

A BETTER KIND OF FROZEN FOOD: USING STATE AND FEDERAL LAW TO BRING SCHOOL FARMING AND OTHER COMMUNITY AGRICULTURE TO RURAL ALASKA COMMUNITIES

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ABSTRACT

Despite a seeming abundance of nourishment in the state, with folklore of Alaska rivers so full of salmon that one can walk across to the opposite shore without getting one's feet wet, Alaska is a very food-insecure state. As of 2014, 15% of Alaskans were found to be food insecure. This rate is part of an increasing trend; from 1998 to 2007, food insecurity increased to 3.7% in Alaska, the largest increase in the country. Further, because only 5% of the food consumed in Alaska is actually produced in-state, there is typically only a three to five-day supply of food available on grocery store shelves. However, food insecurity, particularly lack of access to healthy, fresh foods, disparately impacts rural Alaska populations, which are primarily Alaska Native, because of extreme cost. Alaska Native populations have survived on hunting and gathering for thousands of years, though many Alaska Natives now supplement traditional diets with store-bought goods. These provisions are often prohibitively expensive, because of the cost of importation to these extremely remote locations. This Article provides background on the existing state of food insecurity in Alaska, past government efforts at subsidizing agriculture within the state, and Alaskans' enthusiasm for local produce. It also discusses relevant existing law in Alaska, in California, and at the federal level. This Article offers a series of recommendations for how these laws can be individually modified to produce a better environment for rural Alaska farmers, including, in particular, school farm programs. It ends by considering how recommended modifications may interact to produce prime growing conditions for young Alaskans with agricultural aspirations.

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I. INTRODUCTION

Alaska is a land of surplus, with respect to land, beauty, and natural resources. But for all its abundance, it also lacks in human essentials, especially access to fresh and healthy food.¹ Visitors to urban areas, like Anchorage, Fairbanks, or Juneau, will notice that prices are somewhat, though not absurdly, higher than in the lower forty-eight.² But venture out into rural communities, particularly those north of where the major road system ends in Fairbanks, and one will be shocked at the prices store-bought goods, especially fresh produce, fetch.³ This is largely because 95% of Alaska's food is imported.⁴ Very little food, especially fruits and vegetables, is actually produced intrastate.⁵ This price disparity especially affects Alaska Natives, who make up a significant portion of rural Alaska populations.

Agriculture does exist in Alaska, and those Alaskans who live within reasonable proximity of farmers have displayed enthusiasm for eating local produce.⁶ Alaska is a large state, though, and the conditions where many rural communities are located require would-be farmers to have both green thumbs and substantial resources to farm successfully. This Article suggests that the State of Alaska and the federal government alter existing law, respectively (1) Alaska's oil and gas land property tax system, which would allow for expansion of the Education Tax Credit and reclassification of land at municipal and borough levels to encourage oil and gas companies to donate land and leaseholds to school farming, and (2) the USDA's Seasonal High Tunnel Initiative, to give tundra farmers

1. See Elizabeth Hodges Snyder & Ken Meter, *Food in the Last Frontier: Inside Alaska's Food Security Challenges and Opportunities*, 57 ENV'T 19, 4-5 (2015), <https://static1.squarespace.com/static/584221c6725e25d0d2a19363/t/58b486173e00be93576ba5cc/1488225816373/Food+in+the+Last+Frontier+%28Hodges+Snyder+and+Meter+2015%29.pdf>.

2. See Neal Fried, *Alaska's Cost of Living*, in 35 ALASKA ECON. TRENDS 10, 13 (July 2015), <http://labor.alaska.gov/trends/jul15.pdf>.

3. See *id.* at 12-13.

4. Kalb T. Stevenson et al., *Sustainable Agriculture for Alaska and the Circumpolar North: Part I*, 67 ARCTIC 271, 272 (2014) [hereinafter *Sustainable Agriculture: Part I*].

5. Cf. *id.* at 273 (describing Alaska's food insecurity statistics and the low level of local food production compared to some circumpolar nations); Hodges Snyder & Meter, *supra* note 1, at 2 ("Only an estimated 5-10% of Alaska's food is from instate agriculture, although as recently as 1955, 55% of food consumed in state was grown in Alaska.").

6. See KEN METER & MEGAN PHILLIPS GOLDENBERG, BUILDING FOOD SECURITY IN ALASKA 9 (2014) (sharing results showing that many rural and urban Alaskans prefer to eat locally when possible); *Alaska Grown-Farmers Markets*, ALASKA DEP'T OF NAT. RES. (2018), <http://buyalaskagrown.com/buy/farmermarkets/> (noting that the Anchorage area alone, including the Matanuska-Susitna Valley, now has twenty-two different farmers markets during the summer).

access to auxiliary structures that can extend the growing seasons and stand up to the mighty Arctic. Together, these efforts would bring valuable agricultural skills and healthful habits to young Alaskans and their communities as a whole.

Part II of this Article provides background on the existing state of food insecurity in Alaska, past government efforts at subsidizing agriculture within the state, and Alaskans' enthusiasm for local produce. It also discusses relevant existing law in Alaska, in California, and at the federal level. Part III offers a series of recommendations for how these laws can be individually modified to produce a better environment for rural Alaska farmers, including, in particular, school farm programs. It ends by considering how recommended modifications may interact to produce prime growing conditions for young Alaskans with agricultural aspirations. Part IV concludes the Article with several final remarks.

II. BACKGROUND

This Section provides a background necessary to understanding how state and federal programs can symbiotically work together to bring fresh fruits and vegetables to rural Alaska communities. Part A discusses Alaska's food insecurity, Part B explores past state and federal attempts at promoting agriculture in Alaska, Part C examines Alaskans' increasing interest in the local food movement, Part D provides information on Alaska's property tax system, Part E considers California's Urban Agriculture Tax Incentive, Part F addresses the USDA's Seasonal High Tunnel Initiative, and Part G covers USDA Rural Development programs potentially applicable to Alaska farmers.

A. Food Insecurity in Alaska

Despite a seeming abundance of nourishment in the state, with folklore of Alaska rivers so full of salmon that one can walk across to the opposite shore without getting one's feet wet, Alaska is a very food-insecure state.⁷ As of 2014, 15% of Alaskans were found to be food insecure.⁸ This rate is part of an increasing trend: between 1998 and 2007, food insecurity increased 3.7% in Alaska, the largest increase in the country.⁹ Further, because only 5% of the food consumed in Alaska is

7. See generally, METER & GOLDENBERG *supra* note 6 (proposing strategies to address the food security issues in Alaska).

