Good Eats

THE GREATER PHILADELPHIA FOOD ECONOMY, AND GOOD FOOD’S POTENTIAL TO DRIVE GROWTH, IMPROVE HEALTH, AND EXPAND OPPORTUNITY
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Executive Summary

Good Eats

Food fuels more than just our bodies. In Greater Philadelphia, food-based businesses fuel commercial activity and create jobs for thousands of individuals. Businesses and individuals that participate along the food supply chain comprise an economy unto themselves, a “food economy” that spans small businesses to multinationals, corner stores to global shippers.

But not all food-related activity is created equal. Activity that revolves around good food — food that is health-promoting, sustainably-produced, locally-oriented, and the product of workplaces that pay well and treat their workers fairly — can deliver far-reaching economic and health benefits. In a region like Greater Philadelphia, where differential access to healthy food, high levels of poverty, and food-associated chronic health conditions present barriers to prosperity for too many people, good food — and its myriad economic and health benefits — is uniquely equipped to address these challenges.

Good food is an area of opportunity for Greater Philadelphia generally, and in particular for its anchor institutions. Thirty-four colleges, universities, and hospitals located in the City of Philadelphia spend $5.3 billion annually in goods and services, nearly half of which is spent outside the city. With initiatives to help anchors implement local purchasing practices and commit to food and nutrition standards, the anchors and the good food economy are uniquely complementary in their shared values.

With these factors in mind, the Philadelphia Department of Public Health’s Division of Chronic Disease and Injury Prevention, also known as Get Healthy Philly, engaged the Economy League of Greater Philadelphia to do a broad analysis of the Greater Philadelphia food economy. This analysis investigates regionally-based healthy and good food opportunities, examines the potential for good food production to meet the needs of regional anchor institutions, and expands upon unique expertise at both organizations. Get Healthy Philly’s Good Food, Healthy Hospitals (GFHH) initiative, an innovative program to improve health through changes to hospital food procurement, as well as its work with city departments to improve healthfulness of the food they purchase, serve, and sell, has brought good food to the mouths and pantries of individuals across the region. Similarly, the Economy League’s efforts to expand regional anchor procurement through its Philadelphia Anchors for Growth and Equity (PAGE) program, has helped keep regional dollars circulating in the regional economy. This research partnership realizes the organizations’ shared priorities of fostering good food-related commerce, and its role in improving health, driving growth, and expanding opportunity in the region.

Defining the Food Economy

The food economy comprises all economic activity associated with food-related businesses and organizations, including commercial activity and employment. This assessment breaks the food economy into six sectors: food production, food processing, food distribution, food retail, food hospitality, and food waste and recovery.

Beyond these core food economy sectors, complementary organizations and stakeholders engage with and benefit from food-related activity in the region. This report identifies how anchor institutions, business coalitions, business support and financial firms, government agencies and bodies, non-profits, and individuals can contribute to growing a food economy that supports individual and local economic health.

Good Food for Philadelphia

Not all food-related economic activity has the same impact. Activity that revolves around good food — food that is health-promoting, sustainably produced, locally-oriented, and the product of workplaces that pay well and treat their workers fairly — can deliver far-reaching economic and health benefits.

Philadelphia is the poorest big city in America. The high levels of poverty in the region are coupled with inequitable access to fresh and healthy food. This unequal access to opportunity and good food correlates with chronic disease and can contribute to differences in economic outcomes. Good food firms have the potential to drive business, support a strong workforce that can lift individuals and households out of poverty, combat diet-related disease by providing healthy options and environments, advance racial and socioeconomic equity, and support the needs of anchor institutions, which are some of the biggest employers and purchasers of food in the region.
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**Key Findings**
Data analysis, interviews with individuals at food-based firms, focus groups with Philadelphia’s anchor institutions, and surveys of local food-related firms yield eight key findings about Greater Philadelphia’s food economy today:

1. The majority of food-related businesses are small, and these enterprises support most of the jobs in the food economy
2. Low-wage, low-skill jobs dominate food-related employment
3. Typical food-related businesses operate on tight margins and rely primarily on personal capital for financing
4. Consumer trends point toward healthy, local, diverse, and sustainable food preferences
5. Anchor institutions could be significant drivers of good food economic development
6. E-commerce and the platform economy are changing the food economy
7. Nutrition assistance programs support both retailers and customers
8. The City is an actor in the food economy

