Exploring the Clark County Food System

August 2008

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Executive Summary

Changes in food and agriculture systems over the past several years have had dramatic impacts on public health outcomes. These changes have placed an emphasis on the importance of creating community food system policies that provide residents access to safe, nutritious foods that have been produced sustainably while minimizing threats to the environment. Addressing the food system is a complex process requiring long-term collaborative commitment among diverse partnerships. A regional agricultural economy, linked with food needs and markets, can enhance the nutrition environment with appropriate food access and land use policies.

Exploring the Clark County Food System report is the first step towards determining what personal, institutional, and policy changes need to happen to move Clark County towards a healthy sustainable community where more residents have access to safe, nutritious, locally-produced foods and farmers have viable enterprises. The purpose of this report is to inform the Clark County Food System Council on the status of the food system, guide further assessment areas and provide a foundation for their work. It also examines the broader context in which food choices occur in Clark County: Personal and Community Health, Food Access, Farm and Agriculture, and Resource Management. Public food system data collected at regular intervals, local surveys, special and case studies are found throughout the report to supplement indicator highlights.

Chapter one describes current obesity and overweight trends, and personal behavior factors contributing to poor health outcomes. Eighty-four percent of Clark County residents report engaging in some type of physical activity. However, 25% of Clark County residents are considered obese, exceeding the national target of 15% by 2010. Clark County residents do not meet the national dietary recommendations for fruit and vegetable consumption. Only 25% of Clark County residents consumed five or more servings of fruits and vegetables in 2006; similar rates were observed nationally and state-wide.

In 2006, Clark County consumers spent more on low-nutrient foods than healthful ones. Spending on fruits and vegetables was about 20% of total food purchased while about 40% of food dollars were spent on sweets, fats, snacks and beverages. To some extent, food choices can be affected by economic well-being, location and selection of available foods and nutrition labeling.

Chapter two describes options for Clark County families who lack the financial resources to meet their nutritional needs, healthier food availability and accessibility, and a case study on food access in two neighborhoods in Vancouver, Washington. It also explores institutional changes underway to promote healthy food choices and improve regional food economies.

At a state level, Washington's food insecurity rate (10.3%) is slightly below Oregon's (11.9%) and the national level (11%). At a county level, food insecurity is difficult to measure; however, participation in food and nutrition assistance programs and emergency food usage can give an indication of social and economic situations for those whose nutrition needs go unmet. In 2006, 79% of Clark County households who visited a food bank reported incomes below the 100% poverty level. Almost half reported they worry where their next meal will come from and 45% of food bank visitors were families with children. In 2004, Clark County reached 56% of the food stamp eligible population while Washington State reached 49%. Despite reaching about half of those eligible, Washington ranks 23rd in the nation for providing low-income people access to

food stamp benefits, while Oregon ranks 5th. Another nutrition assistance program that aims to provide fresh, nutritious and locally-grown foods to low-income people is the Farmers' Market Nutrition Program (FMNP). Clark County experiences a high rate of redemption at participating farmers markets among Special Supplement Nutrition Program for Women, Infants & Children (WIC) FMNP recipients; nearly 80% of WIC recipients redeemed their FMNP coupons in 2007.

Access to retail stores with a variety of healthy and affordable food selections is one promising way to improve diets and reduce the occurrence of adverse health outcomes. Selected grocery and convenience stores were surveyed to determine pricing, availability and quality of healthier food options across Clark County. Overall, low-fat milk was found to be less expensive than whole milk. Additionally, smaller stores carried none or a very limited selection of fruits and vegetables. Differences were also observed among small rural and large urban stores.

This section also provides a case study on food access issues in the Fruit Valley and Vancouver Heights neighborhoods of Vancouver, Washington. Neighborhood food surveys were conducted to determine if food access issues existed in neighborhoods with different land use patterns and demographics. Of note, the response rate in Fruit Valley was low. Caution should be used when interpreting these results. The food survey inquired about personal food production and preparation, food access and equity, and readiness to buy locally-produced food. Overall, both neighborhoods responded similarly to survey questions. Most cook food at home generally everyday and grow vegetables and a few fruits. Most buy food from grocery stores or large discount stores. Selection of food was the most important factor when respondents buy their food over price, proximity to home, workplace and bus stop. Differences were observed between the two neighborhoods in areas of food equity and emergency food usage.

To further improve access to healthier food options, institutional policies are being adopted to provide consumers with information to make healthier selections when they eat meals away from home. Menu labeling resolutions have been passed in various parts of the country, including Seattle, Washington, to provide nutrition information at points of purchase in national chain restaurants meeting the required mandate. In addition, public sector institutions such as schools, county government, and hospitals have established food procurement contracts that source local to offer healthier alternatives. The Local Farms, Healthy Kids law gives Washington one of the most comprehensive local foods program in the nation.

Chapter three describes, to some extent, the characteristics of Clark County farmers, land base for farming, farmland protection, and the agricultural market. To reflect the current agricultural conditions in Clark County, a Western Washington peer county composite (WWP) of Pierce, Snohomish, and Thurston, was selected to contrast agricultural trends. In this chapter, figures are expressed as averages unless otherwise stated. Similar to national trends, Clark County farmers are getting older and retiring at a faster rate than younger farmers are entering farming. Currently, there are few programs in Clark County that provide emerging farmers with farm business training and opportunities to link them directly to consumers, retail, and wholesalers. Land base for farming is disappearing in Clark County faster than in the peer counties and state-wide. In addition, more cropland has been converted for urban land uses than in the WWP counties over the past 20 years.

Farms are getting smaller in Clark County and diversifying, however; nursery crops, raspberries and hay continue to dominate crop sales. Likewise, dairy and broiler chickens continue to have a strong presence in the agricultural economy. Over the past 25 years, direct farm sales at the regional and state level have increased considerably. Among Clark County farmers and the WWP counties, trends indicate more farmers engaging in direct marketing opportunities than in

1992 and the value of agriculture products sold directly has tripled in the WWP counties. A case study indicates farmers are participating in subscription farming (Community Supported Agriculture) as demand continues to grow among regional consumers.

Chapter four describes examples of natural resource protection and waste management programs adopted in Clark County. Currently, there are 11 Clark County farms managing over 400 acres certified by the Washington State Department of Agriculture Organic Food Program. This is up from two certified farms in 2001. Organic dairy cows are raised on 75% of this land. In addition, farms are quite evenly distributed around areas with prime agricultural soils with class I, II, or III designation. Much of the prime farmland, located along the flood plain of the Columbia, has been converted to urban uses.

Clark County Solid Waste (CCSW) works with commercial businesses, large grocers and schools to divert food waste to the Cedar Grove composting facility in Maple Valley, Washington. Roughly 16% of the total waste stream in Clark County is from food waste generators. In 2006, Clark County diverted 1,300 tons of food waste. About one-third (30%) of food waste diverted was from approximately 50 schools that participated in the CCSW sponsored Save Organic Scraps program. The largest source of food waste in Clark County was from residential collection (70%). Currently, there is no residential food waste diversion program in Clark County.

Exploring the Clark County Food System attempts to inform the Clark County Food System Council on the status of selected food system indicators and integrates findings from two local case studies on neighborhood food access and community supported agriculture. This report provides a balanced consideration of many factors affecting the Clark County food system and intends to provide a foundation for further food assessments supported by the Clark County Food System Council.

Preface

i. *Steps* Initiative

In 2003, Community Choices, a non-profit organization that is a catalyst for healthy livable communities, released the Clark County Community Report Card revealing a high percentage of overweight, obesity, and diabetes among Clark County residents. In response to these trends, Community Choices convened partners to apply for a *Steps to a Healthier US* grant coordinated by the Centers for Disease Control and Prevention and the U.S. Department of Health and Human Services. Clark County was chosen as one of four Washington *Steps* communities to receive the five year grant and in 2003 the *Steps to a Healthier Clark County Initiative* (*Steps*) began. The aim of the *Steps* initiative is to reduce rates of overweight, obesity, diabetes, and asthma by increasing access to physical activity, healthy foods, and smoke free environments.

The *Steps* Access to Healthy Foods Team (AHF) found that creating a community environment that ensures a sustainable supply of healthy food and addresses food access issues could help reduce the burden of overweight and obesity in Clark County. With this in mind, *Steps* convened a community workshop in 2006 entitled "Healthy Food Forecast: What is Your Role?" at which participants discussed the health, safety and sustainability of the regional food supply and considered the feasibility of a local food policy council. Emerging from this workshop was collective support for creating a Food System Council to provide advice and guidance to local policy makers regarding gaps in the local food system and potential policy solutions.

ii. Clark County Food System Formation

In 2006, the first "step" of establishing a Clark County Food System Council (CCFSC) was taken. Three sub-groups formed under the umbrella of the AHF team: Community Agriculture, Healthy Food Guidelines, and Food Policy. Each set forth strategic objectives to improve access to healthier food options. The AHF team charged the Food Policy Team with creating a Food System Council and approved the commission of a food assessment that would inform the CCFSC on selected food system indicators. For the next year and half, the Food Policy Team developed guiding principles, recruited diverse stakeholders from food system sectors, and prepared a sustainability plan for the life of the Food System Council after *Steps* funding ended in September 2008. In May 2007, the first Clark County Food System Council meeting was held. Subsequent meetings refined the governance and procedural policies of the council. Currently, the CCFSC is a multi-disciplinary council of representatives from public health, nutrition and education, food security, waste management, resource conservation, agriculture, food distribution and community leaders. The mission of the CCFSC is to increase and preserve access to safe, local and healthy food for all residents of Clark County. To ensure the work of the CCFSC is sustained after the *Steps* grant, Clark County Public Health is committed to housing the CCFSC and providing funds for support staff.

iii. Food Assessment Goals

In 2007-2008, a Food Assessment was conducted to investigate the local food supply and nutrition environment trends in Clark County, inform the CCFSC and guide future food system assessment areas. This assessment was advised by the Food Policy Team and involved both primary data collection and the use of pre-existing data sources. Project objectives are described as follows:

1. Inform the CCFSC on Clark County trends in four indicator areas approved by the Food Policy Team: Personal & Community Health, Food Access, Farm & Agriculture Profile, and Resource Management.

2. Determine the availability of and price differences between healthier and less healthy food options in selected Clark County grocery and convenience stores with the Nutrition Environment Measures Survey in Stores (NEMS-S).

3. Prepare a case study that identifies factors influencing food access in two urban neighborhoods (Neighborhood Food Survey).

4. Prepare a case study that explores Community Supported Agriculture (CSA) as a model for farm direct marketing (CSA Survey).

5. Arrange a series of food atlas maps unique to Clark County.

This food assessment report is based on the findings of the above objectives and will serve as a guiding document for the CCFSC when determining its priorities, actions, and future assessment areas.

Limitations

There are limitations to this preliminary food assessment report. Due to time constraints of the project, a large and complex list of indicators was shortened to a limited number of prioritized indicators (Appendix A). This list was adapted from a food system indicator list set forth by Portland State University's Institute for Portland Metropolitan Studies (Appendix B). Food Systems are complex, and one data point or fact should not create specific action or policy, but rather be reviewed as a contribution to the entire Clark County foodshed.

Efforts were made to collect food system data based on the following characteristics:

- Data have been collected at regular intervals and are publicly available in published reports, annual reports, and requested data sets.
- Data can be interpreted at the national, state, and local level where relevant.
- Data were collected the same way for other counties for comparison purposes.

Another limitation was the use of convenience sampling for primary data collection purposes. Local surveys in two urban neighborhoods and a CSA survey are, therefore, not representative of all Clark County residents.

Introduction

i. Defining the Food System

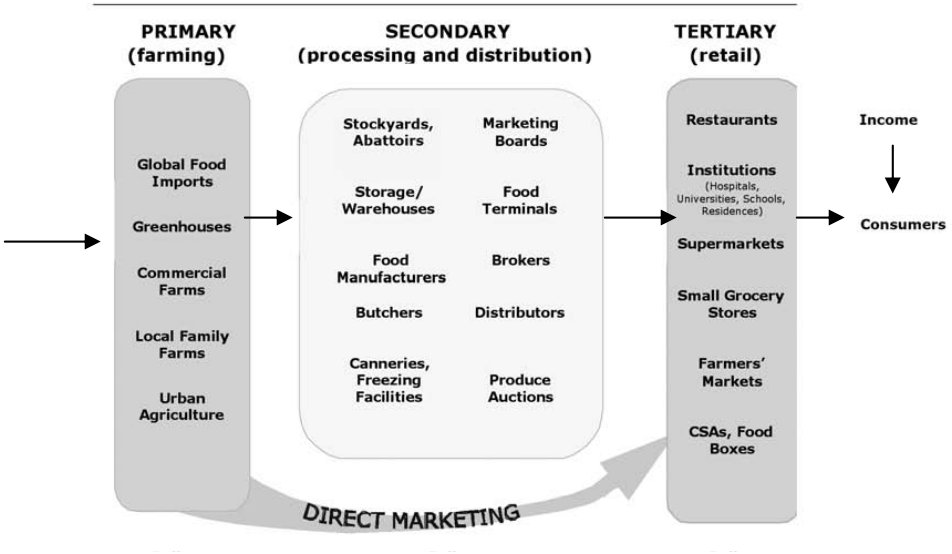


Figure 1: A food system model
Source: Adapted from Xuereb, M. & Desjardins, E., 2005

Figure 1 illustrates the many sectors of the food system and their interdependent roles. The components function at both the global and local levels. While the global food system is a major source of food we eat, the local food system is an integral part of our local economy, community, and daily lives. Each component of the food system has a significant impact on our community's health, economy and environment. Agricultural production provides jobs and income to farmers and farm workers, while farmland provides open space and serves to protect ecosystems and natural resources. Food processing adds value to our farm products, and along with distribution, provides jobs, and contributes to local economic base. (University of Wisconsin-Madison, 2005). Determining the impact of these food system players on the local farm economy, environment and consumer health is a complex process that involves a long-term collaborative commitment to build locally-based, self-reliant food systems (Xuereb and Desjardins, 2005).

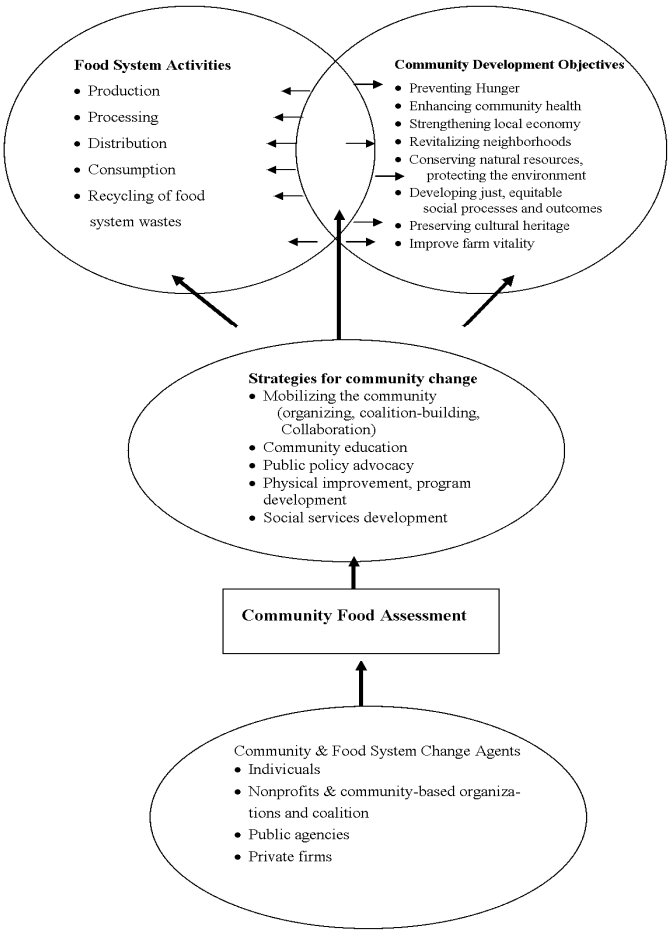
ii. Community Food Assessment

A Community Food Assessment (CFA) is one of the first steps a community can take in planning for food access with the goal of improving food security, safety, and local farm economies. Often designed as collaborative and participatory processes, CFAs are systematic examinations of community food systems used to inform change and bring communities closer to food security.

"Food Security requires a greater local integration of food system links and envisions food as a tool for achieving community objectives in health, economic development, equity, and sustainability."

- Pothukuchi, CFA: A First Step in Planning for Community Food Security

Community Food Assessments can help citizens participate in planning their community for improved food access, strengthening the local food economy, and promoting community change.



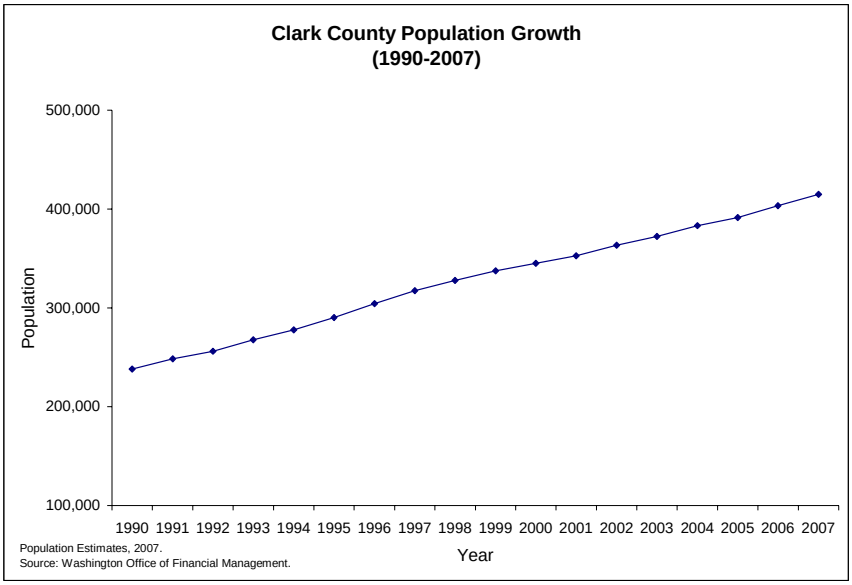
iii. County Profile

Geography. Clark County is one of the smallest counties in Washington State (35th of 39) with a total land mass of approximately 400,000 acres. It is bounded on the south and west by the Columbia River, which forms the border with Oregon and to the north by the Lewis River, which forms the border with Cowlitz County. From Vancouver, the county spreads east through a rapidly growing suburban band, across agricultural lands and small towns, to the slopes of the Cascade Range and Skamania County. Clark County lies within a geographic basin known as the Willamette – Puget Trough, formed by the Cascade and Pacific Coast Mountain Ranges (Population and Economic Handbook, Clark County Department of Assessment & GIS, 2005).

Population. Throughout the 1990s, Clark County was the fastest-growing county in Washington State, in terms of both jobs and population. As a suburban county within the Portland Metropolitan region, the county is attractive to new residents due to lower cost of housing and land use policies that accommodate residential development (Washington State Employment Security Department, 2008). Clark County is the 5th most populous county in the state, with an estimated population of 415,000 in 2007. It has the second-fastest growth rate in the state, which can be attributed to a number of factors. According to the Washington State Office of Financial Management, 71% of the county's growth from 2000 to 2007 was due to in-migration of new residents. Half of Clark County residents live in unincorporated rural areas interspersed with diverse farm operations. The four largest cities are, in order of size, Vancouver, Camas, Battleground, and Washougal.

The population of Clark County has grown 74% since 1990.

From 2000 to 2007, the county's population grew by 20% (approximately 70,000 people).



Race/Ethnicity. In 2007, approximately, 87% of Clark County residents (370,000) were White. Five percent of the population was Asian/Pacific Islander (19,000). Two percent were Black (6,900), 1% was American Indian/Alaskan Native (5,600) and the remainder (5%) were of two or more races or other races (22,000) combined. Approximately 6% of the population was of Hispanic (26,000) decent.

Age. The median age of Clark County residents in 2006 was 35 years. Clark County has proportionally more young people than older residents. Thirty nine percent of residents were between 18 and 44 years, while 26% were under 18 years of age. About 1/3 of residents (35%) were 64 and older.

Income and Poverty. In 2006, the estimated median household income in Clark County was $55,405. In 2005, county income was 10% below the national average. In 2006, 10.5% of families in Clark County earned incomes below the federal poverty level or less than $20,000 for a family of four (Appendix C). Twelve percent of related children under 18 years of age were below the poverty level, compared with 10% of people 65 years and older. The largest percent of population living below the federal poverty level were female households with no husband present (22%). (American Community Survey, 2006)

Of the 10.5% of families living in poverty in Clark County, 22% are female headed households with no husband present.

Chapter 1: Personal & Community Health

A nutritious diet is an important component of personal health. In recent years, diet-related health problems including obesity and diabetes have increased at alarming rates. In response, many communities are placing an increased emphasis on community health. This chapter describes, to some extent, some of the adverse health outcomes associated with personal behavior choices among Clark County adults and youth.

Indicator: Overweight & Obesity

Since the mid-1990s, overweight and obesity[1] has emerged as a national public health epidemic and major contributor to unfavorable health outcomes. Each year, obesity causes at least 300,000 deaths in the U.S. and healthcare costs of adults with obesity amount to approximately $100 billion. Eighty-five percent of Americans now believe obesity to be a national epidemic and feel strongly that the government should play a role in addressing the obesity crisis. A majority of Americans strongly support the creation of programs to expand education about healthy living, provide low-cost access to exercise programs, and reduce the marketing of unhealthy foods to youth. As with adults, there has been a dramatic increase in the percent of youth who are overweight in recent years (Community Choices, 2006).

Overweight and obese youth are at an increased risk of developing preventable diseases such as Type 2 diabetes, hypertension, and heart disease. The epidemic of childhood obesity has been shown to disproportionately impact specific communities. Race and ethnicity, as well as income, play a key role in identifying those most at risk. Currently, rates of obesity have increased more dramatically among African-American, Hispanic, and American Indian children. In particular, among boys, the highest rates of obesity are found in Hispanic children and among girls, the highest rates are found African-American children. Low socioeconomic family status increases the potential for childhood overweight, with the greatest difference found for white, adolescent girls (Institute of Medicine, 2006).

Obesity in children and adolescents is a serious issue contributing to many health and social consequences that often continue into adulthood. The resulting medical problems have a significant financial impact on the healthcare system and workplaces. More than two-thirds of Americans believe children have inadequate amounts of physical activity during the school day and outside of school. Fifty five percent of parents with children under 18 believe lunches provided in schools are not nutritious enough (Community Choices, 2006).

Achieving recommended physical activity (at least 30 minutes or more of moderate activity most days of the week) and nutrition (at least five fruit and vegetable servings per day) standards may significantly reduce the risk of overweight and obesity.

[1] Overweight and obesity in adults is measured by a Body Mass Index (BMI) and considers weight in relation to height. Overweight is defined as a BMI of 25.0 - 29.9 and obesity is defined as a BMI of 30. Among youth, overweight and obesity is determined by standardized growth charts. Obesity is the top 5% by age/gender, and at risk of becoming overweight is the top 6% - 15% by age/gender.

Findings:

- 63% of Clark County residents are overweight or obese, similar to national and statewide trends.
- 25% of Clark County adults are considered obese, far exceeding the national target of 15%.
- A greater percent of males (about 70%) are either overweight or obese compared to females (about 50%) (BRFSS, 2006).

Sixteen percent of Clark County adults report that they do not engage in any physical activity.

- About one quarter (24%) of 8th graders in Clark County in 2006 were either overweight or at-risk of becoming overweight, similar to Washington State youth overall (HYS, 2006).

Indicator: Adult & Youth Diabetes

Diabetes, a disease that affects the way the body produces and uses insulin, is increasing in epidemic proportions among children and adults, making it one of the most costly and burdensome diseases of our time. Of the four types of diabetes, the most common among Americans are type 2 (non-insulin dependent) and pre-diabetes. Both can be prevented or delayed with lifestyle modifications, specifically moderate weight loss and increased physical activity (CCPH, 2008).

Findings:

Overall, Clark County adult and youth diabetes rates are similar to rates in Washington State and the U.S., and they have not changed significantly since 2000.

- The 2006 Clark County rate of adults diagnosed with diabetes was 8% (BRFSS, 2006).
- In 2006, students diagnosed with diabetes ranged from 4-6% among 8th, 10th, and 12th graders (HYS, 2006).
- In 2006, Clark County's death rate from diabetes was 24 per 100,000 meeting the national target of 45 deaths per 100,000 (CCPH, 2006).

Indicator: Fruit & Vegetable Consumption and Food Expenditures

Healthy diets high in foods of plant origin such as legumes, fruits and vegetables help protect against unfavorable health outcomes. Few adults in Clark County consume an adequate amount of fruits and vegetables to realize these benefits. The latest dietary guidelines call for five to thirteen servings of fruits and vegetables per day, depending on a person's caloric intake.

Findings:

Clark County residents do not meet the national dietary recommendations for fruit and vegetable consumption and they are not alone. Consumption rates in Washington State and the U.S. are similar.

- In 2006, 25% of Clark County adults consumed five or more daily servings of fruits and vegetables similar to Washington State and U.S. rates.
- There have been no substantial changes in the rates since 1996 (BRFSS, 2006).
- 30% of 8th graders in Clark County and Washington State consumed five or more daily servings of fruits and vegetables in 2006.
- More 8th graders (30%) consumed five or more daily servings of fruits and vegetables compared to 10th (23%) and 12th graders (20%). Rates are similar to Washington State (HYS, 2006).

Food consumption and expenditures

Based on a projected 50 million new food consumers nation-wide, U.S. food expenditures are projected to rise 26% between 2000 and 2020. The effects of national population trends can also be experienced locally. The increasing Clark County population is likely to put consumers in a position to demand new food products, packaging, more convenience, and safer and more nutritious foods. Shifts in the demographic profile of the U.S. population will affect what and where people will eat and how much they will spend.

How much do Clark County residents spend on food?
In 2006, Clark County spent about $870 million on food. About half of food expenditures were for food eaten at home ($400 million). Clark County per capita spending on food was $2,146 dollars (or about 11% of annual income in the Portland MSA).
(BLS, 2006)

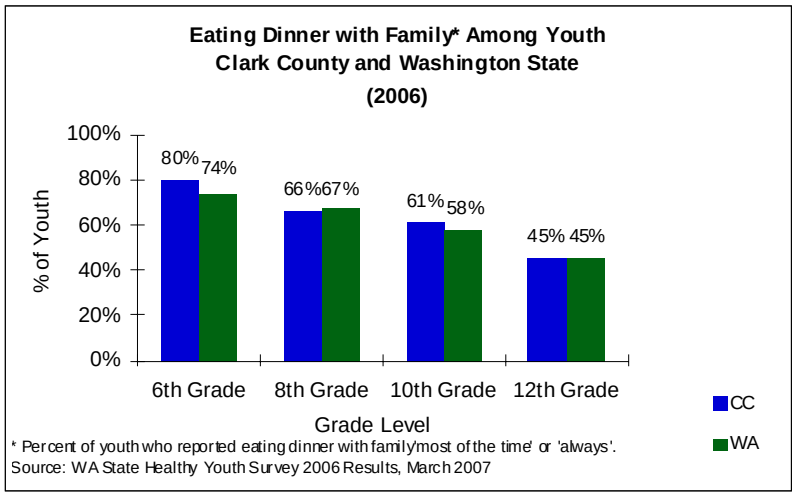
What foods do Clark County residents buy?

To some extent, consumer expenditures indicate the health and nutrition habits of consumers. In Clark County, fruits and vegetables represented a small amount of total expenditures on foods eaten at home, about 20% ($80 million) of foods purchased (BLS, 2006). About 40% of food dollars were spent on sweets, fats, snacks, beverages and other miscellaneous low-nutrient foods (Appendix D). How consumers spend their food dollars will have future implications for their personal health, the economic well-being of farmers, food processors, retailers, and other food system participants.

Indicator: At Home Family Dinners among Youth

Studies show that youth who frequently eat dinner with their families have increased health and well-being. Youth who frequently eat dinner with their families have healthier diets, including higher fruit and vegetable consumption. Family meals allow children the opportunity to learn communication skills, table manners, and good eating habits. In addition to improved dietary intake, these youth are also at a decreased risk for certain delinquent behaviors such as substance abuse, poor grades, depression and suicidal thoughts or behaviors (Community Choices, 2006).

