NATIONAL YOUNG FARMERS COALITION

A Case to Add Farmers to the Public Service Loan Forgiveness Program

FARMING IS PUBLIC SERVICE!

Farming is Public Service:
A Case to Add Farmers to the Public Service Loan Forgiveness Program

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Executive Summary

The need for new American farmers has never been greater. In 2010, USDA Secretary Vilsack challenged Congress, and the nation, to set a goal of bringing 100,000 new farmers onto the land in 5 years. With 63% of farmland on the cusp of transition and farmers over 65 outnumbering farmers under 35 by a margin of 6-to-1, he highlighted an immediate national need. Unfortunately, we will likely fall far short of the Secretary's goal. Between 2007 and 2012, the number of farm operators fell by 90,000 and the average age of farmers rose to 58 years old.[1]

The National Young Farmers Coalition, a national network of thousands of young farmers and ranchers, has identified student loan debt as one of the key obstacles preventing young Americans from starting and finding success in agricultural careers. We surveyed more than 700 of our members and supporters who carry student loan debt—on average each responder had $35,000 in student loans. Fifty-three percent of respondents were currently farming but struggled to make their student loan payments on a farm income. Nearly 30% of respondents didn't pursue farming, or waited to pursue farming, because their student loan debt was more than a farming salary could support.

Just as we've provided incentives for Americans to enter medicine, education, and other public service careers, we need to encourage young people to make careers in agriculture.

The Public Service Loan Forgiveness Program helps Americans enter professions that provide a public good but have salaries too limited at the outset to manage student loan debt. The program covers nurses, doctors, public interest attorneys, government employees, and nonprofit professionals. If enrolled, these professionals make income-based student loan payments for 10 years. The balance of their federal loan debt is then forgiven. The program provides a powerful incentive for entry into these in-demand careers.

Like other professions included in the program, farmers provide a public service:

— Agriculture meets one of our most basic needs—producing the food we eat;

— Farmers manage and steward almost a billion acres of land, which is about half of the land area of the U.S.;

— Farmers support rural economies, providing jobs and income.

To help bring young people into farm and ranch careers in this critical time of need, we urge Congress to add farmers to the Public Service Loan Forgiveness Program.

Jason and Hannah Grimm of Grimm Family Farm in North English, Iowa, grow pastured poultry, beans and vegetables.

Introduction

Jason Grimm is beginning his fifth season farming on his family's land in eastern Iowa. He has started pastured poultry, bean, and vegetable production adjacent to his father and grandfather's calf-cow operation. While Jason loves farming, he can only devote 10 to 20 hours to his farm per week. He spends the rest of his time working off the farm to cover his student loan payments.

Jason works full-time at a local non-profit and hopes to see some of his student loans forgiven as a part of the Public Service Loan Forgiveness (PSLF) program. This program forgives an individual's remaining student loan debt once he or she has made ten years of income-based student loan payments. While non-profit work currently qualifies for the program, farming does not.

If farming qualified for the PSLF program, Jason would be able to devote himself fully to his farm business. He is ready to scale up his farm—he has a plan for a larger building where he could sort and clean his black and pinto beans, store his produce, and process more chickens. Unfortunately, student loans are standing in his way.

For many of America's young farmers and ranchers, student loans are an insurmountable barrier. Due to this debt, young people find that they either cannot afford to farm while paying down their loans, or that college debt is preventing them from leveraging capital to start and grow a farm business.

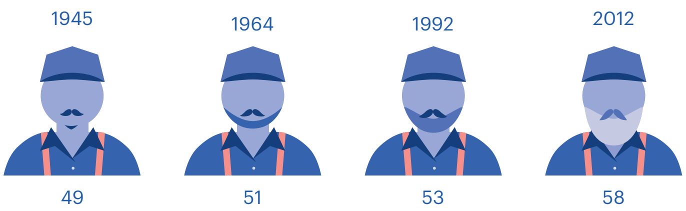
The National Young Farmers Coalition (NYFC) envisions a country where young people who are willing to work, get trained, and take a reasonable amount of risk can support themselves and their families in farming. Achieving this vision relies on lowering the barriers to entering agriculture—barriers such as student loan debt.

