



OPPORTUNITIES FOR INCREASING
ACCESS TO HEALTHY FOODS
IN WASHINGTON

A Report for the Access to Healthy Foods Coalition

JUNE 2010

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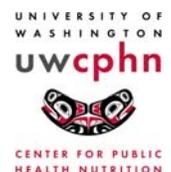


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CHAPTER 1

PURPOSE, DEFINITIONS AND FRAMEWORKS

The concepts that are explored in this report are complex. The project advisors and work team established definitions and frameworks to assure common understandings and guide the methods of data collection and analysis. The first part of the chapter provides:

- Purpose of the project.
- Definitions of healthy food, access to healthy food and food systems.

The major themes for the rest of the chapter are:

- Healthy food access is a component of many interrelated systems, and problems with food access require collaborative solutions.
- Many sectors have a role to play in improving access.
- Goals for increasing access to healthy foods in the population are set within goals for a healthy economy, healthy environment, and healthy people.
- Better access will be achieved by simultaneous actions that include individuals and families, communities, institutions, regional food systems and state and national policy changes.

Access to healthy food is determined by complex and interrelated food and economic systems. Individuals must have:

Physical Access: Proximity to food retailers and reliable transportation

Financial Access: Sufficient resources and affordable food

Nutritional Access: Availability of sufficient food to meet nutritional needs

Cultural Access: Availability of culturally-relevant and familiar foods

PURPOSE OF THE REPORT

Access to healthy food is essential to the health and productivity of Washington's residents, but most do not consume diets that meet recommendations for health. As a result, rates of diabetes, heart disease and obesity continue to rise, and these health problems impact the economic productivity of the state. At least 15% of Washington's residents are food insecure -- that is, they do not have consistent access to healthy foods. Access to food is essential for a productive work force; children need food to support health and success at school.

We can improve access through cooperative and simultaneous actions that impact families, institutions, communities and the state as a whole. Agriculture is a strong sector in Washington's economy, and many of the foods produced in the state are health promoting. Supporting the economic viability of farming and increasing access to healthy foods strengthens Washington's economy.

The purpose of this report is to describe opportunities to improve access to healthy foods in Washington State for the Access to Healthy Foods Coalition so that Coalition members and other stakeholders in Washington State can prioritize initiatives and integrate resources.

What are Healthy Foods?

Healthy foods provide an individual with a balanced diet that meets national dietary guidelines and provides plenty of vegetables, fruits, whole grains, low fat dairy products and healthy fats like olive and canola oil and protein, such as lean meats and legumes.

OVERARCHING GOALS

Because of the interrelated systems that support access to healthy foods it is helpful to consider changes in physical or financial access to healthy foods in the context of these larger systems. The conceptual model displayed in Figure 1 was developed by the project team and advisors. Overall, improving access to healthy foods will help achieve all three goals: people will get healthier, the economy will improve and the environment will be protected and sustained. Health, economic and environmental systems in turn are related to many other factors beyond the scope of this report. This report is based on the following precepts:

- Any opportunities to be considered by the stakeholders should work toward at least one of these interrelated goals
- The best opportunities will address two or three of the goals.
- No opportunity will negatively impact any of the goals.

A Healthy Food System that enhances access to healthy foods for the population will help to meet these overarching goals:



Figure 1. Healthy Food System

SIMULTANEOUS ACTIONS ON SEVERAL LEVELS

Improving access will best be achieved by simultaneous actions that include individuals and families, communities, large and small institutions, regional food systems, and state and national policy changes. This report is organized by these categories.

Complex Adaptive System: many pieces interacting with each other in nonlinear ways that influence the overall behavior of the system.

“Wicked” problems: complex, cross cutting, difficult to define, relentless, no clearly described set of true solutions.

A systems approach:

- Form cooperative and cross disciplinary teams
- Consider all actors in the system
- Be aware of unintended consequences
- Consider multilevel approaches
- Distribute decision, action and authority
- Create feedback loops and assess effectiveness

Individuals & Families

The foods available to families are influenced by local and regional food systems and the policies that drive those systems. Within the home, the family’s resources, knowledge and attitudes influence the kinds of food available to children. Food marketing plays a substantial role in food preference.

Institutions

When worksites, schools, child care, sporting events, and faith communities provide more healthy foods and fewer unhealthy foods, children and adults are more likely to have healthy diets.

Communities

Communities influence food choice in several ways. Physical access to healthy foods is determined by the kinds of foods that are available in neighborhoods, especially for families that do not have reliable transportation. In addition, the social norms and expectations of communities are potent influencers of food choices.

Regional Food Systems

Access to healthy foods is increased when local food production, processing, distribution and retail work together to build strong markets for healthy foods. Regional food systems enhance the economic viability of all the actors in the system.

State and Federal Policies

Existing policies and practices profoundly influence access to healthy foods across Washington State. Many of these have the unintended consequence of decreasing consumption of healthy foods. One of the goals of this report is to stimulate a discussion about these policies and practices with the hope that barriers to healthy eating can be reduced and enhancers of healthy food choices can be increased.

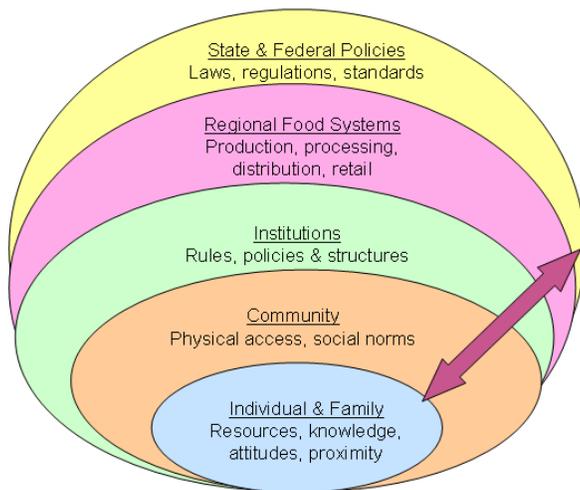


Figure 2. Levels of Influence on Access to Healthy Foods

- Increase food security among U.S. households and in so doing reduce hunger.
- Increase the proportion of persons aged 2 years and older who consume at least two daily servings of fruit.
- Increase the proportion of persons aged 2 years and older who consume at least three daily servings of vegetables, with at least one-third being dark green or orange vegetables.
- Increase the proportion of persons aged 2 years and older who consume at least six daily servings of grain products, with at least three being whole grains.
- Increase the proportion of persons aged 2 years and older who meet dietary recommendations for calcium.
- Increase the proportion of children and adolescents aged 6 to 19 years whose intake of meals and snacks at school contributes to good overall dietary quality. (developmental)

ACCESS TO HEALTHY FOODS AS A SYSTEM

Food Access is Part of Large Systems & Requires a Collaborative Solution

The determinants of access to healthy foods are complex, and the solutions will involve many actors. The situation requires systems thinking. Systems approaches are especially helpful ways to address complex problems by helping many actors see the larger picture and not just their role in it. Systems thinking takes into account large numbers of interacting parts, and has the advantage of raising the level of thinking about a problem and fostering effective results in the context of the “big picture.” Traditional systems thinking methods include the building of maps and models to determine the points at which change can have the greatest impact. Strategies that are adopted with the bigger picture in mind can produce greater and more sustainable benefits.

A lack of access to healthy foods in all populations is a “wicked” problem. Wicked problems are unstructured, crosscutting, and relentless (1) and require collaborative capacity. Networks such as the Access to Healthy Foods Coalition have evolved as a response to such problems because of their ability to bring different organizations to the table to consider the issue. Collaboration is “a process through which parties who see different aspects of a problem can explore constructively their differences and search for solutions that go beyond their own limited vision of what is possible.” Collaboration is a process that enables independent individuals and organizations to combine their human and material resources so they can accomplish objectives (2).”

FRAMEWORKS TO IMPROVE ACCESS TO HEALTHY FOODS

Access to healthy foods is a complex process with many interrelated actors. This report uses two overarching organizational frameworks to address this situation. The goals for increasing access to healthy foods in the population are set within goals for a healthy economy, healthy environment and healthy people (Figure 1). The barriers to healthy foods and opportunities for increasing healthy foods are organized by an adapted version of the social-ecological model (Figure 2). For this report, the levels are individual/family, institutional, community, regional systems and state and federal policies.

This report uses the term Food System in the broadest sense to describe all components from farm to consumption and beyond. Table 1 presents such a food system framework.

Table 1. Food System Framework. Muller, Tagtow, Roberts, MacDougall. J Hunger Environ Nutr.2009. 4: 225–240

Production	Transformation	Distribution	Access	Consumption	Resource and Waste Management
Farming Gardening Wild Foods	Processing Packaging Labeling Marketing	Transportation Wholesaling Warehousing	Retail Food Safety Food Security	Purchasing Preparing Preserving Eating	Disposal Recycling Composting

COLLABORATION TO IMPROVE ACCESS TO HEALTHY FOODS IN WASHINGTON

Both governmental and non-governmental organizations have a role in addressing the complex factors that impact access to healthy foods. These organizations will need to represent a diverse set of stakeholders including, “health professionals, public health advocates, policy makers, scientists, and small and large businesses (e.g. farmers, agricultural producers, food scientists, food manufacturers, and food retailers of all kinds) (3).

A Role for Government

Five of the 10 Washington State Priorities of Government concern issues that are related to the goals of a healthy food system and the impact of access to healthy foods for the population (4):

- Improve the economic vitality of business and individuals
- Improve student achievement in elementary, middle and high school
- Improve the statewide mobility of people, goods and services
- Improve the health of Washingtonians
- Improve the quality of Washington’s natural resources

Table 2 provides examples of governmental goals and objectives around issues related to access to healthy foods. In addition to the departments of Health, Agriculture and Ecology, in Washington, the Departments of Commerce, Transportation, Fish and Wildlife also have a role to play in the system, as does the Conservation Commission and the Office of the Superintendent of Public Instruction.

Table 2. Examples of State and National Government Strategic Planning Related to Food Systems and Access to Healthy Foods

	National		Washington State Departments	
	Mission, Vision or Goal	Objectives & Strategies	Mission, Vision or Goal	Objectives, Strategies & Activities
Health	Increase quality and years of healthy life; Eliminate health disparities (5)	Increase food security among U.S. households and, in so doing, reduce hunger; specific goals for fruit, vegetables, whole grains, calcium and school meals (5)	Improve health outcomes for the people of Washington State (6).	Increase access to healthy foods and opportunities for physical activity (6).
Agriculture	Provide leadership on food, agriculture, natural resources, and related issues based on sound public policy, the best available science, and efficient management (7)	Enhance the competitiveness and sustainability of rural and farm economies; improve the nation’s nutrition and health; protect and enhance the nation’s natural resource base and environment (7)	Facilitate the movement of Washington agricultural products in domestic and international markets (8, 9).	Promote the economic vitality of the agriculture industry, safeguard the environment; assist growers and agri-businesses to enter new markets (8, 9).

Environment	Protect human health and to safeguard the natural environment -- air, water and land -- upon which life depends (10)	Department of Ecology: Protect, sustain, or restore the health of communities and ecosystems using integrated and comprehensive approaches and partnerships (10)	Department of Ecology: Support sustainable communities and natural resources (11) Conservation Commission: Wise stewardship, conservation, and protection of soil, water and related natural resources (12)	Dept of Ecology: Reduce and manage solid wastes; Improve water quality; manage the sustainability of water resources (11) Conservation Commission: Support and guide conservation districts; information, guidance and technical services for private land owners and managers in dealing with land, water and air quality conservation; educate about the value and need for natural resource conservation (12)
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A Role for Non-Governmental Organizations

Many non-governmental organizations participated in the interviews that were conducted for this report. Please see a list of those organizations in the Acknowledgements at the beginning of this report. These organizations:

- Advocate for systems that assure that all families have the resources they need to access healthy foods
- Advocate for systems that assure that food producers, processors, distributors and retailers operate within an environment that supports and encourages the provision of healthy foods at affordable prices for Washington residents
- Provide safety net programs for families who do not have resources to access healthy foods
- Convene coalitions and groups of partners to come together to build strong systems that assure access to healthy foods
- Disseminate information to build awareness about the importance of access to healthy foods and about what is needed to increase access to healthy foods in the state

A Role for Universities

Washington’s public universities provide rich resources for improving access to healthy foods. Experts in public health, agriculture, nutrition, economics, planning, ecology, human behavior, and public administration are working on the issue from several perspectives. Universities provide training, research, evaluation, technical assistance, data, and assessment expertise.

A Role for Providers of Coordination and Technical Assistance

Agencies and institutions like the county agriculture commissions, conservation districts and county offices of the WSU Extension Service provide education and coordination for the issues outlined in this report.

A Role for Farmers, Growers and Producers

Food producers profoundly influence access to healthy foods, and they in turn must operate profitably within a system that influences their decisions. These sectors must be part of decision making about opportunities to increase healthy foods in the state.

A Role for Businesses and Food Service Sectors

In Washington State there are many examples of innovative ways that businesses have contributed to access to healthy foods. These include developing and marketing healthier food products, placing healthier foods at prime locations in retail establishments, and placing small grocery stores in neighborhoods that lack healthy foods.

- In Pierce County local restaurant owners partnered with the Tacoma Pierce County Health Department to develop healthier menu items and provide nutrition information on menus (13).
- A local franchise owner in the South Puget Sound area has partnered with Thurston County Public Health & Social Services to pilot healthier options for kids meals in 10 locations.
- At the University of Washington, healthier food items are priced lower than some high fat/high sugar items.

References

1. Weber EP, Khademian AM. Wicked Problems, Knowledge Challenges, and Collaborative Capacity Builders in Network Settings. *Public Administration Review* 2008;68:334-349.
2. Lasker RD, Weiss ES, Miller R. Partnership synergy: a practical framework for studying and strengthening the collaborative advantage. *Milbank Q.* 2001;79:179-11V.
3. United States Department of Agriculture. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans. Available at: <http://www.cnpp.usda.gov/DGAs2010-DGACReport.htm>
4. Washington State Office of Fiscal Management. 2009-2011. Priorities of Government Final Report. Available at: <http://www.ofm.wa.gov/budget/pog/finalreport2009-11.asp>
5. US Department of Health and Human Services. *Healthy People 2010*. 2nd ed. Washington, D.C.: Government Printing Office, 2000.
6. Washington State Department of Health. Strategic Plan 2009-2013. Available at: http://www.doh.wa.gov/strategic/DOH_2009-13_Strategic_Plan.pdf
7. United States Department of Agriculture. USDA Strategic Plan-2005-2010. Available at: <http://www.ocfo.usda.gov/usdasp/sp2005/sp2005.pdf>
8. Washington State Department of Agriculture. *Future of Farming: Washington Agriculture Strategic Plan 2020 and Beyond*. Available at: <http://agr.wa.gov/FoF/docs/FutureofFarmingReport-PrinterFriendly.pdf>
9. Washington State Department of Agriculture. Strategic Plan 2009-2011. Available at: <http://agr.wa.gov/aboutwsda/Docs/WSDAstrategicPlanFINAL2009-11.pdf>
10. United States. Environmental Protection Agency. 2006-2011 EPA strategic plan: charting our course. Washington, D.C.: Office of the Chief Financial Officer, Office of Planning, Analysis, and Accountability, U.S. Environmental Protection Agency, 2006.
11. Washington State Department of Ecology. Available at: <http://www.ecy.wa.gov/>
12. Washington State Conservation Commission. 2009-2015. Strategic Plan. Available at: http://www.scc.wa.gov/index2.php?option=com_docman&task=doc_view&gid=549&Itemid=38
13. Pulos E, Leng K. Evaluation of a voluntary menu-labeling program in full-service restaurants. *Am J Public Health*;100:1035-9.



CHAPTER 2

SYSTEMS THAT IMPACT ACCESS TO HEALTHY FOODS IN WASHINGTON STATE

Access to healthy foods, agriculture, environmental health, human health, and the economy are all interrelated. This chapter provides background information on these topics and information about the relationships between them.

HEALTH AND FOOD INSECURITY

- Access to healthy foods is essential to the health and productivity of Washington’s residents.
- Access to healthy foods is an economic issue.
- Access to healthy foods is a geographic issue.

AGRICULTURE

- Agriculture is an economic driver in the state.
- Washington has rich and diverse agricultural and food processing sectors that produce a variety of healthy foods.
- There are several threats to the vitality of farming in the state.
- Strengthen agriculture: strengthen the economy.

THE FOOD SYSTEM AND THE ENVIRONMENT

Access to healthy foods is essential to health and productivity.

Healthy foods are needed for:

- Healthy mothers and babies during pregnancy and breastfeeding to support lifelong health
- Healthy growth in childhood
- Good school performance in childhood and adolescence
- Good work performance in adulthood
- Protection against chronic diseases such as cancer, diabetes, and cardiovascular disease
- Healthy aging

In 2010 in Washington State, the Emergency Food Assistance Program is experiencing a 19% increase in demand statewide.

The increase is projected to be 38% by the end of 2010. This would be the greatest increase in clients since the program began in 1981.

HEALTH, FOOD SECURITY AND ACCESS TO HEALTHY FOOD

What are Healthy Foods?

Healthy foods are defined by the *Dietary Guidelines for Americans*, a science-based system to provide the most up-to-date advice about diet and health in the United States. The 2005 guidelines recommend eating a variety of fruits and vegetables, low fat dairy and meats, whole grains, and healthy fats within caloric needs while limiting intake of unhealthy fats, added sugars, sodium and alcohol (1). People who follow the dietary guidelines are at lower risk for overweight and obesity, and chronic conditions such as diabetes, hypertension and cardiovascular disease (2-5). However, the diets of most Washington residents vary substantially from the recommendations. For example, as Figure 3 shows, only about a quarter of Washington's residents eat fruits and vegetables at least five times a day, and only 15.1% of Washington adults report consuming the two or more servings of fruit and three or more servings of vegetables daily (6).

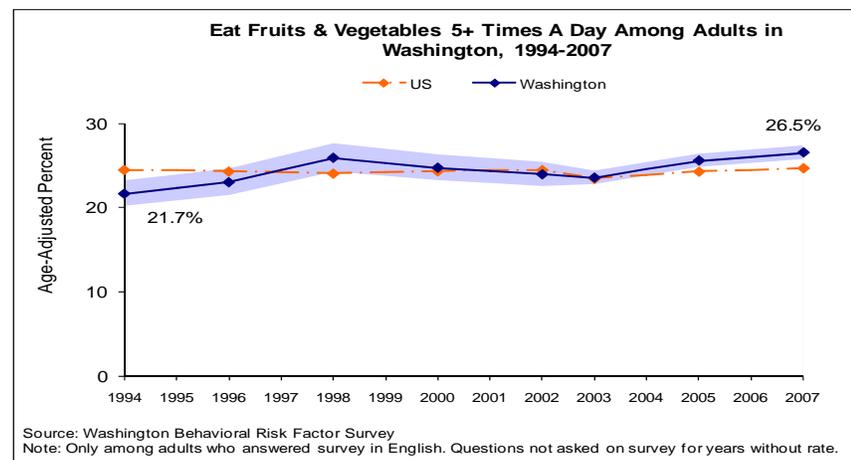


Figure 3. Trends in Fruit and Vegetable Consumption

The recent report of the Dietary Guidelines Advisory Committee (7) indicates that the 2010 guidelines will address the finding that the “majority (of Americans) are overweight or obese and yet undernourished in several key nutrients.” The report finds that, “on average, Americans of all ages consume too few vegetables, fruits, high-fiber whole grains, low-fat milk and milk products, and seafood and that they eat too much added sugars, solid fats, refined grains and sodium.” One highlight of the committee report was an emphasis on increasing seafood consumption. Washington agriculture can be positioned to meet the demand that would ensue if Americans followed the 2010 guidelines. To supply the recommended amounts of fruits and vegetables to Americans, growers would have to double their fruit acreage and more than double vegetable acreage (8). The committee calls for a coordinated strategy that includes all sectors of society. The report specifically calls out the need for farmers, agricultural producers, food scientists, food manufacturers and food retailers of all kinds to be part of systems changes in these sectors.

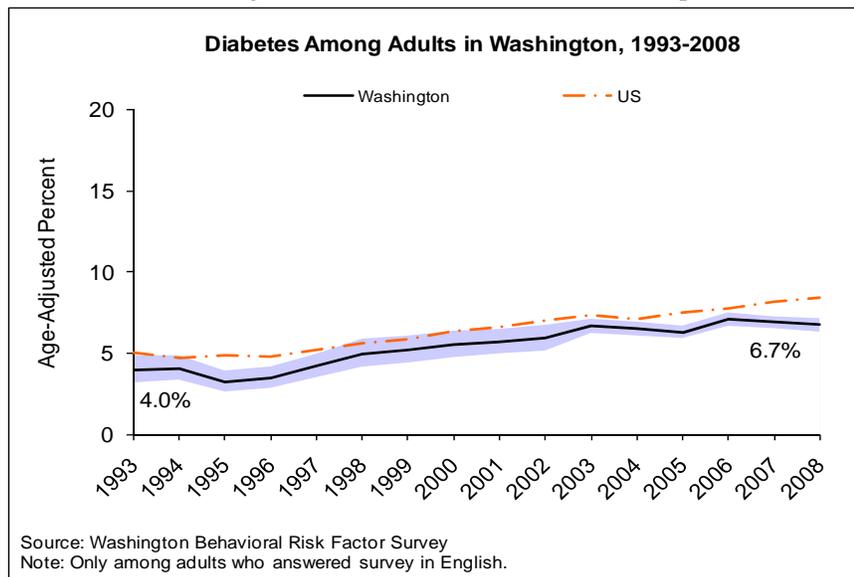
HEALTHY FOODS AND HEALTHY PEOPLE

Poor diet, lack of physical activity, and tobacco use are the three top causes of early death and disease in the US (9). Most people choose their foods based on three things – taste, cost and convenience. When healthy foods are inconvenient and expensive people usually don't choose them. Inexpensive foods that are high in fat, sugar and salt are hard to resist. Lack of healthy foods and excessive exposure to foods that are high in fat, sugar and salt, contribute to obesity and many other health conditions.



Figure 4. Model of Relationship between Access to Healthy Foods & Health

Figure 8 shows rates of chronic diseases in Washington's counties; it is clear that there are differences in disease prevalence across the state. Access to healthy foods helps to prevent these conditions, and once diseases like diabetes or heart disease have developed, healthy foods are essential for treating these diseases. Over time, rates of chronic diseases such as diabetes have been steadily increasing in the state (Figure 5) especially among low income and minority groups and those with lower education levels (10). The prevalence of diabetes has increased over 50% since the 1990s in Washington (10). Obesity is a risk factor for many chronic diseases, especially diabetes, and as Figure 6 shows, obesity rates have been increasing as well. In 2009 in Washington State, 62% of adults were overweight or obese (11). Diseases related to poor diet are extending into the next generation. In 2008



about 42% of Washington mothers were either obese or overweight before pregnancy, and 47% gained more than recommended amounts of weight during pregnancy (12). In 2008, 6% of women experienced diabetes in pregnancy, with 5.3% diagnosed with gestational diabetes (12). Diabetes in pregnancy is a serious condition that is associated with increased risk of pregnancy complications and lifelong risk of diabetes and obesity in babies who are born to mothers with diabetes.

Figure 5. Trends in Diabetes Prevalence in Washington State

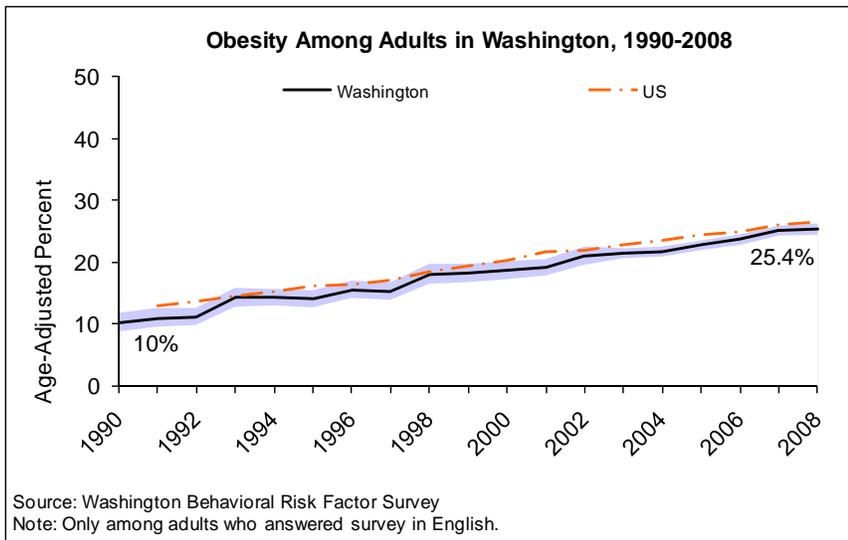


Figure 6. Trends in Obesity Prevalence in Washington State

ACCESS TO HEALTHY FOOD IS AN ECONOMIC ISSUE

On the most basic level, the Washington State Department of Commerce includes food as a necessity for a productive workforce (13). In addition, the chronic diseases that are associated with poor diet are major threats to the economic vitality of Washington State. Health care spending costs attributed to obesity in Washington in 2008 are estimated to be \$1.8 billion; by 2013 obesity attributable costs will be almost \$3 billion if trends continue (14). The true economic costs of chronic disease extend well beyond health care and include substantial loss of productivity by individuals and their caregivers.

Many of Washington’s families do not consistently have access to healthy foods. Between 2006 and 2008 almost 12% of Washington families had trouble providing enough food for all their members; these families were food insecure (15).

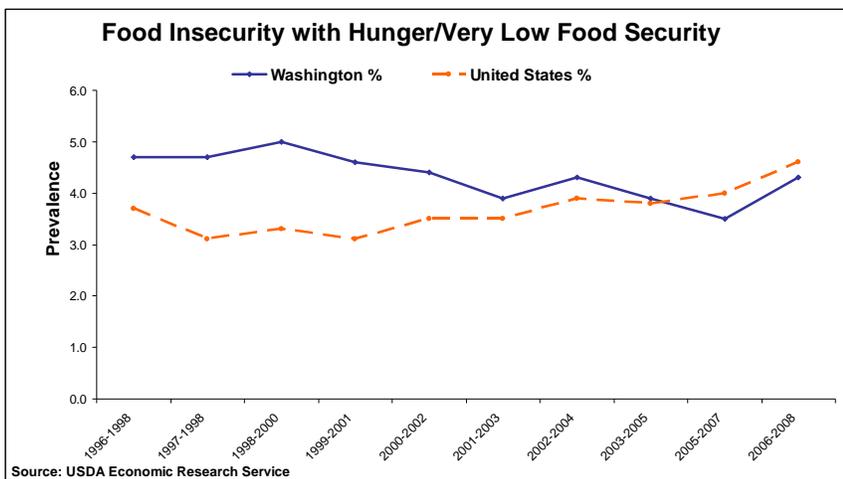


Figure 7: Food Insecurity Trends

they have family members with special needs, they have high medical costs and when housing and utility costs are high.

About a third of Washington’s food insecure families had very low food security where food intake was actually reduced and normal eating patterns were disrupted (see Figure 7). Not all low-income families are food insecure, and not all food insecure families are low-income. Rates of food insecurity are higher for households with incomes near or below the federal poverty line and households with children headed by single women or single men (15). Families run into situations where they don’t have enough money for food when

Compared to food secure families, those that are food insecure have higher risk of many adverse outcomes including poor health, increased risk for the development of chronic diseases, poor psychological and cognitive

example, the unique geography and residential patterns of Seattle mean that most residents live fairly close to stores that sell healthy foods. In parts of Clark County many low-income families, even those without personal cars, find ways to shop at stores with healthy foods (19).

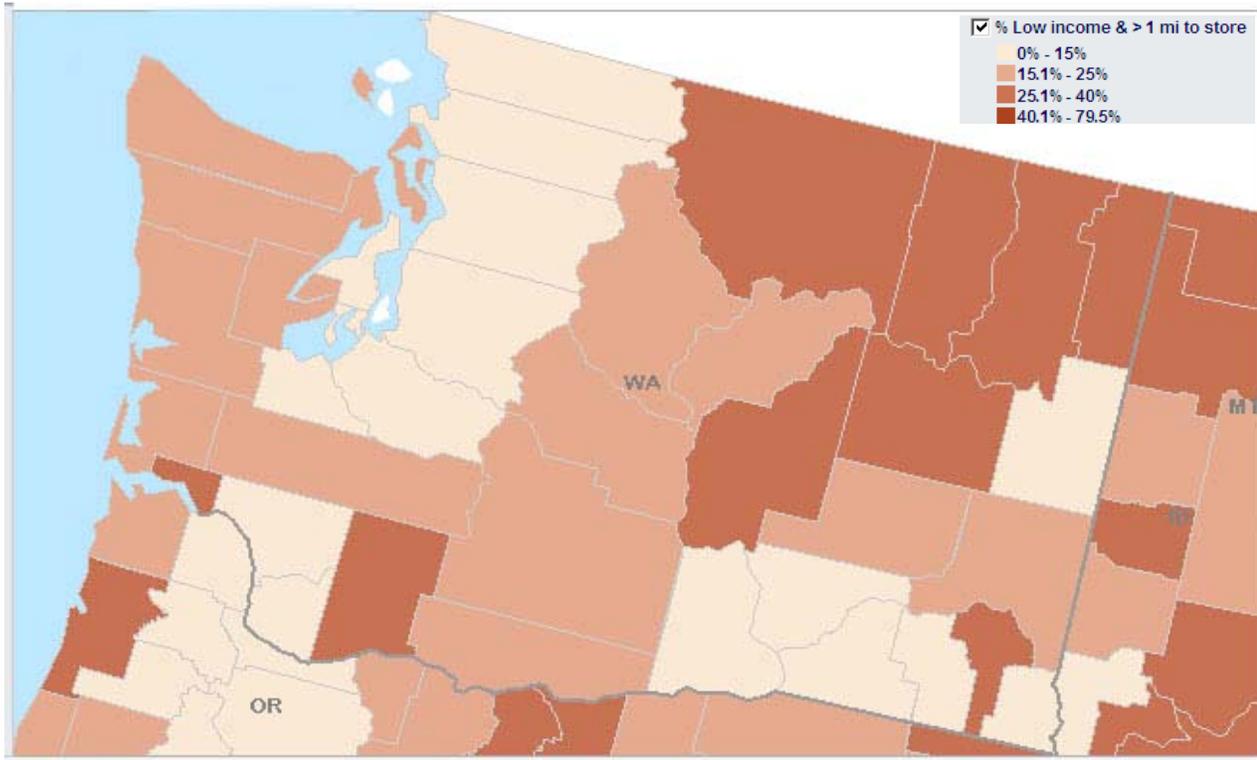


Figure 10. Percent of Low Income Washington Residents Who Live Farther than One Mile to a Grocery Store
Data from USDA Food Environment Atlas)

Figures 9 and 10 indicate that rural counties may be a special concern in our state; nationally 20 of 21 studies found limited food access in rural communities (18).

Table 3. Food Assistance Programs in Washington State

Federal Food Assistance Programs in Washington State					
Program	Population Served	Lead Agency	Washington State Annual Budget	Estimated Need	Numbers Served Per Year
WIC	Pregnant and lactating women, infants and children under 5 with income below 185% of FPL*	Department of Health (DOH)	\$134 million in benefits, \$25.5 million in operational funding to WIC agencies in 2009	Not currently available, data forthcoming	313,000 (2009)
SNAP (Basic Food; Food Stamps)	Individuals in households with gross income below 200% of FPL*	Department of Social and Health Services (DSHS), Economic Services Administration	\$1.046 billion in benefits FY 2009	1,044,827 estimated individuals with income below 125% of FPL* for 2008	940,309 received benefits in March 2010
School Lunch and Breakfast	Children enrolled in public schools in Washington; household eligibility for free meals is 130% FPL*; for reduced-price meals eligibility is 185% FPL*	Office of the Superintendent of Public Instruction (OSPI), Child Nutrition Services	\$143 million federal lunch reimbursement FY 2009; \$16 million in commodities; \$38.5 m in federal breakfast reimbursement; \$10.6 million in state funding	1.015 million children enrolled in WA public schools; 400,000 children eligible for free or reduced-price school meals; 2009-10	532,531 lunch participation FY 2009; 168,093 breakfast participation FY 2009

Federal Food Assistance Programs in Washington State

Program	Population Served	Lead Agency	Washington State Annual Budget	Estimated Need	Numbers Served Per Year
CACFP	Children in child care centers and homes; children in afterschool programs; eligibility requirements vary	OSPI	\$39 million in federal reimbursement	175,000 children are in licensed child care	70,443 enrolled in FY 2009
Summer Meals Program	Children 0-18 in eligible areas	OSPI, Child Nutrition Services	\$3.45 million in federal funds in 2008; \$170,000 in state funds	400,000 children eligible for free or reduced-price school meals	32,500 on an average July day in 2009
SNAP-ED	Households eligible to receive SNAP benefits	WSU Extension; Department of Health	\$7.67 million in 2006	375,000 households participated in SNAP in 2009	880,658 contacts in FY 2009
Senior Meals	Individuals 60 years of age or older and their spouses (regardless of the age of spouse)	DSHS Aging and Disability Services	\$14.6 million in 2008	1.13 million individuals over 60 in WA	55,000 received congregate or home delivered meals in 2008
Senior Farmers Market	Individuals 60 years of age or older and their spouses (regardless of the age of spouse); in areas where certified farmers markets are located	DSHS Aging and Disability Services		1.13 million individuals over 60 in WA	
WIC Farmers Market	Households participating in the WIC program in areas where qualified Farmers Markets are located	DOH	\$796,000 for food purchase, 2009		

Hunger Relief Programs

Program	Population Served	Lead Agency	Annual Budget	Estimated Need	Numbers Served Per Year
Food Lifeline	17 counties of western Washington	Food Lifeline	\$38 million	163 million meals	675,000
Rotary First Harvest	Statewide	Rotary First Harvest	\$15.1 million	no reliable source	1.6 million
Northwest Harvest	300 hunger relief programs	Northwest Harvest	\$30.5 million	No source	6 million
Second Harvest	21 counties in eastern Washington	Second Harvest	\$25 million	No source	2.5 million
Statewide food banks	Statewide	WA Department of Commerce	\$5 million	No source	7.3 million total client visits
Local Meal programs	432 million meals	Varies		~220 million meals	600,000

AGRICULTURE IS AN ECONOMIC DRIVER

In the State of Washington, the agriculture and food industry accounts for 12% of the gross state product, contributing an estimated \$38 billion to the state economy. Exports of agricultural products contributed \$14.8 billion in 2008, making Washington State the third largest exporter of food products in the United States. About 90% of the state’s wheat, peas and lentil crops are exported annually, along with 30% of apples, pears and cherries. The largest markets for food and agricultural products are Japan, China, Canada, Taiwan and South Korea (20). Countries experiencing rapid population and per capita income growth such as India, Mexico, Russia and Brazil offer the greatest opportunities for increased demand for Washington agricultural products (21).