Findings:



- In 2006, 66% of Clark County 8th graders ate dinner with their family most or all of the time.
- In both 2002 and 2004, about 68% of 8th graders ate dinner with their family most or all of the time. Clark County rates are similar to Washington State.
- In 2006, the frequency of family dinners decreased from 80% among Clark County 6th graders to 45% among 12th graders. Washington State data showed a similar decline over grade levels (HYS, 2006).

Chapter 1: Further Considerations
Personal & Community Health

This section provides examples of possible conversations and strategies for the Clark County Food System Council to consider as it develops future work plans to increase and preserve access to safe, local and healthy food for all residents of Clark County.

Community Conversations

1. How can the Food System Council support community initiatives that promote locally-grown healthy foods?

2. How can the Food System Council advocate for policy and system changes that improve opportunities for families to buy locally-grown foods?

3. How can the Food System Council support education programs that help families make better food choices?

Community Opportunities

The Clark County Food System Council could:

1. Collaborate with community partners to promote or develop a "Buy Local" campaign or initiative.

2. Advocate for youth programs such as the fresh fruit and vegetable school snack program and expansion of school gardens throughout the community.

3. Support the continuation of the Fit Pick Healthy Vending Campaign.

More Local Data Needed

1. Community-wide "Buy Local" survey

2. School survey with fruit and vegetable focus

3. Inventory of county vending machine contracts

Chapter 2: Food Access

Access to healthy food is essential to a healthy diet. Social and economic factors impact how people make food selections in their daily lives. A variety of resources exist for families who lack financial or other resources to meet their nutritional needs. This chapter explores the many factors affecting food choices, such as the location of food retail outlets and information provided to help people make informed choices about their food selections. Clark County residents have a variety of healthy food options to choose from in their community (see Clark County Food Atlas Map in Appendix Gi). Subsequent food maps will be referenced with each relevant indicator in this section.

Section I: Social & Economic Access to Healthy Food

Indicator: Food Insecurity

Food insecurity is generally described as households that are unable to acquire, or uncertain of having, enough food to meet the needs of all members due to insufficient money or other resources for food. Food insecurity is often expressed as low food security or very low food security depending on the strength of conditions affecting food access among food insecure households such as poverty and episodic variations in income and employment (USDA, ERS, 2005).

Most U.S. households (89%) had consistent, dependable access to enough nutritious food and were considered food secure in 2006. The remaining 11% of households were food insecure. From 2004-2006, Washington's food insecurity rate (10.3%) was slightly lower than the national average while Oregon's was slightly higher 11.9% (Food Research and Action Center, 2006).

Food insecurity is difficult to measure at a county level, but to some extent, can be indicated by economic factors affecting participation in food and nutrition assistance programs and emergency food usage. In 2006, The Oregon Hunger Factors Survey (OHFS) examined the social and economic situations of food assistance recipients. Surveys were conducted at participating Oregon and Clark County Food Banks. About 400 Clark County food bank visitors participated in the survey.

Findings:

- Of those who visited a food bank, 79% reported incomes below the 100% poverty level in 2006 ($20,000 for a family of four).
- About 47% percent reported they worry at least some of the time where their next meal is coming from.
- Of the 65% who reported skipping meals in the last 12 months, 49% reported doing so almost every month.
- 67% percent reported eating less at least once during the past 12 months because there wasn't enough money to buy more food (OHFS, 2006).

Profile of Hunger in Clark County 2006

Over 45% of visitors to Clark County food banks are families with children. Sixteen percent of food bank visitors owned their home and 16% had a college education. Affordable medical care is a particular burden with 48% of food bank visitors having medical debts over any other type of debt. 37% reported working full time, and 33% reported their wages were insufficient to meet their basic needs.

Indicator: Food Stamps

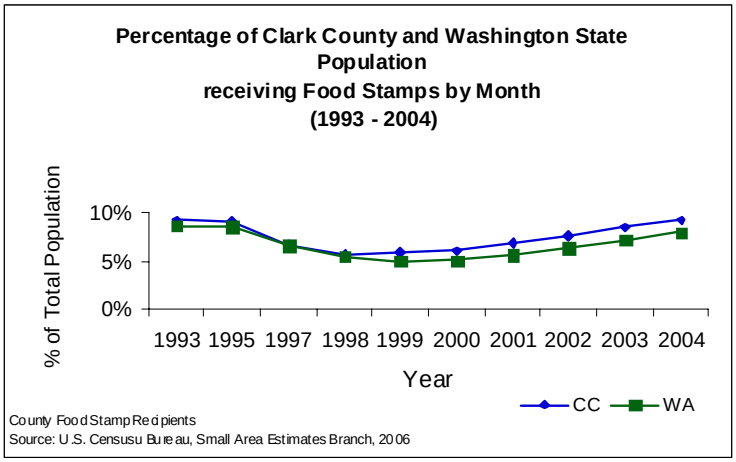
The problem of insufficient income to buy food is reflected through the use of government assistance programs, such as the Basic Food Program which houses the Food Stamp Program. The Food Stamp Program (FSP) is the United States largest nutrition program for low income Americans. People can apply for Food Stamp benefits by completing a state Food Stamp participation application. Benefits are provided on an electronic card that is accepted at most retail food outlets.

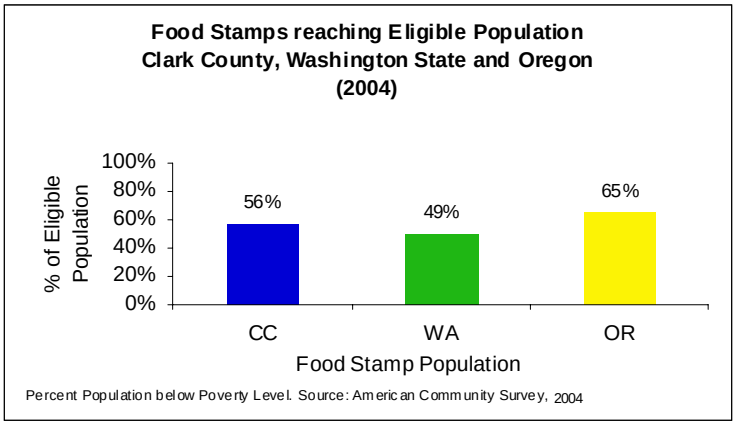
Based on state guidelines[2], Clark County and Washington State residents who report gross incomes below 120 percent of the federal poverty level are eligible for Basic Food Program benefits, including food stamps. Recently, Washington State has loosened the eligibility requirements for foods stamps to 200 percent of the federal poverty level or from $26,900 to $42,400 for a family of four.

When the FSP began, its primary objective was to enable low-income Americans to get enough to eat. Over time, the program has evolved from primarily focusing on sufficient *quantity* of food to an increased emphasis on healthful foods with high nutritional *quality.* This reflects concerns over the nutrition-related health problems now facing more and more Americans of all income levels (USDA, 2007). Allowable food stamp purchases can be found in Appendix E.

Findings:

- Approximately 9% of Clark County residents received food stamps in 2004, similar to the 8% of Washington State residents.
- In 2004, Clark County served 56% of those eligible for Food Stamps; Washington State served 49%, while Oregon served 65% of the eligible population.
- Eligibility was also similar among the Clark County and Washington State population; approximately 16% of the total population in both areas were eligible for food stamps in 2004 (U.S. Census, 2006).
- In 2006, Washington ranked 23rd in the nation in providing low-income people access to food stamp benefits, while Oregon ranked 5th. (USDA, 2007).[3]





[2] According to the Washington Department of Social and Health Services (DSHS) the current maximum monthly allotment for the Basic Food Program is $542 based on a gross monthly income of $2,238 for a family of four.

[3] Ranking was based on The Program Access Index (PAI) which is the ratio of the average number of individuals participating in the FSP to the number of individuals income-eligible to participate in each state. USDA Food and Nutrition Services uses PAI to measure state FSP performance (USDA, FNS, 2008).

Communities at Work: California's Healthy Purchase Pilot Program
California

Meeting the recommended daily servings of fruits and vegetables can be a particular challenge for food stamp recipients for two reasons: access and cost. Small grocers accepting food stamps are not required to offer fresh produce which may make it difficult for food stamp recipients to access fresh fruits and vegetables in their neighborhoods. In addition, food stamp recipients often have limited resources and food dollars to purchase healthful and sometimes more expensive foods. In 2006, in an effort to help Californian food stamp recipients obtain affordable fresh fruits and vegetables, California launched the Healthy Purchase Pilot Program in seven urban and rural counties identified as having insufficient access to fresh produce.

Improving Fresh Produce Availability

The multi-year pilot leverages the California Department of Public Health to offer rebates for food stamp recipients who purchase fresh produce from small grocers in low income ethnic neighborhoods. With help from the California State Department of Food and Agriculture, the Department of Public Health offers grants and technical assistance to participating grocers to obtain the necessary infrastructure to purchase, store, market, and display fresh produce.

To encourage food stamp recipients to use food dollars for fresh produce, the state offers a rebate on every produce purchase which, in turn, creates more income for food stamp approved purchases.

California Food Policy Advocates. Improved Access to Fruit and Vegetables: The "Healthy Purchase" Pilot Program

Indicator: Emergency Food Banks

Food for donated and prepared meals at participating Clark County Food Banks is received from a number of sources. The largest sources of food are private individuals and the food industry. Individual donations come primarily through food drives, including Walk and Knock and the Letter Carriers food drives. Donations also come from special events, including the Oregon Food Bank Waterfront Blues Festival, where food provides full or partial admission. Although the food industry provides dedicated donations from time to time, the vast majority of these donations are from excess food production. These donations may be received directly from the source, as is the case with Fresh Alliance, or through other charitable organizations, such as the Oregon Food Bank. The receiving organization has little control over what is donated.

Federal Emergency Food Assistance Program

To supplement donated food, the federal Emergency Food Assistance Program (TEFAP) of the United States Department of Agriculture makes commodity foods available through Washington General Administration (GA). Washington GA is responsible for procuring excess food and distributing it to state organizations based on need. The types of commodity foods vary depending on State preference and the fluctuation of the agricultural market. The amount of food provided for each state depends on the number of unemployed persons and the number of people with incomes below the poverty level in each state. Food bank visitors who report incomes below 185% of the federal poverty level ($39,220 for a family of four) qualify for a TEFAP/USDA food box. Incomes are self-declared by families who visit a food bank. USDA food boxes are distributed separately from emergency food boxes and reach only a portion of those in need. An ideal food box typically lasts anywhere from 3 to 5 days (Appendix F).

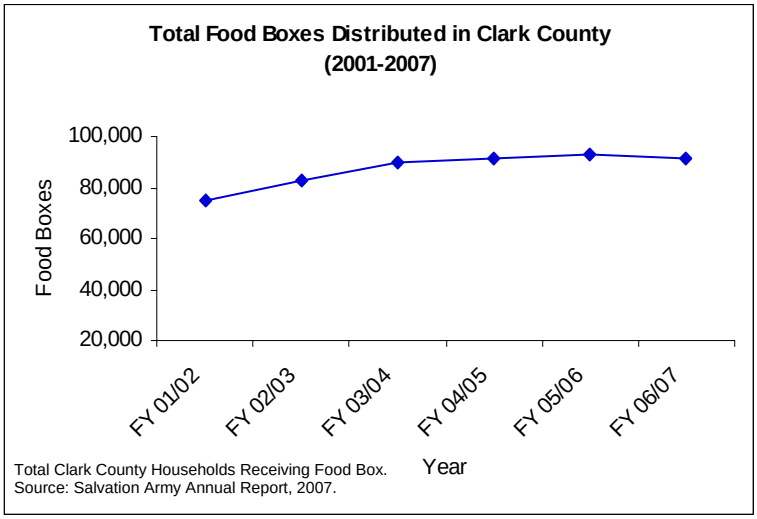
State Emergency Food Assistance Program

In Washington State, the Department of Community, Trade & Economic Development is responsible for the allocation of state Emergency Food Assistance Program (EFAP) funds that operate hunger services in each county. States select local organizations that directly distribute to households, serve meals, or to other local organizations that perform these functions. Funds are used at the discretion of the organization and typically pay for operational expenses, equipment, staff, technically assistance, and food. Food bank visitors who report incomes below 150% of the federal poverty level ($31,800 for a family of four) are available for EFAP.

Findings:

- The Stop Hunger Warehouse disseminates food to 14 emergency food pantries and other hunger programs throughout Clark County (Appendix Gii).
- Fresh Alliance, the primary food recovery program administered by the Stop Hunger Warehouse, collects directly from participating area grocery stores. Of the donations 55% are dairy, eggs, cheese, yogurts and 45% are fresh and processed meat.
- Fresh Alliance recovered about 13% of food (340,989 lbs.) from grocery stores in Clark County for recirculation to vulnerable populations in 2006 and 2007.

Stop Hunger Warehouse, the regional food distribution center for Clark County emergency food supplies, supports food pantries with regular shipments of donated and purchased food supplies. Last year, the warehouse distributed more than 2 1/2 million pounds of food. Forty percent of the Stop Hunger Warehouse's food dollars came from charitable organizations, including the Oregon Food Bank and Northwest Harvest South, an interface between food providers and food banks.



- During 2007, about 90,000 emergency food boxes were distributed by food pantries. Households can receive more than one food box through the year.

- The number of Food Boxes distributed from 2001-2007 rose 23%.

- In 2007, there were about 300,000 visits to a Clark County Food Bank (new and returning). Ten percent of these were new visitors age 2-18.

Indicator: Special Supplement Nutrition Program for Women, Infants, & Children (WIC)

To fulfill its mission of improving the health and nutrition status of pregnant women, new mothers, infants and children under five, the Special Supplement Nutrition Program for Women, Infants and Children (WIC), provides health screenings, nutrition education, nutrient rich foods, breastfeeding support and referrals to other health and social services. In Clark County, WIC is funded by the U.S. Department of Agriculture and administered through Clark County Public Health. Income eligibility requirements are 185% or less of the federal poverty level (WA DOH/WIC, 2008).

The *Clark County Public Health WIC Facts: 2006* states that WIC nutrition education classes promote healthy food choices by:

- Emphasizing healthy habits so families can eat better and stay active to prevent obesity and other chronic diseases.

- Promoting breastfeeding for at least the first year of life and helping working mothers breastfeed longer by providing breast pumps.

- Helping prevent early childhood caries by giving parents ideas for healthy snacks and stressing dental care by age one (WA DOH, 2006).

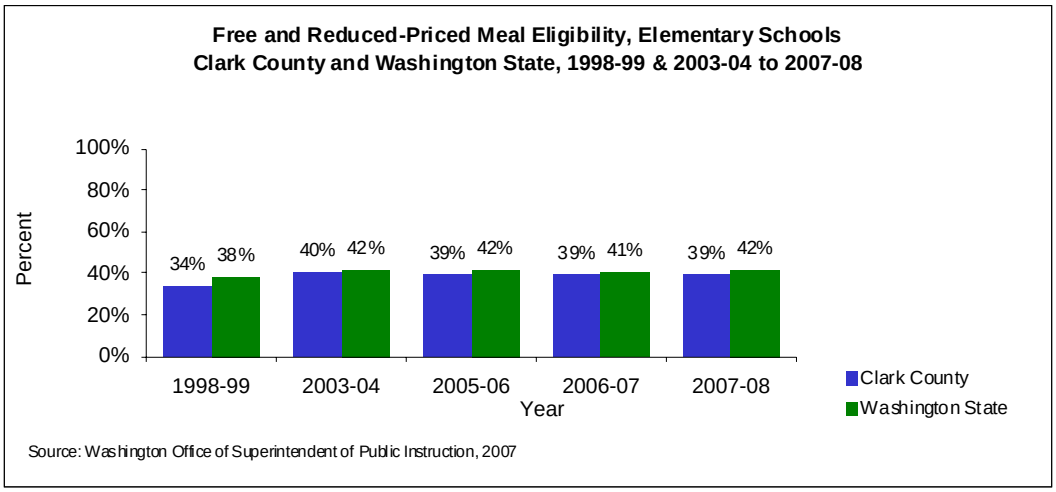
Findings:

- In 2006, WIC served 43% of Clark County infants compared to 50% in Washington State.
- In 2006, there were a total of 15,094 WIC clients in Clark County. There were 11,130 infants and children under 5 years of age, and 3,964 pregnant, breastfeeding and postpartum women.
- In 2006, Washington State WIC clients received an average of $58 per month in healthy foods (WA DOH, 2006).

Indicator: Free and Reduced School Meal Program

One way to measure childhood poverty within a community is the percentage of children who qualify to receive free or reduced-priced meals in public schools. Eligibility is based on federal poverty guidelines and is determined by the household's income. Schools with high levels of eligible students (40 percent or more) receive Federal Title I funding, allowing them to hire additional teachers and provide other supplemental support (Community Choices, 2006). Enrollment represents school districts in the National School Lunch Program (NSLP), School Breakfast Program (SBP) and/or Special Milk Program (SMP). Free and Reduced Price Meal Eligibility is the number and percent that qualify and are enrolled for either free or reduced-priced meals out of the total school enrollment (OSPI, 2008).

Findings:



- The percent of Clark County elementary school students eligible for free and reduced-priced meals rose from 34% in 1998-99 to 39% in 2007-08. The percentage of eligible students varies from school to school (10% to 75%).
- The rate was unchanged over the past several years and remained at 39% in 2007-08. Clark County elementary school eligibility trends were similar overall to Washington State students (OSPI, 2008).

Indicator: WIC and Senior Farmers' Market Nutrition Program

The purpose of the WIC and Senior Farmers' Market Nutrition Programs (FMNP) is to help improve the health and economic well-being of Washington families and farmers. Participants in these programs shop for fresh fruits and vegetables direct from Washington farmers at participating farmers markets and roadside stands. The Farmers' Market Nutrition Program is made up of two federally-authorized programs, the WIC FMNP and the Senior FMNP. They are funded by the U.S. Department of Agriculture and the State of Washington. They are administered through a collaborative effort between the Washington State Department of Health (DOH), Washington State Department of Social and Health Services (DSHS), Washington State Farmers' Market Association and local WIC clinics.

The Washington State FMNP:

- Provides fresh, nutritious, unprepared, locally grown fruits, vegetables, and herbs from Washington farmers to eligible women, children and seniors.
- Improves the health and nutritional status of low-income seniors, women and children by increasing consumption of fruits and vegetables.
- Aids in the development of new and additional farmers' markets and roadside stands

How does the FMNP Program Work?

Packets of checks at a basic benefit value up to $20 (WIC) and $40 (Senior) are distributed each market season. Checks are distributed in a variety of ways among WIC and Senior participants throughout Washington State. Since there is a limited supply, agencies work to ensure WIC families most interested and able to use checks during the redemption period are targeted. For example, WIC participants are likely to attend farmers' market to receive their checks (approximately 90% of checks are distributed this way in Clark County). Seniors receive checks via mail back postcards, DSHS-arranged public events and senior centers. These methods depend primarily on rural and urban conditions, and are not prescriptive throughout the state. Checks are used to purchase local produce at authorized farmers' markets or roadside stands (Senior FMNP only) (Clark County Fruit and Vegetable Stands and Farmers' Market maps can be found in Appendices Giii and Giv).

Who's Eligible for WIC and Senior FMNP?
To qualify for Senior and WIC FMNP redemption coupons, participants must have gross incomes below 185% of the federal poverty level.

Farmers' markets and roadside stands must meet a number of requirements to participate in the FMNP, for example, they must be located within 20 miles of a local WIC clinic or Senior FMNP service site, be able to accommodate a minimum of five farmers who grow and sell edible food, and have been in operation for a minimum of one year. Currently, 10 of 39 (26%) of Washington counties do not have an approved farmers market for WIC FMNP because no markets exist or have applied to meet the current criteria in those counties (WA DOH, 2007).

Data collected by Washington DSHS are limited to broad service areas; therefore, Senior FMNP redemption rates in Clark County are specifically unknown. Limited funding restricts Washington DOH from reaching 75% of eligible WIC clients with FMNP dollars; however, redemption rates are high among those it does serve. Distribution directly at eligible markets has shown to increase redemption rates according to a Washington State Department of Health *Checks at the Market Agency Survey 2007*. Interviewed agencies reported their clients are more likely to use checks if they are issued at the farmers' market rather than WIC clinics (WA DOH, 2007).

Findings:

WIC:

- In 2007, Washington State WIC FMNP had fewer checks to distribute but still experienced more than a 2.5% increase in redemption rates statewide.
- Roughly 80% of Clark County WIC recipients redeemed their FMNP coupons in 2007, while the Washington State WIC redemption rate was about 63%.
- Clark County WIC program distributed 90% of checks at the Vancouver and Battle Ground Farmers' Markets on a first come, first-served basis.

Of 104 WIC Agencies that participate in the FMNP program, Clark County ranked 14th in coupon redemption.
(Washington Farmers' Market WIC Agency Redemption Report, 2007)

- In 2007, about $40,000 was returned to farmers at Vancouver and Battle Ground Farmers' Markets. This was roughly $15,000 less than 2006 due to state-wide redistribution and reductions in funding.
- 800 farmers supplied 81 participating farmers' markets (WA DOH, 2007).

Seniors:

- The Washington State Senior FMNP redemption rate was 83%, about 20 percentage points greater than Washington State WIC recipients.
- About 17,000 people in Washington State were served by the Senior FMNP in 2007; nearly 1,000 were in the Southwest Washington Agency on Aging (SWAA) service area which includes Clark, Cowlitz, Klickitat, Skamania, and Wahkiakum.
- 770 farmers supplied 75 participating farmers' markets.
- About $430,000 was returned to Washington State farmers in 2006 (WA DSHS, 2007).

Section II. Physical Access to Healthy Food
Indicator: Nutrition Environment Measures Survey in Stores (NEMS-S)

Access to retail stores with a variety of healthy and affordable food selections is one promising way to improve diets and reduce the occurrence of overweight, obesity, and associated chronic disease risks among Clark County residents. Evidence suggests that people are more likely to meet dietary recommendations when they have ready access to grocery stores with healthy foods. However, healthy foods are often more expensive and less available than less-nutritious foods, especially in smaller, quick-stop oriented stores, such as convenience stores (Clark County Grocery Store Map can be found in Appendix Gv).

In 2007-2008, the *Steps* Initiative administered the NEMS-S survey in 42 selected Clark County grocery (28) and convenience stores (14) to determine the availability and price difference between healthier and regular food options. Retail stores were selected based on the permit classification of Clark County Public Health.

Location	Number of Stores
Amboy/Yacolt	3
Battle Ground/ Brush Prairie	6
Camas/Washougal	7
La Center/ Ridgefield	4
Vancouver	22

Findings:

Overall, healthier options tended to be more expensive or unavailable among all stores surveyed. In addition, healthier food alternatives were not commonly advertised on-site. Some price comparisons can be made from observed food items. Lean ground beef and whole wheat bread were generally more expensive than regular options; however, whole milk remained more expensive than healthier options (1% or skim). The following are the NEMS-S results for milk, fruits and vegetables, meat and bread, as well as advertisements.

Milk. Almost all stores (98%) carried milk. Of those, 85% offered a low-fat (1% or skim) milk option. Six retail stores did not offer a low-fat milk option. These stores were almost all small specialty stores. On average, ½ gallon of milk was found to be about $.20 more at convenience stores.

Low-fat 1% or skim milk was found to be less expensive than whole milk.

Fruits and Vegetables. Retail stores were surveyed for the availability and quality of a variety of fruits and vegetables. In general, supermarkets with five or more cashiers had a variety of good quality fruit and vegetables. Five of fourteen convenience stores offered a few fruits and vegetables. Rural stores had fewer fruits and vegetables than urban stores.

Smaller specialty stores were reported to have very few fruits and vegetables, if any.

- Roughly 40% of grocery stores had between 7 and 10 types of fruits and vegetables.
- Sixty-five percent of convenience stores offered no fruits and vegetables.

Ground Beef. Thirty eight percent of food retail stores offered ground beef and most offered a healthier alternative (90% lean, 10% fat by weight). Most of these were larger supermarkets. Half of the smaller rural grocery

Half of the smaller rural grocery stores offered ground beef and only one of these offered a healthier alternative.

stores offered ground beef and only one of these offered a healthier alternative. On average, a healthier ground beef alternative cost about 31% more per pound than regular ground beef.

Average price per pound:
Regular Option (80/20) = $3.00
Healthier Option (90/10) = $4.00

Bread. Roughly 86% of food retail stores offered bread. 78% of these were grocery stores, and the remaining 22% were convenience stores. Most of the grocery stores and convenience stores that offered bread had a 100% whole wheat alternative. All of the rural grocery stores offered bread and a 100% whole wheat alternative. On average, a 24 oz. loaf of 100% whole wheat was 16% more expensive than white bread.

On average, 100% whole wheat was 16% more expensive than white bread.

Average price per loaf:
White = $2.05
100% Whole Wheat = $2.40

Advertisement. The most commonly observed store advertisements were alcohol (38%), tobacco (29%), and soda (26%). Over half of the convenience stores surveyed advertise alcohol and tobacco. Only five stores advertised fruits and vegetables.

Healthy food needs to be available, accessible, and advertised to encourage healthy eating choices.

Communities at Work: Healthy Corner Store Network
Nation

Led by the Community Food Security Coalition, The Food Trust, and Public Health Law & Policy, the Healthy Corner Stores Network (HCSN) currently helps over 60 participants from local government, nonprofits, university systems, community organizations and funders who work to promote healthier food options in small neighborhood stores in underserved communities. HCSN provides exemplary policy and program models through conferences, workshops, and other events. These events give HCSN participants the opportunity to share new approaches, lessons learned, and success stories from their own communities.

www.healthycornerstores.org

Spotlight On…Healthy Food Retailer Initiative
Hartford, Connecticut

In 2007, the Hartford Food System (HFS) launched a Healthy Food Retailer Initiative to encourage neighborhood stores to improve their shelf space devoted to healthier food options. Initially six corner store owners took the pledge to commit 5% of their shelf space occupied by junk food and soft drinks to healthier food items. In addition, each store also agreed to stock a few healthier food options such as low-fat milk and whole wheat bread. To re-qualify each year as a Healthy Food Retailer, each store must again shift 5% of their junk food inventory to healthier food items to reduce the amount of junk food dominating shelves on small corner stores in Hartford.

Benefits to Store Owners

In return for their pledge, the HFS offers support to the stores by directing them to wholesalers who can provide the volume of healthier food options that small stores can manage. In addition, HFS partnered with the merchant's association and the city to publicly recognize stores who committed to providing shelf space for healthier foods. Participating stores receive a door sticker informing customers about their commitment to provide healthier food items. HF also worked with area residents to determine what foods they would be most likely to purchase at local neighborhood stores.

Impact

Since its inception, 25 corner stores have pledged to provide more shelf space to healthier foods. HFS found that many owners were motivated by the same concerns about health and nutrition as their customers. Some owners themselves suffered from diet-related health conditions and were particularly interested in learning ways to improve the healthier options in their stores.

Healthy Food Retailers in Hartford's Neighborhoods.
Strategies that Work. Real Solutions to Community Food Problems. February 2007.

Indicator: Community Gardens

Community gardens are small plots in both urban and rural areas, allocated for use by the public. In addition to providing space for people to grow nutritious food, community gardens are credited with improving quality of life by stimulating social interaction, beautifying neighborhoods, and creating opportunities for recreation, exercise, therapy, and education (American Community Gardening Association, 2008).

Despite the growing popularity and perceived benefits of community gardening, site permanency remains a major issue in community garden acquisition. In 1996, only 5.3% of community gardens in the U.S. were either in private ownership or in a land trust.

Over the past 25 years, community gardens have become vehicles for local economic development projects and localizing food sources in many urban neighborhoods. Emerging trends show a rise in training programs for at-risk youth and adults in horticulture, direct marketing, and landscaping. From 1992 -1996, there was a 30% increase in the number of Community Gardens nationwide (ACGA, National Community Gardening Survey, 1998).

According to The Vancouver-Clark Parks and Recreation Department (VCPRD) Comprehensive Parks, Recreation, and Open Space Plan 2006, VCPRD aims to collaborate with community partners in health and education to provide additional community gardens in urban areas where community gardening is determined to be the most appropriate use of vacant public land (Clark County Community Garden Map can be found in Appendix Gvii).

Findings:

According to VCPRD, Community Parks provide the necessary amenities to accommodate a Community Garden. Typically, Community Parks are anywhere from 20 -100 acres in size, providing ample space for amenities, including potable water facilities, parking, maintenance and storage space.

In a community survey conducted by VCPRD, 75% of respondents supported expanding community vegetable and flower gardens.