We Need New Farmers

In the next 25 years, two-thirds of farmer-owned land in the U.S. will transition ownership, and approximately 573 million acres of land will need a new farmer.[2] But between 2007 and 2012, we only added 1,220 young principal operators to America's farming community.[3] At the current rate, we have nowhere near enough new people entering farming to keep farmland from falling out of production or being sold to non-farm owners.

The average age of a farmer in the U.S. continues to climb—in 2012 it reached over 58 years for the first time. Only 6% of farmers are under 35 years old. Within this critical age group, the number of farmers has declined by a third over the past 15 years, down to less than 120,000 in 2012. While this trend has begun to reverse itself, much more work needs to be done to correct for these historic losses.[4]

FIG. 1: CHANGE IN AVERAGE AGE OF FARMER (1945–2012)



Though the land grant university system was established with the goal of training new farmers, not enough students are graduating from these institutions to meet the need. In 2012, land grant universities awarded just 461 associate and bachelor's degrees in agricultural production. Across all universities, only 631 associate and bachelor's degrees were awarded in this field.[5] In addition, we are seeing many young farmers enter agriculture from non-farm families. Under these circumstances, many of today's young farmers are not discovering agriculture as a possible career until college.

Why Young Farmers?

Young people have a special role to play in our agricultural community. Building a farm takes long hours on meager salary. Not only do young people have the energy for it, but many come with fewer family responsibilities. They have the time required to start a farm. In addition, young people are willing to live on far less income if they feel it will jump-start their career.

If we are going to add more successful farms, it is critical that those farms are started and scaled by young people who have the required time, energy, and fortitude to see the project through.

Without helping young people break into agriculture, we are relegating farming to only a hobby or a retirement activity. Farming is too critical to our food supply, rural economies, community security, and environment for us to let this happen.

FIG 2: DECREASE IN FARMERS UNDER AGE 35 (1890–2012)

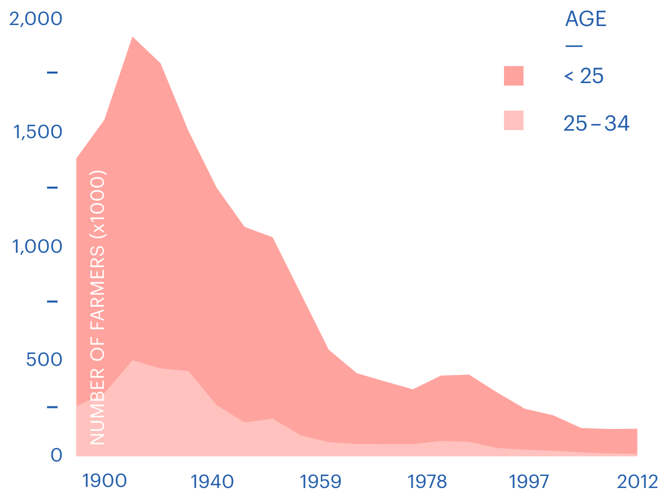
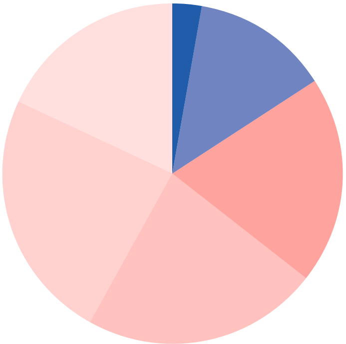


FIG 3: AGE DISTRIBUTION OF FARMERS

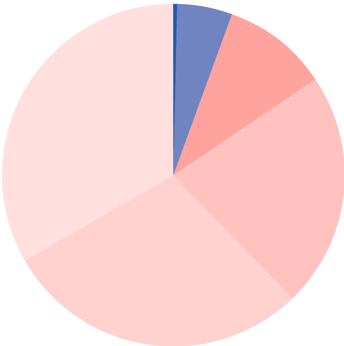
1982

< 25	62,336
25 – 34	293,810
35 – 44	443,420
45 – 54	505,412
55 – 64	536,402
65+	399,596
Total P.O.	2,240,976



2012

< 25	10,714
25 – 34	109,119
35 – 44	214,106
45 – 54	466,036
55 – 64	608,052
65+	701,276
Total P.O.	2,109,303