The United States Department of Agriculture (USDA) strategic plan (22) states that “there is increasing demand for organic and locally-grown high quality fresh and processed foods.” Exports of these crops have grown faster than other Washington products. Sales increased significantly in the last decade to more than eight million pounds of produce, including tree fruit, dried herbs, seeds and oils (23).

Agriculture-related transportation and storage industries contribute substantially to the state’s economy, along with freight forwarders, ports and export businesses (24).

Agriculture—A Cornerstone of Washington’s Economy

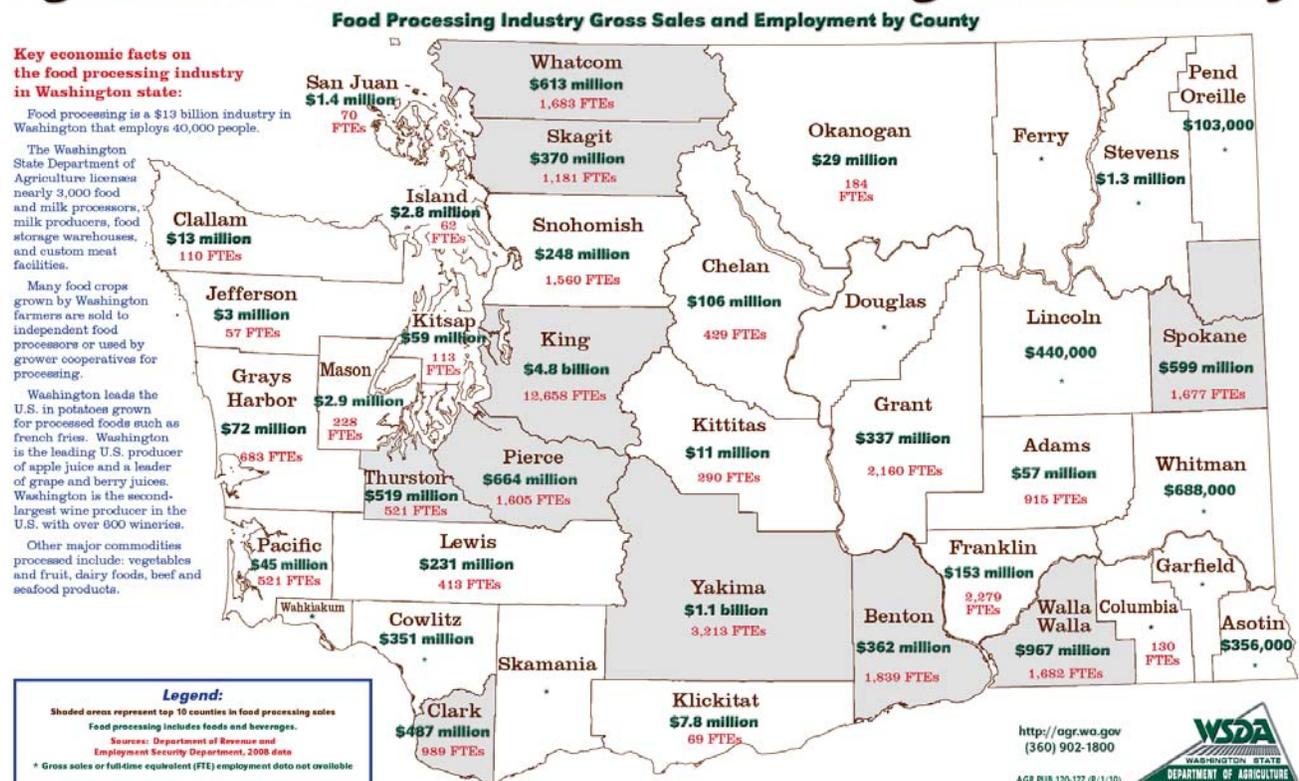


Figure 11. Agriculture – A Cornerstone of Washington’s Economy, WSDA

Employment

Agriculture is also an important factor in employment, supporting an estimated 160,000 jobs on 39,000 farms. Employment increases at peak harvesting time, but total agricultural employment averages more than 95,000 jobs annually with the largest concentrations in metropolitan statistical areas (MSA) of Yakima, Chelan-Douglas and Richland-Kennewick-Pasco (24). Production of crops accounts for the third highest number of “green jobs”, which is 15% of all green jobs in the state and over nine percent of total state employment (25). Green jobs are defined as

“jobs in the primary industries of a green economy that promote environmental protection and/or energy security.”

New Markets

Many programs throughout the state hold promise for further strengthening agriculture, including farm-to-school and farm-to-institution or farm to where-you-are initiatives, which connect growers directly to markets. The number of farmers markets in the state doubled in recent years to 140 across the state, with most of the over \$55 million in sales going directly to farmers (26).

Processing Crops is a Valuable Industry

Processing food is the second largest manufacturing industry in Washington, a \$10 billion industry employing 34,000 in 779 companies (27). The state licenses processors of milk and meat as well as food storage facilities. Top processed crops in Washington include: potatoes/french fries, apple juice, grape and berry juices, and wine (28). Regional processors can and freeze vegetables such as corn, peas, green beans and carrots.

WASHINGTON HAS A RICH AND DIVERSE AGRICULTURE

Washington agriculture produces many healthy foods and holds promise for both near term and long term expansion. The diverse soils and eco-regions of the state ensure that farmers can produce a wide variety of healthy foods.

Fruit

Washington’s apple crop ranks first in US production with a 2008 value of nearly \$1.3 billion dollars. In orchards all over the state but primarily in central counties, varieties have been developed with both the US and international markets in mind. Red Delicious, Gala, Granny Smith and Fuji lead in production. In terms of organic production, other Washington fruit crops rank first in the US, including pears and cherries, while the organic crops of grapes, peaches, blueberries, raspberries and strawberries are the second largest crops in the country.

Dairy

Dairy products are the second largest agricultural commodity in the state with farms located in 28 counties. The largest number of dairies are located in Whatcom County. In 2009 Washington ranked 10th in total milk production in the US and ninth for organic dairy production. Farms with 500 cows or more (17% of total dairies) produce almost 80% of the milk; half of the farms in the state have fewer than 100 cows (29).

Field and Seed Crops

Washington ranks fifth in the U.S. in production of wheat, producing 123 million bushels on 2.2 million harvested acres. The value of wheat production in 2008 was more than \$745 million. Other significant crops include: barley, corn, oats, dry beans and peas, hops, mint and seed crops.

Table 4. Top Commodity Foods in Washington State

Top 10 Commodity Foods	2008 Value of Production (in Millions)
Apples ¹	\$1,283
Milk	\$1,002
Wheat	\$ 745
Potatoes ²	\$ 693
Cattle	\$ 496
Hay	\$ 588
Nursery/Greenhouses	\$ 321
Cherries ¹	\$ 297
Hops ¹	\$ 253
Grapes ²	\$ 201

¹. First in US Production; ². Second in US Production
 Table from WSDA *Top Crops and Food Processing Industries*
<http://agr.wa.gov/AgInWa/>

Meat, Fish & Eggs

Cattle and calves rank fifth among the state's top commodities, valued at over \$580 million in 2007. Eggs, aquaculture and broiler chickens each fall in the top 20 commodities produced. The market value of livestock, poultry and related products increased more than 30% to more than \$2 billion from the 1997 agricultural census to 2007 (30). Organic poultry production ranks fifth in the US for layers and turkeys, while organic beef production ranks 13th in the US. Commercial fisheries generate more than \$250 million in income in Washington (31). Shellfish make up more than 60% of the value of state fishery harvests, followed by groundfish (such as Pacific whiting), and salmon (32).

Agriculture—A Cornerstone of Washington's Economy

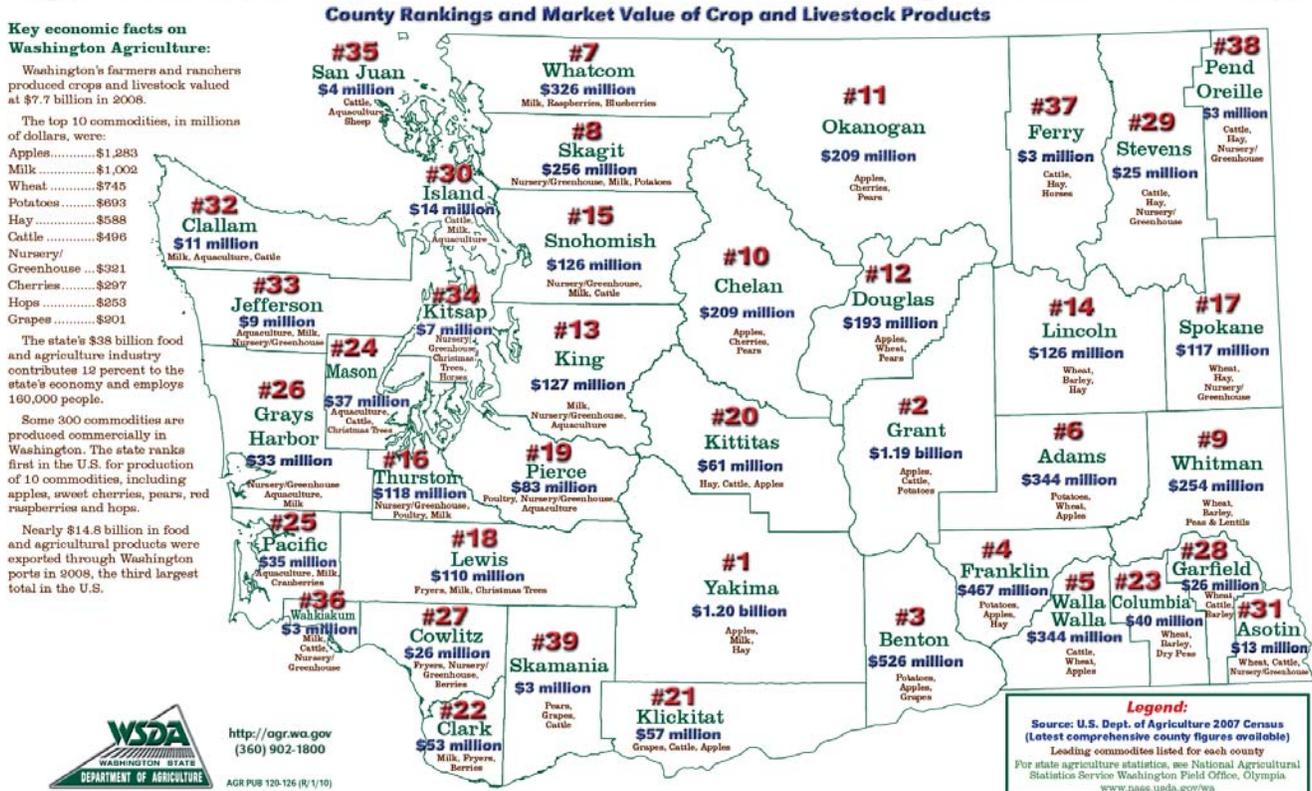


Figure 12. Agriculture – A Cornerstone of Washington's Economy, WSDA

Vegetables

Potatoes constitute the largest vegetable crop in the state, and Washington ranks second in production of potatoes in the U.S. Washington's potato yield-per-acre is higher than anywhere in the world. Columbia Basin counties and the Skagit Valley produce most of the state's potatoes. Almost 90% of the crop goes to processors to be made into french fries, potato chips and mashed potatoes (33). Sweet corn, onions, green peas and carrots are among the state's top 40 commodity crops (30). Organic production of sweet corn, green peas, snap beans and onions ranks first in the US.

THREATS TO AGRICULTURAL PRODUCTIVITY

Loss of Productive Land

In its 2009-2011 Strategic Plan, the Washington State Department of Agriculture (WSDA) lists numerous challenges to agriculture (34). Chief among them is the overall loss of farmland. The main source of farmland loss is competition for land for housing the state's growing population (34). The state's population was 6.7 million as of April 1, 2009, having increased more than 62% from the 1980 census count of 4.1 million (35). Nearly every county of Washington is projected to have a significant increase in population in the coming decade. At the

Washington Climate Change Impacts Conference in 2009, state officials indicated that they are preparing for an eventual influx of climate refugees, people forced to migrate north to more temperate states once some southern states become less hospitable (36).

In the most recent census of Agriculture, total farmland in 2007 is 14,972,789 acres, but only 50% is considered cropland, of which only 4.3 million acres was harvested. From 1997 to 2007, harvested cropland declined by 774 thousand acres, or 15% (35). In 2007, the Washington State Legislature created the Office of Farmland Preservation. A 2009 indicators report shows that while the overall number of Washington farms has increased since 2000, farm size and numbers of acres have both decreased (37).

Water Rights

There are competing demands for the water needed to produce and process Washington farm products (21). Systems for water conservation, storage, distribution, drainage and irrigation need improvement (21). While Eastern Washington soils support ranching and dryland (non-irrigated) farming of wheat, most crops require irrigation. State water rights are almost completely allocated, making new water rights difficult to obtain (38). Irrigation in the Columbia Basin and Central Washington counties supports agriculture on more than 1.1 million acres where low annual rainfall limits agriculture. Large-scale irrigation was made possible via five Bureau of Reclamation Irrigation Projects impacting the Spokane Valley, the Columbia Basin, and several counties including: Okanogan, Grant, Adams, Franklin, Walla Walla, Benton and Yakima Counties (39). The Washington State Department of Agriculture asserts that climate change is already impacting the state's agricultural production due to reduced snow pack, making water less available for irrigation (34).

Labor

Labor is one of the most significant challenges and opportunities associated with farming. Producers report problems with labor shortages and the burden of complying with employment regulations. The U.S. Department of Labor states that "approximately 64 percent of the agricultural labor force in Oregon and Washington are not legally eligible to work in the United States (21)." This is challenging on several levels, not the least of which is the vulnerability of undocumented workers when it comes to health and safety issues. Despite ongoing training programs (40), there is a continued need to improve systems that protect the safety of farm workers in Washington (41).

Transportation

Transportation of agricultural products in Washington is becoming more challenging due to the increasing costs of fuel, the loss of short line railroads, and declining service by Class 1 railroads (34).

Preserving the transportation infrastructure is necessary to support agribusiness, construction, forestry and many other economic sectors. Freight systems made up 29% of state revenue in 2008, involving over 600,000 jobs (42).

Major challenges to the transportation infrastructure include: adding more roads requiring maintenance without adding funding; a growing backlog of deferred maintenance; aging bridges, some of which are not seismically retrofitted; and the growing gap between the needs and the ability of the state gas tax to adequately fund projects. In addition the value of building an infrastructure that will encourage the use of even more energy, needs to be weighed against environmental concerns.

Regional Processing

The loss and consolidation of processing and packing facilities across the state means fewer local plants are close to schools and other institutions. In these cases, transportation costs make a big difference in the ability of institutions to access fresh, local, agricultural products. In turn, if the processing / preparation sector is not expanding, it reduces the potential market for the output of the state's farmers, and threatens the economic viability of farms (21).

Complying with Regulations

There is concern that the costs of regulation fall almost entirely on producers, who already have a narrow profit margin. Regulations often challenge farmers more than most businesses as they deal with environmental, health, labor, and building regulations. It can be costly to comply with regulations that sometimes discourage efficient farming practices (43).

THE FOOD SYSTEM AND THE ENVIRONMENT

Energy

The food industry accounts for an estimated 10-20% of energy consumption in the United States (44). Only 14% of that figure can directly be attributed to transportation, while the remainder supports production, processing, packaging, as well as home refrigeration and preparation (45). In the U.S. between 1997 and 2002, food-related energy use increased by 16.4 percent even though overall per capita energy use declined slightly during those years (46). Food processing showed the largest growth in energy use over this period, as households and food services increasingly “outsource” food preparation to the manufacturing sector through the purchase of prepared food. Within agriculture, producers of vegetables, fruits and poultry saw the largest increases of energy use (46).

Growing food closer to where it will be consumed can reduce “food miles”, a calculation of the distance a food item travels from where it is produced to where it is consumed. However, the Leopold Center for Sustainable Agriculture calculated that while regional institutions could reduce food miles by sourcing more local food, carbon emissions increased in comparison to conventionally sourced food because the regional transportation options often had smaller capacity, resulting in more trips (45).

The process of life cycle assessment takes into account all of the stages of energy consumption in the food system, including agricultural production, transportation, processing, packaging, retail, and even household storage and preparation. A 2008 life cycle assessment of four typical food items sourced regionally and globally found that the local products had less of a climate impact in every case (47). A life cycle assessment of the US food system estimated that 10.2 units of energy were required to produce 1.4 units of food energy and questions the overall sustainability of the US food system (48). Options currently employed in Washington to reduce food miles while also considering overall energy use include direct marketing strategies, farmers markets, and farm-to-institution programs.

Solid Waste

According to the Washington Organic Recycling Council (49), over half of the solid waste generated in the state is organic material, which includes agricultural residues and food waste. Statewide initiatives such as on-farm composting of manure and bedding, manure-share programs, and diverting edible food from stores and restaurants to food banks are reducing solid waste expense in many counties.

Conflict with Other Environmental Priorities

Farmland on the west side of the state is being threatened by development pressures from urbanization; increased runoff and debris slides onto farms; utility corridors and roads; wetland mitigation, fish recovery or levee projects; and wetland and floodplain regulations. Farming conflicts with both the rigidity and intent of many environmental regulations and programs. Using best management practices a farmer can still run afoul of environmental standards. On the west side of the state, agricultural waterways are channelized streams with listed species of salmon; drainage maintenance is a permitting, cost and liability nightmare. The majority of farms are classified as wetlands and are in floodplains or floodways. Buildings and basic farm infrastructure are either prohibited entirely or face wetland mitigation barriers. A significant amount of farmland is being lost to fish and wetland enhancement projects, wetland mitigation banks and floodplain easements. With increasing development from urbanization and the loss of farmland, these impacts on existing farmland are more acute (50).

STRENGTHEN AGRICULTURE: STRENGTHEN THE ECONOMY

Moving toward a healthy food system is an economic development opportunity (51).

Increasing Production of Healthy Foods Benefits Farmers

Production of food crops in Washington has increased in the last 30 years, with the steepest growth in healthy foods like blueberries, cherries, grapes, onions and aquaculture (21). Production of more foods can be further increased. For example, Washington State University Extension researchers are testing high tunnels for season extension and disease reduction for vegetables and berries (52).

Local Economics Benefit

In one study concentrating on the Seattle area, researchers found that only one to two percent of the region's food sales came from the local food economy and that "a shift of 20% of our food dollars into locally directed spending would result in a nearly half billion dollar annual income increase in King County alone and twice that in the Central Puget Sound region (53)."

A 2008 Oregon study showed that, for every dollar spent locally in farm to school programs, an additional 87 cents was spent in the state, resulting in a multiplier of \$1.87 for farm to school spending. In addition, research confirmed that the investment in the farm community via these programs triggered successive spending in nearly every sector of the Oregon economy (54).

Creating New Jobs

Employment in agriculture is increasing in terms of annual worker-months of employment throughout the year, and jobs in agricultural support activities have been rising in recent years. For every agricultural job involving crop production, there are 1.033 additional jobs created (24).

References

1. United States Department of Agriculture. Dietary Guidelines for Americans, 6th ed. Available at: www.healthierus.gov/dietaryguidelines/
2. Ledikwe JH, Blanck HM, Khan LK, et al. Low-energy-density diets are associated with high diet quality in adults in the United States. *J Am Diet Assoc.* 2006;106:1172-1180.
3. National Center for Chronic Disease Prevention and Promotion. Can eating fruits and vegetables help people manage their weight? Available at: http://www.cdc.gov/nccdphp/dnpa/nutrition/pdf/rtp_practitioner_10_07.pdf
4. Ledikwe JH, Blanck HM, Kettel KL, et al. Dietary energy density is associated with energy intake and weight status in US adults. *Am J Clin Nutr.* 2006;83:1362-1368.
5. Mendoza JA, Drewnowski A, Christakis DA. Dietary energy density is associated with obesity and the metabolic syndrome in U.S. adults. *Diabetes Care.* 2007;30:974-9.
6. Centers for Disease Control and Prevention. State Indicator Report on Fruits and Vegetables. 2009. Available at: http://www.fruitsandveggiesmatter.gov/health_professionals/data_behavioral.html
7. United States Department of Agriculture. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans. Available at: <http://www.cnpp.usda.gov/DGAs2010-DGACReport.htm>

8. White House Task Force on Childhood Obesity. Solving the problem of childhood obesity within a generation: White House Task Force on childhood obesity report to the President. 2010. Available at: http://www.letsmove.gov/tfco_fullreport_may2010.pdf
9. McGinnis JM. Health in America--the sum of its parts. JAMA 2002;287:2711-2712.
10. Washington State Department of Health. The Health of Washington State-Diabetes, 2007. Available at: www.doh.wa.gov/HWS/doc/CD/CD_DIAB2007.pdf
11. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System Survey Data. 2009. Available at: <http://apps.nccd.cdc.gov/brfss/>
12. Washington State Department of Health. Perinatal Indicators Report for Washington Residents. Available at: <http://www.doh.wa.gov/cfh/mch/documents/keyindicatorperi.pdf>
13. Washington State Department of Commerce. Defining Commerce: Next Steps in our Mission to Grow and Preserve Jobs. 2009. Available at: <http://www.commerce.wa.gov/uploads/agencyresource/CommerceDeck.pdf>
14. United Health Foundation the American Public Health Association and Partnership for Prevention. The Future Costs of Obesity: National and State Estimates of the Impact of Obesity on Direct Health Care Expenses. Available at: <http://www.fightchronicdisease.org/pdfs/CostofObesityReport-FINAL.pdf>
15. United States Department of Agriculture. Household Food Security in the United States: 2008. Available at: <http://www.ers.usda.gov/publications/err83/>
16. American Dietetic Association. Food insecurity and hunger in the United States. J Am Diet Assoc. 2006;106:446-458.
17. Isaacs J. The Effects of the Recession on Child Poverty-Poverty Statistics for 2008 and Growth in Need 2009. Available at: <http://www.firstfocus.net/library/reports/effects-recession-child-poverty-poverty-statistics-2008-and-growth-need-during-2009>
18. Treuhaft S, & Karpyn, A. The grocery gap: Who has healthy food and why it matters. Available at: <http://www.policylink.org/atf/cf/%7B97C6D565-BB43-406D-A6D5-ECA3BBF35AF0%7D/FINALGroceryGap.pdf>
19. Mortell PK. The Association Between Grocery Store Location and Transportation and Fruit and Vegetable Intake of Families Participating in the WIC Program. University of Washington. Master of Public Health Thesis. 2010.
20. Washington State Department of Agriculture. International Marketing Statistics. Available at: <http://agr.wa.gov/marketing/international/statistics.aspx>
21. Washington State Department of Agriculture. Future of Farming: Washington Agriculture Strategic Plan 2020 and Beyond. Available at: <http://agr.wa.gov/FoF/docs/FutureofFarmingReport-PrinterFriendly.pdf>
22. United States Department of Agriculture. USDA Strategic Plan-2005-2010. Available at: <http://www.ocfo.usda.gov/usdasp/sp2005/sp2005.pdf>

23. Kirby E, Granatstein D. Current Status of Organic Agriculture in Washington State (Revised Feb 2010). Available at: http://csanr.wsu.edu/publications/techreports/wa_orgstats_09_final.pdf
24. Washington State Employment Security Department. 2008 Agricultural Workforce in Washington State. Available at: http://www.workforceexplorer.com/admin/uploadedPublications/9724_Agriculture_Report_2009.pdf
25. Washington State Employment Security Department. Green Economy Jobs. Available at: <http://cru.cahe.wsu.edu/CEPublications/wsueep09-033/wsueep09-033.pdf>
26. Washington State Farmers Market Association. Available at: <http://www.wafarmersmarkets.com>
27. Washington State Department of Commerce. Choose Washington. Available at: <http://www.choosewashington.com/industries/processing/Pages/default.aspx>
28. Washington State Department of Agriculture. Top Crops and Food Processing Industries. Available at: http://agr.wa.gov/AgInWa/Crop_Maps.aspx
29. Washington Dairy Products Commission. Available at: <http://www.havemilk.com/>
30. United States Department of Agriculture. Census of Agriculture-Washington Reports 2007. Available at: http://www.agcensus.usda.gov/Publications/2007/Full_Report/Census_by_State/Washington/index.asp
31. NOAA. Fisheries of the United States. Available at: <http://www.st.nmfs.noaa.gov/st1/fus/fus08/index.html>
32. Washington Department of Fish and Wildlife. Economic Analysis of the Non-Treaty Commercial and Recreational Fisheries in Washington State. Available at: http://wdfw.wa.gov/commission/econ_analysis.html
33. Washington State Potato Commission. Spud Facts. Available at: <http://www.potatoes.com/pdfs/Spud%20Facts%202010%202-17-10.pdf>
34. Washington State Department of Agriculture. Strategic Plan 2009-2011. Available at: <http://agr.wa.gov/aboutwsda/Docs/WSDAStrategicPlanFINAL2009-11.pdf>
35. United States Department of Agriculture-ERS. State Fact Sheets. February 12, 2009.
36. McClure R. State Not Ready for Climate Refugees. Seattle PI 2009.
37. Washington State Conservation Commission. Washington State Farmland Indicators. Available at: <http://ofp.scc.wa.gov/wp-content/uploads/2010/02/2009-Indicators-Report.pdf>
38. Washington State Department of Ecology. Water Resources - Water Rights. Available at: <http://www.ecy.wa.gov/programs/wr/rights/water-right-home.html>
39. King County Food and Fitness Initiative. Agricultural Assessment. Available at: <http://king.wsu.edu/foodandfarms/documents/KCFF-AG-final-6-15-09.pdf>
40. Washington State University. Urban IPM and Pesticide Safety Education. Available at: <http://pep.wsu.edu/>
41. Washington State Department of Health. Pesticide Incident Report and Tracking. 2009 Annual Report. Available at: <http://www.doh.wa.gov/ehp/PIRT/2009report.pdf>

42. Washington State Department of Transportation. Transportation Infrastructure: An asset to economic recovery. 2010. Available at: <http://www.slideshare.net/wsdot/transportation-infrastructure-an-asset-to-economic-recovery>
43. Washington State University. Small Farms Team. Available at: <http://smallfarms.wsu.edu/buy-direct.html>
44. Pimentel D, Pimentel M. Food, Energy and Society. Niwot, CO: Colorado University Press, 1996.
45. Hill H. Food Miles: Background and Marketing. Available at: <http://attra.ncat.org/attra-pub/PDF/foodmiles.pdf>
46. Canning P, Charles A, Huang S, Polenske K, Waters, A. Energy Use in the U.S. Food System. 2010. Available at: <http://www.ers.usda.gov/Publications/ERR94/ERR94.pdf>
47. Born B, Monsivais P, Morgan D. Greenhouse Gas Emissions and the Local Food System. Available at: <http://king.wsu.edu/foodandfarms/documents/GreenhouseGasesandLocalFood.pdf>
48. Heller M, & Keoleian, G. Life Cycle-Based Sustainability Indicators for Assessment of the U.S. Food System. Available at: http://css.snre.umich.edu/css_doc/CSS00-04.pdf
49. Washington Organic Recycling Council. Available at: <http://www.compostwashington.org/>
50. King County Department of Natural Resources and Parks. Farms Report: Future of Agriculture, Realize Meaningful Solutions. Available at: <http://your.kingcounty.gov/dnrp/library/water-and-land/agriculture/future-of-farming/farms-report-no-apdx.pdf>
51. Hamm MW. Principles for Framing a Healthy Food System. J Hunger Environ Nutr. 2009;4:241 - 250.
52. Washington State University. Vegetable Research and Extension. Available at: <http://vegetables.wsu.edu/plasticulture.html#Hightunnels>
53. Sonntag V. Why Local Linkages Matter: Findings from the Local Food Economy Study. Available at: <http://sustainableseattle.org/Programs/LFE%20Files/LFE%20REPORT%20FINAL.pdf>
54. Ecotrust. Farm to School Investment Yields a Healthy Return into State Coffers. 2009. Available at: http://www.ecotrust.org/press/f2s_investment_20090318.html



CHAPTER 3

INTERVIEW METHODS AND RESULTS: BARRIERS TO ACCESS TO HEALTHY FOODS AND EXAMPLES OF CURRENT WASHINGTON STATE INITIATIVES TO ADDRESS THEM

Sixty five key informants representing agriculture, food production, resource and waste management, food processing, schools, institutions, transportation, nutrition and hunger relief services and other important food system stakeholders were interviewed for this report.

This chapter provides:

- A description of the methods used for stakeholder interviews.
- Interview results about beliefs surrounding access to healthy foods in Washington State.
- Tables: Barriers to access and examples of current Washington State initiatives to address them.

METHODS

All interviewees were asked the following questions at the start of each interview:

“Do you think that everybody in Washington State has access to healthy foods? Why or why not?”

The purpose of the question was to gain understanding about the beliefs held by stakeholders regarding food access as a problem in Washington State.

Responses are as follows:

Yes, everybody has access. This belief was expressed by approximately 15% of stakeholders. In general, these respondents felt that healthy foods are readily available and that individuals either choose not to eat them or lack the information or knowledge to access and use healthy foods.

No, everybody does not have access. This belief was expressed by approximately 71% of respondents who cited lack of resources to purchase, lack of availability of healthy foods in neighborhoods, lack of availability of affordable healthy foods and lack of transportation to grocery stores as the primary barriers to access to healthy foods. Other factors mentioned included lack of knowledge about eligibility for and availability of food assistance programs.

I'm unsure whether or not everyone has access. Approximately 14% were uncertain about universal access to healthy foods.

Recruitment

Sixty five representatives from all components of the Washington State food system and other leaders were recruited as informants for the development of this report. Representatives were selected initially through consultation with Access to Healthy Foods Coalition Board members and members of the Washington State Nutrition and Obesity Prevention, Research and Evaluation Network (NOPREN). This network, funded by the Centers for Disease Control and Prevention (CDC) brings together research partners from state agencies for health and agriculture, local public health departments, nutrition policy advocates and multi-disciplinary academic researchers to advance understanding around environmental and policy approaches to improving access to affordable and healthy food.

A snowball technique was used whereby each respondent was asked to recommend other key informants for the project. All recommendations were pursued.

Interviews

Respondents were asked four questions about their perceptions regarding barriers to access to healthy foods in Washington State, current initiatives underway, opportunities for addressing barriers to access to healthy foods and needs for other information, resources and data (see Appendix 1 for specific questions).

Interviews were audio recorded and detailed notes were taken.

Analysis

Atlas.ti® qualitative analysis software was used to analyze the interview data. Data were coded based on the conceptual models presented in Chapter 1.

INTERVIEW RESULTS

The common themes that emerged from the data are presented in this chapter.

What are the Barriers to Access to Healthy Foods and What is Currently Being Done in Washington State to Address Them?

When asked to name the barriers to access to healthy foods and to provide some examples of current initiatives that are taking place in Washington State, respondents provided extensive information on many aspects of the situation. Respondents were asked to speak both from the perspective of the organization they represent and to provide their perspective on barriers and initiatives throughout the overall food system. Some respondents were able to speak to

system-wide issues, but most addressed the issues from the perspective of their work within their organization.

There are four determinants of access to healthy foods – financial, physical, nutritional and cultural.

Responses about financial barriers centered around a lack of individual resources to purchase healthy foods, underutilization of food assistance programs, infrastructure and funding limitations for farmers markets, schools, institutions and senior nutrition programs, and concerns generally about the long term viability of farming.

Interviewees described physical barriers that included the broad areas of scarcity of healthy foods in communities, limitations in the distribution system and food processing capabilities, limited transportation for individuals, and limited availability of healthy, affordable foods for institutional purchase.

Perceived nutritional barriers included the limited adoption and implementation of rigorous nutrition standards in schools, a need for foods that are easy to prepare, and a lack of institutional nutrition standards beyond schools.

Responses about cultural barriers centered around a lack of knowledge about healthy eating, food purchasing, accessing local food systems and food among both individuals and food service operators, the absence of breastfeeding as a cultural norm, lack of demand for healthy foods, lack of communication and collaboration among food system components, and aggressive marketing of unhealthy foods.

The five tables that follow present the stakeholder responses about barriers and examples of initiatives, and are organized according to their existence and/or level of greatest influence among these five categories:

Table 5	Family and Individual Level
Table 6	Community Level
Table 7	Institutional Level
Table 8	Regional Level
Table 9	State or Local Policy Level

Barriers and corresponding initiatives were categorized using a “best fit” approach. In many instances, issues could be categorized at multiple levels.

