labor Statistics. <http://www.bls.gov/data/inflation_calculator.htm>.

xii The National Center for Education Statistics estimates that the the number of students retained at least once in their school career ranges from 10 to 20 percent. It was assumed for simplicity that 15% of Vermont students are retained once in their school career. That means that on average, every 13 years (the number of K-12 school years), 15% of total students have been retained, or 1.15% of total students during any given school year (15% / 13 years). (*The Condition of Education: Grade Retention*. Rep. National Center for Education Statistics, 2006.)

xiii Bissell, Joan S. *Evaluation of California's After School Learning and Safe Neighborhoods Partnership Program: 1999-2001*. Rep. Department of Education, University of California, Irvine, 2002.

xiv *Per Pupil Spending by School Type*. Vermont Agency of Education, 2014. <<http://education.vermont.gov/data/per-pupil-spending>>.

xv Brown et. al, *The Costs and Benefits of After School Programs: The Estimated Effects of the After School Education and Safety Program Act of 2002*, The Rose Institute of Claremont-McKenna College, Sept. 2002.

xvi Calculated using the assumption that the retention rate would be reduced by 53.4% based on:

Bissell, Joan S. *Evaluation of California's After School Learning and Safe Neighborhoods Partnership Program: 1999-2001*. Rep. Department of Education, University of California, Irvine, 2002.

xvii *Vermont High School Graduates Postsecondary Enrollment Rates*. Vermont Agency of Education, 2014. <http://education.vermont.gov/documents/EDU-Data_High_School_Graduates_Higher_Education_Enrollment_Rate.pdf>.

xviii *Residence and migration of all first-time degree/certificate-seeking undergraduates in degree-granting institutions who graduated from high school in the previous 12 months, by state or jurisdiction: Fall 2010.* National Center for Education Statistics, US Department of Education, Nov. 2011. <http://nces.ed.gov/programs/digest/d12/tables/dt12_259.asp>.

xix "Tuition and Fees by Sector and State over Time." *Trends in Higher Education*. The College Board, 2014. <<https://trends.collegeboard.org/college-pricing/figures-tables/tuition-and-fees-sector-and-state-over-time>>.

xx Johnson, Tim. "Vermont in Basement for Higher-ed Funding." Burlington Free Press, 23 Apr. 2014. Web.
<<http://www.burlingtonfreepress.com/story/news/local/2014/04/23/vermont-maintains-low-ranking-higher-ed-funding/8062207>>.

xxi For 2009, 2010 and 2011, the instances of arrests due to felony sex crimes, robbery, aggravated assault and property crimes by youth under 18 were tallied. These figures were multiplied by the tangible and intangible victim costs associated with each. Incarceration costs, probation costs, case management costs, and victim costs due to arrests of persons under 18 were summed and added to victim costs for each year to obtain the total cost related to juvenile crime in Vermont for each year. The average annual cost was obtained based on the total cost for each of the years of 2009-2011.

xxii Puzzanchera, C. and Kang, W. (2014). "Easy Access to FBI Arrest Statistics 1994-2011" Online. Available: <http://www.ojjdp.gov/ojstatbb/ezaucr/>

xxiii *Criminal Justice Consensus Cost-Benefit Working Group Final Report*. The Vermont Center for Justice Research, 2014.
<<http://www.leg.state.vt.us/reports/2014ExternalReports/301407.pdf>>.

xxiv *Archived Facts and Figures*. Vermont Department of Corrections, Agency of Human Services, 2014. <<http://www.doc.state.vt.us/about/reports/ff-archive>>.

xxv OJJDP Statistical Briefing Book. Online. Available:
<http://www.ojjdp.gov/ojstatbb/offenders/qa03301.asp?qaDate=2010>.

xxvi Phillips, Rick. *The Financial Costs of Bullying, Violence, and Vandalism*. Principal Leadership, Vol 11 No. 1. National Association of Secondary School Principals, 2011.

xxvii The numbers of incidents of vandalism from 2006-2011 were averaged. Numbers were obtained from: Puzzanchera, C. and Kang, W. (2014). "Easy Access to FBI Arrest Statistics 1994-2011" Online. Available: <<http://www.ojjdp.gov/ojstatbb/ezaucr/>>.

xxviii Number of births from 2005, 2008, and 2010 were averaged. Numbers were obtained from:

Kost, K., and Henshaw, S. U.S. Teenage Pregnancies, Births and Abortions, 2008: State Trends by Age, Race and Ethnicity. Rep. New York: Guttmacher Institute, March 2013.

xxix Cost was converted from 2008 dollars to 2014 dollars and found in: Sonfield, A., and Kost, K. *Public Costs from Unintended Pregnancies and the Role of Public Insurance Programs in Paying for Pregnancy and Infant Care: Estimates for 2008*. Rep. New York: Guttmacher Institute, 2008.