

"Food Security in the Northeast US"

John Eshleman and Kate Clancy February 9, 2015

Introduction

"Enhancing Food Security in the Northeast" (EFSNE) is a five-year multidisciplinary research project with the primary goal of determining whether greater reliance on regionally produced food could improve food access in low-income communities, while also benefitting farmers, food supply chain firms and others in the Northeast food system. The project assesses all the food currently produced in the region and measures the capacity to produce and distribute a subset of foods (called the 'market basket') for future consumption in the Northeast. The project employs a systems approach, engaging the entire food chain from production to consumption. It represents a collaborative effort among researchers from a range of disciplines and community leaders in eight rural and urban locations across the Northeast where the research is conducted and applied. A large portion of the EFSNE work occurs in specialized project teams that explore a specific segment of the food system—primarily consumption, distribution, and production—along with concurrent efforts to link across teams in a transdisciplinary systems approach.

The purpose of this document is to provide context and background about low-income consumers in the Northeast region. A fundamental goal of the project is to improve food access in low-income communities. This narrative presents secondary data about this population in the Northeast, often comparing findings across states or with the US as a whole. The EFSNE project is the first of its kind in scale, breadth, and approach to analyzing a regional food system, and this document is intended to present a basic description of one of the project's intended stakeholders, low-income consumers.

Demographic Profile

Approximately 21% of the US population lives in the Northeast region. Relative to the US as a whole, the region's population is slightly older with a lower percentage of black and Hispanic inhabitants (see Table 1, page 7). The profile of the region shows great variation in racial makeup when viewed from the state-level. The Mid-Atlantic states of Delaware, Maryland, New Jersey, New York, and Pennsylvania include a high proportion of the region's black population, while relatively few African-Americans live in the New England states. New Jersey and New York also have the highest number of Hispanic residents, and these two states are the only in the region with proportions of Hispanics higher than the national average.

Household median income in the Northeast region is about \$5,500 higher than the national average (see Table 1, page 7). Only West Virginia (\$38,380) and Maine (\$46,933) have median incomes below the national level of \$51,914, and five of the US's top six states in median income are located in the region, including Maryland with the highest state median income level in the country. However, 68% of the region's counties fall below the national average median income. Income levels are particularly low in West Virginia, where 17 of the poorest 20 counties in the region are located. These findings are also reflected in both poverty and child poverty rates, as West Virginia has the highest proportion of residents living below the poverty line for both measures.

Overall, 48% of counties in the Northeast have poverty rates equal to or above the national average of 13.8%, including seven counties with poverty rates of 25% or higher. These high poverty counties include both rural (e.g. McDowell County, West Virginia) and urban (e.g. Baltimore County, Maryland) areas. In addition, both New York and West Virginia report child poverty rates above the national average of 19.2%, and 53% of the region's counties are above the national figure. Thirty-one of these counties have child poverty rates of 30% or higher, many of which are located in southern West Virginia, as well as three counties in western Pennsylvania plus Baltimore, MD and the District of Columbia.

Food Environment

The USDA Economic Research Service (ERS) measures the proportion of people who have low access to grocery stores and supermarkets. Low access to food stores indicates that in urban areas the person lives more than a mile from a store and in rural areas more than 10 miles. In the

Northeast region, 20% of the population is considered low access, with the highest totals from the New England states of Connecticut (29%) and Massachusetts (28%) (see Table 2, page 8). Low access to food stores is most problematic for low-income consumers, as these food shoppers have limited resources to travel to stores. In the Northeast, 4% of the population qualifies as low-access and low-income based on the ERS measures, compared to 6% of the US as a whole.

