



# **NORTH CAROLINA ALLIANCE FOR HEALTH**

## **Policy Review of the Role of Large Institutions in Healthy Food Access**

Anastasia Frolov  
Summer 2020

## **Recommendations**

This analysis is based on recommendations from a report from the North Carolina Healthy Food Retail Task Force titled “Supporting Healthy Food Access in North Carolina.” Specifically, this analysis focuses on how institutions, or big purchasers of food, connect to and influence the sale of local foods in the state of North Carolina; partnerships and distribution efforts between growers, sellers, and buyers; and increased funding for programs that promote healthy eating and for shoppers to choose healthy foods. The institutions primarily considered in this analysis are schools, hospitals, prisons, and senior care facilities.

## **Summary of Research**

To start off this analysis, existing legislation, regulations, and administrative policies in NC regarding institutions were researched. There was legislation concerning making school meal programs more affordable and nutritious, funding for farm to school programs and childhood obesity programs, and bills promoting local food purchasing and healthy food initiatives, although not on an institutional scale but on a smaller one.

Next, research was conducted on existing legislation, regulations, and administrative policies in other states. The main states that were focused on in this section included Oregon, Vermont, and Washington. There was strong evidence found for passed legislation on institutions promoting the sale of local foods through farm-to-institution programs to stimulate local economies and developing local food systems, helping shoppers choose healthier foods, and funding for healthy eating programs. Farm-to-school initiatives and school food program funding were also widespread among the three states.

Following legislation and policy research in other states, existing programs focusing on the institutional recommendations mainly in Oregon, Vermont, and Washington and also outside of these states were examined. There were many programs on farm and healthy food initiatives at prisons, hospitals, and senior homes. In addition, general statewide farm-to-institution programs were prevalent.

Lastly, research was done regarding people and organizations doing innovative relating to the institutional recommendations. These contacts were found primarily through completing the previous program and legislation research in states outside of NC.

## **History of Policies**

When the USDA was established in 1862, agricultural and food policy were not distinguished from each other. Recently, however, the link has weakened, as domestic public health policies strive to produce food of sufficient quantity, quality, sustainability, and diversity at an affordable price to the farmer.<sup>1</sup>

Some domestic public health policies include food assistance programs, such as the National School Lunch Program, the Special Supplemental Food Program for Women, Infants, and Children (WIC), and the Supplemental Nutrition Assistance Program

(SNAP). The USDA purchases excess farm goods at market price from farmers and distributes them to these federally administered programs. However, as the relationship between diet and health grew clearer, the USDA shifted its attention to the nutritional needs of food recipients, mandating that school lunches meet dietary guidelines.<sup>1</sup>

Even today, however, policymakers continue to promote “counting calories” by enforcing total calorie labeling laws for menus and packaging, rather than aiming to increase calories from healthy foods. According to the medical peer reviewed journal the *BMJ*, “integrated policy, investment, and cultural strategies are needed to create change in food production and manufacturing, worksites, schools, healthcare systems, quality standards and labelling, food assistance programmes, research and innovation, and public-private partnerships”.<sup>2</sup>

**Table I: Existing Legislation, Regulations, and Administrative Policies in NC**

Title	Year	Key Text	Evidence or Evaluation	Citations
Small Farms to Healthier Schools Initiative	Senate - 2017, 2018 House - 2017	A partnership between school nutrition programs and local farmers to encourage preparation and consumption of locally grown fruits and vegetables. Provides funding for a pilot program to reimburse participating school districts based on the servings of food they source from farms within the same region.	Strong	16
Free Breakfast and Lunch in K-12 Pub. Schools	House - 2017, 2019	An act to appropriate funds to provide free breakfast/lunch to students attention K-12 public schools. charter schools: may provide school nutrition services for enrolled students by participating in federally assisted school nutrition programs. The Department of Public Instruction shall allocate sufficient supplementary funds to the charter school to provide free breakfast for every student who elects to receive free breakfast and free lunch for every student who elects to receive free lunch.	Moderate	4
Charter Schools Provide Transp. & Food	Senate - 2019, effective July 1 2020	"The school shall develop a plan to provide food services for any student enrolled in the charter school". In the operation of their food service programs, charter schools shall participate in the National School Lunch Program	Moderate	3
Healthy Foods in Our Schools	House - 2017	Funding for school nutrition programs in prekindergarten and elementary schools that participate in the National School Lunch Program to implement nutrition standards	Strong	7
Healthy and High-Performing Schools	House - 2013, 2015	Establishes healthy schools funds; enacts nutritional standards to school meals; physical activity/health education goals; school gardens; local wellness policies; Healthy Youth and Schools Commission establishment; green cleaning supplies; establishes central kitchen; emphasis on local food: "Schools shall serve locally grown, locally processed, and unprocessed foods from growers engaged in sustainable agriculture practices whenever possible. Preference shall be given to fresh, unprocessed agricultural products grown in North Carolina or contiguous states."	Strong	17
Legislative Task Force on Childhood Obesity	House/Senate - 2011	The Task Force shall consider and recommend to the General Assembly strategies for addressing the problem of childhood obesity and encouraging healthy eating and increased physical activity among children	Strong	13
Update Statewide Nutrition Standards	House - 2010	An act directing the state board of education to update statewide nutrition standards for food and beverages available in schools as recommended by the legislative task force on childhood obesity	Strong	14
Eliminate Student Cost Reduced-Price Breakfast	House - 2012	An act to appropriate funds to the dept of public instruction for the child nutrition program to eliminate the student cost for reduced-price breakfast in order to increase breakfast participation, as recommended by the house select committee on childhood obesity.	Moderate	6

Funds for Child Nutrition Stnds.	House - 2012	An act to appropriate funds to the dept of public instruction for the child nutrition program to assist them in meeting nutrition stds as recommended by the house select committee on childhood obesity.	Moderate	8
School Nutrition Program Funds	House - 2009	An act to appropriate funds to ensure that child nutrition programs operating in the public schools have adequate funds to implement nutrition stds adopted by the state board of education for elementary schools	Moderate	9
Limit Foods in School Vending Machines	House - 2009	An act to ensure that school vending machines contain only foods/beverages permitted by law	Moderate	11
Nutrition Stds./All Foods Sold at School	Senate - 2009	State Board of Education shall establish statewide nutrition standards for school meals, a la carte foods and beverages, and items served in the After School Snack Program administered by the Department of Public Instruction and child nutrition programs of local school administrative units. The nutrition standards will promote gradual changes to increase fruits and vegetables, increase whole grain products, and decrease foods high in total fat, trans fat, saturated fat, and sugar. The State Board of Education shall examine the standards on an annual basis and make modifications that reflect current products in the marketplace, best practices in the industry, and science-based evidence as reflected in the most current edition of the Dietary Guidelines for Americans	Strong	10
Eliminate Reduced Cost School Meals	House - 2009, 2010	State funds appropriated to the Department of Public Instruction for the Child Nutrition Program shall be used to eliminate the cost of reduced-price lunches for children who qualify for reduced price meals.	Weak	5
Funds/Tech. Assistance/Healthy Lifestyle	House - 2009	An act to appropriate funds to the dept of health and human services and to dept of public instruction to provide tech assistance in promoting healthy lifestyles. These funds shall be used to provide technical assistance to State agency workplaces for healthy initiatives for promoting positive behavior change for physical activity and good nutrition among adults to improve role modeling for children.	Moderate	15
Healthy Eating/Physical Activity/Child Care	House - 2009	In providing additional opportunities for child care providers to earn points for program standards, the Department shall assess the process and any funding needed for child care facilities to incorporate healthy eating and physical activity practices as quality indicators under the five-star rating system for licensed child care facilities.	Moderate	12
Sustainable Local Food Policy Council/Goal	Senate - 2009	An act to establish NC sustainable local food advisory council to address program and policy considerations regarding the development of a sustainable local food economy in NC, consisting of 27 members from various farming/business entities. Purpose of North Carolina Sustainable Local Food Advisory Council: to contribute to building a local food economy, thereby benefiting North Carolina by creating jobs, stimulating statewide economic development, circulating money from local food sales within local communities, preserving open space, decreasing the use of fossil fuel and thus reducing carbon emissions, preserving and protecting the natural environment, increasing consumer	Strong	18

		access to fresh and nutritious foods, and providing greater food security for all North Carolinians.		
Corner Store Initiative	House – 2017	An act to enact the corner store initiative act to assist healthy food small retailers. Providing assistance to existing small food retailers to stock fresh produce and other healthy foods and promote good nutrition can provide residents with access to healthier foods. Community programs that work with these small food retailers have shown promise in increasing healthy food sales, improving store offerings, and promoting good nutrition.	Weak	19

## Discussion

The source used in this section was the North Carolina General Assembly website, [www.ncleg.gov](http://www.ncleg.gov). Overall, moderate strength evidence was found for this section. There were a number of legislation and policies found concerning school food programs, as well as legislation on child obesity and general nutrition programs. Because of the growing number of charter schools in the state and the lack of federal regulation of them, research was done targeting them for any healthy eating policies or programs. Legislation was found that ensured charter schools participated in the National School Lunch Program.<sup>3</sup> Some evidence was found concerning partnering with local farms, however these were smaller scale initiatives rather than large, institutional ones.

