

OWL Senate Expedition



**OPEN
WORLD
LEARNING**

“Does the MN State Budget
Reflect the Values of the
State of MN?”

Algebra 1 - 2016

Color printing made possible by a
generous donation by SuperAmerica



Dear Reader,

This briefing book reflects the work of the Open World Learning Community (OWL) Algebra 1 students when they were introduced to the MN State Dashboard and dug deeper into what it means to live in MN.

Students worked with several experts and were assisted by educators along the way but the topics are their own. Some of the topics cover areas where the students feel the state of MN is doing a good job and some are areas that are critical of the state Budget.

My goals as their math teacher is to get them to take a position and analyze their position mathematically and become more engaged as citizens in state government. As you read this you will see evidence that the students have worked hard toward both of these goals.

Thank you to Doug Doohar of Education MN who came in to talk to the students about messaging and how to communicate to policy makers and to Lucinda Jesson, Appellate Court Justice and former Commissioner of DHS, who assisted in data collection and understanding state budgets and policies.

A special thank you to the State Senators and Representatives who came out to support our students and listen to them.

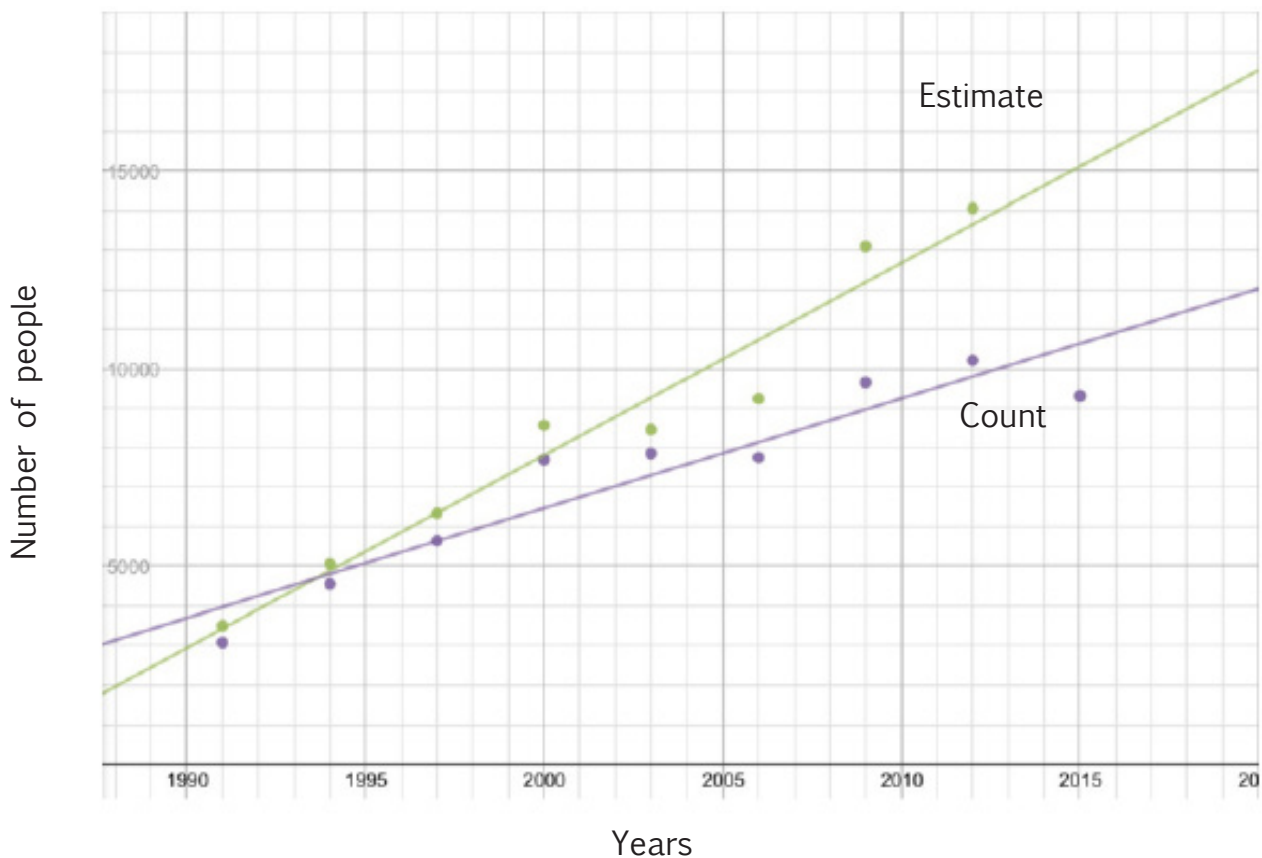
Thomas Totushek
OWL Math Teacher

Relationship Between Homelessness, Education, and Violent Crime

Chutima, Emily, Frankie, Promise

A woman named Amanda didn't have a good life at home, so she left home the day she turned 18. She had slept in parks until she found a boyfriend to live with. Before she was found she lived in a tent she had hidden in the woods and had gotten sick. When she was found she was in so much pain she couldn't move, had a temperature of 106 and was pregnant. In order for Amanda to survive doctors had to take her baby at 5-½ months. Amanda had said if she could have anything it would be just a small shack and not have to worry about losing her job or being evicted. Many people have suffered through the night, maybe because of no food, not enough clothes for the cold, not being able to find a job to provide for themselves and their family but most importantly they don't have a shelter to keep them safe and warm. There are many people outside who are homeless, we just don't know that what we do can help solve and change homelessness for the better.

Estimates and Count of Homeless Persons (years 1991-2012) MN



x_1	 y_1
1991	3500
1994	5061
1997	6341
2000	8569
2003	8461
2006	9244
2009	13100
2012	14057

According to the Wilder Survey, 12% of the homeless population in Minnesota is unsheltered, meaning they are not in shelter or either living in cars, or places that aren't supposed to be for human habitation. People would have to wait on a waiting list and have ONLY 120 days to be in a homeless shelter. During that time, they would have to save up and find another place to stay or live. 65% of students in St. Paul are living with friends, or someone other than their guardian. About 2000 students experience homelessness. When they are in homeless shelters, they won't get enough sleep, because of the noise from everyone else around them. If students can't go to their school of origin, and change schools more than two times a year, they will move down in school. Homelessness can cause children to have stress and anxiety. Project REACH is a program that helps homeless students all over St. Paul to go back to their school of origin. But what homeless children need most of all is a home. While they are homeless, it is needed that they stay in school. Because school is a place where they can obtain the skills that they need to help them escape from being homeless. Families with criminal background are more likely to be homeless, because landlords won't accept anybody with criminal backgrounds. Although there are homeless shelters, being homeless ANYWHERE is dangerous. Domestic violence is slightly part of the reason for one in three homeless women to be unsheltered, many victims of domestic violence face homelessness when they flee their abusive homes.

Although homelessness rates are better than predicted, they are still very high. Many people suffer from homelessness, not everybody knows that we can do things that can help them.

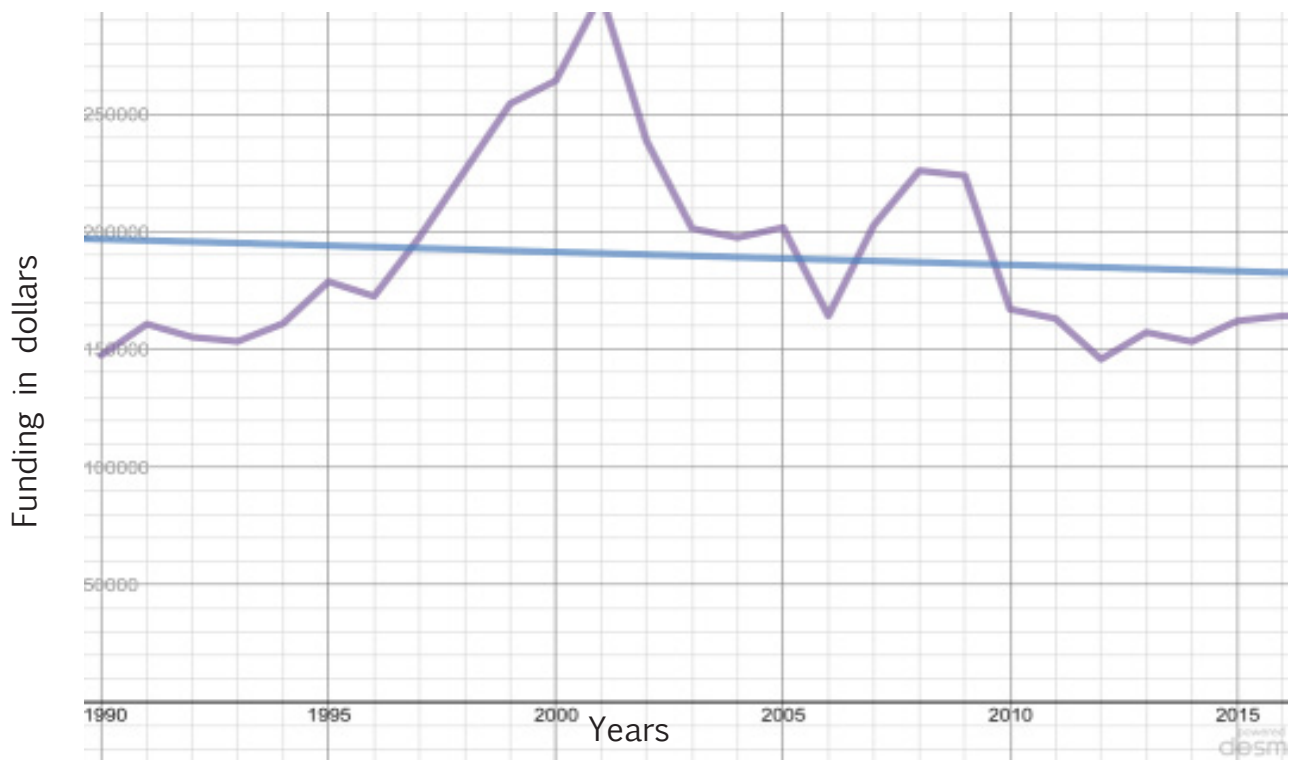


The Benefits of Minnesota Composting

Maxwell Juvland, Robby Schwantes

I went to a school called Expo. It was my favorite school. One day, I was walking around with my friends and I saw a kid. It was in lunch time, but the kid was walking, and then he dropped his tray and started throwing up. At the site I almost did as well. The teachers rushed over to help him, they took him to the nurse's office and it turned out that the kid had food poisoning. This could have been prevented had they composted this food. It turns out that the food was 3 weeks old. We could've prevented this getting better fruit and vegetables from farms and other places. I know that there are things that we could have done but now we can fix that. We can add composting bins to neighborhoods and public schools. We could give the compost to local farms. Now, looking this data we've gotten from the funding per major area by the MN budget, there is some evidence of a trend. If you look at the blue line averaging the spending for environmental resources, this funding is slowly dropping. If we were to keep this up, our environment could become massively neglected. And one of the best ways to help our environment is to eliminate unnecessary waste.

MN Environment Funding



According to the Minnesota Pollution Control Agency, In 2013, nearly 3 million tons of food waste was disposed of in Minnesota. To fix this, we could increase the number of official compost dumps statewide. This would probably prove problematic to some of the people nearby these dumps; however, I think it'd be worth it if it means improving the condition of the current environment. We also think that we could set up a system in all public schools, similar to the program in St. Paul, where we have "Pig Buckets" to compost cafeteria waste. This would set up a composting system with our kids that would make them familiar with it, and maybe encourage them to compost again in the future. Then, we could use this compost to supply local sources, which would in turn give back to us in the form of healthy, nutritious food. However, it might be a bit bothersome to teachers and school staff to go through the process of teaching students how to compost correctly. We feel that it would make it easier to get in habit as a young people if they did it daily as we propose with this idea. Therefore, education would most likely lead to healthier, more waste-free generations after us. Now, we've all seen how recycling has taken off, haven't we? Home recycling has become a huge success, and is now common across the state. So what's wrong with home composting? Well, some might say that it's disgusting, inconvenient, or that recycling is more beneficial to the environment. However, composting is a great way to help our plants while still reducing the size of household waste, not to mention landfills. That's two very important subjects rolled into one solution. Also, Seattle has already developed a composting system similar to our suggestions, so why can't we? If we were just to put in as much money and effort as we have with recycling, I think it's possible for composting to become a popular household waste solution in good time. So what we propose is that we use some of the money that we use for other things like recycling on composting to help decrease unnecessary food waste statewide, and improve our future generations. Thank you for giving us your time, and have a good day!