Barriers to Entry for Young Farmers

Farming has never been a more difficult career to enter. Starting a farm is a capital-intensive proposition—land, equipment, and infrastructure are all necessary and costly. Farmland prices have been rising steadily since the mid-1980s, both in real and inflation-adjusted terms,[6] making both buying and leasing land expensive. Between 2004 and 2014, national farm values more than doubled from $1,360 per acre[7] to $2,950 per acre.[8] In 2014 alone, farm real estate values rose 8.1% over 2013 values.[9]

When NYFC conducted a nation-wide survey of farmers in 2011, we found that 78% of respondents struggled with a lack of capital. Purchasing or leasing land, particularly at these record values, requires access to capital and credit opportunities. However, access to credit is particularly difficult when a farmer already has a high student debt load. Not only can student loans result in a negative net worth for young farmers, payments on these loans reduce monthly cash available for other expenses, like farmland rent or a mortgage.

Farms and ranches generate low to modest incomes. In the 2012 Census, average net income was $43,750 per farm, often split among multiple operators.[10] In addition, 73% of farmers in our survey depended on off-farm income, since farming did not provide enough money to support them. That number was even higher for new farmers—82% of respondents who had been farming for less than a year relied on off-farm income to supplement their farm business.

Student Loan Debt is a Critical Barrier for Many New Farmers

Americans are carrying more student loan debt than ever before. Approximately 37 million people have student loan debt, and the average amount owed is $23,300. This adds up to almost one trillion dollars in total outstanding debt.[11] Paying all of this debt is an enormous burden. Between 2004 and 2009, only 37% of borrowers were able to make timely payments on all their loans.[12]

Young farmers are particularly susceptible to this trend. We surveyed NYFC members and supporters in the fall of 2014 to find out what impact student loans are having on young and prospective farmers. The average student loan debt carried by the 700-plus survey respondents is $35,000. Fifty-three percent of respondents are currently farming but struggling to make their student loan payments. Nearly 30% didn't pursue farming, or are waiting to start farming because their student loan debt is more than a farming salary would support.

Because starting a farm is a capital-intensive undertaking, young farmers enter agriculture prepared for some financial hardship. Many young people who aspire to farm understand that starting a new operation will making student loan repayment difficult, so they look for other jobs in agriculture instead. Unfortunately, these jobs, such as farm labor and seasonal staff positions, do not pay particularly well either. Our survey found that many young people get stuck in a cycle of low paying agricultural work and thus never clear the hurdles and acquire the capital needed to start a farm.

For those young people who do start their own farm businesses, student loans prevent them from investing the time and money they need in the farm. Some young farmers keep an off-farm job specifically to pay their bills. These farmers would be able to grow their operations if only they had the time. Other young farmers are forced to take money that would otherwise be invested in the farm and use it to pay student loans, limiting their ability to invest in new land, infrastructure, or equipment. In either case, young farmers are prevented from building their farms to a scale that can pay a living wage and cover their student loan payments as well.

Despite the hardships created by debt, our survey also highlighted the value of a college degree. Some respondents carry debt from university-based agricultural training programs. While these programs are certainly not the only way to get the experience needed to start a farm, they were very important for those who took part. Other respondents carry debt from non-agricultural degree programs. For these young people, college was integral to their decision to farm in three ways. First, many young farmers come from non-farming backgrounds; college exposed them to their future career, even if they studied something else. Second, a college education teaches critical thinking, scientific analysis, and business skills that young farmers have found to be critical to their career. Finally, bringing college degrees to rural areas is important for building these communities overall, regardless of the field of study. Strengthening rural communities strengthens our agricultural system.

FARMER PROFILE

Matt Williams

Matt's family has been farming for nine generations, originally providing horses to the war effort in both the Revolutionary and Civil Wars. Until recently, the family farmed in southwestern Indiana. Unfortunately, non-farm development moved in around the family's farm, property taxes spiked, and the family was squeezed out.

Now Matt and his wife, May, have started their own farm in Aurora, Wisconsin, where they grow vegetables, flowers, and herbs and raise pastured chicken, pork, and beef. Matt and May have the opportunity to buy a parcel of land adjacent to the farmland they rent now. This parcel is along the highway, which would allow them to build a farm stand along the road and expand their direct-to-consumer business. While the owner wants to sell the land to them, their student loans are keeping them from qualifying for the necessary loan.