There were many policies and legislation on providing free or affordable meals to students. For example, an act was passed appropriating funds to provide free breakfast and/or lunch to students in K-12 public schools.<sup>4</sup> Then, state funds were appropriated to completely eliminate the cost of reduced-price breakfast and lunches for qualified children.<sup>5,6</sup>

Besides making school lunches free or affordable, nutritional standards were enacted for child school nutrition programs, including the National School Lunch Program.<sup>7-9</sup> The statewide nutrition standards were later applied beyond school meals, but also to a la carte and items served in the After School Snack program, promoting gradual changes to increase fruits, vegetables, and whole grain products, while decreasing foods high in fat and sugar.<sup>10</sup> Another passed law limited unhealthy foods and drinks in school vending machines.<sup>11</sup> There were even efforts made for child care facilities to qualify their program ratings through healthy eating and physical activity practices.<sup>12</sup>

In 2011, the Legislative Task Force on Childhood Obesity, composed of six members of both the House and Senate, also made strides in promoting nutrition in schools.<sup>13</sup> The task force directed the State Board of Education to update statewide nutrition standards for food and beverages available in schools.<sup>14</sup> It made recommendations such as providing technical assistance to state agency workplaces to promote positive behavior change regarding exercise and good nutrition among adults to improve role modeling for children.<sup>15</sup>

A passed bill demonstrating strong evidence for partnerships between growers, sellers, and buyers, as well as the increased sale of local food of NC relating to schools was the Small Farms to Healthier Schools initiative. This initiative was created to enact a partnership between School Nutrition Programs and local farmers to encourage preparation and consumption of locally grown fruits and vegetables.<sup>16</sup> Another bill indicating strong evidence to the aforementioned nutrition recommendations was passed in 2013,

and not only set physical activity guidelines, health education goals, and local wellness policies, but also established school gardens, emphasizing that schools “shall serve locally grown, locally processed, and unprocessed foods from growers engaged in sustainable agriculture practices whenever possible.”<sup>17</sup>

The NC Assembly also passed bills promoting local food purchasing and healthy food initiatives. In 2009, the Senate established the North Carolina sustainable local food advisory council comprised of 27 members from farming and business entities.<sup>18</sup> This council sought to address the development of a sustainable local food economy.<sup>18</sup> Some of its relative goals included “increasing consumer access to fresh and nutritious foods.”<sup>18</sup> This act provided strong evidence regarding partnerships between growers/sellers/buyers, the sale of local foods in NC, as well as helping shoppers choose healthy foods. There was also legislation passed promoting healthy food in small grocery stores, such as the corner store initiative, which helped existing small food retailers to stock fresh produce and other healthy foods, as well as promote good nutrition to provide residents with access to healthier foods.<sup>19</sup> These bills demonstrated moderate evidence for the proposed recommendations since it only included small grocery store initiatives. No NC policies were found concerning healthy eating or food programs in prisons, hospitals, or senior care facilities.

**Table II: Existing Legislation, Regulations, and Administrative Policies in Other States**

State	Title	Year	Key Text	Evidence or Evaluation	Citation
Washington DC	Healthy Hospitals Amendment Act	2019	“Hospitals shall make available to patients, staff, and visitors a variety of healthful foods, including vegetarian and 100% plant-based meals, and meals that are low in saturated fat, sodium, and added sugars, and shall ensure that all patients, staff, and visitors are made aware of these options through appropriate menu listings, signage, or other means; Hospitals shall eliminate processed meats from all menus; Hospitals shall provide and promote healthful beverages...”	Strong	36
NY	S1471A/A4072	2019	Requires hospitals in New York to make available upon request plant-based meals and snacks containing no animal products or by-products that are nutritionally equivalent to other menu items.	Moderate	37
Oregon	HB 2288: Relating to the Oregon Food Policy Council	2007	Creates Oregon Food Policy Council with one member actively engaged in farming or ranching in eastern Oregon and another actively involved in growing or producing goods sold at farmers’ markets, farm stands or food cooperatives, in community-supported agriculture or in farm direct marketing. Working with the State Department of Agriculture to encourage the streamlining of regional food purchasing and delivery policies and practices that authorize and encourage public institutions within the state to give preference to regionally produced foods. Foster and develop farmers’ markets, farming, local agricultural marketing opportunities and community-supported agriculture; foster job and business development in Oregon’s agriculture and food processing industries as economic development; and enhance the viability of community and home gardens.	Strong	31
Oregon	HB 3307 A: Relating to food utilization; appropriating money; declaring an emergency.	2007	Directs State Department of Agriculture to consult with Department of Education for purpose of helping Department of Education develop Farm-to-School program. Appropriates moneys from General Fund to State Department of Agriculture for purpose of carrying out duties of department.	Strong	20
Oregon	HB 2800 A: Relating to Oregon Farm-to-School and School Garden Program	2009	Directs Department of Education to provide reimbursements to school districts that serve Oregon food products as part of United States Department of Agriculture’s National School Lunch Program or School Breakfast Program. Directs department to award grants for development of food-based, agriculture-based and garden-based educational activities.	Strong	21
Oregon	HCR 8: Urging support for Statewide Food Systems Council	2011	“Whereas the Statewide Food Systems Council plans to examine the future of rural grocery stores, the need for mobile food processing operations throughout Oregon, the opportunities for farm-to-institution expansion and the local barriers to food systems successes, and plans to identify solutions and best practices to share statewide...we, the members of the Seventy-sixth Legislative Assembly, express our support for the efforts of	Strong	32

			the Statewide Food Systems Council to alleviate hunger in Oregon; and be it further Resolved, That the Legislative Assembly requests that the Statewide Food Systems Council provide a report on food processing barriers and potential solutions to the Legislative Assembly in 2013”.		
Oregon	SB 1567: Relating to state financial administration; appropriating money	2012	Appropriates money for the purpose of providing fresh Oregon-grown fruits, vegetables and cut herbs from farmers’ markets and roadside stands to eligible low-income seniors under the Senior Farm Direct Nutrition Program.	Weak	40
Oregon	House Joint Memorial 10: Local Foods in Schools	2013	Urges Congress to pass legislation improving school nutrition requirements to facilitate purchase of locally produced food by school districts.	Strong	22
Oregon	HB 3403: Relating to vending machines located in public buildings; declaring an emergency	2013	Establishes Healthy Vending Task Force to study matters related to nutritional requirements for food and beverage items sold in public buildings.	Moderate	24
Oregon	HB 2721A: Relating to school food programs; declaring an emergency	2015	Modifies program through which Department of Education distributes grant moneys for school food programs to to assist in paying for the costs incurred by the school district to purchase food produced or processed in this state.	Moderate	23
Oregon	HB 2919: Relating to food services at residential facilities.	2017	Makes facility providing food services at senior community residence subject to regulation as restaurant. Requires Oregon Health Authority to adopt rules establishing foodborne illness prevention program for facilities. Makes facilities subject to inspection for prevention of foodborne illness.	Weak	39
Oregon	HB2579: Relating to the Farm-to-School Grant Program; and declaring an emergency	2019	Increased farm-to-school activities’ support from \$4.5 million to \$15 million will provide critical funds for Oregon schools to buy and serve Oregon foods, and districts and partner organizations to provide agriculture, nutrition, and garden-based educational activities.	Strong	25
Oregon	HB 3442: Relating to plant-based meals	2019	Requires hospitals and long-term care facilities to make available to patients and residents plant-based meals when necessary to accommodate medical, religious, cultural or ethnic needs, preferences or requests The Department of Corrections shall make available to all inmates incarcerated in department facilities plant-based meals as an option any time a meal is served.	Moderate	238
Vermont	6 V.S.A. § 4721 Local food grant program	2007	The Agency of Agriculture, Food and Markets the Rozo McLaughlin Farm-to-School Program shall execute, administer, and award local grants for the purpose of helping Vermont schools develop farm-to-school programs that will sustain relationships with local farmers and producers, enrich the educational experience of students, improve the health of Vermont children, and enhance Vermont's agricultural economy.	Strong	27
Vermont	10 V.S.A. § 330 The Farm-to-Plate Investment Program;	2009	Intended outcomes...Improve access to healthy local foods for all Vermonters. The Vermont Farm-to-Plate Investment Program shall provide support for farm and food businesses, including regional food hubs, selling in all types of markets, direct and	High	33