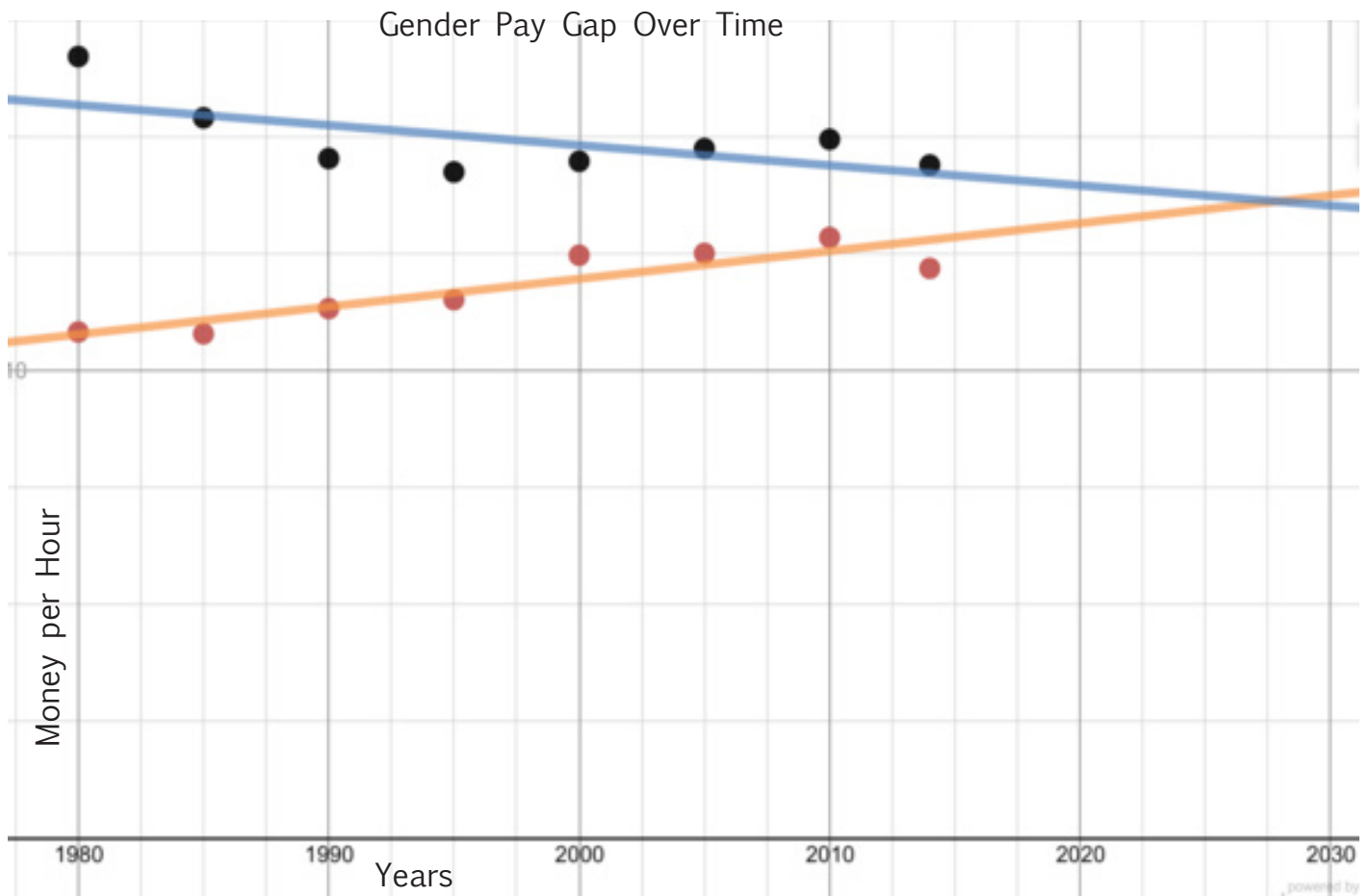
We propose doubling the current government funding for composting to decrease the amount of unnecessary organic waste thrown away statewide.



Eliminating the Wage Gap

Madigan Lodahl, Elsa Carlson, Freya Ebbesen

When young girls think about their future, it's hard to think that their male peers will end up earning more than them. We work just as hard in school and we do all the same things, but when we grow up and get a job, we don't get paid as much as men. Just because we're female. And because women get paid less, they might think they're not as important, they can't make a difference, and they're not worth it, because it can feel like you don't want to waste your money on us by giving us equal pay. The wage gap between men and women in Minnesota needs to be eliminated. The first reason that the wage gap in Minnesota needs to be closed is because it's just not fair. If you look the word fair up in the dictionary it says "treating everyone equally, not favoring one over the other." The wage gap is the exact opposite of this statement. Women in MN got paid \$2.21 less per hour than men in 2014 for the same job. That's unequal pay for equal work, and it's not right. Historically men have always made more than women. People have worked hard to close the wage gap, and progress has been made, however we can do better.



Another reason that the wage gap should be eliminated is because it discourages young girls. Knowing that men will make more money than you just because of your gender can push young women down. It pushes them away from their dreams and desires and towards the stay at home mom, or the part time waiter. A girl may look to her future and wonder if it's worth going to college if she knows she will be earning less than her male peers in the future. Maybe this is related to why some girls in middle school shy away from math and science classes because they feel that it might not pay even in the end. For example, the University of Melbourne reported that girls and boys chose STEM classes earlier on in their high school years but later on boys were most likely to stay with the STEM classes compared to girls. The thought is that it's possible that the gender pay gap may be a cause of this because girls feel discouraged.

In the New York Times of April 12, 2016 there was an article about the pay difference of the top two professional tennis players. The article said that Roger Federer earned \$731,000 in prize money for the Western and Southern Open in August 2015. However, Serena Williams earned 495,000 for winning the same tournament. Even females athletes who work as hard as their male peers earn significantly less. So, as you can see, the wage gap is something that needs to be stopped. But how? Well, we have an idea. We propose to give extra points to companies with a low or no wage gap when trying to figure a reliable company to complete a job for Minnesota. As companies are so competitive to get a job, they will likely make an effort to close their wage gap between men and women. Hopefully, each one will try to make their gap smaller than the other companies gaps, eventually eliminating the wage gap. The wage gap is a depressing and difficult topic to discuss, but without discussion nothing will change. With our proposal, over time, the wage gap will disappear. Please help us bring this idea into reality, so we can create a better future for the youth of Minnesota.

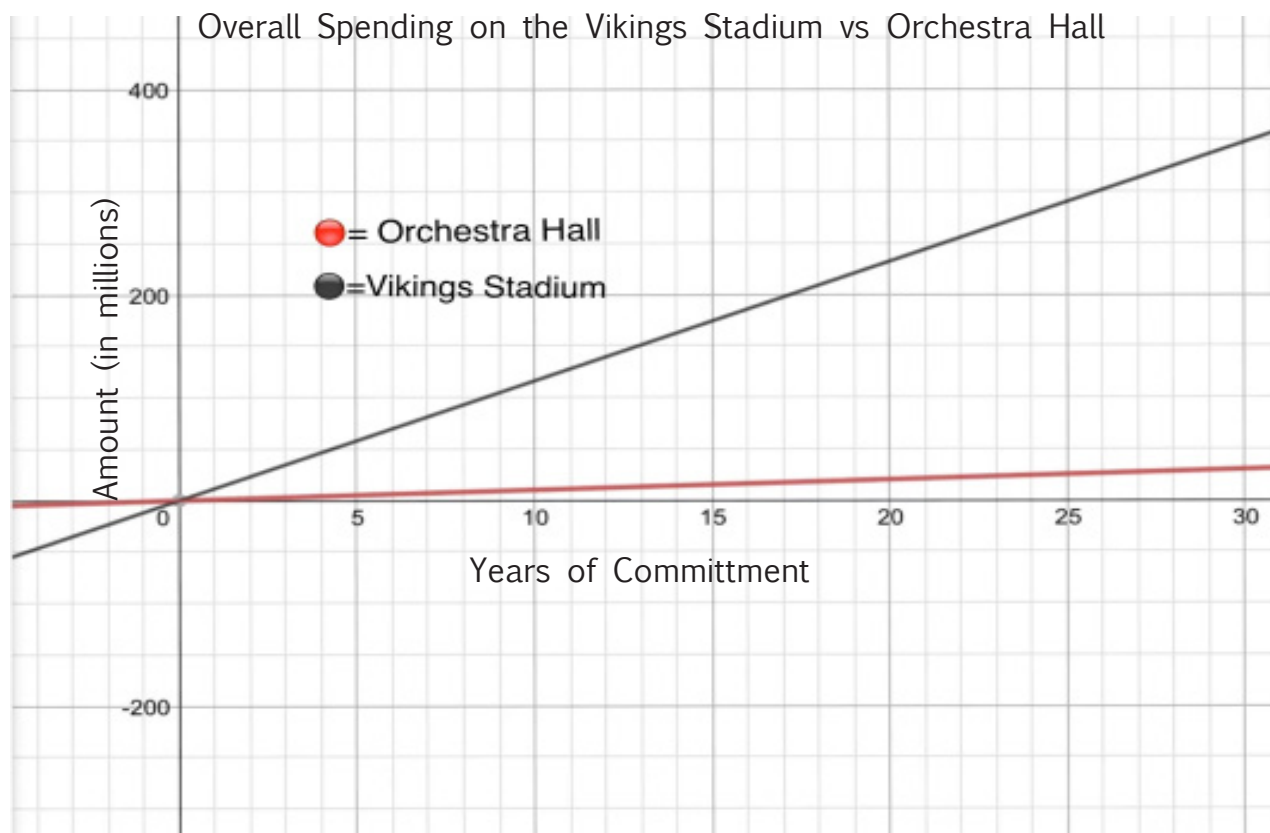
The wage gap is a big problem in MN, and it should be eliminated because it discourages young girls, and is unfair.



Sports vs Music Budget Analysis

Lili, Audrey, Erin and Lizz

As teenagers, we are very passionate about music and sports. Of the four teenagers in this group, we play five sports in all and most of our birthday money goes to buying music. Sports keep us energized and healthy while music calms us and helps us sleep. Music flows through us as we play and is pumping through us. Sports teach coordination and leadership. Music expresses our feelings when our own words can't. Sports build friendships, most of our friends come from playing on teams and learning to work as a team. Both sports and music help academic performance and are getaways from our stressful world. On May 10th 2012 the Minnesota legislature approved funding for a new Vikings stadium. The project is overall 975 million dollars with the state covering 348 million dollars and the Vikings have lease for only 30 years. That is a lot of money compared to the 7.2 million dollars that the orchestra hall received and that has been there for 42 years. The orchestra hall only gets 1 million dollars per year while the Vikings get 11 million 600 dollars per year.



However sports and music have equal importance. “Sports foster the development of social skills such as teamwork, cooperation, and leadership to teaching personal skills such as self-discipline, work ethic and coping with disappointment.” Sporting activities can actually improve your health, fitness levels, well-being and overall quality of life. Whereas, if you don’t join in you can feel left out and different from your friends. “Because sports take up time and energy you would think that they would distract athletes/students from class work but sports require memorization, relation, and learning skill sets. Also determination and goal setting.” “Students with 1 plus years of high school music experience improve their ACT scores 4% higher in math and 7% higher in English.”; Music training stimulates nearly every region of the brain, strengthening those regions used for complex math and abstract-thinking skills.” And “83% of adults with incomes higher than \$150,000 participated in music.”And

Low-income students who took music lessons in grades 8-12 saw math, reading, history, geography and social skills soar by 40% compared to non-music students.” And music helps us concentrate and communicate, music says things that can’t be explained in words. The Minnesota government should give 25% of the sports budget to arts. Because even though a lot of people love sports, music also is a big part of life. It can better people’s futures and make possible jobs and lifestyles for people without the money to go places. Music has been around for millions of years in many cultures in fact musical instruments are amongst the oldest man-made object ever found. Let’s keep music going with music!

“Students with 1 plus years of music experience improve their ACT scores 4% higher in Math. “, Sports help develop social and leadership skills.” This proves that music and sports are equally important.

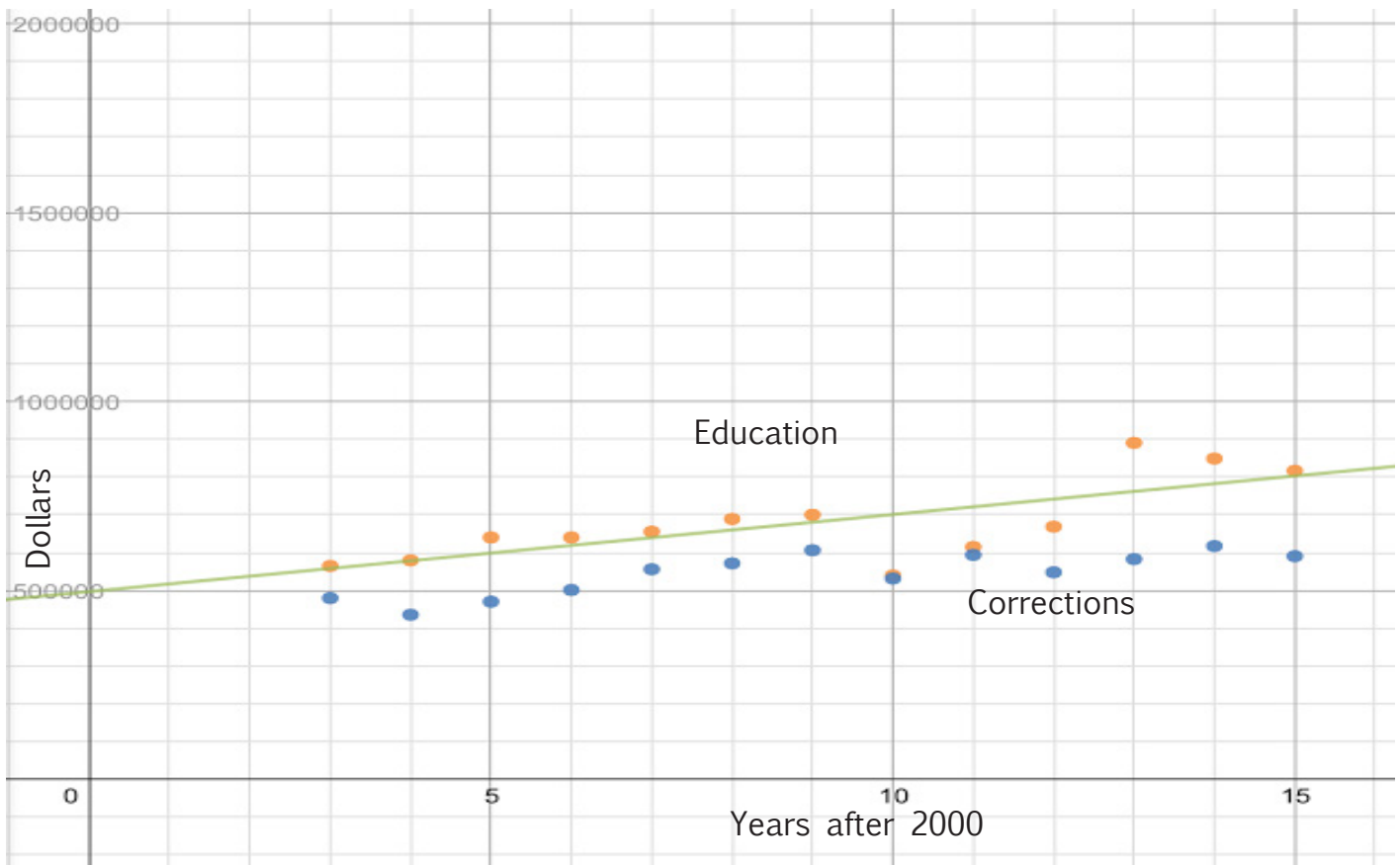


Spending on Education in Minnesota

Tom, Jedi, Kou, Yahya

Our groups investigated spending on public safety/cost of correction compared to spending on education. When we started, we thought Minnesota was not spending enough on education. We had heard from our teacher that we spend 8,000 dollars per student, but 40,00 dollars per inmate. After some digging however, we found out that education was the most spent on thing. We understand that you can only spend 8,000 dollars per student, there are thousands and thousands in the system. Spending has stayed basically the same over the years, as you can see in our graph. Our state spends in the top half in the nation on average cost per student, and we rank high in higher education. We like where we are at, but we would like it if you got us in the top ten for spending. We feel this would increase our chances of succeeding in real life. Below we have some facts about our project