8. *Id.* at 93. Food insecure individuals are defined as those who are not sure where their next meal may come from at some point over the course of one year. *Id.*

9. *Sustainable Agriculture: Part I*, *supra* note 4, at 274.

actually produced in-state, there is typically only a three to five-day supply of food available on grocery store shelves.¹⁰

However, food insecurity, particularly lack of access to healthy, fresh foods, disparately impacts rural Alaska populations, which are primarily Alaska Native, because of extreme cost.¹¹ Alaska Native populations have survived on hunting and gathering for thousands of years, though many Alaska Natives now supplement traditional diets with store-bought goods.¹² These provisions are often prohibitively expensive, because of the cost of importation to these extremely remote locations.¹³

Anchorage, through which substantially all imported goods must first flow, is a sixty hour drive from California's Central Valley, which is a major source of fresh produce, and a sixty-eight hour drive from Nogales, Arizona, which is the country's largest port of entry for foreign produce.¹⁴ However, Anchorage is only a pitstop. It may take as many as seven more days and several flights for goods to arrive in rural communities.¹⁵ The result of all of this travel is that certain foods and essentials cost between 600% and 1,000% more than in the lower forty-eight.¹⁶ Even in Nome, a city of almost 4,000 that receives multiple major commercial flights every day, the average cost of groceries per week for a family of four in 2015 was \$287.85, as opposed to just \$166.40 in Portland, Oregon.¹⁷ Fresh produce fetches top dollar in rural communities and is therefore largely inaccessible to those with limited incomes.

As a result, rural populations have less access to fresh produce. Seventy-five percent of rural Alaska adults do not receive their recommended daily fruit servings, and 88% do not receive their recommended daily vegetable servings.¹⁸ This, in turn, impacts the health of Alaska Natives, who are between 1.4 and 2.1 times more likely to suffer from chronic diseases associated with poor diets than non-native Alaskans.¹⁹ Rising costs have only aggravated the problem, with a 136% increase in diabetes among Alaska Natives between 1995 and 2010.²⁰

10. *Id.* at 272.

11. *Cf.* METER & GOLDENBERG, *supra* note 6, at 32–33, 99.

12. *See Sustainable Agriculture: Part I, supra* note 4, at 272.

13. METER & GOLDENBERG, *supra* note 6, at 32–33.

14. *Id.* at 69.

15. *Id.* at 32–33.

16. Kalb T. Stevenson et al., *Sustainable Agriculture for Alaska and the Circumpolar North: Part II*, 67 *ARCTIC* 296, 311 (2014) [hereinafter *Sustainable Agriculture: Part II*].

17. Fried, *supra* note 2, at 13.

18. METER & GOLDENBERG, *supra* note 6, at 91. As opposed to urban Alaska adults, only 65% of whom do not receive their recommended daily fruit servings, and 80% of whom do not receive their recommended daily vegetable servings. *Id.*

19. *Id.*

20. *Id.*

Although agriculture is common in and around Anchorage and Fairbanks, the climate and topography of the tundra north of Fairbanks, where many of Alaska's most remote communities are located,²¹ is less ideal for farming. Most of the land in the northern portion of the state contains permafrost—a layer of frozen soil between six and eighteen inches below the surface that does not thaw, even during the summer months.²² This leaves the topsoil too cold for ideal growing conditions, with poor drainage and minimal microbial activity.²³ Tundra soil is also not particularly loamy, lacks sufficient levels of phosphorous and nitrogen, and is too acidic for most crops to grow. These problems can be mitigated with various fertilizers, but the cost of importing these is significant.²⁴ Atmospheric conditions at high latitudes are also not ideal for agriculture.²⁵ Although the days are long, the growing season is very short, and unexpected frosts can result in instant crop death.²⁶ Additionally, high winds increase transpiration rates, lodging rates, and nutrient loss and decrease photosynthetic ability and pollination rates.²⁷ Because of these conditions, it takes a very green thumb, as well as a sizeable budget, to successfully farm the Alaska tundra.

B. Past Government Efforts to Encourage Alaska Agriculture

Given the nineteen to twenty hours of sunlight in Alaska's most agriculturally prolific region, the Matanuska-Susitna ("Mat-Su") Valley, and the twenty-two hours of sunlight in the fertile Fairbanks region, federal and later state governments have long contemplated that Alaska may possess prime agricultural conditions.²⁸ Agricultural production began in earnest in Alaska with a handful of wheat farmers in the Tanana Valley around the turn of the twentieth century.²⁹ Since then, the government has sought to encourage and support Alaska farmers.

Although the federal government extensively surveyed soil conditions in Alaska in 1910 to determine which parts had potential for agriculture, the first significant federal program arose in 1935 when 200 families from Michigan, Minnesota, and Wisconsin relocated to the

21. *Cf. id.* at 29.

22. *Sustainable Agriculture: Part II*, *supra* note 16, at 302.

23. *Sustainable Agriculture: Part I*, *supra* note 4, at 290.

24. Kalb T. Stevenson et al., *Sustainable Agriculture for Alaska and the Circumpolar North: Part III*, 67 *ARCTIC* 320, 325–26 (2014) [hereinafter *Sustainable Agriculture: Part III*].

25. *See id.* at 321.

26. *Sustainable Agriculture: Part I*, *supra* note 4, at 290.

27. *Sustainable Agriculture: Part III*, *supra* note 24, at 323.

28. *Sustainable Agriculture: Part I*, *supra* note 4, at 278.

29. *See* METER & GOLDENBERG, *supra* note 6, at 15.