The availability of stores that accept Supplemental Nutrition Assistance Program benefits (SNAP) and Women, Infants, and Children (WIC) benefits is also important for low-income food access. Table 2 (page 8) shows the number of SNAP- and WIC-approved stores per 10,000 people in the Northeast region for both 2008 and 2011. The Northeast has a higher number of SNAP stores and lower number of WIC stores per person relative to the US as a whole. The two states with the lowest median income in the region, Maine and West Virginia, also have the highest number of stores that accept SNAP and WIC benefits. Between 2008 and 2011, the number of SNAP-approved stores increased by 31% in the Northeast, compared to only 25% in the nation as a whole. State-level increases in stores accepting SNAP varied from 13% (Maine) to 49% (Connecticut, Delaware, and Maryland). In the same time span, Northeast stores accepting WIC have increased 13%, but this change is mostly driven by a remarkable increase of 732% in Vermont. Five states have actually decreased the number of stores that accept WIC, reflecting a similar trend of the US total, which declined 8% from 2008-2011. One potential explanation for these decreases is the nationwide decline in WIC eligibility, which is closely coupled with declining birth rates in each year since 2007 (Oliveira 2014). WIC advocates also stress the need for technological upgrades that allow more stores to accept the electronic benefit transfer (EBT) card and increased funding appropriations for WIC that reflect current economic conditions for eligible participants (National WIC Association 2014).

Food Security

The ERS has created a measure for food insecurity in the United States, collecting state-level data annually. ERS asks a series of questions to determine food insecurity, focusing the measure on the frequency with which households cannot access food because of a lack of resources (Coleman-Jenson et. al 2013). Households are determined to be of "low food security" when they report three or more food insecure conditions such as not being able to afford balanced meals or concern that their foodstocks will run out. "Very low food security" exists when three or more conditions of low food security measures are met and at least one household member's food intake was reduced because of a lack of financial resources.

The relatively higher median income in the Northeast corresponds with overall lower rates of food insecurity in the region. Eight states have significantly lower food insecurity prevalence than the national average of 15% of households, and only Maine and Rhode Island show rates higher than the national average (see Table 3, page 9). Similar trends are evident in households with "very low" food security. Most states in the region report significantly lower "very low" food insecurity than the US, with only Maine and Vermont meeting or exceeding the national average. However, the rate of increase in food insecurity in Northeastern states since the year 2000-02 measurement period is *higher* than national levels in nine of the twelve states in the region. This trend demonstrates the difficulty many low-income Northeastern residents have in maintaining food security. In other words, in many Northeastern states, food insecurity is not only increasing, but it is increasing at rates higher than the nation as a whole. New Jersey, Maine, and Connecticut show the largest increases since 2000-02, up almost 6% in each case. In addition, female-headed households and black and Hispanic households demonstrate higher rates of food insecurity across the US (Coleman-Jenson 2013).

SNAP, WIC, School Food Programs, and Emergency Food Pantries

Federal entitlement programs such as SNAP and WIC are designed to assist low-income families who may lack the necessary resources to access adequate food supplies on a regular basis. On average, the per state population receiving SNAP benefits in 2011 was 14.3% across the US and 13.6% among Northeast states (see Table 4, page 10). Several states in the Northeast report proportions of SNAP users above this national average, including Maine (19%), West Virginia (19%), New York (15%), Rhode Island (15%), and Delaware (15%). In addition, the proportion of people receiving SNAP benefits in the Northeast increased by 33% between 2009 and 2011, a rate higher than the national average, led by Rhode Island (57% increase) and New Jersey (50% increase). Historically, SNAP participation increases when the nation's economy declines, which may explain these decreases (Oliveira 2014). WIC participation rates are much lower than SNAP across the nation, as the average for all US states in 2011 was 2.6% and 2.2% in the Northeast. Participation in WIC has declined from 2009 to 2011 across the US and in each Northeastern state, averaging a 5% decline in the region.

The National School Lunch Program (NSLP) is a federal program designed to help schools serve meals that meet nutritional benchmarks at affordable prices, including free lunches to qualifying students. According to the ERS food atlas, 10 percent of the American population and 9 percent of the Northeast US population participated in the NSLP in 2011 (see Table 4). West Virginia and Delaware were the only two states in the region with participation rates higher than the

national average. On average, 38% of US students were eligible for free lunches because their family incomes were below 130 percent of the poverty level. In the Northeast region, states averaged free-lunch eligibility rates of close to 30%, indicative of higher median incomes and lower poverty rates within the region compared to the US as a whole. Only West Virginia and the District of Columbia reported free lunch eligibility above the national average. However, at the county-level, 33% of the region report free lunch eligibility rates above the national average, and 29 counties have free lunch eligibility rates of 50% or higher.

