



DENVER'S FOOD SYSTEM



DENVER
THE MILE HIGH CITY

2016

A Baseline Report
FOR PLANNING PURPOSES ONLY

Acknowledgements

AUTHORS

Blake Angelo
Denver Office of Economic Development

Brittany Goldstein
Masters Candidate at Johns Hopkins University

REVIEWERS

Susan Gallo
Denver Office of Children's Affairs

Dan Goldhamer
CSU-Extension, Denver

Heidi Hoffman
Denver Department of Environmental Health

Meghan Hughes
Denver Department of Environmental Health

Susan Liehe
Denver Office of Economic Development

Mondi Mason
Denver Department of Environmental Health

Jennifer Moreland
Denver Public Health at Denver Health

Eric Swan
Denver Office of Economic Development

Derek Woodbury
Denver Office of Economic Development

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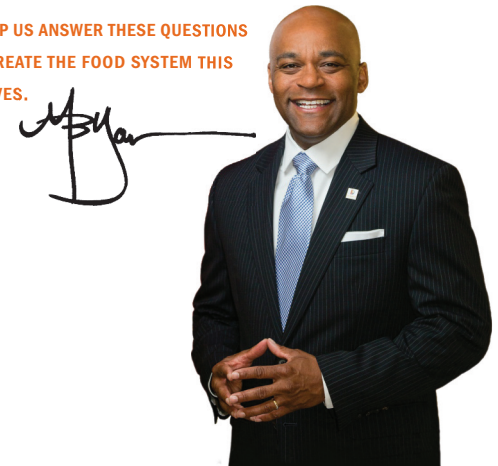
Letter from Denver Mayor Michael B. Hancock

Over the past four years, the City and County of Denver has made **SOLID PROGRESS** in the pursuit of greater healthy food access for all Denver residents, as well as the development of an economically robust food system. Among our many efforts to promote a strong and resilient food system that strengthens our community, I am most proud of the following:

- Creating the **DENVER SEEDS** taskforce
- Supporting the **DENVER SUSTAINABLE FOOD POLICY COUNCIL**, a Mayoral commission
- Adopting, as part of the the citywide **2020 SUSTAINABILITY GOALS**, the goal to grow and/or process 20% of food purchased in Denver in Colorado
- Supporting the development of a **MULTIMILLION DOLLAR INVESTMENT PROGRAM** for healthy food retail
- Initiating, and expanding by more than ten-fold, our **HEALTHY CORNER STORE PROGRAM**
- **HIRING THE FIRST DEDICATED STAFF MEMBER** to support food system development across the city
- **SUPPORTING COMMUNITY, PHILANTHROPIC, AND INDUSTRY ENGAGEMENT** across the food system through events such as the Local Food Summit and Business-to-Business Farmers Market
- **PROVIDING \$7.5 MILLION OF DIRECT FINANCIAL SUPPORT** for food-based projects that build wealth and transform our lowest income communities

World-class cities require world-class food systems, and Denver's food system is not without its challenges. This report frames the incredible impact our system already makes on our economy, our health and our community. This baseline summary also frames some of the fundamental questions we have yet to answer.

I INVITE YOU TO HELP US ANSWER THESE QUESTIONS AND TO HELP US CREATE THE FOOD SYSTEM THIS GREAT CITY DESERVES.



Denver Food System Background

Municipalities around the nation are working to build robust food systems that help achieve critical goals related to health, economy, community, climate, and more. Since 2010, the City and County of Denver and its partners have pursued multiple ongoing efforts to support and promote Denver's food system. As a measuring stick to gauge Denver's progress compared to that of other cities, several representatives attended the Climate Leadership Academy, hosted by the Institute for Sustainable Communities, in Santa Fe, New Mexico in 2014.

Among the city agencies attending were the Denver Office of Economic Development, Department of Environmental Health, Community Planning and Development, as well as City Council. Additionally, representatives from Denver Urban Gardens, the Sustainable Food Policy Council, and Colorado State University Extension attended. Other cities from Colorado, New Mexico, Arizona, Utah, and Nevada were present as well. These communities shared their successes, failures, goals, and plans for how to create more sustainable food systems moving forward.

The Denver group left the conference with the overwhelming feeling that Denver was ahead of the curve based on the number of agencies and organizations engaging in work to promote food systems planning. However, they were without a unified vision and a strategy for how to proceed.

As the result of a recommendation to the Mayor, a Manager of Food Systems Development was hired to align efforts and lead planning efforts to create a more vibrant, robust and sustainable food system for future generations of Denver residents.

THIS BASELINE REPORT OUTLINES THE CURRENT STATE OF THE DENVER FOOD SYSTEM. THE REPORT HIGHLIGHTS KEY FOOD SYSTEM INDICATORS, DISCUSSES RECENT POLICY CHANGES THAT STRENGTHEN THE CITY FOOD SYSTEM, AND POSES SOME KEY QUESTIONS THAT STILL NEED ANSWERS IN ORDER TO BUILD ON CURRENT MOMENTUM TO IMPROVE THE FOOD SYSTEM. THIS REPORT CAN HELP TO GUIDE COLLABORATIVE FOOD SYSTEM PLANNING THAT INSPIRES INDIVIDUALS, COMMUNITIES AND BUSINESSES WORKING TO IMPROVE THE DENVER FOOD SYSTEM.