BARRIERS AND INITIATIVES TO ADDRESS ACCESS TO HEALTHY FOODS IN WASHINGTON

Table 5. Family and Individual Level

Barriers	Current Initiatives
<p>Individual Resources:</p> <ul style="list-style-type: none"> • Insufficient resources to purchase healthy food • Lack of time to purchase, prepare and eat healthy foods -- need for foods that are convenient to prepare and eat • Lack of transportation 	<ul style="list-style-type: none"> • Vouchers provided to tribes for healthy foods • Volunteering in exchange for food • Transportation assistance
<p>Information and Education:</p> <ul style="list-style-type: none"> • Lack of individual nutrition counseling and nutrition education • Lack of knowledge about how to purchase, prepare, grow and preserve fruits and vegetables and other healthy foods • Lack of knowledge about available food assistance programs, qualifications and how to access them, perception that applying for food stamps is a cumbersome process, not worth the effort, and they won't get treated with respect when applying in person (not aware of online options) • Lack of understanding about food system and need for reasonable pricing for both farmers and consumers • Perception that all processed foods are substandard to fresh foods • Stigma around utilizing school meal program (influence of peers) and/or food stamp program and other meal programs like those offered in senior centers 	<ul style="list-style-type: none"> • Parent education materials provided on healthy lifestyles • Advertising campaign, beef industry • Grocery store tours • Community kitchens • SNAP-Ed program • Outreach – Basic Food Program • Classes on gardening -- Extension • Consumer education campaigns: Heart of Washington • Programs connecting consumers with hands-on farm experience (VIVA farms)
<ul style="list-style-type: none"> • Refugee and other immigrant populations have difficulty accessing services due to language and other cultural barriers 	
<ul style="list-style-type: none"> • Difficulty maintaining breastfeeding practice for a year when women are going back to work and school and lack of breastfeeding as a cultural norm 	<ul style="list-style-type: none"> • Breastfeeding peer counseling program

Table 6. Community Level

Barriers	Current Initiatives
<p>Farmers Markets:</p> <ul style="list-style-type: none"> Inability to administer scrip/tokens/EBT <p>Senior Nutrition Programs</p> <ul style="list-style-type: none"> Insufficient funding to meet the need, are at capacity and are not conducting outreach Federal age restrictions for participation limit access by other vulnerable groups Lack of sufficient funding to purchase, prepare and store fresh produce Lack of coordination and distribution system to bring local produce to senior meal programs (and other community programs including child care) 	<ul style="list-style-type: none"> Pilot projects in Washington State to implement use of EBT Senior Farmers Market Program Funding advocacy at state and federal levels
<ul style="list-style-type: none"> Lack of community support for breastfeeding <p>Availability of healthy foods:</p> <ul style="list-style-type: none"> Lack of sufficient grocery stores in urban areas, corner/convenience stores that lack fruits and vegetables and other healthy foods Lack of sufficient grocery stores in rural areas and tribal reservations Lack of retail food stores in low-income areas Fast foods readily available in urban areas Lack of healthy food options in restaurants Lack of customer demand for healthier foods Lack of sufficient farmers markets, often located primarily in “wealthier” areas Farmers markets only open one day per week, with limited hours Local grocery stores are closing, inability of smaller stores to keep up with competition from consolidated operations Lack of sufficient garden space or access to other community garden plots and gleaning opportunities Lack of access to nutritional information about restaurant foods Limited availability of culturally-appropriate foods 	<ul style="list-style-type: none"> Establishment of new farmers markets in worksites, reservations, low-income housing buildings, etc. Funding initiatives for location of stores in underserved areas Facilitating connections between farmers and markets Mobile food pantries Establishment of new community gardens and garden plots New WIC food package which is causing retail stores to stock more nutritious food items Healthy Corner Store initiative Working with restaurants to increase healthy menu options and to use local produce and Washington products Healthy workplace initiative Farm to Institution programs Adoption of menu labeling standards for chain restaurants Pilot of menu labeling in non-chain restaurants Community Kitchens

Table 7. Institutional Level

Barriers	Current Initiatives
<p>Schools/Institutions:</p> <ul style="list-style-type: none"> • Insufficient funds to adequately purchase and prepare healthy foods (includes food cost, staff cost, adequate food preparation facilities) • Higher cost of local food and healthier options relative to alternatives • Lack of capacity to store and utilize fresh foods (refrigerators, freezers, cooking equipment) • Small school districts may lack nutrition expertise • Lack of leadership/institutional will to implement Farm to School programs • Lack of implementation of rigorous school nutrition policies 	<ul style="list-style-type: none"> • Farm to School and Farm to Hospital Programs • Local Farms, Healthy Kids • USDA Fresh Fruit and Vegetable Program • Programs to link food service professionals and chefs with farmers and to train them about healthy food preparation methods and menus • Incorporation of local organic foods into university cafeterias • Dept of Corrections and DSHS exploring streamlined ordering and healthier food procurement approaches • Overhaul of Dept of Corrections menu to include more healthy choices • Wholesale companies offering more healthy and local food items for sale • Vegetable gardens in most correctional facilities • Dept of Corrections program that works with farmers to bring in produce that is cleaned and prepared by inmates • Self-imposed standards to improve nutritional quality of foods (Universities, Dept of Corrections) • Districts working to strengthen school wellness policies • Food donations (seafood, fruit, etc.) to institutions and programs • Composting and recycling programs that lead to reduced waste costs and allow for more resources to be spent on food
<p>Emergency Feeding/Food Banks:</p> <ul style="list-style-type: none"> • Insufficient funds to purchase healthy foods • Insufficient funding for staff, lack of volunteers, lack of space • Some areas have insufficient population base to set up a program • Insufficient resources to handle fresh produce, including appropriate trucks and equipment (freezers/refrigerators) for storage • Donated foods are often less nutritious; food banks lack sufficient fresh produce and meats • Smaller food banks may only be open one or two times per week, not on weekends which is difficult for people who are working <ul style="list-style-type: none"> • Need for convenience and ease of preparation of foods 	<ul style="list-style-type: none"> • Efforts with state legislature to earmark funds for the purchase of healthier foods for emergency feeding programs <ul style="list-style-type: none"> • Continuing development of affordable and convenient products by food processors

Table 7. Institutional Level continued

Barriers	Current Initiatives
<ul style="list-style-type: none">• Lack of institutional support for breastfeeding• Lack of demand for healthier foods• Lack of knowledge about importance of healthy eating, customers looking for quantity at the best price	<ul style="list-style-type: none">• Dept of Corrections “Slender Offender” program• Development of university foodservice healthy food marketing campaign; pricing less nutritious items higher; developing a categorization process for healthier foods

Table 8. Regional Level

Barrier	Current Initiatives
<p>Farmers Markets:</p> <ul style="list-style-type: none"> • Not all equipped with EBT* capability • Monthly technology fee • Inability of some to accept WIC checks • Inability to use EBT* to purchase CSA** shares • Policies that disincentivize opening new Farmers Markets, such as requirement to pay property tax if located on a nonprofit site, health department requirements 	<ul style="list-style-type: none"> • Efforts to change regulations to make the establishment of farmers markets easier • Pilot EBT* projects
<p>Schools/Institutions:</p> <ul style="list-style-type: none"> • Lack of coordination and distribution system to bring local produce to schools (some schools that received grants for local produce were not able to spend them) • Insufficient supply of local products • More efficient to purchase from fewer larger sources 	<ul style="list-style-type: none"> • Efforts to help farmers connect directly with institutions (Farm to School) • Continued exploration and development of affordable, convenient and healthy options from food processors • Resource group for processors and producers
<p>Emergency Feeding/Food Banks:</p> <ul style="list-style-type: none"> • Lack of communication among and between emergency food providers • Lack of communication between emergency food providers and human services providers • Insufficient regional cooperation among distribution centers • Lack of sufficient regional processing capacity 	<ul style="list-style-type: none"> • Coordination with trucking association members to deliver produce to food banks • Pilot projects to improve transportation capacity • Processing and farming survey to identify processing gaps • Development of gleaning manual/gleaning societies
<p>Food Producers:</p> <ul style="list-style-type: none"> • Major grocers contract with growers for large amounts of lower cost foods; local growers have difficulty competing in their own markets; impacts consumer choice and land price • Lack of start-up capital and skills needed to enter into farming, including direct marketing, wholesale and export • Loss of diversity in crops • Large companies and supermarkets are imposing insurance requirements for growers (this came out of the spinach E-coli scare), making it difficult for small farmers to get into the market • Lack of ability to process crops and livestock • Lack of time and money to transport product to market and to be marketing and directly selling their own products • Access to water rights for small and medium farmers • Loss of existing small and middle size farms -- conversion of land for other purposes such as housing; "get big or get out" mentality • Loss of farmland • Many major growers contract sales of large amounts of their products to areas outside of Washington State 	<ul style="list-style-type: none"> • Efforts to connect farmers with markets including food banks, institutions, farmers markets and individual consumers • Mobile processing unit and other plans to increase regional food processing capacity • Efforts to develop new markets for producers • Marketing assistance for small and large farmers • Assistance for bilingual farmers to step into management and farm-ownership roles • Training for farmers including: succession planning; new farmer training; direct marketing; identifying new markets; development of business plans • Efforts to protect farm land

*EBT - Electronic Benefits Transfer
 **CSA - Community Supported Agriculture

Table 8. Regional Level continued

Barrier	Current Initiatives
<ul style="list-style-type: none"> Lack of coordination of food systems work Loss of funding for research and education and development of programs such as setting up CSA drops; partnering with groups to create new selling locations; development of community gardens 	<ul style="list-style-type: none"> Community food assessments Food Policy Councils/Networks
<p>Availability of healthy foods:</p> <ul style="list-style-type: none"> Large/efficient grocery stores prefer locating in high-end markets; current model based on people arriving by car requires 3X the land because of parking lot requirements 	<ul style="list-style-type: none"> Funding initiatives for location of stores in rural/low income areas Inclusion of food access in planning
<p>Transportation/Distribution:</p> <ul style="list-style-type: none"> Inefficiencies present in the transport of food products, especially difficult when handling perishable foods; need for more effective ways to share and pool distribution infrastructure resources NE Washington has special distribution challenges for fresh produce (for example, tribal reservation that takes 39 mile drive on dirt road; vendors won't make trip regularly) Lack of access to the marketplace among smaller farmers, including direct-to-consumer sales Congestion in urban areas makes freight delivery costly and time consuming Failure of the Howard Hanson dam threatens freight systems (Green River basin area) Freeze and thaw cycle of county roads and seasonal weight restrictions keeps producers from being able to legally access consumer markets at all times of the year Lack of transportation to grocery stores, farmers markets and other sources of healthy foods 	<ul style="list-style-type: none"> Initiatives to increase effectiveness and capacity of system (for example, refrigerated rail cars) Coordination with transit authority to bring people to healthy food sources

Table 9. State and Federal Policies, Standards and Regulations

Barrier	Current Initiatives
<p>Individual Resources:</p> <ul style="list-style-type: none"> • Food Stamps <ul style="list-style-type: none"> -Rules not aligned with healthy eating -Insufficient funding for outreach -Insufficient funding -- benefit too low 	
<p>Farmers Markets:</p> <ul style="list-style-type: none"> • Not all equipped with EBT* capability 	<ul style="list-style-type: none"> • Pilot projects to equip markets with EBT* capacity
<p>Schools:</p> <ul style="list-style-type: none"> • Insufficient funds to adequately purchase and prepare healthy foods (includes food cost; staff costs; adequate food prep facilities) • Barriers to purchasing foods directly from farms 	<ul style="list-style-type: none"> • Farm to School Program • Local Farms, Healthy Kids Initiative • USDA fresh fruit and vegetable program • SB5093
<p>Nutritional Standards for Foods in Schools:</p> <ul style="list-style-type: none"> • Lack of common standards • Not well implemented • Don't emphasize nutrition education • Lack of food procurement standards in state institutions 	<ul style="list-style-type: none"> • Self-imposed standards to improve nutritional quality of foods (Universities, Dept of Corrections)
<p>WIC:</p> <ul style="list-style-type: none"> • Limited fruit and vegetable benefit (average approximately \$8/month) 	
<p>Emergency Feeding/Food Banks:</p> <ul style="list-style-type: none"> • Restrictions on funding that can be used for renovation or for additional space (Community Development Block grants very competitive) 	<p>*EBT – Electronic Benefits Transfer</p>



CHAPTER 4

PROMISING STRATEGIES: A REVIEW OF EXPERT RECOMMENDATIONS

Scholarly journals and sets of recommendations from prominent governmental and non-governmental organizations were reviewed for strategies and policy recommendations put forth by experts in health, agriculture, planning and economics.

This chapter provides a description of the most promising strategies and offers specific examples when applicable.

Economic

- Procurement Standards
- Retail Quality & Proximity
- Taxes
- Redevelopment/Economic Development

Direct Access to Foods

- Community Gardens
- Food Security
- Community Supported Agriculture
- Local Kitchens/ Processing Units
- School Food & Nutrition
- Farmers Markets
- Farm-to-Institution

Vitality of Farms/Farming

- Cooperatives
- Supporting Farms & Farmers
- Farmland Preservation

Organization & Planning

- Food Policy Councils
- Community & Comprehensive Planning
- Transportation

Food Issues

- Food Safety
- Emergency Preparedness

Marketing

PROMISING STRATEGIES FOR INCREASING ACCESS TO HEALTHY FOODS

Introduction

To adopt a comprehensive approach to addressing the barriers associated with accessing healthy food within Washington State, the most promising strategies and recommendations are systems approaches and population-based strategies. The following strategies and recommendations come from a variety of sectors and sources representing scholarly journals, policy briefs, government articles and publications, and non-governmental publications. They represent the thinking and experience of experts in the fields of health, planning, agriculture, and economics. These strategies were selected based on how they impact multiple parts of the food system and how they relate to Washington State. Access to healthy foods in Washington State will improve when many strategies are applied at the same time.

Methods

The strategies and recommendations that are presented in this chapter are the product of a literature search conducted to identify a broad range of programs, environmental changes, and policy-level strategies that impact access to healthy foods. The results of the search were put into a table format and sorted by overarching categories, the multi-level framework as described in Chapter 1, and the definition of access to healthy foods components. An abbreviated version of the final table is available in Appendix 2. A full spreadsheet may be found at <http://depts.washington.edu/waaction>. The strategies do not represent an exhaustive list of the types of changes that need to occur, and some may prove to be more important than others in relation to changes that affect access to healthy foods. These strategies and measures can be starting points for addressing access to healthy foods in Washington.

Each of the 20 category sections begins with a definition or description. This is followed by an explanation of how the strategy increases access to healthy foods and evidence for the strategy. The section ends with ways to support or to implement strategies as well as specific examples when applicable. Some categories have undergone more scrutiny and evaluation while others are emerging and promising approaches that are still being evaluated.

The majority of these strategies address needs brought up by interviewees. Some were highlighted during several interviews and were especially pertinent. These include community and comprehensive planning and redevelopment tools, financing initiatives with corner stores and grocers, access to community garden opportunities, nutritional information while dining out, processing and distribution of food to schools, hunger relief, and the vitality of farming. Interviewees did not bring up emergency preparedness; though, it was mentioned in various published recommendations as a needed strategy for consistent access to healthy foods.

Economic

1. Procurement Standards
2. Retail Quality & Proximity
3. Taxes
4. Redevelopment/
Economic
Development

Direct Access to Foods

5. Community Gardens
6. Food Security
7. Community Supported Agriculture
8. Local Kitchens/
Processing Units
9. School Food & Nutrition
10. Farmers Markets
11. Farm-to-Institution

Vitality of Farms/Farming

12. Cooperatives
13. Supporting Farms & Farmers
14. Farmland Preservation

**Organization and
Planning**

15. Food Policy Councils
16. Community and Comprehensive Planning
17. Transportation

Food Issues

18. Food Safety
19. Emergency Preparedness

Marketing

20. Marketing

1. Procurement Standards

Procurement standards guide state agencies when they purchase foods. These standards address the nutritional quality of the food that is offered by vendors within a contract and bid process for institution and food service at state residential facilities, hospitals, and correctional institutions, and foods purchased for meetings and events. Procurement standards can also be used to improve the ability to purchase food locally, enabling more farm-to-institution opportunities.

Several experts recommend the use of procurement standards, and there is some evidence that institutional availability impacts food choice (1-8). A food procurement initiative aimed at utilizing local foods may improve various aspects of the food system by (9):

- Promoting food safety;
- Increasing the consumption of healthy and nutritious food;
- Improving the sustainability and efficiency of production, processing and distribution;
- Increasing cooperation among buyers, producers and along supply chains;
- Improving the sustainability and efficiency of public food procurement and catering services.

Procurement standards can be created as a state, institutional, and/or local policy. Strong policies require agency compliance and institute regulations across all departments. Single departments can also make regulations, but comprehensive laws and regulations will impact a greater population.

Specific examples:

- The federal government is moving forward to improve health by setting a model for providing healthier food to federal employees. The White House Offices of Management and Budget and Health Reform, working together with General Services Administration (GSA), have created a new national template for food service requirements to provide healthier and more sustainable food options in federal dining facilities across the country (10).
- New York City (11, 12) initiated strong procurement regulations that outline standards for food purchased, prepared, and served by city agencies. Food purchased by New York State agencies must meet standards based on guidelines that follow the Dietary Guidelines for Americans (13). This applies to all food purchased or served by City of New York agencies, including contractors providing meals to city-funded programs and food distributed to emergency food providers.
- The Commonwealth of Massachusetts, via executive order, implemented procurement standards that mirror New York City's (14). The executive order clearly states that it is "important that state agencies help model healthy behavior" (15).

2. Retail Quality & Proximity

This section includes strategies to address access to healthy food in stores. Where a grocery store is located, and the ability to access it, are determinants of physical access to healthy foods. Communities are working in public/private partnership with local planners and industry to either persuade grocers to come to underserved neighborhoods, to revitalize old stores, or to increase the offerings of healthy foods in neighborhood stores.

Recommendations by the Centers for Disease Control and Prevention (CDC) (1, 6, 7) and the Institute of Medicine (IOM) (16) support the development of supermarkets in underserved areas to increase access to healthy foods, prevent childhood obesity and related health problems, and to stimulate the economy (17). Some specific strategies to improve retail aim to create large scale financing and public/private initiatives to incentivize a large grocer to locate or relocate to an underserved area (3). Bringing in a grocery store provides living-wage jobs, raises the value of surrounding property, and attracts additional businesses to the neighborhood (18). Other strategies use incentives for small corner stores to carry fresh fruits and vegetables (3).

These strategies require public/private partnerships with good leadership. The experiences in Illinois, Louisiana, New York, and Pennsylvania suggest that identifying leaders and encouraging civic and industry involvement are important components of a successful initiative (17). For example, the Fresh Food Financing Initiative in Pennsylvania (19, 20) encourages the development of food retail in underserved Pennsylvania communities. To date, the initiative has committed \$63.3 million in funding for 68 supermarket projects in 27 Pennsylvania counties, and has created 3,700 jobs (20). The program's success has become a national model; President Barack Obama, in his FY2011 budget proposal called for more than \$400 million in investments in new and expanded supermarkets, farmers markets and other food stores (20).

Specific strategies to improve retail:

- Entice new stores or improve existing stores by using incentive programs (21).
- Involve community partnerships in the rise of non-traditional retailers in food retail (Wal-Mart, Costco, Super Target), which offer food at lower prices than large supermarket chains (21).
- Adapt store models to fit into smaller spaces (21).
- Use tax revenues to encourage grocery stores (21).
- Identify partners and build relationships (city agencies and NGOs) (18).
- Reduce operating costs and work proactively with retailers to help ensure long-term viability by providing technical assistance to improve operations (18).
- Increase the availability of nutritious food within stores; decrease the availability of less healthy food; change the relative prices of both of these types of foods; change physical layout of foods within stores by improving existing stores (6-8, 21).
- Improve the ability of small stores to offer healthy food (7, 22):
 - Reduce risk and costs for small stores by increasing shelf space for fresh produce by documenting unmet demand, subsidizing the additional cost, and providing managers tips to help them buy, sell and display produce.
 - Establish store collaboratives to jointly buy foods from local farmers.
 - Pick the right retailer by finding those that genuinely are receptive to selling healthier products and willing to invest to improve long-term viability.
 - Increase customer spending power by promoting participation in nutrition assistance programs.
 - Connect stores with government resources like financial and technical assistance for small business. Use economic development and health department resources to support these efforts.
- Support local stores in underserved areas that are in danger of closing via city/county resolution providing tax relief or other incentives (19).
- Limit restrictive land use covenants by allowing new grocery chains to move into locations previously held by another chain (19).

3. Taxes

This section addresses the various uses of tax structures as strategies to increase access to healthy foods. Taxes are a tool that can be used at the local, regional, special district, state, and federal level. The strategies listed here include: tax disincentives and incentives for point-of-purchase; tax subsidies for retail and redevelopment; and tax strategies to direct land use and preservation.

Tax Disincentives and Incentives for Point-of-Purchase

Tax structures can incentivize purchases of healthy food and disincentivize purchases of less healthy foods (21). The Institute of Medicine and others have recommended that governments implement a tax strategy to discourage consumption of foods and beverages that have minimal nutritional value (23). Taxation has been proposed as a measure that will reduce intake of sugar-sweetened beverages as a way to lower health care costs and a means to generate revenue that governments can use for health programs (24). The use of tax disincentives that increase the unit price of tobacco is a recommended strategy by the CDC (25). There is a great deal of interest in similar taxes on sugar-sweetened beverages and food products.

The economic rationale for a sugar-sweetened beverage tax is that several market failures exist with respect to sugar-sweetened beverages (24). Market failures occur when the market price of a good does not include the costs of harmful side effects. Consumers of sugar-sweetened beverages do not bear the full costs of their consumption decisions, because the consequences of their consumption include excess health care costs associated with obesity and poor oral health (24).

Key factors to consider when developing an effective policy include the definition of taxable beverages, the type of tax (sales tax or excise tax), and the tax rate (24). Experts propose an excise tax of one cent per ounce for beverages that have any added caloric sweetener (24). The advantages of taxing beverages that have any added sugar are that this kind of tax is simpler to administer than using more complicated formulas to determine nutritional quality of beverages, it may promote the consumption of no-calorie beverages, and it would encourage manufacturers to reformulate products. A tax of one cent per ounce of beverage would increase the cost of a 20 oz. soft drink by 15 to 20% (24). This type of tax could be levied by cities, counties, states or the federal government.

Tax Subsidies for Retail and Redevelopment

Taxes can be used to encourage grocery stores to locate or stay in underserved areas. Recommendations by the CDC (1, 7) and the IOM (26) support the development of supermarkets in underserved areas to prevent childhood obesity and related health problems and to stimulate the economy (17). Tax incentives to encourage retailers into redevelopment areas could include tax credits from the city or state, and federal tax credits that are available to grocery retailers (18). Outreach from city planning, economic development agency staff, and elected officials can help retailers understand what tax credits can mean to their bottom line (18). For example, the city of Richmond, California, attracted a national discount grocery store to an urban retail center with adjacent affordable housing by offering an attractive incentive package, which included land use at reduced cost to the developer, a federal grant, a zoning designation that provided tax incentives, assistance in negotiations with state regulatory agencies, improvement to surrounding sidewalks, streetscape, and traffic signals, and concessions on design standards (1).

Other strategies include:

- Establish food enterprise zones that attract food retailers selling healthy foods in underserved areas through zoning and tax incentives (2).
- Provide tax abatement for retail outlets that sell healthy food. Eliminate tax subsidies for fast food restaurants (2).

Tax Strategies for Land Use and Preservation

These strategies address county, state, and federal regulations on land use and how that land is taxed in relation to its usage. This can impact retail space in a downtown urban area, placement of farmers markets, and/or impact fees and taxes on farmland.

Designating land use and modifying tax policies associated with that land can serve as incentives for retailers and farmers markets to move to underserved locations, or stay in present locations. Farmland preservation eases the encroachment of development and ensures that farmers/producers will be able to continue farming their land and/or buy additional land that is not taxed at a different usage rate.

Specific examples and uses of taxes:

- Amend tax policies to create incentives for farmers and revenue for local governments by revising present-use-value taxation law; district or county governments assess land at its present-use value as farmland rather than at its market value for potential development (5).
- Raise funds for agricultural land preservation and open space acquisition by imposing a sales tax. Sonoma County, in California, has done this by adopting a 0.25 percent sales tax with revenues applied to Agriculture and Open Space Preservation (27, 28).
- Offer a farmers market exemption. Washington SHB 2402 (2010) exempts churches and other non-profits that host farmers markets from being taxed at for-profit rates (29).

4. Redevelopment/Economic Development

Redevelopment at the local level involves working with agencies to transform and revitalize communities through a formal process (30). Economic development improves access to healthy food by bringing valuable assets to the community in the form of grocery stores, which also provide living wage jobs, raise the value of surrounding property, and attract other businesses (30).

Redevelopment encompasses improving transit and street safety, and developing space for retail, housing, and recreation. Through the process of revitalization and redevelopment, public health advocates can work with redevelopment agencies to assist, prioritize, and improve access to healthy food and physical activity (30). Primary steps involve building public/private partnerships with key stakeholders, so that strategies are adapted to local needs and opportunities (17). This involves engaging diverse sectors, including diverse political sectors. Improved health and economic revitalization can go hand in hand when public health and economic revitalization representatives are at the same table (17).

Specific strategies:

Overarching strategies include working within redevelopment agencies, and partnering to assure the best use of development bonds, tax increments financing (TIF), land acquisition, eminent domain, and federal funds (30).

Specific economic development activities within a community food system include:

- Raise public awareness of the importance of the food sector to the local and regional economy (31).
- Create programs and incentives for food-related enterprise development, job creation, and workforce development (31).
- Provide training, technical assistance, and capital to small-scale businesses (especially women and minorities) engaged in farming, food processing, and food retailing (31).
- Implement workforce development strategies to prepare community residents for employment in retail stores (18).
- Use economic development incentives to attract grocery stores (18).
- Create economic stimulus programs and public-private partnerships to promote farmers markets, expand retail grocery stores, and support development of mixed-use neighborhoods (4).

DIRECT ACCESS TO FOODS

Direct Access to Foods

5. Community Gardens
6. Food Security
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8. Local Kitchens/ Processing Units
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11. Farm-to-Institution

5. Community Gardens

Community gardens and urban agriculture (commercial farming in urban areas) are strategies for improving neighborhood food access and providing increased opportunities for physical activity (6, 32).

Community gardens provide a local source of produce for residents and reinforce behaviors such as eating healthily, gardening, and walking (32). Community gardens benefit the overall community or neighborhood by creating community involvement, beautification, and noise reduction. Community gardens are important open space resources that build communities and provide a local food source (33). They are a tool for alleviating hunger because they provide affordable fresh produce to families, increase consumption of vegetables, save money, and improve diets (34, 35). They are valuable for urban greening, for engaging citizens, and as a cushion against local economic insecurity and emergencies and disasters that disrupt the normal flow of food (35).

The creation of community gardens is impacted by development pressures and private land issues. Local planning policies can encourage the development of community gardens. Land use plans may include temporary and low cost leases, marginal land, and in-kind use of city resources for irrigation and maintenance in urban/metro parks, and local school districts. Publicly owned lands (schools, parks, greenways, and tax-foreclosed properties) also provide opportunities for development of vegetable and edible landscapes (36).

Specific strategies:

The federal Farm Bill provides funding through the Community Food Project grant program and Cooperative Extension to support community gardens (37).

Brooklyn, Denver, Oakland, and Seattle (32) have innovative school and community gardening programs. The Seattle P-Patch community garden example is often identified as a model program (37). The Seattle program is supported by the “Urban Villages Element, Seattle Comprehensive Plan” that includes specific guidelines for one garden within walking distance of every 2,500 residents (33, 38).

6. Food Security

This section includes strategies that directly address lack of financial access to food for Washington’s families. Food security means having enough food at all times to meet basic needs for an active healthy life. To be food-secure, a family or individual needs to be able to get acceptable foods in socially acceptable ways (39). Food insecurity occurs when families cannot afford to buy healthy foods.

Financial access to healthy foods is a major barrier for some of Washington’s residents. Efforts to improve hunger and food insecurity in Washington over the past few years have had positive effects. Washington went from eighth hungriest state in the nation in 1996-1998 to 25th in 2004-2006 (40). Due to the efforts of hunger advocates in Washington State, food insecurity declined almost three

percent from an average of 13 percent in 1996-1998 to an average of 10 percent in 2004-2006. Children who participate in food assistance programs such as the National School Lunch Program and the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) have healthier diets, improved school performance, and better health outcomes. State and national hunger organizations have outlined the most effective strategies to address food insecurity (41-44).

Strengthen Food Assistance Programs

- Increase participation in the Supplemental Nutrition Assistance Program (SNAP): simplify program rules, make information about programs more accessible and relevant to low-income families, expand outreach and education (7, 41, 42, 45).
- Increase participation in USDA summer feeding programs for children: increase number of sites; increase participation at each site through improved transportation and outreach (41, 45).
- Increase participation in school meal programs, especially breakfast: reduce paperwork; automatically enroll SNAP-recipient children; serve breakfast in the classroom (42, 43).
- Increase food quality and participation in the Child and Adult Care Food Program and after school snack programs: increase number of child care sites participating, increase number of sponsoring agencies (41, 43, 45).

Strengthen the Emergency Food and Hunger Relief System and Improve the Nutritional Quality of Foods in the System

Stakeholders in the emergency feeding system can contribute to family food security by working to increase public awareness of the problem of hunger in the community and advocating for policies to end hunger (41). The national Blueprint to End Hunger highlights the following:

- Strengthen charitable distribution networks, and continue to acquire and distribute balanced and nutritious food (41).
- Organize labor and industry to be involved with local anti-hunger organizations by advocating and donating time, money or food and support workplace giving campaigns that target hunger (41).

The Centers for Disease Control and Prevention recommends including fruits and vegetables in emergency food programs as a strategy to increase access, availability and consumption of fresh fruits and vegetables (6).

The efficient and reliable distribution of food through hunger relief systems depends on complex interactions between transportation, storage and distribution networks at all levels – from entry points of food into the system to the places where food reaches clients in need. Additionally, hunger relief programs rely on sufficient resources to ensure an adequate supply of nutritious foods, both purchased and donated. Innovative strategies emerge when emergency food programs tap into donated or reduced-rate resources by reaching out to: businesses such as farms, grocery stores, packing houses, cold and dry storage and transport companies; service clubs like Rotary, Kiwanis and Lions – or when they form partnerships around distribution or storage centers to take advantage of economies of scale. A report from Rotary First Harvest (44) has identified the following promising strategies:

- Develop or expand transportation coalitions to build cost sharing transportation networks.
- Use government resources for the purchase of vehicles or use existing general government distribution networks.
- Partner with trucking schools and organizations with pre-established distribution routes to obtain donated and reduced-rate trucking.
- Bypass the need for cold storage and warehousing by offering opportunities for clients to self-select produce from truckloads delivered at prearranged times and locations.
- Share cold storage space between food banks and state storage networks such as those run by the Department of General Administration, Office of Superintendent of Public Instruction and the Department of Corrections.
- Provide mobile food banks in areas where established food banks are not a viable option.

- Link food banks and other hunger relief programs directly with farms and community gardens. Department of Corrections facilities operate gardens to help supplement their food services programs, and some donate to emergency food programs. Farmers and home and community gardeners also share produce.
- Gleaning projects collect surplus produce from commercial farms and produce wholesalers as well as residential gardens and fruit trees for distribution to food banks and other hunger relief organizations.

7. Community Supported Agriculture

Community Supported Agriculture (CSA) is a popular way for consumers to buy local, seasonal food directly from a farmer. A farmer offers a certain number of "shares" to the public. Typically the share consists of several boxes of vegetables throughout the growing season, but other farm products such as meat, dairy, eggs, and flowers may be included. CSAs are a benefit to farmers, who directly market to consumers and receive direct payment, and for consumers who get fresh produce often delivered right to their doors. Multiple experts support CSAs as a beneficial way for local communities and individuals to access healthy food (1, 6, 23, 36). More than 180 CSA farms operate in Washington.

Strategies to implement or expand CSAs include:

- Partner with community organizations to expand access to healthy foods; target areas with low access to fresh produce (46).
- Work with faith-based organizations, health care and hospitals (46).
- Offer reduced-rate shares, installment plans, and work shares for low-income households (22).
- Ensure that CSAs can accept electronic benefit transfer for food assistance programs, and Senior and WIC Farmers Market Nutrition Program Vouchers (22).
- Enact supportive local land use policies (22).
- Provide financing for local and regional producers (22).
- Coordinate CSA memberships at common drop sites such as worksites and schools.

8. Local Kitchens/Processing Units

There are three kinds of local kitchens/processing units: 1) those to help community members prepare meals and learn to cook; 2) agricultural processing kitchens; and 3) community kitchens used between school districts or community groups to prepare and process food that institutions or groups do not have the capacity or space to prepare on site.

Community Kitchens

Community kitchens create opportunities for community members to prepare meals, learn to cook, save money, and promote good health (31). They are also a community food security strategy to increase variety, make ends meet, and provide for families outside of food banks (47). For example, Seattle Parks and Recreation offers a Community Kitchen model, "Community Kitchens Northwest" (48).

Specific examples and strategies:

- Offer food preparation courses as part of city parks and recreation activities (2).
- Develop affordable food processing/kitchen space in economically distressed areas (4).

Agricultural Processing Kitchens

Value-added kitchens are used to make products like jam, cider, butter, and salsa, which can be sold for a higher price than the raw ingredients, and which provide income for producers beyond the growing season (49).

Public kitchens can be located in churches, senior centers, restaurants, catering companies, food processing businesses, contract packing companies, shared-use commercial kitchen incubators, agricultural processing centers, and meat processing facilities (49). Agricultural processing kitchens must be approved by public health, Washington State Department of Agriculture, and/or the United States Department of Agriculture, depending on their purpose. For mobile units, permitting depends on location. The kitchens can be supported by planning and land use strategies if the facility is part of a formal infrastructure.

Specific example and Strategies:

- Develop value-added kitchens and processing units. Examples are in operation on Whidbey Island, WA (50).
- Create neighborhood plans that incorporate facilities and spaces for community kitchens and related infrastructure, food business incubator facilities, and entrepreneurial urban agriculture projects (31).