Cost of Correction Compared to Spending on Education
(Education spending divided by 10)



When we started researching about how much Minnesota spend for education every sites we found said that Minnesota does not spend enough money on education. When we researched even more we found a website that said we do spend enough money on education. We continued searching and found more, including one that was very eye opening. In almost all of them it had the biggest chunk of spending on education. We are comparing education to cost of correction and we found that we are spending more on education than cost of correction. The spending is steady over the years but it is slightly increasing too. This is a good indication that we will continue to invest in education for years to come. You can see these numbers in the graph we have provided.

We like how the government has kept the funding of schools steady. Also we like how we are in the top ten of education and learning. But we hope that you can give us more funding so that we can be in the top 10 of funding for schools. However, in the US, Minnesota fourth graders are leading in math. The eighth graders are following closely behind in third. As for reading we're not doing as good. The fourth graders are in ninth with the eighth graders following at tenth place. These are two of the grades we focused on because they were featured on the website. We are proud of where we are on the list. We're not saying that other grades are bad but you could provide more money to the other areas. With even more spending, we could continue to exceed expectations even further. In conclusion, we feel we are doing a good job with the money we are spending on education, and can do even better with more funding. We feel we could rise to best in the country in education, and help close the gap with countries that are better than us in education.

We applaud you in your efforts in education, recognizing you place a lot of importance with it. We came into this project ready to criticize the government, saying how we need more spending, and came out of it with a better respect for the work you do. http://www.usgovernmentspending.com/Minnesota_state_spending.html This showed that we spent 32% of our spending on education, the most in any area. It was a good source for what we were researching. <https://mn.gov/mmb/images/General-Fund-Spending-by-major-area.pdf> This we site showed us that we spend more money over the years. This web site also showed us that we spend less money of correlation but we are also spending more over the years but not as much as Education. The government has been spending a good amount on education, and with this money Minnesota is doing very well. With more money, we can excel even further.

The government has been spending a good amount on education, and with this money Minnesota is doing very well. With more money, we can excel even further.



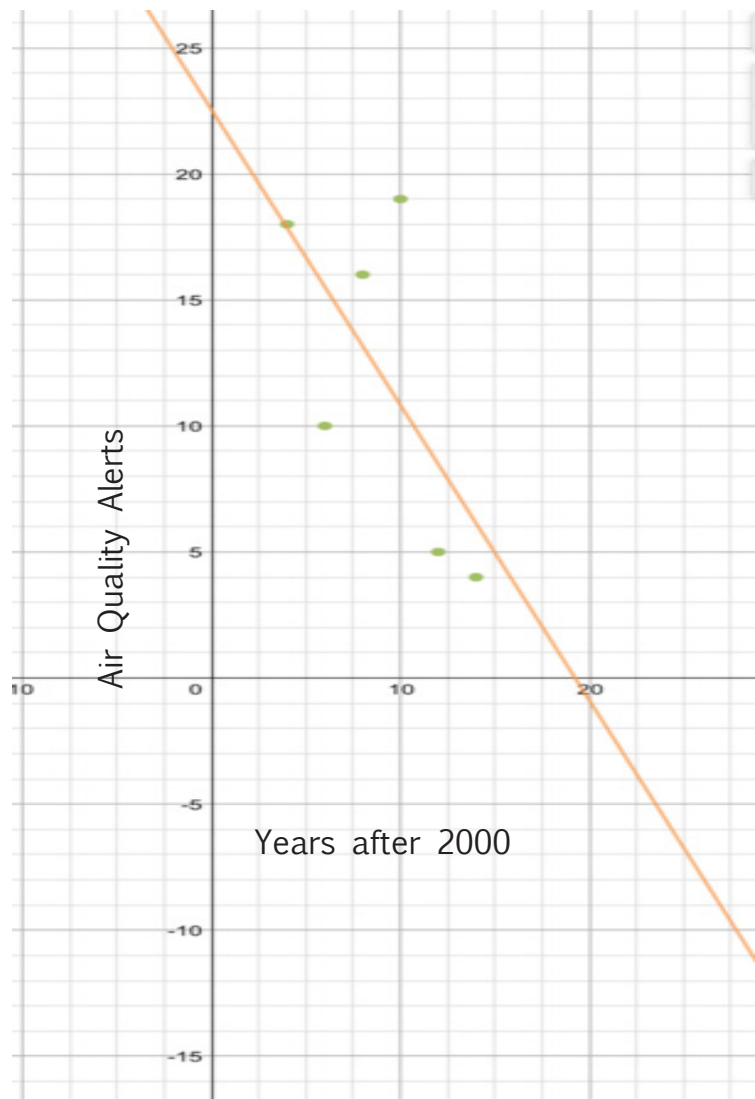
Air Quality and Asthma in Minnesota

Frances Barnett, Aiko Mattie, Emma McCarthy, & Lauren Mitchell

In 2013 asthma affected 410,000 children and adults in Minnesota. It is proven that poor air quality sets off asthma triggers and causes asthma attacks. People with asthma or other breathing problems struggle daily because of pollution, and in some cases people have seen their amount of asthma attacks go up to daily due to the pollution where they live in Minnesota.

Bad air quality can lead to death. In 2010, 73 people in Minnesota died or were hospitalized due to asthma attacks. Coincidentally that is also the year there were 19 air quality alerts. Bad air quality causes a number of health related issues that range from cosmetic issues, like acne, to severe life threatening conditions, like bronchitis. In some cases bad air quality has led to diseases like cancer. These conditions affect people's quality of life in very big ways.


Number of Air Quality Alerts in MN (2004 -2014)



Bad air quality affects people with asthma especially, forcing them to live drastically different lives. Lots of people have had to leave their home due to bad air quality, or are forced to stay inside or limit outdoor activity and sports. Since children and adolescents are more likely to be severely affected by asthma, you can see how it would be hard for them to interact with their peers in ways usually associated with childhood. As they get older the adjustments they've made in their lives will lead to bigger and more life threatening issues in their health.

Minnesota's air quality rates have been changing dramatically. In 2010 we had 19 air quality alerts in all of Minnesota. In 2014 we brought that number down to 3. Minnesota is not the worst state in the US when it comes to air quality, but it isn't one of the best either.

Hospitalization for asthma attacks decreases as the amount of major air quality alerts decrease so, we propose a 2% increase to funding to improve air quality, because it affects the health and well being of many of our Minnesota Residents.

x_1		y_1
04		18
06		10
08		16
10		19
12		5
14		4



In Need of Stability; Why Homeless Individuals are Choosing Jail Over the Streets

Jude, Stephanie, Pao

Homelessness, is like a Chinese finger trap. Easy to get stuck in, difficult to escape. In Minnesota 14,000 people on average are homeless on any given day.

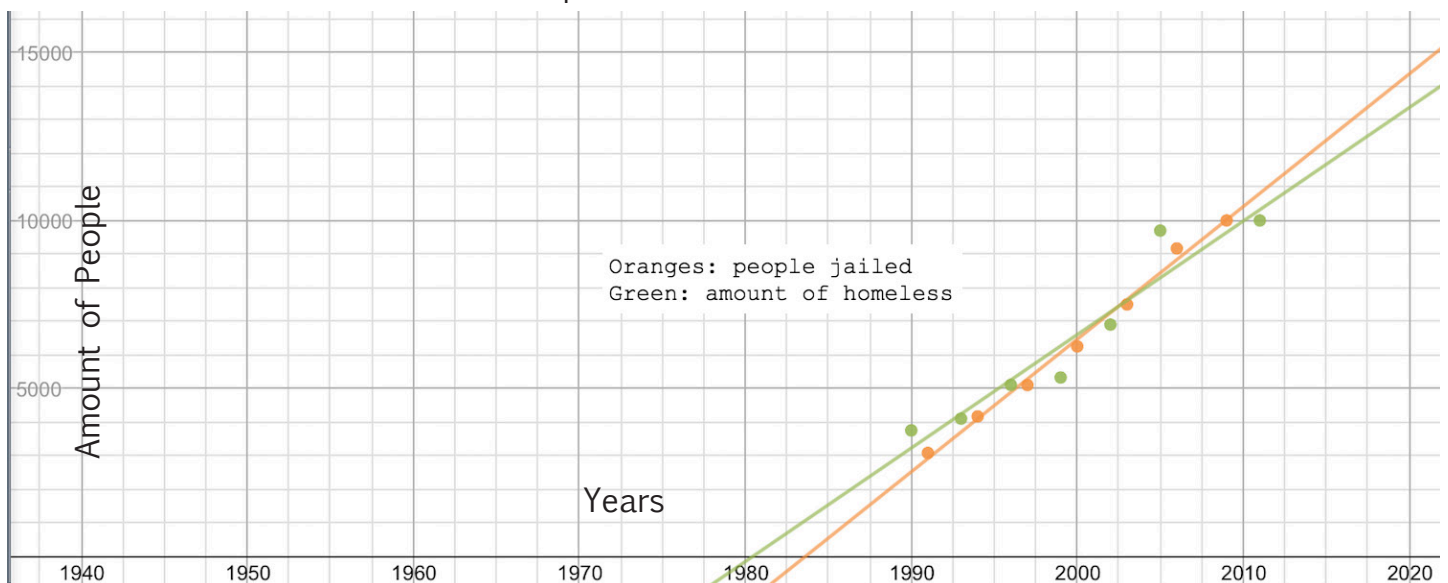
In May of 2011, a particularly frigid night. 30 year old Jamaine Makepeace had had enough of being cold, tired and hungry. He vandalised a dunkin' doughnuts for a place to sleep off the streets. Jamaine had been diagnosed with schizophrenia, barring him from several shelters. Again in January of 2013, he broke the windows of the Rensselaer County Clerk's office, giving him a longer sentence.

Witnesses who called police were surprised when Makepeace did not run off. Instead, police said, he stood near the broken glass and waited to surrender to police. "He told us he figured he would do enough damage to get a year in jail," an officer said. "He told us that he was tired of being on the streets and begging food from people."

There are people choosing to go to jail, because conditions for corrections are better than those provided on the streets. By adopting Utah's approach, and simply housing the homeless, we can give stable environments to students, and the chronically homeless, regardless of background.

A problem seen in the school system is students with unstable environments. When families are switching between relatives houses, It becomes a struggle to keep up with school-work. Getting Space in shelters takes a long time. In Hennepin county there are a little over 100 beds available. The time limit in a shelter was raised from 30 days to 120, which would be a good thing, if we had more resources available. This system leaves those on the waiting list at a disadvantage. Even in a shelter, sleep is scarce and it's difficult to concentrate on home-work. It's often seen that homeless high school students can't get into the foster care system. None of this sets these children up for a good future.

Number of People Jailed and Homeless in MN



Once an individual is homeless, it's hard to escape. Saving money becomes terribly difficult. Only 28% percent of homeless in minnesota are employed, 12% working full time. On top of that, Minnesota is the 4th most expensive housing market in the U.S. And once they go to jail it only gets worse. When they're released, the person has a criminal record. It's difficult to get housing or a job, nearly impossible with a felony. So what's the solution? Back to jail.

Drug habits and mental illness among homeless individuals and youth are sadly common. In a survey, 24% of people were barred from jobs because of mental health. Treatment can be expensive, or hard to stay with. In such terrible environments things can only get worse. 52% homeless youth in minnesota have a significant mental disorder.

This system is corrupt, and offers little to no way out. We believe 30% of the money currently used in correctional facilities should be used to create affordable housing units. Rent would be 50\$ or 30% of one's salary, whichever is greater. This will create a stable environment for homeless students and individuals, in turn decreasing those choosing to be jailed. By housing regardless of background or current situation, we are able to give people second chances.