Quick Facts: Denver Food System¹

2,221 food system business establishments operate in Denver

56,000 employees work in the Denver food system—accounting for nearly 10% of all jobs in Denver

\$312 million of tax revenue is generated annually by Denver's food system

\$7 billion of economic activity is generated by Denver's food system annually

Purpose of this Report

This baseline report outlines the current state of the Denver food system. The report:

- Highlights key food system indicators
- Discusses recent policy changes that strengthen the city food system
- Poses some key questions that still need answers in order to build on current momentum and help inform the Denver Food Plan

While this report investigates the breadth of the food system it is not comprehensive. More research is needed to understand the deep complexities and nuances of each food system sector. Baseline data is just a starting point.

The primary purpose of this report is to help guide collaborative food system planning and inspire individuals, communities, and businesses to build a comprehensive vision for the future of the Denver food system.

What is a Food System?

A **“FOOD SYSTEM”** is the process of how food gets from a farm or ranch to an individual and their family. The food system begins with the land, water, seeds, and tools that farmers and ranchers convert into food. The food system also encompasses the cleaning, moving, processing, repackaging, packaging, distributing, selling, and cooking that happens between the farm and your plate.

CONSUMERS PLAY A CRUCIAL ROLE IN THE FOOD SYSTEM. Our purchases inform the system about what and how much to produce.

DETAILS ABOUT EACH SECTOR IS PROVIDED ON THE RIGHT, but it is critical to note that the strongest food systems include robust links between each sector in the system.



Food System Sectors

FOOD PRODUCERS

Includes farms, ranches, suppliers of critical inputs (e.g. land, water, seeds, technologies, and capital), community and school gardens, and farmer/gardener education. For more information, go to page 13.

FOOD PROCESSORS

Includes packaging, processing, or manufacturing food for snacks, ready-to-eat foods, preserved foods, beverages, etc. For more information, go to page 15.

FOOD DISTRIBUTORS

Includes food distributors, brokers, aggregators, and wholesalers of grocery products and raw farm products. For more information, go to page 17.

FOOD RETAILERS

GROCERY

Includes supermarkets, grocery stores, convenience stores, specialty markets, farmers markets, and farm stands. For more information, go to page 19.

RESTAURANTS

Includes restaurants, cafeterias, schools, hospitals, other food service providers, and food trucks. For more information, go to page 21.

COMMUNITY FOOD SERVICES

Includes food banks, food pantries, hunger relief organizations, food assistance programs (e.g. Supplemental Nutrition Assistance Program; Women, Infants and Children; Senior Assistance), and efforts aimed at preventing food waste. For more information, go to page 23.

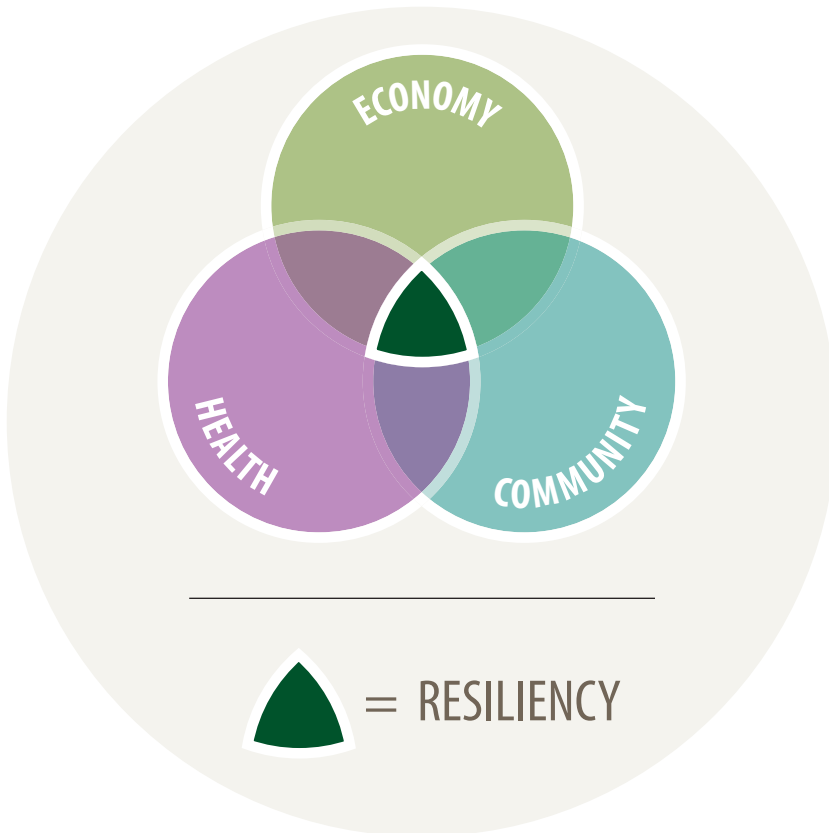
FOOD CONSUMERS

Includes consumer education and empowerment, diet-related health outcomes, healthy food access programs, food-oriented community engagement, and everyone who eats! For more information, go to page 25.

Why Food Systems Matter

The Denver Food System touches residents' lives in many different ways. For 2,200+ businesses and 56,000+ employees, the food system is a critical economic opportunity. For example, **ONE OF EVERY 10 WORKERS IN DENVER IS EMPLOYED IN THE LOCAL FOOD SYSTEM**—a 34% increase over the past decade! As a whole the food system is responsible for six percent, or \$7 billion of Denver's total economic activity.¹ Despite these impressive figures, business owners and entrepreneurs are well aware of the challenges of running a successful enterprise within this industry. Financial viability often requires difficult decisions with significant environmental, social, and even health implications.

