

# CAMPAIGN FOR VERMONT

CampaignForVermont.org

**Re-Energizing Vermont's Public Education System**  
Making Vermont an Education Destination

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## Executive Summary

As is our Vermont tradition, we must be innovative with our public education system in order to compete in a 21<sup>st</sup> century economy.

There is little doubt that Vermont's K-12 public education system is under stress. Student population has decreased by nearly 20,000 over the past two decades, property taxes are steadily rising, and school districts are struggling to comply with a consolidation mandate intended to shed excess overhead costs.

Half of Vermont's 250 school districts have fewer than 100 students, many of which are in rural areas of the state. Because Vermont's property tax system is based on cost per student, slight changes in pupil count can have a dramatic effect on the tax rate in that community. This has created a scenario where rural areas – already seeing population declines – see dramatic increases in property tax rates. These population declines become cyclical as unstable tax rates further deters young families from moving into those communities.

Traditional thinking has evaluated the population decline as something we must match our administrative structure to, essentially “right-sizing” our education system. In other words, we have excess administrative overhead and must reduce it in order to match our level of student enrollment. This approach led to Acts 153, 156, and 46 which have attempted to reduce the administrative overhead of our school systems. Acts 153 and 156 had scant participation from local school districts, (four school districts, Weston, Landgrove, Londonderry, and Peru merged into the Mountain Towns RED). Even Act 46, which is a “mandatory” consolidation effort, has prompted action in less than half of school districts so far.

Right-sizing our education system has proven difficult as it relies heavily on the actions of local communities. Perhaps we are thinking about it in the wrong way. Instead of looking at this challenge as excess overhead, maybe we should think about it as excess capacity. We have seen a student drop of 20% with no similar reduction in school staffing. Which means, theoretically, that we could serve 20,000 more students than we currently do.

Traditional methods of increasing student population include increasing overall population, which takes decades to change. In a flattening world economy we must think more broadly. Many countries around the globe are gaining wealth at a rate approaching that of the United States. This opens up a number of opportunities to look beyond not just the borders of our state, but also the borders of our country for a solution.

Over 80,000 students come into the United States every year from China alone. This is a ten-fold increase from 2008. A rising middle class coupled with explosive economic growth has put American educational opportunities within reach for middle-class Chinese families. Here in Vermont, many independent schools have far more applicants than they could possibly accept from Central Asia. This is nothing new for private schools around the country. The real innovation is that public schools are now beginning to accept international students in similar fashion. Some of these schools are even here in Vermont.

Vermont schools already rank well compared to other states and indeed other countries which would be a useful selling point in attracting international students. Excess capacity in Vermont's rural schools could easily be met with the rapidly growing demand for access to American educational systems around the globe. Public education systems are just beginning to catch on to international education and Vermont can be on the leading edge of this wave. All of this comes at a time when our K-12 public education system is in dire need of innovation. This could be the spark needed to move us forward.

Budget pressures continue to increase, particularly on our smallest schools, while taxpayers are screaming for relief. Instead of making decisions about how to invest in our children's future, they are being forced to make decisions about where to pull back. An infusion of international students would diversify our student populations, introduce new revenue, and create more educational opportunities for our Vermont students.

The infrastructure to implement such a plan is already in place; A number of non-profit organizations already recruit students internationally, and the F-01 Visa program is widely used to tuition students to the United States. Implementing a program like this at a statewide level could leverage recruiting and placement in a way that has not yet been done elsewhere. Filling just half of our excess capacity could bring \$350 million into the state, rivaling the ski industry for direct economic impact.

Let's make Vermont an education destination and revolutionize our Pre-K through 12 education system.

Sincerely,

**Benjamin Kinsley**  
Executive Director  
Campaign for Vermont Prosperity

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## **Opportunity Awaits**

Hundreds of private schools around the country have been recruiting international students for decades. Vermont independent schools such as Saint Johnsbury Academy and the Long Trail School have seen an explosion in applications from China and South Korea in recent years. This is not an isolated phenomenon. Applications for F-01 Student Visas for secondary level education increased tenfold between 2007 and 2012 to over 65,000.<sup>1</sup> Overall applications for F-01 student visas increased 116% from 2007 to 2015, bringing more than 300,000 students into the U.S.<sup>2</sup>

With this rapid growth in demand for access to U.S. education systems, public institutions are starting to catch on. According to Educatius<sup>3</sup>, an organization that recruits and places international students, “international students attend US public high schools that charge a fee to accept the students. Due to this tuition fee, international students can enjoy the same rights regarding subjects, arts, activities, and graduation as American students. Our students stay with host families in the local community. Host families are paid a stipend for hosting.”