Commercial Kitchens

A shared commercial kitchen is a strategy used by schools and other institutions to combine resources and maximize efficiency. This strategy works well for school districts that do not have the capacity to prepare or process food on site (4).

Strategies to implement or expand kitchens and processing units include:

- Support a central kitchen for school districts (46).
- Invest in processing and other food system infrastructure (5).
- Provide incentives for community kitchens that can be used by schools and other institutions (2).

9. School Food & Nutrition

Schools substantially impact access to healthy foods for most of America's children. Access can be improved through rigorous standards for the food served at school, effective nutrition education and thoughtful food procurement practices.

Nutrition Standards

National attention has focused on the need to establish school nutrition standards and limit access to "competitive foods" – that is all foods sold or served in outside school meal programs or during school-sponsored events. School foods should consist of nutritious fruits, vegetables, whole grains, and nonfat or low-fat milk and dairy products to be consistent with the Dietary Guidelines for Americans.

Comprehensive, rigorous school nutrition policies are an effective mechanism for shaping healthy school environments. School districts that successfully adopt and implement school nutrition policies create school environments that promote healthy eating for students and staff by increasing access to healthy foods, decreasing access to less healthy foods, teaching about food and nutrition, and involving families. Strong school nutrition standards have a positive influence on the diets of children. They increase physical and financial access to healthy foods (51-55).

State legislatures are taking a more active role in considering school policies to promote healthier communities and reduce obesity among school-age children. Roles for states include (56):

- Set nutrition standards for school foods and beverages.
- Create multidisciplinary committees or task forces to promulgate such standards.

- Delegate the task of setting these standards to state executive agencies such as the Department of Agriculture or the Department of Education.
- Focus on increasing participation rates in federal school meals programs to provide more nutritious foods to children and adolescents of low income families and to bring federal meal reimbursement funds into the state.
- Establish state multidisciplinary wellness or advisory councils; include members from schools, industry, parents, teachers, medical associations, school boards, physical education associations and other stakeholders.
- Facilitate cooperation among state agencies for wellness policies by creating a School Wellness Policy Task Force to identify barriers to implementing wellness policies and recommend how to reduce those barriers.
- Establish a specific, dedicated state office or an interagency council to coordinate wellness activities.
- Direct local school districts to establish wellness councils with broad stakeholder participation.
- Establish mechanisms for state oversight of wellness policy implementation.
- Establish statewide information clearinghouses for wellness policies and information.

Local Districts can support the development, implementation and evaluation of strong nutrition policies through the following strategies (53, 56):

- Establish a school district wellness team with broad representation from parents, teachers, students, businesses, community members, school administrators and other key stakeholders.
- Ensure that school nutrition policies are integrated into a system of coordinated school health.
- Collect and review data to determine nutrition-related needs within the school district and update existing nutrition policies regularly. Assure that policies address:
 - Specific nutrition standards for foods sold or served outside of school lunch including vending, a la carte, fundraisers, school stores and school celebrations
 - Nutrition education
 - Marketing: restricting marketing of unhealthful food; promoting healthy choices
 - Advisory Committee composition, structure and function
 - Promotion of USDA meal programs, strategies to increase participation
 - School meal environment, adequate time for meals
 - Training for food service staff
 - Access to drinking water (8).
- Assess existing nutrition policies and procedures and review compliance with existing policies
- Implement a farm to school program (6).
- Develop, monitor and regularly revise action plans to guide policy implementation.
- Develop a district-wide school nutrition policy implementation workgroup.
- Identify or develop strategies, resources, and incentives to facilitate school-level policy implementation.
- Develop and implement evaluation activities.
- Compile evaluation data and report results.
- Identify key actions to take based on evaluation results.

Nutrition Education

Quality nutrition education addresses all of the essential academic learning requirements for health and offers students an opportunity to participate in interactive, relevant nutrition education that is integrated into regular subjects such as math and science. Eating patterns are more likely to improve when changes in the school environment are integrated with classroom nutrition education (52). Standards for nutrition education should be included in school wellness policies. Nutrition topics should be integrated within the comprehensive health education curriculum and taught at every grade level (K-12).

Farm to School

Farm to School is a specific example of a general farm-to-institution initiative as described in strategy 11. In these programs, schools (K-12) are connected with local farms with the objectives of serving healthy school meals, improving student nutrition, providing agriculture, health and nutrition education opportunities, and supporting local and regional farmers. The program works to remove obstacles to purchasing and using locally grown food in schools.

In addition to increasing children's physical and financial access to nutritious foods and supporting local family farmers, the Farm to School approach provides students with an opportunity to visit the farms, start gardens, and implement recycling and composting programs at school. Students in schools with farm to school programs eat more fruits and vegetables per day in the cafeteria, classroom and home; make positive lifestyle changes and improve knowledge and attitudes about healthy eating and sustainable agriculture. Student participation in meal programs increases in schools with farm to school programs (6, 57).

School districts, distributors, governmental units, local food advocates and producers all have a role to play to expand use of local produce in Washington schools. Strategies include (58, 59):

- Include Farm to School programs in school district nutrition policies.
- Raise awareness of the program among food producers and distributors, school foodservice directors and nutritionists, and existing community farm to school organizations.
- Advise and provide technical assistance to growers seeking to sell local food to schools, schools seeking local foods and organizations and individuals seeking to create farm-to-school programs.
- Assess the interests, capacities, and needs throughout the food distribution system—from farm to plate—to identify impediments and opportunities.
- Seek additional resources to achieve program goals and leverage existing resources through partnerships with other agencies and organizations.
- Conduct program evaluations.

10. Farmers Markets

At farmers markets, groups of farmers come together in a single location to sell their food products to the public (60). Farmers markets provide fresh produce to communities, support small and local farmers, serve as community venues, and revitalize community centers and downtown areas (1, 23, 56, 61-63). By selling directly to consumers, farmers eliminate the middle man and maximize profits (60). Farmers markets generate economic benefits for the community. For example, farmers market customers also shop at neighboring businesses before or after their visit to the market (60). Spending at farmers markets has a high multiplier effect as money circulates more times in the local economy before leaving (60). The establishment and support for farmers markets is a strategy recommended by CDC to increase fruit and vegetable access, availability and consumption (6).

Some communities have difficulty establishing farmers markets because of the complicated process of finding sites (public and private) (61). Laws and regulations regarding land use and zoning can help or hinder farmers markets. For example, a local zoning law that establishes farmers markets as an allowed use in the areas that the community selects eliminates the need for future permits (21, 22, 31, 36, 37, 46, 61, 63).

Increase Number of Farmers Markets

Local governments can promote healthy eating by supporting local farmers markets. Model comprehensive plan language for farmers markets and model zoning ordinance establishing farmers markets as a permitted use have been developed (61).

Specific strategies include (61):

- Streamline permitting processes for smaller markets. Minneapolis streamlined the process for increasing access to fresh produce in low-income neighborhoods. “Mini Markets” with five or fewer vendors do not require a business license, only a permit. In Minneapolis, Mini Markets are hosted by community organizations and comply with health and zoning codes.
- Offer farmers market sites on city property. For example in San Francisco an ordinance states that farmers markets can be located on park land. The ordinance requires the Commissioner of Agriculture to work with the Recreation and Park department to identify suitable sites.
- Partner with local agencies and schools to sponsor and promote markets. Examples include schools, Chambers of Commerce (Cedar Rapids, Iowa), hospitals (Kaiser), Universities (Wayne State University in Detroit), and faith-based communities (CT).
- Work with municipalities to prioritize markets in an appropriate way for that community (e.g., place markets next to schools, a town center, or public transportation, or in neighborhoods that have no fresh produce outlet).

Increase Availability of Electronic Benefit Transfer (EBT)

Increase availability of EBT by requiring farmers market vendors to accept coupons, vouchers, and EBT cards (28, 61). EBT cards are the mechanism for paying for foods purchased with Supplemental Nutrition Assistance Program (SNAP) funds. Reporting requirements and need for staffing at the markets must also be considered.

Specific strategies:

- Introduce legislation at the state level that requires the acceptance of EBT cards and provides support for their implementation at farmers markets. Many farmers markets cannot process such transactions because EBT terminals are expensive and/or they do not work in all locations. Results from a recent Washington State technology pilot project, that provided wireless point of sale devices to process transactions and other support, indicated a 320% increase in sales to SNAP recipients.
- Apply for grants from USDA Farmers Market Promotion Department.
- Coordinate with local health jurisdictions and economic development organizations.

11. Farm-to-Institution

Farm-to-institution is a direct-to-the-institution procurement method that bypasses a wholesaler or other go-between and allows institutions to purchase fresh produce and other foods directly from the farm. It includes farm-to-school, farm-to-hospital, farm-to-food bank, farm-to-worksites, and farm-to-government institution.

There is renewed interest in building, rebuilding, and encouraging all aspects of a local food system so that producers have the necessary infrastructure to grow, harvest, package and deliver fresh, healthy food to the public (63). The Centers for Disease Control and Prevention and other experts recommend the use of farm-to-institution as a means to increase access to locally produced food and as a way to bolster local farms (1-3, 5, 6, 37, 64). Farm-to-institution programs also meet consumer demand for locally grown products (56, 63). Policy-makers are using strategies to assist local food production and consumption. These include state-wide initiatives to finance infrastructure and create an easier process for state institutions to purchase locally (63). In Illinois (HB 3990) aims to have twenty percent of state-purchased food from in-state sources, one of the first such goals of its kind in the nation (63). Specific components of this bill include (63):

- Goal that 20 percent of all food products purchased by state agencies and state-owned facilities be local farm or food products by 2020. State agencies and state-owned facilities that purchase food products must develop a system to identify the percentage of local farm or food products purchased for fiscal year 2011 as the baseline against which the 20 percent goal will be measured, and to annually track and report local farm or food product purchases.

Vitality of Farms/Farming

- 12. Cooperatives
- 13. Supporting Farms & Farmers
- 14. Farmland Preservation

- Provision that state agencies give preference to a provider of locally grown food when the cost of such food is not more than 10 percent higher than the lowest bid for a procurement contract.
- Local Food, Farms and Jobs Council to help state agencies and state-owned facilities purchase and track local farm or food products;
- Help for local farm and food entrepreneurs so that they can identify and secure resources and equipment to expand projects for development of local farm or food products;
- Building infrastructure and use of public lands for growing local food products;
- Annual goals for purchases of local food products by Illinois residents; and
- Mechanisms to monitor development and expansion of a local farm and food economy through data collection. The council also will develop a label and certification program to identify and encourage consumption of local farm and food products.

Other specific examples:

Montana (SB 328 - 2007) and Kentucky (SB 84 – 2009) also have farm-to-institution legislation that makes the procurement process for obtaining locally produced fresh produce less cumbersome. These policies are good for the local economy as small and medium farms are reaping the benefits of selling locally and institutions (including schools) are purchasing local, fresh produce.

For farm-to-food-bank please refer to Food Security #6 and for farm to school, please refer to School Food and Nutrition #9.

VITALITY OF FARMS/FARMING

12. Cooperatives

There are two types of strategies to increase access to healthy food through the use of cooperatives: a farmers cooperative, and an organizational or institutional cooperative. Even though it can be challenging to convince farmers to join cooperatives, they can facilitate individual and group financial success (64).

Farmer Cooperatives

A farmer cooperative is a group of farmers or producers that come together for mutual benefit regarding crop cultivation and harvest, purchasing of supplies and sales of products. Farmer cooperatives benefit from the pooling of resources to create education programs, develop collective strategies for self-sufficiency, and create value-added products and sell them as a collective. These cooperatives are often eligible for government assistance (64). They can also be especially helpful in times of economic hardship, and important to low-resource producers (64).

Non-governmental organizations can support agricultural cooperatives that guide farmers through the business and financial issues involved in collective self-management (64).

Specific examples:

- The Federation of Southern Cooperatives has worked with family farmers, predominantly African-American farmers, for over forty years. This organization provides education and technical assistance to assist farmers with land retention and development, and the development of cooperatives and credit unions as collective strategies to create economic self-sufficiency (28, 64).
- Limited-resource farmers and ranchers benefit from forming cooperatives that are eligible for some forms of government assistance (64):
 - The Sangre de Cristo Agricultural Cooperative (NM) is a local wheat growing cooperative of mainly Latino and Native farmers. They are funded by a Sustainable Agriculture Research and Education (SARE) grant and extension. They have created a product, “Nativo” bread, popular in local bakeries and sold in Taos and Santa Fe.
 - The Flathead Native Agricultural Cooperative (MT) is a beef processing cooperative funded by USDA. This cooperative has created a value-added product, smoked beef strips from grass-fed cows. The product is sold at the National Museum of the American Indian in Washington, DC.

Institutional Cooperatives

Much like a farmer cooperative, an institutional cooperative enables organizations or institutions to pool resources and capacity in a certain area or for a specific activity. This could be a group of schools, school districts or worksites combining resources for food procurement. By combining resources, these cooperatives create collective buying power that leads to competitive pricing for vending machines, school meals, and other products. It can also provide incentives for the production, distribution, and procurement of food from local farms (1).

The New North Florida Cooperative serves as a regional lead agency for the National Farm-to-School Network and is the hub for farm-to-school activities in the southern region of the United States (1, 28, 65). They facilitate the sale of locally grown produce to local school districts by acting as an intermediary between local farmers and school districts. The cooperative markets, handles, processes, and delivers fresh produce on behalf of participating local farmers at competitive prices so schools are not paying more to buy local (1). As of July 2009, the cooperative has served fresh fruits and vegetables to over one million students in 72 school districts (1).

13. Supporting Farms & Farmers

Support for farming as a profession and sustainability of farms and viable land are two reoccurring themes that run through many strategies and also appear as standalone overarching strategies. For the purposes of this report, “Supporting Farms and Farmers” will address education for farmers and access to land.

Education for Farmers

In addition to the skills and competencies required to produce agricultural products, farmers need to know how to run a business (66). Experts frequently recommend strategies to provide tools and training to make farming a viable business profession (36, 67, 68). Some frequently recommended educational topics that can help farmers, especially new farmers, run their business include:

- Creating a business plan.
- Marketing and selling to institutions and industry.
- Creating market demand for products by promoting the advantages of fresh local produce.
- Identifying appropriate institutional markets.
- Advocating for policies that encourage purchase of food from limited resource producers.
- Complying with government regulations.
- Navigating the governmental procurement and bid process.

In Washington State, Washington State University Extension, local agriculture commissions and conservation districts, and non-governmental organizations such as Washington Tilth Association offer trainings for farmers. In both Washington and across the U.S., shrinking budgets and the growing diversity of farmers are challenging these groups as they seek to meet education needs of all farmers (64). Education needs to be offered in languages that reflect the workforce and clientele (64).

Specific strategies include (64):

- Support non-governmental organizations who work directly with limited resource producers.
- Work closely with state and local food policy councils to identify strategies beneficial to limited resource farmers.
- Address the lack of infrastructure that prevents local producers from being able to respond to strong consumer interest in buying locally grown products.

Access to Land

The viability of the farming profession is heavily dependent on being able to acquire land for producing and having the resources to then use that land (67). The process of acquiring land for farm production can be a complicated endeavor, and some strategies that enable farmers to acquire, keep and use viable land over a period of time have promising potential to increase access to healthy foods. Mechanisms to access land include (69):

- Cash lease: Most cash leases are short-term and require little commitment from either landowner or tenant farmer; long-term leases can be an affordable way for farmers to use more sustainable practices and to invest more in their businesses. A written lease provides benefits and security for both parties.
- Crop share: Also known as “share-crop” and “share lease,” in this model, rent payment is a part of the crop, most often paid as part of the income from total crop sold.
- Long-term lease: This model is very close to ownership, terms are usually 40-99 years and can be inheritable, depending on the state law. They are used by cities and land trusts that own the land, but wish to guarantee farmers lifetime tenure.
- Lease with option to buy or right of first refusal: This model includes: “purchase option,” where the owner and tenant pre-determine the purchase price and date for execution of the purchase; and “right of first refusal,” where the owner can only sell the land to a third party after the tenant has had a chance to “refuse,” by matching that third-party offer and making the purchase first.
- Fee title purchase with seller financing: In this model, the new buyer takes possession of the land and makes payments directly to the seller. This works well when there is an established relationship. This model avoids conventional lending requirements and brokerages fees. This is also a common strategy to transfer land to the next generation within a family.
- Fee title purchase with agricultural conservation easement: This model extinguishes development rights on land, making it less valuable to non-farmers. It usually involves donating or selling the land’s development rights in the form of an agricultural conservation easement to a nonprofit land trust or government agency.

One strategy to increase farmers’ access to land is to facilitate participation in programs that support land purchases by new and socially disadvantaged farmers. The Direct Farm Loans program, which offers “Direct” loans made by the Farm Service Agency (FSA) with government funds, offers loans for farm ownership, operating, emergency and youth. In addition to USDA government services and programs, several agencies and organizations provide services that can help farmers seeking land (69):

- American Farmland Trust (<http://www.farmland.org>): Nonprofit membership organization concerned about the rapid loss of the nation’s farmland to development and dedicated to protecting strategic agricultural resources.
- Equity Trust (<http://www.equitytrust.org/WholeFarm.html>): Small, national nonprofit organization that helps communities gain ownership interests in their food, land, and housing. They offer land tenure counseling, financing, and land stewardship service.

- FarmLASTS Project (<http://www.farmlasts.org/>): Seeks to improve how farm and ranch land is acquired, stewarded, and passed on. The project's working groups conduct research and education on farmland access, farm succession, and the impact of these arrangements on land use and the environment.
- American Society of Farm Managers and Rural Appraisers (<http://www.asfmra.org/>): A nationwide organization for professionals who provide management, valuation, and consulting services on agricultural land assets.

14. Farmland Preservation

Farmland preservation is an effort by government and non-governmental organizations to set aside and protect a region's farmland for the use, education, and enjoyment of future generations. It is often a part of regional planning and national historic preservation and involves federal, state and local land-use planning and zoning (67, 68, 70).

The American Planning Association (APA) has created a guide devoted to agricultural land preservation. The APA Guide on Community and Regional Food Planning highlights the need for planners to develop land use planning policies, economic programs, land taxation, and regulations to enhance the viability of agriculture (31). Access to farmland is important to beginning farmers who may not be able to buy high-value land near cities (64). Producing foods near cities can potentially reduce the energy cost of producing and transporting some foods.

Washington has policies that support agricultural preservation. The state has adopted or enabled many of these policies: agricultural zoning, conservation easements, right-to-farm laws, purchase of development rights, transfer of development rights, and the creation of the Office of Farmland Preservation with the State Conservation Commission. "One of the most useful and valuable tools used by local governments are agricultural strategic plans which outline land use goals and objectives (67, 68)." Growth and development zoning changes which occur at the local level, using policies developed by the state, and which allow for the movement of growth boundaries into agricultural areas, can benefit a landowner trying to transition out of farming, or add another level of impact to a landowner wanting to continue farming (67, 68).

Planning

Farmland can be preserved through land use planning both at the state and local level. Planners can incorporate long-range planning with consistent smart growth strategies at the state, county and municipal levels (70). Agricultural zoning ordinances can be used to protect agricultural land (70). County and municipal governments can be authorized to adopt and fund transfer of development rights programs and purchase of development rights programs for the preservation of agricultural land (70).

Incentives and Taxes

Specific examples include:

- State legislation that links incentives to continue farming, such as state income tax credits or differential assessment for property taxes, with controls preventing conversion of the recipient's agricultural land to non-farm uses (70).
- Taxes levied on the conversion to non-farm uses of important agricultural land in areas designated for agricultural land preservation (70).
- Legislation and regulation that require comprehensive plan language for preserving farmland, establish non-regulatory agricultural districts wherein agriculture is the recognized long-term use, and designate land that cannot be broken up into parcels too small for commercial farming (70).
- Farmland preservation can be encouraged by tax incentives, economic development programs, land taxation, and development regulations (31). For example, Sonoma County passed an Agriculture and Open Space Preservation Proposition raising funds for agricultural land preservation and open space acquisition by imposing a 0.25 percent sales tax to protect farmland and other open space (27, 28).

Organization & Planning

- 15. Food Policy Councils
- 16. Community & Comprehensive Planning
- 17. Transportation

Additional strategies:

Public-private partnerships aimed at preserving farmland are another strategy to preserve farmland. In Pierce County, WA, partners arranged to buy the development rights to a 100-acre property, reducing its value so that local farmers could afford to buy it. Under the agreement, the land must be operated as organic farms in perpetuity (71).

ORGANIZATION & PLANNING

15. Food Policy Councils

Food policy councils, forums, and partnerships act as both forums for food issues and platforms for coordinated action. In a council, citizens, organizations, and agencies can come together for coordinated planning and decision-making. Because groups and government institutions working on access to healthy foods do not always overlap, these kinds of structures can connect between “silos” and facilitate the development of comprehensive food policies (72).

Several experts recommend the creation of food policy councils (2, 6, 23, 31, 32, 37, 63, 64). Food policy councils are effective at bringing together citizens, government officials, and other stakeholder organizations, to examine state and local food systems (23). They are a unique form of civic engagement that assembles diverse food system stakeholders to develop food and agriculture policy recommendations (23).

Formal food policy councils consist of representatives and stakeholders from many sectors of the food system and have formal relationships with local, city, and state officials (72). Councils identify and propose innovative solutions to improve local or state food systems (72). They usually have four functions: to serve as forums for discussing food issues; to foster coordination between sectors in the food system; to evaluate and influence policy; and to launch or support programs and services that address local needs (72).

Recommended strategies (72):

- Engage members across different sectors of the food system and from different socio-economic backgrounds to draw from a diverse base.
- Establish priorities and develop a strategic plan. For example the Acting food Policy Council for Seattle/King County created a strategic framework that outlined strategic areas: equitable food access, infrastructure, local economic development, public health, and council development (73).
- Establish clear structures for decision-making, communication and evaluation from the beginning.
- Examine structural trade offs between being within or independent of government in terms of how the council is funded, and what issues the council chooses to prioritize.
- Include elements of self-education (for members) and the public.
- Diversify political and internal leadership support.

- Evaluate and monitor the effects of the council’s policies and activities.
- Be a “positive energy” organization; become doers and problem solvers, and work *for* the creation of positive alternatives instead of exclusively fighting *against* the current system.
- Maintain good relationships with local (and state) government. Whether a council is independent of government or housed within a government agency, buy-in from local officials is key.
- Start small—food policy councils are still young and building credibility. Many have identified “quick wins” and are striving to establish a good track record before taking on larger structural issues. Mark Winne notes that councils “tend to look at things that we can influence, like getting a law or regulation passed or more funding – that’s the reality that practicality tends to circumscribe the work of Food Policy Councils while bigger issues take longer and become research items.”
- Balance programs and services with larger policy changes. Creating successful programs can address immediate needs while indirectly changing the policy context of a food system. This can help build the credibility needed to address larger structural issues later on.

16. Community & Comprehensive Planning

Although different specific terms are used in different jurisdictions, in general, comprehensive planning directs public policy in terms of transportation, utilities, land use, recreation, and housing. The plans typically encompass large geographical areas, address a broad range of topics, and cover long-term forecasting. Comprehensive plans are policy documents that provide guidance for long-range and future development (33). Under Washington state’s Growth Management Act (GMA), the plans contain the following chapters: land use, transportation, housing, capital facilities, shorelines, and rural (for counties) (67, 74). While there are statewide laws governing the planning process in Washington, the local plans are developed by counties and cities.

Planners and public health practitioners can work collaboratively to influence planning. Planners can play a role in community and regional food planning, and the American Planning Association offers two goals for this realm: to help build stronger, sustainable, and more self-reliant community and regional food systems; and to suggest ways the food system may interact with communities and regions to enhance benefits such as economic vitality, public health, ecological sustainability, social equity, and cultural diversity (31). Just as public health advocates have acknowledged the built environment’s contribution to obesity and have promoted pedestrian and bicycle policies, food systems advocates are beginning to advocate for and engage local governments to identify and establish policies that support community-based and regional food systems (33).

Comprehensive planning includes a broad range of elements to impact food systems and food security: land use, open space, housing, transportation/circulation, conservation, noise, safety, and jobs and economic development (33). A policy option is to create a specific “food system” element at either the state level or at the local level and follow some of the strategies below:

- Assess zoning and land use policies for how they encourage/discourage agricultural activities and how they protect agricultural resources (37).
- Conduct an assessment of urban public lands that could be used for agricultural activities, paying attention to spaces like utility corridors that are otherwise unused (37).
- Establish land use protections for urban agriculture, community gardens, and farmers markets (2).
- Support appropriate land use, economic development, transportation and comprehensive planning policies and regulations to promote local and regional markets for food producing in the region (31).

Planning tools like land use and zoning impact many other strategies and recommendations such as farmers markets, community gardens, retail establishments, and farmland preservation. To be successful, planning changes need to have support from the public, and language should clearly establish links between the change

and benefits to public health and safety (33). The implementation process should be carefully considered because plans will not be successful without specific strategies to implement it, e.g. zoning or other changes (30, 33).

Zoning Strategies

Zoning is the demarcation of an area by ordinance into zones and the establishment of regulations to govern the uses of zones (commercial, industrial, residential) and the location, bulk, height, shape, and coverage of structures within each zone (33, 74). Zoning is a tool used to divide a jurisdiction into areas and identify allowable uses within those areas (33). These include single or multi use residential, neighborhood commercial, light industrial, and agricultural uses (33). Zoning is a tool to regulate lot size, density, open space, parking, and other factors (33). Zoning laws (in some states) must be consistent with the jurisdiction's comprehensive plan, must be rationally related to a legitimate government purpose, and must not deprive property owners of economically viable use of their land (33). Zoning determines what can and cannot be built, and what activities can and cannot take place on the parcels of land throughout a community (61).

Several experts recommend zoning as a strategy to improve environments around schools and recreation centers, create availability for healthy retail environments, and improve transit to, from, and within neighborhoods to healthy food retailers and markets (2, 21, 31, 75). The strength of using zoning ordinances as a viable long-term strategy is that they allow for physical environmental changes and are backed by law (33).

Components of zoning to support access to healthy food:

- Use zoning restrictions to discourage unhealthy food retailers and the creation of healthy eating zones, especially around schools (61).
- Use zoning as a tool for redevelopment and attracting grocery stores to areas, for example, increasing the number of retailers selling healthy food (33).
- Use zoning requirements to develop transit routes from neighborhoods to grocery stores and farmers markets (33).
- Use zoning as a tool to promote community-based food systems (33).

Specific zoning strategies:

- Identify target areas (e.g. areas for zoning, incentives for grocers, etc.) for key policy implementation issues (75):
 - Fast food outlet zoning strategies:
 - Explore the feasibility of zoning changes to limit the development of fast food outlets within a specified radius of schools and other youth-centered facilities such as the local YMCA, YWCA and boys and girls clubs (2, 31).
 - Use zoning restrictions to discourage fast food restaurants (e.g. ban drive-thrus) (37).
 - Restrict the number of fast food restaurants in newly established food enterprise zones (2).
 - Zoning in underserved areas:
 - Use the U.S. Department of Housing and Urban Development's existing regulatory authority to require future developments be sited closer to opportunities to access healthy food (21).
 - Create healthy food zoning requirements and incentives (zoning regulations with strategic financial incentives to attract full-service grocery stores or other healthy food providers (46).
 - Establish food enterprise zones that attract food retailers to underserved areas through zoning and tax incentives. Zoning regulations offer another policy option to increase the number of retailers selling healthy foods and stem the tide of closing supermarkets (2).
 - Offer tax abatement for retail outlets that sell healthy food and eliminate tax subsidies for fast food restaurants (2).

- Develop zoning requirements that create transit routes (sidewalks, pedestrian malls, bicycle paths) from all neighborhoods to grocery stores and food assistance providers (2).
- Zoning strategies around schools:
 - Improve the food environment around schools and recreation centers, for example, zoning regulations, creation of healthy eating zones (46).
 - Restrict the distance that certain products can be sold from certain other institutions like schools and churches by using zoning laws limiting access to unhealthy foods (4, 32).

17. Transportation

Transportation is an integral part of access to healthy food for consumers, farm to processing, other distribution factors, and waste removal. The majority of transportation strategies in this report involve transporting food directly to consumers or consumers to healthy food.

Experts recommend that planning and community development should include transportation to provide convenient and safe access for low-income households to grocery stores, community gardens, and food assistance providers (31, 33, 37).

Specific strategies:

Planning:

- Develop transportation policies that ensure most urban bus lines and other public transit conveniently connect riders with supermarkets or farmers markets (4).
- Develop mass transit, car-sharing and bike sharing programs to support alternative and affordable modes of transportation to stores.
- Enhance transit programs, include alternative or added bus routes to increase access to food retailers.
- Develop zoning requirements that create transit routes (sidewalks, pedestrian malls, bicycle paths) from all neighborhoods to grocery stores and food assistance providers (2).

Combine food assistance programs with transportation:

- Consider a transportation subsidy or benefit in conjunction with SNAP benefits (21).
- Conduct innovative projects designed to enable food banks and hunger relief agencies to maximize efficiency and increase partnerships to make transportation, distribution, and storage capacity more effective and efficient (44).

Develop shuttle services (28):

- Initiate low or no cost van services for customers from the store to the home.
- Initiate retail store van services with a pick-up and drop-off at home.
- Develop joint ventures between grocery stores and government or local non-profit organizations to collaboratively fund shuttle operations, and increase community participation and input about the service.
- Initiate store-operated shuttle services in and around senior citizen complexes, communities with senior populations, and retirement communities.
- Add or change routes that could be used to improve access to stores (21).

Food Issues

- 18. Food Safety
- 19. Emergency Preparedness

18. Food Safety

Food safety protocols in the United States keep the food supply one of the safest in the world. The Washington State Department of Health, Division of Environmental Health, works closely with the CDC to maintain food safety protocols to prevent illness, disability, and death due to food borne diseases (76). The United States Department of Agriculture and Washington State Department of Agriculture work with producers and processors to ensure food safety. Both offices have created protocols that govern steps and processes throughout the food system aimed at ensuring consumer health. The role of the departments of agriculture at the national and state levels is to ensure that food is produced and processed safely. The role of health departments at the local, state, and national level is to ensure that the food prepared is safe to consume.

Recent produce-related food-borne illnesses in the United States as a result of E. coli and Salmonella have led government and industry to develop and strengthen guidelines or strict protocols intended to improve safety on the farm. These strategies are driven by a desire to prevent liability risk and reassure consumers (77). The protocols govern water and land use, worker hygiene, wildlife management, and other activities. Farmers pay for audits to demonstrate compliance before buyers will purchase products. Those selling to multiple buyers are finding themselves entwined in a complex and costly system of food safety programs, audits, and certifications (77).

There is great interest in establishing food safety protocols that ensure consumer health, and that are not overly burdensome to farms and farm workers (31). To be effective, food safety protocols should work for a diverse group of farms and production systems. There are several recommended components (77):

- Assure broad stakeholder influence.
- Adopt protocols that are adaptable to a range of farms and supply chains.
- Adopt protocols that identify the greatest sources of risk.
- Adopt protocols that are risk-based and tiered; they must be compatible with environmental, conservation and waste-reduction goals and organic and other certifications.
- Train auditors to be attentive to various production systems and conservation practices.

State and federal regulations can specify provision of resources for education and training and allow farms time and support to adopt and implement food safety practices and documentation protocols (77). These include:

- Ensure that standards are consistently applied and require uniform training of all auditors.
- Provide federal funding allocated to state departments of agriculture for training and education to help farmers develop food safety plans.
- Authorize state departments of agriculture to allocate a portion of the federal funds they receive to state cooperative extension programs or nonprofits to carry out education and training activities.

- Provide funds to subsidize audits and testing on a sliding scale, with particular attention paid to limited-resource and beginning farmers.

Alternative approaches used in other states and communities:

- Direct purchase relationship-based approach: The Hotel, Restaurant, and Institution Management staff at Iowa State University have created “A Checklist for Purchasing Local Produce” that provides a list of questions for buyers to ask farmers in order to demonstrate that reasonable care has been taken for procurement of foods (77).
- Appalachian Harvest GAP Mirror Program for Organic Produce Production: A federal GAPs (Federal Good Agricultural Practices) “look alike” program that also addresses organic production and sustainability issues; provides mandatory training, no charge or fee, provides sample forms, arranged group rate for water testing.
- Community Alliance with Family Farmers Federal GAPs-based Self-Audit Protocol for Small and Mid-Scale Farms: A voluntary program for organic and non-organic small to mid-sized farms.; protocol takes the form of a Standard Operating Procedure, which when adopted becomes a farm’s food safety plan.
- Maine Organic Farmers and Gardeners’ Association: A Hazard Analysis and Critical Control Point (HACCP)-based rather than GAPS-based approach.
- Making food safety training and audits more affordable:
 - Free audits and assistance (78): Rhode Island GAP Program (79), Pennsylvania (80), North Carolina (81).
 - Education and training assistance: North Carolina State Cooperative Extension’s Tiered Approach; Iowa State University Extension’s Buyer and Grower Education program; Hawaii “Safe” Food Certification Pilot Program; Non-profit technical assistance.

19. Emergency Preparedness

Emergency preparedness refers to a state, local community, regional, and family or individual ability to prepare for and respond to public health emergencies or natural disasters and severe weather (82).

Emergency preparedness assures continuity of access to healthy foods. Emergency preparedness includes how to provide food during an emergency, and the ability to provide healthy food at such a time. The American Planning Association Community and Regional Food Planning Guide (2007) created specific policies to support the development of plans for building local food reserves and related activities to prepare for emergencies (31). “Maintaining food security at household, community, and regional levels during the crisis and recovering food systems in a sustainable manner soon thereafter are central goals of such preparedness” (31). State strategies can incorporate food access strategies into emergency preparedness, build local reserves, and assure maintenance of food supplies in times of crisis (2).

Specific strategies:

Partner with planners and the Washington State Department of Health Office of Public Health Emergency Preparedness and Response Program to review documents and encourage inclusion of protocols and procedures for accessing healthy food during an emergency (83).