	creation; outcomes; tasks; methods		wholesale, in the State and outside the State. As an ongoing task, the Farm-to-Plate Investment Program shall use the information gathered for the strategic plan to identify methods and the funding necessary to strengthen the links among producers, processors, and markets, including: (A) supporting of the work of existing farm-to-school programs to increase the purchase of local foods by Vermont schools, with a particular emphasis on procurement of nutrient-dense animal foods; (B) supporting the work of the Working Lands Enterprise Board to strategically invest in farm and food businesses; (C) collaborating with the Agency of Agriculture, Food and Markets and the Department of Buildings and General Services to increase procurement of local foods (D) collaborating with the Agency of Agriculture, Food and Markets to increase procurement of local foods by businesses and institutions; (E) supporting initiatives that improve the marketing of foods from Vermont producers to consumers inside the State and outside of the State.		
Vermont	S.99: Agricultural Economic Development	2011	This bill proposes to promote agricultural economic development by implementing recommendations of the Vermont sustainable jobs fund's farm-to-plate strategic plan and supporting policies.	Strong	34
Vermont	Rozo McLaughlin Farm-to-School Program	2007	It is the purpose of this chapter to establish a farm-to-school program to: (1) encourage Vermont residents in developing healthy and lifelong habits of eating nutritious local foods; (2) maximize use by Vermont schools of fresh and locally grown, produced, or processed food; (3) work with partners to establish a food, farm, and nutrition education program that educates Vermont students regarding healthy eating habits through the use of educational materials, classes, and hands-on techniques that inform students of the connections between farming and the foods that students consume; (4) increase the size and stability of direct sales markets available to farmers; and (5) increase participation of Vermont students in child nutrition programs by increasing the selection of available foods. (b) It is the goal of the Farm-to-School Program to establish a food system that by 2025: (1) engages 75 percent of Vermont schools in an integrated food system education program that incorporates community-based learning; and (2) purchases 50 percent of food from local or regional food sources.	Strong	26
Vermont	6 V.S.A. § 4722 Farm assistance; Secretary of Agriculture, Food and Markets	2017	The Secretary of Agriculture, Food and Markets shall work with existing programs and organizations to develop and implement educational opportunities for farmers to help them increase their markets through selling their products to schools, registered or licensed child care providers, and State government agencies that operate or participate in child nutrition programs.	Strong	28

Washington	Policy 240.100 Food Services Program	Effective 2000, Revised 2019	The Department has established Food Services programs to provide cost effective, healthy, and quality meals in compliance with health and safety requirements for the State of Washington Department of Corrections facilities.	Strong	25
Washington	SB 6483: Farm-to-school program	2008	<p>(1) A farm-to-school program is created within the department to facilitate increased procurement of Washington grown food by schools.</p> <p>(2) The department, in consultation with the department of health, the office of the superintendent of public instruction, the department of enterprise services, and Washington State University, shall, in order of priority:</p> <p>(a) Identify and develop policies and procedures to implement and evaluate the farm-to-school program</p> <p>(b) Assist food producers, distributors, and food brokers to market Washington grown food to schools by informing them of food procurement opportunities, bid procedures, school purchasing criteria, and other requirements;</p> <p>(c) Assist schools in connecting with local producers by informing them of the sources and availability of Washington grown food as well as the nutritional, environmental, and economic benefits of purchasing Washington grown food;</p> <p>(d) Identify and recommend mechanisms that will increase the predictability of sales for producers and the adequacy of supply for purchasers;</p> <p>(e) Identify and make available existing curricula, programs and publications that educate students on the nutritional, environmental, and economic benefits of preparing and consuming locally grown food;</p> <p>(f) Support efforts to advance other farm-to-school connections such as school gardens or farms and farm visits</p>	Strong	29
Washington	HB1508: Promoting student health and readiness through meal and nutrition programs	2018	<p>The regional markets programs of the department of agriculture must be a centralized connection point for schools and other institutions for accessing and sharing information, tools, ideas, and best practices for purchasing Washington-grown food.</p> <p>program staff from the department of agriculture may:</p> <ul style="list-style-type: none"> <li>-provide scale-appropriate information and resources to farms to help them respond to the growing demand for local and direct marketed products; and</li> <li>-provide technical assistance to farmers, food businesses, and buyers, including schools, about business planning, access to markets, product development, distribution infrastructure, and sourcing, procuring, and promoting Washington-grown foods.</li> <li>-Support new and existing farm businesses;</li> <li>-Maintain the economic viability of farms;</li> </ul>	Strong	30

			<p>-Support access and preparation efforts for competing in markets that are a good fit for their scale and products, including schools and public institutions, and direct-to-consumer markets that include, but are not limited to, farmers' markets, local retailers, restaurants, value-added product developments, and agritourism opportunities.</p> <p>The regional markets programs of the department of agriculture may support school districts in establishing or expanding farm-to-school initiatives by providing information and guidance to overcome barriers to purchasing Washington-grown food. Regional markets program activities may include:</p> <ul style="list-style-type: none"> <li>(a) Connecting schools and other institutions with farmers and distribution chains;</li> <li>(b) Overcoming seasonality constraints;</li> <li>(c) Providing budgeting assistance;</li> <li>(d) Navigating procurement requirements; and</li> <li>(e) Developing educational materials that can be used in cafeterias, classrooms, and in other educational environments.</li> </ul>		
Washington	HB 1731/SB 6091 - Continuing the work of the Washington food policy forum.	2019	<p>The Washington food policy forum is established as a public-private partnership and its purpose is to develop recommendations to advance the following food system goals:</p> <ul style="list-style-type: none"> <li>(a) To increase the availability of Washington-grown foods throughout the state, including by increasing direct marketing sales and consumption of Washington-grown foods;</li> <li>(b) To expand and promote programs that bring healthy and nutritious Washington-grown foods to Washington residents, including increased public and private purchasing of Washington food products for schools, adult care programs, and other publicly funded food programs;</li> <li>(c) To examine ways to encourage retention of an adequate number of farmers for small and mid-scale farms, meet the educational needs for the next generation of farmers, and provide for the continued economic viability of Washington food production, processing, and distribution in the state;</li> <li>(d) To reduce food insecurity and hunger in the state; and</li> <li>(e) To identify ways to improve coordination and communication among city, county, regional, and state food policy entities and communication between these entities and state agencies. Support innovative public-private partnerships that can leverage private and public market influence, such as through institutional purchasing and contracts</li> </ul>	Strong	35

### Discussion

The three main states focused on in this section are Oregon, Vermont, and Washington. Searches were done on the states' respective general assembly sites using key words such as "hospital," "senior home/senior care facility," "prison," "farm," and "farm-to-school." Overall, strong evidence was found for legislation in these and other states that is relevant to the proposed recommendations that focus on how institutions promote the sale of local foods, help shoppers to choose healthier foods, and fund programs emphasizing healthy eating.