Public schools in 42 states have begun accepting international students, including at least three schools right here in Vermont. Brattleboro Union<sup>4</sup>, Montpelier High School<sup>5</sup>, and Leland Gray Academy<sup>6</sup> all have international recruitment programs with F-01 Visa applications. These visa applications are submitted through the Department of Homeland Security Student and Exchange Visitor Program (SEVP)<sup>7</sup>. Two recruitment organizations already operate in Vermont: Student Travel Schools (STS)<sup>8</sup> and Gphomestay<sup>9</sup>. Nearly 2200 international students took advantage of public education offerings in 2013, which amounts to about 5% of total international students in the U.S. To date, these programs have been offered on an individual school basis with no state level coordinated program.

Many schools taking advantage of these programs are indeed rural schools struggling to meet enrollment capacity and providing educational opportunities in struggling communities. Newcomb, NY utilized this model to address demographic challenges within a small school district of about 100 students (half of Vermont's school districts are this size or smaller). “Newcomb's embrace of foreign students is part of a growing movement among rural American school districts struggling to stay afloat amid declining enrollments” said the Newcomb superintendent.<sup>10</sup> Perhaps the most interesting outcome from Newcomb's program is that international students – and the global education perspective they bring – have actually drawn more local students, and the school has doubled in size since 2007.

Schools in Millinocket, Maine, also began recruiting international students and have been able to stabilize their revenue and academic programs.<sup>11</sup> All international students attending public institutions

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<sup>1</sup> <http://www.usatoday.com/story/news/nation/2014/02/23/public-schools-selling-seats/5553119/>

<sup>2</sup> <https://en.wikipedia.org/wiki/F Visa>

<sup>3</sup> <http://www.educatius.org/USA-High-Schools/Public-High-Schools>

<sup>4</sup> <http://www.wssu.k12.vt.us/schools/16buhs-full%201-21-16-v2.pdf>

<sup>5</sup> <http://montpelierinternational.weebly.com/admissions.html>

<sup>6</sup> [http://www.lelandandgray.org/images/china/Certification\\_of\\_Finances\\_Form\\_2012.pdf](http://www.lelandandgray.org/images/china/Certification_of_Finances_Form_2012.pdf)

<sup>7</sup> [https://studyinthestates.dhs.gov/school-search?field\\_school\\_name\\_value=&field\\_location\\_city\\_value=&field\\_location\\_state\\_value=2&field\\_education\\_level\\_value=All](https://studyinthestates.dhs.gov/school-search?field_school_name_value=&field_location_city_value=&field_location_state_value=2&field_education_level_value=All)

<sup>8</sup> <http://www.sts-education.com/>

<sup>9</sup> <https://www.gphomestay.com/>

<sup>10</sup> <http://www.usatoday.com/story/news/nation/2014/02/23/public-schools-selling-seats/5553119/>

<sup>11</sup> <http://www.newyorker.com/business/currency/can-international-students-save-u-s-public-schools>

are in the U.S. on F-01 visas that allow them to pay tuition.<sup>12</sup> The majority of these students are coming from China, followed by South Korea, and then a mosaic of other countries.

According to the Educatius, “International students aged 14-18 are eligible to study at high school” in the U.S. “All students must have and maintain a passing grade point average as well as a level of maturity and motivation to study abroad.” There are also minimum levels of performance that must be met.<sup>13</sup> More information about requirements for foreign students in public schools can be found here: <https://travel.state.gov/content/visas/en/study-exchange/student/foreign-students-in-public-schools.html>

There are a number of organizations that handle recruiting and placement of international students for both private and public schools around the country such as Exchange Service International<sup>14</sup>, School for International Training (SIT)<sup>15</sup>, and the Institute for International Education<sup>16</sup>. Engaging one of these organizations to provide recruitment and training services would dramatically reduce startup time and likely increase chances of early success with such a program.

According to industry experts at SIT, it would not be difficult to scale current recruitment practices to fit Vermont's needs, and the level of international demand for U.S. education is not currently being met by either public or private schools.

The only real impediments to growth seen by public schools implementing this model have been “housing pressures and visa rules” according to Newcomb administrators.<sup>17</sup>

### **Breathing Life Into Our Rural Economy**

More analysis is needed on how many international students could be attracted to Vermont's public education system and how much carrying capacity our system actually has. However, we can draw some assumptions from what we see in other public and private education systems and the growth in international demand for American education.

The going tuition rate for international students in Vermont is around \$50,000 per year. Our public education systems can provide similar educational opportunities for less than \$40,000 per year.<sup>18</sup>

We find it reasonable to expect that Vermont could attract 1,000 students in the first year. Using the tuition model in Appendix A – which includes tuition amounts, block grants to offset local costs, and additional Education Fund revenue – would result in \$37 million in revenue in the first year of operation.