In 2005, Utah had approximately 1,932 chronically homeless. By 2014 that number dropped to around 539. How did they do it? Simple; give them homes. An organization called "Housing First" decided the only way to solve this problem was to provide the homeless with housing, no strings attached. The housing units were simple, often pre-existing, bought properties. Utah's chronically homeless population decreased drastically with this project. Costs for homelessness dropped dramatically, by a state estimate of 8,000 per homeless person. Before, Utah was spending an estimated 30,000-50,000\$ per homeless person.

Joe Ortega, a resident of Grace Mary Manor, a housing unit in Utah, has a 1,000 piece puzzle laid across his room. "It's my new addiction," says Ortega. "You know, it takes my mind off the old addiction."

Ortega was homeless for 20 years, in which, he drank and used drugs. With his new accommodations he has been able to get sober and improve his mental and physical health.

This program will offer students stable environments so they can focus on their education, provide help for mental health, drug abuse, and other physical and mental ailments. Long Term, we will be able to create better futures. People are able to apply for jobs without a crippling criminal record, or history of drug abuse. Affordable housing would offer a way out of the system.

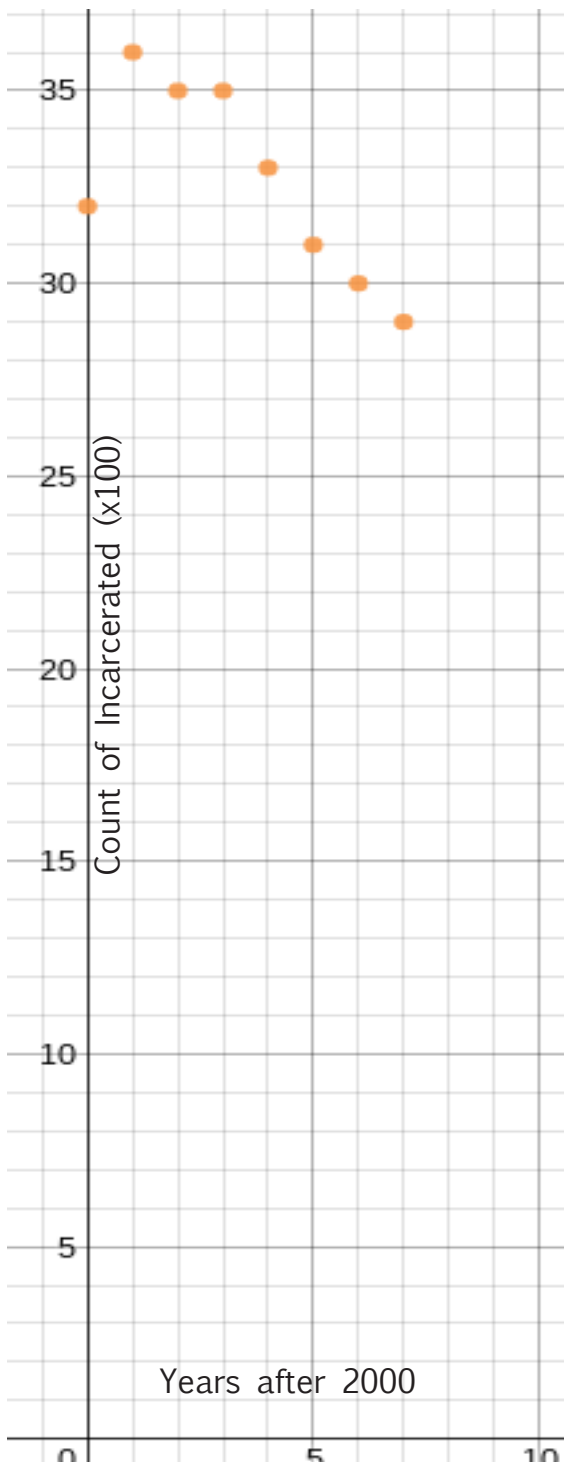
People are choosing jail over the streets. By simply housing the homeless, we can give stable environments to students, and the chronically homeless, regardless of background.



A Solution To The Over-Incarceration of Black People

Henry Bowring-McDonough, Ed Diatta, Wolfgang Wills and Gabby Dehoyos

Count of Black People
Incarcerated in MN



In the United States of America, it is no big surprise that racial profiling is still alive in the prison system. Not only is there obvious racial disparity in the arrests alone, but black citizens are being incarcerated at higher rates for less serious crimes (marijuana possession, trespassing, disrupting the peace, etc.) compared to persons of different ethnicities who commit the same crime, getting off on probation or with a number of community service hours. The reason I am so serious about this is because last year, my friend, let's call him John, who is white, was caught with marijuana on his person with his black friend who also had marijuana. John was charged and jailed for 1 month, but his black friend was jailed for 3. I found this absolutely appalling, especially because there was no arguing that this was blatant discrimination. John and his friend were in the exact same car with the same amount of marijuana and were still punished differently. In fact, in Minnesota a black person is eight times more likely to be charged on possession. But, Our job here is not to prove that there is bias in the criminal justice system, Our job is to question why these black "offenders" are not offered alternative rehabilitation programs. Which would ultimately cost the state less money and have a more positive impact on the offenders.

Let's look at the numbers. 6 years ago, the MNDOC spent \$365.5 million dollars on prison expenditures, but was only budgeted at \$29.6 million. The U.S spends about 5.7 billion a year on incarcerating offenders who committed nonviolent crimes and it cost around \$240 a day to feed and house an inmate. This is obviously a pretty large amount of money out of the taxpayers pockets. So what would happen if say, all of these black offenders committing nonviolent crimes went to court ordered classes or did community service? (Anger management, working at community center, etc.) Well, in minnesota it costs \$41,364 to house an inmate. As of 2015, there are 3,437 black inmates. 30.4% (Or 1,034) of these black inmates are incarcerated for nonviolent crimes. In just one year, sending these offenders to alternative programs would save the state and the taxpayers \$42,770,376 (around 42.8 million.) Now of course the question now is, how much are Court Ordered Classes and alternative programs costing the state? The answer is a bit complicated. For the most part, offenders are asked to pay for classes out of pocket. But what is it costing the state? A low cost of \$261 per person each year, according to a study done in 2010. So let's take our number of \$42.8 million and subtract \$261 for each offender (\$269,874 for all 1,034 black inmates). That is still 42.5 million that the state saves annually. Money that could go towards our schools, healthcare and pensions. In conclusion, if we were to offer these nonviolent offenders other options for correction, we might save ourselves a whole lot of money, as well as save them from a permanent record of "crime".

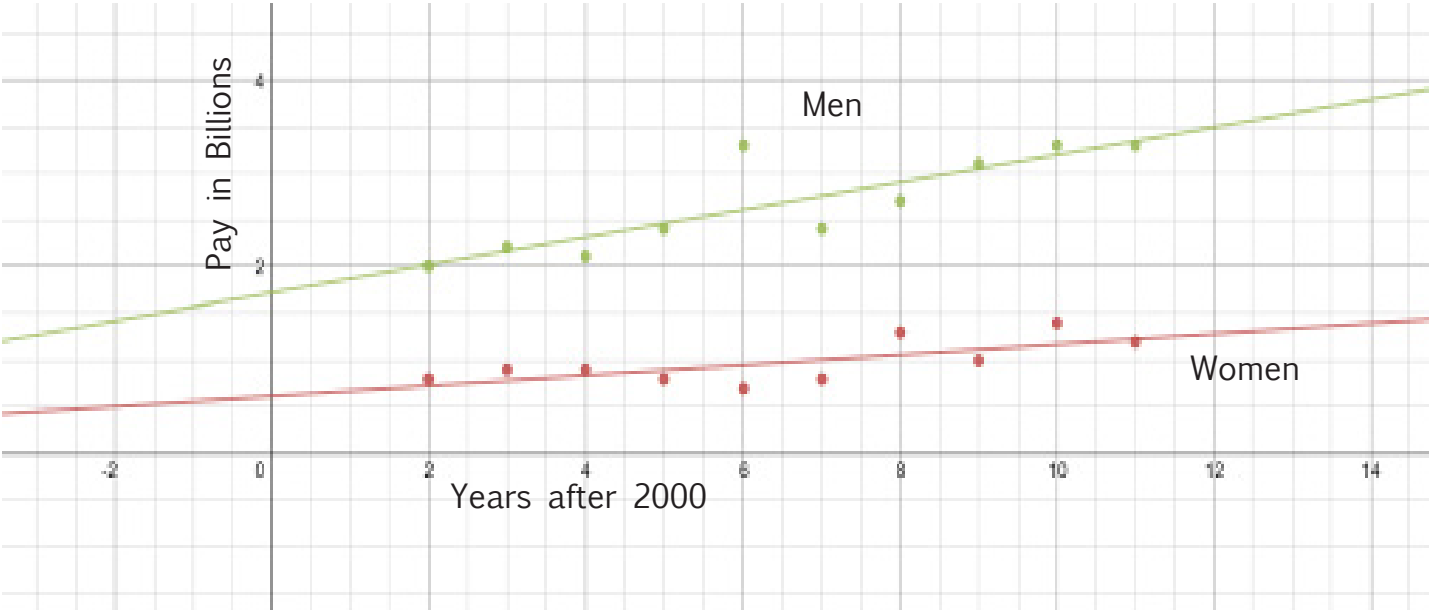
Our solution to the over-incarceration of black people is sending nonviolent offenders to court ordered classes and rehabilitation saving the tax payers millions and offering the offenders a second chance.



The Wage Gap: Differences in Pay for the Same Job

Shayla Brooks, Samuel Osborne, Maddie Simon, Isabella Schmitz

My little sister Lilah is almost four years old and she is the most amazing person I know. She is so enthusiastic in everything she does, and faces every challenge with a smile. I want her to be continue to be happy in whatever she chooses to do, and to have the same opportunities as everyone else. I'm afraid that when Lilah grows up, she'll be treated as less than her male counterparts. I wish to give her a future in which that will never happen and to make sure that no matter what she does in her life. She will be treated the same as everyone else. The fact that this issue even needs to be addressed tells us that something is wrong in our society. The pay gap is a major problem that affects people all over the world. It is defined by the American Association of University Women (AAUW) as the difference in men's and women's median earnings. This is partially inaccurate because the pay gap also includes biases, some unconscious, towards or against ethnicity, gender, sexual orientation, social status, and more. The common statistic is that a white women typically gets paid 79 cents for every dollar a white man makes, and other groups may recieve even less. Individuals may work harder than their coworkers at the same, or higher level job, but get paid less because of their gender, race, etc. This issue denies people the basic human right to be treated as equals. The 1% is a group of people who aren't taxed as much as others, but often have a higher income. We believe this high income group's taxes should be increased because they have more money. The lower and middle class have lower income, yet are taxed more than the 1%. The problem is that taxes are being distributed unfairly. The extra money from taxing the 1% a higher amount could be used to pay compensation to those who are disadvantaged by the wage gap. Should it be found that anyone is being payed less than their counterparts, they will be paid a recoupment.



Some may argue that the pay gap is due to people's choices in life, but that is only partially true. Graduating to a Pay Gap, a research paper published by the AAUW found that a "7 percent difference in the earnings of male and female college graduates one year after graduation was still unexplained." They accounted for college major, occupation, economic sector, hours worked, months unemployed since graduation, and many other relevant factors. According to experimental research also done by the AAUW, employers are often less likely to hire a mother than a woman without children. When they do, they are offered less money than childless women. The wage gap prevents many people from receiving the same opportunities as others. We believe people deserve equal pay for equal work. To solve this issue we propose that the 1% can be taxed more, to help pay compensation if inconsistencies in wage are found. Some difficulties in implementing this plan would be ensuring that enough people take the survey to find the inconsistencies, and that the 1% may be hesitant to accept being taxed more. The pay gap is making it hard for women to support themselves, giving them less opportunities and forcing them to rely on a spouse or overwork themselves in multiple jobs to attain a stable income. In order to solve this problem, a survey would be required to be taken by the public at a similar time to when taxes are due. It would collect statistics on whether or not individuals are being paid less than their counterparts. You can find a sample of what such a survey would be like by visiting our poster board. Should it be found that anyone's pay is less than their counterparts, the money taken from the increased tax of 5.7% on the 1% will be used as compensation for people suffering from the wage gap. We predict that within the first two years of this plan's introduction, the pay gap will be reduced dramatically. If our solution becomes a long term reality we believe it will lead to a brighter future for groups affected by this problem in Minnesota.