MARKETING

Marketing

20. Marketing

20. Marketing

Marketing as a category encompasses how farmers can better sell their crops, and how the state can better promote healthy Washington grown products. Marketing also involves how healthy and unhealthy foods are marketed to children and adults, and where products are being marketed.

Strategies to Create Markets to Sell Products

As discussed elsewhere in this report, there are several mechanisms for increasing opportunities to sell regional agricultural products and many strategies for supporting these mechanisms. Efforts to improve farmers markets, farm stands, community supported agriculture, farm-to-institution and farm-to-restaurant programs all help to build a market for healthy foods. The formation of cooperative associations of farmers and/or purchasers also builds markets for healthy foods. Specific innovative ideas that have worked in other settings include mail order and home delivery programs (66) and the distribution of inventories of local farmers and their products to store owners (66). Direct marketing is a tool that can give a farmer a larger share of the food dollar and possibly a higher return on each unit sold (66).

The business of marketing is considered as important as the production itself (66). Careful planning and innovation are important. For some farmers, adding value or marketing some minimally processed farm products directly to the consumer is a way of enhancing financial viability. Farmers who are unable to compete in, or are locked out of, distant markets can build a thriving local business (66) by adding value to their products and being able to effectively market their products directly to the consumer.

Promotion of Healthy Regional Food Products

Policy-makers are using strategies to assist with local food production and consumption by creating statewide local product marketing logos and campaigns (63). These initiatives create a strong local food system by strengthening aspects from production to marketing and increasing local food production and consumption (63). Washington created a statewide campaign under the Local Farms-Healthy Kids legislation that promotes Washington products to consumers (84). States are also promoting agri-tourism and other models to create markets for local farms(63).

There are many successful examples of strategies to promote regional foods:

- Take advantage of growing interest in fresh local foods and beverages and specialty crops by building and promoting agri-tourism (63) (31).
- Prepare regional food resource guides and conduct a marketing campaign to promote these resources (37).
- Engage diverse stakeholders in developing niche markets by encouraging product diversification and the marketing of high-value projects that will be desired by consumers (31).
- Develop healthy eating/local eating media campaigns targeted to specific communities, regions or the entire state (46).

Limit Promotion of Unhealthy Foods and Increase Promotion of Healthy Foods

Children are exposed to advertising for low-nutrient and high-calorie foods in multiple venues throughout their day. These include screen exposures (websites, television, movies, video games), direct and indirect promotion at schools, retail stores, and in neighborhoods.

Several experts recommend limiting advertisements of less healthy food and beverages (1, 2, 8, 31). Television advertising influences children to prefer and request high-calorie and low-nutrient foods and beverages and also influences consumption (1, 3, 85).

Legislation to limit advertising of less healthy foods and beverages is usually a state or federal policy (1). Local governing bodies, such as school districts, have the authority to limit advertisements of less healthy foods and beverages in areas within their jurisdictions.

Specific strategies:

- School districts can adopt nutrition/wellness plans that include marketing components. Policies can promote nutritious food choices and state that the schools will not allow advertising that promotes less nutritious food choices (1).
- Schools can reject exclusive contracts with soft drink promoters via state law or district mandates. For example, San Francisco County passed the Commercial Free Schools Act, which prohibits the San Francisco Unified School District from entering into exclusive contracts with soft drink or snack food companies and restricts advertising of commercial products in the school district (28).
- Planners can draft policies to prevent billboards and signs promoting low nutrient/high calorie foods, fast foods, and other unhealthy food marketing within a specific radius of schools and other youth-centered facilities (31).

Nutritional Information and Menu-Labeling

Nutritional information and menu-labeling enable a consumer to better understand the nutritional value of foods and use the information to make informed choices and decisions about what to consume.

Experts recommend that the federal government, along with local communities, should disseminate information about the Dietary Guidelines for Americans so that consumers can make informed choices and have better knowledge about their daily caloric needs (1, 2).

In cases when federal policies pre-empt state and local policies, local restaurants benefit from technical assistance to help them understand policies, develop consumer-friendly labels and develop products with health-promoting nutrient composition.

Conclusion

Although these strategies do not represent an exhaustive list of all possible recommendations, they are an important starting point for addressing access to healthy foods in Washington. Additional strategies and recommendations are available in Appendix 2.

References

1. Keener D, Goodman, K., Lowry, A., Zaro, S., & Kettel Khan, L. Recommended Community Strategies and Measurements to Prevent Obesity in the United States: Implementation and Measurement Guide. Available at: http://www.cdc.gov/obesity/downloads/community_strategies_guide.pdf
2. Muller M, Tagtow, A., Roberts, S., & MacDougall, E. Aligning Food Systems Policies to Advance Public Health. *Journal of Hunger and Environmental Nutrition* 2009;4:225-240.

3. Lee V, Mikkelsen, L., Srikantharajah, J., & Cohen, L. Promising Strategies for Creating Healthy Eating and Active Living Environments. Available at: http://www.convergencepartnership.org/atf/cf/%7B245A9B44-6DED-4ABD-A392-AE583809E350%7D/CP_Promising%20Strategies_printed.pdf
4. Robert Wood Johnson Foundation. Improving Access to Healthy Foods: A Guide for Policy-Makers. Available at: <http://www.rwjf.org/files/research/accesshealthyfoodsllhc2007.pdf>
5. Curtis J, et. al. From Farm to Fork: A Guide to Building North Carolina's Sustainable Local Food Economy, a Center for Environmental Farming Systems report. Available at: <http://www.cefs.ncsu.edu/resources/stateactionguide2010.pdf>
6. Centers for Disease Control and Prevention. Guide to Fruit and Vegetable Strategies to Increase Access, Availability and Consumption. Available at: <http://www.eatsmartmovemorenc.com/TheEvidence/Texts/StratstoIncreaseFruitVegConsumption.pdf>
7. Centers for Disease Control and Prevention. Guide to Strategies for Reducing the Consumption of Energy Dense Foods. Available at: <http://www.eatsmartmovemorenc.com/TheEvidence/Texts/Strats4ConsumptionofEnergyDenseFoods.pdf>
8. Centers for Disease Control and Prevention. Guide to Strategies For Reducing the Consumption of Sugar-Sweetened Beverages Available at: http://www.eatsmartmovemorenc.com/TheEvidence/Texts/StratstoReduce_Sugar_Sweetened_Bevs.pdf
9. Nutr 531 2010. Policy Analysis of Standards for Institutional Purchasing of Food by State Government. Available at: http://courses.washington.edu/nutr531/2010project/Food_Procurement_Policy_Report.pdf
10. Auchman C. GSA to Provide Healthier Food Choices to Federal Employees. U.S. General Services Administration, 2010. Available at: http://www.gsa.gov/Portal/gsa/ep/contentView.do?contentType=GSA_BASIC&contentId=29091
11. New York City Department of Health and Mental Hygiene. City Agency Food Standards/Procurement Guidelines. National Association of County and City Healthy Officials, 2009. Available at: <http://www.naccho.org/toolbox/tool.cfm?id=1854>
12. New York City Department of Health and Mental Hygiene. City Agency Food Standards - Requirements and Recommendations In: New York City Mayor's Office, ed., 2008. Available at: http://www.cspinet.org/new/pdf/nyc_agency_food_standards.pdf
13. United States Department of Agriculture. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans. Available at: <http://www.cnpp.usda.gov/DGAs2010-DGACReport.htm>
14. Massachusetts. Massachusetts State Agency Food Standards, Proposed Requirements and Recommendations. In: Governor's Office, ed., 2009. Available at: http://www.mass.gov/Eeohhs2/docs/dph/com_health/nutrition_phys_activity/eo509_proposed_food_standards.rtf
15. Massachusetts Governor. Executive Order No 515. 2009. Available at: http://www.mass.gov/?pageID=gov3terminal&L=3&L0=Home&L1=Legislation+%26+Executive+Orders&L2=Executive+Orders&sid=Agov3&b=terminalcontent&f=Executive+Orders_executive_order_515&csid=Agov3

16. Institute of Medicine of the National A. Childhood Obesity in the United States: Facts and Figures. Preventing Childhood Obesity: Health in the Balance 2004. Available at:
http://www.activelivingresources.org/assets/Childhood_obesity_fact_sheet.pdf
17. Karpyn A, Manon M, Treuhaft S, Giang T, Harries C, McCoubrey K. Policy solutions to the 'grocery gap'. Health Aff (Millwood) 2010;29:473-80.
18. Public Health Law & Policy. Getting to Grocery: Tools for Attracting Healthy Food Retail to Underserved Neighborhoods. Available at: <http://www.phlpnet.org/healthy-planning/products/getting-to-grocery>
19. Strategic Alliance ENACT. Attract supermarkets to underserved areas. Available at:
http://eatbettermovemore.org/sa/enact/neighborhood/supermarkets_underserved.php
20. The Food Trust. Pennsylvania Fresh Food Financing Initiative. Available at:
<http://www.thefoodtrust.org/php/programs/fffi.php>
21. Ver Ploeg M, Breneman, V., Farrigan, T., Hamrick, K., Hopkins, D., Kaufman, P., Lin, B., Nord, M., Smith, T., Williams, R., Kinnison, K., Olander, C., Singh, A., & Tuckermanty, E. Access to Affordable and Nutritious Food—Measuring and Understanding Food Deserts and Their Consequences: Report to Congress. 2009. Available at: <http://www.ers.usda.gov/publications/ap/ap036/>
22. Flournoy R. Healthy Food, Healthy Communities: Promising Strategies to Improve Access to Fresh, Healthy Food and Transform Communities. Available at: http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/HFHC_SHORT_FINAL.PDF
23. White House Task Force on Childhood Obesity. Solving the problem of childhood obesity within a generation: White House Task Force on childhood obesity report to the President. 2010. Available at:
http://www.letsmove.gov/tfco_fullreport_may2010.pdf
24. Brownell KD, Farley T, Willett WC, et al. The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages. N Engl J Med 2009;361:1599-1605.
25. Centers for Disease Control and Prevention. Reducing Tobacco Use Initiation: Increasing the Unit Price for Tobacco Products. Available at: <http://www.thecommunityguide.org/tobacco/initiation/increasingprice.html>
26. Institute of Medicine, Committee on Prevention of Obesity in Children Youth. Preventing Childhood Obesity: Health in the Balance. Washington DC: National Academic Press, 2005.
27. Sonoma County. Agricultural Land Preservation and Open Space Expenditure Plan. 2006. Available at:
<http://eatbettermovemore.org/sa/policies/pdf/SonomaAugAndOpenSpacePreservation.pdf>
28. Strategic Alliance. Environmental nutrition and activity community (ENACT) strategies. Available at:
<http://preventioninstitute.org/sa/enact/members/index.php>
29. Washington State Legislature. Farmers Markets--Property Tax Exemption. 2010. Available at:
<http://apps.leg.wa.gov/documents/WSLdocs/2009-10/Pdf/Bills/Session%20Law%202010/2402-S.SL.pdf>
30. Public Health Law & Policy. How to Use Redevelopment to Create Healthier Communities. Available at:
<http://www.phlpnet.org/healthy-planning/products/redevelopment-create-healthier-communities>

31. American Planning Association. Policy Guide on Community and Regional Food Planning. Available at: <http://www.planning.org/policy/guides/pdf/foodplanning.pdf>
32. Lee V, Mikkelsen, L., Srikantharajah, J., & Cohen, L. Strategies for Enhancing the Built Environment to Support Healthy Eating and Active Living. Available at: http://www.kintera.org/atf/cf/%7B245A9B44-6DED-4ABD-A392-AE583809E350%7D/CP_Built%20Environment_printed.pdf
33. Bournhonesque R, Fisher, A., & Laurison, H. An Introduction to Land Use Planning for Food System Advocates. Community Food Security News: Community Food Security Coalition, 2007. Available at: http://www.foodsecurity.org/CFSCNEWSSP07_FNL.pdf
34. Malakoff D. Community Gardening: A Key to Food Security. Community Greening Review,, 1995. Available at: <http://7d8ca58ce9d1641c9251f63b606b91782998fa39.gripelements.com/docs/CGaKeytoFoodSecurity.pdf>
35. Hamm MW, Bellows AC. Community food security and nutrition educators. Educ Behav 2003;35:37-43.
36. American Planning Association. Policy guide on community and regional food planning. Available at: www.planning.org/policyguides/food.htm
37. Cassidy A, & Patterson, B. The Planner's Guide to the Urban Food System. Available at: <http://postcarboncities.net/files/PlannersGuidetotheFoodSystem.pdf>
38. City of Seattle. Seattle's Comprehensive Plan. 2005. Available at: http://www.seattle.gov/dpd/static/Urban%20Village%20element_LatestReleased_DPDP016169.pdf
39. Nord M, Andrews M, Carlson S. Household food security in the United States, 2005. Available at: <http://www.ers.usda.gov/Publications/ERR29/ERR29.pdf>
40. Nord M, Andrews M, Carlson S. Household food security in the United States, 2006. Available at: <http://ddr.nal.usda.gov/dspace/handle/10113/19450>
41. National Anti-Hunger Organizations. A blueprint to end hunger 2008. Available at: <http://www.hungercenter.org/pdf/BlueprintToHunger.pdf>
42. Food Research and Action Center. Ending childhood hunger by 2015: The essential strategies for achieving the president's goal. 2009. Available at: http://www.frac.org/pdf/endingchildhunger_2015paper.pdf
43. Share Our Strength. Share our strength's plan to end childhood hunger in America. Available at: http://www.strength.org/pdfs/ShareOurStrength_Child_Hunger_Brochure2.1.08.pdf
44. Rasmus B. Efficient and effective: Washington state hunger-relief transportation and storage capacity gaps and possible solutions. Available at: http://firstharvest.org/download/Gap_Analysis.pdf
45. Lane C, & Stone, L. End Childhood Hunger Washington: How We Will End Childhood Hunger in Washington, a 10-Point Strategic Plan. 2008. Available at: http://www.childrensalliance.org/sites/default/files/10_pt_strategic_plan_ECHWA.pdf

46. Baltimore City. Baltimore City Food Policy Task Force, Final Report and Recommendations. Available at: <http://cleangreenerbaltimore.org/uploads/files/Baltimore%20City%20Food%20Policy%20Task%20Force%20Report.pdf>
47. Engler-Stringer R, Berenbaum S. Exploring food security with collective kitchens participants in three Canadian cities. *Qualitative Health Research* 2007;17:75.
48. Community Kitchens Northwest. Available at: <http://www.communitykitchensnw.org/welcome/>
49. Bowan H. Commercial Kitchen? Agricultural Processing Kitchen? Community Kitchen? Available at: <http://www.snovalleytilth.org/Commercial%20Kitchen.pdf>
50. Hillers V, & Wililams, C. Small Scale Food Processing: Opportunities on Whidbey Island. 2009. Available at: <http://www.psfm.org/repository/files/Reference%20Docs/Whidbey%20Food%20Processing%206%2022%2009%20FINAL.doc>
51. Robert Wood Johnson Foundation. School foods sold outside of meals (Competitive foods). Available at: http://www.healthyeatingresearch.org/images/stories/her_research_briefs/hercompetfoodsresearchbrief.pdf
52. Story M, Nanney MS, Schwartz MB. Schools and obesity prevention: creating school environments and policies to promote healthy eating and physical activity. *Milbank Q* 2009;87:71-100.
53. Institute of Medicine, Committee on Nutrition Standards for Foods in Schools. *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth* Washington DC: The National Academies Press, 2007.
54. Institute of Medicine. *School Meals: Building Blocks for Healthy Children*. Available at: <http://www.iom.edu/Reports/2009/School-Meals-Building-Blocks-for-Healthy-Children.aspx>
55. Johnson DB, Lund AE, Bruemmer B, Evens C, Mar CM. Impact of School District Sugar-Sweetened Beverage Policies on Student Beverage Exposure and Consumption in Middle Schools. *Journal of Adolescent Health* 2009;45.
56. Winterfeld A, Shinkle, D., & Morandi, L. Promoting Healthy Communities and Reducing Childhood Obesity Legislative Options. Available at: <http://www.policyarchive.org/handle/10207/bitstreams/21323.pdf>
57. Joshi A, Azuma A, Feenstra G. Do farm-to-school programs make a difference? Findings and future research needs. *Journal of Hunger & Environmental Nutrition* 2008;3:229-246.
58. WSDA Farm-to-School Program. *Farm to School Program 2008-2009 Report to the Legislature, Including a Report of the Washington Grown Fresh Fruits and Vegetable Grant*. Available at: <http://agr.wa.gov/marketing/farmtoschool/docs/285-FarmToSchoolLegislativeReport2008-09.pdf>
59. Joshi A, & Azuma, A. *Bearing Fruit: Farm to School Program Evaluation Resources and Recommendations*. Available at: <http://departments.oxy.edu/uepi/cfj/bearingfruit.htm>
60. Heller M. *Food Connections: Capital Area Community Food Profile*. Available at: <http://www.mottgroup.msu.edu/portals/0/downloads/CACfoodprofile.pdf>

61. NPLAN. Establishing Land Use Protections for Farmers' Markets. Available at: http://www.nplanonline.org/system/files/nplan/Establishing%20Land%20Use%20Protections%20for%20Farmers%20Markets_FINAL_091203.pdf
62. Winterfeld A. Childhood obesity: Legislative policy approaches and the evidence base to date. National Conference of State Legislatures 2006.
63. Winterfeld A, Shinkle, D., & Morandi, L. Promoting Healthy Communities and Preventing Childhood Obesity: Trends in Recent Legislation. Available at: <http://www.ncsl.org/default.aspx?tabid=20101>
64. Bailkey M. Food and agriculture related policies and practices to benefit limited resource farmers. Available at: <http://www.foodsecurity.org/LRPreport.pdf>
65. Holmes G. Benefits of farm-to-school projects, healthy eating and physical activity for school children. Field Briefing testimony to the United States Senate Committee on Agriculture, Nutrition, and Forestry. Atlanta, GA, 2009. Available at: <http://www.schoolnutrition.org/blog.aspx?blogmonth=5&blogyear=2009&blogid=622>
66. Adam K, Balasubrahmanyam, R., & Born, H. Direct Marketing. Available at: <http://attra.ncat.org/attra-pub/PDF/directmkt.pdf>
67. Municipal Research and Services Center of Washington. Planning. Available at: <http://www.mrsc.org/Subjects/Planning/planning.aspx>
68. Washington State Conservation Commission. Office of Farmland Preservation: 2009 Report to the Washington State Conservation Commission. Available at: <http://ofp.scc.wa.gov/wp-content/uploads/2010/01/Merged-2009-OFP-Report.pdf>
69. Johnson K, Dufour, R., & Alcora, M. Finding Land to Farm: Six Ways to Secure Farmland. Available at: www.attra.ncat.org/attra-pub/PDF/finding.pdf
70. American Planning Association. Policy Guide on Agricultural Land Preservation. Available at: <http://www.planning.org/policy/guides/pdf/agriculturallandpreservation.pdf>
71. Washington State Conservation Commission. Office of Farmland Preservation Newsletter. Washington State Conservation Commission, 2010. Available at: <http://ofp.scc.wa.gov/wp-content/uploads/2010/05/OFP-May-2010-Newsletter.pdf>
72. Harper A, Shattuck, A., Holt-Gimenez, E., Alkon, A., & Lambrick, L. Food Policy Councils: Lessons Learned. Available at: <http://www.foodfirst.org/files/pdf/Food%20Policy%20Councils%20Report%20small.pdf>
73. Acting Food Policy Council: Seattle King County, Strategic Planning Framework. Available at: http://king.wsu.edu/foodandfarms/AFPC/AFPC_Strategic%20Framework_051209_FINAL.pdf
74. Washington State Department of Commerce. What is a comprehensive plan? Available at: <http://www.commerce.wa.gov/DesktopModules/CTEDPublications/CTEDPublicationsView.aspx?tabID=0&alias=CTED&lang=en&ItemID=916&MIId=944&wversion=Staging>
75. Chen SE, Florax RJGM. Zoning for Health: The Obesity Epidemic and Opportunities for Local Policy Intervention. J. Nutr. 2010;140:1181S-1184.

76. Washington State Department of Health. About the Food Safety Program. Available at: <http://www.doh.wa.gov/ehp/food/about.html>
77. Starmer E, Kulick, M., & Ogburn, S. Bridging the GAPs: Strategies to Improve Produce Safety, Preserve Farm Diversity and Strengthen Local Food Systems. Available at: <http://www.iatp.org/iatp/publications.cfm?refid=106746>
78. Cornell University Department of Food Science. Good Agricultural Practices (GAPs) Network for Education and Training Available at: <http://www.gaps.cornell.edu/indexhighspeed.html>
79. Rhode Island Food Safety Education. Rhode Island GAP Grower Certification Program. Available at: <http://www.uri.edu/ce/ceec/food/grow.html>
80. Good Agricultural Practices. Four steps to safer farm practices. Available at: <http://foodsafety.psu.edu/gaps/>
81. North Carolina Department of Agriculture and Consumer Services. N. C. Good Agricultural Practices Certification Assistance Program. 2009. Available at: <http://www.ncstrawberry.org/docs/GAP-CertificationAssistanceProgram2009.pdf>
82. Washington State Department of Health. Public Health Emergency Preparedness and Response Program 2008 Annual Summary Report. Available at: <http://www.doh.wa.gov/phepr/PHEPR08summary.pdf>
83. American Dietetic Association Sustainable Food System Task Force. Healthy Land, Healthy People: Building a Better Understanding of Sustainable Food Systems for Food and Nutrition Professionals. A Primer on Sustainable and Emerging Roles for Nutrition Professionals. Available at: http://www.eatbettermovemore.org/SA/documents/Sustainable_Primer.pdf
84. Washington State Department of Agriculture. From the Heart of Washington. Available at: <http://www.heartofwashington.com/about/faq.html>
85. Institute of Medicine. Progress in Preventing Childhood Obesity: How Do We Measure Up? Available at: <http://www.iom.edu/Reports/2006/Progress-in-Preventing-Childhood-Obesity--How-Do-We-Measure-Up.aspx>



CHAPTER 5

GOING FORWARD

As Washington State continues to move forward to achieve the goal of access to healthy foods for all residents, it is important to explore the opportunities seen by key stakeholders in the system and to understand their needs for information, data and tools. This chapter provides information about what we learned from respondents about opportunities for increasing access and about information, data and tools that would help food system stakeholders move forward in this work. The final table in this chapter integrates ideas from respondents and specific strategies recommended by experts.

The chapter provides:

- Opportunities for increasing access to healthy foods: what we learned from interview respondents.
- Need for information, evidence and research identified by interviewees.
- Strategic opportunities for moving forward: combining interview responses with promising strategies.

GOING FORWARD

Washington State has a good start and a strong foundation for building access to healthy foods for all residents. Next steps can include a portfolio of actions that will move us toward the goals of healthy people, a healthy environment and a healthy economy.

INCREASING ACCESS TO HEALTHY FOODS

Respondents were asked to speak about opportunities to address access to healthy food from the perspective of the organization they represent and to provide their perspective on opportunities to address access throughout the food system. This table presents their responses, organized according to their existence and/or level of greatest influence among these five categories:

- Family and Individual Level
- Community Level
- Institutional Level
- Regional level
- State and Federal Policy, Standards and Regulations

OPPORTUNITIES FOR INCREASING ACCESS TO HEALTHY FOOD: WHAT WE LEARNED FROM THE RESPONDENTS

This table provides the opportunities as identified by the respondents.

Table 10. Interview Responses to Questions about Opportunities to Increase Access to Healthy Foods

Focus Areas	Results from Stakeholder Interviews
Families and Individuals	<ul style="list-style-type: none"> • Educate consumers about: <ul style="list-style-type: none"> -healthy eating -buying, preparing, growing and preserving healthy foods -locally and regionally grown and produced foods • Increase outreach for WIC and SNAP (formerly known as food stamps) • Provide increased support for breastfeeding
Communities	<ul style="list-style-type: none"> • Create opportunities to link consumers with farms, farmers markets, gleaning opportunities, community gardens and other sources of healthy foods • Increase availability of healthy foods in communities: <ul style="list-style-type: none"> -expand farmers markets (include worksites, mobile markets) -increase the number of community gardens and opportunities to grow food on small plots of urban land • Assure that communities have retail grocery stores that stock adequate, affordable healthy foods through: <ul style="list-style-type: none"> -financing initiatives -healthy corner store initiatives -incentives for stores to become WIC providers • Develop and support school and university campus gardens • Ensure access of homebound individuals to fresh produce and healthy foods • Educate restaurant chefs about healthy menu options, utilizing local and regional foods, and the importance of Washington State’s food system to the economy, environment and health • Create a culture of breastfeeding in communities

Table 10. Interview Responses to Questions about Opportunities, continued

Focus Areas	Results from Stakeholder Interviews
Institutions	<ul style="list-style-type: none"> • Create a culture of breastfeeding in institutions • Develop procurement guidelines for state institutions • Support the development, implementation and evaluation of school wellness policies that include rigorous nutrition standards • Support the development, implementation and evaluation of child care nutrition standards • Educate institutional foodservice managers about healthy menu options and utilizing local and regional foods
Regional Food System	<ul style="list-style-type: none"> • Preserve farmland and its accessibility • Support farmers (training, incentives, communication and information sharing) • Address workforce issues • Develop incentives and support for new farmers entering the industry • Develop new local markets for Washington produce • Remove legislative and regulatory barriers, conduct an agriculture legislative summit • Develop and preserve small and medium size farms and support linkages with retail grocery stores, institutions, restaurants, college campuses and other markets • Increase the number and variety of different crops grown across the state • Improve regional statewide purchasing, distribution and processing systems: <ul style="list-style-type: none"> -purchasing cooperatives -support for implementation and evaluation of food bank distribution pilot projects -increased regional processing capacity • Develop a system for coordination of data, resources and information among and between food system components and sectors • Conduct a comprehensive assessment of regional food systems and identify gaps • Ensure that food access is an integral part of community and comprehensive planning, including health impact assessments • Develop an understanding of best practice approaches and evaluate pilots and programs
State and Federal Policies and Standards	<ul style="list-style-type: none"> • Increase funding support for programs: WIC fruit and vegetable benefit; food stamps (SNAP); summer feeding; school nutrition; senior nutrition; child care • Collaborate to influence national legislation regarding: <ul style="list-style-type: none"> -Farm Bill -School Nutrition -Menu Labeling -Food Marketing -Child Care -Senior Nutrition Programs

NEED FOR INFORMATION, EVIDENCE AND RESEARCH IDENTIFIED BY INTERVIEWEES

Respondents were asked about what kind of information, evidence and resources are needed to help our state address barriers to access to healthy food. Responses are grouped into four broad categories: Need for Information; Evaluation and Research; and Resources and Information to Facilitate Collaboration and Access to Healthy Foods. Ideas for specific pilot projects are also listed.

Need for Information

1. Statewide and Regional Food System Information

Gap Assessment

- Community food assessments of all regions of the state using common indicators
- Identification of areas where there are gaps in access to healthy food in major metropolitan areas and other regions

- GIS data set of the whole state, including full service grocery distribution and income distribution, who is being served and who is not

Food Distribution

- Food transportation and distribution systems throughout Washington State, large and small scale, including case studies on how networks are set up
- Truck trips to grocery stores
- Cost-benefit of intermittent access along current county road systems compared to all-season system (to be used to inform planners and policy makers)

Food Processing

- Regional barriers to food processing, large and small scale
- Data on the numbers, locations and types of food processors throughout Washington State

Access

- Data on the number and location of farmers markets throughout the state, including the number of individual farmers involved and volume of sales (including average farmer sale)
- Location and effectiveness of gleaning projects throughout the state
- Data on the number of community and urban gardens in each county

Food Production

- Data on all the farms in Washington State, including demographics of farmers, what they grow and how much, who they sell to and how they get their product to the market
- Data on community supported agriculture programs (CSAs) including the number, subscribers and volume of sales
- Evaluation of food banks in Washington State, where they get their food and in what volume, standards for food, unmet needs, what a successful program looks like, how they establish relationships with distributors and producers

2. Food Purchasing Patterns and Practices

Individual

- Statistics on the amount of produce purchased from local farms or markets vs. supermarkets, trends
- Consumer food purchasing patterns and preferences by zip code and demographics
- Analysis of food purchasing patterns by zip code (where consumers shop and what they buy) compared to eligibility for food assistance programs
- Consumer survey to learn about barriers to buying local, where they're willing to shop, what they want to buy
- Consumer survey to learn about knowledge of diet and its relationship to health and knowledge about how to purchase and prepare fruits and vegetables and other health foods

Institutional

- Statistics on the amount of produce purchased from local farms or markets vs. supermarkets, trends
- Institutional food purchases, amount of foods purchased from producers in Washington State vs. other areas and what drives purchasing decisions (consumer preferences for example) and who makes these decisions

Evaluation and Research

Programs and Services

- Evaluation of effectiveness of school fresh fruit and vegetable program (USDA)
- Evaluation of who is using Electronic Benefits Transfer (EBT) cards and whether or not their use impacts the purchase of healthy foods
- Evaluation of the many pilot programs that are taking place across the state addressing issues like distribution, farmers' co-ops, etc.

Hunger and Access to Nutrition Programs

- Results of BRFSS questions related to hunger (questions recently added)
- Evaluation of who needs food in Washington State and why they are hungry
- Average income of neighborhoods within a two mile radius of healthy food venues
- Research to understand why food stamp recipients who are also eligible for WIC do not participate in the WIC program
- Evaluation of role of state in connecting people who need food with those that have food

Health

- Evidence around health claims about organic foods, antioxidants, and growing foods with practices that maximize nutrient density
- Proposed health impacts of revised Dietary Guidelines for Americans and how these relate to the food system in Washington State
- Impact of changes in school food on student health and behavior (academic and attitudes about food)
- Long term and cross-sectional costs of an unhealthy diet
- Identification of best practices for nutrition education

Economic Data

- Research on the true costs of importing food versus growing locally and comparative lifecycle costs, including environmental impacts
- Impact of changes in school food on school food service budgets
- Economic data on the contribution of local food to the local economy, including number of jobs it supports
- Data on the percentage of economic development program funds that go to promoting commodity agriculture consumption for the global market place vs. what percentage goes to local, regional and statewide economic food systems
- Data on investments in development of agricultural production in the state
- Current revenue coming into Washington State (public and private funds) to address access to healthy food issues and where it is being spent geographically

Farming and Food Production

- Research on the amount of arable land consumed by development every year – by county and for the state as a whole
- Total amount of arable land zoned for non-agricultural use – by county and for the state as a whole
- Evaluation of success of farmers markets across the state using common indicators
- Assessment of farmers participating in farmers markets: what is their relationship to the market? How do the needs of established farmers compare to needs of new farmers?
- Assessment of how farmers choose different sales channels, the relative profitability of the different channels and how increases in markets impact their sales and profit
- Data about price and volume of sales and direct to consumer sales

- Data on the amount of Washington State agricultural land that is set aside for commodity production for the international market and about how much is produced and consumed within Washington State
- Research on the real capacity of sustainable agriculture vs. conventional agriculture, including yield and productivity by practice
- Data on genetically modified foods being grown in Washington State
- Data on percentage of farmland designated to organics within Washington State
- Research on comparative quality of local vs. imported produce
- Analysis of King County food production capacity: how much food could be produced, how many people can be feed on existing land that is being farmed, how much more food could be grown if underutilized land were put to productive use, how much food (produce?) we are eating

Resources and Information to Facilitate Collaboration and Access to Healthy Foods

- Map of all food assistance programs in Washington State
- Database of available funding for food assistance and access to healthy foods, purpose, geographic availability, where it is currently being spent
- Consistent definition of “healthy food”
- Comprehensive map of Washington State food system -- who’s doing what
- Central hub (website) to refer people to for information on locations to access fresh foods (type in address and nearby points of sale are shown)
- Central hub that contains information for new farmers
- Comprehensive map of food system that identifies where the barriers are, what’s working’ what’s not, how the system is functioning and holistic recommendations for improving its functioning
- Development of system for measuring and tracking effectiveness of pilot projects and other initiatives on increasing access to healthy foods over time
- Resources available specifically to incentivize grocery store locations in under served areas

Pilot Project Ideas

- Economic incentives necessary to bring retail and other food sources (including food banks) into needy communities
- Effective methods for attracting vendors to rural areas of NE Washington
- Best practices for promoting access to healthy food throughout health care

STRATEGIC OPPORTUNITIES FOR MOVING FORWARD: COMBINING INTERVIEW RESPONSES WITH PROMISING STRATEGIES

The following general strategies were derived from two sources:

- 1) Stakeholder interviews where respondents were asked to describe opportunities for improving access to healthy foods; and
- 2) The review of strategies and policy recommendations put forth by experts in health, agriculture, planning and economics that is presented in Chapter 4.

These general strategies are highlighted because they have the potential for substantial reach in the population, are politically, socially and economically feasible, have the potential to address inequalities in access to health promoting foods, and appear to be the most promising for a comprehensive approach that many stakeholders can support.