Utilizing half of our excess capacity – perceived to be about 10,000 students – would result in over \$390 million dollars in revenue realized in the Education Fund, school district budgets, and local economies all over the state.<sup>19</sup> These revenues break down as follows:

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<sup>12</sup> <https://www.ice.gov/sevis>

<sup>13</sup> <http://www.usatoday.com/story/news/nation/2014/02/23/public-schools-selling-seats/5553119/>

<sup>14</sup> <http://www.exchange-service.org/>

<sup>15</sup> <https://www.sit.edu/>

<sup>16</sup> [http://www.iie.org/What-We-Do#.WKxvx\\_nyteM](http://www.iie.org/What-We-Do#.WKxvx_nyteM)

<sup>17</sup> <http://www.usatoday.com/story/news/nation/2014/02/23/public-schools-selling-seats/5553119/>

<sup>18</sup> See Appendix A

<sup>19</sup> See Appendix A

- \$175 million in direct payments to school districts which could be reinvested in educational programs or realized in property tax relief. This represents a 16% increase in revenue.
- Directs \$19 million into higher education and early childhood initiatives within the first three years. Could provide as much as \$47 million towards these programs.
- Recaptures \$36 million to be used for property tax relief – over six cents on the statewide education property tax rate.
- Funnels \$62 million into Vermont's rural economy through direct payments to host families.

To put this into perspective, Vermont's ski industry is estimated to have \$428 million<sup>20</sup> in direct impact on Vermont's economy. A recruitment program like the one outlined here could have a similar direct impact on Vermont's economy and be targeted at areas of the state that desperately need it.

Economic impacts are likely to be more pervasive than the direct impacts laid out above. International students are likely to buy goods and services while attending school, parents are likely to visit and contribute to our hospitality industry, and students are likely to enjoy skiing and other recreational activities that contribute to the economy as well. According to Newcomb school officials, with just 18 students, "visitors poured about \$100,000 annually into the local economy."<sup>21</sup> Additionally, there are potential future economic impacts realized through personal ties with Vermont. As students graduate and continue on into career paths, there is an increased likelihood that they will invest in and start businesses here in Vermont.

### **Local School Districts**

A recruitment program for international students could be run on a statewide level with an administrative system that provides training to school districts and host families and coordinates placement of students. However, the system would be dependent upon local participation; there are several financial and social incentives to encourage this participation.

Using the model for state placed students allows a district to receive tuition dollars as well as use that student in the calculation of equalized pupils for tax rate purposes. Essentially, this gives the district a free student, allowing them offset their budget with tuition dollars, and subsequently see a benefit on their tax rate from an increased student count. This phenomenon would be further increased for international students because of the formula used for tax rate calculations weights for second language learners. The model in Appendix A lays out a tuition model for international students that includes local administrative and language learning costs which would amount to nearly \$20,000 per student paid directly to local districts.

We modeled five districts to measure the impact of international students. We found that spending per student was lowered 13-28% by adding only 5-10% international students to a school. Adding only 8 of these students to a school of 160 realized nearly a 30 cent decrease in tax rates. You can see more details on the impacts for school districts in Appendix B.

Introducing international students into Vermont's rural education systems would assist with diversifying a student population that is often criticized for being homogenous. Only 9% of students were of minority descent in 2015 according the National Center for Education Statistics. Vermont students could benefit from diverse perspectives and cultures that international students would bring into our schools.

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<sup>20</sup> Vermont Ski Industry Report - <https://www.uvm.edu/~snrvtdc/publications/vt%20ski%20industry.pdf>

<sup>21</sup> <http://www.usatoday.com/story/news/nation/2014/02/23/public-schools-selling-seats/5553119/>

However, until enrollment behaviors are better understood, it may be advisable to cap international enrollment at 10-15% of the student body to avoid a shift in focus away from local students and to avoid creating disparities in funding between districts.

Further analysis is needed to determine carrying capacity in Vermont's rural schools, particularly when a cap is applied. Given the drastic population loss in many rural schools, 10% or 15% may be well below actual carrying capacity.

## **Revolutionizing our School System**

Vermont's public education system enrollment has declined from 105,984 in 1998 to 87,311 in 2015, a drop of nearly 18,700 students. Our public 9-12 education system has seen a 15% decrease in enrollment during that time frame. Adding just 5,000 students would bring our high school enrollment back up to 1998 levels.<sup>22</sup>

The National Center for Education Statistics data indicates that Vermont has one of the least diverse student populations in the country. Only 8.7% of Vermont's students in FY2015 public enrollment data were of Hispanic, Asian, African, or Native American descent. This trend holds for both elementary and secondary education systems. Adding 5,000 international students would nearly double the diversity in our schools and bring us closer in line with other states.

In addition to the school district modeling, we also modeled the impact of additional students on Vermont's entire education system. Just 1,000 international students would reduce the amount of property tax revenue needed by \$18 million<sup>23</sup> and result in reductions in the ratio for calculating equalized pupils and the yield amount used for local tax rates. This means that some districts not receiving international students may see slight increases in their tax rates. However, this could be avoided by excluding international students from the statewide long-term weighted membership count. We included them in our modeling for consistency because state-placed students are counted under the current formula.

Opening up an additional source of revenue in the Education Fund would allow the state to begin moving away from dependence on property tax revenues to fund education. This is something many taxpayers have asked for, and using international tuitioning dollars could be an effective way of shifting some of this dependence and realizing property tax relief, particularly in Vermont's rural areas.