"We are forced to rent our farm, and the monthly rent is more than a mortgage payment would be, even when including insurance and repairs. Our student loan debt has forced us to miss payments on other bills, and as a result we have messed up our credit trying to juggle the debt. I'm a ninth-generation American farmer; generation number ten is sleeping in the crib right now. We just hope we can hang on long enough to pass the farm along."

In 2012, 71% of all new four-year college graduates had student loan debt.[13] If farming is not a viable occupation for young people with debt, the pool of potential young farmers is very small.

Farming is Public Service

Farmers deliver critical services to our nation. Much like teachers, doctors, nurses, and government employees, farmers provide an important public service. They provide a secure domestic food supply, steward half our nation's land, and support rural communities.

— **Agriculture meets one of our most basic needs: producing the food we eat.** Eighty-three percent of the food Americans consume was produced domestically in 2012.[14] Without a robust agricultural sector, the U.S. would need to import more food and would risk having less control over our food supply. Farmers in the U.S. have a critical role to play in ensuring the supply of safe, healthy food.

— **Farmers manage and steward almost a billion acres of land,[15] which is about half of the land area of the U.S.[16]** This land provides valuable environmental services if properly managed, including erosion and sediment control, water quality maintenance, wildlife habitat, and carbon sequestration.[17] However without careful and active management, farmland can erode and degrade, polluting water and damaging soil health and fertility.

— **Farmers support rural communities and economies.** Rural communities are built around people and businesses. With fewer farmers, there is less to keep these communities afloat. Increasing the opportunities for rural farm entrepreneurs to succeed will result in increased opportunities for whole communities to stay in rural America.

TABLE 1: SURVEY RESULTS ON IMPACT OF STUDENT LOANS

I'm currently farming but have to rely on another income (mine or a partner's) to help pay my student loan bills.	42.11%
I'm currently farming but haven't been able to grow my business because of student loan pressure.	28.08%
I had to quit because my student loan debt was too burdensome.	5.68%
I can't get other credit because of my student loan balance.	19.56%
I didn't pursue farming, or am waiting to start farming, because my student loan debt is more than a farming salary would support.	29.65%
Other	18.93%

We asked our members and supporters to tell us how student loans have impacted their ability to farm. The table in the data above has been derived from the 700 responses to our inquiry.

Support for Rural America

Rural economies are struggling. In 2013, the rural poverty rate was 18.4%, or a little more than 1 in 6 people. The poverty rate in rural America is historically much higher than in urban centers—3% higher in 2013.[18] Median household income is also significantly lower in rural areas—rural residents are earning only 77.7% of the median urban income. These trends are reflected in where people choose to live. While growth in urban areas has been out-pacing rural areas for some time, in 2010–2012 rural areas experienced their first decline in population overall.[19]

The farm economy plays a critical role in supporting these areas that, as the trends show, need help the most. In low-density rural areas, agriculture, forestry, and fishing provide 12% of all jobs.[20] These jobs have a dramatic effect on the rest of the rural economy. The agricultural sector has driven economic growth in rural areas and led the recovery from the Great Recession.[21] Through equipment and input purchases, employment, and locally sold goods, farms pay big dividends for communities, even if young farmers do not see this benefit in the farm's bottom line.

Economic multipliers are one way of examining this economic impact. Multipliers measure the additional economic output of an investment in an industry—the economic ripple effects. In California, a dollar investment in agriculture and related industries generated $1.27 for the state economy, a multiplier of 2.27. The employment multiplier in California is 1.94. For every 100 jobs created in agriculture, another 94 related jobs were created.[22] Table 3 shows the multipliers for a selection of other states. These multipliers demonstrate that investment in new farmers benefits the entire community. To face the problem of rural poverty, more family-scale farms and their accompanying economic impacts are needed.

Median household income is also significantly lower in rural areas—rural residents are earning only 77.7% of the median urban income.