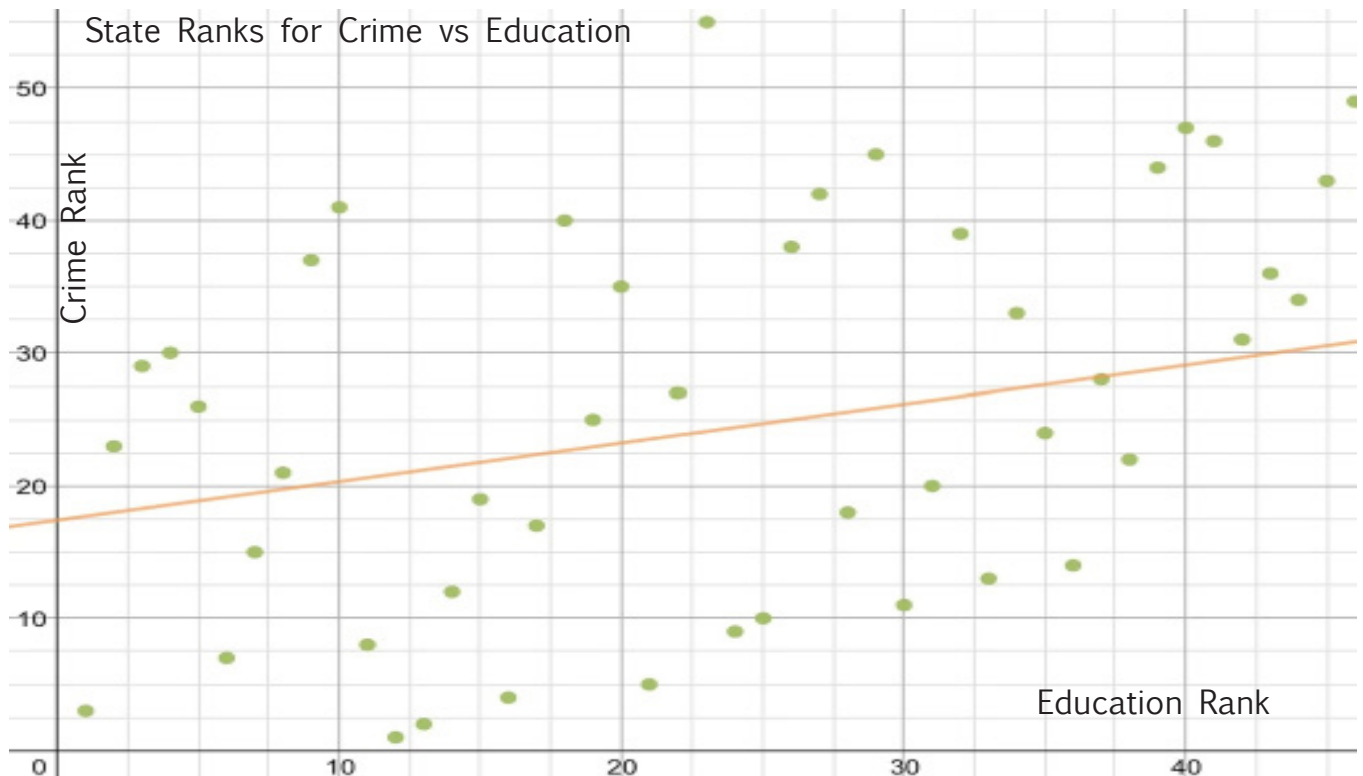
The wage gap prevents many people from receiving the same opportunities as others. We believe people deserve equal pay for equal work. To solve this issue we propose that the 1% can be taxed more, to help pay compensation if inconsistencies in wage are found.



Correlation of Crime Rates and Education

Quincy Lewis, Francesca Buettner, Madalena Jacoby, Ella Pratt

Our original claim was that crime rate had a direct correlation to how high in education in a state was ranked. However we still believe that keeping down crime rate will help education though they may not go hand in hand however it is all connected in one way or another my personal experience is before I moved to Open. I was in 6th grade, young and easily influenced. I was in a learning environment that didn't feel responsible for the final outcome of their students. That mindset rubbed off on the students. I was surrounded with people that didn't care about their education and their futures. I had stopped trying, seeing how no one else put effort into school I didn't feel like I had to either. Around the middle of the year I made a friend named Emily, at that time she hadn't been making good decisions. Emily had been smoking and abusing medication. After that I had become more aware of the things kids my age were doing I began noticing it happening at my school. We believed that the higher crime rate a state had the lower education it would have. However this was wrong there turned out to be no correlation. So then we started to think why we believed that there would be one and a strong one at that. We think it's because per 100,000 African Americans 2,207 were incarcerated while only 380 Caucasians were arrested per 100,000 in 2010. While African American reading scores in the 8th grade are 191-236, and the score for Caucasians is 255-299. Clearly something is here about 100 less than 6 times the amount of African Americans were incarcerated than Caucasians, reading scores for African American people are also lower than Caucasians though this time only by around 50 points. I believe that if more research was put into this we could find a correlation but perhaps there is another reason a third factor that impacts both education and crime rate.



Our data didn't show how the state's crime and school rank related, but some stories convinced us how the crime rank can affect the schools. Brown University sociologist Julia Burdick Has studied how the crime rate in the area can affect the schools and kids test scores. She has found violent crime affects standardized test scores but not students GPA. "So you would expect that if what's really going on is students are distracted and not learning as much and also not able to perform as well on the day of the test that it would affect their test scores," Burdick-Will said. "But it wouldn't necessarily affect how much homework they've turned in over the course of the year. You're still going to have that kid who is really eager; he or she is just not going to know as much." This shows that the crime can affect the students by distraction. We had an idea and we were thinking about: Do the states that have better education system have a lower crime rate?

Well we looked into this idea and we realized that there was absolutely no correlation. Some states had a good education system and low crime rates like Vermont who is ranked first for education and third for crime rates which is amazing; other states had a higher crime rate and worse education system like Nevada for example, they have the worst education system and are ranked 50th on the charts and they are the 48th worst for crime rates, other states had no correlation at all like Maryland who was ranked 10th for education and 41st for crime rates, however many states were similar to Maryland's results.

We have no realized that there was no correlation and we believed that crime rates directly influenced education; however the graphs indicated that there is no correlation. We still believe that keeping crime rate down can help students thrive in schools and in their homes.

Our initial claim was that crime rates directly influenced education. However the data indicated that there is no correlation. We still believe that keeping crime rate down can help students.

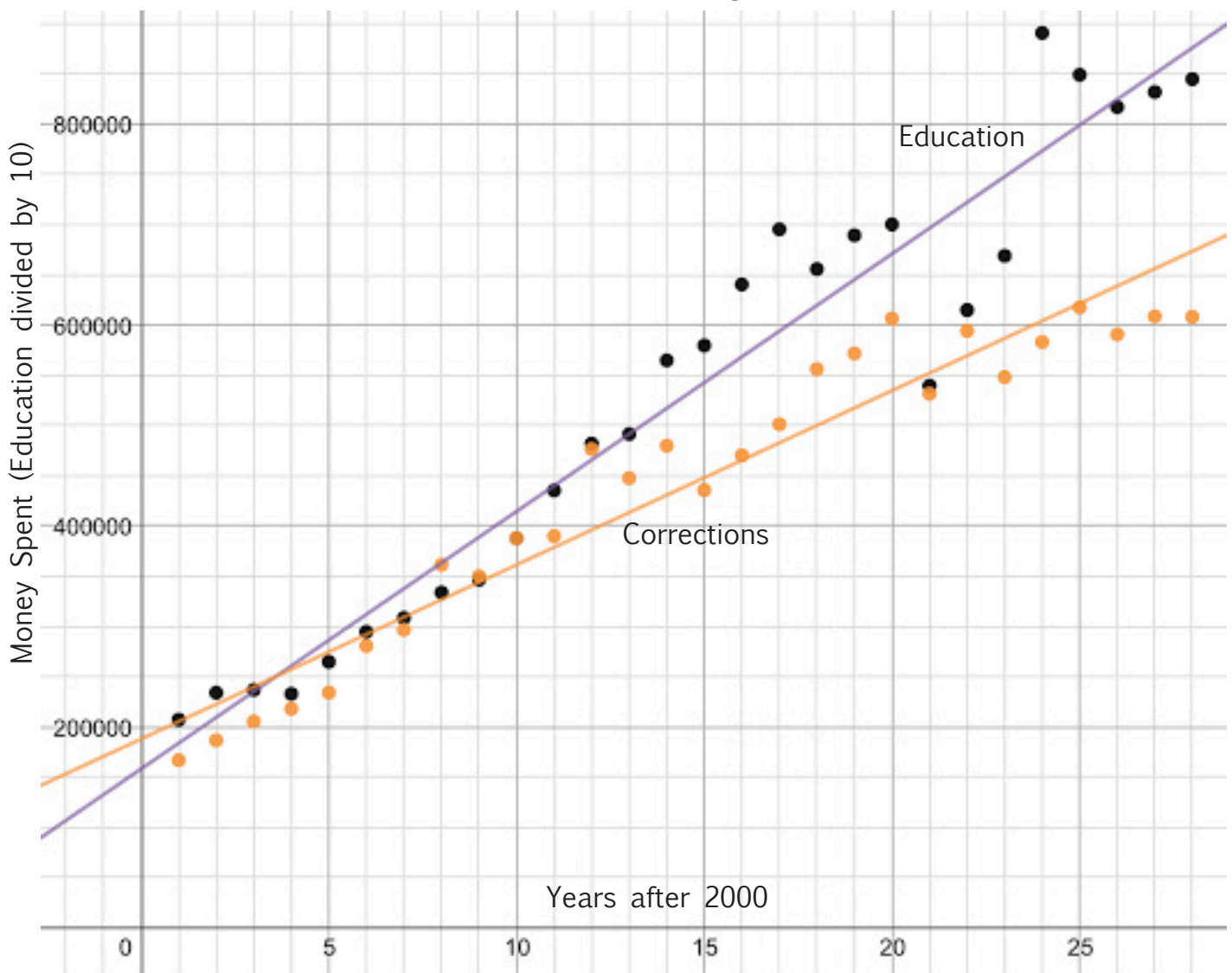


Cost of corrections vs Cost of education

Kaelen, Lu, Kong, Eric

We hear so much about the criminal justice system, and how the increase of growth in money spent goes to the cost of corrections instead of other just as important things such as education. We went into this project thinking we needed to make a change for the education benefits, but it turns out we were wrong. We did research, collected data, and came to the conclusion that the growth of money spent on education increased much faster than the cost of corrections growth. The reason we started this project was to make sure that the growth in the cost of corrections never exceeds the growth in the cost of education. The cost of education is increasing at a faster rate than the cost of corrections in criminal justice. We feel education would be a better thing for the money to be spent on because it would help students around the world learn more. The more money that schools and universities have, the more programs and options that students can have. A bigger amount of money in education, the more graduates and college students there will be. If students graduate high school and college, then they will be much more successful than if they were to drop out or just not go to college.

Education and Corrections Spending by Year



It is very simple actually. The more money that goes to education, the better off our working world will be. Criminal justice does need money, but not as much as it used to need in previous years. Students who drop out say that “school is lame” or “I don’t understand school so I give up”. Is it possible that if schools had more money, that they could make school more enjoyable and have better teaching ways that students can learn easier. The more money, the more graduates, the less money, the less graduates. Money determines the success of the educated world. The more educated people, the more likely for life to change for the better. More beneficial inventions will be created, economic statistics will change, and hopefully better personalities will rise to greater power than just citizenship, scientists can find better solutions for Earth, etc. The world’s people and technology all revolves around education and the opportunities given to the people of the planet. The growth of money spent of education should stay above the growth of money spent corrections such as correctional facilities and prisons. It’s a play by play sequence. The first play is keeping the growth of money spent on education above and try to increase the money total all together. That improves the world greatly. The second play is keep it at a steady rate for as long as possible. That will ensure that the world is benefitted by educational statistics for as long as it possibly can. Finally, the third play is to see how it changed the world itself. The first two plays had the very important rolls, without them, the world can not change for the better and will remain the same. Education is a very important thing, keep it strong.

The growth in cost of corrections should never exceed the growth in cost of education.



Diversion services

Nora Leifheit, Lilian Hennessee, Charlotte Marboe

I have two cousins, both of which have been through correctional services for substance abuse. My cousin was sent to prison as punishment, has been back once already, and may end up in one again. My family is worried about her, and prison is obviously not helping her get clean. Having a prison record has made it hard for her to find jobs, and no one wants to hire her anymore. Without a steady income she can't always pay for food. It seems impossible for her to get her life back on track. My other cousin was caught and was put into a diversion program that included rehab. Now, 5 years later, she is sober, has not been back to prison, and is now a proud mother of a beautiful baby boy. Without a prison record, she could find a job and finally start providing for herself and eventually, her baby. We want to put my cousin Carol into a program soon, because my family and I know that with a record, getting a job is a lot harder than it would be without one, and that that stress is what made her relapse. It's going to be hard, but we know that with the right help, she can get her life back. "Over the past 25 years, the state's incarceration rate has soared by 150 percent, and Minnesota's prisons are bloated beyond capacity."

Program name (click on the program name for more detail)	Date of last literature review	Benefit to cost ratio	Chance benefits will exceed costs
Family-based therapy (Parenting with Love and Limits model)	Sep. 2015	\$22.96	98 %
Functional Family Therapy (youth in state institutions)	Dec. 2014	\$9.95	99 %
Education and Employment Training (EET, King County)	Dec. 2015	\$34.50	100 %
Wilderness experience programs for juvenile offenders	Sep. 2015	\$92.27	100 %
Adolescent Diversion Project	Jul. 2015	n/a	100 %
Functional Family Therapy (youth on probation)	Dec. 2014	\$7.34	99 %
Mentoring	Jun. 2014	\$7.39	88 %
Group homes (Teaching-Family Model)	Jun. 2015	\$1.86	67 %
Aggression Replacement Training (youth in state institutions)	Dec. 2014	\$11.69	93 %
Aggression Replacement Training (youth on probation)	Dec. 2014	\$8.98	92 %
Other family-based therapies (non-name brand)	Sep. 2015	\$7.00	95 %
Family Integrated Transitions (youth in state institutions)	Dec. 2014	\$1.87	69 %
Diversion, no services (vs. traditional juvenile court processing)	Jul. 2015	n/a	97 %

A high percentage of Minnesota prisons are people incarcerated for drug abuse or possession of drugs. The support and community service offered in diversion programs usually gives people better chances at getting back on track after being released. Although the cost for funding diversion programs may cost more at first, the return on investment is much higher than when one is released from prison. Offenders can get out of diversion programs, get their life back on track, and start giving back to the community. Not only that but they can start helping themselves.