Just like for North Carolina, all three states had legislation relating to school meal programs as well as many farm-to-school initiatives. However, these initiatives proved to be more thorough and extensive than the ones in North Carolina. Oregon had legislation that would push schools to buy local Oregon food. The Oregon Legislative Assembly found that farm-to-school programs have been proven to: increase market opportunities for farmers, food processors and manufacturers; support economic development; educate children about agriculture and food systems; and increase children's consumption of produce, thereby improving nutrition and lessening obesity incidence.<sup>20</sup> In 2007, the Legislative Assembly partnered with the Department of Education to develop a farm-to-school program.<sup>20</sup> In 2009, the state required the Department of Education to reimburse school districts that serve local Oregon produce as part of the National School Breakfast/Lunch program, and awarded grants for the "development of food-based, agriculture-based, and garden-based educational activities," such as the School Garden Program.<sup>21</sup>

In 2013, Oregon urged Congress to pass legislation that would improve school nutrition requirements to facilitate the purchase of locally produced food by school districts.<sup>22</sup> Similar legislation was passed in 2015, which modified a program through which the Department of Education distributes grants to school programs to assist in paying for the costs incurred by school districts that purchased food produced or processed in Oregon.<sup>23</sup> Similar to North Carolina's control over vending machines, in 2013, Oregon established a Healthy Vending Task Force to "study matters related to nutritional requirements for food and beverage items sold in public buildings."<sup>24</sup> In 2019, a House bill received unanimous support to increase funds from \$4.5 million to \$15 million for schools to buy and serve Oregon foods, and for school districts to provide agriculture, nutrition, and garden-based educational activities.<sup>25</sup>

Vermont also passed legislation to support schools buying local food. In 2007, the state created the Roza Mclaughlin Farm-to-School Program, with the purposes of: encouraging residents to eat nutritious local foods; maximize use by Vermont schools of locally grown, produced, or processed food; work with partners to establish a food, farm, and nutrition program educating students on healthy eating habits; and increasing the participation of students in nutrition programs by increasing the selection of available foods.<sup>26</sup> By 2025, the program hopes that schools will purchase at least 50% of their food from local food sources.<sup>26</sup> Also in 2007,, Vermont established a local foods grant program to: support relationships between schools and local farmers and producers; support the educational experience of students; improve their health; and to enhance Vermont's agricultural economy.<sup>27</sup> Finally, in 2017, Vermont widened the reach of its local farms by passing legislation for farmers to sell their products to not only schools, but also to child care providers and state government agencies that have child nutrition programs.<sup>28</sup>

In Washington, legislation was passed in 2008 creating a farm-to-school program with the goal of increasing the procurement of locally grown food by schools.<sup>29</sup> In 2018, the state passed a bill concerning resources for purchasing Washington-grown food for schools and other institutions. It allowed the Department of Agriculture to: provide resources to farms to help them respond to the growing demand for local products; provide technical assistance to farmers, food businesses, and buyers (including schools) about Washington-grown foods; support new and existing farm businesses; expand farm-to-school initiatives by providing information and

guidance to overcome barriers to purchasing local food; connect schools and institutions with farmers and distribution chains; provide budgeting assistance; and develop educational materials for use in cafeterias and classrooms.<sup>30</sup>

Unlike North Carolina, all three states had bills passed promoting local food sales and creating partnerships between large institutions and smaller farms to stimulate the local economy. For example, Oregon created the Oregon Food Policy Council to “encourage the streamlining of regional food purchasing and delivery policies and practices that authorize and encourage public institutions within the state to give preference to regionally produced foods.”<sup>31</sup> The council would also: foster and develop farmers’ markets, farming, local agricultural marketing opportunities and community-supported agriculture; foster jobs in Oregon’s agriculture and food processing industries; and enhance the viability of community and home gardens.<sup>31</sup> Oregon also created the Statewide Food Systems Council to examine the opportunities for farm-to-institution expansions as well as the local barriers to food systems success.<sup>32</sup>

Vermont passed legislation to create the Farm-to-Plate Investment Program to improve access to healthy local foods.<sup>33</sup> The program strived to support farms and food businesses selling in direct and wholesale markets, and gathered information to identify methods and funding necessary to strengthen partnerships between producers, markets, and processors.<sup>33</sup> Some of these methods included supporting farm-to-school program purchasing of local foods, supporting the Working Lands Enterprise Board to invest in farm and food businesses, collaborating with various agencies and departments to increase the procurement of local foods by businesses and institutions, and supporting initiatives that improve the marketing of foods from Vermont producers to consumers.<sup>33</sup> Another Vermont bill sought to promote agricultural economic development by implementing recommendations from the farm-to-plate strategic plan on sustainable jobs.<sup>34</sup>

Lastly, Washington established the food policy forum as a public-private partnership to advance certain food system goals. These goals included: increasing the availability of Washington-grown foods throughout the state by increasing direct marketing sales or the consumption of them; expanding programs that bring healthy, local goods to residents by increasing public and private purchasing of Washington food products for schools and senior-care facilities; supporting the economic viability of local food production, processing, and distribution; improving communication among city, county, regional, and state food policy entities; and supporting public-private partnerships through institutional purchasing and contracts.<sup>35</sup>

Little to no evidence was found on nutrition legislation related to hospitals in Oregon, Vermont, or Washington. However, 2 regulations were found from Washington, DC and New York. The Healthy Hospitals Amendment Act, passed in 2019 in Washington, DC, required hospitals to: make available healthy foods that are low in saturated fat, sodium, and added sugars; provide vegetarian and 100% plant-based meals; eliminate all processed meats; and promote healthful beverages.<sup>36</sup> Legislation passed in New York required hospitals to make available plant-based meals and snacks that are nutritionally equivalent to other menus.<sup>37</sup> Oregon had one bill regarding hospitals and long-term care facilities such as prisons to make available plant-based meals, but that was the extent of the promotion of healthy eating in hospitals.<sup>38</sup>

There was weak evidence presented from two bills from Oregon regarding nutritious meals at senior-care facilities. One such bill made senior care facilities subject to the same meal regulation as restaurants, such as establishing a foodborne illness prevention program.<sup>39</sup> Another bill appropriated money to the Senior Farm Direct Nutrition Program in order to provide Oregon-grown produce from farmers' markets to eligible low-income seniors.<sup>40</sup>

Legislation regarding healthy meals in prisons was only found in Washington. The state established Food Services programs to provide cost-effective, healthy, and quality meals in compliance with health and safety requirements for the Washington Department of Corrections facilities.<sup>41</sup>

**Table III: Programs**

County	Program Title	Implementing Agency or Organization	Key Text	Evidence or Evaluation	Citations
VT	Vermont Gleaning Collective	Salvation Farms	Its mission is to collaborate as a state-wide partnership of autonomous, community-based programs that glean and work in solidarity to support farmers, residents, and the food system. Created to establish best practices, increase professionalism, and track the impact of gleaning statewide.	-Reduced Vermont's on-farm food loss by 442,194 pounds -Distributed 1,326,582 servings of farm-fresh crops to partners around the region, including the Vermont Foodbank's network of 220+ sites -Provided work-readiness training to 17 underemployed individuals	43
Lamoille County, VT	Lamoille Valley Gleaning	Salvation Farms	We engage and feed the community through collecting and distributing what farmers can't sell.	Collected 53 types of fruits and vegetables from 19 farms; Distributed 210,501 servings of nutritious crops to 31 sites; Engaged 215 individual volunteers including 19 different service groups, corporate teams, or youth programs	42
VT	Vermont Commodity Program	Salvation Farms	Created to aggregate, clean, quality-assess, process, and package large volumes of Vermont surplus produce. Originally envisioned as a correctional industry and work opportunity for the incarcerated, the current iteration is based in the community and provides work-readiness training for individuals with barriers to employment. Our objective is to test the financial feasibility and logistical needs (food safety, product flow, product development) of aggregating large volumes of surplus crops in one facility to serve charitable and institutional meal sites.	390,000 servings of produce from 9 Vermont farms and gleaning programs moved through the Vermont Commodity Program in 2018. This bounty was distributed to 18 sites, including the Vermont Foodbank's network of 215 agencies. 23% was moved to sites out of state. Crops are packed raw and minimally processed (cut and frozen) to extend shelf life. During 2018, 8 individuals completed the program with 88% securing jobs in the final days of the program or shortly after - many in food related occupations, earning above minimum wage.	44
San Diego, CA	Farm and Rehabilitation Meals (FARM)	San Diego's Richard J. Donovan Correctional Facility	-Has set aside 3 acres of the prison grounds for growing -Has trained 20 prison inmates to tend and harvest the garden with the help of prison staff gardeners and volunteers -The farm will produce fresh fruits and vegetables for consumption in prison cafeterias, with surpluses donated to local food banks -Costing only \$4,000 to establish and funded entirely by private donors -Projected to save the facility in food procurement costs by	No evaluation exists as of date	47