FARMER PROFILE

Meredith Epstein and Guy Kilpatrick

Meredith and her husband Guy met at their first farm job in Maryland in 2007. They fell in love with farming and decided to pursue further experience and training, including the Apprenticeship in Ecological Horticulture program at UC-Santa Cruz. While Guy went on to work on farms in Virginia and Massachusetts, Meredith went back to school for a degree in agriculture. In doing so she accumulated over $45,000 of federal student loan debt to add to the $12,000 Guy had left over from his undergraduate degree.

"When monthly loan payments are added on to other financial demands, including rent, utilities, car payments, and insurance, the results are stifling," Meredith says. Five years ago, the couple thought they would be starting their own farm by now. But that dream is a long way off, even though they are thoroughly trained in agriculture science and business management.

Meredith and Guy could be contributing to local economic growth and community health by starting a sustainable farm with a sound business plan. For now, they wait. Meanwhile, they are both fortunate to be gainfully employed in the industry, despite not having their own farm.

"We made the choice to pay down our debt as fast as we can afford to, while still trying to accumulate a little savings. It will still take another fifteen years. And without our jobs, we would not be able to make our monthly loan payments." At almost thirty, the couple stands at another crossroads: "Do we save for a farm, or do we save for a family? Our student loan debt does not leave room for both."

Adding Farmers to the Public Service Loan Forgiveness Program

Young farmers from the Hudson Valley of New York meet with Congressman Chris Gibson (NY-19, Far Right) to discuss student loans.

Farmers are in critical demand, yet we are seeing an entire generation of young farmers trapped by student loan debt. Luckily, there is already a program in place that offers student loan relief for public service professionals. We believe farmers should be added to this program.

The Higher Education Act (HEA) drives student loan policy in the U.S. Much like the Farm Bill, the HEA is a large, multi-title piece of legislation that covers a diverse array of topics, including direct assistance to colleges and universities (or institutional aid), international education, and teacher preparedness. Title IV provides direct assistance to students, including the federal student loan programs and Pell grants. This title also includes the Public Service Loan Forgiveness Program (PSLF), which provides debt relief for professionals serving in the public interest including doctors, teachers, government employees, and non-profit workers.

When it was first passed in 1965, the HEA was designed to help another profession that the U.S. critically needed: teachers. The current HEA reauthorization is the perfect opportunity to expand this mission to include farmers.

Through the PSLF program, farmers who make 10 years of income-driven student loan payments could have the balance of their federal loan debt forgiven. Not only would this help farmers manage their debt as they begin a farming career, but it would provide an incentive for new farmers to enter careers in agriculture.

Including farmers in the Public Service Loan Forgiveness Program would leverage this existing tool and help young farmers manage their student debt while building important businesses.

TABLE 2: ECONOMIC MULTIPLIERS OF AGRICULTURE IN SELECT STATES

State	Output Multiplier	Employment Multiplier
California [23]	2.27	1.94
Georgia [24]	1.40 – 1.89, depending on the crop	1.10–2.38, depending on the crop
New York [25]	1.70–1.99, depending on the crop	1.13–2.44, depending on the crop
Wisconsin [26]	1.52	1.89
Utah [27]	1.66	2.50

Output multipliers measure the impact of each dollar invested. Employment multipliers measure the impact of each job created. When farm goods are purchased, the money flows to the farmer and the farm's staff. These individuals spend that money back in the local community—at stores, restaurants, and other businesses. Those businesses then spend some of that money in the local economy as well. That single dollar invested in the local economy bounces around and multiples its impact by the factors above.

TABLE 3: SURVEY RESULTS ON ACCESS TO INCOME-BASED REPAYMENT PROGRAMS

Standard	56.94%
Extended	7.10%
Income-Based Repayment	27.90%
Income-Contingent Repayment	4.68%
Pay-As-You-Earn	3.39%

All Americans have access to income-based repayment programs. Few take advantage of them for fear of increased interest that only prolongs repayment. Our survey respondents mirrored this trend.

FARMER PROFILE

Davon Goodwin

Davon Goodwin is a 25-year-old farmer-veteran from North Carolina. When he returned injured from his tour of duty in Afghanistan, Davon lost his sense of purpose and mission. Now he works as a manager at Fussy Gourmet Farms in Raeford, North Carolina, where his mission is to feed his community. He grows Muscadine grapes and pastured chicken, pork, sheep, and goats. "Farming is serving your community at the highest level," Davon says. "Making sure families have access to healthy, local food is as important as being a police officer or a teacher."