Table 11: Most Promising Approaches for Access to Healthy Foods

Focus Areas	Specific Strategies Recommended by Experts & Washington Stakeholders
Families and Individuals	<ul style="list-style-type: none"> • Marketing: decrease at point-of-purchase for less healthy foods and increase promotion for healthier and Washington grown foods • Tax structure: disincentives for less unhealthy foods, incentives for healthier foods • Transportation benefits in conjunction with SNAP benefits
Communities	<ul style="list-style-type: none"> • Increase EBT facilities at farmers markets • Community and comprehensive planning (land use, zoning) • Public/private partnerships for financing and economic development (specifically retail food establishments) • Develop affordable local kitchen/food processing units/spaces
Institutions	<ul style="list-style-type: none"> • Nutrition standards for schools and child care • Healthy food procurement strategies
Regional Food System	<ul style="list-style-type: none"> • Farm cooperatives • Farmland preservation • Training, education for farmers • Value-added products
State and Federal Policies and Standards	<ul style="list-style-type: none"> • Procurement (state and national standards) • Farm Bill • Child Nutrition Reauthorization

10 Processes to Improve Access to Healthy Foods

Respondents also identified specific processes that are needed to help address issues affecting access to healthy foods across Washington State:

1. Include healthy food access in planning initiatives for housing, transportation, and development at the local, regional and institutional levels.
2. Conduct a comprehensive assessment of regional food systems and identify gaps and develop a system for coordination of data, resources and information among and between food system components and sectors.
3. Build knowledge of best practice approaches across agriculture, food processing, retailing, planning, transportation, and education; evaluate pilots and programs.
4. Increase outreach, funding and other support for nutrition programs such as Supplemental Nutrition Assistance (SNAP, aka food stamps), nutrition programs in schools, child care and senior settings, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC), and hunger relief initiatives.
5. Assure that institutional policies, environments and social culture support breastfeeding.
6. Develop, implement and monitor healthy food procurement guidelines, standards and procedures for government agencies, schools and child care.
7. Communicate widely about the importance of Washington State’s food system to the economy, environment and health.
8. Collaborate to influence national legislation regarding: farm bill, menu labeling, food marketing, school nutrition, including USDA fresh fruit and vegetable program, child care nutrition, senior nutrition programs.
9. Train and educate consumers, restaurant chefs, and institutional food service decision makers about:
 - Healthy food & healthy eating
 - Buying, preparing, growing and preserving healthy food
 - Benefits of choosing local or regional foods
10. Assure resources to prepare the future workforce to work across disciplines to sustain and improve the food system.



APPENDIX 1: INTERVIEW QUESTIONS

1. **Do you think that everybody in Washington State has access to healthy foods? Why or why not?**
2. **Internal/Component of Food System/Organizational Level**
 - a. How would you describe your organization's role(s) in providing access to healthy food for Washington State residents? What kinds of things are you doing? (Probe within the components of the food system as appropriate: growing, harvesting, processing, packaging, transporting, distribution, warehousing, marketing, selling, consuming and disposing of food and food packaging, resource and waste management)
 - i. Have you been involved in initiatives to improve access to healthy foods?
 - b. What are opportunities for your organization to improve access to healthy foods in Washington State?
 - c. What are opportunities for others in your field/work area to improve access to healthy foods?
 - d. What are the barriers that your organization faces in helping to improve access to healthy foods?

We've been talking about the access that individuals, families and institutions have to healthy foods so far. Now I'd like to ask a little about the whole food system itself and how we might approach building healthy food systems in Washington State.

3. **External/Overall Food System**
 - a. From your perspective, what are the opportunities to improve access to healthy foods throughout the entire Washington State food system?
 - i. Why do you highlight these issues?
 1. Do you have experience with these issues? Where have you heard about them? Have their results impacted you?
 - b. What are the barriers to accessing healthy food within the entire food system?
 - i. Why do you highlight these issues?
 1. Do you have experience with these issues? Where have you heard about them? Have their results impacted you?
4. **Who else should we be talking to? Why do you recommend him/her/them?**
5. **When you think about the food system in WA State, are there things that you would like to know, data you wish you had or research that would help our state address barriers to access to healthy food?**
6. **Would you be willing to complete an electronic survey later on to help us prioritize recommendations?**



APPENDIX 2: STRATEGIES TABLE

For a searchable list of strategies and links to references please see the online database at:
http://depts.washington.edu/waaction/tools/featured_resources/access_report.html

Overarching Category	Strategies, Recommendations & Goals	Source
Breastfeeding	Implement policies and practices in hospitals and outpatient medical facilities (including physician practices, prenatal services, and community clinics) to support successful initiation and continuation of breastfeeding.	(1)
Breastfeeding	Allow breastfeeding women sufficient break time to pump, private space for expression of breast milk, and space to store breast milk.	(1)
Community Gardens	Start a community garden program, creating partnerships with other public agencies that can provide resources (e.g. water hook-ups, mulch supply, educational programs).	(2)
Community Gardens	Encourage rooftop gardens and street trees as a viable source of food production.	(2)
Community Gardens	Create a regulation about community gardens per capita.	(2)
Community Gardens	Noise: absorb noise pollution through green space such as community gardens and urban farms.	(3)
Community Gardens	Create topical plan for community gardens and farmer markets.	(4)
Community Gardens	Make available composted and water to community gardens. Provide allowances for organizations to lease non-developable city-owned property for community gardens.	(4)
Community Gardens	Community garden permanent park and open space system of cities (i.e. not a temporary use of land).	(5)
Community Gardens	Community Gardens/Urban Agriculture: provide land; provide grants, low-interest loans, services, and technical assistance.	(6)
Community Gardens	Support community gardening and urban farm plots (three legged stool example available vacant land, entrepreneurial urban agriculture, and local institutional climate).	(7)
Community Gardens	Support and promote community and home gardens.	(8)
Community Gardens	Expand community gardens and urban agriculture. Community gardens and urban agriculture (commercial farming in urban areas) are land use planning strategies for improving neighborhood food access and providing increased opportunities for physical activity. They provide a healthy source of produce for residents and reinforce the practice of behaviors such as eating healthily, gardening, and walking. An additional benefit is that community gardens beautify the neighborhood and provide an environment where people are more likely to enjoy spending time.	(9)
Community Gardens	Characteristics of community gardening initiatives: land and supplies procurement; organization of participants; reduction of barriers to fresh produce; production of primary or alternative sources of fresh produce; entrepreneurial gardens; neighborhood beautification and community revitalization; provides potential employment opportunities.	(10)
Community Gardens	Support and promote gardens and greenhouses including: maintain a garden, connect consumers to food that is sustainably produced by promoting and maintaining gardening programs in: Churches, hospitals, communities through parks and recreation programs, schools and universities, senior living centers, urban centers.	(11)

Overarching Category	Strategies, Recommendations & Goals	Source
Community Gardens	Encourage and support community gardens.	(3)
Community Gardens	Establish community gardening.	(3)
Community Gardens	Provide funding for school field trips to community gardens and local farms to children learn how food is produced.	(2)
Community Gardens	Provide gardening resources to immigrants and people of other cultures so they can grow the foods to which they are accustomed.	(2)
Community Gardens	On publicly owned lands, such as schoolyards, parks and greenways, and tax-foreclosed properties, support the development of vegetable gardens, edible landscaping, and related infrastructure, and the formation of partnerships with community based nonprofits serving low income residents for garden related programs.	(12)
Community Gardens	Planners encourage and support food production on the grounds of public agencies and institutions while providing employment to low income workers and distributing products to cafeterias and area food assistance sites.	(12)
Community Gardens	Develop assessments of land on institutional properties suitable for cultivation and support food production activities on these sites.	(12)
Community Gardens	Conduct an assessment of urban public lands that could be used for agricultural activities, paying attention to spaces like utility corridors that are otherwise unused.	(2)
Community Gardens	Housing: incorporate community gardens into the design of multi-family units and as central gathering places within larger neighborhoods.	(13)
Community Gardens	Conservation: compost green waste (such as food scraps and yard trimmings) and use gray water for urban agriculture and community gardens.	(3)
Community Supported Agriculture (CSA)	Develop or expand community supported agriculture programs.	(8)
Community Supported Agriculture (CSA)	Agricultural economic development: community supported agriculture shifts the time that growers must spend on marketing to the beginning of the year.	(14)
Community Supported Agriculture (CSA)	Educate farmers with operations in the city about incentive programs that will help them continue farming or to sell their land to farmers with interest in smaller scale agricultural operations such as CSAs.	(3)
Community Supported Agriculture (CSA)	Promote and expand community supported agriculture: lessons learned -- difficult to maintain a core group of dedicated participants and a more mixed income model would be more sustainable.	(7)
Community Supported Agriculture (CSA)	Community Supported Agriculture: Offer reduced rate membership shares, installment plans, and work shares for low income households; Ensure that CSAs can accept EBT, and Senior and WIC Farmers Market Nutrition Program Vouchers; Enact supportive local land use policies; Provide financing for local and regional producers.	(6)
Comprehensive Planning	Planners support, through appropriate land use and zoning, transportation, urban design, and research tools, community based organization that develop demand for healthful foods, especially in low income communities.	(12)
Comprehensive Planning	Support the development of temporary farm stands, urban agriculture projects, and community vegetable gardens on school, park, and community center sites, and near public agency offices and nonprofit providers offering health, human and social services.	(12)
Comprehensive Planning	Promote the provision of community gardens, urban agriculture projects, and community kitchens in multifamily and low income housing projects.	(12)
Comprehensive Planning	Integrate recommendations emerging from community and regional food planning into comprehensive plans and supporting ordinances, strategic plans, economic development plans, environmental plans, neighborhood or area plans, and plans for specific agencies such as transportation and parks and recreation.	(12)
Comprehensive Planning	Adding community food security to Comprehensive Plans.	(3)
Comprehensive Planning	Awareness of Interim Control Ordinance (ICO) in regards to temporary measures to prohibit building permits from being issues for a specific use until permanent land use regulations are adopted.	(3)
Comprehensive Planning	Role of implementation of Comprehensive Plan and politics of implementation.	(3)
Comprehensive Planning	Community Development Block Grant Program; communities could be encouraged to incorporate healthy food systems planning in the required Consolidated Plans they submit that lay out their plans for the use of grant funds; Encouraging local governments to plan that does not dictate specific policies, but instead allows communities to devise solutions specifically tailored to the community.	(15)

Overarching Category	Strategies, Recommendations & Goals	Source
Comprehensive Planning	Expand access to retail establishments that provide healthy food options. Land use policies and zoning ordinances have the power to encourage or discourage healthy food retail. Inserting general plan language that states the specific intent to encourage healthy food retail options within designated walkable areas is considered a key starting point. Eliminating barriers in current codes, such as restrictions that might prohibit sidewalk produce displays or limit the use of specific sites for healthy food retail, is an important corollary strategy for increasing access to healthy food. While land use policy is a starting point, localities will need other incentives to attract grocery stores, improve small stores, and establish farmers' markets in underserved communities, such as attractive financing options, support to reduce operating costs, and assistance with locating and developing appropriate sites. A few states have utilized low interest financing mechanisms to support supermarkets. For example, Pennsylvania Fresh Food Financing provides grants and loans, financing, and technical assistance.	(1)
Comprehensive Planning	Washington Comprehensive Plans Guidelines and Regulations.	(16)
Comprehensive Planning	Prepare comprehensive and neighborhood plans that recognize community gardens and other forms of urban agriculture, farm/garden stands, and farmers markets as desirable civic uses in neighborhoods, and provide sufficient space, infrastructure, and inter-modal transportation access for such uses. Ensure that zoning barriers to these activities are addressed or removed.	(12)
Comprehensive Planning	Incorporate urban agriculture as an integral part of city planning.	(17)
Comprehensive Planning	Growth Management Act and Comprehensive Plan components and guidelines.	(16)
Comprehensive Planning	Planners support community food assessment and planning to preserve and strengthen traditional native and ethnic food cultures (e.g. fisheries in Louisiana and Alaska and desert foodscapes in New Mexico and Arizona).	(12)
Comprehensive Planning	With the collaboration of communities to be served, planners support the development of plans to preserve and restore the natural environment and biodiversity in the region, to revitalize traditional and ethnic food systems that depend on the regional ecology.	(12)
Comprehensive Planning	Consider the impact of proposed changes in land use and other plans on the ability of Native American and ethnic minority communities to sustain food production systems and support the coordination of planning efforts to enhance such systems in the future.	(12)
Comprehensive Planning	Planners support and help develop policies, plans, and regulations in land use, transportation, economic development, and urban design so as to increase access to food sources that offer affordable and culturally appropriate healthful foods, especially for low income households in urban and rural areas.	(12)
Comprehensive Planning	Planners support integrating traditional food systems and related cultural issues into community and regional planning efforts, including comprehensive and economic development plans and other governance activities.	(12)
Comprehensive Planning	Support planning that builds on and celebrates the diverse cultural, agricultural, and dietary traditions present in the region.	(12)
Comprehensive Planning	Work with tribal governments and state agencies to address land and resource management issues so as to strengthen Native American food systems including farming, hunting, gathering and fishing and nutritious diets.	(12)
Comprehensive Planning	Planners support developing food system inventories, economic and market analyses, and evaluation techniques to better understand the economic impact and future potential of local and regional agriculture, food processing, food wholesaling, food retailing and food waste management activities.	(12)
Comprehensive Planning	Support as relevant with planning tools, efforts to assess the capacity of regional agriculture for meeting potential energy demands versus regional food needs.	(12)
Comprehensive Planning	Assist in conducting energy audits to assess amounts and sources of energy used in the region for the production, distribution, and consumption of food. This inventory can identify existing uses of local and sustainable energy resources as well as the potential for expansion in this area.	(12)
Comprehensive Planning	Planners support food system activities that minimize energy use and waste, and encourage the use of local and renewable energy resources.	(12)
Comprehensive Planning	Develop plans and redevelopment proposals for food insecure areas with sites and incentives for community gardens, entrepreneurial urban agriculture projects, farmers markets, neighborhood grocery stores, and food assistance programs.	(12)
Comprehensive Planning	Assist nonprofit agencies and public-private-nonprofit partnerships engaged in anti-hunger, nutrition, and agriculture activities by sharing data for planning, implementing, and evaluating programs.	(12)

Overarching Category	Strategies, Recommendations & Goals	Source
Comprehensive Planning	Planners employ land use, transportation, and other planning tools to increase spatial access to programs and facilities that help reduce hunger and food insecurity for residents in impoverished urban and rural communities.	(12)
Comprehensive Planning	Provide data and mapping support to community and regional food assessments, including the incidence of food insecurity and location of diverse food assets.	(12)
Comprehensive Planning	Investigate the use of appropriate Brownfield sites in low income areas for food production.	(12)
Comprehensive Planning	Planners develop and support policies, plans, and regulations in land use, transportation, economic development, and urban design to encourage the availability of healthy types of foods associated with reduced risk of or occurrence of obesity and poor nutrition leading to diet-related diseases like diabetes and heart disease (especially in and near schools and other predominantly youth-centered environments).	(12)
Comprehensive Planning	Develop area plans and design schemes in ways that encourage safe and convenient pedestrian, bike, transit connections between neighborhoods and the food sources described above.	(12)
Comprehensive Planning	Planners support the creation of local and regional food planning mechanisms that integrate major local planning functions (such as land use, economic development, transportation, environment, parks and recreation, public safety, health and human services, and agricultural preservation).	(12)
Comprehensive Planning	Land use: accommodate public structures such as farmer's and public markets to serve as direct sales outlets for local producers. Retain industrial land for local businesses critical to the food system. Regulate undesirable land uses such as fast food drive-thrus. Affect the location of supermarkets and community gardens.	(3)
Comprehensive Planning	Open space: accommodate urban agriculture and community gardens and into the design of multifamily units and as central gathering places within larger neighborhoods.	(3)
Comprehensive Planning	Establish city ordinances that allow residents to keep chickens, ducks, rabbits, and beehives.	(4)
Comprehensive Planning	Enforce land use protections for urban agriculture, community gardens, and farmers markets.	(4)
Comprehensive Planning	Establish edible landscaping on city and county-owned property.	(4)
Comprehensive Planning	Enforce land use policies that halt the excessive encroachment of urban development on agricultural land.	(4)
Comprehensive Planning	Formalize policies that dedicate vacant land to promote farm, garden, market and infrastructure development.	(18)
Comprehensive Planning	Address land use and zoning ordinances.	(18)
Comprehensive Planning	Support, as relevant with the use of planning tools, the integration in food production and distribution of sustainability principles and practices, which promote clean air, water, healthy soils, and healthy habitats and ecosystems.	(12)
Comprehensive Planning	Encourage conservation of regional agricultural land, open space, and wilderness resources for agriculture and food systems (as identified in the APA Agricultural Land Preservation Policy Guide).	(12)
Comprehensive Planning	Develop land use and transportation plans, modify development regulations, and help prepare economic incentive programs to provide accessible and well-served sites and other development assistance for year round public markets, farmers markets, small-scale processing facilities, and distribution centers for foods produced in the region.	(12)
Comprehensive Planning	Planners support developing appropriate land use, economic development, transportation and comprehensive planning policies and regulations to promote local and regional markets for food producing in the region.	(12)
Comprehensive Planning	Support street vending of healthy foods.	(7)
Comprehensive Planning	Undertake periodic assessments of community/regional food issues, including broad community participation, and develop recommendations for actions.	(12)
Comprehensive Planning	Provide site planning, design, and other relevant assistance to these institutions to facilitate food production and distribution.	(12)
Comprehensive Planning	Assist in assessing solid waste streams at different points of the community's food system (production, wholesale, retail, consumer, etc.) and considering ways to reduce, reuse, and recycle wastes.	(12)
Comprehensive Planning	Collaborate among professionals to explore ways through which the food system impacts the region's natural environment, fisheries and other wildlife habitats, and ecology, and the impacts of pollution on food systems. This analysis can inform plans to sustain ecologies including those upon which our food system depends, and to minimize harm to them.	(12)

Overarching Category	Strategies, Recommendations & Goals	Source
Comprehensive Planning	Planners support efforts to assess and mitigate the negative environmental and ecological effects caused by and affecting food system activities.	(12)
Comprehensive Planning	Assist in assessing the sources of lake and river pollution and eutrophication, and considering ways to reduce such pollution.	(12)
Comprehensive Planning	Support efforts to reduce and mitigate negative air quality impacts in food system activities, including those contributed by farm activities and the long distance transportation of food from farm to fork.	(12)
Comprehensive Planning	Support strategies to increase the adoption of water and soil conservation practices in agriculture.	(12)
Comprehensive Planning	Reduce pollution and congestion by shortening the distances that food travels.	(2)
Comprehensive Planning	Create regional infrastructure for production, distribution, and processing of local and regionally grown healthy foods, including links with grocery stores, schools, hospital systems, food banks, childcare, and afterschool programs.	(1)
Comprehensive Planning	Fresh, local, and healthy food is available and affordable in all communities and neighborhoods.	(1)
Comprehensive Planning	Planners support resolving issues of rural poverty through land use, transportation, economic development planning and appropriate regulatory measures.	(12)
Comprehensive Planning	Undertake assessments of possible links between farm and food workers' work conditions and planning-related decisions (e.g. distance between housing, schools, and work sites, and availability of transportation options).	(12)
Comprehensive Planning	Prepare comprehensive and rural community plans to address the spatial, social and economic needs of low income rural residents.	(12)
Comprehensive Planning	Assess the impact of food waste disposal on area landfills and explore possibilities related to recycling food wastes through composting and bio-fuel development.	(12)
Comprehensive Planning	Explore ways to make it easier to recycle and reuse food packaging, requiring local grocery stores to offer plastic bag recycling and other such programs.	(2)
Comprehensive Planning	Integrate household and business composting into the area's waste management services, provide composting supplies and pick up excess material as part of normal waste pick up.	(2)
Comprehensive Planning	Chapters could document related activities to enable the broader APA membership to draw lessons from their successes and challenges, and to inform federal policy advocacy.	(12)
Comprehensive Planning	Conditional Use Permit (CUP), use of land after public hearing.	(12)
Cooperatives	Agricultural economic development, grower cooperatives can increase their access to lucrative markets with a cooperative.	(14)
Cooperatives	Agricultural cooperatives.	(19)
Emergency Preparedness	Coordinate with other agencies in the implementation of public outreach and education campaigns to inform the community about food related emergency preparedness.	(12)
Emergency Preparedness	Planners support the development of plans for building local food reserves and related activities to prepare for emergencies.	(12)
Emergency Preparedness	Assess the community and region's food needs during emergencies of different kinds (such as a major earth quake, hurricane, terrorist attack, or the spread of contagious disease) and the capacity of current food sources and distribution systems in the community and region.	(12)
Emergency Preparedness	Partner with appropriate public agency and private stakeholder groups to develop appropriate plans to build sufficient local and regional food reserves for emergencies, including related communications, logistics, and transportation infrastructure, and to restore food system integrity and operation after the emergency.	(12)
Emergency Preparedness	Incorporate food access strategies into emergency preparedness plans to build local reserves and assure maintaining food supplies in times of crisis.	(4)
Emergency Preparedness	Develop disaster and emergency preparedness plans that incorporate local, seasonal and sustainably raised foods.	(11)
Farmers Markets	Develop or expand farmers market programs.	(8)
Farmers Markets	Increasing and protecting farmers markets by removing barriers like zoning regulations.	(20)
Farmers Markets	Optimizing locations for farmers markets via land use policies.	(20)
Farmers Markets	Increasing access to farmers markets for low income customers via land use policies.	(20)
Farmers Markets	Local and sustainably produced foods are priority versus cost. Ease requirements for farmers markets to utilize EBT technology for SNAP and WIC FSNP participants.	(4)
Farmers Markets	Enhance staff and community access to fresh produce by establishing accessible Farmers Markets or farm stand programs on hospital grounds.	(10)
Farmers Markets	Streamline permitting processes for smaller markets.	(20)

Overarching Category	Strategies, Recommendations & Goals	Source
Farmers Markets	Work with land owners and farmers market organizers to create or expand local markets in low income neighborhoods.	(2)
Farmers Markets	Ensure a safe atmosphere at farmers markets and provide equipment so that food stamps can be used.	(2)
Farmers Markets	Offer farmers market sites on city property.	(20)
Farmers Markets	Subsidize farmers market purchases for low income residents.	(20)
Farmers Markets	Partner with schools, allow markets on school grounds.	(20)
Farmers Markets	Partner with local organizations like: Chambers of Commerce and other businesses, development organizations, hospitals, universities, faith-based communities.	(20)
Farmers Markets	Zoning regulations and ordinances in regards to farmers markets.	(20)
Farmers Markets	Local land use laws and adoption of state comprehensive plans or master plans.	(20)
Farmers Markets	Offer model Comprehensive Plan language to protect and expand farmers markets.	(20)
Farmers Markets	State health and safety laws in regards to how farmers markets are classified; important to review the state laws governing any local community to ensure that the state law does not affect the community's ability to regulate farmers markets; also need to consider that vendors may also be subject to licensing and labeling laws, tax laws, and labor laws.	(20)
Farmers Markets	Start and sustain Farmers Markets: Link farmers to retail opportunities; Increase use of EBT, WIC cash-value vouchers, and WIC and Senior Farmers Market Nutrition Program Coupons; Support farmers collaborative and technical assistance.	(6)
Farmers Markets	Promote and expand farmers markets (with EBT capability) in low income areas: markets in low income areas typically need to be subsidized, either by farmers market nutrition programs, the patronage of middle income customers, or with proceeds from more profitable markets; community ownership of the market; products at the market should provide basic foods at affordable prices; hire local sales staff, especially if there is a language barrier; consider transit options/programs to get to the markets); consider nutrition education offerings.	(7)
Farmers Markets	Community level interventions: farmers markets, community gardens, or mobile carts or trucks that sell fruits and vegetables.	(15)
Farmers Markets	Establish accessible Farmers Markets or farm stand programs in underserved areas. Characteristics of a successful farmers market in an underserved area: location of markets to be established on the edge of low income communities or in places with a mixed income consumer base; product mix should include familiar products and be priced affordably; community members are actively involved in the market and feel a sense of ownership; location should be inviting and designated as a safe public space; brings together people of different ethnic groups and incomes; effective transportation systems servicing market areas; flexible market hours (including regular night and weekend hours); hiring sales staff from community; utilizing a community organizing approach; accepting WIC Farmers Market Nutrition Program (FMNP) and/or Senior Farmers Market Nutrition Program (SFMNP) coupons; offering electronic benefit transfer (EBT) as a payment option.	(10)
Farmers Markets	Initiative new farmers markets at hospitals, schools and universities, urban centers and worksites.	(11)
Farmland preservation	Protect agricultural lands.	(3)
Farmland Preservation	APA National calls upon Congress to amend the Farmland Preservation Policy Act of 1981 to require that Federal agencies withhold public funds for proposed projects if those projects are inconsistent with adopted growth management plans.	(21)
Farmland Preservation	APA Chapters support legislation that incorporates agricultural land preservation into long range planning consistent principles of smart growth at the state, county, and municipal levels including the issue of equity.	(21)
Farmland Preservation	APA Chapters support legislation that sets forth their state's policy on agricultural land protection.	(21)
Farmland Preservation	APA Chapters support reauthorized and increased funding for federal grants to state and local governments for the purchase of development rights to agricultural land. The Federal Agricultural Improvement and Reform Act of 1996 provided \$35 million for state and local PDR programs. This money has been spent. Section 388 of the Act should be reauthorized by Congress and funded at \$50 million a year.	(21)
Farmland Preservation	APA Chapters support ongoing agricultural land mapping and monitoring programs such as LESA (USDA Land Evaluation Site Assessment), GIS, and land classification system in order to document the amount of land in farm production and the rate at which it is being converted to non-farm uses.	(21)
Farmland Preservation	APA National and Chapters support Federal and state farm policies that maintain the economic viability of agriculture through value added products or industries which use materials from agriculture, as a means of protecting agricultural land usage.	(21)

Overarching Category	Strategies, Recommendations & Goals	Source
Farmland Preservation	APA national and chapters support state and local regulatory approaches to promote agricultural preservation such as TDR's performance zoning, agricultural preservation districts and other similar techniques where feasible.	(21)
Farmland Preservation	Explicitly authorize county and municipal governments to adopt agricultural zoning ordinances as an appropriate technique for protecting agricultural land. Such agricultural zones would limit non-agricultural development to densities and development patterns that are consistent with the continuation of agriculture.	(21)
Farmland Preservation	Explicitly authorize county and municipal governments to adopt and fund transfer of development rights programs and purchase of development rights programs for the preservation of important Agricultural land.	(21)
Farmland Preservation	APA Chapters support state legislation linking incentives to continue farming (such as state income tax credits or differential assessment for property taxes and affirmative supports for the business of agriculture) with controls preventing conversion of the recipient's agricultural land to non-farm uses. These controls could range from strict agricultural zoning to permanent easements forbidding non-farm development and should supplement and not replace existing incentive programs that provide temporary protection for farmland.	(21)
Farmland Preservation	APA Chapters support state legislation that levies a tax on the conversion to non-farm uses of important agricultural land in areas designated for agricultural land preservation.	(21)
Farmland Preservation	APA Chapters support legislation that establishes non-regulatory agricultural districts wherein agriculture is the recognized long term use.	(21)
Farmland Preservation	APA Chapters support state legislation requiring comprehensive plans to address preservation of Important Agricultural Land and specifying programs for its protection.	(21)
Farmland Preservation	APA Chapters support legislation that will eliminate exemptions from the normal subdivision process that would result in the division of Important Agricultural Land into parcels that are too small for commercial farming.	(21)
Farmland Preservation	Require that state funds for infrastructure facilities, especially for highways and sewer facilities, not be provided unless the State Secretary of Agriculture, the State Planning Board (or similar agency/organization), and other appropriate state natural resource planning agencies find that the facilities will not be detrimental to the continuation of agriculture.	(21)
Farmland Preservation	APA National supports legislation that extends from governors to local governments the right to sue in cases where the intent of the Farmland Preservation Policy Act is violated or its implementing procedures are not being carried out. Add land use mediation tools to prevent lawsuits (look at wetlands).	(21)
Farmland Preservation	Two primary planning goals are to provide locations for necessary urban development and to protect natural resources, such as good agricultural soils. If growth is properly directed, the two rarely come into conflict. If it is not, neither goal can be achieved. Therefore, agricultural land preservation programs should not be independent of more general growth management programs.	(21)
Farmland Preservation	Agricultural land preservation is necessary to curb urban/suburban sprawl and refocus development into existing downtowns and areas with appropriate infrastructure. Growth boundary strategies can work only if development in the countryside is held to a minimum.	(21)
Farmland Preservation	Recognize important Agricultural land as a valuable natural resource that all levels of government should protect for future generations.	(21)
Farmland Preservation	Conduct assessments of prime agricultural lands that will be affected by current and projected development trends.	(12)
Farmland Preservation	Develop or modify policies, regulations, and other tools such as agricultural land preservation zoning, purchase of development rights, transfer of development rights, and partnerships with land trusts, to protect prime agricultural land.	(12)
Farmland Preservation	Planners support developing land use planning policies, economic development programs, land taxation, and development regulations to enhance the viability of agriculture in the region (as identified in the APA Agricultural Land Preservation Policy Guide).	(12)
Farmland Preservation	OFP recommends legislature undertake examination of public land ownership, looking at state agency uses for land, the resource needs for maintenance, loss of working lands due to state agency acquisition, and other issues.	(22)
Farmland Preservation	Ag resources should not be taken out of use by mitigation.	(22)
Farmland Preservation	Temporary moratorium on acquisition of land by state agencies.	(22)
Farmland Preservation	Develop a county agricultural economic development and farmland protection plan.	(18)
Farmland Preservation	Appropriate funding should be made available to counties to develop strategic plans for agricultural resources in the county.	(22)

Overarching Category	Strategies, Recommendations & Goals	Source
Farmland Preservation	Governor should issue an executive order acknowledging the priority of agricultural resources in the state and directing agencies to protect agriculture resources in their policy actions.	(22)
Farmland Preservation	Preserve farmland on the urban and suburban fringes and in prime growing areas. Farmland preservation within urban and suburban fringes promotes regional agriculture, provides land for growing food, and helps prevent sprawl. Land trusts are one partnership mechanism to keep farmlands in operation. Preventing expansion at the urban and suburban fringe through policies like infill development is an important strategy. Maintaining existing farmland at the urban or suburban fringe also requires policy attention to ensure farming operations are compatible with neighboring developments (i.e. operations do not pollute the air, water, and soil near schools and housing). An emerging area of interest is the intersection of farmland preservation, open space, recreation, and park development efforts and their relationship to health.	(1)
Farmland Preservation	Purchase conservation easements to protect farmland.	(18)
Farmland preservation	Dedicate permanent and significant funding for farmland preservation.	(18)
Farmland Preservation	Agriculture conservation development: set aside land for farming now and in the future, ensure long term ability to grow local fresh foods, preserve community character, provide income for farmers, and conserve green space.	(23)
Farm to Institution	Include or expand farm-to-where-you-are programs in all possible venues.	(8)
Farm to Institution	Hospitals: institute a farm to institution program to incorporate fresh local produce into cafeteria and patient meals.	(10)
Farm to Institution	Assemble and implement business enhancement and related incentives to help public institutions such as schools, hospitals, colleges, and government agencies, and private food outlets such as grocery stores and restaurants source foods produced in the region.	(12)
Farm to Institution	Start farm to institution programs at schools, prisons, and hospitals.	(2)
Farm to Institution	All schools provide (locally grown) fruit and vegetable snacks to all children.	(4)
Farm to Institution	Purchasing healthy foods for schools and government institutions: farm to school programs, farm to hospital programs, school garden programs.	(24)
Farm to Institution	Expand and promote farm to school.	(18)
Farm to Institution	Improve availability of mechanisms for purchasing food from farms.	(25)
Food Policy Councils	Promote Food Policy Councils as a Means to Improve the Food Environment at State and Local Level.	(8)
Food Policy Councils	Conduct an assessment of local food system infrastructure needs.	(18)
Food Policy Councils	Assist and support locally based efforts by Native American and other ethnic minority communities, to identify and document community and ecological assets and cultural traditions that are tied to food production, preparation, and consumption (e.g. salmon runs, wild rice and nut-gathering, agricultural fairs, and ethnic and cultural festivals).	(12)
Food Policy Councils	Support locally based efforts to identify challenges and needs faced by members of Native American and ethnic minority groups in consuming healthful diets.	(12)
Food Policy Councils	Support local efforts to build on existing assets and cultural traditions that nourish Native and ethnic minority food cultures and to mitigate challenges to them.	(12)
Food Policy Councils	Assist efforts to develop ongoing community participation mechanisms in food assessments and related planning in First Nations and in communities with a significant Native American or other minority ethnic cultures.	(12)
Food Policy Councils	Support efforts by and within Native American and other ethnic minority communities to identify and document indigenous and ethnic food systems that have been degraded or are threatened.	(12)
Food Policy Councils	Support local efforts to restore or protect native, indigenous, or ethnic food systems.	(12)
Food Policy Councils	Work collaboratively to establish mechanisms in the region to minimize and resolve conflicts between tribal governments, other local governments, and state and federal agencies and among different minority groups in communities, so as to facilitate Native and other ethnic minority communities' efforts to sustain their food systems.	(12)
Food Policy Councils	Work with leading institutions to discourage the financing of unhealthy food sources such as fast food businesses.	(2)
Food Policy Councils	Provide maps, information, and analysis on particular planning issues linking food system and local areas to food policy councils.	(12)
Food Policy Councils	APA Chapters support the development of and participation in state food policy councils that provide a comprehensive and systematic focus on statewide food issues and needed actions.	(12)