According to Feeding America, the US's largest hunger-relief network, agencies in their network provided emergency food supplies nationwide to 37 million people in 2009, 33% of which were children. They estimate serving 5.7 million clients in any given week through a vast network of food pantries, kitchens, and shelters. Feeding America estimates their network to include over 33,000 food pantries, 4,000 emergency kitchens, and 3,500 emergency shelters with hunger relief. Although data are not available for the entire region, Feeding America reports that in Vermont and Rhode Island 10% of the population accessed emergency food, with slightly lower rates in Massachusetts (9%), New Jersey (9%), and Maryland (6%).

Conclusion

Food insecurity is a problem that affects low-income consumers across the United States, including many residents of the Northeast region. Although some measures of income, food insecurity, and federal entitlement program participation are lower in the Northeast than the nation as a whole, the data presented in this report show that the Northeast is in no way immune to food insecurity.

References

Coleman-Jensen, A., M. Nord, and A. Singh. 2013. *Household Food Security in the United States in 2012*, ERR-155, U.S. Department of Agriculture, Economic Research Service, September 2013.

National WIC Association. 2014. "2014 Legislative and Funding Agenda: Summary." Accessed online: https://s3.amazonaws.com/aws.upl/nwica.org/legislative_agenda_2014_one_pager.pdf (April 17, 2014).

Oliveira, V. 2014. *Food Assistance Landscape: FY 2013 Annual Report*, EIB-120, U.S. Department of Agriculture, Economic Research Service, February 2014.

Child Poverty Population 2010 % Black % Hispanic Median Age Median income **Poverty rate** Rate Connecticut 3,574,097 \$67,740 9.2 12.2 10.1 13.4 40.0 Delaware 897,934 21.4 8.2 38.8 \$57,599 16.3 11 District of Columbia 601,723 50.7 9.1 33.8 \$58,526 18.5 29.6 1.2 17 Maine 1,328,361 1.3 42.7 \$46,933 12.6 Maryland 8.2 \$70,647 8.6 10.9 5,773,572 29.4 38.0 Massachusetts 6,547,629 9.6 39.1 \$64,509 10.5 13.2 6.6 New Hampshire 1,316,470 1.1 2.8 41.1 \$63,277 7.8 9.3 New Jersey 8,791,894 17.7 39.0 \$69,811 9.1 12.7 13.7 New York 19,378,102 15.9 17.6 38.0 19.9 \$55,603 14.2