## **Conclusion**

The technological boom that has created wealth in many parts of the world – particularly central Asia – has also provided us with advancements in educational technologies and even changing workforce requirements for primary, secondary, and post-secondary education. No longer are workers expected to retain vast amounts of information, but rather to take the wealth of common knowledge and apply it in strategic fashion. This requires a re-tooling of our public education systems. Nothing is more important than making these investments in the future of our children's education and the future economic success of our state.

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<sup>22</sup> Enrollments by grade - National Center for Education Statistics: <https://nces.ed.gov/ccd/elsi/expressTables.aspx>

<sup>23</sup> Appendix C

We encourage lawmakers to further investigate attracting international students to Vermont's secondary public education systems. Vermont is uniquely positioned to take advantage of the increased demand for American education internationally; we can be on the leading edge of public education systems serving international students.

We ask the Vermont legislature to put resources into the Vermont Agency of Education to develop and implement a program to attract and place international students in Vermont public schools. This investment has great potential for return - a relatively small number of students can have significant impact on our school funding.

The only current limitation to the F-01 visa program is that students are limited to 1 year in a public institution for grades 9-12. They can continue their education in the U.S., but it must be at a private school.<sup>24</sup> We would urge our federal delegation to expand the F-01 visa program to include four years at public institutions and allow grades 7-8.

A program like this has real potential for diversifying Vermont's student populations, creating new educational opportunities, reducing property taxes, and breathing vitality into our rural economies.

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<sup>24</sup> <http://www.csiet.org/>



## Appendix A

**Cost Model:** Campaign for Vermont’s analysis of potential economic impact of introducing international students into Vermont’s secondary public education system.

Vermont Public Student Exchange Program	Tuition \$	Year 1	Year 2	Year 3	Year 5
<b>Total Estimated Utilization:</b>		<b>1,000</b>	<b>2,500</b>	<b>5,000</b>	<b>10,000</b>
Estimated Elementary Utilization					
Estimated Secondary Utilization		1,000	2,500	5,000	10,000
<b>Estimated Secondary Tuition Rate:</b>					
School tuition	\$ 15,512	\$ 15,511,650	\$ 39,942,499	\$ 82,281,547	\$ 169,499,988
Host family stipend	\$ 5,490	\$ 5,490,000	\$ 14,136,750	\$ 29,121,705	\$ 59,990,712
ELL Reimbursement	\$ 4,100	\$ 4,100,000	\$ 10,250,000	\$ 20,500,000	\$ 41,000,000
Local Admin	\$ 1,400	\$ 1,400,000	\$ 3,605,000	\$ 7,426,300	\$ 15,743,756
Higher Ed investment	\$ 1,300	\$ 1,300,000	\$ 3,575,000	\$ 7,865,000	\$ 17,303,000
Early childhood investment	\$ 1,920	\$ 1,920,000	\$ 5,280,000	\$ 11,616,000	\$ 25,555,200
Property tax recapture	\$ 2,500	\$ 2,500,000	\$ 6,875,000	\$ 15,125,000	\$ 33,275,000
Administration	\$ 6,500	\$ 6,500,000	\$ 6,630,000	\$ 6,762,600	\$ 6,897,852
<b>Total</b>	<b>\$ 39,304</b>	<b>\$ 39,304,400</b>	<b>\$ 91,787,546</b>	<b>\$ 186,774,344</b>	<b>\$ 389,392,429</b>
Tuition		\$ 39,304	\$ 36,715	\$ 36,755	\$ 38,939
<b>Overhead:</b>					
Administration	\$ 1,500,000	\$ 1,500,000	\$ 1,530,000	\$ 1,560,600	\$ 1,591,812
Recruitment	\$ 5,000,000	\$ 5,000,000	\$ 5,100,000	\$ 5,202,000	\$ 5,306,040

### **Inflationary growth:**

- School tuition – 3% year over year
- Host family stipend – 3% year over year
- ELL reimbursement – 0% as a fixed block grant (could be statutorily increased over time)
- Local Admin – 3% year over year
- Higher Ed investment – 10% (could be increased in year 2-3 to offset reduction in tuition)
- Early childhood investment – 10% (could be increased in year 2-3 to offset reduction in tuition)
- Property tax recapture - 10% (could be increased in year 2-3 to offset reduction in tuition)
- Administration – 2% year over year

### **Assumptions:**

- Inflationary increases as listed above.
- Tuition amounts based on FY2017 actuals, will need to be adjusted for FY2018.
- Host family stipend based on foster parent reimbursement of \$610 per month.
- ELL reimbursement is arbitrarily set, AOE will need to determine appropriate amount.

- Local administration is arbitrarily set, will need AOE to determine actuals.
- Higher Ed investment is based on amount needed to reach \$6.5 million proposed by Governor Scott in year 3.
- Early childhood investment is based on amount needed to reach \$9.6 million proposed by Governor in year 3.
- Administrative costs based on conversations with recruiting organizations.