**Opportunities to Grow the Good Food Economy**
Through an investigation of the sectors and jobs that make up the food economy, survey responses from area food businesses, and interviews with local experts, we identify the following opportunities to improve health for individuals and the health of the food economy:

1. **Good Food Policy Opportunities:**
   a. Explore a good food purchasing policy for the City of Philadelphia
   b. Expand institutional food purchasing policies that prioritize nutritious, locally-produced foods
   c. Support statewide efforts to raise the minimum wage to $15 per hour
2. **Good Food Business Opportunities:**
   a. Centralize local produce processing and meal preparation
   b. Design last-mile distribution with smaller minimum orders
   c. Lease anchor-owned retail spaces to local good food businesses
   d. Recover and collect more organics
3. **Good Food Product Opportunities:**
   a. Meet demand for plant-based and multi-cultural foods
   b. Formulate healthier versions of popular foods
   c. Develop the supply chain for more local ingredients
4. **Good Food Partnership Opportunities:**
   a. Expand City programs that support good food businesses
   b. Bridge the education gap for non-traditional financing
Understanding the Food Economy

Food fuels more than just our bodies; in Greater Philadelphia, food-based businesses fuel commercial activity and create jobs for thousands of individuals. Businesses and individuals that participate along the food supply chain comprise what we call the “food economy,” whether they are small businesses or multinationals, corner stores or global shippers.

This assessment builds on definitions in the 2011 report, “Eating Here: Greater Philadelphia’s Food Systems Plan,” from the Delaware Valley Regional Planning Commission (DVRPC). Drawing from North American Industry Classification System (NAICS), the food economy comprises activity within six distinct industry sectors: food production, food processing, food distribution, food retail, food hospitality, and food waste and recovery. This report refers to businesses within these six sectors as “food-related businesses,” or “food-related firms.” Not all businesses fit squarely into one sector. For example, ReAnimator Coffee, a Philadelphia-based coffee company that roasts coffee beans, sells them to businesses and individuals, and operates coffee shops, could be categorized as a processor, retailer, and hospitality business. Though cross-sector business activity like this is common, a sector-based analytical approach allows for comparison and isolation of strengths, weaknesses, opportunities, and challenges within segments of the food economy.

A subset of the food economy is the “good food economy,” in which businesses value their workers, local economic vitality, and healthy ecosystems. The Philadelphia Food Policy Advisory Council (FPAC) defines “good food” as “healthy, sustainable, fair, and local.”

In Greater Philadelphia today, too few people have access to good jobs, too many communities struggle with high rates of poverty and food insecurity, and economic growth is uneven and inequitable. A good food economy provides living wage jobs, strengthens local supply chains, and supports expanded access to health-promoting food. Finding effective ways to encourage and support food-related commerce, particularly good food businesses, can go a long way in driving growth, promoting health, and expanding opportunity in our region.

What Is Good Food?

Drawn from research done by Get Healthy Philly and the Philadelphia Food Policy Advisory Council (FPAC), this report defines good food as:

1. **Health-promoting**: good food is nutritionally dense and nourishing, and does not contribute to chronic disease.
2. **Locally-oriented**: good food comes from a radius of 250 miles from Philadelphia, encompassing the Greater Philadelphia Metropolitan Statistical Area (MSA). This region reaches as far north as New York City, NY, as far south as Washington, D.C., and almost as far west as State College, PA. Locally-oriented food also includes good food produced by Philadelphia area businesses.
3. **Sustainably produced**: good food is produced using sustainable practices that minimize environmental impact and reduce waste.
4. **Fair**: good food is the product of workplaces that pay family-sustaining wages, provide career pathways, and have healthy workplace environments. For the purposes of this report we define family-sustaining wages using the Massachusetts Institute of Technology’s Living Wage Calculator’s assessment of regional living wage for two adults and two children. This comes to an hourly wage of $16.35, and an annual wage of $34,008 for the Philadelphia metro area.
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The Economic and Social Ripple Effects of Good Food

Philadelphia has the highest rates of unemployment, poverty, and chronic disease incidence among the 10 largest cities in the United States. But support for good food businesses can create new healthy foods, new jobs, and healthier environments, and can harness the extant and growing demand for their goods and services.