“Matanuska Colony” in the Mat-Su Valley, forty-five miles north of Anchorage, as part of the New Deal program.³⁰ Each family was allowed to select forty acres to farm, upon which the government promised to construct houses and barns.³¹ The government subsidized these costs by extending to the colonists thirty-year loans at a 3% interest rate.³²

Although the government selected the Midwestern families because of their perceived hardiness and familiarity with a similar climate, not many of the original families could maintain agrarian lifestyles in Alaska.³³ This was largely due to the government’s inability to provide adequate housing, supplies, and services in a timely fashion. Many settlers left the state or pursued non-agriculture employment.³⁴ However, agricultural production in Alaska continued to grow through the 1940s and 1950s. While there were fewer than 100 full-time farmers in the Mat-Su Valley by the mid-1950s, Alaska still produced 55% of the food consumed within the state by 1955.³⁵ Few of the original families that relocated to the Matanuska Colony continued farming long-term, but the program ultimately demonstrated Alaska’s agriculture potential.³⁶

Following Statehood in 1959, the State of Alaska became much more involved in incentivizing agriculture. The first significant effort came in the late 1970s, when the Korean government expressed interest in purchasing or leasing up to 500,000 acres in Alaska for barley production.³⁷ However, instead of just passing the means of production on to the Korean government, the state decided to instead pass the opportunity on to its citizens.³⁸ Using state loans, individual farmers established thirty-seven barley farms near Delta Junction.³⁹ Additionally, the state constructed a 522,000-bushel grain silo in Valdez for holding grain awaiting export to Korea.⁴⁰ The state believed everything was in place for it to become Korea’s primary supplier of barley.⁴¹

However, barley production proved to be too expensive, and the individual farmers realized that they could not compete with cheaper

30. *Id.* at 16–17.

31. *Id.* at 17.

32. CLAUS NASKE, ALASKA: A HISTORY OF THE 49TH STATE 112–15 (2d ed. 1994).

33. *Id.* at 114.

34. *Sustainable Agriculture: Part I, supra* note 4, at 281.

35. *Id.*

36. See METER & GOLDENBERG, *supra* note 6, at 17.

37. *Id.* at 24–25.

38. *Id.*

39. *Id.* at 25.

40. *Id.* at 24–25. Valdez is also where the Trans-Alaska Pipeline ends, and received significant improvements to its port during the same decade in preparation for the Pipeline’s completion. See *Hot North Slope Oil Flowing*.

41. See METER & GOLDENBERG, *supra* note 6, at 24–25 (outlining the steps Alaska took in preparation for the major deal with the Korean government).

barley flowing out of the lower forty-eight.⁴² Crops in the continental United States yielded four-times more barley per acre, meaning that a bushel could be sold for half of what it cost Alaska farmers to produce a single bushel.⁴³ Production of Alaska barley peaked in 1984 at just 500,000 bushels, and less barley was produced in Alaska in 2014 than before the start of the state-funded program.⁴⁴ As a result, all but a handful of the Delta Junction farms have since closed, since many farmers defaulted on their loans.⁴⁵ This was exasperated by the state's decision to place financial responsibility for the development of Alaska barley on the individual famers.⁴⁶ This hampered those farmers' ability to adapt to the market due to the significant number of loans they took on in order to advance this state initiative.⁴⁷

More recently, in 2010, then-Governor Sean Parnell signed the 2010 Farm to School Act, which uses State funds to purchase produce from Alaska farmers and provide agricultural education to Alaska children.⁴⁸ This program arose out of an effort by a school in Dillingham to begin a school garden to increase its access to fresh produce for school lunches and soliciting local fishermen to donate portions of their catches.⁴⁹ The program eventually funded the purchase of locally produced foods, school gardens, and agricultural education statewide.⁵⁰ In 2013 alone, more than \$3 million was distributed statewide for schools to purchase locally produced foods.⁵¹ Other schools used funds to provide students with lasting opportunities for unique hands-on experiences, including one school in Tok which constructed a greenhouse.⁵² This program allowed schools across Alaska to both improve the diets of their students and instill in them an interest in where their food comes from.⁵³

The success of the Farm to School Act has in turn led to other Alaska entities emphasizing the importance of education in promoting local agriculture. As part of a 2012 report on the status of agriculture and food security in the state, the Alaska Food Policy Council issued five recommendations for improving Alaska agriculture, including to

42. *Id.* at 25.

43. *Id.* at 25, 54.

44. *Id.* at 25.

45. *Id.* at 25, 54.

46. *See id.* at 31.

47. *Id.*

48. AS 03.20.100. Funding for this program expired on July 1, 2014. H.B. 70, § 5, 26th Leg. (Alaska 2010).

49. METER & GOLDENBERG, *supra* note 6, at 134.

50. *Id.* at 136.

51. *Id.*

52. *Id.* at 137.

53. *See id.* at 136–37 (describing examples of how different schools utilized the program from 2011 to 2013).

“[d]evelop, strengthen and expand the school-based programs and policies that educate about and provide healthy, local foods to schools,” and to “[i]dentify and support existing local food system leaders, projects, events, and activities that support Alaska’s food system.”⁵⁴ Additionally, the University of Alaska Cooperative Extension Service, founded in 1930 to bring educational services to rural Alaskans, has since increased its efforts at educating Alaska Native communities in agricultural production, including helping establish school gardens.⁵⁵ These efforts demonstrate a statewide consensus that creating more farmers out of Alaskans necessitates starting at a younger age.

C. Alaskans’ Enthusiasm for Local Agriculture

Alaskans have long had the reputation of being a self-sufficient group. Hunting, fishing, and foraging are all prevalent in the state. And while growing one’s own food may be somewhat less typical, great reverence is held for those resilient and skilled enough to farm the land. In the past decade, Alaska has experienced waves of smaller-scale agricultural production.

Although it is not uncommon to find small sections of Alaska-grown produce in grocery stores in Anchorage, Fairbanks, and outlying communities, a better measure of the desire for local produce can be seen in the success of Alaska farmers markets. The Anchorage area alone, including the Mat-Su Valley, now has twenty-two different farmers markets during the summer.⁵⁶ This, in part, is the result of a 46% increase in markets statewide between 2010 and 2011 alone.⁵⁷ Despite an “eat local” movement sweeping the entire country over the past decade, this was still the highest rate of growth of any state that year.⁵⁸ This amounted

54. *Sustainable Agriculture: Part III*, *supra* note 24, at 331–32; DANIEL HELFFERICH, ALASKA FOOD POLICY COUNCIL, FOOD IN ALASKA: FOOD SYSTEMS, SECURITY, AND POLICY IN THE 49TH STATE 23 (2012), https://static1.squarespace.com/static/584221c6725e25d0d2a19363/t/5aa02410c83025dd22763c46/1520444433164/AFPC+Food+in+AK_11-7-12_Final.pdf.

55. See MEIER & GOLDENBERG, *supra* note 6, at 133 (outlining University of Alaska Fairbanks’ work with the Angoon school); *Cooperative Extension Service—About UAF CES*, UNIV. OF ALASKA FAIRBANKS, <https://www.uaf.edu/ces/about/> (last visited Sept. 20, 2019).