**Appendix B**

**District Model:** Analysis of international tuitioning student impacts on model school districts of about average size and composition.

FY2015	Example 1		Example 2		Example 3	
	Prior	Post	Prior	Post	Prior	Post
School Budget (net)	\$3,696,879	\$3,565,844	\$6,668,947	\$6,386,110	\$6,668,947	\$6,082,406
Education Spending (net)	\$2,633,122	\$2,502,087	\$5,322,773	\$5,039,936	\$5,322,773	\$4,736,232
State Offsets						
International Tuition	0	\$124,093	0	\$263,698	0	\$542,908
Intn'l Student Offsets	0	\$48,662	0	\$103,407	0	\$212,896
Additional Costs						
Administrative salary	0	\$30,000	0	\$30,000	0	\$30,000
Administrative benefits	0	\$3,500	0	\$3,500	0	\$3,500
Administrative costs	0	\$11,500	0	\$20,500	0	\$42,000
Language teaching (salary)	0	\$39,930	0	\$39,930	0	\$39,930
Language teaching (benefits)	0	\$3,600	0	\$3,600	0	\$3,600
Allocated Language Costs	0	\$30,220	0	\$63,768	0	\$127,263
Average Daily Membership (ADM)	160	168	353	370	353	388
Long Term Membership (LTM)	144	159	341	358	341	376
Pre-K (LTM)	6.6	6.6	0	0	0	0
K-6 Membership (LTM)	59.8	59.8	0	0	0	0
7-12 Membership (LTM)	75.5	83.5	328.8	345.8	328.8	363.8
<b>International Students</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>35</b>
ELL Count	0	8	0	17	0	35
State Placed Students	0.21	8.21	12.58	29.58	12.58	47.58
Poverty Ratio	0.2845	0.3083	0.2635	0.2984	0.2635	0.3320
Long Term Weighted Membership	158.8	180.8	409.4	457.5	409.4	508.7
Equalized Pupil Count	145	165	375	416	375	463
Spending/LTM	\$25,619	\$22,414	\$19,535	\$17,819	\$19,535	\$16,160
Ed Spending/EqPup	\$18,121	\$15,205	\$14,212	\$12,105	\$14,212	\$10,231
Equalized Tax Rate	1.913	1.619	1.500	1.283	1.500	1.084
	<b>Equalization Ratio</b>		<b>Equalization Ratio</b>		<b>Equalization Ratio</b>	
	0.9148	0.9101	0.9148	0.9101	0.9148	0.9101
	<b>Yield</b>		<b>Yield</b>		<b>Yield</b>	
	9285	9205	9285	9205	9285	9205

FY2015	Example 4		Example 5	
	Prior	Post	Prior	Post
School Budget (net)	\$10,160,181	\$ 9,757,767	\$36,008,112	\$35,197,017
Education Spending (net)	\$9,115,625	\$ 8,713,211	\$28,518,789	\$27,707,694
State Offsets				
International Tuition	0	\$387,791	0	\$775,583
Intn'l Student Offsets	0	\$152,069	0	\$304,138
Additional Costs				
Administrative salary	0	\$41,600	0	\$40,000
Administrative benefits	0	\$3,500	0	\$3,500
Administrative costs	0	\$38,167	0	\$73,667
Language teaching (salary)	0	\$42,470	0	\$42,470
Language teaching (benefits)	0	\$3,600	0	\$3,600
Allocated Language Costs	0	\$99,279	0	\$194,958
Average Daily Membership (ADM)	515		2125	2175
Long Term Membership (LTM)	547	572	2121	2171
Pre-K (LTM)	0	0	54.9	54.9
K-6 Membership (LTM)	0	0	1083.0	1083.0
7-12 Membership (LTM)	532.6	557.6	974.6	1024.6
<b>International Students</b>	<b>0</b>	<b>25</b>	<b>0</b>	<b>50</b>
ELL Count	0	25	43	93
State Placed Students	14	39	8.5	58.5
Poverty Ratio	0.2635	0.2957	0.2031	0.2412
Long Term Weighted Membership	656.4	727.0	2339.2	2490.2
Equalized Pupil Count	600	622	2,140	2,266
Spending/LTM	\$18,588	\$17,071	\$16,978	\$16,213
Ed Spending/EqPup	\$15,181.13	\$13,168	\$13,328	\$12,226
Equalized Tax Rate	1.602	1.396	1.407	1.296
	<b>Equalization Ratio</b>		<b>Equalization Ratio</b>	
	0.9148	0.9101	0.9148	0.9101
	<b>Yield</b>		<b>Yield</b>	
	9285	9205	9285	9205