The VCPRD conducted a Community Survey collecting data on current park, recreation, and open space use by residents of Clark County. The survey also gathered input on park and recreation needs, preferences, and priorities. The results demonstrated a high level of community interest in community gardens.

- Currently, there are four community gardens in Clark County. Marshall Community Garden, at Marshall Community Park, is the only garden managed and operated by VCPRD (Appendix J).
- The other three gardens in Clark County are operated by a private non-profit, a church, and a school group.
- Typically there is a higher demand for plots than space allows.

During the 2006 and 2007 growing seasons, approximately 250 residents used 200 plots in Clark County Community Gardens.

Clark County Case Study: Neighborhood Food Access in Fruit Valley and Vancouver Heights

Only 1% of Fruit Valley residents are within ½ mile of a full service grocery store compared to 53% of Vancouver Heights residents.
(Regional Equity Atlas, 2007)

To better understand food access issues among neighborhoods with different demographic characteristics, the *Steps* Initiative launched a food survey in Spring 2008 in the Fruit Valley and Vancouver Heights neighborhoods of Vancouver, Washington. These neighborhoods were selected based on their level of access to full service grocery stores as reported in the Coalition for a Livable Future's *Regional Equity Atlas* 2007 report. Fruit Valley was reported to have "poor" access to a full service grocery store, where "access" is a function of population density and distance to a full service store. Only 1% of Fruit Valley residents are within ½ mile of a full service store. Vancouver Heights' had "moderate" access with 53% of its residents within ½ mile distance of a full service grocery store (see Full Service Grocery Store Access Map in Appendix Gvi). The *Regional Equity Atlas* report also indicated that both neighborhoods have generally good access to public transit, over 70% of neighborhood residents from both Fruit Valley and Vancouver Heights are within ¼ mile of a bus stop.

The Neighborhood Food survey was adapted from a Washington *Steps* partner, E.A.T.S Group, in Wenatchee, Washington. Survey questions were categorized into three broad food access themes:

1. Self-reliance on Food Production & Preparation
2. Food Access & Equity
3. Readiness to Buy Local

Food surveys were delivered to over 3,500 households in both neighborhoods and returned surveys were mailed to Clark County Public Health in a provided pre-paid envelope. Paper surveys were also available at selected drop box site locations in each neighborhood in English, Spanish and Russian in an attempt to reach ethnic and minority groups who may frequent social service and health care clinics.

Neighborhood Profiles

Fruit Valley. Fruit Valley is situated in a light residential and industrial zoned section of western Vancouver. It is one of the largest neighborhoods by land mass in Vancouver, Washington (see Fruit Valley Neighborhood Map page 30). It is separated from the rest of Vancouver by the Burlington Northern & Santa Fe railroad tracks network on the eastern border. Agriculture continues to maintain a presence within the neighborhood with Firestone Farms Orchards and Andersen Dairy farm. There is one farm stand and community garden located in the neighborhood. The median household income level is $25,185 and 36.3% of its 2,000 residents live in poverty. There are two convenience stores in Fruit Valley offering few nutritional foods, limited fruits and vegetables, and no low-fat milk options. C-Tran bus routes connect Fruit Valley north to south, but do not provide east to west connection to proximal grocery stores. Many residents must make multiple bus transfers to access a full service grocery store.

Clark County Case Study: Neighborhood Food Access in Fruit Valley and Vancouver Heights

Vancouver Heights. Vancouver Heights is a centralized neighborhood in Vancouver (see Vancouver Heights Neighborhood Map page 31). It is surrounded by two major arterial roads, Mill Plain Blvd to the north and Macarthur Blvd to the south. Median household income in Vancouver Heights is $41,134 and 13% of residents live in poverty. There is a food pantry and six small or convenience stores and one full-service grocery store (located on the western end of the neighborhood). Bus routes provide adequate coverage to food retail stores, with the exception of the eastern most section of the neighborhood.

Limitations

There are limitations to the Fruit Valley and Vancouver Heights neighborhood food survey. Because the survey was a convenience sampling of residents, the observed results are not representative of either neighborhood. The response rate among Fruit Valley residents was much lower than Vancouver Heights; and therefore, caution should be used when examining results from Fruit Valley. Nonetheless, the results do provide insight into factors affecting food choices among survey respondents.

Findings:

Reported Neighborhood Demographics

Fruit Valley. Fifty three Fruit Valley residents responded to the neighborhood food survey, a response rate of 3%. The majority of respondents were between ages 25 and 44 and had incomes of less than $25,000. Neighborhood Food Survey results for Fruit Valley can be found in Appendix H.

Vancouver Heights. There were 304 Vancouver Heights residents who responded to the neighborhood food survey, a response rate of 18%. The majority of respondents were between ages 45 and 64 and had incomes between $25,000 to $59,999. Neighborhood Food Survey results for Vancouver Heights can be found in Appendix I.

1. Self-reliance on Food Production and Preparation

To determine how self-reliant Fruit Valley and Vancouver Heights residents are at preparing and producing their own food, survey participants were asked a variety of questions about how often they grow, prepare, and preserve food at home. In general, respondents from both neighborhoods cook at home most days of the week (5 to 7 days). Eighty seven percent of Fruit Valley respondents prepare food at home compared to 79% of Vancouver Heights respondents. Respondents from both neighborhoods also grow herbs, blueberries, sun flowers, and other edible plants. Community gardens can be a place where people experiment with growing techniques, share ideas with neighbors, and learn about the healthful benefits of fresh local foods. Only 8% of Fruit Valley respondents and 1% of Vancouver Heights respondents use a community garden.

About 1/3 of Fruits Valley and 1/2 of Vancouver Heights respondents grow their own vegetables.

In both neighborhoods, some respondents preserve their own food or would take classes to learn how to grow, cook, or preserve food. Roughly 60% of Fruit Valley and Vancouver Heights responded that they sometimes preserve seasonal food by canning, freezing or drying. Of those Fruit Valley respondents who do not preserve their own food, 54% reported that they would take food preservation classes, while only 25% of Vancouver Heights residents reported they would take classes if offered.

Clark County Case Study: Neighborhood Food Access in Fruit Valley and Vancouver Heights

2. Food Access & Equity

To better understand where Fruit Valley and Vancouver Heights residents shop for food, participants were asked questions about where they buy food, how much money they have for food and whether transportation options were a factor when they buy food.

Food Outlets. Similarly, Fruit Valley and Vancouver Heights respondents shop at large grocery stores or food discount stores most of the time. They buy food from farmers' markets, produce stands, or fast food some of the time. The most notable difference in where respondents buy food was observed among mini-marts. Twenty one percent of Fruit Valley and 7% of Vancouver Heights respondents reported shopping at Mini-marts for food. For both neighborhoods, food choice selection was the most important consideration when they bought food over price, proximity to home and worksite.

21% Fruit Valley and 7% of Vancouver Heights respondents buy food at a Mini-mart or gas station sometimes or often.

Food Insecurity. In general, Fruit Valley respondents experienced greater food insecurity than Vancouver Heights respondents. They were more likely to report having less money to spend on food, use government food assistance programs in the past year, and 19% reported their children go to bed hungry sometimes or often. Thirty nine percent of Fruit Valley respondents did not have enough money sometimes or often to buy food compared to 16% of Vancouver Heights respondents. Similarly, 25% of Fruit Valley and 10% of Vancouver Heights respondents used food stamps in the past year. In addition, Fruit Valley respondents were more likely to use food banks, family or friends and soup kitchens for food sources than Vancouver Heights respondents.

Fruit Valley respondents were more likely to use emergency food sources such as food banks and soup kitchens than Vancouver Heights respondents.

For both Fruit Valley and Vancouver Heights respondents, selection of food was the most important consideration when they bought food over price and proximity to home.

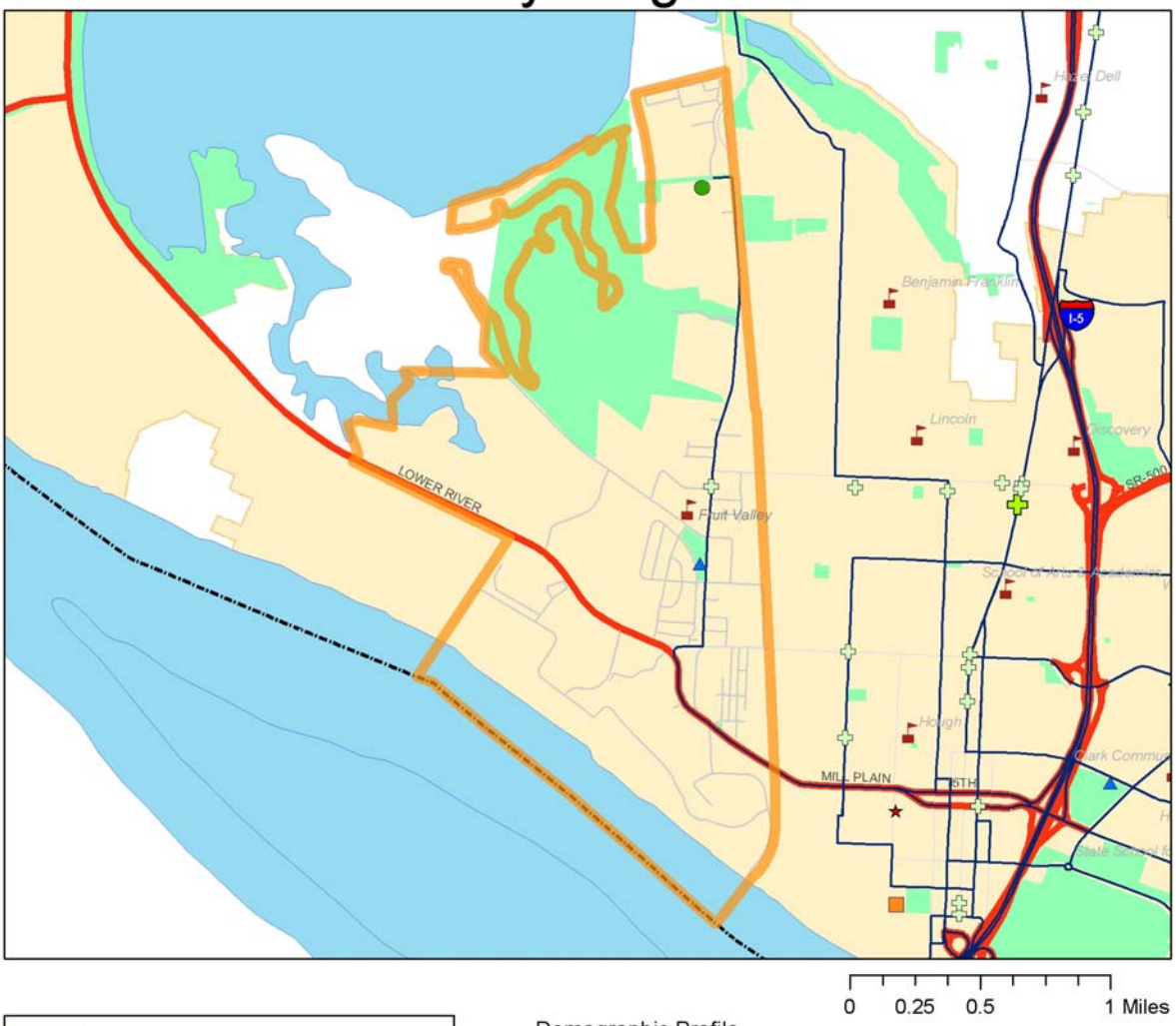
Transportation Factors. Most respondents use a car to get to where they buy food. Very few use alternative transportation options. Fifteen percent of Fruit Valley and 5% of Vancouver Heights respondents reported using other alternative transportation (walk, bike, or transit) to where they most often buy food. Thirty one percent of Fruit Valley and 13% Vancouver Heights respondents reported that being near a bus stop was an important factor when they buy food. However, 24% of Fruit Valley respondents report transportation being a problem when they buy food. Nonetheless, transportation barriers had little impact on where people often shopped for food. This was observed for both Fruit Valley and Vancouver Heights except for farmers' markets and produce stands. Fruit Valley respondents who reported transportation problems as a barrier to buying food rarely or never shopped at farmers' markets or produce stands.

Clark County Case Study: Neighborhood Food Access in Fruit Valley and Vancouver Heights

3. Readiness to Buy Local

Many Fruit Valley (76%) and Vancouver Heights (81%) respondents reported buying food grown in Clark County. The most common local food purchases reported were fruits and vegetables followed by meat or poultry, eggs and dairy. However, 21% of Fruit Valley and 14% of Vancouver Heights residents were not sure if they bought locally grown foods. Similarly, 64% of Fruit Valley respondents and 47% of Vancouver Heights respondents who did not buy locally grown food reported they did not because they did not know where to get it. Respondents from both neighborhoods supported schools, hospital systems and restaurants offering locally grown food options. Only 6% of Fruit Valley and 1% of Vancouver Heights respondents indicated they currently participate in community supported agriculture; however, 35% of Fruit Valley and 16% of Vancouver Heights respondents would like to. Despite reported interest, about 33% of Fruit Valley and 29% of Vancouver Heights respondents were unaware of what community supported agriculture is.

Clark County Food Atlas
Fruit Valley Neighborhood



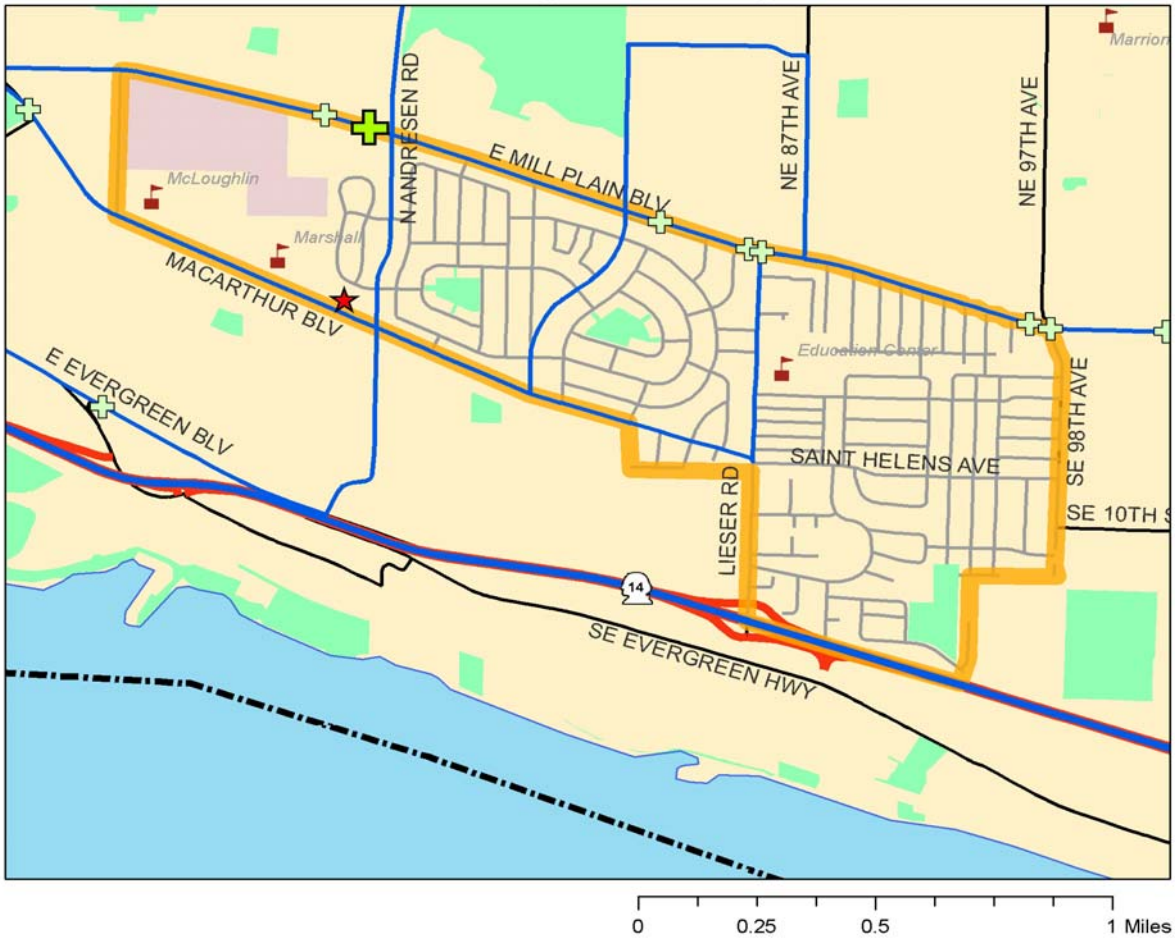
- Fruit Valley
- Full Service Grocery Stores
- Small Grocery / Convenience Stores
- Community Garden
- Fruit & Vegetable Stand
- Farmer's Market
- Food Pantry
- Bus Route
- Park Land
- Public School

Demographic Profile
Population: 1,940
Median age: 31.6
Median household income: $25,185
People in Poverty: 36.3%
White: 81.3% People of Color: 18.7%
English: 79% Other: 21%

Access to Services
Full-service grocery store access = poor
1% pop. within 1/2 mile of full-service grocery
73% pop. within 1/4 mile of bus stop

Prepared by Clark County Public Health, 2008

Clark County Food Atlas
Vancouver Heights Neighborhood



- Vancouver Heights Boundary
- Full Service Grocery Store
- Small Grocery / Convenience Stores
- Food Pantry
- Bus Route
- Parks
- Public School
- Cemetery

Demographic Profile
Population: 4,460
Median age: 37.5
Median household income: $41,134
People in Poverty: 13%
White: 83% People of Color: 17%
English: 79% Other: 21%

Access to Services
Full-service grocery store access = moderate
53% pop. within 1/2 mile of full-service grocery
77% pop. within 1/4 mile of bus stop

Prepared by Clark County Public Health, 2008

Section III: Institutional Access to Healthy Food
Indicator: Menu Labeling

American adults and children consume on average 1/3 of their calories from eating out.

(Center for Science in the Public Interest, 2008)

In many places across the country, menu labeling resolutions have been introduced that would require fast-food and chain restaurants to list more complete nutrition information (such as calorie counts) on point of purchase prompts such as menus and menu boards. Mandates have been passed in New York City, Seattle and San Francisco. Menu labeling, clearly displayed at the point of decision, can help consumers make more informed choices when they eat away from home and is a potential strategy for reducing obesity and other chronic diseases.

78% of adults nation-wide agree that fast-food and other chain restaurants should list nutritional information such as calories, fat, sugar or salt content on menu and menu boards.

(Caravon Opinion Research Corp., 2008)

To quantify the potential impact of menu labeling on the obesity epidemic and other chronic diseases, the Los Angeles County Public Health, Division of Chronic Disease & Injury Prevention, conducted a health impact assessment on menu labeling. By using conservative assumptions that menu labeling would result in 10% of large chain restaurant patrons ordering reduced calorie meals with an average reduction of 100 calories per meal, researches estimated that 40% of the average annual weight gain among the population age 5 years and older in Los Angeles County would be averted.

In 2007, the King County Board of Health passed a menu labeling regulation to require chain restaurants with 15 or more national locations to display calorie information on standard items offered every day somewhere near points of purchase prompts (such as menus and menu boards) by January 2009 and to eliminate artificial trans fat in all King County restaurants by February 2009 (Public Health Seattle and King County, 2008). The Washington Restaurant Association supports a similar initiative for all restaurants with more than 25 national locations operating under the same trade name.

Findings:

Nine percent of surveyed chain restaurant provided nutritional information on site.

In 2007, a survey was conducted to determine the level of nutrition information in 56 chain restaurants with 10 or more establishments nationwide in Clark County. Oregon Health & Science University dietetic interns, working with The Holland, Inc., conducted phone and website surveys. The results are as follows:

- Sixty-six percent of surveyed chain restaurants had limited or full nutritional information available on their website.
- Seven percent of chain restaurants identified healthy options on restaurant menus.
- Nine percent of surveyed chain restaurants were trans fat free.
- Eleven percent of surveyed chain restaurants use cooking oils containing trans fats.

The survey did not find trans fat use information in 80% of chain restaurants surveyed.

Indicator: Clark County Correctional Facilities (CCCF) Food Procurement Contract

For convenience and cost, many public sector institutions (schools, county governments, and hospitals) purchase food through national food distributors. Much of this food is processed and prepared by food service companies, requiring little preparation and limited kitchen facilities. Public Sector Food Procurement Contracts can support a local food economy and offer fresh, healthy food by pursuing local producer contracts or partial-bid contracts that ease the transaction between food service buyers and local producers.

Findings:

CCCF, Southwest Washington Medical Center, and the Drug and Rehabilitation Center are all purveyors of food distributors that provide locally sourced food options. For example, CCCF uses local, regional, and national vendors (see Appendix K). This section focuses on CCCF only.

Currently, CCCF maintains a bid specification for their food procurement contracts (see Appendix L). This application attempts to promote Food Alliance[4] certified products in the bid process; however, it is not a requirement of vendors to provide a certified alternative in their bid application. In addition, the percentage of vendors offering alternative Food Alliance certified bid options in their contract application is largely unknown (March 2008).

- No food procurement dollars have been spent on Food Alliance certified products according to CCCF (Clark County Procurement Department, March 2008).

According to the CCCF bid specification, no partial bids are allowed and bids are awarded to the overall lowest responsible bidder. Partial bids would give local producers and purveyors some flexibility to adapt to seasonal food availability and unforeseen circumstances affecting product availability.

CCCF reports three constraints to pursuing a supply network that includes local food producers:

- Cost and Volume - Limited food budgets require food service staff to maximize food purchases, local foods often cost more than products available through contract food service companies who can provide a lower cost per unit.

- Seasonality – lack of availability of fresh farm products throughout the year puts local producers at a disadvantage.

- Food Safety & Nutrition Standards – Purchasing local products require food service staff to have the knowledge to properly store, prepare fresh products and meet mandated portion requirements.

[4] Food Alliance is the most comprehensive third-party certification program in North America for sustainably produced food. For more information on the Food Alliance please see "Third Party Certification" in Chapter 3 of this report.

Communities at Work: Local Farms, Healthy Kids
Washington State

Across the country, farm-to-school programs have become one of the most innovative strategies for making it easier for schools to offer locally grown nutritious food while providing reliable markets for local farmers.

In response to this national movement, Washington State passed the Local Farms, Healthy Kids bill in March 2008 to implement better food choices in schools. In particular, this program creates the opportunity to improve nutritious food access for low-income school children by getting more fruits and vegetables into school snacks and lunchrooms. Local Farms, Healthy Kids aims to ease purchasing restrictions that currently make it difficult for schools and institutions to buy from local farms by establishing a state farm-to-school program. Farm-to-school programs help connect schools with community farmers and provide technical assistance to school districts, food service staff and farmers.

Spotlight On …Olympia School District
Olympia, Washington

Connect with Local Farmers
Olympia School District began its farm-to-school program five years ago after parents at Lincoln Elementary helped organize an organic salad bar by making connections with local farmers. The organic salad bar model is now offered in all of Olympia's 18 schools. Each cafeteria across the district offers a hot lunch and salad bar loaded with protein sources, organic produce and greens from local farmers.

Establishing relationships with local farmers has provided a market for surplus and safety net for Olympia area farmers. Olympia's Food Service Director regularly buys local greens, carrots, winter squash, potatoes, onions and seasonal fruit from local farmers and a few farmers are now planting specifically for Olympia schools. The Olympia School District currently supplies 70% of school meals with organic produce, of which 7% comes from local farms.

Food Service Innovation
Olympia Food Service staff use creative ways to satisfy state bidding rules and offset the cost of purchasing more expensive produce from smaller producers. Annual produce costs rose by $20,000 after the organic salad bar was introduced. To balance this out, desserts and pizza contracts were terminated, as well as, a plastic "spork" contract.

"Olympia district's farm-to-school program a role model". *Seattle Post Intelligencer*. October 15, 2007.
www.farmtoschool.org Washington Profile

Chapter 2: Further Considerations
Food Access: Social & Economic, Physical and Institutional

This section provides examples of possible conversations and strategies for the Clark County Food System Council to consider as it develops future work plans to increase and preserve access to safe, local and healthy food for all residents of Clark County.

Community Conversations

1. How can the Food System Council support community initiatives that increase healthy options in emergency food boxes?

2. How can the Food System Council support social service agencies to improve food stamp participation among the eligible population?

3. How can the Food System Council promote pilot projects to improve access to farm stands, farmers' markets, and food retail outlets?

4. How can the Food System Council encourage private and public agencies to institutionalize access to locally-grown foods through local food procurement contracts or collaboratives?

5. What opportunities exist for the Food System Council to support the expansion of urban agriculture and community gardening capacity?

6. How can the Food System Council support public transportation infrastructure that enhances access to healthy foods?

Community Opportunities

The Clark County Food System Council could:

1. Advocate for gleaning and food recovery programs to supplement emergency food boxes.

2. Support state and local programs that incentivize nutrition assistance programs.

3. Advocate for funding for county projects such as the Electronic Benefit Transfer Food Stamp program at farmers' markets.

4. Convene food system stakeholder forums on potential benefits and challenges of local food procurement.

5. Support Vancouver-Clark Parks and Recreation Department with acquisition of land suitable for community gardens.

6. Advocate for policies or system changes that provide public or private transportation options to improve access to healthy food retail outlets.

More Local Data Needed

1. Donations of locally produced foods, particularly fruits and vegetables
2. Food stamp recipient survey
3. Farmers' market capacity for food stamp and Farmers Market Nutrition Programs, zoning criteria for full service grocery store
4. Food procurement contract language and partial-bid information
5. Urban land inventory suitable for community gardens
6. C-Tran ridership data, criteria for route selection

Chapter 3: Farm & Agriculture Profile

Since the mid-1990s, Washington State agriculture has faced numerous changes and challenges. The global restructuring of the food system to vertically integrated systems has put regional food producers and processors at a significant disadvantage. This is particularly true for small scale producers, who are unable to provide the volume of production and supply to compete in the vertically integrated system. In addition, competing demand for land, water, and other natural resources has contributed to higher costs for production inputs, and consequently, a decline in the number and size of Washington farms over the past 30 years (WSDA, 2008).

The impact of changes in the global marketplace has been hardest on Eastern Washington, the "Bread Basket" of Washington State. Larger commercial farms dominate the landscape with wheat and grain crops and dryer lands limit the variety of crops grown. Eastern Washington experiences higher levels of wind and rill erosion than Western Washington. Conditions in Western Washington are more suitable for diverse crop production; farms tend to be smaller and in family or individual ownership. Silt loams provide prime farming soils. These circumstances make it difficult to compare Clark County agriculture to Washington State as a whole (WSDA, 2008).

For this chapter, three urbanizing Western Washington counties (Pierce, Snohomish, and Thurston) were chosen as a composite comparison group. These counties will serve as the Western Washington peer (WWP) counties, and all figures in this section are expressed as averages unless otherwise indicated. Data from the U.S. Census of Agriculture, unless otherwise stated, was selected to describe the agricultural trends in Clark County, WWP counties, and Washington State.

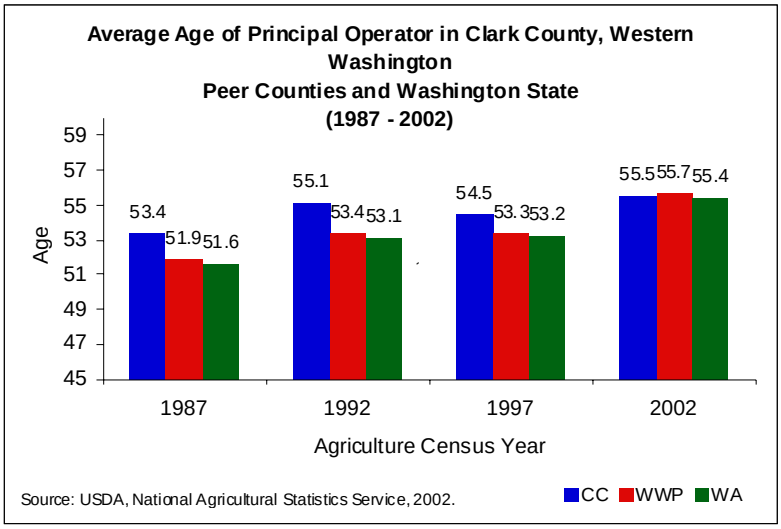
The U.S. Census of Agriculture is one of the few long term farm tracking systems that conducts a survey every five years measuring numerous agriculture indicators including farm ownership and management, financial conditions, crop and livestock production, among others. When reviewing this section, it is important to note that the U.S. Census of Agriculture defines a farm if the respondent self reports an annual farm income of $1,000 or more. The extent to which the U.S. Census of Agriculture methodologies capture current agricultural trends is often disputed. In special studies, it has been suggested that newer small scale farm enterprises have yet to be represented in the U.S. Census of Agriculture aggregated data (Globalwise Inc., 2007). Nonetheless, it is routinely collected data that, to some extent, describes emerging trends in the agriculture sector. This section describes selected agriculture indicators from farm operator characteristics, water & land availability, and crop & livestock varieties, among others in Clark County, WWP counties and Washington State.