56. *Alaska Grown—Farmers Markets*, ALASKA DEP’T OF NAT. RES. (2018), <http://buyalaskagrown.com/buy/farmermarkets/>.

57. *Sustainable Agriculture: Part III*, *supra* note 24, at 330 (citing a 2011 USDA statistic); Kathleen Merrigan, *7,175 Ways to Know Your Farmer, Know Your Food: Visit a Farmers Market*, USDA (Aug. 5, 2011), <https://www.usda.gov/media/blog/2011/08/05/7175-ways-know-your-farmer-know-your-food-visit-farmers-market>.

58. *Sustainable Agriculture: Part III*, *supra* note 24, at 330. The national average for growth in farmers markets during this same time was just 17%. *Id.*

to Alaska having the highest portion of produce grown within its borders sold directly by farmer to consumer: of the \$11.8 million worth of produce grown in Alaska in 2012, \$2.2 million of those sales occurred directly between farmers and consumers.⁵⁹ Alaskans evidently love to eat locally and love to support their area farmers when they can.

Although most of this progress is occurring in more southern and urban parts of the state, market demand has led to a proliferation of small farmers that are actually able to produce a measurable portion of Alaska's produce needs at competitive prices. According to the 2012 Census of Agriculture, Alaska had 181 farms between ten and forty-nine acres and 247 farms between one and nine acres.⁶⁰ However, in 2002, Alaska had only 129 farms between ten and forty-nine acres and 127 farms between one and nine acres.⁶¹ That is a 67% increase in small farms in Alaska between 2002 and 2012.⁶² A 2014 survey placed the number of farms in the state at 762. Alaska Natives ran only twenty-eight of those farms.⁶³ Based on the acreage that these farms altogether have allotted for various crops, they are capable of producing between one-fifth and one-seventh of the total potatoes, carrots, and cabbage consumed in Alaska annually, as well as smaller portions of numerous other crops.⁶⁴ Additionally, for many of these crops, retail prices are significantly less for Alaska produce than imported produce.⁶⁵ A study of the twenty-one most common crops grown in the Fairbanks region found that retail prices for ten crops were less than or equal to prices for imported produce of the same type.⁶⁶ Alaska is therefore capable of producing a significant portion of its required produce at competitive prices.

But there are many Alaskans who do not make a living off of

59. METER & GOLDENBERG, *supra* note 6, at 10, 50. This was thirteen times the national average portion of sales occurring between farmers and consumers, and reflected a 32% growth in such sales in the state between 2007 and 2012. *Id.*

60. 2012 CENSUS OF AGRICULTURE: 1 ALASKA-STATE AND AREA DATA PT. 2, at 7 (2014); Victoria Naegele, *Farming Growth in Alaska Tops National Average*, MAT-SU VALLEY FRONTIERSMAN (Aug. 23, 2014), http://www.frontiersman.com/news/farming-growth-in-alaska-tops-national-average/article_fb99fe76-2b43-11e4-9d99-0019bb2963f4.html.

61. Naegele, *supra* note 60.

62. *Id.*

63. U.S. DEP'T OF AGRIC., AC-12-A-51, CENSUS OF AGRICULTURE: 1 UNITED STATES - SUMMARY AND STATE DATA, pt. 51, at 308, 581 (2012); *Sustainable Agriculture: Part II*, *supra* note 16, at 311.

64. METER & GOLDENBERG, *supra* note 6, at 60-61, 63-64, 65, 67.

65. CHRISTINE NGUYEN, ALASKA COOP. DEV. PROGRAM, DEMAND FOR LOCAL PRODUCE IN INTERIOR ALASKA: 2014 MARKET STUDY 13, https://www.uaa.alaska.edu/academics/business-enterprise-institute/center-for-economic-development/reports/_documents/demand-for-local-produce-in-interior-alaska.pdf.

66. *Id.*

agriculture, and instead farm either as a weekend avocation or, especially in the case of rural Alaskans, to supplement traditional diets.⁶⁷ The discovery of gold on the Seward Peninsula in 1899 brought a rush of miners to northwest Alaska, some of whom carried with them their agrarian lifestyles.⁶⁸ They shared this knowledge with their hunter-gatherer neighbors, who became deft in raising hardy crops, particularly potatoes.⁶⁹ Kotzebue, which lies north of the Arctic Circle, now has dozens of community gardens, and was reputed to have as many as 600 private gardens in the 1960s.⁷⁰

But perhaps Alaska's greatest success story of community gardening comes from the village of Venetie, which is several hundred miles northeast of Fairbanks and now has fewer than 200 residents. In 1961, a village-wide effort led to a single harvest of 24,000 pounds of potatoes and 4,000 pounds of other produce.⁷¹ The village had similar annual yields through 1967, though interest waned thereafter.⁷² Alaskans, and particularly those in the far northern portions of the state, have thus demonstrated the success of community agriculture at various points throughout the state's history.

D. Alaska State Property Taxes

The only property in Alaska taxed by the state is property used for oil and gas exploration, production, and pipeline transportation.⁷³ The state collected more than \$122 million in property taxes in 2018.⁷⁴ Municipalities and boroughs are also allowed to tax oil and gas property, as well as property used for other purposes.⁷⁵ A majority of the property

67. See METER & GOLDENBERG, *supra* note 6, at 108 ("Seasoned farmers report a significant influx of hobby or homesteading farmers in the direct marketplace. . .").

68. See *Sustainable Agriculture: Part I*, *supra* note 4, at 278 (describing the history of the 19th century gold-rush and the agriculture that came with it); METER & GOLDENBERG, *supra* note 6, at 43 (discussing the tradition and influences of Alaska Native agriculture).

69. See METER & GOLDENBERG, *supra* note 6, at 43 ("In many settlements . . . we learned of miners who taught their gardening skills to their neighbors — many of whom were natives.").

70. *Id.* at 99–100.

71. *Sustainable Agriculture: Part I*, *supra* note 4, at 281.

72. *Id.*

73. ALASKA STAT. ANN. § 43.56.010(a) (2018).

74. ALASKA DEP'T REV. TAX DIV., OIL AND GAS PROPERTY TAX 2018 ANNUAL REPORT, <http://tax.alaska.gov/programs/programs/reports/Annual.aspx?60018&Year=2018> (last visited Nov. 26, 2019).