Fussy Gourmet Farms prides itself on sustaining community, environment and local economy. It is providing jobs for the local economy and food for the community. But it's not Davon's farm. Davon currently owes $9,000 in student loan debt. With his monthly student loan payments, it's difficult to make ends meet while raising a young family and trying to save for his own farm.

Our Proposal

Launching Career Farmers

The future of our agricultural system relies on young people entering agricultural careers and making a decent living. For the purposes of the PSLF program, a farmer should be defined as someone who contributes a significant amount of time, energy, and labor to a farm. A farmer need not serve in a management role, which would allow training and apprenticeship programs to qualify. However, farm ownership without active labor or management should not be sufficient to qualify for this program.

While "hobby" farmers or "points farms"[28] are cultivating the land, these types of farms are excluded from our proposal as they are generally not a means of full-time employment and have limited production capacity. Instead, loan forgiveness would be offered to farmers generating more than $35,000 in gross revenue on an annual basis. This requirement limits "hobby" farmers from benefiting from the program while not disqualifying a young farmer in his or her first year, when he or she is just beginning to scale up production.

A Long-term Commitment

In the PSLF model, loan repayment is a partnership between the borrower and the federal government. Both partners have repayment obligations. The borrower is required to make ten years' worth of on-time, income-based payments. Once the ten years of payments have been made, the federal government commits to canceling the balance of the loan. This ten-year commitment is not something to be taken lightly—it is a serious, long-term commitment to a public service career.

A Need-based Approach

The PSLF program requires that participants make income-driven payments on their loans for the length of the program. By taking an income-based approach, this program targets those in need of help managing their student loan debt. If a participant, through favorable circumstances or a steady income, can make his or her payments each month without the program's help, his or her income-based payments will be scaled accordingly and the forgiveness at the end of the program will decrease. In this way, the PSLF program targets only those for whom student loans are a barrier to success in a public service career.

TABLE 4: POTENTIAL FORGIVENESS AND REPAYMENT SCENARIOS

Scenario	Direct into Profitable Farming	Higher Earner Following Start-up	Low Earner Following Start-up
Total Beginning Debt	$35,000	$35,000	$35,000
Training and Start-up Length	0 years	4 years	5 years
Training and Start-up Annual Earnings	N/A	$20,000	$20,000
Salary Following Training and Start-up	$60,000 [29]	$60,000	$30,000
Total Paid by Borrower over 10 Years	$42,335	$29,300	$9,973
Total Forgiven under PSLF Program [30]	$0	$21,551	$44,109

There are many variables that affect a young farmer's student loan payment, including her total student debt load, her interest rate, and her income. The scenarios below show how changing income affects a young farmer's total debt forgiveness under the Public Service Loan Forgiveness Program.

FIG 4: CAREERS UNDER THE PUBLIC SERVICE LOAN FORGIVENESS PROGRAM

Filling a Gap

Since the Dust Bowl the federal government has taken steps to help support farmers and ensure the future of our domestic agricultural production. Historically this support has taken the form of crop insurance. While progress has been made to improve this safety net, many young farmers are left underserved, as this insurance is expensive and hard to use.

For young farmers, especially those who diversify their crops, crop insurance provides limited coverage. Young commodity and row crop farmers have crop insurance policies available, however they come at a steep cost. Farms without four years of production history must use trend-adjusted yields, or t-yields.[31] This means that young farmers pay more for the same coverage as their more established counterparts.

For farmers who are growing organic and/or selling direct-to-consumer, Whole Farm Revenue Protection crop insurance has been introduced to provide a safety net. Unfortunately, new farmers are left out of this insurance product entirely. A farmer must be in his or her seventh year of production to use this policy. Though the Noninsured Crop Disaster Assistance Program (NAP) can cover these young farmers, many are growing new crops in their counties with no historical yield data available. These farmers must work through an arduous process with the Farm Service Agency to create a safety net for their farm.

It is these young farmers who already gain the least protection from the farm safety net who are struggling the most with student loans. Providing student loan assistance creates a different kind of safety net for young farmers, one that is directly tied to their needs and addresses a critical gap in farm policy.