Good Food is Good Business: Local and national studies demonstrate that good food businesses serve as important sources of jobs and economic activity at the community level and help drive the creation of household wealth.1,2 Good food businesses generate direct economic impacts in the form of jobs and wages at the businesses themselves, as well as indirect and induced impacts via the stimulus of local supply chain activity and worker spending. Good food retail has also been shown to enhance the value of nearby homes—in Philadelphia, home values near healthy food outlets see up to 7% increase in value, and local tax revenue sees a boost near healthy food outlets.3

Good Food Supports Individual Health: Access to healthy food options is inequitable in the Philadelphia region, and many people reside in areas with limited access to healthy food, and in areas with oversaturation of unhealthy food options.4 This inequity exacerbates high rates of chronic diseases—one in three adult Philadelphians has hypertension, and one in eight has been diagnosed with diabetes—and reduces the productivity and earning potential of those afflicted.5 Good food businesses support the health of customers and workers.

Good Food Can Help Build a Strong Workforce: Twenty-six percent of Philadelphians live below the poverty line.6 Lack of access to opportunity, low educational attainment, weak professional social networks, or previous incarceration can be barriers to finding living-wage work. And while food-based businesses have many entry-level job opportunities—dishwashers, servers —many of those jobs have low pay and high turnover. However, many good food businesses strive to offer living wages and full time work to employees, while all food businesses rely on living wage work that may not immediately be thought of as food-related, like mechanics that repair industrial equipment or transportation-related careers. Food economy careers also provide workforce development opportunities, providing skills and training that can prepares individuals for better paying jobs and advancement opportunities. A food economy with fair workplace practices, targeted training and skills development, and living wages can retain employees, and lift individuals out of poverty.

Good Food Can Support Racial Equity: Black, brown, and immigrant communities across the region are disproportionately affected by historic discrimination and disinvestment that stunts their opportunities for employment and wealth creation.7 Non-immigrant people of color are also more likely to experience diet-related disease than white non-immigrants.8 For a region and city as racially diverse as ours—35.5% of people in Greater Philadelphia are people of color, and 64.2% of Philadelphians are people of color—increasing good food economy job opportunities, particularly in neighborhoods with large proportions of people of color, offers an opportunity to redress these inequities, support better health and economic outcomes, and drive regional growth.

Methodology

This study employs a mixed-methods approach, using local and national quantitative data, surveys, and interviews to investigate the nuances of food-related business operations and relationships. The quantitative analysis examines wage and labor data from the Bureau of Labor Statistics, tax revenue data from the City of Philadelphia’s Department of Revenue, wage data from PayScale, and firm-level data from ReferenceUSA. The qualitative analysis draws from intelligence gathered through 20 interviews with key firms

2 Ibid.
3 The Economic Impacts of Supermarkets on their Surrounding Communities. (Philadelphia, PA: The Reinvestment Fund, 2007).
4 Bell, Ibid.
8 Ibid.
Local Spotlight: Philly Bread and the Good Food Economy

Businesses in Greater Philadelphia are already bringing good food to the mouths, tables, and pantries of area residents, and simultaneously supporting the regional economy. Working in food service and urban agriculture, Pete Merzbacher noticed new trends in food processing: he watched the beer and coffee industries localize and specialize and became convinced that bread would be the next industry to undergo such a transformation. Driven by a passion for food and a penchant for baking, Merzbacher started his business, Philly Bread, in 2013 with his signature local take on the English muffin: the Philly Muffin. Built around creative financing, inclusive hiring practices, regional procurement, regional sales, and large-scale contracts, the way Philly Bread does business is an approach worth replicating.

Creative Financing: Philly Bread started from personal financing: personal savings, credit cards, loans from friends and family. But from the beginning, Philly Bread capitalized on unique funding sources to finance its growth, including the City of Philadelphia’s KIVA Zip loan and crowdfunding program, and funds from community development financial institutions like PIDC.

Driving Demand for Regional Products by Buying Regionally: Merzbacher and his team believe that even small businesses can support the regional food economy and drive demand by purchasing a segment of their raw goods from other regional firms. The business buys local canola and sunflower oils, as well as a percentage of local whole grain flour, with the aim of growing that percentage in the future. “Farmers aren’t going to grow it unless there’s a demand for it,” says Merzbacher, “and people aren’t going to demand it unless it’s available at a good price. So, if I could work my way up to 1,000 pounds of flour a day, and start with 50 pounds out of a thousand at a premium price, that isn’t going to break my food cost. And then ratchet it up.”