Diversion programs offer help such as community service, support groups, and medical/physical help or medication. Whereas prisons offer cramped space, densely populated areas, and not as much help or support offenders need to stay clean. After being imprisoned for drug abuse or possession it is harder to get a job, or a steady income, and it becomes hard to continue to support themselves, where diversion programs make jobs and necessities more accessible. Many people believe that when one has been convicted with a drug offense, they should be locked up in a jail or prison. However, diversion programs such as rehab or community service can be a better alternative. This is because there is a 97% chance that the benefits will exceed the cost of putting someone through diversion programs. Although these programs cost money, it's extremely likely that you will gain back more than you spent.

Overall, diversion programs are a better alternative to disciplining people than prison. This is because diversion services are usually way more effective, because they get people to stop their substance abuse or possession, whereas in prison they have little to no chance to pick their life back up, and get help with their addiction. Many of the people who come out of prison end up getting charged another time, and end up in prison. This is why we should put more people through diversion services.

It is better to send people convicted of a drug offense to diversion services, rather than prison.

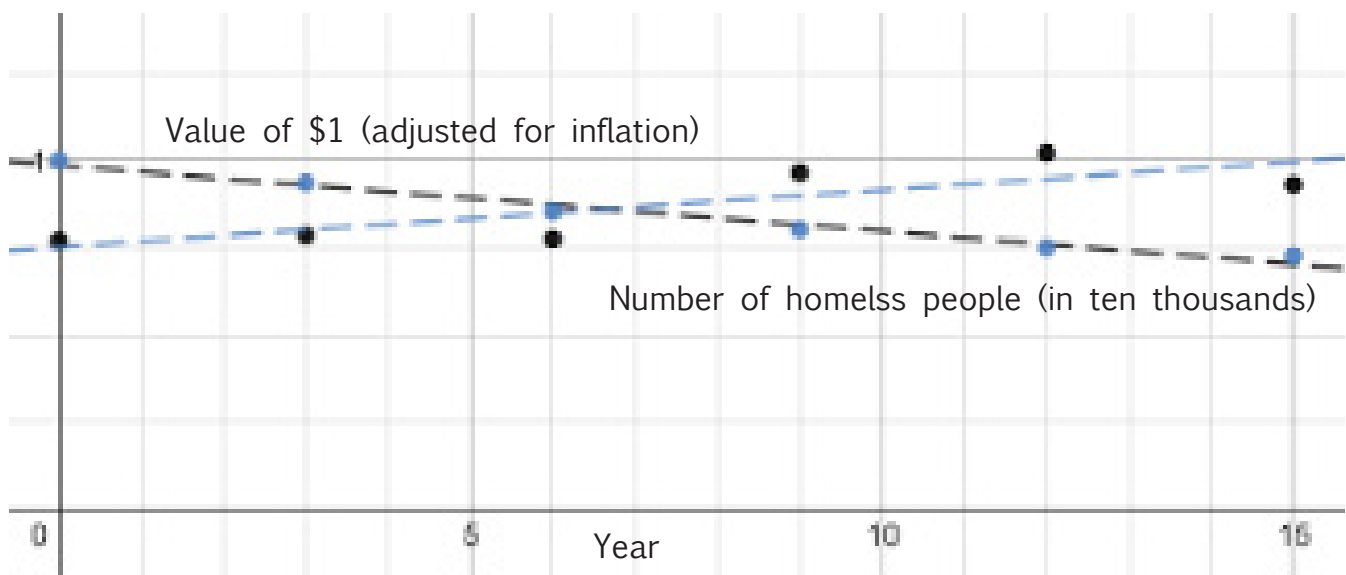


Homeless youth in Minnesota

Abby Davis, Zoe Campion, Leo Dungan- Seaver, and Greta Kvale

We have researched the relationship between homelessness and education, and how they affect one another. We collected a series of data and will be talking about the correlation between the two. Homelessness is an ongoing problem and solutions are not being taken into consideration. Going more in depth with our research, we found Minnesota has a very large homelessness rate, and it continues to grow based off the 2015 Wilder Statewide Study. They developed this survey to understand the causes and circumstances and effects of homelessness as well as to promote efforts towards movement, and affordable housing for all Minnesotans. The study includes counts and estimates of the people that are homeless. Comparing to education was the most significant comparison considering homelessness has a fairly large impact on an individual's education. We will talk about a series of selected data and discuss the negative aspects and outcomes of homelessness and how it affects beyond education. In Minnesota, the number of homeless people has been on the rise for a long time. Luckily, last year this number has dropped slightly but there is still a lot of work to be done. For families with children it is very difficult because it gets increasingly harder to come up with the money to send their children to school. We would like to see an increase in efforts to help homeless children succeed in school with the worth of the dollar going down since the Minnesota Family Investment Program (MFIP) decided to support homeless families. It is very hard for homeless children to focus in school and do well on tests when they don't have a home environment to go home to. We suggest that more money should be spent on families to create better conditions for them so their children can have a better education for themselves.

Relationship between the Value of a Dollar and the Number of Homeless People in MN



A huge problem with the homelessness in Minnesota, is that the value of a dollar is in decrease each year. The program MFIP, an organization that supports families through work and helps them meet their needs, has not been keeping up with the CPI (“Consumer Price Index”) and therefore setting the people under the care of this program with a lesser value of money each year. If MFIP was keeping up with the CPI, their support would total to around \$40 more than the year 2000. We would like to see this program change to meet the CPI and be able to help these families in need, since many people depend on it to fulfill their human needs. Though this may not help every homeless individual or family, we believe it is a good start to ending homelessness in Minnesota and would like to take part in other events to begin a constructive approach to end this ongoing problem. As per what the evidence shows it is relatively clear to see that more funds from the budget should be diverted to boosting education rates in Minnesota and more care for the homeless populace in Minnesota. The conditions for homeless people and students have been degenerating slowly over the past few years, by taking steps against homelessness and taking a stand we are helping 17% of the people living in the metro area. And that is only a small part of what increasing funds for homeless people will do for us and for them.

We are looking at the relationship between homelessness and education. We went more in depth the with how the two affect each other as well as how we can develop solutions and enforce movement with positive outcomes.

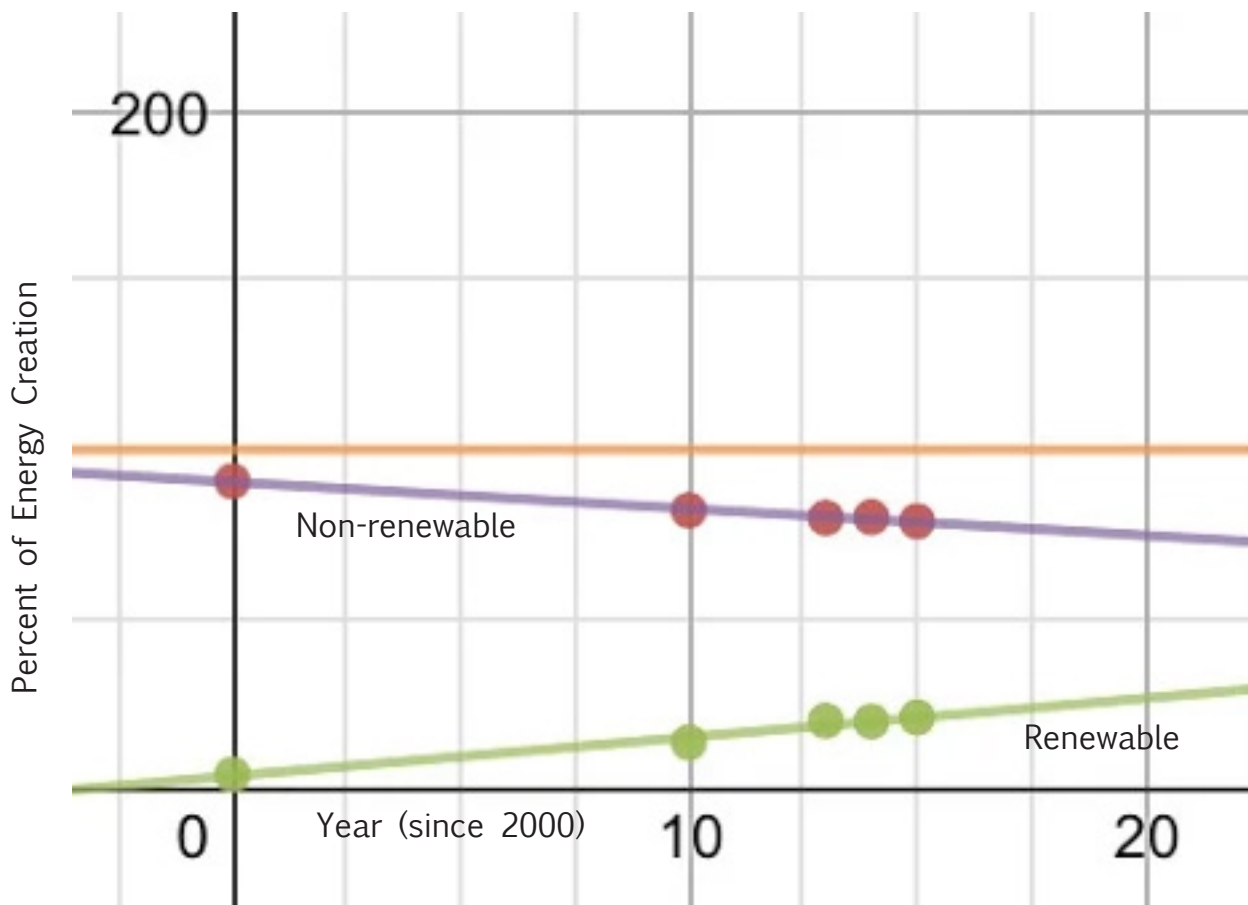


Student Analysis of State Energy Budget

Mercutio, Lachlan, Soren, Jack

I have been many different places in Minnesota, and have only seen a few wind turbine fields and only two solar fields. I have seen at least ten coal power plants as well, which leads me to believe that Minnesota really needs more green energy. When we drive in the car and pass a coal power plant even on the highway we have to shut the windows if they are open due to the poor air quality. I've been to some really nice places in Minnesota that have clean, fresh, air and the pollution makes me worry about our parks. Our parks are great and they are very important to the public. Green energy has an overall positive impact on the environment, and produces around a fifth of our state's power. Solar and wind both are major sources of renewable energy in Minnesota, and should definitely be expanded upon. Minnesota does a pretty good job when it comes to renewable energy compared to other states. But is it good enough? Figure 1 states that by the year 2048 Minnesota will have more renewable energy than non-renewable energy. This is great compared to lots of other states yet it's not good enough.

Renewable vs. Non-Renewable Energy Production in MN by Year



By the year 2178 the world will have run out of fossil fuels including coal, petroleum, gasoline and oil, so we are asking to take 5% of the money spent on non-renewable energy sources and put that into the renewable funding. If we were to do this we could have full renewable energy by the year 2080, about a ten year drop. This could significantly impact the state as we could save our precious fossil fuels for things that at the moment don't have the technology to use renewable energy including airplanes and spacecraft. To sum up our request, we would like you to help us start the end of the unnecessary amounts of coal and begin to use environmentally friendly renewable energy. We ask you to do this by transferring 5% of the coal power budget into the renewable energy budget. We realize that this may be difficult or take some time to do but the sooner we do it the better. The sooner we get the 5% the sooner we can use more renewable energy than coal. I would like to repeat that in 2048 we will use more renewable energy than not and if we get the 5% the time will be reduced by about 10 years.

We are proposing to take 5% of the money spent on non-renewable energy sources and put that in renewable funding.



Air Quality in Minnesota

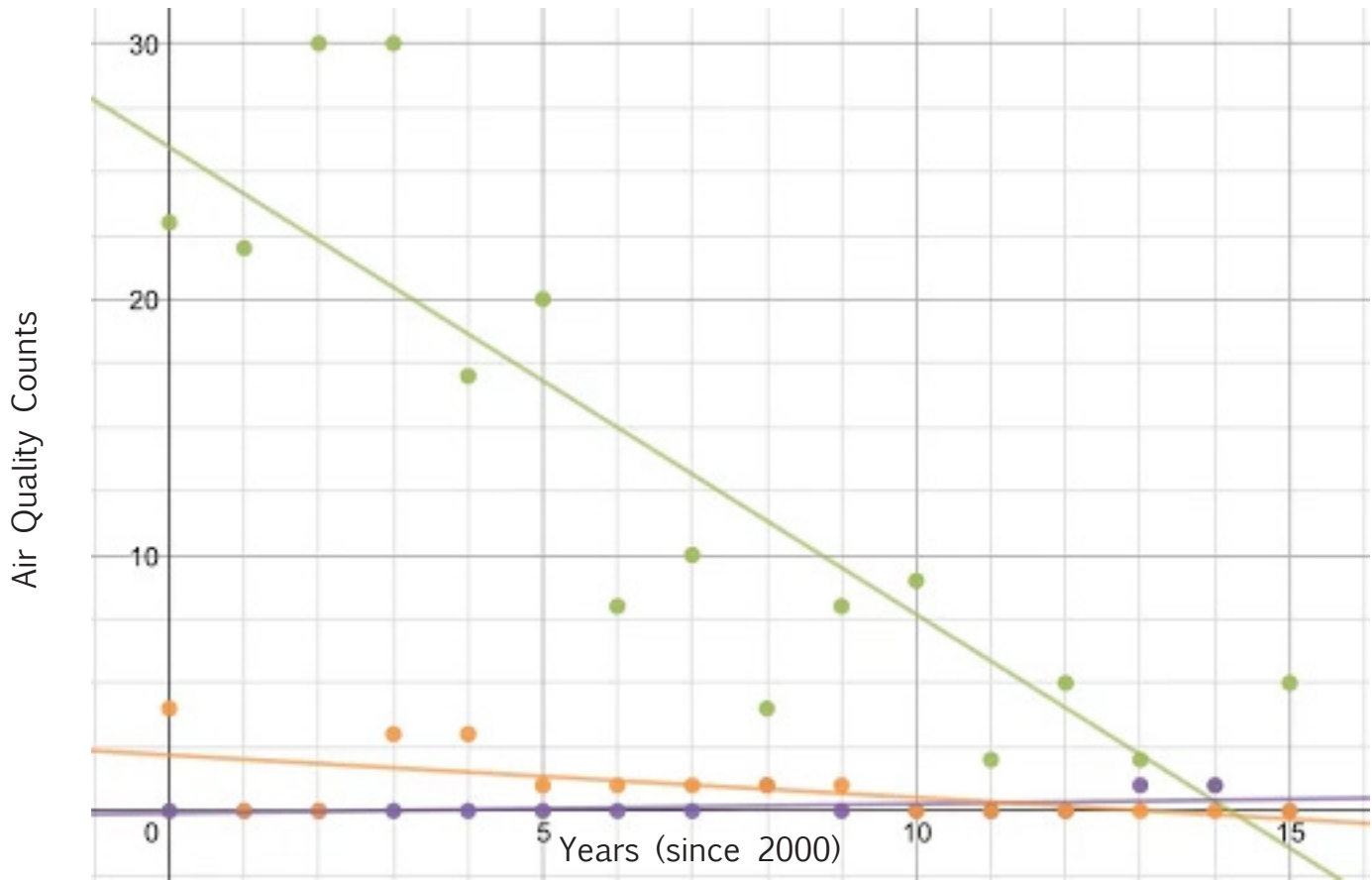
Madeline Gray, Maggie Windingstad, Leslie Sanchez, Will Squires Mosher