			supplementing the menu with house-grown produce		
St. Johnsbury, VT	Northeast Regional Correctional Facility	Vermont Department of Corrections and Salvation Farms	Integrates locally grown potatoes and apples into the prison cafeteria while offering inmates hands-on food processing job experience. The program has set the goal of increasing the amount of produce entering the prison cafeterias by analyzing and upgrading the infrastructure of prison kitchen facilities.	Has helped inmates helped to plant, grow, harvest, and process about 141,000 pounds of 6 different crops; 2,000 pounds of have been incorporated into prison cafeterias as surplus, with the rest being distributed and donated to various food banks, schools, and other institutions in the area. Established 3 greenhouses on the prison grounds, offering inmates job-training in food production, and a second source of locally grown produce.	45
Deerlodge, MT	Prison Farm to Cafeteria	Montana Women's Prison	Strives to increase both life-skill training and nutritional intake among its inmates by consistently putting locally grown produce on its cafeteria menu. Uses a cook-chill process to produce food for inventory and from that inventory. They supply 8 institution or approximately 12000 meals per production day with nutritionally balanced fresh meals, purchasing from local vendors whenever possible. Goals include: Keep producing nutritionally balanced, safe, cost-effective foods to prison institutions.	Sourcing from over ten local vendors, the prison spends about \$60,000 a year on local foods, making up 30 percent of their food purchases. The prison system goes beyond produce by sourcing local beans, breads, cereal, eggs, meat, and milk, as well. It has also built a greenhouse on prison grounds for the prison inmates, to increase produce consumption within the prison while offering inmates the opportunity to gain job-training skills in gardening and food production.	46
Monroe/ Stafford Creek, WA	Washington State Farm to Prison	Washington State Department of Corrections	Locally sourced fresh, Washington-grown produce and food items were brought into the procurement stream for the two facilities. The program was designed to impact on not only inmate nutrition but also on recidivism rate, as well as broader economic and environmental issues including food packaging, carbon emissions, and local economic stability. Since 2012, the correctional facilities continue to ensure the availability of fresh and local produce, but have shifted from locally procured sources to growing produce in-house.	From 2010 through 2012, local foods were integrated into prison cafeterias, offering inmates an opportunity to consume healthier locally grown food options and saving the correctional facilities about 20% on their food budget spending.	45
Monroe, WA	Sustainability in Prisons Project (SPP)	Monroe Correctional Complex	Expansive vermiculture program for its inmates. The program offers education in sustainability and vocational training for its housed offenders, who repurpose discarded materials into homes for more than 5 million worms	Processes thousands of pounds of food scraps every month. This processing, in turn, reduces food waste disposal costs and produces castings (worm manure) that create high-quality organic fertilizer.	48
OR	Healthy Food Access Project	Women's Coffee Creek Correctional Facility	Program objectives: -Expand existing CCCF garden and integrate inmate-grown, fresh produce into menus. -Change menus: Increase availability of fresh fruits and vegetables, adjust caloric intake to be gender appropriate, display	No evaluation exists as of date	49

			<p>calorie information during meal time, offer healthier options at canteen and celebrations</p> <p>-Provide onsite training to help women develop gardening and other food system skills by...</p> <ol style="list-style-type: none"> <li>1. Inmate education</li> <li>2. Menu labeling and coding of items on canteen list</li> <li>3. Job training in food production &amp; preparation</li> </ol>		
MI	Buy Michigan First	Michigan Department of Corrections	<p>Going against the popular idea of prison privatization, the Michigan Department of Corrections ended its reliance on contracted food vendors and now incorporates locally grown produce into its prisons' cafeterias.</p>	<p>The facilities feed over 43,000 inmates daily, and now purchase over 4 million pounds of potatoes a year in addition to a variety of other vegetables from local farmer. The prison cafeteria menu includes locally grown potatoes, carrots, collard greens, corn, cabbage, and beets. Not only has this initiative increased the availability of fresh and local produce available in prison cafeterias, the local purchases have helped reduce the cost of the average inmate meal from \$2.69 to \$2.25.</p>	45
CT (based in)	Harvest Now	Harvest Now	<p>Through partnering with the Department of Corrections and creating grow-to-donate gardens within correctional facilities, not only do we seek to create strong food systems and benefit local food banks and shelters, but to also improve the wellbeing of inmates by providing fresh food for their own cafeterias, training for post-release job opportunities, and a source of pride and therapeutic outlet while serving their time.</p>	<p>Since 2008, Harvest Now has expanded to 18 states and 85 prisons through a strong partnership with the Department of Corrections. Together we've produced over 300,000 pounds of food for families in communities that struggle with food insecurity, and every year we continue to expand our reach.</p>	50
hospitals nationwide	Partnership for a Healthier America	Hospital Healthier Food Initiative	<p>Ensures that hospital patients, their families and all the people who care for them have healthful meal options that meet high standards for nutrition, labeling, marketing and food preparation.</p>	<p>In all, approximately 700 hospital partners (10 percent of all hospitals nationwide) have stepped up to commit to those standards, from healthcare giant Kaiser Permanente to smaller systems such as El Camino Hospital in the Silicon Valley.</p>	51
hospitals nationwide	Health Care Without Harm's Healthy Food in Health Care	Healthy Food in Healthcare	<p>Dedicated staff at health care facilities across North America are implementing policies and programs that support sustainable food systems using an environmental nutrition framework. The initiatives hospitals are engaged in include:</p> <ul style="list-style-type: none"> <li>-The purchasing of locally grown and produced food and beverages (79%)</li> <li>-The creation of healthy food access programs including hosting of farmers markets (50%) and hosting onsite CSA program for patients, employees, and/or community residents (28%)</li> </ul>	<p>1/3 of hospitals are part of network</p> <ul style="list-style-type: none"> <li>69% reduced meat served</li> <li>69% choosing meat raised without antibiotics</li> <li>70% purchased sustainable foods</li> <li>79% purchased local foods</li> <li>14% have food/veg subscription programs</li> <li>26% make grants to support healthy food thru community benefit programs</li> </ul>	52

			<ul style="list-style-type: none"> <li>-Utilizing their community benefit programs to promote healthy food access/healthy food systems in their community through grants to the community (12%) and other financial investments (14%)</li> <li>-Supporting local food production through off-site community gardens or farms (22%), and growing food on their campuses for their cafeterias and for community members (19%)</li> <li>-Connecting their clinical care to their patients food and nutrition needs through fruit and vegetable prescription programs (14%)</li> </ul>		
OR	Northwest Food Buyers Alliance	Ecotrust	A peer-to-peer network of food service directors from all kinds of institutions: schools, hospitals, higher education, assisted living, corrections, and corporate cafes. Members go on farm and institutional kitchen tours, and meet quarterly to share strategies on how to source locally at institutional levels.	No evaluation exists as of date	57
OR	FoodHub	Ecotrust	One of the earliest tools designed to connect farmers, ranchers and fishers directly with local chefs, restaurateurs and foodservice directors.	Like an online dating site for the local food trade, for nearly 10 years FoodHub helped connect farmers, ranchers, fishermen and specialty producers with wholesale food buyers in their region. The online platform was retired in 2018 after a massive host failure.	58
OR	Food Forums	Ecotrust/Whole Foods Market	Designed to bring together leading thinkers to dig deeply into the mechanics of the regional food system, stirring up opportunities for closer relationships and shared initiatives. This three-part event series was designed to engage leaders in digging deeply into the challenges and transformation of our regional food system.	No evaluation exists as of date	59
New England	New England Farm to Institution Metrics Project	Farm to Institution of New England (FINE)	A six-state network of nonprofit, public, and private entities working collaboratively to achieve a mission of strengthening the food system by increasing the amount of New England-grown and processed food served in our region's institutions. FINE has focused on developing cross-sector connections between K-12 schools, colleges and universities, hospitals, and other institutions. Today, FINE serves those at the forefront of the farm-to-institution movement in the region, providing a forum to connect and share ideas, models, resources, and support. FINE leads projects related to key issues identified by farm-to-institution leaders and acts as the backbone organization for farm-to-institution work in the region.	Across the six New England states, institutions spend a total of more than \$78 million per year on local food and an estimated 3.8 million people eat at institutions served by FINE. According to those New England-based distributors FINE surveyed, together they moved over a billion dollars of food in 2012, of which \$366 billion was sold to institutions. Nearly 90 percent believed sales of local food to institutions will continue to increase.	60