**Calculations:**

- Examples above are real districts based on FY2015 showing side-by-side the impacts of international tuitioning students on school finances, spending per student, and tax rates.
- **Education Spending:** additional costs assumed for administrative and language teacher salaries were factored into adjusted spending including offsets from the state for Tuition, ELL, and administration.
- **Administrative Cost:** Takes assumed salary and benefits for an administrator in the school used for the model and allocates for one Full Time Employee (FTE) per 30 international students. Part time employees are allocated full benefit packages.
- **Allocated Language Costs:** Takes assumed salary and benefits for language teacher in the school used for the model and allocates for one Full Time Employee (FTE) per 12 international students. Part time employees are allocated full benefit packages.
- **Long Term Membership:** Calculated using the average of the prior two years ADM count plus the state placed students for the current fiscal year (in the adjusted column this includes international students).
- **Poverty Ratio:** pulled from the Agency of Education Data Tool for FY2015. The poverty rate was adjusted in "Post" column to account for additional ELL students not on 3SquaresVT which is factored into the equalized pupil calculation. To adjust for this in the formula we factored we adjusted the poverty ratio by multiplying the original LTM by the original poverty ratio, adding the new ELL students, and then dividing by the adjusted LTM count to get the new poverty ratio.
- **Long Term Weighted Membership:** was calculated by weighting grade levels, poverty ratio, and English language learners in accordance with the Equalized Pupil Formula.
- **Equalized Pupil Count:** is arrived at by multiplying the Long Term Weighted Membership by the equalization rate. The equalization rate changes from the original to compensate for the additional equalized pupils added by international students. This calculation can be found in Appendix C.
- **Equalized Tax Rate:** is the tax rate prior to assignment to lower districts (if the assessment is for a union school district) and the adjustment for Common Level of Appraisal. This is calculated by determining what percentage of the yield amount the education spending per equalized pupil is. This ratio is then multiplied by the statewide tax rate, which for FY2015 was \$0.98. The calculation for the adjusted yield amount can be seen in Appendix C.
- **Equalization Ratio:** determined using calculation in Appendix C.
- **Yield:** determined by accounting for a 1.12% increase in student count. See Appendix C.

**Assumptions:**

- **Administrative Salary:** Average salary for school administrators in the school being used to model. Where school administrator history was not available, average staff salary was used.
- **Administrative Benefits:** Nominal cost of benefits for school business administrators in the applicable school district.
- **Language Teaching Benefits:** Average Salary for a language teacher in the applicable school district. Where language teacher history was not available, average teacher salary was used.
- **Language Teaching Salary:** Nominal salary for language teacher in applicable school district.
- **Average Daily Membership:** FY2015 + State Placed Students

- **Long Term Membership:** (FY2013 ADM + FY2014 ADM)/2 + State Placed Students
- **ELL Count:** data pulled from the National Center for Education Statistics ELSi system.
- **State Placed Students:** were projected based on state data. Specific information is not available from the Agency of Education.
- **Long Term Weighted Membership:** State Placed Students in the original school data calculation were weighted at the elementary school level of 1.00. For the adjusted district calculation the additional international students were weighted at the high school level of 1.13 because these are the grade levels they are expected to attend.

**Sources:**

- Vermont Agency of Education Data Information Tool
- National Center for Education Statistics ELSI Tool
- Vermont State Auditors Report on the Vermont Agency of Education (equalized pupil formula)

**Appendix C**

**State Model:** Analysis of the impact of 1,000 international tuitioning students on the Vermont Education Fund, Equalized Pupil Count, Equalization Ratio, and Yield Amount.

**Equalization Ratio and Equalized Pupils:**

Description	Current			Adjusted		
	Actual	Weight	Total	Actual	Weight	Total
Two-year average ADM		-	88,200		-	88,200
Pre-K	5274.6	-		5274.6	-	5,274.60
Grades K-6	43,108.13	-		43,108.13	-	43,108.13
Grades 7-12	39,817.32	-		39,817.32	-	39,817.32
International Students	-	-	-	<b>1,000</b>	-	1,000.00
State Placed Students	283	-	283	283	-	283
Long-term membership (LTM)	88,483	-	88,483	89,483	-	89,483
Combined grade weights	-	2351	2351	-	2481	2481
Grade weighted LTM	-	-	90,834	-	-	91,964
Unpacked Poverty Ratio Numerator	21,842.04	0.24685	21,842	22,842		
Poverty Ratio	0.24685	-	-	0.25527	-	-
Poverty weight	-	5,606	5,606	-	5,869	5,869
ELL Weight	1442	288	288	2,442	488	488
Long-term weighted membership (LTWM)	-	-	96,728	-	-	98,321
<b>Equalization Ratio (LTM/LTWM)</b>	<b>0.91477</b>	(8,245)	0.91477	<b>0.91011</b>	(8,838)	0.91011
Equalized pupils before phantom students	-	-	88,483	-	-	89,483
Phantom students	-	772	772	-	154	154
<b>FY 2015 Equalized Pupils</b>	-	-	<b>89,255</b>	-	-	<b>89,637</b>

**Notes:**

- Two-year Average ADM: Statewide (FY2013 ADM + FY2014 ADM)/2
- Long-term Membership (LTM): Sum of two-year average ADM, state placed, and international students
- Grade Weighted LTM: Statewide two-year average ADM grade weighted (Pre-K: 0.46, K-6: 1.00, 7-12: 1.13). State placed students were weighted at 1.08 because data on what grade levels they participated in was not available. International students were weighted at 1.13 since they are expected to participate in 7-12 grade levels.
- Unpacked Poverty Ratio Numerator: estimated number of students receiving 3SquaresVT services based on poverty ratio and LTM (LTM\*Poverty Ratio). For the adjusted calculation, international students were added to this number based on the Equalized Pupil calculation.