75. ALASKA STAT. ANN. § 43.56.010(b) (2018). Governor Mike Dunleavy introduced a bill in 2019 that would repeal the levy of a tax by a municipality against oil and gas property. This bill remains before the Senate Committee on

taxes that are collected on oil and gas property are actually collected by municipalities, not the state.⁷⁶ Of the \$545 million collected in property taxes on the oil and gas property in Alaska in 2014, municipalities collected \$417 million.⁷⁷ During that same year, the North Slope Borough, which is home to \$18 billion in oil and gas infrastructure and also some of Alaska's most remote communities, derived nearly all of its revenue from oil and gas property taxes.⁷⁸

The State grants oil and gas companies a tax credit for cash and equipment donations made to various educational programs in Alaska via the Education Tax Credit.⁷⁹ These programs include, among other entities, two and four-year colleges, public secondary schools, and vocational educational courses.⁸⁰ Since 2018, entities have been limited to a credit of 50% of the first \$100,000 donated to such programs, 75% of the next \$200,000, and 50% of any donations made beyond this, for a credit of up to \$1 million.⁸¹ The Education Tax Credit has a sunset provision and will expire at the end of 2024.⁸² Before 2018, entities were entitled to a credit of 50% of the first \$100,000 donated to such programs, 100% of the next \$200,000, and 50% of any donations made beyond this, for a credit of up to \$5 million.⁸³

E. California's Urban Agriculture Incentive Zones Act

In 2013, California Governor Jerry Brown signed into effect the Urban Agriculture Incentive Zones Act. Beginning January 1, 2014, landowners of parcels between 0.1 and three acres in Census-designated urban areas of 250,000 people or more could apply to their respective cities or counties to have their properties qualified as Urban Agriculture Incentive Zones.⁸⁴ Once designated as such, the property is assessed for

Community & Regional Affairs. S.B. 57, 31st Leg. (Alaska 2019).

76. Pat Forgey, *Conflict Lurks Over Property Taxes for Proposed Alaska Gas Line*, ANCHORAGE DAILY NEWS (Sept. 20, 2015), <http://www.adn.com/article/20150920/conflict-lurks-over-property-taxes-proposed-alaska-gas-line>; see also DEP'T OF COMMERCE, CMTY., AND ECON. DEV., ALASKA TAXABLE 2014 15-18 (2015), <https://www.commerce.alaska.gov/web/Portals/4/pub/OSA/14Taxable.pdf>.

77. Forgey, *supra* note 76.

78. *Id.*

79. ALASKA STAT. ANN. § 43.56.018(a)(1)-(3) (2018).

80. *Id.*

81. ALASKA DEP'T REV. TAX DIV., ALASKA TAX CREDITS: EDUCATION, <http://tax.alaska.gov/programs/programs/credits/index.aspx> (last visited Sept. 22, 2019).

82. *Id.*

83. *Id.*

84. CAL. GOV'T CODE §§ 51040.3(a), 51042(b)(2) (West 2013); see Eli Zigas, *California's New Urban Agriculture Property Tax Incentive*, SPUR (Oct. 2, 2013),

tax purposes according to the average value of agricultural land in the state of California, instead of as developable urban land.⁸⁵ In 2012, the value of the average agricultural acre assigned to such properties was \$12,000.⁸⁶

Property owners who choose to have their land designated as Urban Agriculture Incentive Zones are obligated to use it for agriculture for a minimum of five years and may not live on the property or use it for any non-agricultural purpose.⁸⁷ The Act recognizes the public interest of promoting sustainable farming in urban centers, and thus encourages small-scale production of vegetable and animal products in such settings.⁸⁸ Many owners of undeveloped property lease land to young farmers at below-market rates so that they may take advantage of this tax incentive.⁸⁹

F. USDA's Seasonal High Tunnel Initiative

In 2010, the USDA introduced the Seasonal High Tunnel Initiative, funded as part of the Environmental Quality Incentives Program.⁹⁰ Under the Initiative, farmers are eligible to receive back from the USDA up to 75% of the cost of high tunnels⁹¹—long greenhouse-like structures that are covered in soft plastic and typically tall and wide enough for a small tractor to drive under. Minority and beginning farmers may receive back up to 90% of the cost of high tunnels.⁹² To be eligible for the Initiative, a high tunnel must be placed on land currently used for agriculture and crops must be planted directly in the ground or raised beds.⁹³

The Seasonal High Tunnel Initiative has proven very successful in Alaska. All fifty states now participate in the Initiative, and Alaska has received more funds than any other state—over \$4 million as of June

<http://www.spur.org/news/2013-10-02/california-s-new-urban-agriculture-property-tax-incentive>.

85. CAL. GOV'T CODE § 51042(f) (West 2018) (citing CAL. REV. & TAX. CODE § 422.7).

86. Zigas, *supra* note 84.

87. CAL. GOV'T CODE § 51042(b)(1), (3), (4) (West 2018).

88. *Id.* § 51040.1 (West 2014).

89. See Lara Hermanson, *AB 551 in Oakland and Los Angeles*, FARMSCAPE (Oct. 21, 2014), <http://farmscapedgardens.com/blog/ab-551/> (explaining that tax credit makes it easier for young farmers to access land).

90. Matt Milkovich, *USDA Program Helps Growers Purchase Tunnels*, VEGETABLE GROWERS NEWS (July 18, 2013), <https://vegetablegrowersnews.com/article/usda-program-helps-growers-purchase-tunnels/>.

91. *Id.*

92. *Id.*

93. *Id.*

2015.⁹⁴ As of 2016, there were more than 325 federally funded high tunnels on the Kenai Peninsula alone.⁹⁵

Each state has a different cap on how much farmers may be reimbursed; Alaska farmers are eligible to receive back up to \$16,000 for their expenditures.⁹⁶ High tunnels are particularly valuable to Alaska farmers because they warm the air and soil surrounding plants and protect plants from wind. Crops grown under high tunnels in Alaska can often be harvested one to three weeks earlier than those grown in the open air.⁹⁷

However, Alaska is a large state with diverse growing conditions, and certain parts, such as the tundra, have proven inhospitable to high tunnels.⁹⁸ High tunnels leave crops more susceptible to frosts at the beginning and end of growing seasons than crops grown in conventional greenhouses.⁹⁹ Additionally, tundra soil is too cold, poor, and without proper drainage for farmers in the far north to plant crops directly in the ground. By instead planting crops in pots or raised beds under high tunnels, farmers can increase soil temperatures by as much as eight to ten degrees Fahrenheit.¹⁰⁰ To achieve similar results, farmers can instead dig down several feet and install a layer of insulating material, but this is both difficult and expensive.¹⁰¹ Thus, although a community garden as far north as Kotzebue did receive Initiative funds for a high tunnel, the Initiative has primarily benefitted farmers in south and central Alaska.¹⁰²