Section I: Profile of Clark County Farmers
Indicator: Age of Principal Operator

A number of farm operators may work on a farm, but the principal operator is defined as the person primarily responsible for the on-site day-to-day operation of the farm or ranch business. For example, a hired business manager, tenant, renter, or a member of the owner's household may be the principal operator. The principal operator is not necessarily the land or farm owner. On a national level the average age of principal operators has been more than 50 years of age since the mid-1970s and has increased by one or more years from one census to the next. Similarly, principal operators over the age of 65 have increased from one in six to more than one in four while principal operators younger than 35 years old have been declining and currently represent about 6% of principal operators nation-wide (USDA, NASS, 2002).

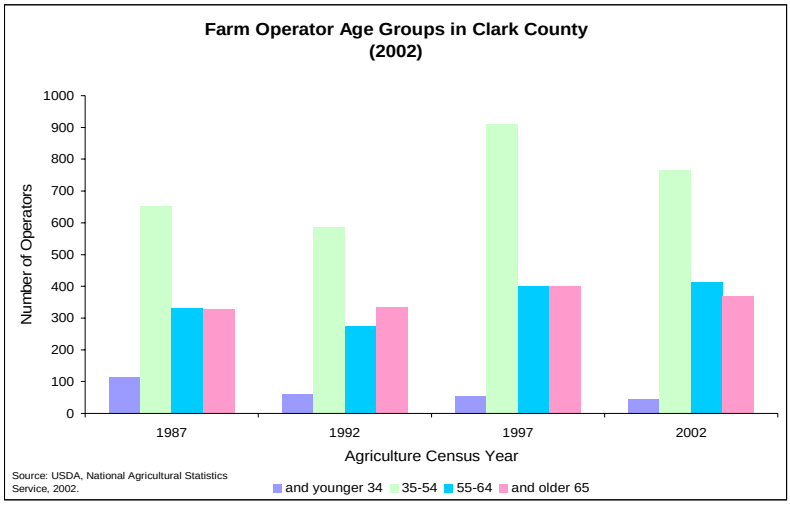
Findings:

- The average age of all U.S. principal operators in 2002 was 55.3 years. Clark County, WWP counties and the Washington State average age closely matched national trends. (U.S. Census, 2002)



- From 1987 to 1997, Clark County principal operators were slightly older than principal operators in the WWP counties and Washington State.

From 1987 to 2002, the number of Clark County principal operators younger than 34 years old declined 60% from 116 operators to 46 operators.



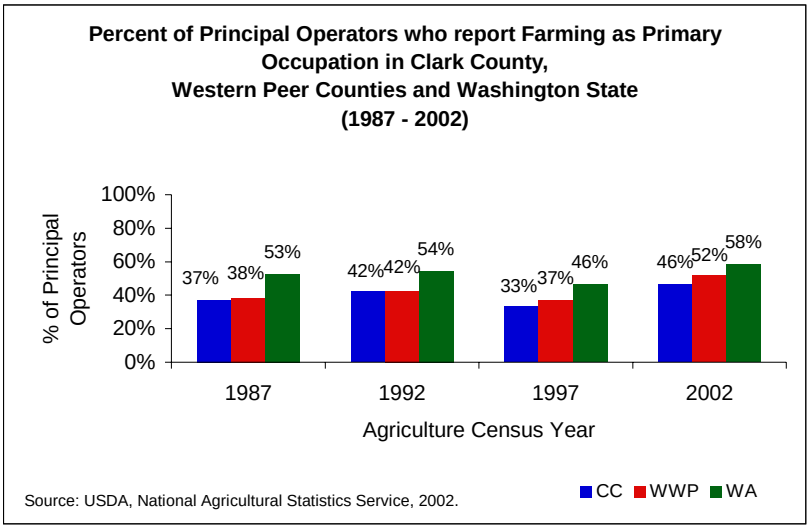
- In 2002, 49% of farms were operated by principal operators 55 and over; and similarly operators ages 35 to 44 operated 48% of all farms. Operators younger than 34 years operated less than 3% of farms in Clark County.

- Trends indicate that principal operators in Clark County are getting older and retiring at a faster rate than younger principal operators are entering farming.

Indicator: Farm Occupation

Farming is determined a primary occupation if the principal operator reports spending 50 percent or more of his/her work time in farming or ranching. Off-farm work reduces the likelihood of a farm household being categorized as lower income. For many agricultural households, off-farm work helps stabilize household economic well-being. Variation in farm income due to fluctuation in market prices, pest infestations, weather, and other factors is a common challenge (Amber Waves, 2008). The proportion of principal operators claiming farming or ranching as their primary occupation in 2002 increased significantly from 1997. The National Agricultural Statistics Service reports that a survey design change may account for this significant increase. The definition of primary occupation was not printed on the 2002 report form. Some respondents may have indicated that they were farm or ranch operators without the knowledge that it meant they were reporting their primary occupation. Changes in the average age of the farm operator tend to support the increase in the farming occupation proportion. When compared to 1997, the average age of farmers increased significantly in 2002. Older principal operators may be "retired" with little if any sales and still report farming as their primary occupation since they often have limited opportunity for off-farm jobs (USDA, NASS, 2002).

Findings:



Fifty-four percent of principal operators in Clark County worked off-farm jobs to supplement farm income in 2002.

- In 2002, Clark County had fewer principal operators (46%) who farmed full-time compared to the WWP counties (52%) and Washington State (58%).
- From 1997 to 2002, the percent of principal operators who reported farming as a primary occupation rose by 13%. This was similar to trends in WWP counties and Washington State.

Indicator: Farm Education

Crucial to the success of the farm economy is the intergenerational transfer of sound farm practices and business management. Fewer new farmers entering into farming pose many challenges to the future of farming and the protection of land, resources, and sustainable agriculture production methods. Two farm education programs serve as examples of opportunities for existing and emerging farmers to acquire practical business models and to re-introduce younger generations to growing food and the associated health benefits.

Agricultural Entrepreneurship and Business Planning Class (AGEB). Washington State University (WSU) Clark County Extension's Small Farm Promotion & Outreach Program links small scale farmers to consumers through outreach events, workshops and area conferences. The Extension also provides seminars to train farmers on a variety of production and marketing techniques. In 2008, WSU Clark County Extension Small Acreage Program offered the Agricultural Entrepreneurship and Business Planning Class (AGEB). The AGEB aims to equip new and emerging farmers with skills necessary to run a successful small business with innovative agricultural practices. The class is based on the "Cultivating Success" curriculum developed by Washington State University and the University of Idaho. The curriculum was developed in response to a growing interest in small acreage farming and experiential education opportunities. Enrolled students are eligible to earn WSU class credits.

Findings:

Currently, the AGEB is the only farm business class offered in Clark County. It covers farm business planning and research, legal and management issues, marketing strategies and other business development skills. Participants must produce a business plan by the completion of the course. Courses are available to students, farmers, and community members. The following are highlights from the 2008 class:

- Twenty-nine students graduated owning 20 farms (approximately 263 acres) with draft business plans.
- Ten of the 20 farms currently run a business.
- 38% of the farms have livestock (goats, alpacas, horses, cows, pigs, and poultry).
- Many farmers grow fruits and vegetables – to sell off-farm or at farmers markets.
- Five of the 29 students applied for CEUs (Continuing Education Units).

School Garden Enhanced Nutrition Program (SGENP). In addition to the AGEB, the WSU Clark County Extension also provides a program to encourage young people to learn where their food comes from. The WSU Clark County Extension Food $ense program primarily provides nutrition education curriculum for students and families in the Evergreen School District. The Food $ense program teaches children and parents how to meet the federal nutrition guidelines and select nutritious foods on limited budgets.

Food $ense parents report that children show an increased knowledge of nutrition labels when grocery shopping and preparing meals at home.

Recently, Food $ense has partnered with the School Garden Program (SGP) from Clark County Solid Waste to create a model framework for promoting nutrition and garden education in Clark County public schools. Together these programs have created the School Garden Enhanced Nutrition Program (SGENP). The SGENP provides students with a foundational knowledge of plant science

and physiology, environmental stewardship, nutrition education and the necessary physical enhancements for outdoor environmental education, such as demonstration gardens. School staff are encouraged to integrate curriculum into health, fitness, math, science, and language arts. SGENP creates opportunities for children to discover fresh food, healthier food options, and learn about both organic and conventional growing methods. The SGENP ensures that children have the opportunity to learn where their food comes from, how it's grown, and its nutritional value. It is one example of how children are learning the importance of farming for the social, cultural, and economic health of a community.

Together the Food $ense and School Garden Program have established School Garden Enhanced Nutrition Programs in three Clark County public schools reaching over 1,300 students.

In the Vancouver School District, Fruit Valley and Hazel Dell Elementary Schools each have demonstration gardens with food producing raised beds, vermicomposting, fruit trees and flower gardens. Students are able to taste-test food from the garden in the classroom and utilize out-door learning sites for class lectures and hands-on learning. Classes are offered during normal school hours and as after-school activities.

- In 2007, the SGENP reached over 1,300 Fruit Valley and Hazel Dell children and 200 adults.
- Image Elementary School has garden design plans to install food producing raised beds during the 2008-2009 school year. In 2007, the SGENP reached 25 Image students.

Communities at Work: Fruit Valley Elementary School Garden
Vancouver, Washington

In 2007, with the help of school leadership and the Fruit Valley Elementary School Garden students were provided with the opportunity to learn gardening skills and develop nutritional knowledge to help them make healthier food choices. Dedicated school leaders and garden and nutrition coordinators organized work parties, installed raised beds and helped students transplant squash, peas, native rose bushes, and salmonberry. Their effort and commitment has helped sustain garden and nutrition education activities with limited funding.

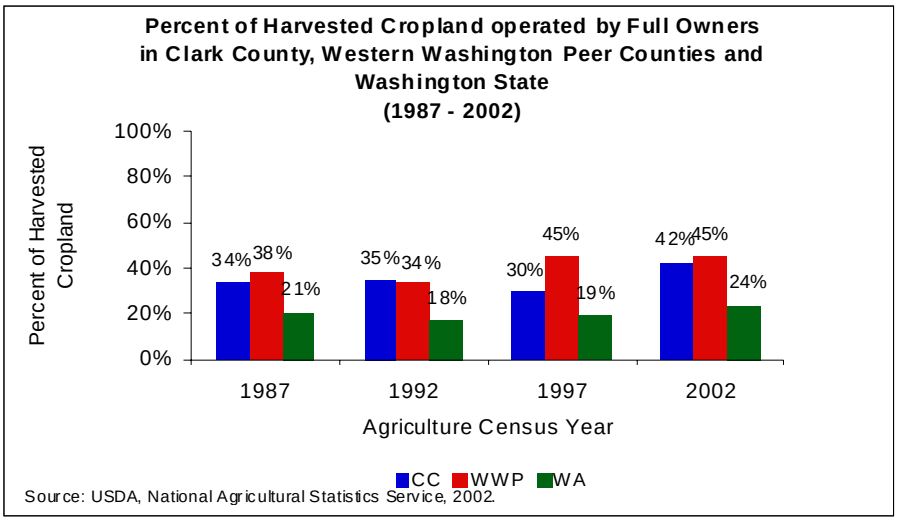
Indicator: Harvested Cropland in Full Ownership

Harvested cropland is land on which all crops are harvested and hay is cut including land in orchards, citrus groves, Christmas trees, vineyards, nurseries and greenhouses. It is one of the strongest indicators of farming trends. Full owners operate only land they own, part owners operate land they own and land they rent from others. Tenants operate only land they rent from others or work on shares for others.

Findings:

- In 2002, about 42% of all harvested cropland was operated by full owners in Clark County while nearly half of all harvested cropland was operated by full owners in the WWP peer counties. Only 24% of harvested cropland was operated by full owners in Washington State.

Over half (58%) of harvested cropland in Clark County was operated by part owners or tenants in 2002.



- Trends in full owners operating on harvested cropland have changed marginally since 1987. However, Clark County full owners operated more harvested cropland in 2002 than in 1997. The amount of harvested cropland operated by full owners changed little if at all among WWP counties and Washington State over the same time period.

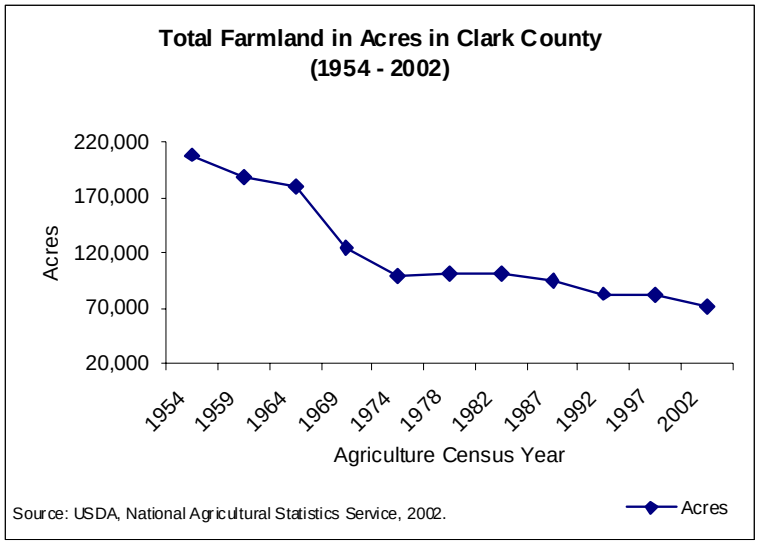
- Most farms in Clark County, WWP counties, and Washington State are owned by families or individuals. In Clark County, over 90% of farms were owned and/or operated by families or individuals (USDA, NASS, 2002).

Section II: Land Base in Clark County
Indicator: Acres in Farm Land & Agriculture Zones

Land in farms consists primarily of agricultural land used for crops, pasture, or grazing. It includes woodland and wasteland not actually under cultivation or used for pasture or grazing, provided it was part of the farm operator's total operation. Agriculture zones are determined by county jurisdiction based on physical land features and parcel size with some consideration for farm use. Land base for farming in Clark County has experienced significant decline over the past 50 years. Population growth, encroaching development and escalating land prices are a few factors that have considerably reduced the land base for Clark County farmers.

Findings:

- There were about 70,000 acres of farm land in Clark County in 2002. This is roughly 30% less than reported in 1978 (100,000 acres) and 66% less than reported in 1954 (208,000 acres) (USDA, NASS, 2002).
- The reported 70,000 acres is about 17% of Clark County's total land base (Clark County Growth Management Plan, 2007).



- According to the 2007 Growth Management Plan, there are approximately 32,500 acres in Agriculture Zones AG – 20[5] (30,200 acres) and AG/WL[6] (2,300 acres) in Clark County.

Total estimated agriculture land in Clark County = 32,500 acres

This total estimation includes the 4217.19 acres of Ag -20 zoned land de-designated and brought into the Urban Growth Area with the adoption of the Clark County Growth Management Plan in 2007 (see Appendix M). However, in 2008, a Western Washington Growth Management Hearings Board found that 2,614.65 acres that were de-designated did not comply with the Washington Growth Management Act.

[5] This designation applies to lands that have a 20 acre minimum parcel size and the growing capacity, productivity, soil composition, and surrounding land use to have long-term significance for agriculture and associated resource production.

[6] This designation applies to areas in the Columbia River lowlands which have the characteristics to support long-term commercial agriculture and are also valuable seasonal wildlife habitat areas. The primary uses in these areas are commercial agriculture, wildlife habitat management and recreation.

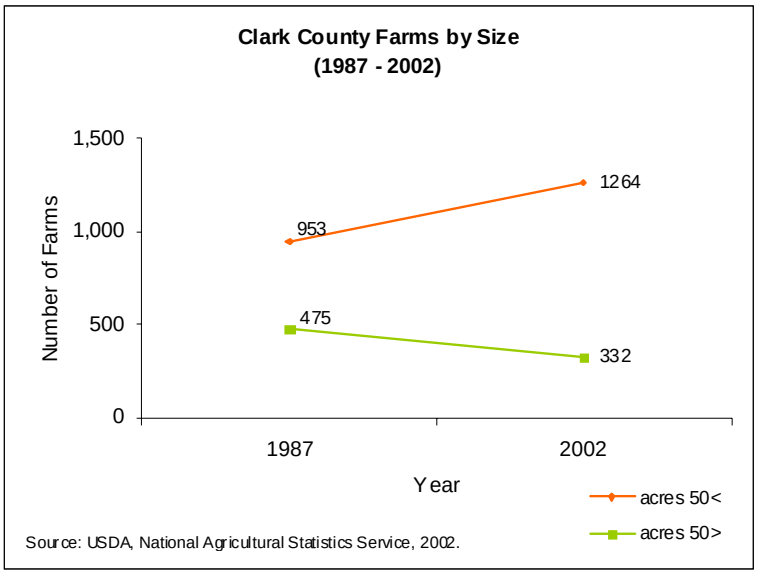
Indicator: Size of Farms

All farms are classified into size groups according to the total land area, including owned and operated as well as land rented from others. For example, land rented to a tenant is considered part of the tenant's farm and not part of the owner's. Clark County is dominated by farms less than 50 acres in size which is also the fastest growing agriculture sector.

	1987			2002			Percent Change 1987-2002		
	Total Farms	Total Acres	Avg. Farm Size	Total Farms	Total Acres	Avg. Farm Size	Total Farms	Total Acres	Avg. Farm Size
CC	1,428	94,646	66	1,596	70,694	44	11.8%	-25.3%	-33.3%
WWP	1,083	65,779	58	1,398	66,760	49	29.0%	1.5%	-15.5%
WA	33,559	16,115,568	480	35,939	15,318,008	426	7.0%	-4.9%	-11.2%

Findings:

- From 1987 to 2002, the number of farms in Clark County increased by roughly 12%. While the average number of farms in the WWP counties increased by almost 30%.
- During the same time period, Clark County lost about 25% of its land in farms while WWP counties gained about 1.5% of farmland.

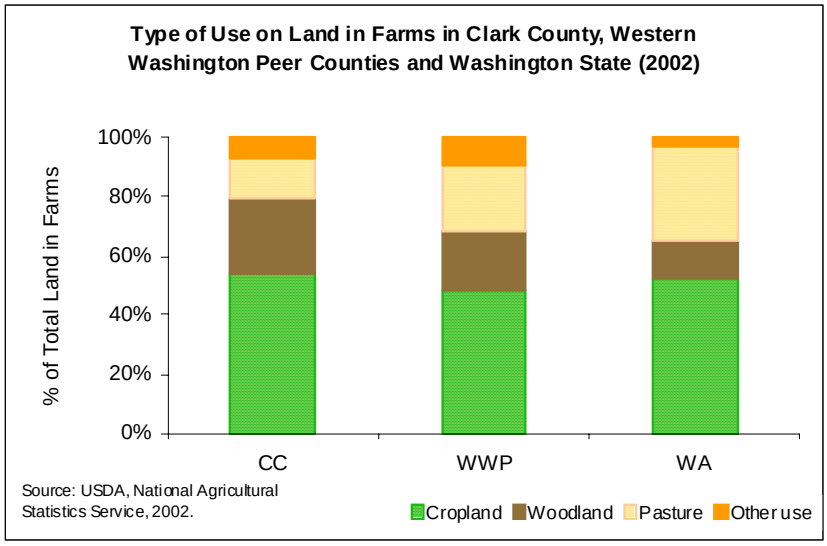


- In 1987, there were twice as many farms less than 50 acres in size than there were greater than 50 acres in Clark County. By 2002, there were nearly four times as many.
- From 1987 to 2002, in Clark County, the number of farms less than 50 acres in size increased 33%, while the number of farms 50 acres or greater decreased 30%.
- During the same time period, in the WWP counties, both farms less than 50 acres in size and greater than 50 acres in size increased approximately 30%.

Indicator: Type of Use on Land in Farms

There are four primary categories that describe the type of land use on farms: cropland, pastureland, woodland, and other lands. Cropland includes land from which crops were harvested and hay was cut, and land used to grow short-rotation woody crops (Christmas trees), land in orchards, citrus, groves, vineyards, nurseries, and greenhouses. This also includes cropland used for pasture or grazing, idle or failed cropland and cover crops. Pastureland or rangeland encompasses all grazable land that does not qualify as cropland pasture. It may be irrigated or dry land. In some areas, it can be a high quality pasture that could be cropped with improvements. In other areas, it is marginally suitable for grazing. Woodlands are described as natural or planted woodlots or forested land with value for wood products. Other lands are typified by barn lots, ponds, and other lands not categorized by cropland, pastureland or woodland (USDA, NASS, 2002).

Findings:



- In 2002, about 50% of land in farms was in cropland in Clark County. This is similar to WWP counties and Washington State.
- About 25% of land in farms was in woodland in Clark County. Similarly 20% of land in farms was in woodlands in the WWP counties while Washington State had 13% in woodlands.
- Approximately 13% of land in farms is in pastureland in Clark County, compared to 22% in the WWP counties and 32% in Washington State.
- Very little land in farms, less than 10% for all three groups, is in land for secondary farm use, i.e. barn lots.

Indicator: Current Use Taxation Program

The Open Space Taxation Act was enacted in 1970, to help protect Washington State land for agriculture purposes. The Acts states: "it is in the best interest of the state to maintain, preserve, conserve, and otherwise continue in existence adequate open space lands for the production of food, fiber, and forest crops and to assure the use and enjoyment of natural resources and scenic beauty for the economic and social well-being of the state and its citizens." Under the

Act, property owners are allowed to have their open space, farm and agricultural, and timber lands valued at their current use rather than at their highest and best use.

Eligible land owners (Appendix N) who would like their land to be considered for Farm and Agriculture designation must provide legal description, a site plan, and IRS Farm Income Schedules for three of the previous five years to the Clark County Department of Assessment and GIS. The application process typically takes one year.

Penalties for Withdrawal from Current Use Taxation Program

Removal of Land from Current Use. If land is removed from current use taxation designation prior to 10 years from the date of classification, a property owner must pay the deferred tax amount accrued over the previous seven years and a 20% penalty of the total amount due, plus interest. The deferred tax amount is the difference between what was paid at the "current use" tax rate and what would have been paid had the property been taxed at the normal "highest and best use" tax rate.

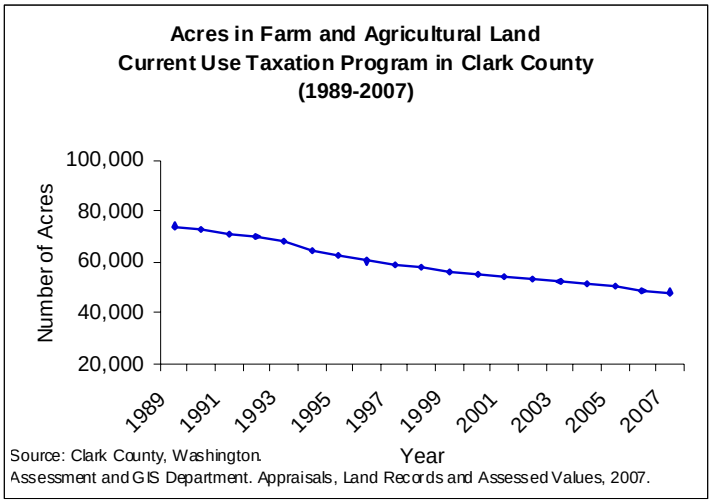
If an owner of land classified under open space taxation gives the State a two year notice that they intend to withdraw their land from open space, the State will waive the 20% penalty. Land must be classified for at least eight years in order to give the two year notice of an owner's intent to withdraw (8 + 2 = 10 classified years). The 20% penalty applies if no notice is given or if land is removed before the first ten years.

Selling Land in Current Use. If the property owner intends to sell the land, the seller must pay the deferred taxes, penalties, and interest on the land unless the buyer signs a Notice of Continuance that demonstrates the buyer's intent to maintain the property in the current use designation. The buyer then assumes the responsibilities required for current use classification.

Findings:

- From 1989 to 2007, designated farm and agricultural land in current use decreased by 35% (74,000 to 48,000 acres).

- Approximately 32% of total farmland in Clark County is not enrolled in the current use program for farm and agriculture classification (USDA, 2002).



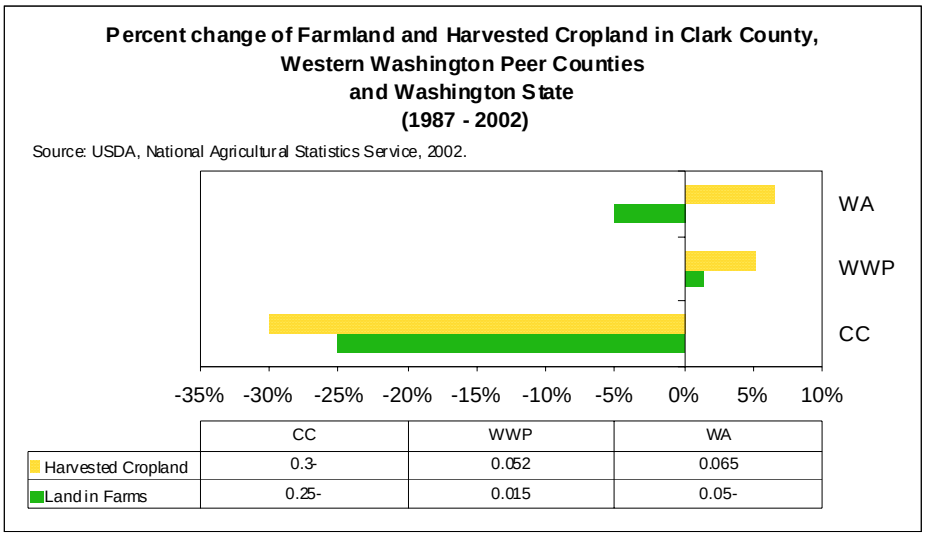
- In 2005, the market value of farm and agriculture land was more than three times the 1989 value (approximately 200 million to 600 million), while current use land experienced a loss in value during the same time period (9%).

- On average, fewer than 12 applications for Farm and Agricultural Land designation applications are received each year.

Indicator: Natural Resource and Crop Land Conversion

Land use patterns in Clark County include heavy urban development in the southern third of the county, rural and agricultural land in the western and central areas, and forest lands in the eastern and northern edges. Much of the better farmland is located along the flood plain on of the Columbia and has been converted to urban uses (Washington State Employment Security Department, 2004).

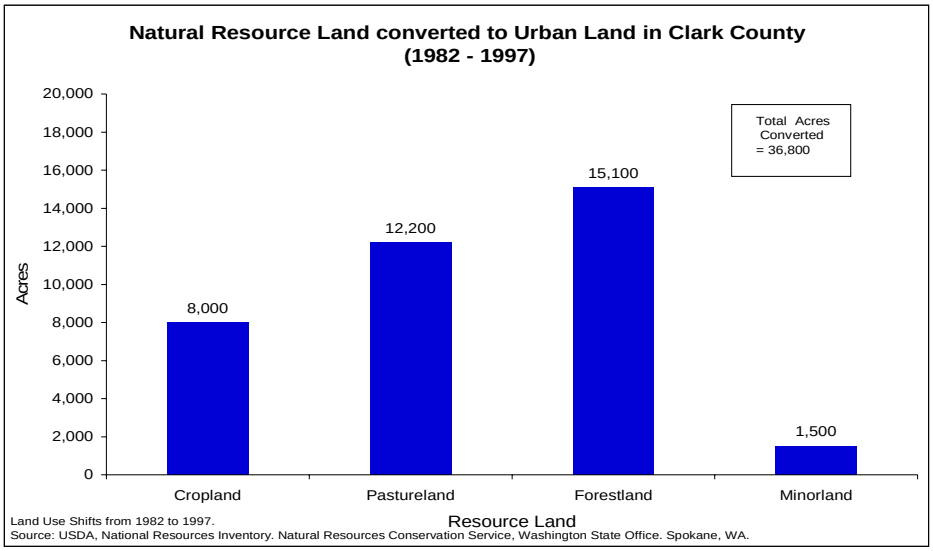
Findings:



	CC	WWP	WA
Harvested Cropland	0.3-	0.052	0.065
Land in Farms	0.25-	0.015	0.05-

- The change in land in farms and harvested cropland in Clark County during the 15 year period were significantly more than in WWP or Washington State.