Nationwide	Good Food Purchasing Program	Center for Good Food Purchasing	<p>The Program provides a metric based, flexible framework that encourages large institutions to direct their buying power toward five core values: local economies, environmental sustainability, valued workforce, animal welfare and nutrition.</p> <p>Nutrition Vision: Promote health and well-being by offering generous portions of vegetables, fruit, whole grains and minimally processed foods, while reducing salt, added sugars, saturated fats, and red meat consumption, and eliminating artificial additives.</p> <p>Through the Program, the Center works with institutions to establish supply chain transparency from farm to fork, evaluate how current purchasing practices align with the Good Food Purchasing Standards, assist with goal setting, measure progress, and celebrate institutional successes in shifting towards a values-based purchasing model.</p>		62
Hardwick, Vermont	JustCut	Center for an Agricultural Economy/Vermont Food Venture Center	<p>For the last four years, the CAE has been moving local produce to institutional markets. We aggregate and process root and storage crops to advance farm viability and food accessibility for all. Our goals for this program are twofold:</p> <ol style="list-style-type: none"> <li>1. We strive to provide a fair price to our farmers, and pay in a timely fashion, with the aim of diversifying their markets into institutional food service settings.</li> <li>2. We work with values-based institutional buyers, to help leverage their buying power to support our working landscapes, and to reach the constituents and consumers who eat in their cafeterias and dining halls.</li> </ol>	<p>As of October 2019, JustCut already passed the processing totals of 2018, weighing in at over 110,000 lbs. of raw produce processed. The program also delivers numerous other positive impacts in line with the Center for an Agricultural Economy's mission:</p> <ol style="list-style-type: none"> <li>1. Production of Just Cut products creates food processing jobs in the Hardwick community.</li> <li>2. The need for significant volumes of produce and the work of CAE staff to recruit farms as contract growers creates markets and reduces risk for local farms.</li> <li>3. Co-branding with the farms who grow the crops for the Just Cut products positively reinforces their brand with institutional purchasers and creates or strengthens existing wholesale relationships.</li> <li>4. As goals for local sourcing increase across many institutions, Just Cut offers an easy way to meet procurement targets without dramatically increasing prep costs.</li> <li>5. Incubator clients can take advantage of bulk purchasing for Just Cut production to obtain better pricing for some of their ingredients.</li> </ol>	61

				6. Where appropriate, CAE staff cross-promote the products of incubator clients to Just Cut purchasers, a valuable marketing boost for any new food business.	
Charlottesville, VA	Hydroponic Farms	Commonwealth Senior Living	The provider recently partnered with Charlottesville, Virginia-based Babylon Micro-Farms to build indoor microfarms with the capacity to grow up to 5,800 plants a year and 45 different leafy lettuces, edible flowers and herbs. Through an app, Babylon guides Commonwealth’s dining service directors and associates through the seeding, planting, harvesting, cleaning process.	Commonwealth has been able to trim the money it spends on fresh lettuce and produce, which can lie anywhere between \$750 to \$1500 a month for a typical community. “Based on the overall cost of what we we’re purchasing from farms or from mainline vendors, this has reduced our cost probably by about 10% to 15%,” Raymond said. “And, we’ve eliminated a 50- to 60-mile round trip [for deliveries] 52 times a year.”	53
CA	Cloud Kitchen	Priya Living	Cloud kitchens — also referred to as “ghost kitchens” or “dark kitchens” — are restaurants that lack a dining room and don’t have a physical storefront. The food is cooked in the kitchen and then delivered to or catered at other sites. Priya Living uses Chef, an offsite “cloud kitchen” service that makes and delivers food to residents on demand. The provider uses Chef in place of a more traditional commercial kitchen or onsite senior living dining program. Chef delivers refrigerated, prepackaged meals to residents three times a week.	While residents pay for the service, each meal costs just \$8 to \$10. The provider’s communities in Fremont and Santa Clara, California, have monthly rates for residents between \$2,500 and 3,000, before you add in any other services. Looking ahead, Paul expects more senior living providers — particularly those in urban markets — to explore using cloud kitchens to supplement or even replace their in-house dining programs.	53
CT	The Maplewood Culinary Sensory Experience	Maplewood Senior Living	Involvement of all five senses—smell, taste, hearing, touch and sight—is necessary to enhance quality of life for everyone, and specifically seniors as they age. To accomplish these sensory goals, the culinary team uses fresh, locally sourced ingredients in accordance with the seasons. This practice offers peak nutrition for residents and creates dishes that charm with taste and aroma as well as presentation. The 48-acre farm in Eastport provides some fresh produce that is augmented with local farms and fisheries at each of the communities.	No evaluation exists as of date	55
IL	Farm-To-Table in Senior Living	Presbyterian Homes	Introducing locally grown, uber-fresh "farm-to-table" ingredients to the menus at each of its senior living communities in IL. They have established relationships with small, 10-15 acres farms in Buffalo Grove and Libertyville.	No evaluation exists as of date	56
VA	Farm at Willow Run	Virginia Mennonite Retirement	For the ultimate in freshness, flavor and nutritional value, we use in-season vegetables and herbs grown at their very own Farm at Willow Run. They also buy local as often as possible, supporting	The Farm at Willow Run has lowered the bill and put a larger bounty than usual on the kitchen chopping blocks. By mid-October, VMRC hopes to	54

		Community	Harrisonburg-area farmers and food producers.	reach a yield goal from the farm equal to \$24,000 of produce.	
--	--	-----------	---	--	--

## Discussion

All the programs listed in Table III present strong evidence for the aforementioned recommendations. There are many effective nutrition and institution related programs that exist throughout the US. Research focused on prison, hospital, and senior home programs. There were also programs that branched large institutions to small farms, as well as gleaning initiatives, which is the process of collecting and distributing what farmers cannot sell.<sup>42</sup>

The gleaning programs were part of the Salvation Farms of Vermont, a federally recognized non-profit organization working to increase local farm food consumption. One of their programs, the Vermont Gleaning Collective, hopes to collaborate as a state-wide partnership of community-based programs that glean and work in solidarity to support farmers, residents, and the food system.<sup>43</sup> The program has proved to be effective, already reducing Vermont's on-farm food loss by 442,194 pounds, distributing 1,326,582 servings of farm-fresh crops, and providing work training to 17 underemployed individuals.<sup>43</sup> In addition, Salvation Farms has a Lamoille Valley Gleaning program made up of 215 volunteers. The volunteers have already collected 53 types of fruits of vegetables from 19 farms, and distributed 210,501 servings of crops to 31 sites.<sup>42</sup> Clearly, gleaning programs are effective at dispersing locally grown foods and promoting healthy eating practices.

Salvation Farms went a step further now expanding opportunities for individuals with employment barriers through the Vermont Commodity Program.<sup>44</sup> In this program, individuals aggregate, clean, quality-assess, process, and package large volumes of Vermont surplus produce.<sup>44</sup> In 2018,390 servings of produce from 9 farms moved through the program, getting distributed to 18 sites, with 23% being moved out of state.<sup>44</sup> In addition, Salvation Farms partnered with the Vermont Department of Corrections to integrate 3 greenhouses into the Northeast Regional Correctional Facility's cafeteria, offering inmates hands-on food processing job experience.<sup>45</sup> Salvation Farms has helped inmates plant, grow, harvest, and process 141,000 pounds of 6 different crops, with 2,000 being incorporated into prison cafeterias, and the rest being distributed to various food banks, school, and institutions.<sup>45</sup>

Just like at Salvation Farms, there are many prison programs throughout the nation that have similar aims of giving job experience to the incarcerated and providing healthier meals in prison cafeterias. The vast number of these programs show that they are effective at promoting local food consumption. Montana Women's Prison has a Prison Farm to Cafeteria program that puts locally grown produce on the menu to increase both life-skill training and nutritional intake among inmates.<sup>46</sup> The prison supplies 8 institutions with fresh meals from local vendors, serving 12,000 meals per day.<sup>46</sup> It also has a greenhouse on the grounds to increase produce consumption and job-training skills.<sup>46</sup> In San Diego, California, the Richard J. Donovan Correctional Facility created the Farm and Rehabilitation Meals (FARM) program, which has built a 3 acre farm on prison grounds with 20 trained inmates tending to it.<sup>47</sup> The farm produces fruits and vegetables for consumption in prison cafeterias, while surpluses are donated to local food banks. It cost only \$4,000 to establish, and funded entirely by private donors.<sup>47</sup> Washington State's Department of Corrections developed two

programs at the Monroe and Stafford Creek Correctional Complexes. One of the programs created in 2012, Washington State Farm to Prison, brought in locally sourced Washington-grown produce and food items into the two facilities, saving 20% on their food budget spending.<sup>45</sup> The program aimed to not only impact inmate nutrition but also the recidivism rate, as well as broader economic and environmental issues.<sup>45</sup> Today, the facilities have expanded to also grow produce in-house.<sup>45</sup> Another program at Monroe, the Sustainability in Prisons Project (SPP), offers education in sustainability and vocational offenders, who repurpose discarded materials into homes for more than 5 million worms, processing thousands of pounds of food scraps every month into fertilizer.<sup>48</sup>