Overarching Category	Strategies, Recommendations & Goals	Source
Food Policy Councils	Develop policy and programmatic recommendations related to those proposed in this Policy Guide for the consideration of and action by state food policy councils to consider.	(12)
Food Policy Councils	APA Chapters and Divisions support the development of federal policies related to international trade, humanitarian aid, development assistance, and other categories of international involvement in ways that promote sustainable and self-reliant solutions to hunger and food insecurity experienced in other countries.	(12)
Food Policy Councils	Advocate and build support for a more comprehensive approach to food planning, such as through local and/or regional food policy councils or coalitions.	(12)
Food Policy Councils	Conduct research on existing state food policy councils and assess the feasibility of a state food policy council if currently non-existent, including its structure, decision processes, constituents, and relationship to government agencies and legislative bodies.	(12)
Food Policy Councils	State and local Food Policy Councils should play a more significant role.	(19)
Food Policy Councils	Food policy councils (bring stakeholders together, make recommendations, coordinate and deliver existing programs, address policy barriers, community outreach).	(23)
Food Policy Councils	Engage with or establish a food policy council.	(11)
Food Policy Councils	Establish and implement a statewide food policy advisory council.	(18)
Food Policy Councils	Pass a resolution recognizing the importance of local healthy and sustainably produced foods.	(4)
Food Policy Councils	Planners support the creation of community and regional food systems linking production, processing, distribution, consumption, and waste management to facilitate, to the extent possible, reliance on a region's resources to meet local food needs.	(12)
Food Policy Councils	Foster a network between local producers, processors, transporters, and restaurants, grocery stores, households and other purchasers.	(2)
Food Policy Councils	Form or build upon existing partnerships, coalitions, or advisory boards to address access to physical activity and healthy eating and promote policies and action plans across multiple agencies and organizations in support of healthy communities.	(1)
Food Policy Councils	Government and the private sector support and promote healthy eating and active living environments.	(1)
Food Policy Councils	Emphasize the linkages between supporting limited resource farmers and widely shared goals and values.	(1)
Food Policy Councils	Use government and private sector influence on their contractors to encourage healthy practices.	(1)
Food Policy Councils	Identifying partners and building relationships: city agencies, NGOs.	(26)
Food Policy Councils	Ensure government has dedicated staff responsible for oversight of improvements to support healthy living environments.	(1)
Food Policy Councils	Develop an award program recognizing communities that reduce food waste in landfills.	(4)
Food Policy Councils	Establish standards for food industry water use/water recycling.	(4)
Food Safety	Assess the possible food safety implications of older buildings housing food markets, grocery stores, and food processing operations, with a view to supporting goals related to food safety and business viability, and consider providing incentives to businesses to enhance food safety.	(12)
Food Safety	The federal government must provide significant resources for education and training, allowing farms time and support to adopt and implement food safety practices and documentation protocols.	(27)
Food Safety	DHHS: Food safety, drug regulation, food labeling, dietary guidelines and nutrition promotion, other research and educational activities; community service block grant program, action communities for health innovation and environmental change	(28)
Food Safety	DHS: food safety and security; customs and border protection; disaster assistance; immigration and customs enforcement.	(28)
Food Safety	Provide explicit federal funding allocation to state departments of agriculture for training and education to help farmers develop food safety plans, implement the plans and associated testing, and meet the requirements of an audit.	(27)
Food Safety	Protocols must be adaptable to a range of farms and supply chains.	(27)

Overarching Category	Strategies, Recommendations & Goals	Source
Food Safety	Broad stakeholder influence is vital to the development of a fair, affordable and effective approach to on-farm food safety.	(27)
Food Safety	Protocols must accurately identify the greatest sources of risk, and specific measures to mitigate produce safety risk must be based on sufficient and independent science when possible, or on precautionary, time-tested practices.	(27)
Food Safety	Protocols must be risk-based and tiered, i.e. possible options for lowest-risk farms, moderate-risk farms, and higher-risk farms.	(27)
Food Safety	Food safety protocols must be compatible with environmental, conservation and waste reduction goals and organics and other certifications.	(27)
Food Safety	Auditors should be attentive to various production systems and conservation practices.	(27)
Food Safety	Marketing agreements are not appropriate vehicles to regulate food safety.	(27)
Food Safety	Ensure that standards are consistently applied and require uniform training of all auditors.	(27)
Food Safety	State departments of agriculture should be authorized to allocate a portion of the federal funds they receive to state cooperative extension programs or nonprofits to carry out education and training activities.	(27)
Food Safety	Provide funds to subsidize audits and testing on a sliding scale, with particular attention paid to limited-resource and beginning farmers.	(27)
Food Safety	Advocate at the federal level to support small-scale, diversified farmers in the adoption of food safety protocols.	(18)
Food Safety	Education about food safety issues.	(11)
Food Safety	Planners support, through land use decisions, environmental monitoring, ecological mitigation, and policies related to working conditions of farm and food workers, food safety practices that ensure consumer health.	(12)
Food Safety	Support land use decisions, environmental monitoring, and ecological mitigation that prevents potential contamination of agriculture and food products through water runoffs from animal operations, provides sanitary living and working conditions for farm and food workers, and otherwise promotes food safety. In supporting these decisions, additional barriers and costs that potentially may be imposed on especially small and limited resource farmers and ranchers may need to be considered and addressed.	(12)
Food Safety	Support agricultural and food practices that affirmatively and proactively address worker health and safety in ways that also advance food safety.	(12)
Food Safety	Challenges: Health and safety laws may inhibit the donation of already cooked food (e.g. restaurant leftovers), and may complicate the use of other unsold items. Building and safety regulations may also make it difficult to enact a composting program, and the general population may see composting as an unappealing practice (look into Portland's "Fork it over" program to reduce hunger and waste).	(2)
Food Safety	EPA: pesticide regulation, education and research; water pollution regulation and abatement; air pollution regulation and abatement; renewable fuels standard; climate change mitigation and research; environmental education grants program; environmental justice small grants program, Brownfield's programs, non-point source management program (NSMP), clean water state revolving fund, region-specific grants.	(28)
Food Security	Include fruits and vegetables in emergency food programs.	(8)
Food Security	Leverage the purchasing power of the federal Women, Infants, and Children Program (WIC) and Food Stamp Program participants to encourage small stores and farmers' markets to offer fruits and vegetables in low income neighborhoods through Electronic Benefit Transfer (EBT) access at farmers' markets, WIC certification to meet new food package guidelines, and food stamp bonus points.	(1)
Food Security	Making healthy foods affordable: providing refunds or discounts on fresh produce to individuals using food stamps, adopting price reductions on healthy foods in government institutions where food is served, paying farmers for surplus produce and distributing to social agencies, work with USDA and WIC and Senior Farmers Market Nutrition Program.	(24)
Food Security	Support and expand EBT use at direct market venues.	(18)
Food Security	Explore ways in which these institutions can be linked with community based organizations in producing food on their sites to provide job opportunities and healthy food for school cafeterias and low income residents — e.g. programs such as "plant-a-row for the hungry" that add fresh produce to food assistance provided by Second Harvest Food Banks.	(12)
Food Security	Provide nutrition education through local food banks and other emergency food sources.	(2)
Food Security	Encourage emergency food sources to solicit donations of unsold food from farmers market stands at the end of each market day.	(2)
Food Security	Increase food stamp benefits to help more people purchase healthy foods and improve outreach and efficiency in food stamp delivery and nutrition education.	(1)
Food Security	Glean food from local farmers for food banks and pantries.	(11)
Food Security	Distribution center and food bank vehicles.	(29)

Overarching Category	Strategies, Recommendations & Goals	Source
Food Security	Promote and refer others to the Seniors Farmers Market Nutrition Program (SFMNP) and the WIC Farmers Market Nutrition Program (WIC FMNP).	(11)
Food Security	Mobile food banks.	(29)
Food Security	Strategically ordering government commodities.	(29)
Food Security	Government storage; improved cooperation of storage between Dept of GA and CSFP (Commodity Supplemental Food Program).	(29)
Food Security	Restore economic growth and create jobs with better wages for lower income workers.	(30)
Food Security	Raise the incomes of the lowest income families.	(30)
Food Security	Strengthen the SNAP/Food Stamp program.	(30)
Food Security	Strengthen the Child Nutrition Programs.	(30)
Food Security	Engage the entire federal government in ending childhood hunger.	(30)
Food Security	Work with states, localities and nonprofits to expand and improve participation in federal nutrition programs.	(30)
Food Security	Make sure all families have convenient access to reasonably priced, healthy food.	(30)
Food Security	Provide all children with a healthy breakfast.	(31)
Food Security	Encourage and enable healthy food choices.	(31)
Food Security	Help eligible families meet needs at home with access to food stamps.	(31)
Food Security	Improve the economic security of working families.	(31)
Food Security	Increase families' access to fresh, affordable products in their neighborhoods.	(31)
Food Security	Help afterschool programs provide healthy meals and snacks, expand the reach of summer meals programs.	(31)
Food Security	Ensure access to balanced, nutritious diets for all pregnant women and preschool children.	(31)
Food Security	Ensure access to nutritious food in shelters and food pantries.	(31)
Food Security	Provide comprehensive public education about available resources and assistance.	(31)
Food Security	Families with low incomes efficiently receive Basic Food support to meet their needs.	(32)
Food Security	Making information about Basic Food more accessible and relevant to low income families.	(32)
Food Security	Destigmatizing the use of benefits through wider acceptance of EBT cards.	(32)
Food Security	Joining with national advocates to push for change in the federal program including benefits that address rising food costs.	(32)
Food Security	All children eat a healthy, appealing breakfast, lunch and snack at school.	(32)
Food Security	Increase access to federally reimbursed breakfast and lunch for low income students.	(32)
Food Security	Improve nutritional quality of school meals and serving more locally raised foods.	(32)
Food Security	Ensure that school wellness policies minimize competitive foods and beverages and promote participation in federal meal programs.	(32)
Food Security	Children and youth eat healthy meals in their communities throughout the summer.	(32)
Food Security	Increase site locations so they are accessible in more communities, particularly those in rural and underserved areas.	(32)
Food Security	Make sure that families know about the program, eligibility requirements and locations.	(32)
Food Security	Provide safe ways for kids to get to the sites.	(32)
Food Security	Keep sites open often enough days and long enough hours for families to rely on them.	(32)
Food Security	Improve program quality, including the nutritional quality and appeal of food served.	(32)
Food Security	Low income children and families have access to affordable food, especially fresh fruits and vegetables, in their communities.	(32)
Food Security	Serving more locally raised food in school and other institutions that feed low income kids.	(32)
Food Security	Increasing the number of farmers markets and smaller food markets that accept Basic Food and WIC payments.	(32)
Food Security	Bringing more food markets that offer affordable fresh food to low income market.	(32)
Food Security	Developing more community gardens and gardening education programs in low income neighborhoods.	(32)
Food Security	All pregnant women, infants and young children have a healthy, balanced diet.	(32)
Food Security	Increase the percentage of eligible women, infants, and children who utilize WIC.	(32)
Food Security	Keep more kids in the program for as long as they are eligible.	(32)
Food Security	Make sure that families enrolled in WIC programs have reliable access to the food and services they're eligible to receive.	(32)
Food Security	Increase the percentage of women enrolled in WIC who breastfeed for more than six months.	(32)
Food Security	Raise the number of WIC clients who get vouchers for farmers markets and who receive the maximum benefit allowed at those markets.	(32)
Food Security	Young children have healthy food available in early learning and childcare programs.	(32)
Food Security	Make sure that providers serve foods that meet children's cultural and dietary needs.	(32)
Food Security	Families with low incomes can achieve great economic security and build assets.	(32)

Overarching Category	Strategies, Recommendations & Goals	Source
Food Security	Train providers in how to improve the nutritional quality of the meals they serve by using more whole grains, produce, low fat milk and other healthy foods and using fewer high fat, high sugar foods.	(32)
Food Security	Food banks and meal programs are readily available and provide nutritious meals to those who need to supplement their family's food options.	(32)
Food Security	Improve the nutritional quality of foods provided through donations and locally raised foods.	(32)
Food Security	Children and youth eat healthy snacks and meal in afterschool programs.	(32)
Food Security	Children and families have the knowledge and skills to make healthy food choices through effective nutrition education.	(32)
Food Security	Invest in and strengthen the national nutrition safety net.	(33)
Food Security	Ensure that states, localities and schools offer all federal food assistance program and work actively to enroll eligible people in these programs.	(33)
Food Security	Strengthen local use of federal nutrition programs.	(33)
Food Security	Reduce the complexity and stigma of applying for SNAP.	(33)
Food Security	Adopt policies (at the state level) that would expand eligibility of applying for SNAP.	(33)
Food Security	Work with school districts and localities to ensure that they offer the full range of child nutrition programs.	(33)
Food Security	Provide incentives to grocery stores, corner stores and farmers markets to provide healthy food options in under-served communities.	(33)
Food Security	Invest in public education to increase outreach and awareness of the importance of preventing hunger and improving nutrition for health, learning and productivity.	(33)
Food Security	Provide eligible children the full range of federal nutrition assistance programs, including free and reduced-price breakfast and lunch, after school snacks and supper, summer meals programs and the child and adult care meals program.	(33)
Food Security	Ensure that all eligible children who wish to participate are enrolled in the school meal and child nutrition programs.	(33)
Food Security	Invest in public education to increase outreach and awareness of the importance of preventing hunger and improving nutrition for health, learning and productivity.	(33)
Food Security	Non-profit: Work to increase public awareness of the problem of hunger in the community and advocate for policies to end hunger.	(33)
Food Security	Non-profit: Ensure that state and local governments take advantage of all federal nutrition programs.	(33)
Food Security	Non-profit: Strengthen charitable distribution network and faith-based agencies.	(33)
Food Security	Non-profit: Educate low income people about their potential eligibility for nutrition assistance and help connect them with the appropriate programs.	(33)
Food Security	Non-profit: Monitor program performance in SNAP offices, schools and communities.	(33)
Food Security	Non-profit: Ensure that, once families are connected with food assistance, they also have access to affordable nutritious food.	(33)
Food Security	Non-profit: Continue to acquire and distribute balanced and nutritious food.	(33)
Food Security	Labor and industry: Collaborate with government and community group to connect low wage workers to federal nutrition programs.	(33)
Food Security	Labor and industry: Contribute time, money, food, warehouse space and/or transportation capacity to local anti-hunger organizations.	(33)
Food Security	Labor and industry: Support workplace giving campaigns that target hunger.	(33)
Food Security	Labor and industry: Advocate for improved public policies to end hunger.	(33)
Food Security	Urge elected officials to do more to reduce hunger by improving and expanding federal nutrition programs.	(33)
Food Security	Become involved with local anti-hunger organization by advocating and donating time, money or food.	(33)
Food Security	Raise local awareness of hunger by talking to friends, family, and people in your community.	(33)
Food Security	WIC package and guidelines to formulate Corner Store Fruit and Vegetable opportunities.	(34)
Food Security	Food and nutrition programs provide food that meets current US dietary guidelines.	(4)
Food Security	WIC repackaging may impact the feasibility of increasing nutritious food options in small grocery stores and corner stores.	(15)
Food Security	Adopt a "zero waste" goal for food scraps.	(2)
Health care	Health care organizations and providers promote healthy eating and active living in their own institutional policies and in their clinical practices.	(1)
Local kitchen/ processing units	Provide nutrition and cooking education, especially in low income or high obesity areas.	(2)
Local kitchen/ processing units	Develop area-wide and neighborhood plans with appropriate sites for facilities (such as community kitchens) and spaces (such as for entrepreneurial community gardens) that support food-related entrepreneurial development for low income households.	(12)

Overarching Category	Strategies, Recommendations & Goals	Source
Local kitchen/processing units	Offer food preparation courses as part of city parks and recreation activities.	(4)
Local kitchen/processing units	Establish and expand education and training programs for culinary arts and sciences.	(4)
Local kitchen/processing units	Support the development of community kitchens and related infrastructure, food business incubator facilities, and entrepreneurial urban agriculture projects.	(12)
Local kitchen/processing units	Support a central kitchen model for school districts.	(7)
Local kitchen/processing units	Provide incentives for community kitchens that can be used by schools and other institutions to preserve locally produced food. Develop provisions to expand access on public land for community gardeners.	(4)
Local kitchen/processing units	Support and promote nontraditional local processing capabilities including: churches, community colleges, mobile processing units.	(11)
Marketing	Direct marketing assistance programs (i.e. programs that support opportunities for farmers to market and/or sell their products, such as roadside stands and markets).	(35)
Marketing	Discourage consumption of sugar-sweetened beverages.	(25)
Marketing	Limit marketing of sugar sweetened beverages and minimize marketing's impact on children.	(36)
Marketing	Model healthy organizational practices by ensuring that healthy foods and beverages are available and promoted in cafeterias, vending machines, coffee carts, and other concessions.	(1)
Marketing	Implement standards and secondary labels/logos for foods produced within a specific geographic region.	(4)
Marketing	Support the creation of marketing networks to bring together farmers, processors, and purchasers of locally grown and produced foods.	(12)
Marketing	Contribute to the preparation of regional food resource guides that identify organizations and businesses that are involved in local and regional food production, processing, and retailing, the better to educate the public and build links between local producers and local consumers.	(12)
Marketing	Create an inventory of local farmers and distribution it to markets and convenient store owners.	(2)
Marketing	Assist efforts to help regional farmers diversify their products, and produce and market organic and other high-value products desired by consumers.	(12)
Marketing	Explore the possible use of sign controls to prevent billboards that market low nutrient/high calorie foods fast foods and other negative food marketing within a specified radius of schools and other youth-centered facilities.	(12)
Marketing	Through plans, state and federal agricultural policies and funding, and development regulations, support food production for local consumption, direct marketing by farmers, agri-food tourism, and niche marketing of specialized agricultural products such as wines, cheeses, and cherries.	(12)
Marketing	Selling food in more local or regional market via: direct marketing, CSAs or farmers markets, farm to institution programs, and ecolabels.	(37)
Marketing	Healthy foods and beverages are promoted in grocery and other food stores, restaurants, and entertainment venues.	(1)
Marketing	Promote in season sources for locally and regionally grown products in retail, restaurant, and entertainment venues.	(1)
Marketing	Reduce point-of-sale marketing of energy dense, nutrient-poor foods and beverages to children in grocery stores, corner stores, and restaurants.	(1)
Marketing	Place healthier food and beverage items at eye level, the ends of aisles, and prominent places, and increase overall shelf space devoted to healthy items in grocery stores, convenience, and small stores.	(1)
Marketing	Limit and monitor marketing of energy dense, nutrient-poor foods and beverages to children through television, other electronic media, food and beverage packages, toys, licensed characters, contests, or other marketing approaches.	(1)
Marketing	Limit and monitor marketing to children in digital media.	(1)
Marketing	Establish restrictions on sales and marketing of fast food and alcohol. Formula retail and restaurant ordinances are being used to limit the density of fast food chains and liquor outlets or set minimum distances from specific sites such as schools.* Conditional use permits (CUP) are one way for a municipality to control certain "nuisance" businesses that have specific public health risks (e.g. fast food restaurants, liquor stores, auto repair shops, and dry cleaners). Most cities have some form of a CUP in their zoning ordinance, but their uses are varied.	(1)

Overarching Category	Strategies, Recommendations & Goals	Source
Marketing	Limit and monitor the marketing of sedentary behaviors in television and other electronic media.	(1)
Marketing	Limit advertisements of less healthy foods and beverages.	(25)
Marketing	Organizations, institutions, and individuals that influence the information and entertainment environments share responsibility for and act responsibly to promote healthy eating and active living.	(1)
Marketing	Restrict availability of less healthy foods and beverages in public service venues.	(25)
Marketing	Prohibit the marketing of foods of low nutritional value to children.	(4)
Marketing	Mandate that for every dollar spend by food industries on marketing foods of low-nutritional value, 25 cents must go towards a national nutrition campaign.	(4)
Marketing	Agencies that regulate food advertising: FTC's Bureau of Consumer Protection; Federal Communications Commission.	
Marketing	Help network direct marketing initiatives statewide.	(18)
Marketing	Develop a city-wide, county-wide, state-wide healthy eating publicity campaign (see community low fat milk campaigns).	(7)
Marketing	Benefits of direct marketing to schools, universities and child care facilities.	(38)
Marketing	Encourage point-of-sale identification of local, seasonal and sustainably raised food in markets.	(11)
Marketing	Agricultural economic development, direct marketing to consumers through county encouragement and county marketing tools.	(14)
Marketing	Agricultural economic development, marketing to restaurants and food retailers in order to capture more profit.	(14)
Marketing	Agricultural economic development, agritourism services bring in new customers and promote farm products.	(14)
Marketing	Expand labeling laws to include foods that contain genetically engineered ingredients.	(4)
Marketing	Prohibit misleading health claims in advertising and on food package labels.	(4)
Marketing	Require franchise and fast food restaurants to provide nutritional information on menu items.	(4)
Marketing	Promote menu labeling & restaurant programs.	(39)
Marketing	Require franchise and fast food restaurants to provide nutritional information on menu items.	(4)
Marketing	Encourage restaurants to provide healthy foods and beverages by reformulating existing menu items, adding healthier menu items (e.g. fruits, vegetables, and whole grains), offering affordable and reasonably sized portions, providing healthier combinations for meals, and making healthier items the standard for children's meals.	(1)
Marketing	Promote strategies to require fast-food and chain restaurants to list nutrient information (such as calories, saturated fat, and sodium) on menu boards and table-service chain restaurants to list nutrient content on menus.	(1)
Procurement	Establish minimum percentage of locally produced food purchased by public entities.	(4)
Procurement	Require that public institutions purchase a percentage of their food locally.	(2)
Procurement	Provide incentives for production, distribution, and procurement of foods from local farms.	(25)
Procurement	Establish procurement policies that give priority to locally produced foods in federal food programs.	(4)
Procurement	Government purchasing (i.e. farm to school, Kentucky example procurement policy)? Might be just farm to school.	(35)
Procurement	Enact food procurement policies that require a minimum of 10% of foods used in USDA food programs are from local producers.	(4)
Procurement	DOD: Military feeding programs, produce procurement for child nutrition programs.	(28)
Procurement	Washington State could adopt national nutrition standards for food purchasing or the Governor could formulate an executive order. The Umbrella contract offers several possibilities for improving the nutritional quality of food purchases.	(40)
Procurement	Establish goal for state procurement of local food.	(18)
Procurement	Develop a model farm to institution program that addresses barriers to procurement for institutional markets.	(18)
Procurement	Establish procurement priorities for local food in state-funded programs and institutions.	(4)
Procurement	Local Food Purchase Policy, see Iowa (Woodbury County).	(19)
Procurement	WA could institute weighted bidding, a means of emphasizing food's nutritional profiles and giving "more weight" to healthier options and less weight to minimally nutritious foods during the negotiating of the Umbrella contract.	(40)
Procurement	Nutritional professionals could work with General Administration to establish healthier specifications for the foods purchased as part of the contract.	(40)
Procurement	WA could institute non-competitive bidding for fresh and local fruits and vegetables.	(40)
Procurement	Provide incentives for institutional procurement of local and regionally grown healthy foods for grocers, schools, childcare, employers, and other community institutions.	(1)

Overarching Category	Strategies, Recommendations & Goals	Source
Procurement	Policies and practices related to institutional purchasing.	(19)
Procurement	Establish policies and practices to support geographic preferences to procure foods grown locally or regionally for health care food service.	(1)
Procurement	Develop a statewide food systems procurement goals and baseline assessments.	(18)
Procurement	Child care: Adopt a comprehensive food policy that develops nutrition, health, and environmental guidelines for purchasing to ensure that meals, snacks and beverages include healthy and sustainable choices. Policies can address: purchase of local/regional foods for child care programs; nutrition and food system education; access to fresh, healthy, and seasonal fruits and vegetables, as well as organic and/or food produced without pesticides, hormones, or chemicals; support farming of antibiotic-free meat and poultry and humane treatment of animals; support farms that practice just treatment of farm workers.	(10)
Procurement	Hospitals: Adopt a comprehensive food policy that develops nutrition, health, and environmental guidelines for purchasing to ensure cafeteria meals, patient meals, and vending machines include healthy and sustainable choices. Hospital food policies can include the following standards for cafeteria meals, patient meals, and vending machines: nutrition including guidelines on calories, fat, trans fat, sodium, fiber, etc.; location: within a certain number of miles for the institution, regional food, state grown food; food produced without synthetic chemicals or pesticides, antibiotics, or growth hormone; supports small and mid-sized farmers; fair treatment of and wages for farm workers; farming and food production practices that protect the environment; animal welfare; fair trade.	(10)
Procurement	New York City Food Procurement Dietary Guidelines	(41)
Procurement	Massachusetts Food Procurement Dietary Guidelines.	(42)
Procurement	Propose or support local, state and or federal policy (legislation or other) that supports sustainable food systems such as institutional food procurement policies that support purchasing local foods (i.e. hospitals, schools, universities, correctional facilities, long-term care facilities).	(11)
Procurement	Implement rules that require the foods served to children through USDA programs are produced without the use of antibiotics, synthetic hormones, pesticides, or chemical fertilizers.	(4)
Redevelopment/ Economic Development	Assemble and implement business incentives encouraging partnerships between convenience stores and neighborhood-based nonprofits that encourage stores to offer healthful foods, and educate the community to adopt healthy diets.	(12)
Redevelopment/ Economic Development	Create Business improvement Districts that include health food sources	(2)
Redevelopment/ Economic Development	Safety: Form closer knit communities through community gardens and farmers and public markets.	(3)
Redevelopment/ Economic Development	DHUD: community renewal and empowerment zones; community outreach partnerships centers program; section 108 loan guarantee program.	(28)
Redevelopment/ Economic Development	Develop equity strategies that include community gardens and markets near transit-dependent populations.	(2)
Redevelopment/ Economic Development	Encourage business district revitalization efforts to include support for convenience store sales of fresh foods.	(12)
Redevelopment/ Economic Development	Support efforts to raise public awareness of the importance of the food sector to the local and regional economy.	(12)
Redevelopment/ Economic Development	Support preparation of area-wide economic development plans that incorporate food production, processing, wholesale, retail, and waste management activities as well as consideration of the impacts these activities have on the local and regional economy in terms of jobs, tax and sales revenues, and multiplier effects.	(12)
Redevelopment/ Economic Development	Assemble in partnership with other public agencies and community-based organizations, economic development programs and incentives for food-related enterprise development, job creation, and workforce development.	(12)
Redevelopment/ Economic Development	In partnership with community-based organizations, planners support the creation of programs to enhance food related economic opportunities for low income residents.	(12)
Redevelopment/ Economic Development	Planners support integrating food system elements into urban, rural, and regional economic development plans.	(12)

Overarching Category	Strategies, Recommendations & Goals	Source
Redevelopment/ Economic Development	Working with redevelopment agencies to create healthier communities: redevelopment bonds and tax increment financing (TIF), land acquisition, eminent domain, federal funds.	(12)
Redevelopment/ Economic Development	Job and economic development: Pursue an industrial land use development and retention policy that identifies land for local food processors, distributors, and other entrepreneurial uses.	(3)
Redevelopment/ Economic Development	Workforce development within cities and connecting to residents with work opportunities by providing vocational and readiness training, job referrals, and other employment services and may be used to help retailers recruit, hire, train, support and retain workers at all levels.	(26)
Redevelopment/ Economic Development	Use economic development programs to attract grocery stores.	(26)
Redevelopment/ Economic Development	Increasing Access to Health foods: creating economic stimulus programs and public-private partnerships to promote the creation of farmers markets and the expansion of retail grocery operations in low income neighborhoods, developing land use policies and joint use agreements, seeking funding for federal programs that support at-home food production, develop transportation policies that ensure urban bus lines and other public transit conveniently connect riders with supermarkets or farmers markets, and creating incentives for free or low cost transportation; create local zoning ordinances to support development of mixed-use neighborhoods.	(24)
Redevelopment/ Economic Development	Implement economic development plans that include fruits and vegetable production (specialty crops).	(4)
Redevelopment/ Economic Development	Financial agencies and departments: Farm Credit Administration; Commodities Futures Trading Commission; Federal Reserve System; Department of the Treasury.	(28)
Redevelopment/ Economic Development	Promote local food systems businesses and special events.	(18)
Redevelopment/ Economic Development	Economic development funding sources: Community Development Block Grants, redevelopment funds, elected officials, discretionary funds, grant making.	(43)
Redevelopment/ Economic Development	Agricultural economic development, planning for agricultural viability with agricultural business strategies into traditional economic development plans. (See Maryland example and New York).	(14)
Redevelopment/ Economic Development	DOE: bioenergy research, mandates, subsidies and loans; other renewable energy programs; smaller business innovation research and small business technology transfer tax incentives	(28)
Redevelopment/ Economic Development	Funding sources for healthy food retail: federal resources, state resources?	(45)
Redevelopment/ Economic Development	Providing equitable access to food requires help from banks and loaning institutions, which have traditionally viewed fast food and liquor stores as the safest investments for low income communities. Planners must collaborate with local community and business groups, as well as entrepreneurs to create safe, local access to food.	(2)
Redevelopment/ Economic Development	Federal financing and incentive programs can be used for new store development (programs exist primarily to spur community development, not just supermarket development).	(15)
Redevelopment/ Economic Development	Establish grant and loan programs, technical assistance, and other incentives to attract retail grocery stores, improve offerings at small stores, start and sustain farmers' markets, and other innovative means to improve access to high quality fresh affordable fruits, vegetables, and other healthy foods in underserved communities.	(1)
Redevelopment/ Economic Development	Encourage farmers markets, community supported agriculture, and farm to institution programs to keep the food economy locally based.	(2)
Redevelopment/ Economic Development	Use redevelopment strategies to create healthier communities by using Redevelopment Bonds and Tax Increment Financing (TIF), land acquisition, eminent domain, federal funds; also work with them on policy initiatives, grantmaking, community benefits agreements, and public/private partnerships.	(44)
Redevelopment/ Economic Development	Establish a city ordinance allowing mobile fruit and vegetable vendors in low income neighborhoods.	(4)

Overarching Category	Strategies, Recommendations & Goals	Source
Redevelopment/ Economic Development	Create a public/private partnership working with government agencies and nonprofit organizations with expertise in food access and health.	(46)
Retail Quality and Proximity	Improve geographic accessibility of supermarkets in underserved areas.	(39)
Retail Quality and Proximity	Improve existing small stores in underserved areas.	(39)
Retail Quality and Proximity	Improve access to retail venues that sell or increase availability of high quality fruits and vegetables in currently underserved communities.	(8)
Retail Quality and Proximity	Use grocery stores as valuable assets for community economic development. Leads to providing living wage jobs, raising the value of surrounding property, and attracting additional businesses to neighborhoods.	(43)
Retail Quality and Proximity	Support continued research on food deserts and collaboration with policymakers (urban and rural for WA).	(7)
Retail Quality and Proximity	Predevelopment assistance: site development and acquisition, community engagements, infrastructure development, regulatory incentives.	(26)
Retail Quality and Proximity	Incentive programs to entice new stores or improve existing stores: rise of non-traditional retailers in food retail (Wal-Mart, Costco, Super Target), which offer food at with lower prices than large supermarket chains; several major supermarkets have subsidiaries tailored specifically to cater to low income and bargain shoppers; some traditional grocers have opened stores in more densely populated areas, adapting their store models to fit into smaller spaces; use of tax revenues to encourage grocery stores.	(15)
Retail Quality and Proximity	Operations assistance to help reduce operating costs and working proactively with retailers can help ensure the long term viability of the project.	(26)
Retail Quality and Proximity	Improvements to already existing stores: Increasing availability of nutritious food, decreasing the availability of less healthy food, changing the relative prices of both of these types of foods, changing physical layout of foods within stores.	(15)
Retail Quality and Proximity	Improve small stores: Reduce the risk, and the costs, for small stores; Pick the right retailer; Increase and capitalize on customer spending power; Connect stores with government resources.	(1)
Retail Quality and Proximity	Increase Fresh Food Retailers.	(47)
Retail Quality and Proximity	Fresh fruit and vegetable distributor minimum purchase requirements (Healthy Corner Store Initiative) solutions; cooperative buying group or "slipstreaming" (adding a small order onto a larger one, such as a grocery store's order).	(34)
Retail Quality and Proximity	Improve geographic availability of supermarkets in underserved areas.	(25)
Retail Quality and Proximity	Provide incentives to food retailers to locate in and/or offer healthier food and beverage choices in underserved areas.	(25)
Retail Quality and Proximity	Encourage store owners to stock fresh produce by identifying a variety of options for financing refrigerated produce cases (Healthy Corner Store Initiatives).	(34)
Retail Quality and Proximity	Create a statewide financing program that provides grants and loans to healthy food retail ventures that improve access to fresh fruits and vegetables and other affordable healthy food in underserved communities, particularly in low income and rural areas.	(46)
Retail Quality and Proximity	Connect locally grown food to local food retail establishments, including: supermarkets, small stores, street vendors, and local restaurants.	(10)
Retail Quality and Proximity	Attract grocery stores to underserved areas through financial and regulatory incentives. Characteristics of successful supermarket attraction strategies: provide an assessment of market demand; identify multiple site locations; create financial and regulatory incentives; provide development assistance; recruit multiple operators.	(10)
Retail Quality and Proximity	Pennsylvania Fresh Food Financing Initiative: reduce the high incidence of diet-related diseases by providing healthy food; stimulate investment of private capital in low-wealth communities; remove financing obstacles and lower operating barriers for supermarkets in poor communities; create living wage jobs; and prepare and retail a qualified workforce.	(48)
School Food	Foods and beverages (e.g. whole grains, legumes, fruits, vegetables, and water, and less saturated fat, trans fat, sodium, and sugars).	(1)
School Food	Childcare organizations, including preschool, afterschool and early childhood settings, offer and promote only healthy foods and beverages to children and provide sufficient opportunities for, and promote, physical activity.	(1)
School Food	Ensure that students have only appealing, healthy choices in foods and beverages offered outside the school meals program.	(39)
School Food	Establish policies to incorporate fruit and vegetable activities into schools.	(8)
School Food	Provide meals and snacks that offer appropriate portion sizes of healthy foods.	(1)