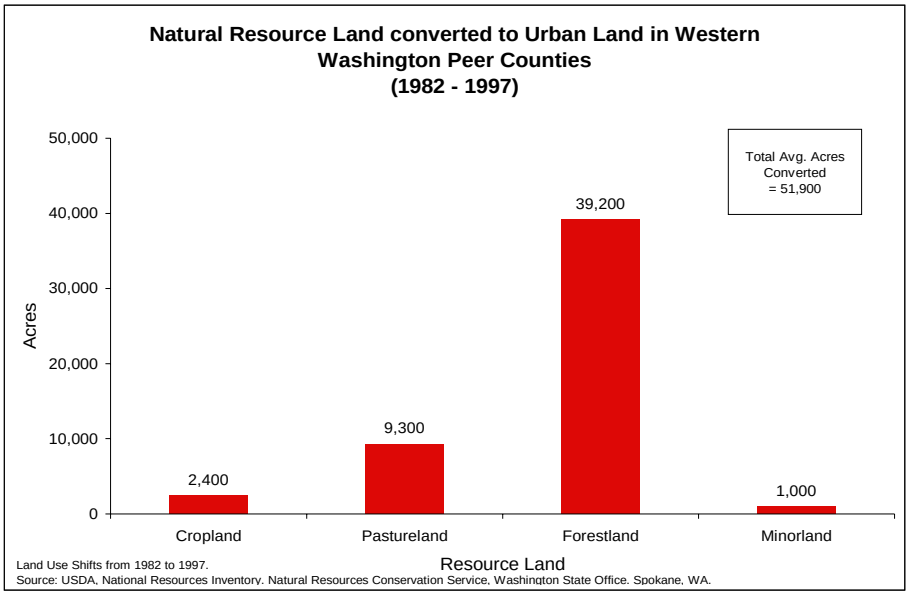
Clark County



From 1982 to 1997, Clark County lost approximately 17,400 acres of cropland to other land uses including urban built-up land. Forty six percent (8,000 acres) was converted to urban land, and similarly 44% was converted to pastureland. The findings below describe natural resource lands converted to urban land uses.

- From 1982 to 1997, a total estimation of 36,800 acres of natural resource land in Clark County was converted to urban land.
- Of the land converted, 40% came from forestland, 30% from pastureland and over 20% came from cropland.
- The remaining 4% was converted from minorlands such as farm structures, marshlands and barrenlands.

WWP Counties



An average of approximately 6,800 acres of cropland in the WWP counties was converted to other land uses from 1982 to 1997. However, the relative loss of cropland to other land uses was 800 acres. The average cropland gained among WWP was 6,000 acres from other land uses (predominately pastureland).

- From 1982 to 1997, approximately 51,900 acres of natural resource land in WWP combined was converted to urban land.
- Of the land converted, 75% came from forestland, 18% came from pastureland and 5% came from cropland.
- The remaining 2% was converted from minorlands such as farm structures, marshlands and barrenlands.

Section III: Agricultural Market in Clark County

Agriculture is a relatively small part of the Clark County economy. In 2006, around 1,600 workers were involved in crop and livestock production, contributing less than one percent to the county's total workforce (Bureau of Economic Analysis, 2008). In 2002, a majority of farms sold less than $10,000 per year accounting for only 4% of county farms sales, while very few farms sold more than $100,000 or 85% of farm sales. Clark County farmers continue to produce at a loss. Farmers spend $400,000 more each year to produce crops and livestock than they earn in sales. On average, $300,000 of federal subsidies have been extended to county farmers each year since 1995; however, these do not fully compensate farmers for production losses (Meter, 2008).

In 2002, Clark County total farm sales were $54 million, up 13% from 1997. Just over half of total sales were crop sales ($28 million). The remaining 48% was from livestock, poultry, and related products ($26 million). Cash receipts for livestock have fallen approximately 50% over the past 50 years in Clark County while cash receipts for crops have fallen about 30% over the same time period (Meter, 2008). A small but growing number of specialty farms are emerging in Clark County; however, raspberries and hay continue to dominate crop sales. Dairies, though in decline, had the highest agriculture sales in 2002 ($9 million) of total livestock sales in Clark County. Some dairies have re-located to Eastern Washington, Oregon, and parts of Idaho where land prices are lower, land base is larger and operation and management costs are less (Globalwise Inc., 2007).

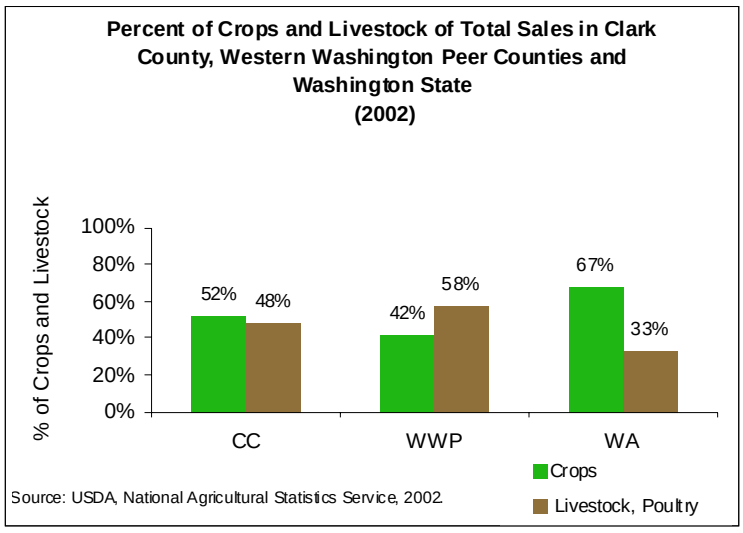
Indicator: Crop Diversity and Value of Sales

A variety of edible and inedible crops are grown in Clark County and across Washington State. Some areas are more suited for the production of certain crops due to environmental conditions including soil type and climate. Many farmers produce a diversity of crops, which can help to protect against losses due to crop failings. In addition to private farmland, Clark County leases land for agricultural purposes.

Findings:

Clark County leases approximately 350 acres for agricultural use including berry, grass and hay crops, and for grazing purposes. The largest parcel of land leased by Clark County is in pasture near Ridgefield. About 40% of this land is in berry production; the remainder is in grass production or is pasture land.

- A smaller percentage of Clark County and WWP counties' agricultural land is used for cropland than for Washington State as a whole. The most even distribution is in Clark County with 52% of land used for crops and 48% used for livestock.



Market Value of Crops produced in Clark County, WWP Counties, and Washington State			
2002	Value ($1,000)	Total Ag. Products Sold ($1,000)	Farms
CC	$28,475	$54,409	571
WWP	$47,418	$111,931	391
WA	$3,582,818	$5,330,740	17,117

Although there are more farms in Clark County than in WWP counties, the value of crops produced and total agricultural products sold are almost twice as high in the WWP counties than in Clark County.

Top 5 Crops by Market Value in Clark County in 2002 (52% of Total Sales)			
WA Rank	Crop	Value Clark County ($1,000)	Value WWP ($1,000)
5	Nursery, greenhouse, floriculture, & sod	$18,682	$39,317
1	Fruits, Tree Nuts, and Berries	$5,796	$1,461
4	Other Crops (including Hay)	$1,529	$849
	Christmas Trees, cut	$1,310	$851
3	Vegetables and related crops	$974	$4,452
	Other	$184	$499

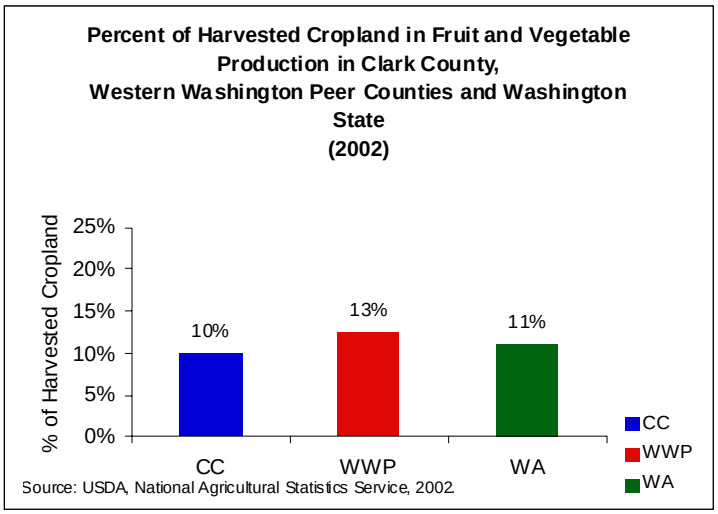
Nursery crops dominate the market value of sales in Clark County followed by berry crops. Of crop sales, 66% ($18.7 million) were from nursery and greenhouse products in 2002. The WWP counties sell twice the value of nursery crops than Clark County and almost five times the vegetable crops. Traditional food crops, especially vegetables, are a small share of the total agricultural value in Clark County. In Washington State, fruit, tree nuts and berries were the number one crop, followed by grain crops in 2002. In Clark County, vegetable crop sales made up just over 3% of total crop sales in 2002 (USDA, NASS, 2002). Wheat, corn for silage, barley, and oats share $1.5 million in sales with hay; however, hay dominates the agricultural landscape in acres over the other crops. Clark County ranked fourth in Christmas tree acreage in 2002, and sixth in Christmas tree sales.

What kinds of crops are grown on *harvested* cropland in Clark County?

In 2002, about 30% of all land in farms was in harvested cropland in Clark County. This was also true for the WWP counties and Washington State. Although there are many crops grown in Clark County and in the WWP counties, the most abundant use on harvested cropland in Clark County is forage. Forage (grasses) includes hay, silage, and haylage to feed livestock and horses. About half (16,000 acres) of harvested cropland was in forage production in 2002 for a total of 1.5 million in farm sales. This was slightly more than the WWP counties; roughly 1/3 of all harvested cropland (12,000) was in forage production. Grass production can be a passive farm activity and, in some instances, is possible without irrigated water or good soils. Additional harvested cropland in Clark County is used for nurseries, floriculture, Christmas trees, fruits and vegetable crops, and a few others.

Indicator: Fruit & Vegetable Diversity and Value of Sales

Fruit and vegetable production together accounted for less than 13% of harvested cropland in Clark County, WWP counties and Washington State in 2002. Vegetables and related crops are the fifth ranked crop in Clark County. Nationally, high percentages of vegetables are grown near urban areas. This allows farmers to sell their produce directly to consumers. Fruit crops were about 20% of total crop sales in Clark County in 2002 while vegetable crops were 3% of total crop sales.



Findings:

Fruits, nuts, and berries harvested for sale in CC and WWP			
2002	Farms	Acres	Value ($1,000)
CC	117	1,667	$5,796
WWP	77	433	$1,461

Fruit. The value of production from fruits, nuts and berries on a per acre basis is about the same for Clark County and WWP counties. However, Clark County has almost 4 times the acres in fruit production than WWP counties. Fruit and nut sales increased 40% from $4.2 million in 1997 to $5.8 million in 2002 (Meter, 2002).

Clark harvested approximately 1,700 acres of fruits, nuts, and berries for sale in 2002. Berries are grown on 83% (1,400 acres) of total fruit acres in Clark County; the remaining 17% is in fruit and nut trees. Fifty percent (850 acres) produce raspberries. Clark ranked 3rd in Washington State for acres of berries grown in 2004. Other fruits and berries commonly grown are strawberries, blueberries, grapes, and pears. Since 2002, blueberries are the only crop in Clark County to show overall increases from new planting. Raspberries and strawberries are in decline since 2002 according to the Washington Raspberry Commission. Grapes are showing some growth in new acres planted in Clark County since 2002 as well; however, all fruit trees are in decline. Many tree fruit farmers in Clark County engage in direct marketing (Globalwise Inc., 2007).

Top 5 Fruits grown in Clark County in 2002	
Fruit	Acres
Raspberries	852
Strawberries	371
Blueberries	149
Grapes	78
Pears	56
Others	161
Total	1,667

Top 3 fruits, nuts, and berries raised in Clark County compared to WWP counties (2002)		
Fruit	CC (Acres)	WWP (Acres)
Raspberries	852	100
Strawberries	371	53
Blueberries	149	94

Pierce County harvested about 400 acres of fruits, nuts, and berries for sale in 2002. Twenty seven percent (120 acres) produce raspberries. Other fruits and berries commonly grown are blueberries, apples, strawberries and blackberries. Snohomish County harvested approximately 500 acres of fruits, nuts, and berries for sale in 2002. Thirty two percent (160 acres) produced raspberries. Other fruits and berries commonly grown are pear, apples, strawberries, and blueberries. Thurston County harvested approximately 300 acres of fruits, nuts, and berries for sale in 2002. Fifty percent (160 acres) produced blueberries. Other fruits and berries commonly grown are strawberries, apples, grapes, and pears.

Vegetables harvested for sale in CC and WWP			
2002	Farms	Acres	Value ($1,000)
CC	46	624	$974
WWP	75	1,964	$4,452

Vegetables. The value of vegetable production on a per acre basis is higher among WWP counties than in Clark County, almost 1.5 times more valuable in WWP counties than in Clark County. Seven of the 46 acres in production were used for processing in 2002 (Meter, 2008).

Clark County harvested approximately 620 acres of vegetables for sale in 2002. Many farms producing vegetables are engaging in direct marketing opportunities. Sixty five percent (400 acres) grew green peas. Other vegetables commonly grown include sweet corn, pumpkins, cucumbers/pickles, and tomatoes, among others.

Top 5 vegetables grown in Clark County in 2002	
Vegetable	Acres
Green Peas	401
Sweet Corn	61
Pumpkins	56
Cucumbers/pickles	18
Tomatoes	15
Other	73
Total	624

Top 3 vegetables in Clark County compared to WWP counties (2002)		
Vegetable	CC (Acres)	WWP (Acres)
Green Peas	401	576
Sweet Corn	61	499
Pumpkins	56	185

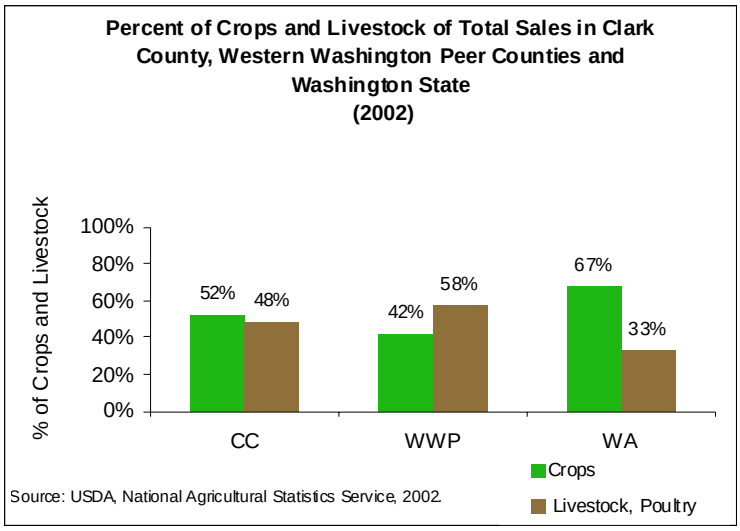
Pierce County harvested approximately 3,400 acres of vegetables for sale in 2002. Pierce County ranks 1st in Washington State for rhubarb production, 18% (600 acres) of total vegetable acres in 2002. Other vegetables commonly grown include pumpkins, lettuce, cabbage, and radishes. About 80 acres produced herbs. Snohomish County harvested approximately 2,300 acres of vegetables in 2002. Snohomish County ranks 6th in Washington State for green pea production; 74% (1700 acres) of total vegetable acres were produced in 2002. Other vegetables commonly grown include pumpkins, squash, herbs, and lettuce. Thurston County harvested approximately 200 acres of vegetables in 2002. 28 percent (55 acres) produced sweet corn. Other vegetables commonly grown include pumpkins, green onions, and squash.

Indicator: Livestock Diversity and Value of Sales

Some farmers raise livestock in addition to crops, while others focus exclusively on livestock. Dairy and milk sales dominate livestock sales in Clark County with over $9 million in sales in 2002, followed by poultry and eggs ($7 million) and cattle and calves ($4.7 million). There is no USDA inspected meat packing facility in Clark County, which may limit livestock operations to some degree. Special studies have reported that there are four or five larger livestock operations that account for much of the cattle inventory in Clark County. However, many beef cattle are raised for personal beef consumption on smaller properties (Globalwise Inc., 2007). Dairy operators have had a significant presence in Clark County; however, the industry has declined over the past several years.

Findings:

In 2002, livestock sales made up 48% of total agricultural products sold in Clark County



- In Clark County, livestock sales were 48% of total agricultural products sold in 2002 ($26 million) while livestock sales were higher among the WWP counties (58%) but much lower among Washington State (33%).

Market Value of Livestock raised in Clark County, WWP Counties and Washington State			
2002	Value ($1,000)	Total Ag. Products Sold ($1,000)	Farms
CC	25,934	54,409	800
WWP	64,513	111,931	688
WA	1,747,922	5,330,740	14,372

Similar to trends in crop sales, there are more farms in Clark County than in WWP counties that had livestock sales in 2002. However, the value of livestock raised and total agricultural products sold in the WWP counties was over two times the value in Clark County.

Top 5 Livestock by Market Value in Clark County in 2002 (48% of Total Sales)			
WA Rank	Livestock	Value Clark County ($1,000)	Value WWP ($1,000)
2	Milk and Dairy Products	9,514	25,952
4	Poultry and Eggs	7,031	12,497
1	Cattle and Calves	4,718	5,888
5	Horses, ponies, mules	562	2,584
	Sheep, goats, & products	253	135
	Other	71	1,441

As mentioned, dairies and related-milk products were the number one livestock sale in Clark County in 2002, followed by poultry and eggs, and cattle and calves. The value of cattle sales declined 14% from 1997 to 2002. Clark County ranked third in the state for sheep, goat, and related product sales ($253,000) in 2002. Clark County has at least two licensed goat dairies. Goat diaries are more specialized operations than cow dairies and can operate on much smaller land base (Globalwise Inc., 2007). Aquaculture, the third leading livestock sales in Washington, does not have a strong presence in Clark County (USDA, NASS, 2002).

Livestock Type and Inventory (2002)			
WA Rank	Livestock	Clark County	WWP Counties
2	Broiler Chickens and others	4,371,474	1,808,086
3	Cattle & Livestock	16,068	23,394
	Beef Cows	4,543	4,486
	Milk Cows	3,669	9,940
1	Layers (20 wks or >)	2,828	756,437
	Sheep & Lambs	1,993	1,516
	Hogs & Pigs	699	818

The number of broiler chickens sold in Clark County has nearly tripled from 1.5 million in 1987 to 4.4 million in 2002. Clark County ranked 2nd in Washington State for broiler chicken inventory in 2002. The Washington Fryer Commission reports that Clark County produces approximately 11.45 percent of the state's fryer chickens. Broiler chickens are raised by a declining number of growers in Clark County who have large indoor confinement operations. There are 10-15 growers in Clark County contracting with one or two large poultry processors in Western Washington. Clark County farmers sold more than twice as many broiler chickens than WWP counties in 2002; however, Thurston county alone sold almost 3 million broiler chickens in 2002, while Pierce county only sold 970,000. According to the Washington Fryer Commission, the overall trend in broiler chicken production is in decline in Washington (Globalwise Inc., 2007).

Clark County livestock farm operations are declining in number and much of livestock production is concentrated on a small number of farms. The number of Clark County farms raising cattle fell 30% from 1997 to 2002. In 2002, there were about 700 farms and ranches with 16,000 cattle and calves in Clark County. Six farms raised 30% of the country's cattle with more than 500 heads, while over 600 farms raised less than 100 animals each. Sixteen farms (one third of all farms with pigs and hogs) had fewer than 25 animals. Three of the farms had between 100 and 500 animals and the remaining 29 farms had between 25 and 100 animals each. Between 1997 and 2002, the number of farms raising pigs and hogs decreased from 54 to 48. During that same period, however, the number of animals increased from 375 to 699, an increase of 86% (USDA, NASS, 2002). In 2002, 3% of Washington State's sheep and lambs (2,000) were raised on 83 farms in Clark County (Meter, 2008).

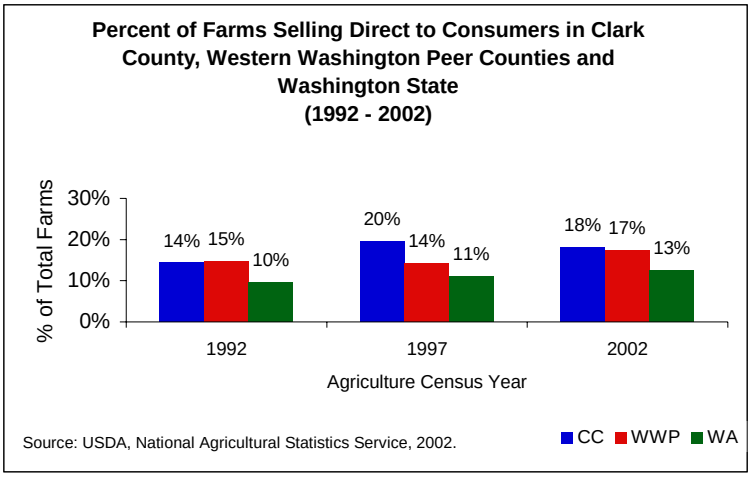
Indicator: Direct Marketing

Buying direct from farmers has numerous economic, social, and environmental benefits such as improving local food security by providing access to local, fresh, safe food, stimulating the local economy by keeping food dollars in the local market;, and reducing energy costs to import food, among many others. Direct marketing opportunities are a chance to link producers and consumers and create business opportunities among emerging farmers (WSU, 2008).

The value of agricultural products sold directly to individuals for human consumption includes transactions from roadside stands, farmers' markets, pick-your-own sites, and Community Supported Agriculture. It excludes non-edible agriculture products. Sales of agricultural products by vertically integrated operations through their own processing or marketing operations are excluded from this tabulation (USDA, NASS, 2002).

One important downward trend in the farm economy is the farm share of consumer expenditures. Farmers continue to receive a decreasing share of what consumers pay for food at retail stores. Currently, farmers capture only about 27% for fresh fruit and 24% for fresh vegetables. Dollars returned from retail purchases are spread out among processors, brokers, distributers and farmers and therefore have a marginal impact on farm profits. Some studies estimate that for every $100 spent at a grocery store, only $25 returns to the local economy, while for every $100 spent at a farmers' market, $62 goes directly to vendors (Sonntag, 2007). Despite the contribution to farmers' income, direct sales made up less than 2% of farm sales in Clark County, the WWP counties, and Washington State in 2002. However, with the exception of Clark County, the value of agriculture products sold directly to consumers tripled for both the WWP counties and Washington State from 1992 to 2002 (USDA, NASS, 2002).

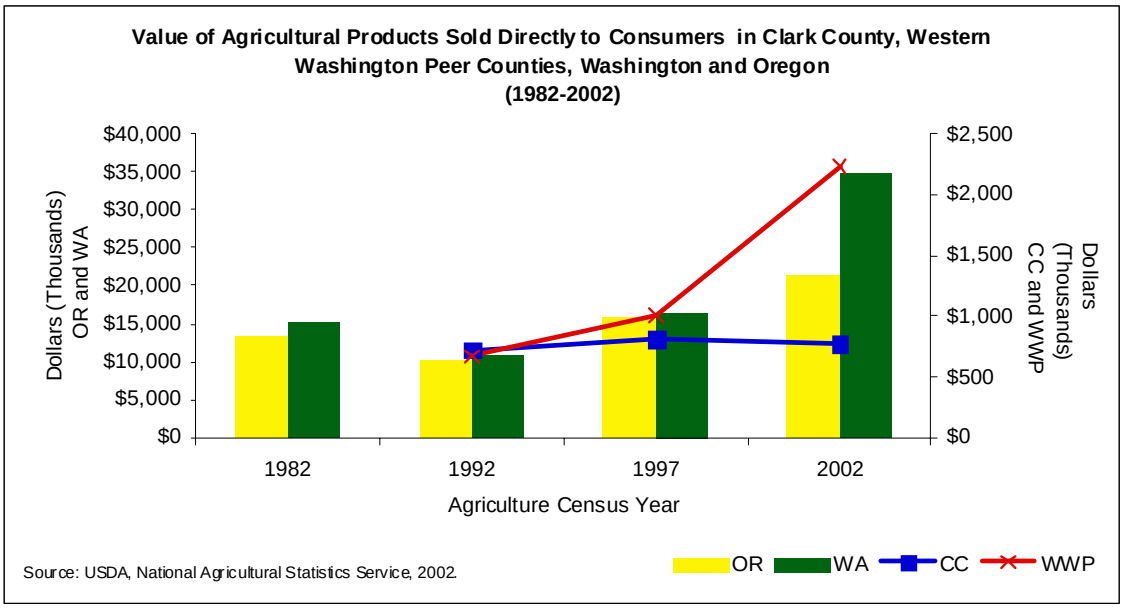
Findings:



- From 1992 to 2002, the percent of farms selling direct to consumers peaked in Clark County in 1997 at 20 percent.

Number of Farms with Direct Market Sales			
	1992	**1997**	**2002**
Clark County	181	347	290
WWP Counties	154	229	243
Washington State	2,933	4,428	4,527

Although fewer WWP farms report participating in direct farm sales than Clark County, the value of agricultural products sold directly to consumers was much greater, nearly three times more than Clark County in 2002.



- 290 farms in Clark County sold $769,000 of food directly to consumers in 2002.
- The number of farms selling direct to consumers fells 16% from 1997 to 2002, while sales volume fell 6% (Meter, 2008).
- From 1992 to 2002, both Washington State and WWP counties tripled the value of agriculture products sold directly to consumers ($35 million and $2.2 million respectively) while the value for Clark County remained about the same ($769,000).

Clark County Case Study: CSA Model for Small Farm Direct

One example of direct marketing is Community Supported Agriculture (CSA). The CSA model is a shared risk agreement between a farmer and community members. Typically, members or "share-holders" of the farm provide the farmer with working capital, an average of about $500 in Clark County, in advance that pays for the seasonal input costs. In return, they receive shares of the farm's bounty throughout the growing season. These relationships provide customers access to fresh nutritious foods as well as an opportunity to strengthen the presence of CSA farming in a local farm economy. Growers receive better prices for their crops, gain some financial security, and are relieved of much of the burden of marketing (USDA, 2008). CSA farming has grown considerably in Clark County, from 2007 to 2008 the number of CSA farmers listed in the WSU Clark County Extension directory grew from nine to 13.

To better understand subscription farming in Clark County, CSA farmers listed in the 2007 WSU Clark County Extension CSA directory were approached at the Meet your CSA Farmer Event in January 2008 to participate in a CSA profile survey (Appendix P). Six of the nine farmers (67%) participated (2007 Clark County CSA Farms Map can be found in Appendix Gviii).

Findings:

Acre Availability and Production. Collectively, CSA farmers reported approximately 20 acres in production. Farmers reported an additional 70 acres as "farmable;" however, some farmers reported they were unable to manage additional acres due to the volume of demand and some acres were in young tree farms requiring a significant investment to convert to food production.

Farm and Off-Farm Employment. Four farmers reported that off-farm jobs contributed less than 30% of their household income while two reported that between 71% and 100% of their household income was generated from off-farm wages. Three farmers reported that CSA profits supported additional family members. Most farmers managed their CSA farms without hiring seasonal farm help. Only one reported employing seasonal workers.

Current Use Taxation Program Enrollment. Only one CSA farmer is enrolled in the Farm and Agriculture Land designation of the Current Use Program. This farmer reported being satisfied with the abatement program because the requirements are minimal and the tax relief helps make farming viable. Other farmers commented that the Current Use Program does not apply to the CSA farm segment.

> *"Until affordable land is available and a local marketing system is established, CSA farmers can't touch more than the edges of the market."*
> *– Clark County CSA Farmer*

Variety of Agriculture Products. All farmers reported producing a variety of fruits and vegetables, cut and dried flowers, herbs and chickens for egg production. No CSA farmer reported raising livestock, and a few reported offering honey and value-added products.