In Oregon, the Healthy Food Access Project at the Women's Coffee Creek Correctional Facility hopes to expand its existing garden and integrate inmate-grown produce into menus, in addition to providing onsite training to women to help them develop food system skills.<sup>49</sup> The program also wants to adjust caloric intake to be gender appropriate, display calorie information, and offer healthier meal options.<sup>49</sup> A program at the Michigan Department of Corrections, Buy Michigan First, avoids prison privatization by ending its reliance on contracted food vendors, incorporating locally grown produce into prison cafeterias.<sup>45</sup> Not only has this initiative increased the availability of fresh produce, but the local purchases reduced the cost of a meal from \$2.69 to \$2.25.<sup>45</sup> Finally, Harvest Now, a program based in Connecticut, partnered with the Department of Corrections to create grow-to-donate gardens, seeking to create strong food systems, benefit local food banks, and improve the wellbeing of inmates.<sup>50</sup> Since 2008, the program has expanded to 18 states and 85 prisons, producing over 300,000 pounds of foods for food insecure families.<sup>50</sup>

There were no hospital programs found in a particular state, only programs existing in various hospitals nationwide. One of these programs is the Partnership for a Healthier America by the Hospital Healthier Food Initiative group. The program ensures that patients and families have healthy, nutrient dense meal options.<sup>51</sup> There are nearly 700 hospital partners (10% of all hospitals nationwide) that have committed to these standards.<sup>51</sup> Another program, Healthcare Without Harm's Healthy Food in Health Care, tries to support sustainable food systems through an environmental nutrition framework.<sup>52</sup> Some of its initiatives include: the purchasing of locally grown and produced food and beverages (79%), creation of healthy food access programs (78%), community grants (12%), supporting local food production through off-site gardens or farms (22%) or growing food on campus (19%), and connecting clinical care to fruit and vegetable nutrition programs (14%).<sup>52</sup>

Various senior homes across the nation have also begun to incorporate farm-fresh meals into their facilities. For example, in Charlottesville, Virginia, Commonwealth Senior Living has partnered with Babylon Micro-Farms to build indoor hydroponic farms with the capacity to grow up to 5,800 plants a year.<sup>53</sup> Commonwealth has been able to reduce spending on fresh produce by about 10% to 15%, as well as eliminate a 50-mile round trip for deliveries 52 times a year.<sup>53</sup> Another senior care home in Virginia, the Virginia Mennonite Retirement Community, established its own Farm at Willow Run, growing in-season vegetables and herbs, as well as buying local as often as possible.<sup>54</sup>

At Maplewood Senior Living in Connecticut, the facility tries to establish a "culinary sensory experience" for its seniors to enhance their quality of life, as seniors tend to gradually lose their 5 senses.<sup>55</sup> The culinary team uses fresh, locally sourced, seasonal

ingredients offering peak nutrition, taste, aroma, and presentation to residents.<sup>55</sup> In Illinois, Presbyterian Homes uses a farm-to-table program to introduce local ingredients to each of its living communities, establishing partnerships with small, 10-15-acre farms.<sup>56</sup>

“Cloud” or “ghost” kitchens, have also been gaining popularity.<sup>53</sup> Priya Living, a senior care facility in California, uses Shef, an offsite cloud kitchen service that makes and delivers food to residents on demand. Each meal costs between \$8 and \$10.<sup>53</sup> This might be an option for institutions to get local food cooked and delivered to supplement or replace an in-house dining program.

Lastly, there were many programs across states connecting institutions to local food. Ecotrust, an Oregon-based nonprofit that works to advance farm-to-institution initiatives in the Pacific Northwest, has multiple such programs.<sup>57</sup> For example, the Northwest Food Buyers Alliance is a peer-to-peer network of food service directors from institutions such as schools, hospitals, universities, assisted living facilities, correctional facilities, and corporate cafes.<sup>57</sup> Members go on farm and institution kitchen tours, and meet quarterly to share strategies on how to source locally at institutional levels.<sup>57</sup> Another one of their programs, FoodHub, is a web tool designed to connect farmers directly with foodservice directors.<sup>58</sup> Although retired in 2018, the online platform was active for nearly 10 years.<sup>58</sup> One more of Ecotrust’s programs, Food Forums, was designed to bring together leading thinkers to address problems such as scale-appropriate institutional purchasing and the challenges of their regional food system.<sup>59</sup>

The New England Farm to Institution Metrics Project also brings together large institutions to strengthen the food system and to increase the amount of New-England-grown and processed food.<sup>60</sup> The organization leading this project, Farm to Institution of New England (FINE), is at the forefront of the farm-to-institution movement in the region, providing a forum to connect and share ideas.<sup>60</sup> Across the six New England states it serves, institutions spend more than \$78 million per year on local food with 3.8 million people eating at institutions served by FINE.<sup>60</sup> Another farm-to-institution project, JustCut by the Center for an Agricultural Economy (CAE) of Hardwick, Vermont, has been moving local produce to institutional markets for the past four years.<sup>61</sup> JustCut acts as a shared-use processing hub and a home for small food businesses, farmers, and producers.<sup>61</sup> As of October 2019, JustCut already passed the processing totals of 2018 at 110,000 lbs. of raw produce processed.<sup>61</sup> The program has positive impacts in line with the CAE’s mission such as: the need for significant volumes of produce to create markets for local farms, co-branding with farms to reinforce their brand with institutional purchasers and strengthen wholesale relationships, and offering an easy way to meet procurement targets without dramatically increasing prep costs.<sup>61</sup> Nationwide, the Center for Good Food Purchasing created the Good Food Purchasing Program that “encourages large institutions to direct their buying power toward five core values: local economies, environmental sustainability, valued workforce, animal welfare and nutrition.”<sup>62</sup> Their nutrition vision is to promote health and well-being through generous portions of vegetables, fruit, and whole grains.<sup>62</sup> The Center works with institutions to establish supply chain transparency from farm to fork, shifting towards a values-based purchasing model.<sup>62</sup>

**Table IV: People and Organizations**

Organization	Relevant Work
Farm and Rehabilitation Meals (FARM) program	Hopes that FARM will improve inmate nutrition and health through the increase of available fresh produce, while decreasing the prison recidivism rate through sustainable agriculture job training.
Salvation Farms	A federally recognized non-profit with a mission to build increased resilience in Vermont’s food system through agricultural surplus management. Works with farmers, partners, and community members to move wholesome crops that have no market to those in need of nourishment. Salvation Farms is working toward a future where communities are increasingly fed by local farms. 2 goals: 1. Create an agricultural surplus clearing house to capture and facilitate the movement of Vermont’s agricultural surplus fruit, vegetables and meat to make them available to institutions (such as hospitals, nursing homes, schools, correctional facilities) and general public who are in need of charitable assistance in meeting basic nutritional needs; and 2. Develop and educate the general public around programs, systems, and policies enhancing and supporting community food security, particularly for members of the general public and institutions in need of assistance to meet basic nutritional needs.
Harvest Now	A Connecticut-based organization that operates in more than 85 prisons across multiple states and aims to alleviate hunger in underserved communities by cooperating with correctional facilities.
Ecotrust	An Oregon-based nonprofit that works to advance farm-to-institution initiatives in the Pacific Northwest. Goals: First, they aim to sway large institutions with huge food budgets to leverage their purchasing power in support of small and mid-sized regional farmers, ranchers, and fisherman as a way to boost the local economies. And to pivot away from consolidated global distributors like Sysco. Second, to open up access to healthy, local, and sustainable food for the populations generally served by public institutions.
Center for Good Food Purchasing	Wants to take the proven rigorous institutional food purchasing policy national
Montana State Prison - Deerlodge farm to cafeteria program	The MCE Food Factory is a central kitchen that uses a Cook-Chill process to produce food for inventory and from that inventory we supply 8 institution or approximately 12000 meals per production day with nutritionally balanced fresh meals. Whenever possible they purchase food items from local vendors.
VFVC	The Vermont Food Venture Center is owned and managed by the Center for an Agricultural Economy (CAE), whose mission is “to build a regenerative, locally based, healthy food system by engaging the greater Hardwick community through collaboration opportunities, educational outreach and providing infrastructure.” The VFVC was built to help create jobs in the agricultural economy. It acts as a shared-use food processing hub and a home for small food businesses, farmers, and producers. It plays host to everything from food safety trainings to local student projects student projects. As of December 2016, the VFVC has 36 participating businesses, primarily producing value added products for the direct-to-consumer retail market.
FINE	Farm to Institution New England is a six-state network of nonprofit, public, and private entities working collaboratively to achieve a mission of strengthening the food system by increasing the amount of New England-grown and processed food served in our region’s institutions. Since its inception, FINE has focused on developing cross sector connections between K-12 schools, colleges and universities, hospitals, and other institutions. Today, FINE serves those at the forefront of the farm-to-institution movement in the region, providing a forum to connect and share ideas, models, resources, and support.