Minnesota's air quality has gotten better from 2000-2015. We have decided to compare Minnesota to states such as Arizona and Florida that have excellent air quality. Minnesota has had up to 30 days with air alerts per year, 2002-2003. Now from 2014-2015 we have gotten down to only a few days per year. Although we have improved our air quality people are still developing health problems because of it. Many organizations are trying to improve the air quality in neighborhoods of poverty by putting a limit on the amount of chemicals that factories are producing. We were approached one day about the EPA clean power plan.

Year	MN	AZ	FL
2000	23	0	4
1	22	0	0
2	30	0	0
3	30	0	3
4	17	0	3
5	20	0	1
6	8	0	1
7	10	0	1
8	4	1	1
9	8	0	1
10	9	0	0
11	2	0	0
12	5	0	0
13	2	1	0
14	1	1	0
15	5	0	0

Announced on August 3rd, 2015, they are trying to improve air quality around low income and African American neighborhoods. They are working on establishing the first limits on carbon pollution from power plants. This will help neighborhoods be safe and reduce our carbon footprint. We are trying to bring awareness to this situation so Minnesota can be a safer place to live. The clean power plan hopes to have 100 percent reduction in carbon emissions by 2050. The data shows that Arizona and Florida had very few alert days.

Air Quality Comparison for Alerts vs Time



Minnesota's air quality has improved but it is still an issue in low-income neighborhoods. The EPA clean power plan hopes to set the first limits on the amount of carbon pollution produced from factories by 2050.

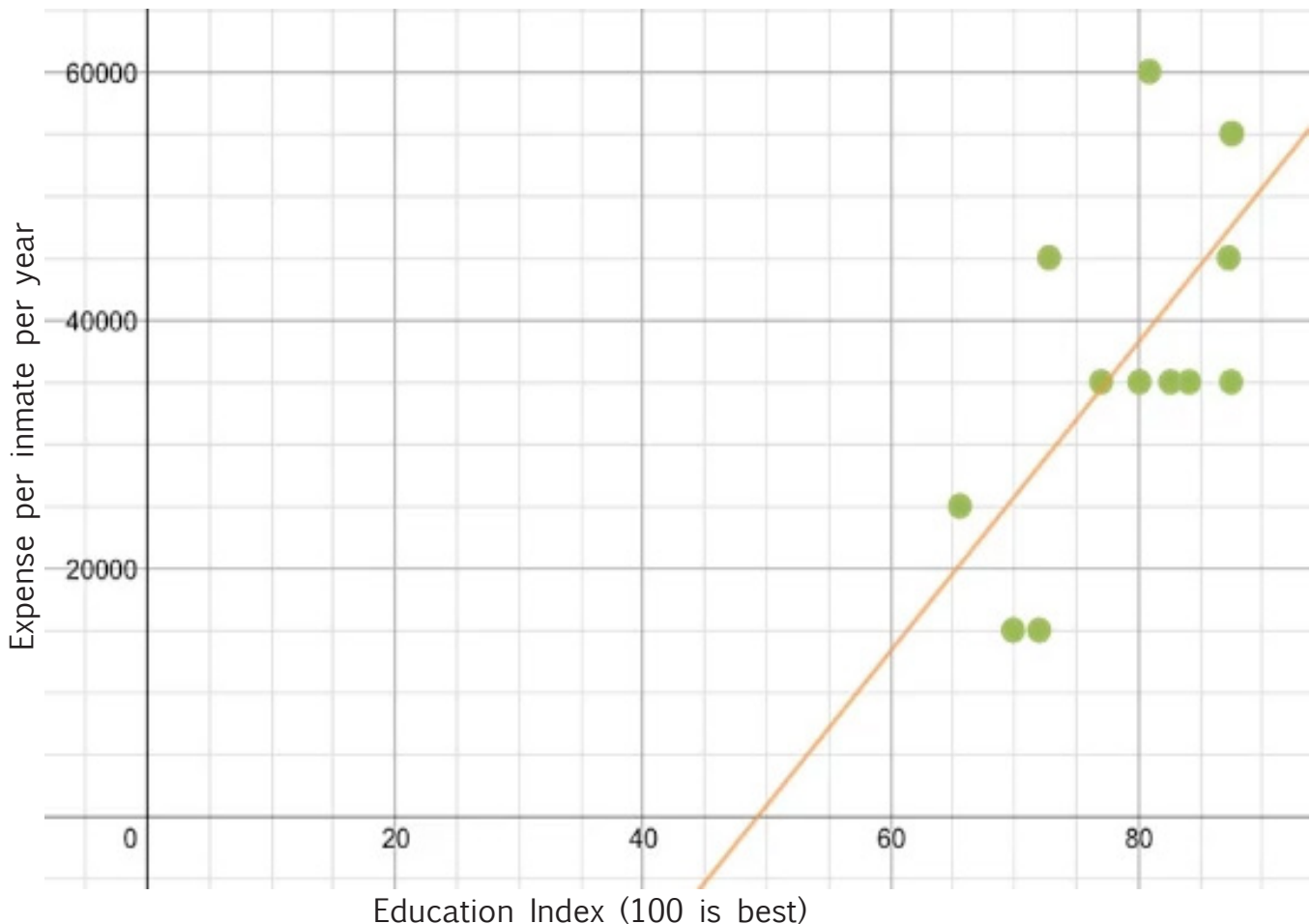


Cost of Education

Andraya, Atquetzali, Carter, Ryland

In our group we started out with Cost of Corrections Vs. Cost of Education. We specifically looked at the difference between the cost per inmate and student. At first we thought we spent more per inmate than per student. But as we researched more in depth, we found that we spend more on Education than on Correctional facilities. So we took a different approach, we compared the cost of inmates in different states and where that state ranked for good Education quality. What we found is that the states that ranked highest in education spent more per inmate. This is not what we expected to find. After doing a little more research we came to the conclusion that we do spend more on Education then prisons or correctional facilities.

Cost of Corrections vs Education Rank



x_1	 y_1
87.5	35000
72.8	45000
80.9	60000
87.6	55000
87.5	55000
80.1	35000
82.6	35000
72.0	15000
77.0	35000
84.1	35000
87.3	45000
65.6	25000
69.9	15000

Although, cost of education and correctional facilities are too close for comfort. What we want to propose is that there should be more funding towards Education. Education should continue to be priority because the kids in this country are the future. If you fund the schools more the students can have more teachers, which means smaller class sizes and more students would be able to work one on one with the teacher if they're struggling. Which would help in the long run. Also if there was more funding it could go towards the art classes such as Theater, Art and music. Believe it or not many students want to pursue an art career but it is hard to gain experience in school already because there isn't enough money for proper materials or to go on field trips. Giving more money towards education would also greatly affect the future. As stated before children are the future, if we had more funding for schools they could maybe make school fun. And if students start to enjoy learning, they will grow up to be educated individuals.

We learned that we spend more on education than on correctional facilities but not by much. There should be more funding for education to strengthen the children of the future.



Help our Homeless


Chutae Yang, Nick Osweiler, Shengyeng Xiong, Teddy Engelking

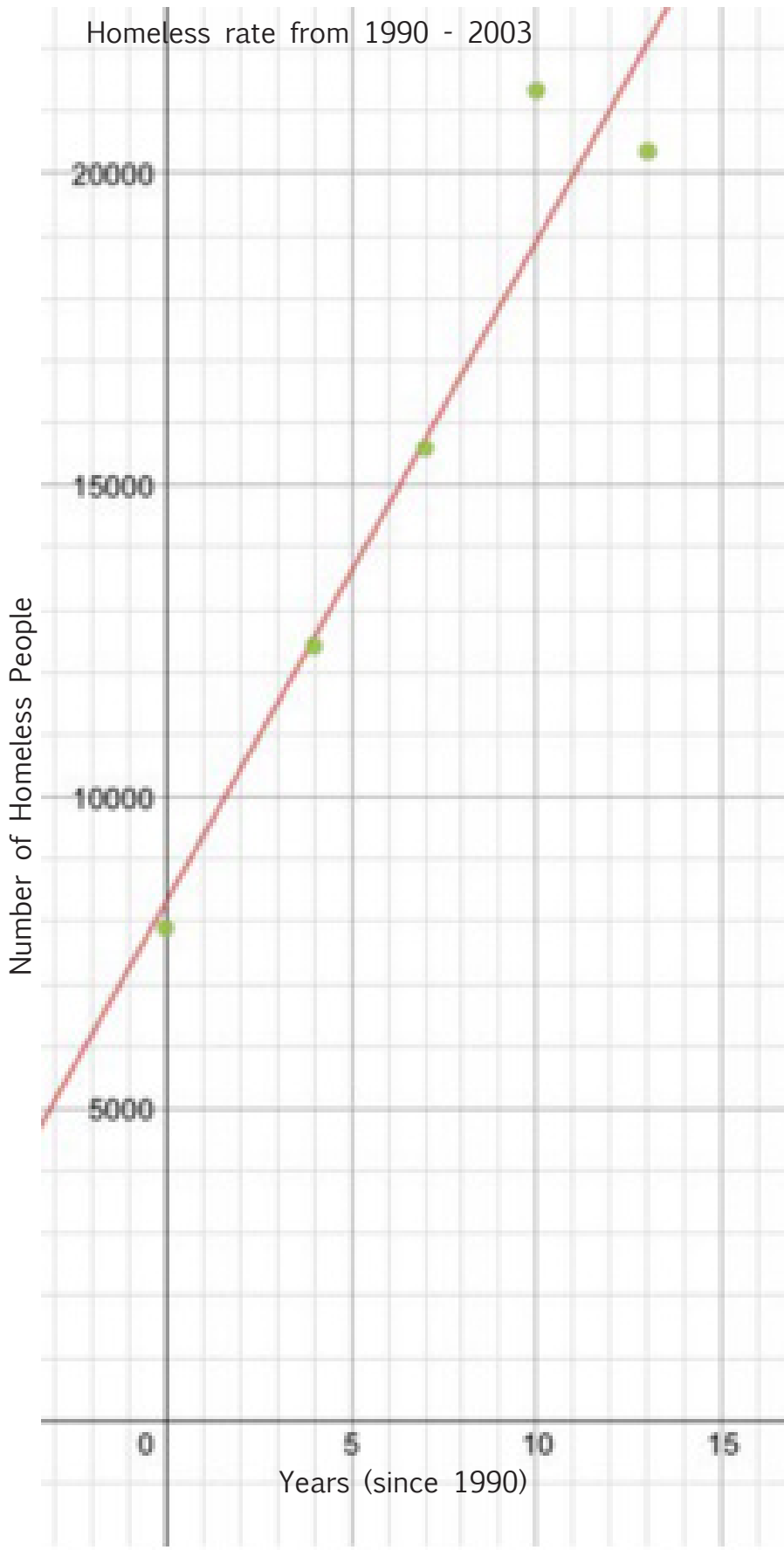
Have you ever noticed that there are too many people that are in homeless shelters when they should have a home? On any given day 4000 Minnesotan youth are without a home. Homeless people need more help and we think you should Increase the budget for public housing finance to solve the homeless problems in MN.

We believe that it is important to provide affordable housing for those families that are homeless but trying to make ends meet. For homeless people that are not able to participate in the workplace we need to provide them with shelter and financial assistance.

This graph shows that from 1990 to 2003 homelessness has increased in 13 short years and has probably gotten worse since then. We need to invest in programs that will provide resources for homelessness. Many can get themselves out of poverty if they have access to jobs with a livable wage. We need to provide resources to those that are unable to work.

We think homelessness is a very big problem in MN. Wilder Research conducted a study on the homeless and found that 46 % of homeless are under the age of 21.

x_2	 y_2
0	7890
4	12415
7	15590
10	21329
13	20347



Homeless people need more help and we think you should increase the budget for public housing finance to solve the homeless problems in MN.