Denver residents play a large role in the food system. Our **HIGH QUALITY OF LIFE DEPENDS ON MANY FACTORS**, including accessibility of food vendors, healthy food options, job opportunities, safe food preparation, and even **AWARENESS OF WHERE FOOD COMES FROM AND HOW DIET AFFECTS ONE'S HEALTH**. At its best, the food environment (i.e. what food is supplied, processed, and grown in the community) reflects and supports the values of residents.



Benefits of a Strong Food System

The food system does much more than just feed people. **THE FOOD SYSTEM IMPACTS (AND IS IMPACTED BY) EVERYTHING FROM CITY ZONING POLICIES AND ECONOMIC DEVELOPMENT TO DIET AND WELL-BEING**. The ripple effects of a vibrant food system are felt beyond grocery sales and local production; it means healthier students who can learn better, a higher quality of life for community residents, greater equity among residents, and stronger economic growth and resiliency for our city.

ECONOMIC IMPACTS

As Denver continues to grow, demand for grocery stores, restaurants, specialty markets, farmers markets, and commercial kitchens grows as well. This in turn creates jobs and helps build strong local businesses.

COMMUNITY IMPACTS

People want to live in communities that have convenient, affordable food stores with fresh food choices. People also want to feel proud of their neighborhood and feel connected to the people and businesses located within walking distance. The food system plays a large role in a neighborhood landscape and how community members come together. This can include school or neighborhood gardens beautifying a block, or a corner store stocking fresh fruits and vegetables for local patrons. However, not all communities experience these benefits equally and large disparities exist between neighbors and neighborhoods.

HEALTH IMPACTS

Access to convenient, affordable, healthy foods are goals that when adopted by a community, can decrease rates of chronic disease and premature death.² In a city where one in five adults are obese and one in three children are either overweight or obese, reducing such health complications is a top priority. Such challenges can begin to be addressed when the food system is considered holistically.

RESILIENCY IMPACTS

Resiliency refers to our community's ability to withstand significant and often unplanned events like extreme weather events. Strong food systems support resiliency of our community in an uncertain future.

Denver Food System History³

The food system has been essential to Denver's community and economic development since the city was founded in 1858—even before becoming part of the Colorado territory.

In fact, in 1858 Dr. William Thomas, an early professor of the Colorado Agricultural College, toured 139 farms within 75 miles of Denver and remarked on the abundance and productivity of our agricultural land.

The demand for local food is not a new trend. As early as 1859, the *Rocky Mountain News* featured an editorial encouraging the development of a more robust local food system to support a growing mining industry.

The early success of Denver's food system was due in great part to early innovations, including granite flour mills and "hot houses" for season-long lettuce exports as early as 1876. In 1877, mining and food systems products yielded nearly the same economic impact—over \$7.4 million in sales. As the boom in silver mining in Colorado brought much wealth to the residents of Denver, the city's economy also gained a more stable base rooted in railroads, wholesale trade, manufacturing, food processing, and servicing the growing agricultural, ranching, and mining industries.

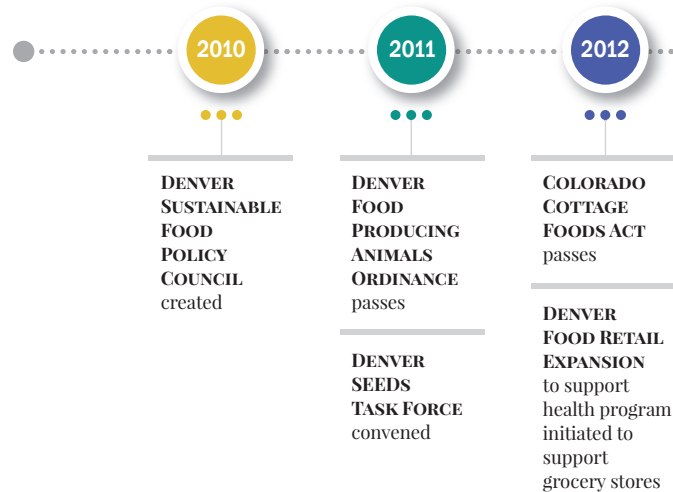
In 1893, financial panic swept the nation, and the silver boom collapsed. Denver was already suffering economically due to several successive years of droughts and harsh winters that had hurt the agricultural industry. Agricultural distress, coupled with the withdrawal of foreign investors and the over-expansion of the silver mining industries, led stock prices to decline, banks to close, businesses to fail, and numerous farms to cease operation.

The U.S. economy began to recover in 1897, and while jobs slowly began to trickle back into Denver, real estate prices remained depressed through 1900.