Clark County Case Study: CSA Model for Small Farm Direct

Marketing and Distribution. An estimated $130,000 was provided directly to farmers by about 260 shareholders in 2008. Some CSA farmers utilize other direct marketing methods including selling directly to wholesalers, engaging in roadside stand transactions and farmers' markets. All six farmers sell between 91% and 100% of their product locally. Half reported selling directly to wholesalers. Four farmers said they would like more information about on-site processing.

> *"Local food choices are an integral part of a healthy community. The farms they come from provide good jobs locally, stimulate community interactions and provide healthy food."*
> *– Clark County CSA Farmer*

Production Practices. Most (five) farmers reported using organic production standards. Two of these farmers reported being third party certified and using free range methods and the remainder reported being uncertified followers of organic production standards[7]. Farmers also reported they used no till farming methods, low impact crop rotation, inter-planting and companion planting.

Communities at Work: Community Supported Agriculture
Clark County, Washington

Spotlight On….Storytree Farms

Clark County is home to many farm families dedicated to growing local food crops, educating consumers about their knowledge of growing practices and sharing their bounty each harvest season. Currently, there are about 15 CSA farms in Clark County, an increase of more than 75% in the past few years. Consumers are turning to CSA farms for many reasons: affordability, fresh and local produce, and convenience. Some consumers are finding that buying shares from a CSA helps save on food and transportation costs.

In return, many CSA farmers provide supplemental services to shareholders. Some CSA farmers provide front-porch deliveries and installment plans. Others provide recipes for food they grow and storage ideas to their subscribers. Some, like Storytree Farm and Rosemattel's CSA, also invite the public to tour their farm during seasonal open houses. In a previous open house at Storytree Farm, visitors were treated to grilled figs; something some people might not have tried before.

Storytree farmer, Anne Lawrence, routinely sells out of farm shares. She gets requests from many more subscribers than she has the capacity to sign up. Anne believes that "there are so many possibilities for the immediate future of food in Clark County. Just imagine if every new residential development set aside one building lot for a community garden. What a wonderful way to connect with the land, build community, get to know one's neighbors, and obtain the freshest produce. The demand for locally grown food continues to rise, and I believe that we have the opportunity and the responsibility to work toward a future where food security for everyone in our community is a reality."

"Getting their Farm Share." *The Columbian*. May 9, 2008; Anne Lawrence. Personal Communication, August 2008.

[7] In Washington, organic and conventional crops are allowed to be grown together as long as adequate buffer zones are maintained (WSDA, OFP, 2008).

Chapter 3: Further Considerations
Farm & Agriculture Profile

This section provides examples of possible conversations and strategies for the Clark County Food System Council to consider as it develops future work plans to increase and preserve access to safe, local and healthy food for all residents of Clark County.

Community Conversations

1. How does the Food System Council support linking producers to local processors and wholesalers?

2. How can the Food System Council support advancing small farm businesses and farm education?

3. How does the Food System Council encourage the protection of agricultural lands suitable for community food production?

Community Opportunities

The Food System Council could:

1. Convene food system stakeholders to facilitate the integration between farmers, local wholesalers, distributors and institutions.

2. Support Washington State University Clark County Extension and community partners' efforts to provide education and mentorship programs for new and existing farmers. Leverage direct marketing and distribution systems to allow farmers to sell locally.

3. Advocate and maintain farm land preservation program.

More Local Data Needed

1. Farmland suitable for food production

2. County Farm Survey

3. Current Use Program implications and Notice of Continuance for farm and agriculture designation compliance

Chapter 4: Resource Management

Sustainable management of natural resources is crucial to a strong agricultural base. Population and urban land growth put pressure on communities to protect natural resources such as prime farm land and water. This chapter explores prime farm soils, third party certification and food waste management programs in Clark County.

Indicator: Prime Agricultural Soils

Suitable soil quality is one of many factors contributing to conditions necessary for a variety of crop production and high yields. The U.S. Department of Agriculture defines prime farmland as "land that has the best combination of physical and chemical characteristics for producing a variety of crops." It has the combination of soil properties, growing season, and moisture supply needed to produce sustained high yields of crops if it is treated and managed according to acceptable farming methods. In general, prime farmland has an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, an acceptable level of acidity or alkalinity, an acceptable content of salt or sodium, and few or no rocks. Its soils are permeable to water and air and well drained (USDA, NRCS, 2008).

There are many land capability classifications that describe the suitability of soils for many crops; however, only the first three classifications are considered "prime" agricultural soils. The following describe the prime farmland classes and suitability ratings for Clark County (USDA, NRCS, 2008). Much of the farming in Clark County is on prime farm class I, II, and III soils (Appendix Q). Farms are located quite evenly across the county; however, the following section describes the types of farms identified in the report, *Analysis of the Agricultural Economic Trends and Conditions in Clark County, Washington* that are located on class I,II, and III soils.

Findings:

Class I: These soils have few limitations that restrict their use. They have the best soil structure, best climate, wide range of workability, least energy inputs, and are very fertile. All crops adapted to the area can be grown on these soils. In Clark County, the Hillsboro soils offer the best soil conditions for high-value horticulture crops and pasture for animals. These soils are located in the western and central parts of the county where some of the existing fruit and vegetable, livestock and dairy farms reside.

Class II: These soils have moderate limitations that reduce the choice of plants or that require some conservation practices to protect the quality of the soil. For example, these soils are prime when they are behind dikes. They are fertile, have good soil structure, and a wide range of crops can be grown. Newberg and Sauvie soils in Clark County are Class II prime farm soils and are located along the alluvial terraces on the western border of the county and in the central areas where many farms on the Class I soils are located.

Class III: These soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both. These soils are prime or unique for specialty crops when they are drained. Semiahoo and Tisch are prime class III soils concentrated in the north and north central section of the county where many Christmas tree, nursery and specialty farms reside.

Indicator: Water Rights

A Water Right is a legal authorization to use a predefined quantity of public water for a designated purpose (Appendix O). This purpose must be determined to be a "beneficial use," or "reasonable quantity of water applied to a non-wasteful use, such as irrigation, domestic water supply, or industry generation, to name a few" (Water Rights in Washington, 2008). Under Washington State law, the waters of Washington belong to the public and cannot be owned by any one individual or group. The Washington State Department of Ecology (DOE) retains authoritative issuance and compliance of Water Right Permits and Certificates in Washington State. Once a water right is established it is attached to the land on which it is being used.

A Water Right is necessary if you plan to divert or withdraw any amount of water for any use from:

- Surface Waters (lakes, rivers, streams, springs)

- Ground Waters (aquifers, under ground sources) if user intends to:
    - withdraw more than 5,000 gallons a day.
    - Irrigate more than a ½ acre of lawn or garden.

Water use is subject to the "first in line, first in right" clause, originally established in historic Western water law and now part of Washington State law. This means that a Senior water right cannot be impaired by a Junior water right. Seniority is established by the date an application was filed for permit or certificate consideration or the date water was first put to beneficial use in the case of a water right claim. The law holds that in times of water shortage, senior water right holders have their water needs satisfied first.

There are three types of water rights: Permits, Certificates, and Claims. A water right permit lends permission by the state to begin development of a water right and is the first step towards securing a certificate. Once the permit has been completed, the water right is said to be "perfected" and DOE issues a water right specifying the maximum water use and beneficial purpose. The water right then becomes attached to the land. Claims are the most controversial water certification because a claim is not a water right, but rather a statement filed by the property owner that a water right may exist. Claims require a significant assessment and can take many years to complete.

Since much of the water in Washington has already been allocated or claimed, it is increasingly difficult to obtain new water rights. This is particularly problematic for farmers, if they intend to diversify crops, alter agriculture practices that would demand more water use, or increase production acres. In addition, people often use the expression "use it or loose it" to describe Washington State water rights. Relinquishment is enforced to ensure that limited water resources are put to maximum and beneficial uses. Five or more successive years of non-use may be grounds for relinquishing water rights. In Clark County, at least 90% of the county's water comes from ground water wells. The most plentiful source of water is the aquifer beneath the Columbia River. Wells along the river have few recharge problems, while inland wells have more limited supply and is some instances draw water faster than can be replaced (WDESD, LMEA, 2004).

Findings:

Water Right Certificates

- DOE has issued 230 Water Right Certificates in Clark County for ground and surface water withdrawals of beneficial use[8] including irrigation.
- A Water Right Certificate for irrigation has not been issued in Clark County since 1998.

Water Right Claims

- From 1970-1974, 165,000 water right claims were filed in Washington during the implementation of the 1967 Water Right Claims Registration Act. (The Act was passed to pursue the legitimacy of pre-code rights).
- Approximately 6,000 water right claims have been filed for adjudication in Clark County.
- About 16% of submitted claims state irrigation as purpose of water use in Clark County.
- Water Right Claims do not specify quantity of water usage.

[8] Beneficial irrigation use includes: golf courses, cranberry farming, lawn/garden watering with definite acreage, greenhouses, fish propagation, domestic single (one dwelling with lawn and garden, up to one-half acre), commercial and industrial manufacturing, domestic multiple (PUDs, schools, parks, trailer courts), fire protection, and stock watering.

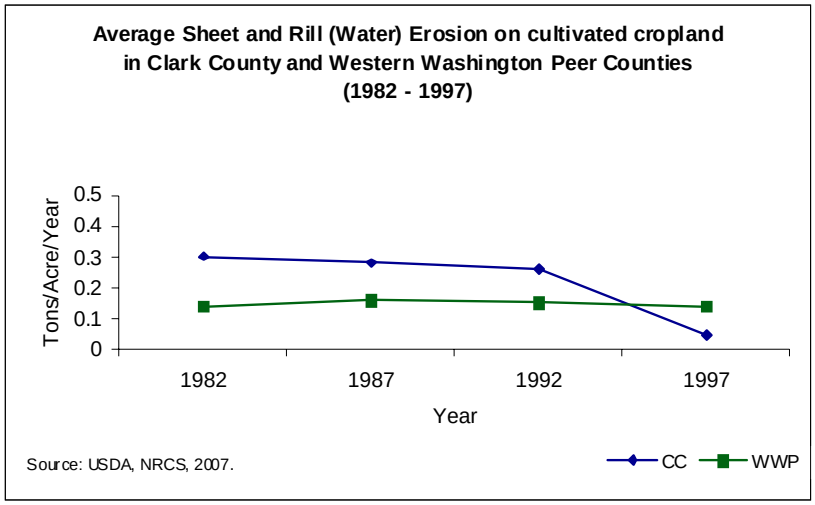
Indicator: Sheet and Rill Erosion on Cropland

Topsoil loss on cropland due to sheet and rill (water) is monitored by the U.S. Department of Agriculture, Natural Resource Conservation Service, National Resources Inventory. Soil erosion involves the breakdown, detachment, transport, and redistribution of soil particles by forces of water, wind, or gravity. Soil erosion on cropland is of particular interest because of its on-site impacts on soil quality and crop productivity and its off-site impacts on water quality, air quality, and biological activity (Soil Erosion Annual Natural Resource Inventory, 2003).

Sheet erosion is the process by which the transportation of soil particles in water begins. It is gradual and difficult to detect until it develops into rill erosion or runoff channels. Sheet erosion depends on a variety of soil factors including soil type and quantity of flow. Long, steep slopes that carry higher volumes of runoff are more susceptible to sheet erosion. Soil hazards in Clark County are found along the eastern side where the foothills of the Cascades begin (Appendix R). As rill erosion begins, erosion rates increase dramatically due to higher velocity flows (Erosion and Sediment Control Measures, University of Iowa, 2008). Topsoil loss due to sheet and rill erosion (tons/acre/year) on cultivated cropland decreased 23% in Washington and 33% in Oregon from 1982 to 1997.

Findings:

In general, Clark County and the WWP counties experienced minimal sheet and rill erosion on cultivated cropland from 1982 to 1997. This is partly due to their relatively flat topography. Topsoil loss is occurring at a tolerable rate for Clark County and WWP soils to maintain productivity and fertility (USDA, NRCS, 2007).



- From 1982 to 1997, the average sheet and rill erosion on cultivated cropland decreased by about 80% in Clark County. During the same time period, the average sheet and rill erosion on cultivated cropland in WWP counties changed very minimally.

Indicator: Third Party Certification

A growing number of programs have emerged in the past decade that recognize farm and business practices that reduce hazardous impacts on the environment and help protect the quality of farm land. Third party certifiers offer food producers, processors and handlers programs that distinguish foods produced by operations that use socially and environmentally responsible agricultural practices. They also provide an opportunity for producers and handlers to strengthen their brand name and reputation for quality. Common third party standards include providing safe and fair working conditions, reduced pesticide use and toxicity, water and soil conservation practices, and food handling safety. Applicants who qualify must pass an on-site inspection, meet the required standards of the specific certification program, and pay certification fees. Three certification organizations, Food Alliance, Oregon Tilth Certified Organic, and Washington State Department of Agriculture Organic Food Program (WSDA OFP), were contacted in March 2008 to determine the number of third party certified Clark County farmers, ranchers, and/or food handlers. Currently, there are 13 Food Alliance certified producers and two certified handlers in Washington State, none of which are in Clark County.

Findings:

- In Clark County 21 farms sold $25,000 in organically certified foods in 2002; .05% of total farm sales (USDA, NASS, 2002).
- In March 2008, there were no Food Alliance or Oregon Tilth Organic certified producers, processors, or food handlers in Clark County, Washington.
- According to the WSDA OFP database, there are currently 11 Clark County farmers who operate about 400 acres of WSDA certified land, up from two organic certified farms in 2001 (WSDA, OFP, 2008).
- Certified organic dairy cows are raised on roughly 75% of these acres. Other certified organic products grown in Clark County include almonds, apple varieties, Asian and bartlet pears, boysenberries, cherries, a variety of vegetables, plums, raspberries, table grapes, and walnuts.

Indicator: Food Waste

Food leftovers are the largest waste stream component by weight in the United States. Americans discard more than 25% of food they prepare or about 96 billion pounds of food waste each year (EPA, 2007). In 2005, almost 12% of total municipal sold waste (MSW) generated in American households was food scraps, less than 3% of this was recovered (EPA, 2008). In an effort to reduce disposal fees and waste combustion, communities are implementing food waste recovery and composting programs across the country.

In 1999 and 2003, Clark County conducted a comprehensive analysis of municipal solid waste to evaluate existing waste prevention and recycling programs. A 2007-2008 Waste Composition Study is underway; however, preliminary figures based on the first three quarters of samples are available.

Clark County waste is collected by two primary garbage haulers in the county, Waste Connections, Inc. and Waste Control. These collectors distribute waste to two transfer stations, the Central Transfer Recycling Center (receives approximately 70% of county waste) and the West Van Materials Recovery Center (receives the remaining 30%) which process waste to recover recyclable materials and household hazardous waste.

Food waste is collected from all generators in the county, including franchised-collected residential and commercial, residential self-haul and commercial self-haul. Commercial sources include businesses, institutional and industrial sites.

Findings:

- Preliminary figures from the 2007-2008 Waste Composition Study indicate that the overall food waste from all sources is 16%, up from 15.3% in 2003.
- 35,700 tons of food wastes from all generators accounted for 15.3% of the total waste stream in 2003.
- Food wastes were the largest single component of 30 waste substreams (Clark County Waste Analysis Report, 2003).
- All residential food waste goes to the Finley Buttes Landfill in Oregon. None of it is diverted for composting at this time.

Food wastes were the largest single component of the Clark County waste substream in 2003. *(Clark County Waste Analysis Report, 2003)*

Clark County residents discard about ½ pound of food per day.

<u>Sources of Food Waste in Clark County in 2003 of total food waste in waste stream:</u>

- Residential collection accounted for 73.2%
- Commercial collected accounted for 25.3%
- Residential self-haul customers contributed 1.2%
- Commercial self-haul customers contributed 0.3%

Indicator: Food Waste Diversion

Food waste is comprised of both pre-consumer and post-consumer products. Pre-consumer food waste refers to materials that have no or low probability of having been exposed to human or other pathogens, such as meat scraps from meat processors and grocery meat departments. Post-consumer food wastes are organic materials that may or may not have been exposed to human or other pathogens and tend to be regulated such as plate scraps, salad or food bar leftovers, contaminated paper towels, expired food products and produce.

Prior to 2000, the Clark County Solid Waste Program (CCSW) did not target food waste as a recoverable material in its organic materials recycling program. Currently, CCSW works primarily with schools to implement the Save Organic Scraps (SOS) School Program. Waste Connections, a solid waste services company, provides food waste recovery programs to many Clark County businesses. Food waste from commercial businesses, the SOS School Program, larger grocery stores and restaurants is diverted to the Cedar Grove Composting Facility in Maple Valley, Washington, where it undergoes a decomposition period before being packaged and sold for various agricultural and domestic uses (Organic Wastes - Clark County Solid Waste Plan, 2000). Local composting facilities, H & H Wood Recyclers and West Van Material Recovery Center, in Vancouver do not have permits to handle food wastes at this time.

Findings:

- In 2006, Washington State composted 94,470 tons of food waste (approximately 10% of total waste composted).

- In 2006, Cedar Grove Composting Facility in Maple Valley composted 40,048 tons of food waste (approximately 42% of total food waste in Washington State).

- In 2007, Clark County diverted about 1,300 tons of non-residential food waste for composting:
    - 500 tons from Waste Connections (private sector garbage and recycling hauler).
    - 370 tons from 48 schools participating in the SOS Program.
    - 260 tons from large grocers.
    - 145 tons commercial businesses.

- There are no residential food waste diversion programs in Clark County at this time.

Communities at Work: Fork it Over! Metro Program
Portland, Oregon

According to the Oregon Food Bank, Oregon ranks among the top 10 worst states in the nation for hunger and food insecurity. In the Portland metropolitan region over 180,000 tons of food are thrown away each year that to some extent could be rescued from businesses and redistributed to those in need.

Metro's Fork It Over! Food Donation Program creates an innovative way to help businesses see surplus food as a resource, rather than a waste product. By providing an online interactive database of charitable organizations and locations of food rescue programs, the Fork It Over! program makes it convenient for businesses to reduce their food waste costs and donate quality left over foods, surplus, frozen goods, and more.

The program offers tools and technical assistance to help donors by setting up individual donation programs that link them to charitable organizations that meet their capacity for food donation. Fork It Over! provides food handling safety and donor liability information and promotional stickers to let patrons know their purchases support a food donation program.

In 2008, over 70 businesses from university systems, catering services, restaurants, hotels, hospitals, and many others donated food to over 50 hunger relief organizations in the Portland metropolitan area.

Fork It Over! Program. www.oregonmetro.gov

Chapter 4: Further Considerations
Resource Management

This section provides examples of possible conversations and strategies for the Clark County Food System Council to consider as it develops future work plans to increase and preserve access to safe, local and healthy food for all residents of Clark County.

Community Conversations

1. How can the Food System Council support environmental stewardship and sustainable farm practices?

2. How can the Food System Council promote the enhancement of food waste diversion programs in businesses, schools and households?

3. How can the Food System Council support the protection of water for current and future agricultural use in Clark County?

Community Opportunities

The Food System Council could:

1. Support farmers in pursuit of Third Party Certification for sustainable production.

2. Support the expansion of the Clark County Solid Waste food diversion program, Save Organic Scraps (S.O.S.) program to additional schools.

3. Advocate for prioritization of water use for food production.

More Local Data Needed

1. Barriers to Third Party Certification

2. Clark County Waste Facilities

3. Water Right claims, water use and quantity for agriculture

Appendices

Appendix A. 2007 – 2008 Clark County Food Assessment Indicator List

Personal & Community Health	Farm & Agricultural Profile
Overweight & Obesity	Age of Principal Operator
Adult &Youth Diabetes	Harvested Cropland in Full Ownership
Fruit & Vegetable Consumption and Food Expenditures	Farm Occupation
At Home Family Dinners among Youth	Farm Education
Food Access	Acres in Farm Land & Agriculture Zones
Food Insecurity	Size of Farms
Food Stamps	Type of Use on Land in Farms
Emergency Food Banks	Current Use Taxation
Special Supplement Nutrition Program for Women, Infants, & Children (WIC)	Natural Resource and Crop Land Conversion
Free and Reduced School Meal Program	Water Rights
WIC & Senior Farmers Market Nutrition Program	Crop Diversity and Value of Sales
Nutrition Environments Measures Store Survey	Fruit & Vegetable Diversity and Value of Sales
Community Gardens	Livestock Diversity and Value of Sales
Menu Labeling	Direct Marketing
Clark County Correctional Facilities (CCCF) Food Procurement Contract	**Resource Management**
	Third Party Certification
	Prime Agriculture Soils
	Soil Erosion
	Food Waste
	Food Waste Diversion

Appendix B. Complete Food System Indicator List (Adopted from the Institute for Portland Metropolitan Studies, Portland State University 2007-2008)

Sustainability Goals & Indicators

Background Demographic Indicators

0-1 Population

- WA state
- Clark County population as % of state population
- Population density, person/sq. mi
- Urban growth, % of county population in Vancouver

0-2 Ethnic distribution

- Inflation adjustment
- Total employment for county
- Total earnings for county
- County per capita annual income
- County's rank in state per capita income

0-3 Poverty

- Number of welfare recipients
- Number of WIC recipients
- % of county's population receiving welfare

- Civilian unemployment rate, 8.2%
- % of county's families below poverty – urban vs. rural

Sustainability Aspect: Social

Goal 1: Personal and Community Health

Objective 1-1: Food choices lead to healthy eating
- Per capita daily servings of fruit and vegetables
- Obesity rate in adults and children
- Diet-related diabetes
- Adult and youth diabetes rate
- # of at home family meals (avg/wk)
- Food expenditures, home vs. away
- % infants breastfed to one year

Objective 1-2: Schools providing healthy eating options
- % of schools with farm to school program
- Sales of foods and beverages of minimal nutritional value in schools
- % of schools offering a la carte
- % implementation of healthy nutrition guidelines
- Impact of new policies/law
- Competitive foods
- Activity level data – connection to health

Objective 1-3: Policies in place to support healthy food choices
- # of food policy councils at city, county, state level
- Diversity of membership of councils
- Schools without corporate food or beverage advertising
- Schools without exclusive pouring rights
- % of farmers' markets accepting FMNP coupons, senior FMNP, food stamps

Objective 1-4: Data collection infrastructure in support of healthy food choices
- # or % of health and food related surveys with questions pertinent to community food systems

Objective 1-5: Celebrations of sustainable food
- # of sustainable community food events

Objective 1-6 : Residents aware of healthy food options – local/organic/fresh
- % of population aware of term "food mile"
- % of population can identify 5 regional, seasonal foods
- % of population recognizing Buy Local branding
- % of schools with food based education program
- # of agroecology/farm ed centers
- Food education program to support cultural diversity in eating
- % of students with food based education

Objective 1-7: Labeling system in place to inform consumers
- Labeling in restaurants - ingredients, origin of sources, GMO
- GMO products labeled
- Country-of-origin labeling

Goal 2: Food Access

Objective 2-1: Easy access to healthy foods from retail outlets
- Distance and distance distribution of eaters to nearest full-service food store
- Per capita convenience stores
- Food access by density, income, ethnicity, transit, accessibility for households without vehicle
- # of households without vehicle**
- % of food markets meeting criteria for affordable, culturally appropriate, local and sustainable

Objective 2-2: Healthy food is affordable to residents
- Price, availability and quality comparability - local, conventional, organic

Objective 2-3: Low-income population obtaining services to increase food access/security
- % of population food secure
- % of population in poverty or eligible for food stamps and other programs
- % of eligible population receiving food stamps (participation rate)
- % of eligible population in WIC program
- % of eligible children enrolled in school meal program
- Location of food stamp acceptance to food stamp users
- Distance/time/wait for food stamps and WIC
- Recovery programs - # of participants, pounds recovered
- Persons served by food banks/pantry and % of population served by food bank/pantry
- Number of gleaning programs, pounds, participants

Objective 2-4: Alternative Access to healthy food
- 8 CSA's with locations
- % of residents with convenient access to farmers' markets
- Farmers' market sales - per capita, # of patrons, avg. per patron
- Farm stands

Objective 2-5: Access to healthy food outside the home
- Access to healthy restaurant options

Objective 2-6: Number of education programs

Objective 2-7: Residents able to grow own food
- % of residents with food growing garden
- % of population with access to growing spaces
- % of population gardening for food
- square feet of community garden space & number of spaces per capita
- Avg wait for community garden space
- Apartments with garden space/program
- Zoning requirements for garden space

Sustainability Aspect: Environmental

Goal 3: Resource Stewardship

Objective 3-1: Farmland is protected
- Farmland in permanent, deeded protection (acres and # of farms)
- Acres and farms in ag protection zoning
- # acres/% of prime farmland lost since x date
- Acres of farmland converted for development
- Acres within conservation programs
- Amount of GMO drift bio-pollution
- Funding for pesticide tracking laws

Objective 3-2: Track agricultural resources base
- Number of farms in WA, % in county
- Acres in farming in WA, % in county
- Average farm size
- Number of farms by acreage size class
- % of acres in full, part, and tenant ownership
- # of full owners in each county
- Minority farm operators, # of farms
- # of organic farms and acreage of organic farms

Objective 3-3: Resources are managed sustainably, minimizing threats to natural environment.

- Tons of topsoil lost per year
- Tons of food waste
- Amount of surface water pollution
- Well-water pollution, average nitrate
- Total water usage in Ag
- Alternative fuels in production
- Energy intensity of production
- Total tons of synthetic pesticides used in agriculture
- Fisheries threatened
- Number of acres in no-take marine zone

Objective 3-4: Waste is reduced, recycled or reused in food system

- Ag and food waste reduction
- Animal waste recovery
- Food diversion programs (to compost)
- sust. food processing conference
- Reuse/recycle in food processing
- Restaurant waste processing –
- % of food and ag waste composted
- Number of schools with waste recovery program

Objective 3-5: Farms and food processors engaged in sustainable management practices

- % of farm acres with conservation plan
- % of farms/farm acres organic
- % of farms certified by Food Alliance, Salmon Safe
- % of animal farmers w/humane certification for production
- % of beef production grass fed
- % of poultry free range
- % of dairy rBGH free
- % of food businesses with Food Alliance, Natural Step, WSDA, SWA
- % of commercial pesticide applicators in compliance with Pesticide Use Reporting System (PURS) requirements (WSDA)
- Sub-therapeutic anti-biotic use

Sustainability Aspect: Economic

Goal 4: Economic Vitality

Objective 4-1: Farmers have opportunity to be profitable

- Farming receipts and % total earnings in county & WA
- Farm production balance by size, type
- Net farm income
- Farm income – fruits and vegetables
- % of farms fully owned by farmer
- Farms by size, type
- % farmers, full-time
- Farmgate to retail spread
- Total food and farm cluster earnings and % of earnings
- Total food and farm employment/% of jobs in region
- Farming: # of jobs and % of jobs in region
- Farming as principal occupation, % farms
- Avg. age of farmers
- Ease of entry to new farmers; programs to facilitate
- Ease of exit from farming and keeping land in agriculture

Objective 4-2: Programs and policies in place to support regional farming economic development

- Zoning supports appropriate on-farm business

- Existence of Buy Local/branding campaigns
- # and % producers participating in Buy Local/branding campaigns
- # and % stores participating in Buy Local/branding campaigns

Objective 4-3: Food system manufacturers, distributors, processors, retailers have opportunity to be profitable

- Food manufacturers/processors # of jobs/% of jobs in region
- Food wholesalers # of jobs/% of jobs in region
- Food retailers # of jobs/% of jobs in region
- Food Service # of jobs/% of jobs in region
- Processors by size, type
- # of federal and state inspected slaughterhouses
- # of commercial fishing licenses and permits
- Total and per capita food expenditures
- Food manufacturers/processors receipts and % total earnings in the region
- Food wholesalers receipts and % total earnings in the region
- Food retailers receipts and % total earnings in the region
- # of retail chains
- % of retail food businesses locally owned
- % of retail chains locally owned
- % of processors locally owned

Objective 4-4: Alternative agriculture methods are viable economic markets

- Gross receipts from direct farm marketing, % of total farm earnings in region
- % of farms engaged in direct marketing
- Achievement of regional food economy potential (impact on farm income and food cluster businesses if % of food dollars spent on local product)

Objective 4-5: Fishers have opportunity to be profitable

- Avg. age of fishers
- # of commercial fishing licenses and permits
- Ease of entry to new fishers; programs to facilitate
- Ease of exit for fishers; transition assistance for newcomers
- Income/employment from commercial fishing and processing

Goal 5: Resiliency (food system is resilient in face of threats to food supply or safety)

Objective 5-1: Local/regional ownership of elements of the food system.