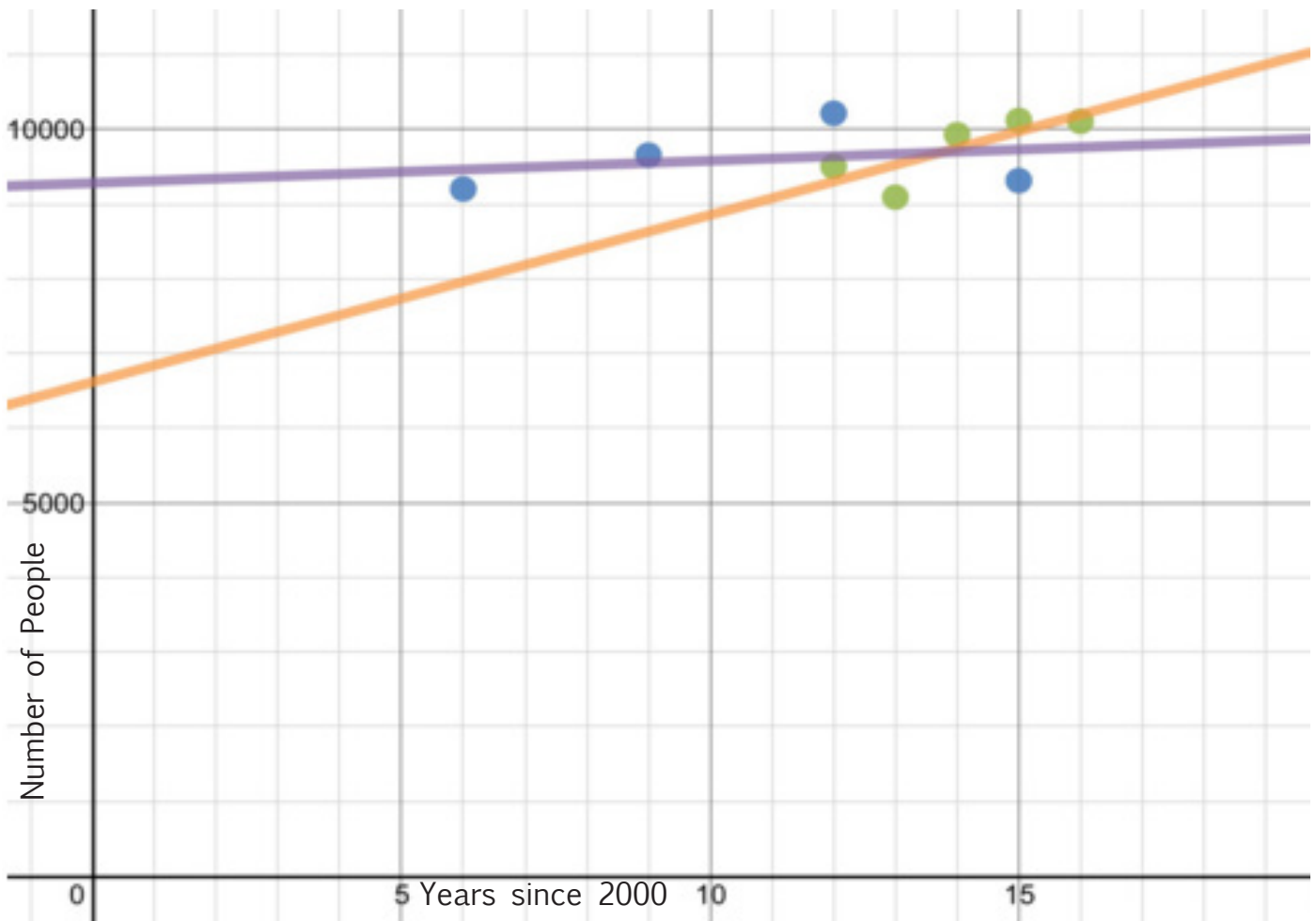


Ex-Convicts among the Homeless

Kean Collins, Micah Gundale, Jaydon Gilkes, Angel Espinosa, Carlos Santiago

Have you ever worried about being incarcerated? You probably wouldn't have to worry if you are white. African American people make up about 6 percent of Minnesota's population while as of 2015. The Minnesota department of corrections adult inmate profile shows that the total number of inmates are at 10,105 in 2016, so far 52.3% is Caucasian and 35.6% African American. As our group started looking for what we wanted as our project, we discussed the high rate of homelessness and how people leaving prison contributed to that number. So our plan is to get inmates a place to live before being let out.

Homeless Population and Incarcerated Population vs Time in MN



Our idea is, about a month before an inmate's sentence is over, they would go through a "program" in which they would find and set up a place where they could stay until they are stable. This could be a family member's house, friends house, or a shelter. Our data shows that, sometimes, after an inmate's sentence, they have nowhere to go and cannot find a job because of their history. If they aren't able to live somewhere and/or have a steady wage, they will most likely become homeless. This is a major problem that needs to be fixed very soon. If we can get this system to work, it is likely that homelessness rates will go down. This will make Minnesota a happier and cleaner place. This could also work in tandem with the Second Chance organization. As you probably already know, the Second Chance organization gives ex-offenders a location in which they can stay and attempt to acquire a job.

What we are finding is that a felon, who's sentence is over and has a record of homelessness or poverty will attempt to find a job or a way to support themselves but will be unable to obtain an income or shelter due to their explicit past and will later re-commit a crime to be reincarcerated because prison provides the essentials to living.

We want a system that lets inmates have a secure place upon being released from prison.



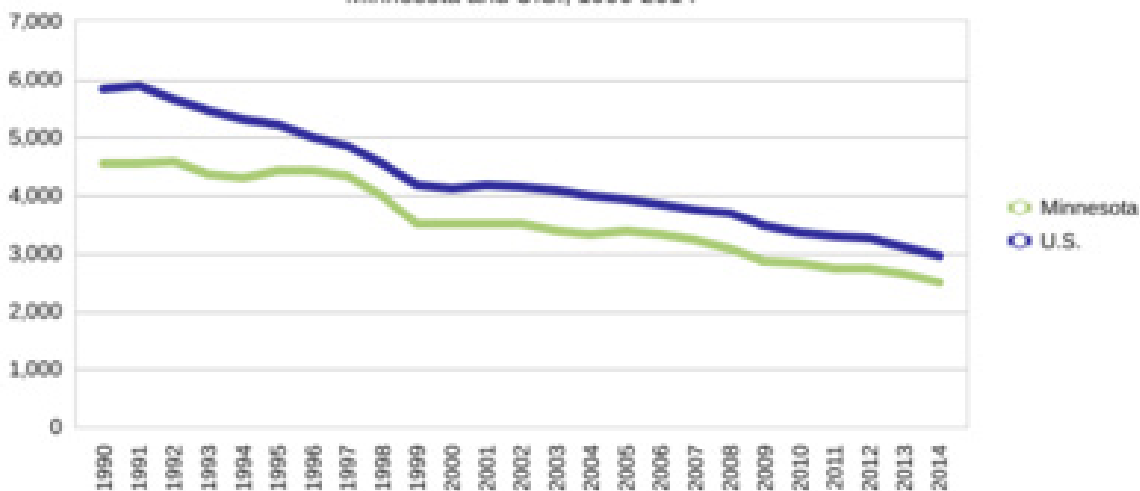
Violent Crime in Minnesota

Micah, Victoria, Oliver, and William

This analysis is about Minnesota's violent crime rates compared to Wisconsin's violent crime rates. With data, mostly from a website we found: www.disastercenter.com, we learned that from 2000 to 2013 Wisconsin's violent crime went up from 236.8 to 280.7 (per 100,000 people), while at the same time our violent crime rates in MN went down from 280.8 to 223.2 (per 100,000 people). Also from 2013 to 2014 the crime index dropped 5%, the lowest since 1966. (<https://www.minnpost.com/data/2015/07/minnesota-crime-drops-lowest-rate-beatles-were-bigger-jesus>) This is further supported in data found on http://www.civildashboards.com/state/minnesota-04000US27/violent_crimes_per_100000 which said that in 2014 Minnesota had 229 violent crimes per 100,000 people and had 42nd highest violent crime rate compared to 369 as an average for the USA as a whole and 290 for Wisconsin and 31st highest violent crime rate in the country. From this we have gathered that Minnesota's violent crime rates are going down, which means what we are doing right now is working and we should continue to do what we are already doing. As more proof in our second graph which we are comparing Minnesota to the US through 1990 and 2014, MN still shows a major drop in violent crime rate between these 24 years. But the biggest drop in crime in Minnesota happened between 1997 and 1999. And today our violent crime rate still gradually goes down. But we need to come up with a plan that will make our state crime free because although violent crime is going down, still not every place in Minnesota is safe. Minneapolis has 15.73 crimes daily and at anytime in Minneapolis you have a 1 in 18 chance to be the victim of any crime (<http://www.areavibes.com/minneapolis-mn/crime/>). So does this make Minnesota a bad place to live? Absolutely not! All it means is that some places need some extra work. Like raising awareness about violent crime so people know more about it and how to spot crimes plus how they can help the victims of violent crime by teaching the people of MN about dangers and victims of violent crimes so people are less likely to do it.

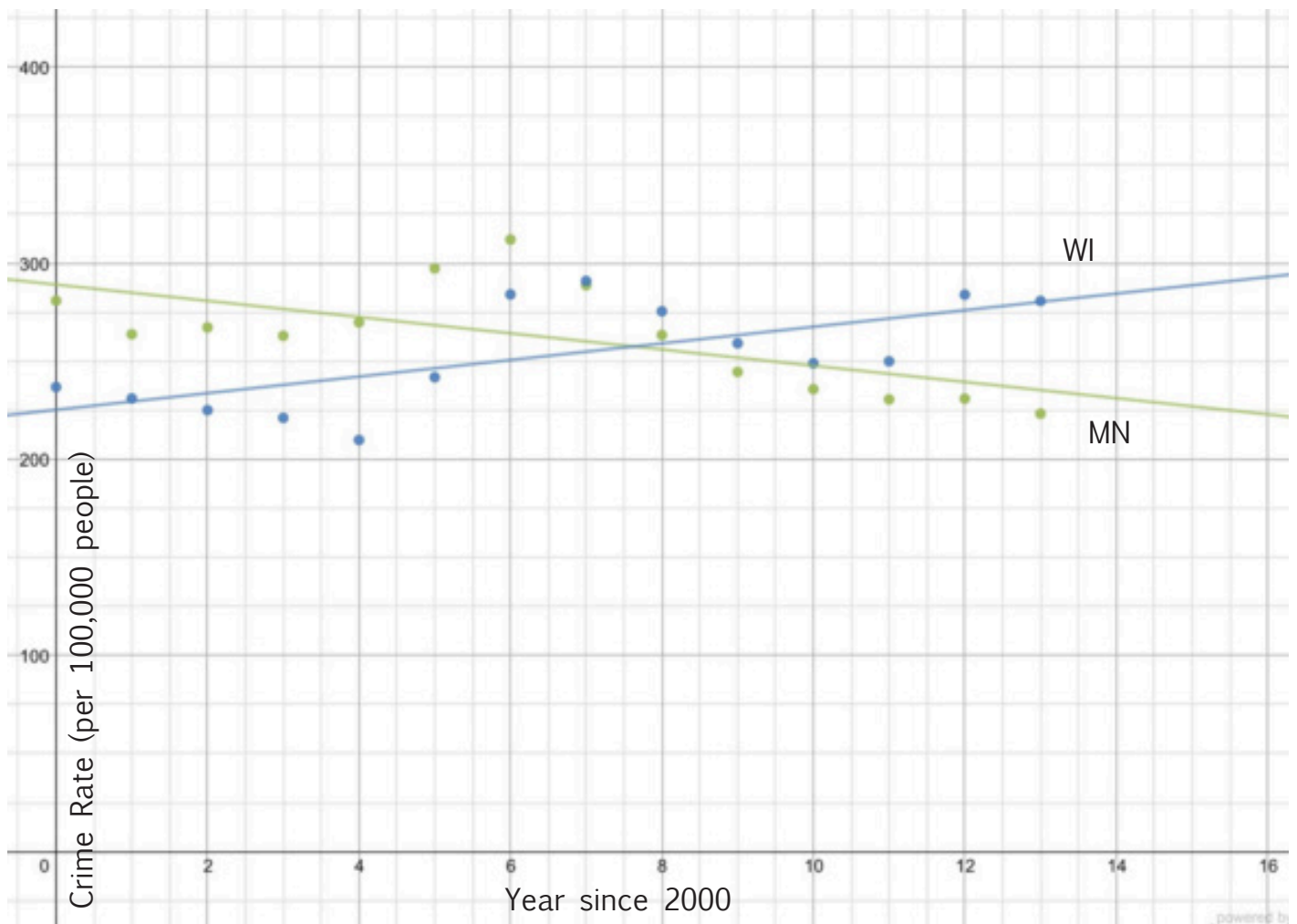
Serious crime rate per 100,000 residents

Minnesota and U.S., 1990-2014



We could also talk about why people go into things like violent crime how to stop themselves from resorting to violent crime. We could make more lighting so it is harder for potential criminals to jump out and attack someone. But not to many because as it says in *The End of Night* by Paul Bogard too many lights actually make it harder to see so crimes increase. We could improve education so less people have to hurt other people to get money. We could limit access to guns so less people can use them to harm others. We could ban semiautomatic weapons and reinstate the ban on assault rifles. Or if we can't get rid of the guns we can raise prices for guns and bullets so they are harder to gain access to. We could have paid parental leave so young parents can get money when raising children. These are just few things we could do in our state.

Minnesota and Wisconsin Crime Rates by Year



MN's crime rate has been going down. We can do even better by improving education, gun laws, lighting and knowledge about crime.