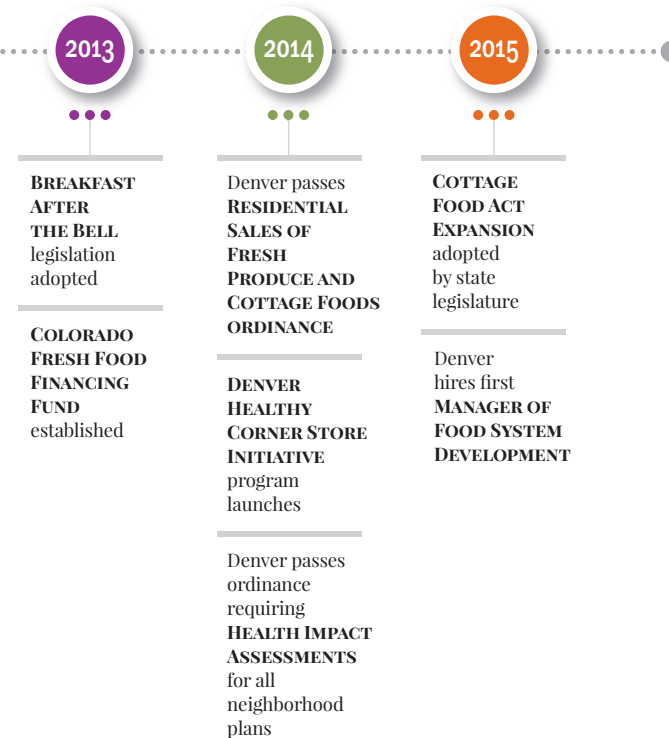
From that time and through the depression, agriculture remained a strong, consistent industry. Developing irrigation infrastructure and increasing crop diversification led to a stable food industry throughout the state. Without the jobs brought by the production and processing of food, the depression in Denver would have been much worse.

While much has changed in Denver's social, political, and economic landscape, the fundamental need for a robust food system has remained.

CELEBRATING OUR SUCCESSES



DENVER FOOD SYSTEM TIMELINE (SINCE 2010)



FOOD PRODUCTION



The food production sector is primarily comprised of farms and ranches. However, production actually starts with land, water, soil, sunlight, and other inputs used to enhance fertility and reduce the sometimes-devastating impacts of events like pests and unseasonable weather.

FARMS IN DENVER AND THE SURROUNDING METRO AREA PRODUCE AN INCREDIBLE ABUNDANCE including wheat, corn, soy, oilseed, dry beans, dry peas, nursery and greenhouse crops, fresh fruits and vegetables, and other grains. Farms and ranches also produce meat (beef, pork, lamb, goat, chicken, turkey, and duck), eggs, and dairy.

To a lesser degree, **COMMUNITY AND HOME GARDENS ALSO PROVIDE FOOD** to residents. Perhaps more importantly, recent research suggests that **GARDENING LEADS TO IMPROVEMENTS** in overall fruit and vegetable consumption, dietary knowledge, physical activity, sense of community, and overall community engagement.⁶

Trends

- ✓ The number of businesses in the food production sector has decreased. In 2007 there were 24 farms located in Denver but today there are only 14⁴
- ✓ At its peak Denver was home to 307 farms, meaning we have lost an average of three farms per year for the last 90 years⁵
- ✓ Several programs for beginning farmers exist in Denver to help new farmers enter agriculture

Challenges

- ✓ Economic viability of family farms and ranches
- ✓ Long-term access to land
- ✓ Reliable access to clean, affordable water
- ✓ Efficient access (distribution & information) to reliable markets
- ✓ Dependent and reliant on the weather (growing season and extreme weather events)
- ✓ Consumer education and awareness about the realities of food production

Policy Changes

DENVER FOOD PRODUCING ANIMALS ORDINANCE (2011): Permits Denver residents to maintain up to eight chickens and/or ducks and up to two dwarf goats on a single property.

UPDATED ZONING TO ALLOW FOR GARDENING: In the latest revision of the city zoning code, a number of changes were made to ensure that gardening was an allowable use in nearly all zone districts.

Key Questions

Where should food production happen in the city?

What is the city's role in supporting urban and rural farm viability?

How can Denver be a strong partner in a robust regional food system?

QUICK FACTS

Denver farms use 143 acres (or 0.14%) of total land in the city

Only one Denver farm was certified as organic as of 2012

124 households have food-producing animal permits in Denver

Six Denver farms are located on Denver Public Schools' properties

Another 102 DPS schools have gardens

Denver has more than 110 active community gardens

...and thousands of home gardens!

14

BUSINESSES IN 2014¹

406

TOTAL JOBS IN 2015¹

\$24,119,603

SALES GENERATED IN 2013¹

\$517,643

TAX REVENUE GENERATED IN 2013¹

FOOD PROCESSING



The ability to preserve and extend the season of food products is a critical function of any food system as it allows for year round food access. This sector is often considered a value-added step in the food system—where raw food products are transformed through processing (e.g. cutting, mixing, freezing, cooking, baking, canning, etc.) into a product ready for distribution and/or consumption. **FOOD PROCESSING/MANUFACTURING IS CONSIDERED A BEST PRACTICE STRATEGY** for stimulating food entrepreneurship that has gained national attention in recent years.

Food processors/manufacturers in Colorado have **A STRONG HISTORY OF SUCCESS** in the marketplace: from products like pickled vegetables and snack foods to the plethora of microbreweries, wineries, distilleries, and other beverages. Maybe it's something in the sunlight or water, but Colorado's food companies are flourishing. Their success is, in no small part, a direct reflection of Denver consumers' values and desires.

Trends

- For the last decade, Denver bakers have been the largest full-time and part-time employed occupation in the food-processing sector. This occupation has grown 22% since 2008
- Over the past two years, several commercial kitchens have closed in Denver, prompting concerns about limited commercial kitchen infrastructure for new and growing food businesses

Challenges

- Affordable, available commercial processing space
- Compliance with food safety requirements
- Efficient access to good markets, customers
- Cash flow challenges during growth
- Land use changes and competition for scarce manufacturing space in Denver

Policy Changes

COTTAGE FOOD ACT (2012):

This state law enabled small food manufacturers to use home kitchens rather than commercial kitchens for a very limited range of products, sold directly to consumers.