Overarching Category	Strategies, Recommendations & Goals	Source
School Food	Promote flexibility for geographic references for locally and regionally grown produce in childcare, afterschool, and school vacation feeding programs.	(1)
School Food	Adopt nutrition and physical activity standards for childcare licensing.	(1)
School Food	Farm to school: bring fresh food to school meals, educate children about food, instill lifelong healthy preferences, support the local farm economy, use less gas to transport food to schools.	(23)
School Food	Institute smaller portion size options in public service venues.	(25)
School Food	Increase availability of healthier food and beverage choices in public service venues	(25)
School Food	Assist programs that encourage youth to consume healthy foods that they are involved in producing, such as through edible schoolyards, after school gardening and snack programs, and food preparation classes.	(12)
School Food	Couple nutrition and environmental education curricula with the development of schools gardens.	(2)
School Food	Encourage the involvement of public health and school officials to integrate health impact and food security considerations into planning and land use decision-making processes.	(1)
School Food	Limit the soft drink and snack industries' access to schools and other institutions.	(4)
School Food	Schools offer and promote only healthy foods and beverages to students.	(1)
School Food	Provide free fresh fruit and vegetable snacks in all schools.	(1)
School Food	Improve the nutritional quality of competitive foods and beverages and school meals by providing appropriate portion sizes of healthy foods and beverages (e.g. more whole grains, legumes, fruits, vegetables, and water, and less saturated fat, trans fat, sodium, and sugars).	(1)
School Food	Allow for geographic preferences of local and regional sources for healthy foods and encourage Farm to School programs.	(1)
School Food	Require gardening and food preparation programs integrated into school curriculum	(4)
School Food	Implement and enforce strong local wellness policies to ensure healthy school food environments, including, prohibiting the use of foods as a reward or punishment, limiting energy-dense, nutrient-poor foods at school celebrations, and offering only healthy snacks (e.g. fresh fruits and vegetables).	(1)
School Food	Set nutrition standards for school food and beverages.	(35)
School Food	Create multidisciplinary committees or task forces to promulgate such standards.	(35)
School Food	Delegate the task of setting these standards to state executive agencies such as the department of agriculture.	(35)
School Food	Focus on increasing participation rates in federal school meals programs to provide more nutritious foods to children and adolescents of low income families and to bring federal meal reimbursement funds into the state.	(35)
School Food	Establish state multidisciplinary wellness or advisory councils, including members from schools, industry, parents, teachers, medical associations, school boards, physical education associations and other stakeholders.	(35)
School Food	Facilitate cooperation among state agencies for wellness policies by creating a School Wellness Policy Task Force to identify barriers to implementing wellness policies and recommend how to reduce those barriers.	(35)
School Food	Establish a dedicated state office or an interagency council to coordinate wellness activities.	(35)
School Food	Direct local school districts to establish wellness councils with broad participation.	(35)
School Food	Establish mechanisms for state oversight of wellness policy implementation.	(35)
School Food	Establish statewide information clearinghouses for wellness policies and information.	(35)
School Food	Establish a school district wellness team with broad representation from parents, teachers, students, businesses, community members, school administrators and other key stakeholders.	(49, 50)
School Food	Ensure that school nutrition policies are integrated into a system of coordinated school health.	(49, 50)
School Food	Raise awareness of the Program among food producers and distributors, school foodservice directors and nutritionists, and existing community farm to school organizations.	(51, 52)
School Food	Collect and review data to determine nutrition-related needs within the school district and update existing nutrition policies regularly. Assure that policies address specific nutrition standards for foods sold or served outside of school lunch including: 1) vending a la carte; fundraisers, school stores and school celebrations; 2) nutrition education; 3) marketing, restricting marketing of unhealthful food, promoting healthy choices; 4) advisory committee composition, structure and function; 5) promotion of USDA meal programs strategies to increase participation; 6) school meal environment, adequate time for meals, training for foodservice staff, access to drinking water.	(49, 50)
School Food	Implement a farm to school program.	(49, 50)

Overarching Category	Strategies, Recommendations & Goals	Source
School Food	Advise and provide technical assistance to growers seeking to sell local food to schools, schools seeking local foods and organizations and individuals seeking to create farm to school programs.	(51, 52)
School Food	Assess existing nutrition policies and procedures and review compliance with existing policies.	(49, 50)
School Food	Develop, monitor and regularly revise action plans to guide policy implementation.	(49, 50)
School Food	Develop a district-wide school nutrition policy implementation workgroup.	(49, 50)
School Food	Identify or develop strategies, resources, and incentives to facilitate school-level policy implementation.	(49, 50)
School Food	Develop and implement evaluation activities.	(49, 50)
School Food	Compile evaluation data and report results.	(49, 50)
School Food	Identify key actions to take based on evaluation results.	(49, 50)
School Food	Include Farm to School programs in school district nutrition policies.	(51, 52)
School Food	Assess the interests, capacities, and needs throughout the food distribution system—from farm to plate—to identify impediments and opportunities.	(51, 52)
School Food	Seek additional resources to achieve program goals and leverage existing resources through partnerships with other agencies and organizations.	(51, 52)
School Food	Conduct program evaluations.	(51, 52)
Supporting Farms and Farmers	Educate urban food producers about sustainable techniques and practices.	(2)
Supporting Farms and Farmers	Planners support initiatives in marketing, technical, and business development assistance for small-scale and women and minority-owned farm, food processing and food retail enterprises.	(12)
Supporting Farms and Farmers	Build (enhance the production and) distribution infrastructure for small farmers.	(19)
Supporting Farms and Farmers	Collaborate with agricultural and related agencies and other organizations that provide training, technical assistance, and capital to small-scale businesses and businesses owned by women and minorities engaged in farming, food processing, and food retailing.	(12)
Supporting Farms and Farmers	Agreement for leasing and owning land: cash lease, crop share, long-term lease, lease with option to buy or right of first refusal, fee title purchase with seller financing, fee title purchase with agricultural conservation easement (acreage, soil quality, drainage, water access, infrastructure and equipment, proximity to markets).	(53)
Supporting Farms and Farmers	DOC: fisheries management, aquaculture, weather monitoring and climate change response and education, domestic economic development, patent and trademark approval, trade, economic development administration programs.	(28)
Supporting Farms and Farmers	Invest in business planning and management support for local food and farming enterprises.	(18)
Supporting Farms and Farmers	Provide "patient capital" to food and farming enterprises.	(18)
Supporting Farms and Farmers	Policies and practices executed through university extension.	(19)
Supporting Farms and Farmers	Sustainable agriculture training.	(19)
Supporting Farms and Farmers	Corporation for National and Community Service: AmeriCorps volunteers in service to America (VISTA) program; Learn and Serve Program.	(28)
Supporting Farms and Farmers	Use chemical-free pest management and lawn care for city- and county- owned property. Provide business development assistance for small-scale and women and minority owned farms.	(4)
Supporting Farms and Farmers	DOI: Western Water Subsidies, Livestock grazing, fisheries management, endangered species act administration.	(28)
Supporting Farms and Farmers	APA, its Chapters and Divisions support the development and advocacy of policies and programs outside of the federal Farm bill to further General Policies #1 through #6.	(12)
Supporting Farms and Farmers	APA, its Chapters and Divisions support developing and advocating for programs in the federal Farm Bill to facilitate community and regional food planning.	(12)
Supporting Farms and Farmers	Analyze how different titles of the Farm Bill affect communities and regions, pose barriers to achieving goals of community and regional food planning, and how they may affect planners' ability to implement actions recommended in General Policies #1 through #6.	(12)
Supporting Farms and Farmers	In collaboration with other organizations advocating for policies relevant for economic development, public health, sustainable agriculture and food systems, and social justice, develop and advocate for proposals in the Farm Bill to facilitate actions described under General Policies #1 through #6.	(12)

Overarching Category	Strategies, Recommendations & Goals	Source
Supporting Farms and Farmers	Provide risk management and disaster assistance programs for farmers to close gaps in coverage.	(18)
Supporting Farms and Farmers	Adopt legislation to support contract fairness for producers.	(18)
Supporting Farms and Farmers	Place a moratorium on livestock producers preventing the regular use of subtherapeutic antibiotics and synthetic growth hormones in healthy animals.	(4)
Supporting Farms and Farmers	Prohibit the production of genetically engineered crops for pharmaceutical purposes in open fields.	(4)
Supporting Farms and Farmers	Authorize and appropriate agricultural legislation that provides incentives to increase production of foods that promote health (e.g. fruits, vegetables, whole grains).	White House Report, 2010
Supporting Farms and Farmers	Infrastructure development: enable farmer to offer new products to local purchasers, aid farm entrepreneurs, provide incentives for new generation of small and mid scale farmers, retail existing agriculture infrastructure, respond to market changes.	(23)
Supporting Farms and Farmers	Preserve agricultural lands near cities and towns.	(2)
Supporting Farms and Farmers	Regulations should not negatively impact agriculture resources.	(22)
Supporting Farms and Farmers	Support local and regional food systems by preserving farmland, creating regional infrastructure for processing and distribution, and investing in new and existing farmers. Characteristics: communities have dedicated land and open space dedicated to farming and farm production; existing farmers are able to make a viable living from producing healthful products such as fruits and vegetables; new farmers are supported in learning the trade of farming and encouraged to grow foods other than commodity crops (which are highly subsidized by the federal government and often unhealthy) such as fruits and vegetables; mechanisms, such as light processing and distribution structure, are in place to allow for local farmers to sell their products to regional retail establishments and institutions.	(10)
Supporting Farms and Farmers	Agricultural economic development, business planning and capital investment; preparing a business plan to allow farmers and ranchers to examine a range of strategies to increase profits. (See Massachusetts and Canada).	(14)
Supporting Farms and Farmers	Agricultural economic development, purchase of agricultural conservation easement programs, they compensate property owners for restricting the future of their land.	(14)
Supporting Farms and Farmers	Agricultural economic development, Loan programs and economic development incentives by working with state and local governments to facilitate agricultural economic development by treating farms as other businesses, making loan funds, tax incentives and technical assistance available to producers.	(14)
Supporting Farms and Farmers	Agricultural economic development, farmers markets give growers access to a large base of customers.	(14)
Supporting Farms and Farmers	Agricultural economic development, Diversification to reduce risk and increase profits and not be shocked by low prices or bad weather.	(14)
Supporting Farms and Farmers	Agricultural economic development, new products and marketing strategies for value-added products.	(14)
Supporting Farms and Farmers	Agricultural economic development, reducing the cost of production by using innovative techniques and partnerships.	(14)
Supporting Farms and Farmers	Increase funding from state and local governments to non-governmental organizations.	(19)
Supporting Farms and Farmers	Develop strategies for investing in new and existing farmers, land acquisition, and access to capital to ensure support for family farms in communities across the country.	(1)
Supporting Farms and Farmers	New Immigrant and refugee farming; National Immigrant Farming Initiative.	(19)
Supporting Farms and Farmers	Establish community kitchens and mobile processing units.	(4)
Supporting Farms and Farmers	Invest in needed processing and other food systems infrastructure.	(18)
Supporting Farms and Farmers	Assess zoning and land use policies for how they encourage/discourage agricultural activities and how they protect agricultural resources.	(2)
Supporting Farms and Farmers	Explore the development community policies for "fair trade" purchasing by public agencies to ensure that public expenditures in food procurement are fair and equitable to producers and communities in other countries.	(12)
Supporting Farms and Farmers	Provide incentives and special zoning provisions to integrate locally supported agriculture (e.g. community gardens, urban agriculture, small farms) into existing settlements and new areas of residential development.	(12)

Overarching Category	Strategies, Recommendations & Goals	Source
Supporting Farms and Farmers	Use tools such as transferable development rights and conservation easements to protect local agricultural resources.	(2)
Supporting Farms and Farmers	Leverage USDA grant programs to build local foods infrastructure.	(4)
Supporting Farms and Farmers	Producing and marketing healthy foods: Preserve farmland, provide reliable market to distribute their produce year-round, help small farm owners create viable marketing and business plans, provide grants and free marketing opportunities to roadside markets, farmers markets, community supported agriculture and direct-deliverer programs, create grant programs and economic incentives to fund construction and renovation of farmers markets, develop affordable food processing/kitchen space in economically distressed areas.	(24)
Supporting Farms and Farmers	Preserve native/ethnic food cultures. City resolutions require city agencies to buy minimum percentage of their food from local farmers.	(4)
Supporting Farms and Farmers	Risk management and capacity building.	(19)
Supporting Farms and Farmers	Access to resources: capital, land, and land retention.	(19)
Supporting Farms and Farmers	Connect local farmers to low income consumers.	(6)
Supporting Farms and Farmers	Assist the region's farm and food worker organizations in rural food and community assessment and improvement efforts.	(12)
Supporting Farms and Farmers	Partner with organizations that promote better understand of farm life for urban dwellers to reduce the urban/rural divide.	(12)
Supporting Farms and Farmers	Remove distortions in agricultural markets by maintaining fair commodity prices.	(4)
Supporting Farms and Farmers	Agencies that negotiate, implement and enforce international protocols, trade agreements and foreign aid programs: Dept of State; Office of the US Trade Representative (USTR); International Trade Administration and the International Trade Commission; US Agency for International Development (USAID).	(28)
Supporting Farms and Farmers	Agencies in antitrust oversight and enforcement: Dept of Justice; Federal Trade Commission (FTC).	(28)
Supporting Farms and Farmers	Ease licensing requirements for new farm stands. Expand access to feeding programs (breakfast, lunch, after school, summer) to all children and youth throughout the year.	(4)
Supporting Farms and Farmers	Develop coordinated food safety regulations. Appropriate funds to fully support WIC and Senior Farmers Market Nutrition Programs in all states.	((4)
Supporting Farms and Farmers	Value-added development (fund program).	(19)
Supporting Farms and Farmers	Implement a community composting initiative that provides composting bins to residents and businesses to collect food scraps that are provided to area farms.	(4)
Supporting Farms and Farmers	DOL: employment standards; occupational safety and health; temporary agricultural worker program; national agricultural workers survey.	(28)
Supporting Farms and Farmers	Provide safe working conditions in processing facilities.	(4)
Tax	Analyze factors that support or constrain the viability of agriculture in the region such as high property taxes, access to markets, high cost of capital, and land use regulations that restrict farmers' ability to earn additional income through agri-tourism or farm stands. Special attention to this category may be given to "agriculture of the middle," i.e. farms that fall in between local and commodity markets.	(12)
Tax	Offer tax credits for food production, processing, transportation, and retail entities using alternative energy.	(4)
Tax	Ease permitting, regulatory, and other taxes for food business incubation.	(4)
Tax	Incentive package: tax credits from city, state, and federal tax credits available to grocery retailers. Use outreach from city planning and economic development agency staff to help retailers understand what tax credits can mean to their bottom line.	(26)
Tax	Interventions may be needed to reduce incentives to eat less healthful foods or reduce access to these foods; taxing less healthy foods (e.g. soda or sweetened beverages) is one example of such a policy, but these taxes inherently have distributional tradeoffs that must be considered.	(15)
Tax	Offer tax incentives for regional transportation, warehousing, and wholesaling of locally produced foods.	(4)
Tax	Provide tax incentives for roof gardens (in urban areas). Partner with tribal governments to establish productive lands that support native food systems.	(4)
Tax	Offer tax incentives for using food waste for biofuel production.	(4)

Overarching Category	Strategies, Recommendations & Goals	Source
Tax	Offer tax incentives for small to mid-sized industries that process, store, and distribute perishable foods grown in the state.	(4)
tax	Amend tax policies to create incentives for farmers and revenue for local governments.	(18)
Tax	Create tax of sugar-sweetened beverage by 1 cent per ounce.	(54)
Tax	Propose or support local, state and or federal policy (legislation or other) that supports sustainable food systems such as tax incentives for local producers and processors.	(11)
Transportation	Transportation coalitions; transportation cost-sharing programs.	(29)
Transportation	Shared-trucking communication platform (online format via web or email).	(29)
Transportation	Government funding and transportation via TEFAP and EFAP (state and federal).	(29)
Transportation	Pilot supermarket home delivery program, VSP (Virtual Supermarket Project).	(7)
Transportation	Develop regional plans and policies that strengthen markets for the region's food producers with the goal of reducing long distance transportation of agricultural products and processed foods.	(12)
Transportation	Support transit programs that improve connections between low-mobility neighborhoods on the one hand, and supermarkets, community gardens, food assistance programs such as food pantries and soup kitchens, and health and social service providers on the other, with a view to reducing travel time and enhancing safe and convenient use.	(12)
Transportation	Develop transportation, community development, and other plans and policies to provide convenient and safe access for low income households to grocery stores, community gardens, and food assistance providers.	(12)
Transportation	Include food sources as a factor in public transportation planning.	(2)
Transportation	DOT: food transport, infrastructure and land use; land access.	(28)
Transportation	Improve roads to make them safe for pedestrians and bicyclists, connect public transit to major retail areas, and create pedestrian centered commercial corridors.	(3)
Transportation	If transportation in the area already exists, it may not be too expensive or take as much time to change or add routes that could be used to improve access to stores; Transportation subsidy; transportation benefit in conjunction with SNAP benefits.	(15)
Transportation	Establish cooperative transportation and warehousing opportunities for local producers.	(29)
Transportation	Improve transportation strategies to supermarkets and other large food outlets: low or no cost store initiated van services for customers from the store the home; store initiated van services with a pick-up and drop-off at home; enhanced transit programs including alternated or added bus routes to increase access to food retailers; joint ventures between grocery stores and government or a local non-profit organization to collaboratively fund the shuttle; operation, and to increase community participation and input; develop mass transit, car-sharing and bike-sharing programs to support alternative and affordable modes of transportation to stores; store-operated shuttle services operate in and around senior citizen complexes, communities with senior population, and retirement communities.	(10)
Worksites	Employers offer and promote access to healthy foods and beverages and opportunities for physical activity.	(1)
Worksites	Ensure ready access to fruits and vegetables in worksite foodservice and in food offered at meetings and events.	(8)
Worksites	Promote healthful foods at workplace cafeterias in workplace vending machines, and at meetings and conferences.	(39)
Worksites	Provide healthy food and beverage options for employees during the workday and at all meetings through catering policies and healthy food and beverage offerings in workplace cafeterias and vending machines.	(1)
Worksites	Adopt worksite practices that promote healthy eating and activity.	(1)
Zoning	Rezoning.	(3)
Zoning	Zoning text amendment.	(3)
Zoning	Assess and map the availability of fast food restaurants in low income neighborhoods relative to the availability of grocery stores offering healthier food options.	(12)
Zoning	Explore the feasibility of zoning changes to limit the development of fast food outlets within a specified radius of schools (say, one-half mile) and other youth-centered facilities such as the local YMCA and YWCA and boys and girls clubs.	(12)
Zoning	Use zoning restrictions to discourage fast food restaurants (e.g. ban drive-thrus).	(2)
Zoning	Key policy implementation issue is how to go about identifying target areas (e.g. areas for zoning, incentives for grocers, etc.).	(55)
Zoning	The U.S. Department of Housing and Urban Development has existing regulatory authority to require future developments be sited closer to opportunities to access healthy food.	(15)
Zoning	Restrict the number of fast food restaurants in newly established food enterprise zones.	(4)
Zoning	Improving the food environment around schools and recreation centers, i.e. zoning regulations, creation of healthy eating zones.	(7)

Overarching Category	Strategies, Recommendations & Goals	Source
Zoning	Create healthy food zoning and requirements and incentives (zoning regulations with strategic financial incentives to attract full-service grocery stores or other healthy food providers; menu-labeling in another component).	(7)
Zoning	Establish food enterprise zones that attract food retailers to underserved areas through zoning and tax incentives. Zoning regulations offer another policy option to increase there number of retailers selling healthy foods and stem the tide of closing supermarkets. Tax abatement for retail outlets that sell healthy food/eliminate tax subsidies for fast food restaurants.	(4)
Zoning	Establish zoning restrictions limiting fast food outlets within a specific distance of schools and youth-centered facilities.	(4)
Zoning	Zoning laws can also be used to restrict the distance that certain products can be sold from certain other institutions like schools and churches.	(1)
Zoning	Limiting access to unhealthy foods: enacting school nutrition policies, zoning to limit the number of fast food restaurants around schools.	(24)
Zoning	Develop zoning requirements that create transit routes (sidewalks, pedestrian malls, bicycle paths) from all neighborhoods to grocery stores and food assistance providers.	(4)
Zoning	Local policies toward zoning or governmental programs (at the Federal, State, or local level) that subsidize these costs for stores may be effective.	(15)
Zoning	Establish fast food free zones in and near schools and hospitals.	(4)

REFERENCES

- Lee V, Mikkelsen L, Srikantharajah J, Cohen L. Promising Strategies for Creating Healthy Eating and Active Living Environments. Available at: http://www.convergencepartnership.org/atf/cf/%7B245A9B44-6DED-4ABD-A392-AE583809E350%7D/CP_Promising%20Strategies_printed.pdf
- Cassidy A, Patterson B. The Planner's Guide to the Urban Food System. Available at: <http://postcarboncities.net/files/PlannersGuidetotheFoodSystem.pdf>
- Bournbonesque R, Fisher A, Laurison H. An Introduction to Land Use Planning for Food System Advocates. Community Food Security News: Community Food Security Coalition Publication, 2007. Available at: http://www.foodsecurity.org/CFSCNEWSSP07_FNL.pdf
- Muller M, Tagtow, A., Roberts, S., & MacDougall, E. Aligning Food Systems Policies to Advance Public Health. Journal of Hunger and Environmental Nutrition 2009;4:225-240.
- American Community Gardening Association. The Case for a Community Greening Research Agenda. Available at: <http://lda.ucdavis.edu/people/websites/francis/ACGAArticle.pdf>
- Flournoy R. Healthy Food, Healthy Communities: Promising Strategies to Improve Access to Fresh, Healthy Food and Transform Communities. Available at: http://www.policylink.org/atf/cf/%7B97c6d565-bb43-406d-a6d5-eca3bbf35af0%7D/HFHC_SHORT_FINAL.PDF
- Baltimore City. Baltimore City Food Policy Task Force, Final Report and Recommendations. Available at: <http://cleanergreenerbaltimore.org/uploads/files/Baltimore%20City%20Food%20Policy%20Task%20Force%20Report.pdf>
- Centers for Disease Control and Prevention. Guide to Fruit and Vegetable Strategies to Increase Access, Availability and Consumption. Available at: <http://www.eatsmartmovemorenc.com/TheEvidence/Texts/StratstoIncreaseFruitVegConsumption.pdf>
- Lee V, Mikkelsen L., Srikantharajah J, Cohen L. Strategies for Enhancing the Built Environment to Support Healthy Eating and Active Living. Available at: http://www.kintera.org/atf/cf/%7B245A9B44-6DED-4ABD-A392-AE583809E350%7D/CP_Built%20Environment_printed.pdf
- Prevention Institute. Strategic Alliance ENACT. Available at: <http://eatbettermovemore.org/sa/enact/members/index.php>

11. American Dietetic Association Sustainable Food System Task Force. Healthy Land, Healthy People: Building a Better Understanding of Sustainable Food Systems for Food and Nutrition Professionals. A Primer on Sustainable and Emerging Roles for Nutrition Professionals. Available at: http://www.eatbettermovemore.org/SA/documents/Sustainable_Primer.pdf
12. American Planning Association. Policy Guide on Community and Regional Food Planning. Available at: <http://www.planning.org/policy/guides/pdf/foodplanning.pdf>
13. Bournhonesque R, Fisher, A., & Laurison, H. An Introduction to Land Use Planning for Food System Advocates. Community Food Security News: Community Food Security Coalition, 2007. Available at: http://www.foodsecurity.org/CFSCNEWSSP07_FNL.pdf
14. American Farmland Trust. Fact Sheet: Agricultural Economic Development. 1998. Available at: http://www.farmlandinfo.org/documents/29476/FS_AED_9-98.pdf
15. Ver Ploeg M, Breneman V, Farrigan T, Hamrick K, Hopkins, D, Kaufman P, Lin B, Nord M, Smith T, Williams R, Kinnison K, Olander C, Singh A, Tuckermanty E. Access to Affordable and Nutritious Food—Measuring and Understanding Food Deserts and Their Consequences: Report to Congress. 2009. Available at: <http://www.ers.usda.gov/publications/ap/ap036/>
16. Washington State Department of Commerce. Growth Management Services. Available at: http://www.commerce.wa.gov/portal/alias_CTED/lang_en/tabID_375/DesktopDefault.aspx
17. Carter A, Mann P. Farming from the City Center to the Urban Fringe: Urban Planning and Food Security. Community Food Security Network. Available at: <http://www.foodsecurity.org/FarmingCitytoFringe.pdf>
18. Curtis J. From Farm to Fork: A Guide to Building North Carolina's Sustainable Local Food Economy, a Center for Environmental Farming Systems report. Available at: <http://www.cefs.ncsu.edu/resources/stateactionguide2010.pdf>
19. Bailkey M. Food and agriculture related policies and practices to benefit limited resource farmers. Available at: <http://www.foodsecurity.org/LRPreport.pdf>
20. NPLAN. Establishing Land Use Protections for Farmers' Markets. Available at: http://www.nplanonline.org/system/files/nplan/Establishing%20Land%20Use%20Protections%20for%20Farmers'%20Markets_FINAL_091203.pdf
21. American Planning Association. Policy Guide on Agricultural Land Preservation. Available at: <http://www.planning.org/policy/guides/pdf/agriculturallandpreservation.pdf>
22. Washington State Conservation Commission. Office of Farmland Preservation: 2009 Report to the Washington State Conservation Commission. Available at: <http://ofp.scc.wa.gov/wp-content/uploads/2010/01/Merged-2009-OFP-Report.pdf>
23. Dillon C, Harris M. Counties and Local Food Systems: Ensuring Healthy Foods, Nurturing Healthy Children. Available at: http://www.farmtoschool.org/files/publications_133.pdf
24. Robert Wood Johnson Foundation. Improving Access to Healthy Foods: A Guide for Policy-Makers. Available at: <http://www.rwjf.org/files/research/accesshealthyfoodslhc2007.pdf>
25. Keener D, Goodman, K., Lowry, A., Zaro, S., & Kettel Khan, L. . Recommended Community Strategies and Measurements to Prevent Obesity in the United States: Implementation and Measurement Guide. Available at: http://www.cdc.gov/obesity/downloads/community_strategies_guide.pdf
26. Public Health Law & Policy. Getting to Grocery: Tools for Attracting Healthy Food Retail to Underserved Neighborhoods. Available at: <http://www.phlpnet.org/healthy-planning/products/getting-to-grocery>

27. Starmer E, Kulick, M., & Ogburn, S. Bridging the GAPS: Strategies to Improve Produce Safety, Preserve Farm Diversity and Strengthen Local Food Systems. Available at:
<http://www.iatp.org/iatp/publications.cfm?refid=106746>
28. Gosselin M. Beyond the USDA: How other government agencies can support a healthier, more sustainable food system. Available at: <http://www.iatp.org/iatp/publications.cfm?refid=107172>
29. Rasmus B. Efficient and effective: Washington state hunger-relief transportation and storage capacity gaps and possible solutions. Available at: http://firstharvest.org/download/Gap_Analysis.pdf
30. Food Research and Action Center. Ending childhood hunger by 2015: The essential strategies for achieving the president's goal. 2009. Available at:
http://www.frac.org/pdf/endingchildhunger_2015paper.pdf
31. Share Our Strength. Share our strength's plan to end childhood hunger in America. Available at:
http://www.strength.org/pdfs/ShareOurStrength_Child_Hunger_Brochure2.1.08.pdf
32. Children's Alliance. End Childhood Hunger in Washington Strategic Plan. Available at:
<http://www.childrensalliance.org/sites/default/files/Plan%20to%20End%20Childhood%20Hunger%20MEDRES.pdf>
33. Alliance to End Hunger. A blueprint to end hunger. 2008. Available at:
<http://www.alliancetoendhunger.org/resources/blueprint/>
34. Burtness D. Healthy Food for All: Healthy Corner Store Strategies from Across the United States. Available at: <http://www.iatp.org/localFoods/HealthyFoodforAllstudy809.pdf>
35. Robbins L. State Policies for Increasing Access to Healthy Foods. Available at:
<http://www.ncsl.org/default.aspx?tabid=14323>
36. Centers for Disease Control and Prevention. Guide to Strategies For Reducing the Consumption of Sugar-Sweetened Beverages Available at:
http://www.eatsmartmovemorenc.com/TheEvidence/Texts/StratstoReduce_Sugar_Sweetened_Bevs.pdf
37. Hill H. Food Miles: Background and Marketing. Available at: <http://attra.ncat.org/attra-pub/PDF/foodmiles.pdf>
38. Barrentine P, Donovan C, Berman F. WSDA Small Farm and Direct Marketing Handbook. Available at:
<http://agr.wa.gov/Marketing/SmallFarm/DOCS/056-SmallFarmAndDirectMarketingHandbook-Complete.pdf>
39. Centers for Disease Control and Prevention. Guide to Strategies for Reducing the Consumption of Energy Dense Foods. Available at:
<http://www.eatsmartmovemorenc.com/TheEvidence/Texts/Strats4ConsumptionofEnergyDenseFoods.pdf>
40. University of Washington Nutri 531. Policy Analysis of Standards for Institutional Purchasing of Food by State Government. Available at:
http://courses.washington.edu/nutr531/2010project/Food_Procurement_Policy_Report.pdf
41. New York City Department of Health and Mental Hygiene. City Agency Food Standards - Requirements and Recommendations In: New York City Mayor's Office, ed., 2008. Available at:
http://www.cspinet.org/new/pdf/nyc_agency_food_standards.pdf
42. Massachusetts State Agency Food Standards, Proposed Requirements and Recommendations. In: Governor's Office, ed., 2009. Available at:
http://www.mass.gov/Eeohhs2/docs/dph/com_health/nutrition_phys_activity/eo509_proposed_food_standards.rtf

43. Public Health Law & Policy. How to Use Economic Development Resources to Improve Access to Healthy Food. Available at:
http://www.phlpnet.org/system/files/EconDev_factsheet_FINAL_web_090303.pdf
44. Public Health Law & Policy. How to Use Redevelopment to Create Healthier Communities. Available at:
<http://www.phlpnet.org/healthy-planning/products/redevelopment-create-healthier-communities>
45. Public Health Law & Policy. Funding sources for healthy food retail: A guide to federal and California state economic development resources. Available at:
<http://www.phlpnet.org/sites/phlpnet.org/files/editor/FoodRetailPrograms.pdf>
46. Prevention Research Center at Tulane University. Report of the healthy food retail study group: Recommendations for a Louisiana healthy food retail financing program. Available at:
<http://www.sph.tulane.edu/PRC/Files/Healthy%20Food%20Retail%20Study%20Group%20Booklet.pdf>
47. Treuhaft S, Karpyn A. The grocery gap: Who has healthy food and why it matters. Available at:
<http://www.policylink.org/atf/cf/%7B97C6D565-BB43-406D-A6D5-ECA3BBF35AF0%7D/FINALGroceryGap.pdf>
48. The Food Trust. Pennsylvania Fresh Food Financing Initiative. Available at:
<http://www.thefoodtrust.org/php/programs/fffi.php>
49. Institute of Medicine, Committee on Nutrition Standards for Foods in Schools. Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth. Washington, DC: The National Academies Press, 2007.
50. National Association of State Boards of Education. Preventing Childhood Obesity: A School Health Policy Guide. Available at:
<http://www.ok.gov/strongandhealthy/documents/school%20health%20policy%20guide.pdf>
51. Joshi A, & Azuma, A. Bearing Fruit: Farm to School Program Evaluation Resources and Recommendations. Available at: <http://departments.oxy.edu/uepi/cfj/bearingfruit.htm>
52. WSDA Farm to School Program 2008-2009 Report to the Legislature, Including a Report of the Washington Grown Fresh Fruits and Vegetable Grant. Available at:
<http://agr.wa.gov/marketing/farmtoschool/docs/285-FarmToSchoolLegislativeReport2008-09.pdf>
53. Johnson K, Dufour R, Alcora, M. Finding Land to Farm: Six Ways to Secure Farmland. Available at:
www.attra.ncat.org/attra-pub/PDF/finding.pdf
54. Brownell KD, Farley T, Willett WC, et al. The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages. N Engl J Med 2009;361:1599-1605.
55. Chen SE, Florax RJGM. Zoning for Health: The Obesity Epidemic and Opportunities for Local Policy Intervention. J. Nutr. 2010;140:1181S-1184.



APPENDIX 3

ACTIONS FOR THE ACCESS TO HEALTHY FOODS COALITION TO SUPPORT THESE PROMISING OPPORTUNITIES

- **Communication:** Be a central source for communication about the need to increase access and the state-wide benefits of improving agriculture and health by focusing on access to healthy foods. Develop policy briefs, provide presentations to diverse stakeholder groups, provide information to policy makers, and work with media.
- **Data Resources & Information:** Build a system for web-based coordination of data, resources and information.
- **Convene and Train:** Serve as a convener & trainer of the multiple sectors that impact access to healthy foods. Provide in-person or online training to community representatives.
- **Food Procurement:** Develop model food procurement nutrition standards that reflect the 2010 Dietary Guidelines for Americans.
- **Education:** Assess the current state of nutrition education in schools in Washington State. Develop model standards for school-based nutrition education; pilot the standards and evaluate the results.
- **Planning:** Develop and disseminate model planning standards that support physical access to healthy foods in communities.
- **Pilot Projects for High Priority Areas:** Develop pilot projects that address the major barriers that have been identified. Convene partners, work with communities, apply for funds, conduct project; rigorously evaluate projects, disseminate the results. Specific projects could address:
 - Use of food procurement guidelines in institutions and government agencies.
 - Innovative models for farm-to-institution programs for local links between farms and child care or out-of-school programs.
 - Use of incentives to promote purchases of healthy foods by families or institutions.
 - Use of incentives and other methods to bring retail and emergency food sources into communities.

THE ACCESS TO HEALTHY FOODS COALITION

The Access To Healthy Foods Coalition, a 501(c)(3), is a group of businesses, industries, government agencies and non-profit organizations working together to positively influence health and nutrition in Washington state by improving the access to healthier foods where Washington citizens live, learn, work and play.

By working with the Coalition, large employers, hospital cafeterias, school districts, public health agencies, agriculture associations and non-profit organizations can change the environment where food is available and influence policy makers and decision makers to promote the changes needed.

Access works to improve the availability of healthier foods. Access also brings together buyers, suppliers and distributors to offer healthy choices in the workplace, in schools, restaurants, community centers, military posts, hospitals, vending machines, at retail and through food assistance programs. With increased access to healthy foods, Access believes Washington citizens *can and will* make positive choices when faced with food decisions, because healthy foods are available.

Access to Healthy Foods Coalition efforts were initiated in 2003 by the Washington State Department of Health as a way to increase healthy eating and to implement the Washington State Nutritional and Physical Activity Plan. Access is funded in part by a grant from Centers for Disease Control and Prevention through the Washington State Department of Health with primary funding from members and supporters.