Scope of Impact

Out of the U.S. population overall, about 15.4% of people carry student loan debt. However, for those adults under 30, this percentage spikes to 40.1%. In this age group, there are 14.7 million borrowers total.[32] If farmers carry a representative amount of student loan debt,[33] 17,824 farmers currently under the age of 35 are borrowers and could benefit from this program.[34]

Now is the Time to Act

As U.S. farmers continue to grow older and retire, the need for new farmers has never been greater. We cannot, however, expect new farmers to succeed in a capital-intensive career when they are saddled by student loan debt. We have plenty of hard-working, enthusiastic young people who are ready to make a long-term commitment to a career in farming.
For these young people, their student loans are a significant barrier to entering agriculture. We are losing young farmers to student loan debt, and we cannot afford to let this trend continue. With the Higher Education Act ready for reauthorization, the opportunity for pivotal legislation is at hand. It is time to add farmers to the Public Service Loan Forgiveness Program.

1 USDA National Agriculture Statistics Service. (2014). *2012 Census of Agriculture*. http://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_1_US/st99_1_055_055.pdf

2 USDA National Agriculture Statistics Service. (2014). *2012 Census of Agriculture*. http://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_1_US/st99_1_069_069.pdf

3 When counting all farmers, not just principal operators, we lost young farmers and beginning farmers over the same five-year period.
USDA National Agriculture Statistics Service. (2014). *2012 Census of Agriculture*. http://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_1_US/st99_1_069_069.pdf
USDA National Agriculture Statistics Service. (2009). *2007 Census of Agriculture*. http://www.agcensus.usda.gov/Publications/2007/Full_Report/Volume_1,_Chapter_1_US/st99_1_063_063.pdf

4 USDA National Agriculture Statistics Service. (2014). *Beginning Farmers: Characteristics of Farmers by Years on Current Farm*. http://www.agcensus.usda.gov/Publications/2012/Online_Resources/Highlights/Beginning_Farmers/Highlights_Beginning_Farmers.pdf

5 Food & Agricultural Education Information System. (2014). http://www.faeis.ahnrit.vt.edu/index.shtml

6 Nickerson, C., Morehart, M., Kuethe, T., Beckman, J., Ifft, J., and Williams, R. (2012). *Trends in U.S. Farmland Values and Ownership*. USDA Economic Information Bulletin No. (EIB-92). http://www.ers.usda.gov/publications/eib-economic-information-bulletin/eib92.aspx#.U9Wbc41dW78

7 USDA. National Agriculture Statistics Service. (2004). *Land Values and Cash Rents: 2004 Summary*. http://usda.mannlib.cornell.edu/usda/nass/AgriLandVa//2000s/2004/AgriLandVa-08-06-2004_Land_Values_Cash_Rents.pdf

8 USDA. National Agriculture Statistics Service. (2014). *Land Values: 2014 Summary*. http://usda.mannlib.cornell.edu/usda/nass/AgriLandVa/2010s/2014/AgriLandVa-08-01-2014.pdf

9 Ibid.

10 USDA National Agriculture Statistics Service. (2014). 2012 Census Highlights: Farm Economics—Record high agriculture sales; income and expenses both up. http://www.agcensus.usda.gov/Publications/2012/Online_Resources/Highlights/Farm_Economics/

11 Brown, M., Haughwout, A., Lee, D., Mabutas, M., and van der Klaauw, W. (2012). *Grading Student Loans*. http://libertystreeteconomics.newyorkfed.org/2012/03/grading-student-loans.html. U_37EEifjC8

12 Cunningham, A. F. and Kienzl, G. S. (2011). *Delinquency: The Untold Story of Student Loan Borrowing*. The Institute for Higher Education Policy. http://www.ihep.org/assets/files/publications/a-fdelinquency-the_untold_story_final_march_2011.pdf

13 The Institute for College Access & Success. (2014). *Quick Facts about Student Debt*. http://projectonstudentdebt.org/files/pub/Debt_Facts_and_Sources.pdf

14 USDA Economic Research Service. (2012). *Import Share of Consumption*. http://www.ers.usda.gov/topics/international-markets-trade/us-agricultural-trade/import-share-of-consumption.aspx

15 USDA National Agriculture Statistics Service. (2014). *2012 Census of Agriculture*. http://www.agcensus.usda.gov/Publications/2012/Full_Report/Volume_1,_Chapter_1_US/st99_1_008_008.pdf