- Poverty Ratio: based on FY2015 for the current calculation. For the adjusted calculation the poverty ratio was arrived at by dividing the adjusted unpacked poverty ratio numerator by LTM.
- Poverty weight: arrived at, per the Equalized Pupil formula, by multiplying the poverty ratio by 0.25 and then by the grade weighted LTM.
- ELL Weight: arrived at, per the Equalized Pupil formula, by taking the current number of students on ELL, adding international students, and then multiplying by 0.2.
- Long-term weighted membership (LTWM): Sum of grade weighted LTM, poverty weight, and ELL weight.
- Equalization Ratio: LTM/LTWM
- Phantom Students: Assumes that 80% of districts hitting the 3.5% threshold on equalized pupil loss would be able to avoid it by accepting international students.
- FY2015 Equalized Pupils: (LTWM\*Equalization Ratio)+Phantom Students
- You will notice that the difference between the current and adjusted equalized pupils is 382 not 1,000 students. This is because of the assumption that most phantom students would go away.

### Education Fund Outlook:

FY2015 Education Fund Outlook		Current	Adjusted
a	Base Homestead Property Tax Rate	\$ 0.98	\$ 0.976
	<i>Average Homestead Property Tax Rate</i>	\$ 1.50	\$ 1.50
b	Uniform Non-Residential Property Tax Rate	\$ 1.515	\$ 1.515
c	Base Tax Rate on Household Income	1.80%	1.80%
d	Base Education Amount Per Equalized Pupil	\$ 9,285	\$ 9,205
e	Total Equalized Pupil Count	89,257	89,637
	Statewide Education Grand List	\$ 88,471,530,000	\$ 88,471,530,000
f	Statewide Education Grand List Growth Rate	-0.50%	-0.50%
g	Statewide Education Spending Growth Rate		

Sources			
1	Homestead Education Tax	\$ 573,600,000	\$ 571,100,000
1a	Income Sensitivity Adjustment	\$ (151,100,000)	\$ (151,100,000)
1b	Homeowner Rebate - <i>EF share only*</i>	<i>included in 1a</i>	<i>included in 1a</i>
1c	<i>International Recapture</i>	\$ -	\$ 2,500,000
2	Non-Homestead Education Tax	\$ 603,400,000	\$ 603,400,000
3	Sales & Use Tax	\$ 127,600,000	\$ 127,600,000
4	Purchase & Use Tax	\$ 32,400,000	\$ 32,400,000
5	General Fund Transfer	\$ 295,800,000	\$ 295,800,000
6	Property Tax Relief Fund Transfer	\$ 1,800,000	\$ 1,800,000
7	Lottery Transfer	\$ 22,800,000	\$ 22,800,000
8	Medicaid Transfer	\$ 7,600,000	\$ 7,600,000
9	Other Sources (Wind & Solar Property Tax, Other)	\$ 1,100,000	\$ 1,100,000
9a	<i>International Tuition</i>	\$ -	\$ 19,611,650



9b	<i>International Food &amp; Housing</i>	\$	-	\$	6,072,750
9c	<i>International Student Administration</i>	\$	-	\$	7,900,000
9d	<i>International Student Other</i>	\$	-	\$	3,220,000
<b>10</b>	<b>Total Sources</b>	<b>\$</b>	<b>1,515,000,000</b>	<b>\$</b>	<b>1,551,804,400</b>
<b>Uses</b>					
11	Education Payment	\$	1,258,500,000	\$	1,258,500,000
12	Special Education	\$	173,300,000	\$	173,300,000
13	State-Placed Students	\$	16,900,000	\$	<b>38,494,400</b>
13a	<i>Payments to Host Families</i>	\$	-	\$	5,490,000
13b	<i>International Recruitment Program</i>	\$	-	\$	6,500,000
14	Transportation	\$	17,200,000	\$	17,200,000
15	Technical Education	\$	13,700,000	\$	13,700,000
16	Small Schools	\$	7,700,000	\$	7,700,000
17	Essential Early Education	\$	6,300,000	\$	<b>8,220,000</b>
18	Adult Education & Literacy	\$	5,800,000	\$	<b>7,100,000</b>
19	Community HS of Vermont (Corrections) Renter Rebate (General Gov't) - <i>EF share</i>	\$	3,800,000	\$	3,800,000
20	<i>only**</i>	\$	6,600,000	\$	6,600,000
21	Reappraisal & listing (General Gov't)	\$	3,300,000	\$	3,300,000
22	Other Uses (Accounting & Auditing, Other)	\$	1,300,000	\$	1,300,000
<b>23</b>	<b>Total Uses</b>	<b>\$</b>	<b>1,514,400,000</b>	<b>\$</b>	<b>1,551,204,400</b>

\*Allocation of Revenue Surplus, Stabilization Reserve, and Available Funds are unchanged.