G. USDA Rural Development Programs

The USDA Office of Rural Development hosts a series of programs that have historically benefitted rural Alaska communities. Established by the 1990 Farm Bill,¹⁰³ the Office is intended to improve living conditions

94. Hodges Snyder & Meter, *supra* note 1, at 4.

95. Suzanna Caldwell, *High-Tunnel Gardening is Booming on the Kenai Peninsula. Here's Why*, ANCHORAGE DAILY NEWS (Aug. 6, 2016), <https://www.adn.com/slideshow/alaska-life/gardening/2016/08/06/high-tunnel-gardening-is-booming-on-the-kenai-peninsula-heres-why/>.

96. Dan Joling, *High Tunnels Extend Alaska's Growing Season*, NEWS MINER (May 31, 2014), http://www.newsminer.com/news/alaska_news/high-tunnels-extend-alaska-s-growing-season/article_8bfe53c4-e8ee-11e3-a82a-001a4bcf6878.html.

97. *Sustainable Agriculture: Part III*, *supra* note 24, at 322.

98. *See* Stevenson, *supra* note 11, at 334.

99. *Id.* at 324.

100. Stevenson, *supra* note 16, at 322.

101. *Sustainable Agriculture: Part III*, *supra* note 24, at 323.

102. *See* Hodges Snyder & Meter, *supra* note 1, at 4 (explaining community gardens have taken advantage of high tunnel funding in Nome, Kotzebue, and Kodiak as have farmers in Bethel, Palmer, Talkeetna, and Fairbanks).

103. Food, Agriculture, Conservation, and Trade Act of 1990, Pub. L. No. 101-

in rural America by supporting agricultural development and other rural community needs.¹⁰⁴ Two programs within the auspices of the Office that have had significant impact in Alaska are the Community Facilities Direct Loan and Grant Program and the Rural Business Development Grants Program.

The Community Facilities Direct Loan and Grant Program provides grants and low-interest loans to municipalities, tribes, and non-profit organizations for the development of essential community facilities.¹⁰⁵ Although the Program has primarily been used to bring water and wastewater disposal facilities to rural communities, essential community facilities qualify as anything including, but not limited to, health services; community, social, or cultural services; transportation infrastructure; electrical and telephonic services; natural gas distribution networks; and industrial park development.¹⁰⁶ Communities of 2,500 or fewer individuals receive priority in the allocation of loan funds.¹⁰⁷ There is also a priority system for grant funds, with priority being given to rural populations of 5,000 or fewer individuals where the median household income is either below the poverty line or below 60% of the state nonmetropolitan median household income.¹⁰⁸ Since 1994, the USDA has provided more than \$539 million in funding to 672 projects in more than 130 villages via the Rural Alaska Village Grant Program, a sub-program of the Community Facilities Direct Loan and Grant Program.¹⁰⁹

The Rural Business Development Grants Program allows rural communities, state agencies, non-profits, educational institutions, tribes, and cooperatives to apply for funds to provide technical assistance, training, and other support to businesses with fewer than fifty employees and less than \$1 million in annual gross revenue.¹¹⁰ These competitive grants are determined at the state level and are only available to

624, § 364, 104 Stat. 3359, 3979 (1990) (establishing pre-cursor to Office of Rural Development).

104. *Mission & History*, U.S. DEP'T OF AGRIC. RURAL DEV., <https://www.rd.usda.gov/about-rd/mission-history> (last visited Sept. 21, 2019).

105. 7 U.S.C. § 1926(a)(1), (19) (2012); 7 C.F.R. § 1942.1 (2018); 7 C.F.R. § 3570.51 (2018).

106. 7 C.F.R. § 1942.17(d)(1)(i)(B) (2018).

107. 7 C.F.R. § 1942.17(c)(2)(ii)(A)(1) (2018).

108. 7 C.F.R. § 3570.67(a)(1), (b)(1) (2018).

109. U.S. DEP'T OF AGRIC., ALASKA NATIVE VILLAGE AND RURAL COMMUNITIES SANITATION GRANT PROGRAM FUNDING TABLE (2018); U.S. DEP'T OF AGRIC. RURAL DEV., USDA RURAL DEVELOPMENT RURAL ALASKA VILLAGE GRANT PROGRAM 2, 7 (2016), https://www.rd.usda.gov/files/AK_2016RAVGbrochure.pdf.

110. U.S. DEP'T OF AGRIC. RURAL DEV., RURAL BUSINESS DEVELOPMENT GRANTS (RBDG) (2016), <https://www.rd.usda.gov/files/fact-sheet/RD-FactSheet-RBS-RBDG.pdf>.

communities of 50,000 or fewer individuals.¹¹¹ Grants are awarded based on the economic need of a particular community, evidence that a grant will result in economic stimulation, an applicant's success with similar past efforts, and the availability of matching funds from other sources.¹¹²

III. ANALYSIS AND RECOMMENDATIONS

Existing state laws and federal programs, namely Alaska's property tax laws and the USDA's Seasonal High Tunnel Initiative, should be amended to help satiate rural Alaska's hunger for fresh, healthy foods. Modifying these laws and programs individually can have tremendously beneficial results, but modified together, they have the potential to create prime growing conditions for rural Alaska farmers, particularly school farm programs.

A. The State of Alaska Should Expand the Education Tax Credit and Encourage Local Governments to Reclassify Property Donated to Educational Institutions Through Leasehold or Other Interest.

Instead of placing the sunset provision on the Education Tax Credit,¹¹³ the state should instead make permanent the ability for oil and gas companies to receive credits equal to or greater than the pre-2018 amounts. Additionally, it should expand the program to allow oil and gas companies to donate leaseholds or other interests in property, instead of only cash or equipment, to schools to use for agricultural purposes. Using the California's Urban Agriculture Incentive Zones Act as a model, the State should also encourage municipalities and boroughs to consider rezoning resource development lands in which leaseholds or other interests have been donated to schools. This may incentivize oil and gas companies to donate interests in properties so that the properties may be assessed at lower amounts.¹¹⁴ This would provide young rural Alaskans with valuable agricultural skills that they otherwise would not possess and avoid saddling individual farmers with the economic responsibility of expanding Alaska agriculture.