16 USDA Economic Research Service. (2014). *Land Use, Land Value, and Land Tenure: Overview*. http://www.ers.usda.gov/topics/farm-economy/land-use,land-value-tenure.aspx

17 Ribaudo, M., L. Hansen, D. Hellerstein, and C. Green. (2008). *The Use of Markets To Increase Private Investment in Environmental Stewardship*. USDA Economic Research Report No. (ERR-64). http://www.ers.usda.gov/publications/err-economic-research-report/err64.aspx

18 USDA Economic Research Service. (2014). *Rural Poverty and Well-Being: Rural Poverty Overview*. http://www.ers.usda.gov/topics/rural-economy-population/rural-poverty-well-being/poverty-overview.aspx

19 USDA Economic Research Service. (2013). *Rural America at a Glance: 2013 Edition*. http://www.ers.usda.gov/media/1216457/eb-24_single-pages.pdf

20 The White House Council of Economic Advisers. (2010). *Strengthening the Rural Economy—The Current State of Rural America*. http://www.whitehouse.gov/administration/eop/cea/factsheets-reports/strengthening-the-rural-economy/the-current-state-of-rural-america

21 The White House Council of Economic Advisers, the White House Rural Council, and the U.S. Department of Agriculture. (2012). *Strengthening Rural Communities: Lessons from a Growing Farm Economy*. http://www.whitehouse.gov/sites/default/files/docs/rural_communities_06_11_2012.pdf

22 Agricultural Issues Center, University of California. (2009). *The Measure of California Agriculture: Chapter 5 – Agriculture's role in the economy*. http://aic.ucdavis.edu/publications/moca/moca_current/moca09/moca09chapter5.pdf

23 Ibid.

24 UGA Extension. (n.d.). Ag Stats. http://extension.uga.edu/agriculture/ag-stats-agencies/ag-stats/

25 Schmit, T. M. and Bills, N. L. (2012). Agriculture-Based Economic Development in NYS: Trends and Prospects. EB 2012-11. http://dyson.cornell.edu/outreach/extensionpdf/2012/Cornell-Dyson-eb1211.pdf

26 Deller, S. C. and Williams, D. (2009). The Contribution of Agriculture to the Wisconsin Economy. http://www.uwex.edu/ces/ag/wisag/documents/Ag_Impacts_2007_FINAL_7%2031%2009.pdf

27 Ward, R. A., Jakus, P. M., and Coulibay, L. (2013). The Economic Contribution of Agriculture to the Economy of Utah in 2011. Center for Society, Economy and the Environment Paper #2013-01. http://www.ag.utah.gov/documents/EconomicContributionOfAgriculture2011.pdf

28 "Points farms" are farms that make less than $1,000 in revenue, but have enough characteristics, or points, to qualify as a farm by USDA's definition.

29 Average salary four years following graduation for four-year degree earner working in agriculture, according to the National Center for Education Statistics PowerStats.

30 When loans are placed in the Pay-As-You-Earn (PAYE) Repayment plan and the PSLF program is completed in the minimum amount of time. PAYE allows for the lowest monthly payments, while other qualifying repayment programs increase the proportion born by the borrower. Additionally, taking more than the minimum 10 years—because, for example, the borrower took time off of working in farming—would also increase the proportion borne by the borrower.

31 Land Stewardship Project. (2014). How Crop Insurance Hurts the Next Generation of Farmers. http://landstewardshipproject.org/repository/1/1410/white_paper_3.pdf

32 Brown, M., Haughwout, A., Lee, D., Mabutas, M., and van der Klaauw, W. (2012). Grading Student Loans. http://libertystreeteconomics.newyorkfed.org/2012/03/grading-student-loans.html#.U_37EEifjC8

33 We recognize this is a significant assumption that should be further tested.

34 According to USDA's most recent Census of Agriculture, 6% of the total 2.1 million farms are operated by individuals under the age of 35—126,558 people in total. Of those, assuming farmers mirror the population overall, 40.1% of this group, or 50,750 farmers, are borrowers. This calculation uses the the borrower rate for individuals under 30 years old for the age 30–35 cohort as well.

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