COTTAGE FOOD ACT EXPANSION (2015):

This law expanded the kinds of products that can be processed for sale locally. Additionally, this law increases the gross revenue a producer can earn per product sold.

Key Questions

How can existing food processors best be retained and helped to grow in Denver?

How can new food processors best be supported as they start and grow in Denver?

How can connections between processors, local input suppliers, and local customers be strengthened?

Is there really a lack of kitchen infrastructure or do the businesses and resources just need to be better connected?

QUICK FACTS

Food processors in Denver accounted for \$3.5 billion in sales, which is almost half of the Denver food system's total sales

32% of these businesses are beverage manufacturers, accounting for 28% of the jobs and 34% of sales

Employees in this sector make an average of \$67,159 per year, the highest across the food system and over twice as much as the average of \$32,129

Denver has 674 active food licenses, including 132 licensed bakeries⁷

149
BUSINESSES IN 2014¹

6,062
TOTAL JOBS IN 2015¹

\$3,505,176,290
SALES GENERATED IN 2013¹

\$67,768,274
TAX REVENUE GENERATED IN 2013¹

FOOD DISTRIBUTION



Food aggregators and distributors fulfill several critical roles in our food system. This sector is responsible for transporting raw farm and ranch products to processors and for redistributing both raw and processed food back to markets, retailers, and sometimes even directly to consumers.

Aggregators and distributors have an even larger impact as a connector between supply and demand. **THESE BUSINESSES FUNCTION AS CRITICAL INTERMEDIARIES BETWEEN CONSUMERS AND PRODUCERS OR PROCESSORS.** On one hand they market food products and on the other they help inform and shape production to better meet customer needs. This creates extraordinary value and efficiency in the marketplace. Improvements and innovations in food distribution have been a significant factor in reducing the cost and increasing the quality of food for many consumers.

Trends

- Loss of small, local distribution businesses
- Consolidation of remaining businesses
- Interest in innovation to fill perceived market gaps through food hubs, producer cooperatives, etc.

Challenges

- Cost of infrastructure and unpredictable gas/oil prices
- Affordable, available warehouse space near transportation corridors
- Lacking infrastructure that supports connections between local suppliers and retailers
- Seasonal variation in product availability
- Shorter shelf life of many healthier foods
- High levels of competition, significant cash-on-hand needs, and low profit margins

Policy Changes

USDA AGRICULTURAL MARKETING SERVICE (AMS) GRANTS: The USDA AMS provides resources, technical assistance, and in 2015 allocated \$90 million to support the development of local food systems. The AMS has identified innovative distribution models, like food hubs, as one key promising strategy for supporting small and midsize farmers while bringing more local foods to local markets.

Key Questions

How can existing food distributors best be retained and helped to grow, particularly in light of land use changes and competition for warehouse space in Denver?

How can connections between distributors, local suppliers, and local customers be strengthened?

Are there sufficient gaps in distribution and aggregation of local and/or healthy food that warrant the creation of new aggregation/distribution companies?

QUICK FACTS

22% of food aggregator and distributor establishments in Colorado are located in Denver County

Denver has 12 active wholesale food licenses for fresh milk and dairy companies and over 40 for each, fresh meats and fish; produce and bulk foods; and bottled and canned food and beverage companies⁷

181

BUSINESSES IN 2014¹

4,214

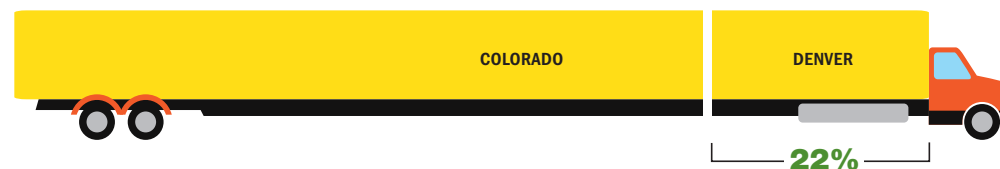
TOTAL JOBS IN 2015¹

\$683,933,855

SALES GENERATED IN 2013¹

\$82,493,066

TAX REVENUE GENERATED IN 2013¹



FOOD RETAIL GROCERY



FOOD RETAIL IS THE SECTOR OF THE FOOD SYSTEM WITH WHICH PEOPLE INTERACT MOST FREQUENTLY. A considerable part of this industry sector includes grocery stores, convenience stores, and specialty markets. These establishments provide a broad array of products for residents of the communities where they are located. These establishments are a community's main lifeline to food resources.

Retailers and their food offerings strongly reflect consumers' purchasing patterns—their tastes and preferences—and also the economic realities of a neighborhood. Retailers in urban environments like Denver are diverse and can be smaller in physical size, mobile, and/or can be limited in the variety of food items offered.

MANY DENVER RESIDENTS LACK EQUITABLE ACCESS TO A RANGE OF DIFFERENT RETAILERS OR EVEN A SINGLE FULL-SERVICE GROCERY STORE. High income and educational attainment are among the demographic indicators that grocery retailers prefer, which does not always coincide with underserved areas. As a result, some Denver neighborhoods rely on smaller establishments, like convenience stores and specialty markets, for all of their food resources because they cannot access a full-service grocery store. Access can be further limited if residents do not have easy access to a vehicle, public transportation, or safe ways to walk/bike to grocery retailers.