5.7

12.4

1.5

1.2

12.6

16.3

10.8

5.7

1.0

3.4

11.8

12.6

40.1

39.4

41.5

41.3

39.2

37.2

\$50,398

\$54,902

\$51,841

\$38,380

\$57,570

\$51,914

12.4

12.2

11.1

17.4

11.9

13.8

17.3

16.7

13.7

23.8

16.4

19.2

Source: 2010 Decennial Census

Pennsylvania

Rhode Island

Vermont

West Virginia

Northeast Region

United States

Table 1: Demographic Indicators, Northeast region

12,702,379

1,052,567

625,741

1,852,994

64,443,463

308,745,538

Table 2: Food, SNAP, and WIC access across the Northeast region

	% Low Access	% Low Access, Low Income	SNAP stores/10,000 (2008)	SNAP stores/10,000 (2011)	% change SNAP stores, 2008-	WIC stores/10,000 (2008)	WIC stores/10,000 (2011)	% change WIC stores, 2008-
Connecticut	28.9	3.9	4.5	6.7	48.6	1.8	1.5	-15.5
Delaware District of	25.6	5.8	6.4	9.5	49.0	0.9	1.0	10.1
Columbia	2.8	1.0	6.9	8.0	16.4	0.4	0.4	3.4
Maine	13.6	3.7	12.0	13.6	13.3	2.7	2.7	1.0
Maryland	20.4	3.0	4.9	7.3	49.2	1.3	1.5	10.8
Massachusetts New	28.4	4.0	5.3	7.7	45.5	1.7	1.7	0.8
Hampshire	25.5	4.2	5.9	8.5	44.4	2.2	2.2	0.0
New Jersey	25.1	3.7	5.1	7.5	46.8	1.0	1.1	7.3
New York	12.6	2.5	7.2	9.3	28.4	1.9	1.8	-4.5
Pennsylvania	20.8	4.5	6.8	8.2	20.3	1.4	1.5	2.4
Rhode Island	26.1	5.7	5.7	8.3	45.9	1.3	1.2	-6.5
Vermont	11.9	3.1	8.1	11.4	41.1	0.3	2.5	731.5
West Virginia Northeast	17.4	6.3	12.1	13.8	14.2	2.7	2.4	-10.5
total	19.9	3.6	7.0	9.2	31.4	1.5	1.7	13.3
US Total	21.0	6.0	4.0	4.9	24.5	2.7	2.4	-8.1

Source: USDA ERS

food atlas

Table 3: Food Insecurity in Northeast States Percent Low or Percent Very % change in food security since 2000¹ Very Low Food Low Food **Security Security** Connecticut 13.4 4.9 5.8 Delaware 11.6 4.9 4.8 District of Columbia 12.0 4.5 2.7 Maine 14.9 7.1 5.9 Maryland 13.0 5.1 4.8 Massachusetts 4.2 5.0 11.4 9.9 New Hampshire 4.3 4.8 New Jersey 12.1 4.6 5.9 New York 13.2 5.0 3.8 Pennsylvania 2.9 12.3 4.8 Rhode Island 5.5 15.4 5.3 Vermont 12.7 5.6 3.7 West Virginia 14.2 4.9 4.8 **Northest Total** 11.9 4.6 n/a **United States** 3.9 14.7 **5.6**

Source: Coleman-Jenson et al. (2013)

	% SNAP participation, 2009	% SNAP participation, 2011	% Change SNAP participation, 2009-11	% WIC participation, 2009	% WIC participation, 2011	% change WIC participation, 2009-11	% NSLP participation, 2011	Free-lunch eligibility, 2010
Connecticut	7.3	10.6	44.1	1.7	1.6	-8.4	8.4	26.0
Delaware	10.3	14.9	44.8	2.7	2.5	-8.4	10.4	40.0
District of Columbia	17.2	21.8	26.7	2.9	2.7	-8.2	7.6	62.0
Maine	15.3	18.7	22.3	2.0	2.0	-2.2	8.2	34.0
Maryland	8.0	11.5	43.8	2.6	2.5	-1.5	7.5	31.0
Massachusetts	9.5	12.4	29.8	1.9	1.8	-6.8	8.2	27.0
New Hampshire	6.0	8.6	44.4	1.4	1.3	-6.7	8.2	18.0
New Jersey	5.7	8.6	49.9	1.9	1.9	-1.6	8.2	26.0
New York	11.9	15.4	29.7	2.7	2.6	-0.8	9.4	16.0
Pennsylvania	10.6	13.5	27.0	2.1	2.0	-2.2	9.1	31.0
Rhode Island	9.7	15.2	56.9	2.4	2.3	-4.4	7.5	35.0
Vermont	11.6	14.7	26.7	2.8	2.5	-9.7	8.8	28.0
West Virginia	16.8	18.6	10.9	2.9	2.6	-9.2	11.1	43.0
State avg (region)	10.2	13.6	32.6	2.3	2.2	-4.9	8.8	29.6
State avg (US)	10.9	14.3	30.7	2.8	2.6	-4.3	10.3	38.0

Sources: USDA ERS Food Atlas; Free and reduced lunch from National Center for Education Statistics: Common Core of Data (2009-2010)