Supporting Local Firms and Jobs by Selling Regionally: Philly Bread’s entrepreneurial approach has gotten signature products in the door at a wide variety of small local retailers. To date, Philly Bread products have been sold at local retail and hospitality businesses like Square One Coffee, Mariposa Co-Op, and Green Line Café. Selling regionally supports local businesses and employment, keeping money circulating in the regional economy.

Inclusive Hiring Practices: While Merzbacher doesn’t exclusively rely on workforce training placement programs to staff the bakery, he has hired candidates through CareerLink and Philabundance programs. Philly Bread’s hiring philosophy supports diversity, welcoming employees that live in the neighborhoods surrounding the bakery as well as formerly incarcerated individuals.

Large-Scale Contracts: For small food-related businesses, large-scale contracts can provide predictable revenue that can be the key to achieving profitability. In 2017, Philly Bread landed a game-changing contract with national restaurant chain Sweetgreen. Today, Philly Bread’s contract with Sweetgreen accounts for a healthy percentage of its revenue stream, giving the company room to explore growth opportunities.
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Greater Philadelphia’s Food Economy Today

Greater Philadelphia’s food economy supports 331,000 jobs across 25,000 firms in the 11 counties that constitute Philadelphia’s Metropolitan Statistical Area (MSA).9 10 Philadelphia itself is home to 79,000 food-related jobs across 6,500 firms, accounting for nearly 25% of all food-related jobs and firms in the region—a share that is on par with the city’s share of all regional jobs (24%).11

Table 1. Food Economy Jobs and Firms

<table>
<thead>
<tr>
<th></th>
<th>City of Philadelphia</th>
<th>Philadelphia MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Jobs</td>
<td>676,800</td>
<td>2,769,500</td>
</tr>
<tr>
<td>Number of Food-Related Jobs</td>
<td>79,000</td>
<td>331,000</td>
</tr>
<tr>
<td>Food-Related Jobs as a Percentage of All Jobs</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Total Firms</td>
<td>35,100</td>
<td>165,000</td>
</tr>
<tr>
<td>Number of Food-Related Firms</td>
<td>6,500</td>
<td>25,000</td>
</tr>
<tr>
<td>Food-Related Firms as a Percentage of All Firms</td>
<td>18%</td>
<td>15%</td>
</tr>
</tbody>
</table>

2007-2017 saw steady growth in the food economy in the region, with food-related employment growing at an average of 2.4% per year, corresponding roughly with the city’s overall employment growth. This decade yielded 16,750 net new food-related jobs, compared to a total net gain of 36,200 jobs in Philadelphia during this period. Between 2016 and 2017, food-related job growth accelerated to an annual average of 4.2%—75% higher than overall annual job growth of 2.4%.

Overall, the food economy generates $66.3 million in annual wage tax revenue for the City, accounting for 4% of total wage tax receipts. Roughly half of this revenue comes from the hospitality and retail sectors.12 Distribution and processing, despite relatively small employment bases, also generate a significant amount of wage tax revenues—the result of higher average wages in these sectors. The waste and recovery sector, on the other hand, represents only 1% of the wage tax revenue generated by food-related businesses. Between 2012 and 2016, wage tax revenue from food-related businesses increased by an annual average of 3.7%, closely following overall revenue growth.

9 Philadelphia’s MSA includes Bucks County, PA; Burlington County, NJ; Camden County, NJ; Cecil County, MD; Chester County, PA; Delaware County, NJ; Gloucester County, NJ; Montgomery County, PA; New Castle County, DE; Philadelphia County, PA; and Salem County, NJ.
11 Ibid.
12 City of Philadelphia Department of Revenue, Raw Data (Philadelphia, PA: 2017)
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The Food Economy in Numbers

The growth in the number of food-related jobs and firms in the region over the past decade, and the increase in the food economy’s share of the overall regional economy during this period, underscores the food economy’s importance to Greater Philadelphia. Table 2 below provides a snapshot of food economy sectors. See Appendix A of this report for the full sector dashboards that illustrate overall employment, jobs, and projected growth for each food economy sector. The full sector dashboards also highlight some of the fastest growing, largest, and highest-paying industries within each sector, as well as a snapshot of notable occupations, their annual mean wages, and the typical entry-level education necessary for that role.