Trends

- Loss of independent and neighborhood grocery stores
- Increasing interest in consumer and worker-owned cooperative grocery stores
- Lower numbers of grocery stores in many lower income neighborhoods

Challenges

- Economic viability of small grocery retailers
- Connecting to reliable local suppliers and cost effective distributors at the right scale
- Access to an adequately trained workforce
- Increased competition for market share between grocers

Policy Changes

RESIDENTIAL SALES OF FRESH PRODUCE AND COTTAGE FOODS ORDINANCE:

Allows individual permit holders to sell raw, uncut produce or homemade cottage foods produced on their home property.

FOOD RETAIL EXPANSION TO SUPPORT HEALTH (FRESH):

This program supports grocery store development in underserved areas in Denver.

HEALTHY CORNER STORE INITIATIVE:

Aimed at helping small convenience stores in Denver increase their inventory and sales of healthy foods.

Key Questions

How to encourage retailers to increase healthy and/or local food options in stores while remaining profitable?

How to support convenience stores interested in increasing fresh and/or healthy food options?

How to best motivate grocery stores to move into neighborhoods that currently have limited access to healthy food?

How do we encourage marketing and placement of healthy foods and beverages in stores to affect purchases?

QUICK FACTS

49% of low- to moderate-income Denver neighborhoods lack convenient access to grocery stores

92 grocery stores in Denver represent 4,938 jobs. While convenience stores and specialty markets provide the other 1,181 jobs

The number of Denver stores authorized to receive Supplemental Nutrition Assistance Program (SNAP) benefits increased 34% from 2008 to 2012⁸

In 2008, 33 stores in Denver were authorized to receive Women, Infants and Children (WIC) benefits. Between 2008 and 2012 this number did not change

Denver has 22 front-yard farm stands (with residential sales permits)

Denver has 16 farmers markets, up 78% since 2009

224

BUSINESSES IN 2014¹

6,119

TOTAL JOBS IN 2015¹

\$452,042,576

SALES GENERATED IN 2013¹

\$37,999,087

TAX REVENUE GENERATED IN 2013¹

FOOD RETAIL RESTAURANTS



Today, **AMERICANS ARE EATING OUT MORE AS OPPOSED TO COOKING MEALS AT HOME.** Nationwide, consumers spend \$1.9 billion on food outside of the home daily, so it's no wonder greater than 40% of Americans say that restaurants are an essential part of their lifestyle.^{9, 10, 11}

The restaurant sector in Colorado is flourishing due to this consumer demand. **ONE IN TWO COLORADOANS EAT AT RESTAURANTS ON ANY GIVEN DAY**, adding up to approximately 2 million restaurant meals served in Colorado daily.⁹

In Denver, the restaurant sector is growing rapidly. Restaurant sales are higher than the national average, and Denver restaurant sales grew by 4.9% in the past year: the fourth-highest growth rate among major U.S. cities.¹² The sector is also **A MAJOR DRIVER OF EMPLOYMENT IN THE CITY**, contributing the two most widely employed positions in Denver and 7% of the total city workforce.¹ This growth is impressive and as Denver's population grows the demand for food consumed outside of the home will continue to increase.

Trends

- ✓ Rapid increase in number of Denver restaurants
- ✓ Increased consumer demand for local, source identified products
- ✓ Denver is increasingly identified as having one of the nation's hottest and highest quality restaurant scenes

Challenges

- ✓ Economic viability of (new) restaurant business
- ✓ Connecting to reliable local suppliers
- ✓ Understanding and complying with new food safety requirements
- ✓ Availability of trained workforce

Policy Changes

DENVER RETAIL STRATEGY:

In 2014, the Denver Office of Economic Development issued a strategic retail plan for the city. Among its priorities is the support of neighborhood retail. Restaurants and other food retailers play a vital role in the execution of this strategy.

Key Questions

How can restaurants increase healthy and/or local food options to menus while remaining profitable?

How to best help train the workforce needed to meet the growing/changing industry demand?

How to support emerging retail businesses without compromising the viability of existing businesses?

How to encourage restaurant development that serves the needs and desires of all communities?

QUICK FACTS

70% of all Denver food system jobs and 7% of all jobs in Denver are in the restaurant sector

Two of the five fastest growing employment opportunities in Denver are at restaurants

Over 10,000 individuals are employed in food preparation jobs

Waiters and waitresses account for more than 9,500 jobs

As of May 2015, Denver has issued 304 retail food mobile licenses—mostly for food trucks and food carts

1,647

BUSINESSES IN 2015¹

39,015

TOTAL JOBS IN 2015¹

\$2,283,394,789

SALES GENERATED IN 2013¹

\$123,197,438

TAX REVENUE GENERATED IN 2013¹

FOOD RETAIL COMMUNITY FOOD SERVICES



Fueling our bodies with nutritious and adequate amounts of food is essential to leading a healthy and happy life. Some individuals and households, however, **EXPERIENCE FOOD INSECURITY**. A person who is food insecure experiences **“REDUCED QUALITY, VARIETY, OR DESIRABILITY OF DIET.”** Sometimes food insecure individuals also experience hunger, meaning there are **“MULTIPLE INDICATIONS OF DISRUPTED EATING PATTERNS AND REDUCED FOOD INTAKE.”**

Regardless of the circumstances that account for an individual or household being food insecure or hungry, there is a support network present in Denver to help. This network is composed of organizations and programs that are national, state, and locally run. Organizations including food banks, food pantries, food rescue/recovery, hunger relief, and nutrition assistance programs like **SUPPLEMENTAL NUTRITIONAL ASSISTANCE PROGRAM (SNAP)** and **WOMEN INFANTS AND CHILDREN (WIC)** that help individuals and families obtain nutritionally adequate and safe food in socially acceptable ways.