**Notes:**

- **Base Education Amount Per Equalized Pupil:** Calculated using the decrease in simple yield = (grand list/100)\*base tax rate/equalized pupil count. Amounts to about a 0.86% decrease.
- **Homestead Education Tax:** Shifts \$2.5 million to tuition recapture (line 1c).
- **Total Sources:** increase of \$36.8 million.
- **Total Uses:** increase of \$36.8 million.

### Appendix D

Impact and potential savings for property tax payers in school districts taking advantage of modeled international student program.

**Impact on Local Taxpayers:**

	Example 1		Example 2		Example 3		Example 4		Example 5	
	Original	Adjusted	Original	Adjusted	Original	Adjusted	Original	Adjusted	Original	Adjusted
Ed Spending per Eq Pup	\$18,121	\$15,205	\$14,212	\$12,105	\$14,212	\$10,231	\$15,181	\$13,168	\$13,328	\$12,226
Equalized Tax Rate	1.913	1.619	1.500	1.283	1.500	1.084	1.602	1.396	1.407	1.296
Elementary dist. Tax Rate	0	0	1.0314	1.0314	1.0314	1.0314	1.351	1.351	0	0
Share Ratio	100%	100%	34.07%	34.07%	34.07%	34.07%	48.49%	48.49%	100%	100%
Rate Pre-CLA	1.913	1.619	1.191	1.117	1.191	1.049	1.473	1.373	1.407	1.296
CLA Adjustment	101.93%	101.93%	102.33%	102.33%	102.33%	102.33%	104.09%	104.09%	98.80%	98.80%
Applied Ed Tax Rate	1.876	1.588	1.164	1.092	1.164	1.026	1.415	1.319	1.424	1.312
Applied Income Sensitized	3.786	3.205	2.969	2.551	2.969	2.156	3.172	2.775	2.785	2.577
Average Housesite Value	\$155,750	\$155,750	\$95,000	\$95,000	\$95,000	\$95,000	\$195,500	195,500	\$263,700	\$263,700
AHV + 150% Median Household Income	\$233,625	\$233,625	\$142,500	\$142,500	\$142,500	\$142,500	\$293,250	293,250	\$395,550	\$395,550
Ave. Property Tax Bill	\$42,813	\$42,813	\$49,773	\$49,773	\$49,773	\$49,773	\$59,345	\$ 59,345	\$79,073	\$79,073
Ave. Income Sensitized 150% Median Prop. Tax Bill	\$2,923	\$2,474	\$1,106	\$1,037	\$1,106	\$974	\$2,766	\$ 2,578	\$3,754	\$3,459
	\$1,621	\$1,372	\$1,478	\$1,270	\$1,478	\$1,073	\$1,882	\$ 1,647	\$2,202	\$2,037
	\$4,384	\$3,710	\$1,659	\$1,556	\$1,659	\$1,461	\$4,150	\$ 3,868	\$5,632	\$5,188
<b>Savings</b>	<b>\$249 - \$673</b>		<b>\$69 - \$208</b>		<b>\$131 - \$405</b>		<b>\$188 - \$282</b>		<b>\$165 - \$444</b>	

**Notes:**

- **Elem. Dist. Tax Rate (Elementary District Tax Rate):** is the actual equalized tax rate from the elementary school district if applicable. Collected from the AOE Education Data Tool for FY2015.
- **Share Ratio:** is the ratio of equalized pupils from the given town that attend a regional or local high school if applicable. Towns without a union high school district will have a 100% share ratio.
- **Rate Pre-CLA Adjustment:** is the weighted average tax rate from the elementary and high school districts.
- **CLA Adjustment:** is the ratio provided by the AOE in the Education Data Tool for FY2015.
- **Applied Ed Tax Rate:** is the rate after adjusting for Common Level of Appraisal = Rate Pre-CLA/CLA Adjustment.
- **Applied Income Rate:** the percentage above the Base Education Amount that Education Spending Per Equalized Pupil is, applied to the FY2015 1.94% income sensitized rate.

- **Ave. Housesite Value (Average House Site Value):** the median value of primary residential properties sold in the applicable town in FY2015 according to housingdata.org.
- **Med. Household Income (Median Household Income):** the Median Household Income for homeowner households according to housingdata.org.
- **Ave. Property Tax Bill:** The Applied Education Tax Rate applied to every \$100 of the average house site value.
- **Ave. Income Sensitized:** The Applied Income Rate applied to median household income.

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