- Fisheries ownership
- Market/retail ownership – number, concentration
- Number of manufacturers/processors
- Farms by size, type, acres per capita, ownership

Objective 5-2: Dedicated regional population exists that will continue to produce food

- Average age of fisher *
- Average age of farmers *
- % of population growing food
-

Objective 5-3: Diverse food cropping system, not dependent on one commodity or market.

- Number of crops in the region accounting for 75% of harvested acres *
- Number of cultivars for selected commodities accounting for top 75% of production *
- Diversity of crops, e.g., crops and livestock produced on x% of farms

Objective 5-4: Crop management within the system by resident system actors.

- Diversity of seed source *
- Seed saving networks * /seed exchanges

Objective 5-5: Reduced petroleum dependency by food system producers over time.

- Fuel, fertilizer, and chemical expense in agriculture as % of total expenses *

Objective 5-6: Total food miles reduced for % of products in food system
- Food miles *

Objective 5-7: Policies in place to prevent pollution and safeguard resources needed for food production.
- Threats to genetic pollution addressed
- Sustainable agriculture programming/resources
- Roads, bridges, trains and ports diverse, maintained, protected from human and natural disasters
- HAACP—Hazard Analysis and Critical Control Points
- Precautionary principals implemented

Goal 6: Worker Opportunity & Justice

Objective 6-1: Provide successful, meaningful livelihoods for food/fish workers
- % of farmers with health insurance
- % of food dollar paid to farmer, region food dollars, net farm earnings
- Job satisfaction ratings of farmers, farmworkers, fishers & food industry workers

Objective 6-2: Food system workers are income secure - livable wage, health insurance as health contributes to income insecurity
- Avg. wage paid to farmworkers
- % farmworkers employed through farm labor contractors
- # farmworkers, % farmworkers FT/year round
- % farmworkers with health insurance
- Avg. wage paid to food processing workers (mean, median)
- % of food processing workers with health insurance
- Avg. wage paid to grocery workers
- % of grocery workers with health benefits
- Avg. wage paid to food service workers - mean, median, compared to other industries
- % of food service workers with health benefits

Objective 6-3: Food system workers' health is protected
- Farmworker housing - supply and condition
- Pesticide exposure of farmworkers and families
- Farmworker pesticide poisonings

Objective 6-4: Training programs in place to increase system worker skill base
- Programs to assist food entrepreneurs, incl. financial facilities, technical assistance, training
- Programs for low-income and minority access to land and food production skills
- Education and training programs for farmworkers and families

Objective 6-5: Fishing industry (state level) that where workers' health is protected
- Avg. age of fishers
- Avg. wage of fishers
- No. of commercial fishing licenses and commercial permits
- % of fishers with health insurance

Appendix C. 2008 Federal Poverty Table

FAMILY SIZE	100% POVERTY*	120%	133%	150%	170%	175%	185%	190%	200%	250%	300%	400%
1	10,400.00	12,480.00	13,832.00	15,600.00	17,680.00	18,200.00	19,240.00	19,760.00	20,800.00	26,000.00	31,200.00	41,600.00
2	14,000.00	16,800.00	18,620.00	21,000.00	23,800.00	24,500.00	25,900.00	26,600.00	28,000.00	35,000.00	42,000.00	56,000.00
3	17,600.00	21,120.00	23,408.00	26,400.00	29,920.00	30,800.00	32,560.00	33,440.00	35,200.00	44,000.00	52,800.00	70,400.00
4	21,200.00	25,440.00	28,196.00	31,800.00	36,040.00	37,100.00	39,220.00	40,280.00	42,400.00	53,000.00	63,600.00	84,800.00
5	24,800.00	29,760.00	32,984.00	37,200.00	42,160.00	43,400.00	45,880.00	47,120.00	49,600.00	62,000.00	74,400.00	99,200.00
6	28,400.00	34,080.00	37,772.00	42,600.00	48,280.00	49,700.00	52,540.00	53,960.00	56,800.00	71,000.00	85,200.00	113,600.00
7	32,000.00	38,400.00	42,560.00	48,000.00	54,400.00	56,000.00	59,200.00	60,800.00	64,000.00	80,000.00	96,000.00	128,000.00
8	35,600.00	42,720.00	47,348.00	53,400.00	60,520.00	62,300.00	65,860.00	67,640.00	71,200.00	89,000.00	106,800.00	142,400.00

*For family units of more than 8 members, add $3,600

MONTHLY GUIDELINES

FAMILY SIZE	100% POVERTY	120%	133%	150%	170%	175%	185%	190%	200%	250%	300%	400%
1	866.67	1,040.00	1,152.67	1,300.00	1,473.33	1,516.67	1,603.33	1,646.67	1,733.33	2,166.67	2,600.00	3,466.67
2	1,166.67	1,400.00	1,551.67	1,750.00	1,983.33	2,041.67	2,158.33	2,216.67	2,333.33	2,916.67	3,500.00	4,666.67
3	1,466.67	1,760.00	1,950.67	2,200.00	2,493.33	2,566.67	2,713.33	2,786.67	2,933.33	3,666.67	4,400.00	5,866.67
4	1,766.67	2,120.00	2,349.67	2,650.00	3,003.33	3,091.67	3,268.33	3,356.67	3,533.33	4,416.67	5,300.00	7,066.67
5	2,066.67	2,480.00	2,748.67	3,100.00	3,513.33	3,616.67	3,823.33	3,926.67	4,133.33	5,166.67	6,200.00	8,266.67
6	2,366.67	2,840.00	3,147.67	3,550.00	4,023.33	4,141.67	4,378.33	4,496.67	4,733.33	5,916.67	7,100.00	9,466.67
7	2,666.67	3,200.00	3,546.67	4,000.00	4,533.33	4,666.67	4,933.33	5,066.67	5,333.33	6,666.67	8,000.00	10,666.67
8	2,966.67	3,560.00	3,945.67	4,450.00	5,043.33	5,191.67	5,488.33	5,636.67	5,933.33	7,416.67	8,900.00	11,866.67

Appendix D. Clark County Food Expenditures: Markets for food eaten at home 2005 (millions)

- Meats, poultry, fish, and eggs $ 97.6
- Fruits & vegetables $79.4
- Cereals and bakery products $18.8
- Dairy products $51.0
- "Other," incl. sweets, fats, & oils $162.8

Food Consumption Estimates from Bureau of Labor Statistics: Consumer Expenditure Survey
http://www.bls.gov/cex/home.htm

Appendix E. Allowable Food Stamp Items

Food Stamps CAN purchase:
- Breads
- Cereals
- Fruits and Vegetables
- Meats
- Fish
- Poultry
- Dairy
- Food producing seeds & plants

Food Stamps CAN NOT purchase:
- Alcohol
- Cigarettes
- Cleaning supplies
- Vitamins
- Medicines
- Hot foods

Federal Food and Nutrition Services. United States Department of Agriculture. 2008. Allowable Food Stamp Purchases

Appendix F. Emergency Food Box contents

canned fruit	rice
canned vegetables	dry beans
canned meat	frozen meat
chili	dairy products (IA)*
peanut better	pasta
cereal or oatmeal	spaghetti sauce
margarine (IA)*	bread
pastries	chips

*IA = If Available

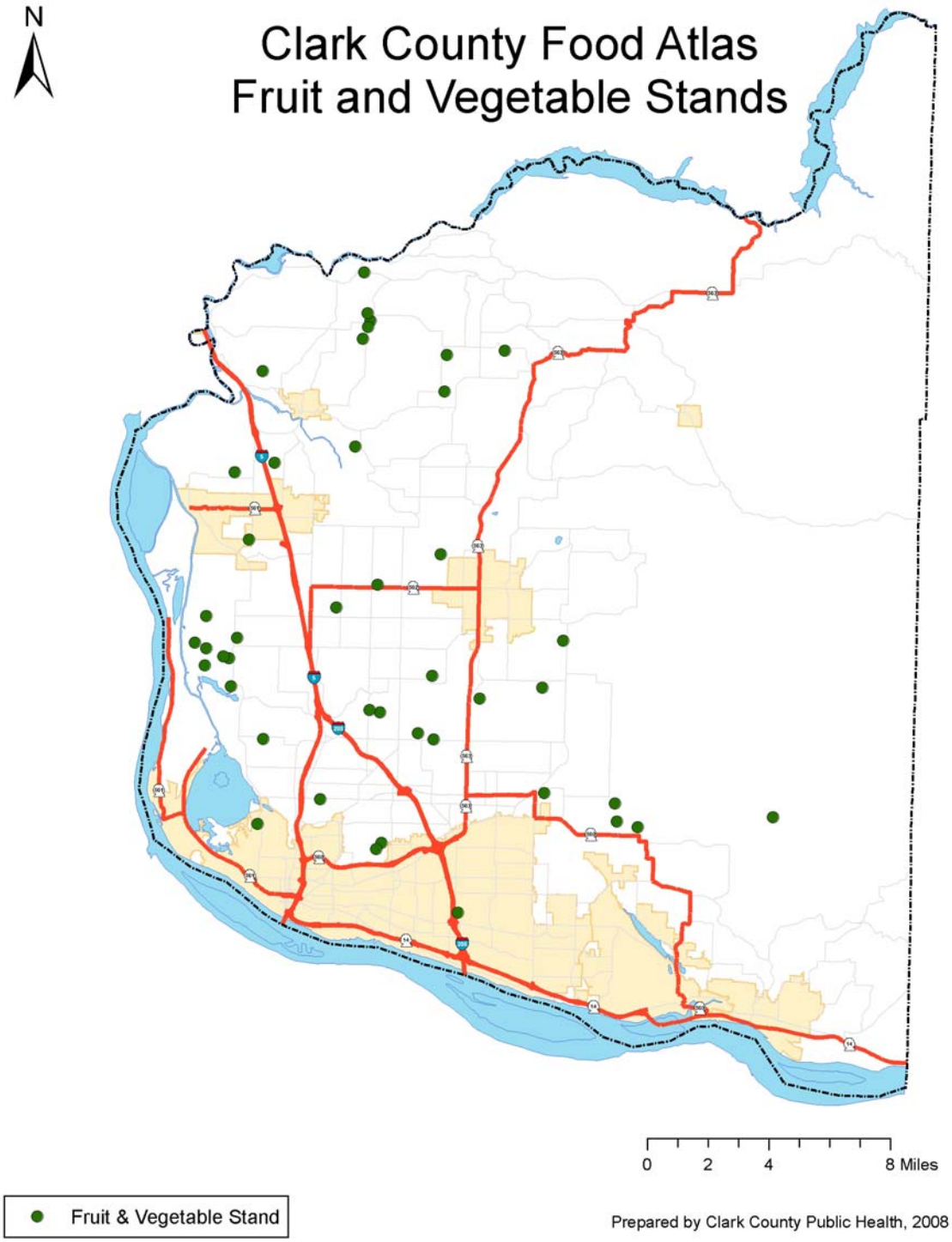
The Emergency Food Assistance Program. United States Department of Agriculture. 2008. General Food Box Items

Appendix G. Food Atlas Map Series

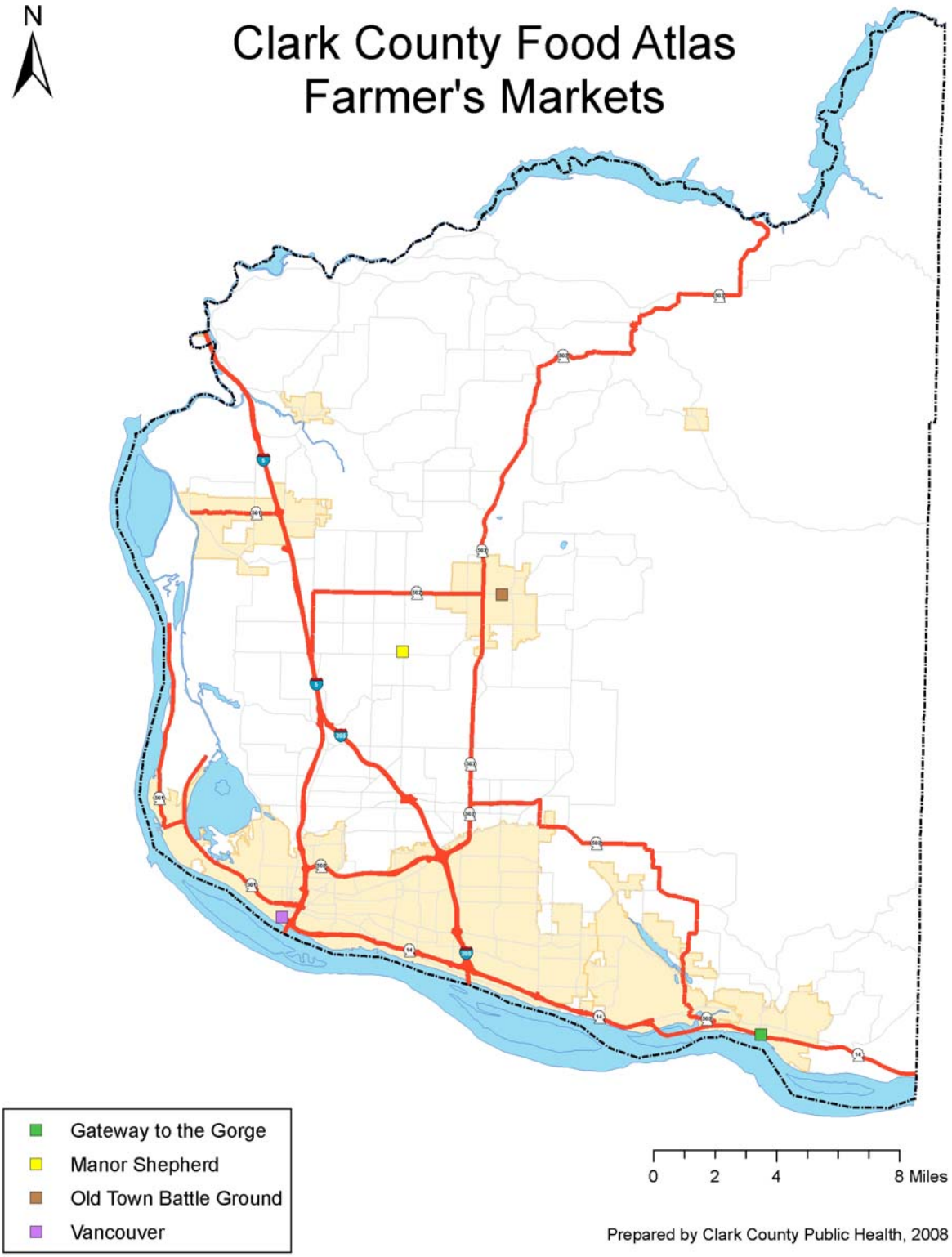
Appendix Gi. Clark County Food Atlas

Appendix Gii. Clark County Food Pantries Map

Appendix Giii. Clark County Fruit and Vegetable Stands Map

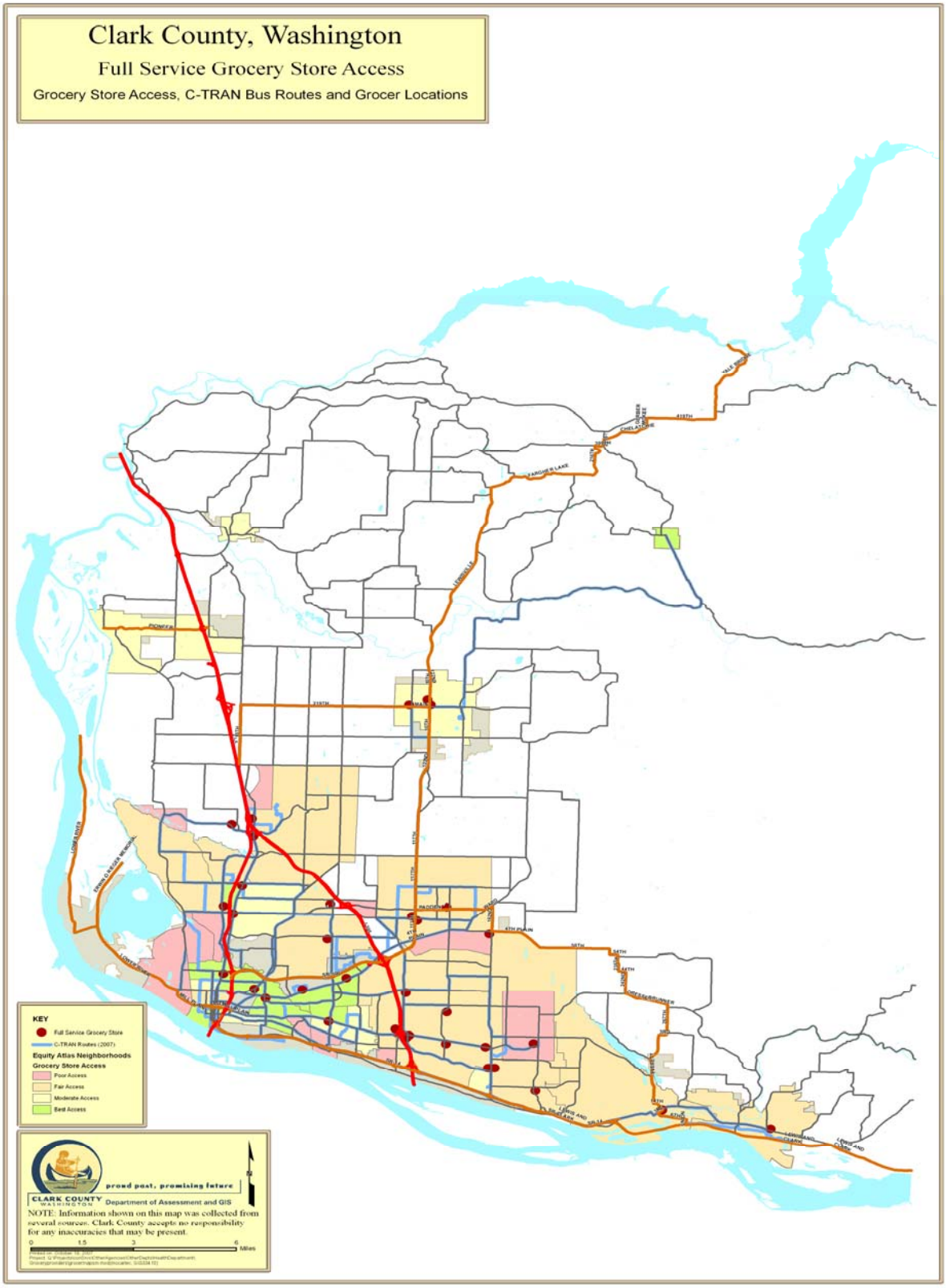


Appendix Giv. Clark County Farmers Markets Map



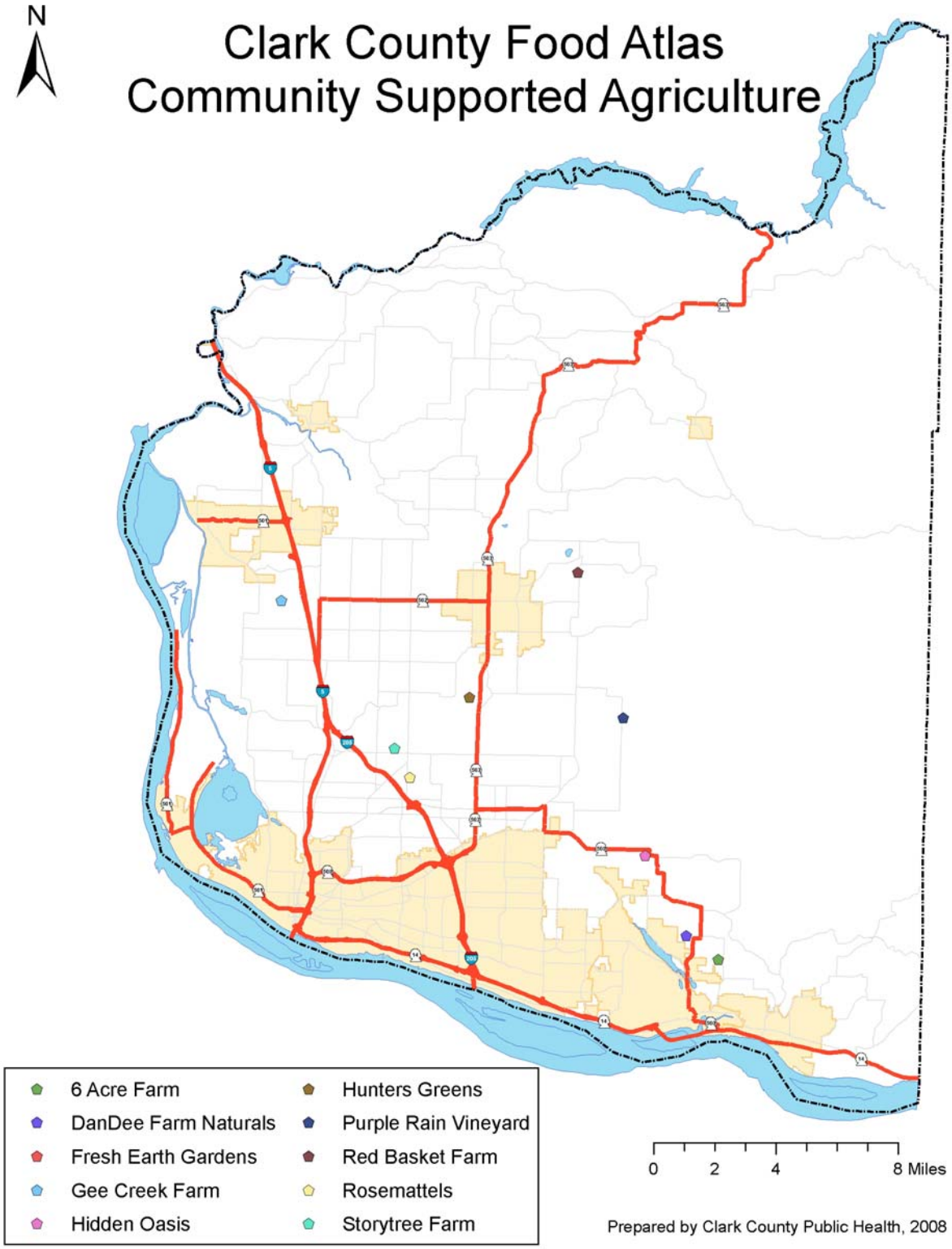
Appendix Gv. Clark County Grocery Stores Map

Appendix Gvi. Clark County Full Service Grocery Store Access Map



Appendix Gvii. Clark County Community Gardens Map

Appendix Gviii. Clark County Community Supported Agriculture Map



Appendix H. Neighborhood Food Survey – Fruit Valley

COMMUNITY FOOD SURVEY

Fruit Valley Results
July 2008

Response rate 3% (53 responses/2000 distributed)
Survey conducted Spring 2008

Note: Totals may not add to 100% due to rounding.

Dear Community Member,

Together, Community Choices, Clark County Public Health and Steps to a Healthier Clark County are conducting a Food Assessment to learn more about food and hunger issues in your neighborhood. Our goals are to educate the Clark County Food System Council about food access issues you face as a consumer and improve healthy food options in your community.

The survey should take you about 10 minutes to complete. Please return the survey in the pre-paid envelope provided.

Would you like to take the survey online instead?
Please visit: www.clarkcommunitychoices.org

For more information about the Clark County Food Assessment or to receive paper copies of the survey in other languages please call: 360-567-1092

Thank you for taking part in this important survey!

Disclaimer:
None of the information you provide will be used to identify you in any way and your participation is voluntary.

This publication is supported by the Steps to a HealthierUS Cooperative Agreement Program of the U.S. Department of Health and Human Services (HHS). Its contents do not necessarily represent the official views of HHS.

Community Choices and Steps to a Healthier Clark County would like to thank the EATS Group in Wenatchee, WA and Ecumenical Ministries of Oregon for providing partial survey content.

1. How often do you or someone in your household cook at home?
13% 0 to 4 days per week **87%** 5 to 7 days per week

2. Do you raise or grow any kind of food at home? **check all that apply*
34% Yes, vegetables **15%** Yes, fruit **4%** Yes, chicken or livestock
9% Yes, other:_____ **60%** No

3. Do you preserve seasonal food by canning, freezing, or drying, etc.?
64% Yes/Sometimes **36%** No

4. If classes were offered for cooking, preserving, or growing food in your community would you take them? **54%** Yes **19%** No **21%** Not sure **6%** Already take classes

5. Do you use a Community Garden? **8%** Yes **83%** No **9%** Not sure what it is

6. Would you like a Community Garden in your neighborhood?
34% Yes **11%** No **9%** Don't know **45%** Already have one

7. Would you like to participate in Community Supported Agriculture (CSA)? **35%** Yes **12%** No **15%** Not sure **6%** Already buy from a CSA **33%** Don't know what it is

8. How often do you buy your food from the following places?
**check all that apply*

	Never/Rarely	Sometimes/Often
Grocery store	**4%**	**96%**
Mini-mart or gas station (Quick Stop, 7-Eleven, etc.)	**79%**	**21%**
Large discount store (Wal-Mart, Winco, etc.)	**17%**	**83%**
Restaurant	**51%**	**48%**
Farmers Market (when available)	**58%**	**42%**
Produce Stand (when available)	**58%**	**42%**
Fast Food	**58%**	**42%**
Other:_____	**25%**	**75%**

9. How important are the following factors when you buy food?

	Not Important	Important/Very Important
Price	**4%**	**96%**
Selection of food	**0%**	**100%**
Close to home(less than 1 mile)	**36%**	**64%**
Close to work(less than 1 mile)	**57%**	**44%**
Near bus stop	**69%**	**31%**

10. Do you buy locally grown foods (foods grown within Clark County)?
76% Yes/Sometimes **4%** No **21%** Not sure

11. If you answered "no" to question 10, why? *(please select one answer)*
9% Not available **0%** Too expensive **18%** Not convenient
0% Not the food I like **9%** Not important to me

64% Don't know where to get it **0%** Other:_____

12. How do you think the price of locally grown food compares to the price of other food you buy? **21%** More expensive **31%** About the same **17%** Less Expensive **31%** I don't know

13. Which of the following locally grown foods do you buy? *check all that apply
59% Vegetables **66%** Fruits **19%** Eggs **23%** Meat and poultry
21% Dairy **6%** Other:_____ **13%** I don't know **4%** None

14. If you don't buy locally grown foods, which would you like to buy?
*check all that apply **49%** Vegetables **43%** Fruits **43%** Eggs **37%** Meat and poultry
36% Dairy **6%** Other:_____ **4%** None

15. Which of the following places would you like to see locally grown food offered? *check all that apply
55% Restaurants **32%** Worksite **68%** School **55%** Hospitals
11% None of these **21%** Other:_____

16. Do you or your children ever go to bed hungry? **19%** Yes/Sometimes **81%** No

17. Do you generally have enough money for food? **62%** Yes **19%** No **19%** Sometimes

18. In the past year, which of these have you used to get food: *check all that apply
8% Farmers Market coupons **30%** Food Bank **9%** WIC Program
15% Church or soup kitchen **25%** Food stamps **44%** None of these
26% Family or friends **8%** Other:_____

19. Would you like the above programs to provide locally grown foods?
77% Yes **4%** No **19%** Not sure

20. How do you get to where you most often buy food?
85% Car **15%** Other than car: Bike/Bus/Walk/Other

21. How often is transportation a problem when you buy food?
77% Never/Sometimes **24%** Often/Most Often/Always

22. Are you a member of a group that is involved in local food, farming, or helping the hungry? **16%** Yes, name of group_____*(optional)* **84%** No

23. What neighborhood do you live in? ☑Fruit Valley □ Vancouver Heights □ Other

24. What is your age group? **45%** 0-44 years **36%** 45-64 years **19%** 65 and over

25. What language do you most commonly speak at home?
96% English **2%** Spanish **0%** Russian **2%** Other_____
26. What is your annual household income?
65% less than $24,999 **30%** $25,000 - $59,999 **4%** $60,000 or more

27. If you would like to participate further in this community food assessment project please tell us how we may contact you: *(optional) **26% responded**

Appendix I. Neighborhood Food Survey – Vancouver Heights

COMMUNITY FOOD SURVEY

Vancouver Heights Results

July 2008

Response rate 18% (304 responses/1670 distributed)
Survey conducted Spring 2008

Note: Totals may not add to 100% due to rounding.