Trends

- ✔ In 2013, 59% of individuals eligible for SNAP in Denver were enrolled—a sizable increase from 46% in 2008
- ✔ As a result of low participation in SNAP, the city lost an additional \$101.9 million of annual grocery sales
- ✔ An estimated 40% of food produced in the U.S. is wasted, yet much of that food could still feed families. In 2015, the federal Environmental protection Agency (EPA) launched a campaign to help reduce food waste and recover/redistribute edible food

Challenges

- ✔ Enrolling eligible individuals for existing food services programs
- ✔ Accurate and timely processing of enrollment applications. Errors and delays often result in a gap in services and require re-applying
- ✔ Inconsistent and unpredictable funding for community food services
- ✔ Hunger relief agencies often do not have adequate quantities of fresh foods
- ✔ Many community food service organizations do not have the capital, infrastructure, and/or trained staff needed to increase the number served

Policy Changes

- COLORADO CHARITABLE CROP DONATION ACT (2014):** A state law passed in 2014 giving local producers a tax credit for food donated to food banks/pantries.
- BREAKFAST AFTER THE BELL PROGRAM (2013):** A state law mandating that schools with high rates of current students eligible for free or reduced lunch provide free breakfast for all students.

Key Questions

- How to support community food service programs and outlets to increase fresh food options?
- How to expand efforts rescuing and redistributing good food that is going to waste?
- How can nutrition assistance programs be supported and leveraged to further increase access to affordable healthy food?

QUICK FACTS

Nearly 1 in 6 individuals in Denver (1 in 5 children) are food insecure

69.7% of the Denver Public Schools (DPS) student body are eligible for free or reduced cost lunch (52,044 and 6,958 students, respectively)¹³

86,932 Denver residents (13.4%) are enrolled in and receive over \$143 million dollars annually in food assistance from the federal Supplemental Nutrition Assistance Program (SNAP)

35.3% of Denver children receive food vouchers from the federal Women Infants and Children (WIC) program

118 DPS schools participate in the Breakfast After the Bell Program

The City of Denver helps provide 80,000 additional meals per year through the At-Risk After School Meal program as well

109

ACTIVE FOOD PANTRIES¹⁴

175

TOTAL JOBS IN 2015¹

\$143,598,648

ANNUAL SNAP BENEFITS¹⁵

\$101,930,767

LOST GROCERY SALES FROM LOW ENROLLMENT¹⁵

FOOD CONSUMPTION



Every decision consumers make about the food they eat impacts the food system. Therefore they have a lot of power as they drive demand for certain types of food.

The food environment in Denver—the types of foods sold in grocery stores, restaurants, specialty markets, corner stores, and restaurants—is in part driven by what consumers will buy, which then plays a large role in what is ultimately accessible and available. That is one reason restaurants and other types of food and beverage businesses (breweries, food trucks, etc.) are flourishing in Denver; they are a direct reflection of consumer values, desires, and purchasing behaviors.

Consumer demand and market forces have played a significant role in reducing the costs of certain types of food. Now, more than ever, there are many low cost, nutrient deficient products available for consumers, like fast, pre-packed prepared foods. Compared to 30 years ago, **AMERICANS TODAY ARE CONSUMING MORE CALORIES, SUGAR, FATS, AND FEWER FRUITS, VEGETABLES, AND WHOLE GRAINS.**¹⁶ In Colorado, only 8% of children and 26% of adults meet the US Department of Agriculture's recommended daily servings of fruits and vegetables.¹⁷

One major challenge to eating more healthfully is the lack of access to affordable, nutritious, and culturally appropriate foods like fruits and vegetables. As a result, **FOOD INSECURITY AND DIET-RELATED DISEASES LIKE OBESITY AND DIABETES ARE INCREASINGLY MORE COMMON**, especially for low-income neighborhoods or in communities of color.¹⁸

In Denver, one in three children and one in two adults is considered overweight or obese!¹⁹ Because of this and other trends in diet-related health outcomes, many organizations around Denver are working closely with consumers to grow home and community gardens, provide education on healthy cooking and shopping on a budget, and offer classes about how to preserve and sell cottage/homemade food products. Together a healthy food system also **ADDRESSES ISSUES OF ACCESS, AFFORDABILITY, AND CONSUMER EDUCATION AND ULTIMATELY IMPACTS HEALTHY FOOD CONSUMPTION, DEMAND, AND HEALTH OUTCOMES.**



Trends

- In 2011-2012, 20.1% of adults in Denver were obese — a 6% increase from 2003-2004
- Nearly one out of every three Denver high school students consumes one or more sugar-sweetened beverages a day
- On average adult Coloradans eat only 2 servings of fruits and vegetables per day — well below the recommended 5 servings per day to help prevent and control diet-related diseases
- Overall the number of people with expensive diet-related, chronic diseases (both adults and children) is increasing in Denver

Challenges

- Fresh, healthy food items are often less affordable and/or less accessible
- Eating healthy food often means cooking more meals at home, which can be time consuming
- Nationally beverage companies spent \$395 million in youth-directed marketing in 2009 and ads for sugary drinks were much more common in lower-income neighborhoods

Policy Changes

DENVER CITY ORDINANCE REQUIRING HIAs:

Health Impact Assessments (HIAs) are a tool used to assess health implications of any proposed program, policy, or project. In 2014, Denver City Council prioritized funding for HIAs to be conducted for all neighborhood plans.