**Discussion**

Various contacts were found related to state programs researched. These contacts were mainly program directors who were doing innovative work in the nutrition field that related to the proposed recommendations.

## Bibliography

1. Kessler DA. The Evolution of National Nutrition Policy. 1995.
2. Mozaffarian D, Rosenberg I, Uauy R. History of modern nutrition science-implications for current research, dietary guidelines, and food policy. *BMJ*. 2018;361:k2392. doi:10.1136/bmj.k2392
3. Senate. *Charter Schools Provide Transp. & Food.*; 2019.
4. House. *Free Breakfast and Lunch in K-12 Public Schools.*; 2019.
5. House. *Eliminate Reduced Cost School Meals.*; 2009.
6. House. *Eliminate Student Cost Reduced-Price Breakfast.*; 2012.
7. House. *Healthy Foods in Our Schools.*; 2017.
8. House. *Funds for Child Nutrition Stnds.*; 2012.
9. House. *School Nutrition Program Funds.*; 2009.
10. House. *Nutrition Stds./All Foods Sold at School.*; 2009.
11. House. *Limit Foods in School Vending Machines.*; 2009.
12. House. *Healthy Eating/Physical Activity/Child Care.*; 2009.
13. House, Senate. *Legislative Task Force on Childhood Obesity.*; 2011.
14. House. *Update Statewide Nutrition Standards.*; 2010.
15. House. *Funds/Tech. Assistance/Healthy Lifestyle.*; 2009.
16. Senate. *Small Farms to Healthier Schools Initiative.*; 2018.
17. House. *Healthy and High-Performance Schools.*; 2015.
18. Senate. *Sustainable Local Food Policy Council/Goal.*; 2009.
19. House. *Corner Store Initiative.*; 2017.
20. House. *Relating to Food Utilization; Appropriating Money; Declaring an Emergency.*; 2007.
21. House. *Relating to Oregon Farm-to-School and School Garden Program.*; 2009.
22. House. *Local Foods in Schools.*; 2013.
23. House. *Relating to School Food Programs; Declaring an Emergency.*; 2015.
24. House. *Relating to Vending Machines Located in Public Buildings; Declaring an Emergency.*; 2013.
25. House. *Relating to the Farm-to-School Grant Program; and Declaring an Emergency.*; 2019.
26. *The Roza Mclaughlin Farm-to-School Program.*; 2007.
27. *Local Foods Grant Program.*; 2007.
28. *Farm Assistance; Secretary of Agriculture, Food and Markets.*; 2017.
29. *Farm-to-School Program.*; 2008.

30. House. *Promoting Student Health and Readiness through Meal and Nutrition Programs.*; 2018.
31. House. *Relating to the Oregon Food Policy Council.*; 2007.
32. House. *Urging Support for Statewide Food Systems Council.*; 2011.
33. *Farm-to-Plate Investment Program.*; 2009.
34. Senate . *Agricultural Economic Development.*; 2011.
35. House. *Continuing the Work of the Washington Food Policy Forum.*; 2019.
36. Andersen L. D.C. Council Bill Would Ban Bacon in Hospitals. *Physicians Committee for Responsible Medicine*. October 22, 2019.
37. Hoylman B. *An Act to Amend the Public Health Law, in Relation to Offering Plant-Based Food Options in Hospitals.*; 2019.
38. House. *Relating to Plant-Based Meals.*; 2019.
39. House. *Relating to Food Services at Residential Facilities.*; 2017.
40. Senate. *Relating to State Financial Administration; Appropriating Money.*; 2012.
41. *Food Services Program.*; 2000.
42. Lamoille Valley Gleaning. *Salvation Farms*. 2018. <https://www.salvationfarms.org/wp-content/uploads/2019/05/LVG-2018.pdf>. Accessed July 27, 2020.
43. Salvation Farms. Vermont Gleaning Collective. <http://vermontgleaningcollective.org/>. Accessed July 27, 2020.
44. Vermont Commodity Program. 2018.
45. Bulger M. Six U.S. Correctional Facilities With “Farm to Prison” Local Food Sourcing Programs. *Smart Cities Dive*. <https://www.smartcitiesdive.com/ex/sustainablecitiescollective/six-us-correctional-facilities-farm-prison-local-food-sourcing-programs/1033746/>. Accessed July 27, 2020.
46. Farm to Prison Programs. <https://farmtocafeteria.ncat.org/overlay/correctional.htm>. Published 2013. Accessed July 27, 2020.
47. Richard J. Donovan Correctional Facility (RJD). California Department of Corrections and Rehabilitation. <https://www.cdcr.ca.gov/facility-locator/rjd/>. Accessed July 27, 2020.
48. Castellanos J. Using Worms to Reduce Food Waste Costs at the Monroe Correctional Complex. *Foodtank*. January 2014.
49. Braun M, Sazie E, Drach L, Rutt D. Creating a Healthier Food Environment for Incarcerated Women in Oregon. Presented at the:
50. Harvest Now. <http://harvest-now.net/>. Published 2013. Accessed July 27, 2020.
51. Partnership For A Healthier America. Our Partners. [https://www.ahealthieramerica.org/our-partners?impact\\_area=&initiative=hospital-healthier-food-initiative&q=](https://www.ahealthieramerica.org/our-partners?impact_area=&initiative=hospital-healthier-food-initiative&q=). Accessed July 27, 2020.
52. Healthcare Without Harm. 2019 health care food trends. Medium. <https://medium.com/@HCWH/2019-health-care-food-trends-77994ade7fa8>. Published November 13, 2019. Accessed July 27, 2020.
53. Regan T. Rising Trends in Senior Living Dining: Cloud Kitchens and On-Site Microfarms. *Senior Housing News*. <https://seniorhousingnews.com/2019/12/04/rising-trends-in-senior-living-dining-cloud-kitchens-and-on-site-microfarm/>.

Published December 4, 2020. Accessed July 27, 2020.

54. McColl S. Farm-to-Table Dining Hits the Retirement Home. Take Part. <http://www.takepart.com/article/2015/08/12/elder-care-farm-table/>. Published August 12, 2015. Accessed July 27, 2020.
55. Fernland S. Maplewood Senior Living. Edible Cape Cod. <https://ediblecapecod.ediblecommunities.com/recipes/maplewood-senior-living>. Published August 29, 2019. Accessed July 27, 2020.
56. CES Public Relations and Communications. Presbyterian Homes Introduces Farm-to-Table Harvest to Dining. Patch. <https://patch.com/illinois/evanston/presbyterian-homes-introduces-farm-table-harvest-dining-0>. Published September 14, 2014. Accessed July 27, 2020.
57. Local protein purchasing resources for institutional food buyers. Ecotrust. <https://ecotrust.org/project/local-proteins/>. Accessed July 28, 2020.
58. FoodHub helped set the stage for connections. Ecotrust. <https://ecotrust.org/project/foodhub/>. Accessed July 28, 2020.
59. Food Forums: Engaging in Our Food System - Ecotrust. <https://ecotrust.org/project/food-forums/>. Accessed July 29, 2020.
60. New England Farm to Institution Metrics Project. FINE. <https://www.farmtoinstitution.org/metrics>. Accessed July 28, 2020.
61. Brooks N. Food Processing Case Study: Business Incubator Builds In-House Wholesale Processing. January 2017.
62. Good Food Purchasing Program. Center for Good Food Purchasing. <https://goodfoodpurchasing.org/program-overview/>. Accessed July 28, 2020.