Dear Community Member,

Together, Community Choices, Clark County Public Health and Steps to a Healthier Clark County are conducting a Food Assessment to learn more about food and hunger issues in your neighborhood. Our goals are to educate the Clark County Food System Council about food access issues you face as a consumer and improve healthy food options in your community.

The survey should take you about 10 minutes to complete. Please return the survey in the pre-paid envelope provided.

Would you like to take the survey online instead?
Please visit: www.clarkcommunitychoices.org

For more information about the Clark County Food Assessment or to receive paper copies of the survey in other languages please call: 360-567-1092

Thank you for taking part in this important survey!

Disclaimer:
None of the information you provide will be used to identify you in any way and your participation is voluntary.

This publication is supported by the Steps to a HealthierUS Cooperative Agreement Program of the U.S. Department of Health and Human Services (HHS). Its contents do not necessarily represent the official views of HHS.

Community Choices and Steps to a Healthier Clark County would like to thank the EATS Group in Wenatchee, WA and Ecumenical Ministries of Oregon for providing partial survey content.

1. How often do you or someone in your household cook at home?
   22% 0 to 4 days per week **79%** 5 to 7 days per week

2. Do you raise or grow any kind of food at home? **check all that apply*
   46% Yes, vegetables **18%** Yes, fruits **1%** Yes, chicken or livestock
   6% Yes, other:_____ **48%** No

3. Do you preserve seasonal food by canning, freezing, or drying, etc.?
   58% Yes/Sometimes **42%** No

4. If classes were offered for cooking, preserving, or growing food in your community would you take them? **25%** Yes **39%** No **32%** Not sure **3%** Already take classes

5. Do you use a Community Garden? **1%** Yes **96%** No **3%** Not sure what it is

6. Would you like a Community Garden in your neighborhood?
   34% Yes **18%** No **44%** Don't know **5%** Already have one

7. Would you like to participate in Community Supported Agriculture (CSA)? **16%** Yes
   28% No **26%** Not sure **1%** Already buy from a CSA **29%** Don't know what it is

8. How often do you buy your food from the following places? **check all that apply*

	Never/Rarely	Sometimes/Often
Grocery store	**2%**	**98%**
Mini-mart or gas station (Quick Stop, 7-Eleven, etc.)	**93%**	**7%**
Large discount store (Wal-Mart, Winco, etc.)	**25%**	**75%**
Restaurant	**40%**	**60%**
Farmers Market (when available)	**46%**	**54%**
Produce Stand (when available)	**49%**	**51%**
Fast Food	**60%**	**40%**
Other:_____	**54%**	**46%**

9. How important are the following factors when you buy food?

	Not Important	Important/Very Important
Price	**3%**	**97%**
Selection of food	**2%**	**98%**
Close to home (less than 1 mile)	**21%**	**79%**
Close to work (less than 1 mile)	**74%**	**26%**
Near bus stop	**87%**	**13%**

10. Do you buy locally grown foods (foods grown within Clark County)?
    81% Yes/Sometimes **5%** No **14%** Not sure

11. If you answered "no" to question 10, why? *(please select one answer)* **12%** Not available **14%** Too expensive **14%** Not convenient **0%** Not the food I like
    4% Not important to me **47%** Don't know where to get it **10%** Other:_____

12. How do you think the price of locally grown food compares to the price of other food you buy?
25% More expensive **40%** About the same **10%** Less Expensive **25%** don't know

13. Which of the following locally grown foods do you buy? **check all that apply*
70% Vegetables **72%** Fruits **21%** Eggs **15%** Meat and poultry
20% Dairy **3%** Other:_____ **12%** I don't know **4%** None

14. If you don't buy locally grown foods, which would you like to buy? **check all that apply*
38% Vegetables **34%** Fruits **30%** Eggs **27%** Meat and poultry
23% Dairy **3%** Other:_____ **2%** None

15. Which of the following places would you like to see locally grown food offered?
check all that apply* **68% Restaurants **23%** Worksite **55%** School **45%** Hospitals
9% None of these **13%** Other:_____

16. Do you or your children ever go to bed hungry? **5%** Yes/Sometimes **95%** No

17. Do you generally have enough money for food? **83%** Yes **6%** No **11%** Sometimes

18. In the past year, which of these have you used to get food: **check all that apply*
2% Farmers Market coupons **7%** Food Bank **4%** WIC Program
4% Church or soup kitchen **10%** Food stamps **71%** None of these
10% Family or friends **4%** Other:_____

19. Would you like the above programs to provide locally grown foods?
75% Yes **2%** No **23%** Not sure

20. How do you get to where you most often buy food?
95% Car **5%** Other than car: Bike/Bus/Walk/Other

21. How often is transportation a problem when you buy food?
98% Never/Sometimes **2%** Often/Most Often/Always

22. Are you a member of a group that is involved in local food, farming, or helping the hungry? **13%**
Yes, name of group_____*(optional)* **87%** No

23. What neighborhood do you live in? □ Fruit Valley ☑ Vancouver Heights □ Other

24. What is your age group? **24%** 0-44 years **40%** 45-64 years **36%** 65 and over

25. What language do you most commonly speak at home?
98% English **2%** Spanish **0%** Russian **0%** Other_____

26. What is your annual household income?
21% less than $24,999 **49%** $25,000 - $59,999 **30%** $60,000 or more

27. If you would like to participate further in this community food assessment project please tell us how we may contact you: *(optional) **13% responded**

Appendix J. Clark County Community Garden Inventory

Name	Location	Dimensions
Marshall Garden	1009 E. McLoughlin Blvd.	20' X 20' (80 plots)
Campus Garden	Campus Drive & 65th Avenue	20' X 20' (50 plots)
Ellsworth	10th Street & Ellsworth Road	20' X 20' (50 plots)
Fruit Valley	31st Street & Fruit Valley	20' X 20' (20 plots)

Appendix K. Clark County Correctional Facilities Food Vendor List

Clark County Correctional Facilities Food Vendor Information

Vendor	Product	Location
Sunshine Dairy Foods	Dairy Products	Local
Franz Family	Baked Goods	Regional
Sysco Food Service	Fresh Produce	National
Sysco Food Service	Fresh Eggs	National
Sysco Food Service	Meat and Poultry	National

Appendix L. Clark County Correctional Facilities Food Procurement Contract

PART VI – BID SPECIFICATION BID NO. 2508

The undersigned submits the following bid for furnishing goods or services according to all provisions set forth in Parts I through VI of this contract.

DESCRIPTION	BASE BID
Total of Extensions – (Items 1 through 21)	$ _____

ALTERNATE #1

Total of Extensions with Food Alliance Certification	$ _____

http://www.foodalliance.org/gp_producer.htm
http://www.foodalliance.org/certification/standards.htm

NOTE: Failure to acknowledge receipt of Addenda will render the bid non-responsive and therefore void.

ADDENDA:

Bidder shall insert number of each Addenda received. If no addenda received, please mark "NONE".

No._____ Dated: _____ No._____ Dated: _____

Delivery shall be _____ after receipt of order. It is acknowledged that the documents enclosed are hereby incorporated by reference and upon award constitute a contract between the undersigned and the County of Clark. Vendor certifies that he has not entered into any agreement whatsoever to fix or maintain prices or competition with respect to this contract.

Bids submitted without a signature below will be rejected.

FIRM NAME
_____

BY _____ (Print Name)
_____

PART VI – BID SPECIFICATION **BID NO. 2508**

ADDRESS _____CITY & STATE _____ ZIP _____

DATE _____ TELE. NO ( )_____ FAX NO. ( )_____

NOTE: For this contract, we will use Local City/County Sales and Use Tax Location Code Number_____ Federal Tax ID. _____ UBI Number _____

SCOPE

It is the intent of these specifications to describe the Annual Meat and Poultry for the Clark County Sheriff's Office Detention facilities and Juvenile Detention Hall.

GENERAL

Clark County invites vendors of both fresh and frozen meats and cheeses to bid upon the items listed within these specifications. Quantities noted are approximates based on three month actuals and are to be used by the bidding firms as a basis upon which to compute unit and extended prices. These figures do not constitute a commitment to purchase the quantities listed.

No partial bid awards shall be made. The successful bidder shall have bid upon all specified items. The bid will be awarded to the overall lowest responsible bidder. Vendor shall bid on unit/pack specified. Non-compliance may result in bid disqualification.

Clark County has made this bid subject to Washington State statute RCW 39.34. Therefore the bidder may, at the bidders' option, extend identical prices and services to other public agencies wishing to participate in this bid. Each public agency wishing to utilize this bid will issue a purchase order (or contract) binding only their agency. Each contract is between the bidder and the individual agency with **no** liability to Clark County.

APPLICABLE PUBLICATIONS: All foodstuffs shall comply with WAC 248.84.010.

REQUIREMENTS:

1. The Clark County Auditor shall have access to copies of records relating to product orders and deliveries made to Clark County. The vendor agrees to promptly make and release copies of such records to the Auditor. It is mutually agreed that the Auditor shall limit disruption of normal day-to-day operations of the vendor in obtaining copies of records; when and where possible.
2. The successful bidding firm shall be a HACCP certified facility.
3. Deliveries shall be made using a refrigerated truck.
4. Meat and Poultry shall comply with WAC 246.215

DELIVERY

PART VI – BID SPECIFICATION **BID NO. 2508**

1. The successful bidding firm shall provide deliveries twice a week to:

Clark County Jail Work Center
5197 Lower River Road
Vancouver, WA 98660

2. All deliveries shall be accompanied by a legible delivery receipt which shall be signed by an authorized receiving agent. If a specified item is unavailable at the time an order is placed, it shall be the successful vendor's responsibility to offer, at the quoted price of the items specified, a like product of the same or better quality and utility.

3. Deliveries of foodstuffs to the above-noted correctional facility shall require the successful bidding firm to become familiar with specific delivery schedules and procedures.

4. Meat and poultry products shall be priced and delivered, F.O.B. destination, freight prepaid and included.

5. Because the ordering department is located in a correctional facility, special security conditions exist. It shall be the responsibility of the successful vendor to meet with custody personnel to become familiar with specific delivery schedules and procedures.

6. Invoices shall be submitted in duplicate and accompanied by a legible signed copy of the applicable delivery receipt (s) and shall be identified by the facility served to:

Sheriff's Department
Attn: Accounts Payable
PO Box 410
Vancouver, WA 98666

7. Deliveries of meat and poultry to the above noted correctional facility shall require the successful bidding firm to become familiar with specific delivery schedules and procedures. Please contact Clark Campbell RD; at (360) 397-2211 X-3203 for times and procedures.

CONTRACT TERMINATION:

1. The contract resulting from this bid award may be canceled:

(a) By mutual written agreement of both parties. Termination under this agreement may be immediate.

(b) By Clark County for breach by the successful bidding firm of its obligation as set forth in this specification or within the contract. The County shall give the successful bidding firm written notice of intent to terminate under this provision. The firm shall have five (5) calendar days from receipt of such notice to cure and rectify the breach.

(c) At the County's discretion, by the vending firm having increased its overall bid price by more than five (5) percent during the term of the contract.

ESCALATION / DE-ESCALATION:

PART VII - BID TABULATION **BID NO. 2508**

1. Prices may be adjusted during the life of the annual contract provided:

   (a) The vendor furnishes Clark County Purchasing notice of intent to adjust cost at least 3 days prior to date new price is to take effect.

   (b) The new price is consistent with current market conditions. Clark County Purchasing will use, as an aid in determining cost adjustment validity, the trade publication published by the Oregon State University Extension Service titled, "Market Review ...Livestock, Meat and Wool".

EXTENSIONS

Clark County reserves the right to extend this contract for two (2) one (1) year periods, with the same terms and conditions, by serving written notice of its intention to do so thirty (30) days prior to the expiration date stated in the contract. Contract prices will be negotiated, per line item, at the time of the extension.

Appendix M. Proposed Urban Growth Area Expansion and Acres converted to Urban Use

Acres of 2004 CompPlan* designations converted to urban uses in Adopted 2007 Plan							
General CompPlan	UGA Expansion Areas						
	Battle Ground	Camas	La Center	Ridgefield	Vancouver	Washougal	Total
Agriculture	411.30	781.36	692.19	828.60	1231.84	271.88	4217.19

Note: Other land use areas include forest, rural residential, commercial, industrial, parks and public spaces
*Clark County Comprehensive Growth Management Plan, 2007

Appendix N. Current Use Program: Farm and Agriculture Land Eligibility Criteria

Farm and Agricultural Land Eligibility: 1993 Statute

Land may be eligible for Farm and Agriculture current use designation if it meets any of the following requirements:

Option 1: Any parcel of land or adjoining parcels that are **20 acres or more** and a) devoted primarily to livestock production or agriculture purposes or b) enrolled in a federal conservation reserve program

Option 2: Any parcel of land or adjoining parcels that are between **5 and 20 acres** in size producing a gross income of $200 or more per acre annually during three of the preceding five years prior to the date of application for classification. Gross income from agricultural uses includes, but is not limited to, wholesale value of agricultural products donated to nonprofit food banks or feeding programs.

Option 3: Parcel of land or adjoining parcels that are **less than 5 acres** in size producing a gross income of $1,500 or more annually during three of the preceding five years prior to the date of application for classification.

Qualifying lands can include up to 20% of the land in compatible "incidental uses" (such as wetland preservation), as well as storage or building structures necessary to produce, prepare, or sell agricultural products. Greenhouse production may not be eligible in Clark County.

Appendix O. Water Rights

Water Right Exemptions

There are four types of groundwater uses exempt from the state Water Right permitting requirements

- Stock-watering purposes (no gallon per day limit or acre restriction)
- Withdrawing a total of 5,000 gallons or less of ground water from a well each day for any of the following uses:
  - Irrigating a ½ acre or less of lawn or garden
  - Providing water for a single home or groups of home
  - Providing water for industrial purposes, including irrigation

Permit Once DOE approves the intended user's application, receives the public notice Affidavit and prepares the Report of Examination, the user is issued a Permit to Appropriate Public Waters of the State of Washington. A water right permit lends permission by the state to develop a Water Right and is the first step towards securing a Water Right Certificate. The Permit specifies a development schedule, timeline for construction completion and when the water must be put to full beneficial use. Once these requirements are achieved, the user must submit a description of operational facilities, purpose, quantity and location of water usage, and a statement that all conditions of the permit have been met to be considered for a water right certificate.

Certificate Once the permit project has been completed, the water right is said to be "perfected." DOE issues a water right certificates specifying maximum water use described in the permit and terms of the water right. Once a certificate is issued, the water right is considered "appurtenant" or attached to the land on which the water is used.

Claims Assessing water right claims can be more complicated than evaluating a permit or certificate because a claim is not a water right, but is a statement filed by a property owner that a water right may exist. A water right claim is a statement of beneficial use of water that began prior to 1917 for surface water and prior to 1945 for ground water. These water rights are considered "vested rights" and validity must be determined through a general water right adjudication conducted by the Superior Court. Claimants are required to prove that water has been in continual and beneficial use prior to 1917 for surface water and prior to 1945 for ground water. Claims can limit water usage because it protects the pre-existing water right for the quantity, purpose and place of use prior to the surface and ground water codes. Current use must be consistent with this information. Any water right change must be pursued through the Department of Ecology or the local Water Conservancy Board.

Changing an Existing Water Right

The application process for making a change to an existing water right is similar to acquiring a new water right. Water right holders may request to change the following elements of an existing water right:

- Place of use
- Point of diversion or withdrawal
- Additional point(s) of diversion or withdrawal
- Purpose of use (including season of use)

Relinquishment

People often use the expression "use it or loose it" to describe Washington water rights. Relinquishment is enforced to ensure that limited water resources are put to maximum and beneficial uses.

- **5 or more successive years of non-use** may be grounds for relinquishment unless there is sufficient cause to explain non-use, such as:
  - Water Unavailability (due to drought or other)
  - Irrigation reduced due to:
    - weather condition (temporary)
    - to crop rotation (temporary)
    - use from aquifer due to drought or low flow period

Appendix P. Community Supported Agriculture Farmer Survey

Clark County Food Assessment
Project of the Clark County Food System Council and Steps to a Healthier Clark County

FARMER/PRODUCER SURVEY

Dear Farmer,

Steps to a Healthier Clark County and the Clark County Food System Council are working together to find ways to improve the farm economy in Clark County. The information you provide will help educate our groups about emerging issues farmers face and how to better advocate for policies that support local farm operations. This data will help us track the availability of locally-grown food and small farm viability in our county. Any reports produced will include aggregated or combined data only. Personally identifiable information will not be released without your express permission.
(Sections of this survey were adopted from Ecumenical Ministries of Oregon, IFFP supported program by the USDA Community Food Projects Grant)

Please return the survey in the prepaid envelope provided by Wednesday April 30th, 2008

If you have any further questions or comments please contact Amy Gilroy: foodweb01@gmail.com; or call 360.567.1092

THANK YOU for participating in this important survey.

DATE:_____

(This section will be kept confidential)

Your name:		
Name of your operation:		
Mailing Address:		
Street Address (if different from above):		
Phone:	Email:	Website:

Do you consider yourself: (check all that apply)

❑ Agricultural Producer ❑ Processor ❑ Other_____

How many total farmable acres do you have? _____

Amount of acreage in production: _____

If you have additional acreage that you are not farming, why is it out of production?

How many seasonal employees work on your farm operation?_____

How many annual employees work on your farm operation?_____

How many family members are supported by your farm operation?_____

Is your farm under current agriculture or open space taxation?

❑ Yes ❑ No ❑ Not sure

If "yes" are you satisfied with the taxation designation? Please explain:

Please check the farm products you provide for sale (check as many as apply):

❑ Apples	❑ Fish	❑ Pork
❑ Berries	❑ Flowers ❑ Cut Flowers ❑ Dried flowers	❑ Seeds ❑ Heirloom
❑ Beef	❑ Goat ❑ Milk ❑ Cheese ❑ Meat	❑ Sheep ❑ Meat ❑ Wool
❑ Chicken	❑ Herbs	❑ Table Grapes ❑ Wine Grapes
❑ Christmas Trees	❑ Honey	❑ Transplants ❑ Vegetables
❑ Dairy (other than cheese)	❑ Lamb	❑ Vegetables
❑ Edible Flowers	❑ Meat ❑ Other_____ ❑ Other_____	❑ Value Added
❑ Eggs	❑ Ornamentals ❑ Trees ❑ Perennials	❑ Other:
❑ Other:	❑ Other:	

Please check the method(s) used to sell or market your products (check all that apply):

❑ Wholesale ❑ CSA ❑ Internet ❑ Roadside or Farm Stand

❑ Retail ❑ U-pick ❑ Mail Order ❑ Restaurant

❑ Farmers' Market ❑ Other ❑ Gleaning program

What percentage of your products are sold locally (within about 50 miles of your farm)?

❑ 0-10% ❑ 31-40% ❑ 61-70% ❑ 91-100%

❑ 11-20% ❑ 41-50% ❑ 71-80%

❑ 21-30% ❑ 51-60% ❑ 81-90%

Production Practices (check as many as apply)

❑ Conventional ❑ Certified Organic ❑ Free-range ❑ Sustainable (please explain):

❑ Certified Naturally Grown ❑ Organic - not certified ❑ IPM (Integrated Pest Management)

How many shareholders have invested in your CSA for the 2007 growing season?_____

Where do you most of your shareholders live? (please choose one answer)

❑ Clark County ❑ Washington, outside of Clark County

❑ Portland, Oregon ❑ Oregon, outside of Portland Metro Region

Do you or other household members/farmers work **off-farm or in non-farm** related business?

❑ Yes ❑ No

What is the estimated % of household income from non-farm related businesses?

❑ 0-10% ❑ 31-40% ❑ 61-70% ❑ 91-100%
❑ 11-20% ❑ 41-50% ❑ 71-80%
❑ 21-30% ❑ 51-60% ❑ 81-90%

What marketing strategies are you most interested in?

❑ New crop ideas ❑ New production techniques ❑On-site processing ❑ Waste disposal and management
❑Other:_____ ❑ Other:_____

What are your top **two** challenges as a farmer?

1._____

2._____

What are **two** major barriers to marketing your products locally?

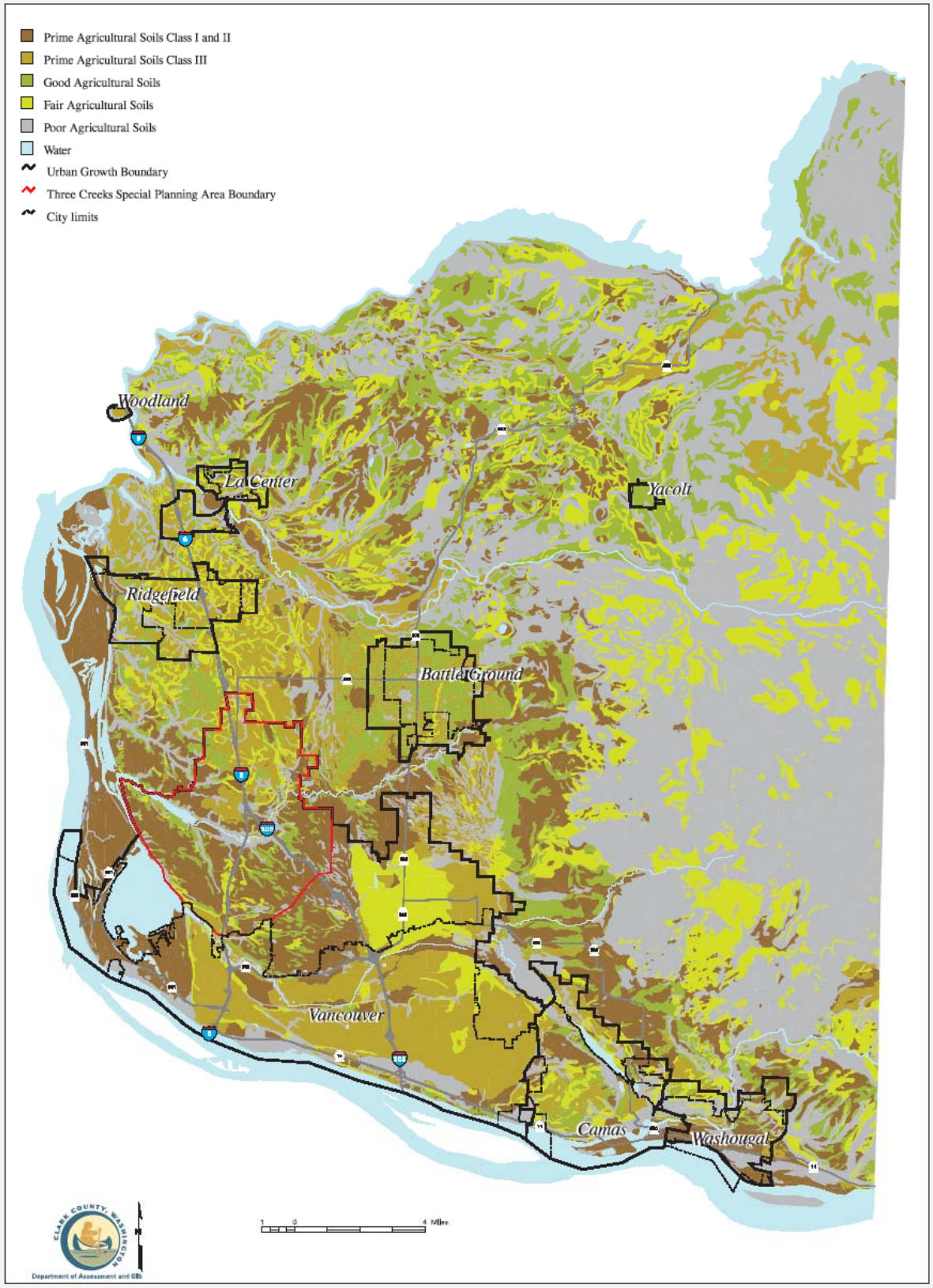
1._____

2._____

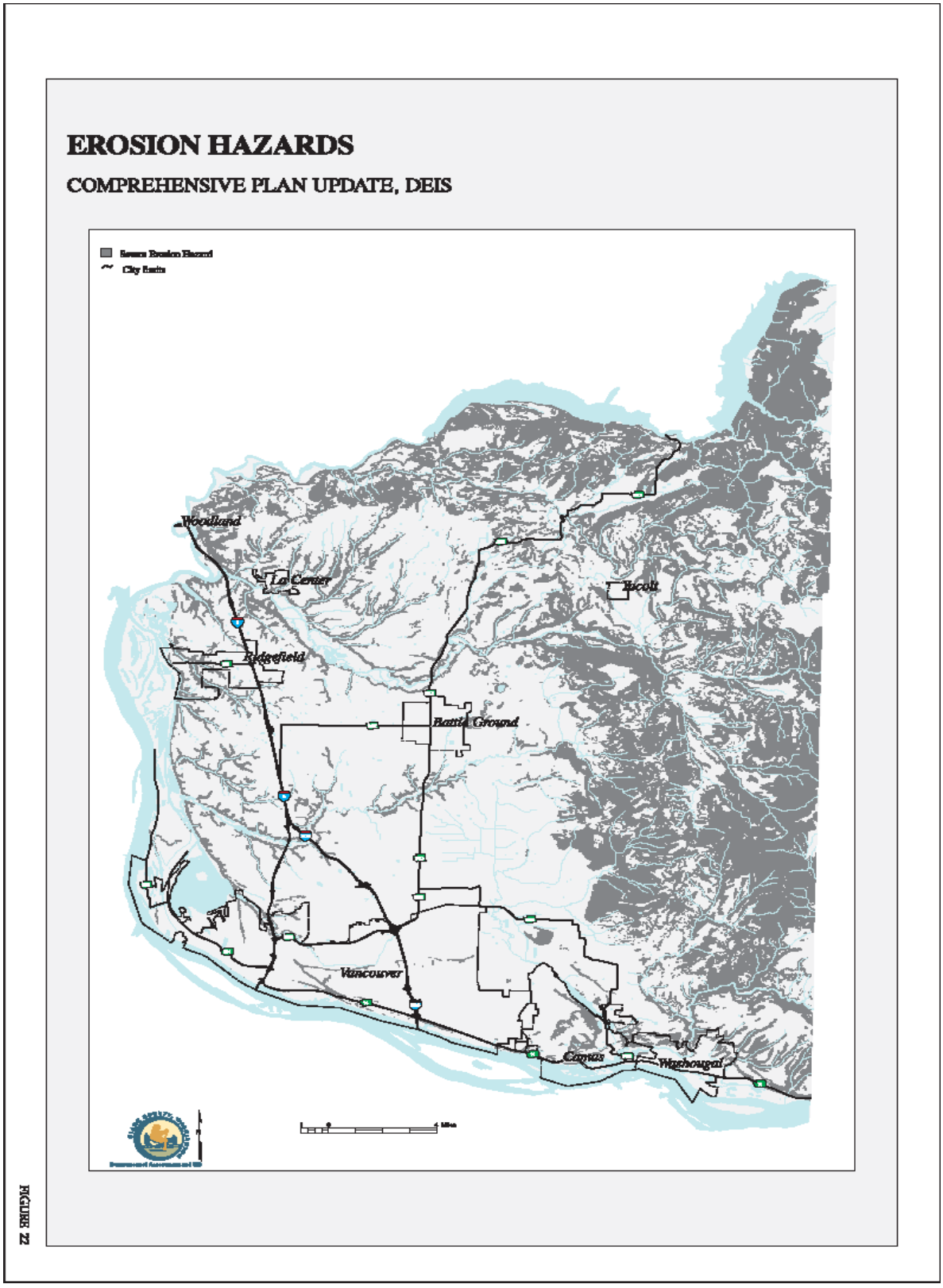
Please rank the following in order of importance to you in dealing with local outlets.
1 = most important, 5 = least important.

__ Broker __Direct sales to institution(s) __ Volume __ Guaranteed sales __ Simplicity of transaction

Appendix Q. Prime Agricultural Soils Map


Prime Agricultural Soils Class I and II
Prime Agricultural Soils Class III
Good Agricultural Soils
Fair Agricultural Soils
Poor Agricultural Soils
Water
Urban Growth Boundary
Three Creeks Special Planning Area Boundary
City limits
Woodland
La Center
Yacolt
Ridgefield
Battle Ground
Vancouver
Camas
Washougal
0
4 Miles
CLARK COUNTY, WASHINGTON
Department of Assessment and GIS

Appendix R. Soil Erosion Hazards Map



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