2020 SUSTAINABILITY GOAL FOR FOOD:

In 2013, the Mayor endorsed the Denver Office of Sustainability's goal for 25% of city food purchases and 20% of all food purchased in Denver to come from local sources by 2020.

Key Questions

How can restaurants, grocery stores, corner stores, etc. be enlisted to help make healthy food the default choice?

How to encourage individuals and families to eat healthier whether at home or at a restaurant?

How can neighborhood food environments be changed to build a culture of healthy eating?

How to celebrate changes in neighborhood food environments that improve access and community around healthy and/or local foods?

QUICK FACTS

53% of adults and 31% of children in Denver are overweight or obese

A recent report published by the National Institutes of Health found that per-person direct medical cost of being obese is \$1,837 and overweight is \$284 higher than that of a normal weight individual. For Denver, that would mean more than \$284 million was spent on direct medical costs to treat adult obesity in 2012²⁰

33.2% of Denver families eat less than one serving of fruits and vegetables per day

22% of Colorado kids consume one or more sugar-sweetened beverages per day often leading to tooth decay, childhood obesity, and diabetes —tooth decay is painful for children and often causes missed school, difficulty learning, and problems eating or speaking

Only 17% of 6th to 12th grade students in DPS eat the daily-recommended number of vegetables

Supporting the Food System

FOOD SYSTEMS ARE COMPLEX AND INTERCONNECTED



 = RESILIENCY

Planning the Future of Denver's Food System

The City and County of Denver is embarking on the first of its kind strategic planning effort to strengthen Denver's Food System.

Denver Food Vision: 2030

- A 15-year strategic vision focused on key numerical impacts across the food system
- The Vision will be driven by community and industry stakeholder input and will contain high-level goals addressing issues like: healthy food access (e.g. food deserts, food swamps, food security); economic development (e.g. number of businesses, revenue growth, new jobs, workforce development); and neighborhood-level community development (access to healthy and/or local food through healthy corner stores, farmers markets, community gardens, safe sidewalks, or other community events and spaces, etc.)
- *Development timeline: January - December 2016*

Denver Food Action Plan: 2020

- A 5-year action plan to guide city efforts toward achieving the Denver Food Vision 2030
- Citywide plan will be based on individual neighborhood and industry community action plans that support the city food vision. City staff will provide a template and limited technical assistance materials (webinars, how-to guides, and meetings) to support community action planning.
- *Development timeline: January - Mid 2017*

For more information and to get involved:

www.denvergov.org/foodplan

OR SEND AN EMAIL TO DENVERFOODPLAN@DENVERGOV.ORG





Appendix A: Methods and Limitations

METHODOLOGY

- [1] Reviewed 114 national, state and city food system literature, reports, white papers, and case studies
- [2] Compiled indicators provided in 16 other city, county, and state food system plans
- [3] Reviewed available secondary data to compile list of key indicators for each segment of the food system
- [4] Prepared report to summarize findings and support future citywide food system planning efforts
- [5] Solicited feedback from other city agencies, the Denver Sustainable Food Policy Council (a mayoral commission), academics with food system expertise, and key food system informants

LIMITATIONS

The vast majority of the data included in this was from secondary data sources. Primary data was not collected for this version of the report. Therefore this report is not a comprehensive food assessment and does not include all possible indicators.

It is also important to note that many datasets are self-reported from taxes, government surveys, etc. and have not been confirmed by a third party. Moreover, some the data are estimated using proprietary algorithms based on that self-reported data.

Secondary data, however, offers us an objective way to track our progress over time with reasonable assurance that similar data will be regularly collected in the future.

Appendix B: References

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- ⁶ Litt, et al. (2011). The influence of social involvement, neighborhood aesthetics, and community garden participation on fruit and vegetable consumption. American Journal of Public Health.
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- ¹⁵ Hunger Free Colorado (2016). Food Stamps Fuel a Healthy Colorado: Denver County Impact Report.
- ¹⁶ US Department of Agriculture Economic Research Service. (2014). Diet Quality and Nutrition.
- ¹⁷ The Colorado Health Foundation. (2008). Income, Education and Obesity: A Closer Look at Inequities in Colorado's Obesity Problem.
- ¹⁸ Beaulac, et al. (2009). A Systematic Review of Food Deserts 1966-2007. Preventing Chronic Disease.
- ¹⁹ Denver Environmental Health and Denver Public Health. (2014). Be Healthy Denver: Community Health Assessment.
- ²⁰ Tsai, et al. (2011). Direct medical cost of overweight and obesity in the USA: a quantitative systematic review. Obesity Review.

Appendix C: Indicators by Sector

Appendix available online at: WWW.DENVERGOV.ORG/FOODPLAN

HELP CREATE THE Denver Food Plan

YOUR VOICE IS ESSENTIAL IN CRAFTING A VISION FOR THE FUTURE OF DENVER'S FOOD SYSTEM AND THE ACTION PLAN FOR HOW WE GET THERE. WHETHER YOU'RE A RESIDENT OR A BUSINESS, WE WANT TO HEAR YOUR VOICE!

GET INVOLVED!

www.denvergov.org/foodplan

OTHER QUESTIONS?

PLEASE CONTACT **BLAKE ANGELO** AT 720.913.1638

MANAGER OF FOOD SYSTEMS DEVELOPMENT

OFFICE OF ECONOMIC DEVELOPMENT

CITY AND COUNTY OF DENVER



DENVER
THE MILE HIGH CITY