Presently, oil and gas companies may receive a credit of no more than \$1 million for donations made to educational institutions; this will expire December 31, 2024.¹¹⁵ The current tiered structure of the Education Tax Credit allows entities to write off 50% of the first \$100,000, 75% of the

111. *Id.*

112. *Id.*; 7 C.F.R. § 4280.4354 (2018).

113. ALASKA DEP'T REVENUE TAX DIV., *supra* note 81.

114. *See supra* Part II.E.

115. ALASKA DEP'T REVENUE TAX DIV., *supra* note 81.

next \$200,000, and 50% of any amount over that, for a maximum total \$1 million credit. This incentivizes companies to donate up to \$1.9 million to Alaska schools and educational programs in order to receive the maximum \$1 million credit.¹¹⁶

The State should instead return the credit cap to \$5 million, the amount under the pre-2018 credit, or increase this cap even more. Further, it should consider granting oil and gas companies credits for a portion of the assessed value of leaseholds or other interests in property donated to schools for farming. Companies may possess excess lands or structures that are adjacent to pipeline transportation or production properties that are only used for seasonal storage and that may instead be used for vertical farming during other parts of the year. Companies, in lieu of paying these property taxes to the state, may be greatly incentivized to continue providing significant amounts of funding to educational institutions, or even possessory interests in real property for the development of school farms, as a means of avoiding paying state property taxes on the massive amounts of resource development land in rural Alaska.

Local governments may also be able to encourage companies to donate leaseholds or other interests in property to schools, if the state expands the Education Tax Credit, by allowing companies that donate interests to have the property assessed at a lower rate, similar to how California's Urban Agriculture Incentive Zones Act operates.¹¹⁷ Municipalities and boroughs can allow companies to have such property assessed as undeveloped or even commercial property. Companies would thus not only be encouraged to donate leaseholds or subleases to educational institutions in order to establish school farms. In order to attain the state's Educational Tax Credit, companies would be incentivized to also donate additional funds necessary to initiate school farming so that these properties could be taxed at lower rates at the local level.

In expanding the Education Tax Credit at both the state and local levels, the state would be using funds from oil and gas production to encourage young people to become involved in Alaska agriculture. This would be a more effective means of expanding agriculture in the state than extending loans to individual farmers that are then left to ride out what, historically, has been a very risky industry in Alaska. As seen

116. *Id.*

117. *See supra* Part II.E. In most instances, resource exploration and extraction occurs far from the nearest community. Oil and gas companies may be incentivized to make donations of cash, equipment, or interests in other property inside of communities for the reclassification of property held elsewhere.

through the success of the Farm to School program, young Alaskans are excited by the prospect of local agriculture. By providing students with the abilities to improve their diets, try new foods, and learn valuable skills that may be later used for the improvement of their communities, these programs incentivize students to bring fresh and innovative ideas to the burgeoning industry.¹¹⁸ This would all be funded by money provided by established private industry.

It is true that this would mean fewer funds in the state's coffer, as well as the coffers of municipalities and boroughs that choose to assess property used for school farming at lower rates. But the Education Tax Credits offers a maximum 75% credit for only \$200,000 in donations—those between \$100,000 and \$300,000. Donations above and below this range receive only a 50% credit.¹¹⁹ This means that Alaska educational institutions stand to receive up to \$1.9 million in donations from each participating entity in exchange for tax credits of just \$1 million.¹²⁰ Thus, oil and gas companies would instead be funding Alaska agriculture, instead of obligating individual farmers to pay back government loans. This contrasts past unsuccessful public efforts at developing Alaska agriculture, such as with the Matanuska Valley Colony¹²¹ or with the attempt to break into the barley industry in the late 1970s and 1980s.¹²² Rural schools should also be encouraged to explore using the Rural Alaska Village Grant Program for purposes of supplementing their farming budgets. However, modifying the Education Tax Credit alone has the potential to better young rural Alaskans' lives by providing them with skills that can be applied to future careers in agriculture and with healthy school lunches. The financial responsibility for this expansion of Alaska agriculture would all be placed on the state and existing private industry instead of individuals.

B. The USDA Should Expand the Seasonal High Tunnel Initiative So That Schools and Individuals on the Tundra Also Have Access to Auxiliary Structures.

Although it is true that more farmers in Alaska have benefitted from the USDA's Seasonal High Tunnel Initiative than in any other state, those

118. See Neil D. Hamilton, *America's New Agrarians: Policy Opportunities and Legal Innovations to Support New Farmers*, 22 FORDHAM ENVTL. L. REV. 523, 526–27 (2011) (explaining entrepreneurial, environmental, and public health motivations of new generations of farmers).

119. ALASKA DEP'T REVENUE TAX DIV., *supra* note 81.

120. *Id.*

121. *Sustainable Agriculture: Part II*, *supra* note 16, at 309–10.

122. METER & GOLDENBERG, *supra* note 6, at 24–26.

Alaskans who have benefitted are largely restricted by latitude.¹²³ This unique program raises the question of what else the USDA can do to improve Alaska agriculture.¹²⁴ To allow school and community farms as well as individual farmers further north to also participate in the program, the USDA should create exceptions to the requirements necessary to qualify for the program and expand the program to make more durable auxiliary structures available to those who can show a geographic-based need. These efforts would make rural Alaska agriculture more feasible.

The Initiative's two current requirements, that land be under agricultural production and that crops be planted directly in the soil or raised beds, pose challenges for tundra farmers. The first requirement could be improved by simple clarification. Given that a community garden in Kotzebue used Initiative funds to purchase a high tunnel, existing community gardens presumably qualify as agricultural use. The definition, however, is less clear when considered in conjunction with property interests donated to schools by oil and gas companies, as addressed in the previous section.¹²⁵ It is unclear whether there would be any classification issues with land that continues to be taxed as oil and gas property, but is instead playing host to a school farm. This could be rectified by creating a state-specific definition of agricultural production, given each state already has specific qualifications under the Initiative, such as the amount farmers are able to receive in subsidies.¹²⁶

Additionally, the requirement that crops be planted directly in the ground or raised beds makes farming the tundra either impossible or prohibitively costly. Soil at far northern latitudes is too cold for ideal growing conditions, lacks proper drainage, and has low levels of microbial activity.¹²⁷ It can be amended with significant amounts of fertilizer and installation of insulation several feet beneath the surface, but this requires shipping in a significant amount of supplies.¹²⁸ The same effects can be achieved at a fraction of the cost by allowing Alaska farmers above a certain latitude to instead farm in pots or other containers. This would raise the soil temperature without the costly installation of

123. See Hodges Snyder & Meter, *supra* note 1, at 4 (explaining that the Initiative has primarily benefitted farmers in southern and central Alaska).

124. See Neil D. Hamilton, *Moving Toward Food Democracy: Better Food, New Farmers, and the Myth of Feeding the World*, 16 *DRAKE J. AGRIC. L.* 117, 128 (2011) (suggesting one manner the USDA can support new farmers).

125. See discussion *supra* Part III.A.

126. Joling, *supra* note 96.

127. *Sustainable Agriculture: Part I*, *supra* note 4, at 290.

128. See *Sustainable Agriculture: Part III*, *supra* note 24, at 322–23 (explaining plastic mulches for insulation have moderate to high initial investment costs); *id.* at 325 (explaining shipping fertilizers results in “exorbitant” costs).

belowground insulation, require significantly less amended soil, and allow for plants to be easily moved to safety when frost threatens. The possibility of growing plants hydroponically could also be explored. By lifting these requirements from certain Alaska farmers, the program's underlying purpose – to benefit northern, first-time farmers – will shine through.¹²⁹

The USDA should also consider expanding the Initiative to grant funds to farmers for other types of auxiliary structures when high tunnels prove ineffective for a particular climate. High tunnels provide inadequate protection against the vagaries of Alaska's changing seasons.¹³⁰ For those farmers who can show climate-based need, the Initiative should subsidize more durable structures that stand up against surprise frosts, including greenhouses or even manufactured buildings that can be used for vertical farming. These buildings may cost more than seasonal high tunnels. However, minority and first-time farmers may be reimbursed up to 90%, as opposed to just 75%, of the cost of high tunnels under the Initiative.¹³¹ Given most of the individuals who would benefit from greenhouses or manufactured buildings are likely both first-time farmers and Alaska Natives, they would be highly qualified to receive these additional funds.

Even if the USDA could not subsidize 90% of the cost of a greenhouse or manufactured building, it could still provide tundra farmers with 90% of the cost of a high tunnel, which could then be used by a farmer to purchase a greenhouse or manufactured building at a more reasonable cost. If the USDA finds favoring rural Alaska farmers over other American farmers in this way problematic, funds may instead be made available under the Rural Alaska Village Grant Program for the installation of such structures. However, this should not be necessary. The USDA established the Seasonal High Tunnel Initiative to help extend the growing seasons of geographically-disadvantaged farmers. It is the end effect that is important, not the means by which it is accomplished. The Initiative therefore can and should be interpreted to allow for funds to be used to purchase other auxiliary structures that can extend farmers' growing seasons besides just high tunnels.

129. See Joling, *supra* note 96.

130. Hodges Snyder & Meter, *supra* note 1.

131. Milkovich, *supra* note 90.

C. Rural Alaska School Farming Will Experience Prime Growing Conditions if Recommended Actions Are Taken by Both the State of Alaska and the USDA.

While rural Alaska agriculture, especially school farms, will benefit if either the state expands its Education Tax Credit or the USDA expands and lifts restrictions on its Seasonal High Tunnel Initiative, the greatest effects will be had if both entities jointly take such efforts. The state's expansion of the Education Tax Credit, including allowing for donations of possessory interests in property, has the potential to make valuable spaces available to educational institutions to use for school farms. Eliminating the 2024 sunset provision and returning the credit cap to its pre-2018 \$5 million amount, while also encouraging local governments to provide incentives of their own, will ensure oil and gas companies continue to make cash donations to get school farming on their property underway. Expanding the Seasonal High Tunnel Initiative to no longer require crops be planted directly in the ground or raised beds and allowing for the subsidization of greenhouses and manufactured buildings will then allow school farms to make the most of cash donations provided by oil and gas companies by purchasing durable auxiliary structures at affordable prices to be used on these properties. In the event that structures already exist on properties provided by oil and gas companies, those particular schools can be encouraged to practice vertical farming instead so that USDA funds may be allocated to other schools or properties where protection from the elements is needed for successful agriculture.

Dual action by both the State of Alaska and the USDA will also ensure that a new generation of farmers becomes invested in expanding Alaska agriculture. Given agriculture has traditionally been a fairly alien subject to most rural Alaskans, these actions by the state and USDA will make up for the learning curve that accompanies a northern upbringing.¹³² By focusing on this younger generation, the government can work to ensure food security will be stronger in these communities well into the future.¹³³ The State and USDA would be investing in the long-term success of Alaska agriculture by making it a part of public schools' standard curriculums, ensuring a greater portion of public school students have the skills necessary to pursue careers in agriculture and, at the very least, the knowledge necessary to structure a healthy diet. This

132. See Hamilton, *supra* note 118, at 557–58 (explaining that new farmers face “steep learning curve” that can be overcome through programs aimed to help them).

133. See *id.* at 532 (explaining how new farmers are linked to the future of agriculture).

would stand in stark contrast to past unsuccessful government efforts at Alaska agriculture, which have placed too much responsibility on individual farmers. The State of Alaska and the USDA would thus be wise to take this opportunity to make young rural Alaskans excited about the prospect of bringing local agriculture to unconventional places.

IV. CONCLUSION

While agriculture in Alaska, in many respects, is growing at a rate faster than any other state, conditions can still be vastly improved upon to make it easier and more feasible for Alaska farmers, especially those in rural parts of the state, to feed their communities. The framework for legally supplementing Alaska agriculture already exists, at both the state and federal levels via the State of Alaska's Education Tax Credit and the USDA's Seasonal High Tunnel Initiative. The success of the 2010 Farm to School Act has also demonstrated young Alaskans' eagerness to become involved in farming. However, through the expansion of the Education Tax Credit and Seasonal High Tunnel Initiative, rural Alaska communities would be able to realize that more than just oil can come out of the ground. Property interests and, potentially, structures can be provided to schools and other educational institutions by expanding the Education Tax Credit, and the Seasonal High Tunnel Initiative can be repurposed to make essential auxiliary structures capable of standing up to the tundra's harsh climate available to school farms and other farmers. Together, these efforts will spur a new generation of Alaska farmers, capable of bringing fresh and healthy produce to food insecure communities for years to come.