Explore the full analysis of each sector at economyleague.org/foodeconomy.

Table 2. Comparison of Food Economy Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Greater Philadelphia</th>
<th>Philadelphia</th>
<th>Number of Jobs; % of Food-Related Jobs</th>
<th>Job Growth 2007-2017; % Annual Change</th>
<th>Projected Job Growth 2014-2024</th>
<th>Number of Firms; % of Food Economy Firms</th>
<th>2017 Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production</td>
<td></td>
<td></td>
<td>8,882 Jobs, 3% of food-related jobs</td>
<td>98.3 jobs per year, 1.2% annual change</td>
<td>N/A*</td>
<td>575 firms, 2% of food-related firms</td>
<td>$37,491</td>
</tr>
<tr>
<td></td>
<td>Phila.*</td>
<td></td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
<td>N/A*</td>
</tr>
<tr>
<td>Processing</td>
<td>Greater Philadelphia</td>
<td>17,827 jobs, 5% of food-related jobs</td>
<td>301 jobs per year, 2.0% annual change</td>
<td>(PA) 14 jobs per year, 0.4% annual change</td>
<td>626 firms, 3% of food-related firms</td>
<td>$44,430</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philadelphia</td>
<td>3,441 jobs, 4% of food-related jobs</td>
<td>-73 jobs per year, -1.7% annual change</td>
<td>-10 jobs per year, -0.2% annual change</td>
<td>140 firms, 4% of food-related firms</td>
<td>$44,058</td>
<td></td>
</tr>
<tr>
<td>Distribution</td>
<td>Greater Philadelphia</td>
<td>26,008 jobs, 8% of food-related jobs</td>
<td>351 jobs per year, 1.6% annual change</td>
<td>(PA) 259 jobs per year, 0.7% annual change</td>
<td>5,502 firms, 22% of food-related firms</td>
<td>$56,602</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philadelphia</td>
<td>5,636 jobs, 7% of food-related jobs</td>
<td>-12 jobs per year, -0.2% annual change</td>
<td>13 jobs per year, 0.3% annual change</td>
<td>757 firms, 11% of food-related firms</td>
<td>$60,308</td>
<td></td>
</tr>
<tr>
<td>Retail</td>
<td>Greater Philadelphia</td>
<td>83,290 jobs, 25% of food-related jobs</td>
<td>1,119 jobs per year, 1.6% annual change</td>
<td>(PA) -63 jobs per year, 0.0% annual change</td>
<td>5,302 firms, 21% of food-related firms</td>
<td>$24,210</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philadelphia</td>
<td>16,379 jobs, 21% of food-related jobs</td>
<td>189 jobs per year, 1.5% annual change</td>
<td>31 jobs per year, 0.2% annual change</td>
<td>1,716 firms, 27% of food-related firms</td>
<td>$22,252</td>
<td></td>
</tr>
<tr>
<td>Hospitality</td>
<td>Greater Philadelphia</td>
<td>194,127 jobs, 59% of food-related jobs</td>
<td>2,945 jobs per year, 1.8% annual change</td>
<td>(PA) 3401 jobs per year, 0.9% annual change</td>
<td>12,495 firms, 50% of food-related firms</td>
<td>$18,492</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philadelphia</td>
<td>53,465 jobs, 68% of food-related jobs</td>
<td>1,340 jobs per year, 3.3% annual change</td>
<td>580 jobs per year, 1.2% annual change</td>
<td>3,780 firms, 58% of food-related firms</td>
<td>$20,564</td>
<td></td>
</tr>
<tr>
<td>Waste and Recovery</td>
<td>Greater Philadelphia</td>
<td>1,071 jobs, 0% of food-related jobs</td>
<td>33 jobs per year, 4.6% annual change</td>
<td>(PA) 50 jobs per year, 1.9% annual change</td>
<td>438 firms, 2% of food-related firms</td>
<td>$63,201</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Philadelphia</td>
<td>135 jobs, 0.0% of food-related jobs</td>
<td>7 jobs per year, 9.3% annual change</td>
<td>4 jobs per year, 2.8% annual change</td>
<td>60 firms, 2% of food-related firms</td>
<td>$62,941</td>
<td></td>
</tr>
</tbody>
</table>

*Due to only having 11 firms within the city, production does not include calculations for Philadelphia. For full explanation of methodology, visit economyleague.org/foodeconomy.
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**Other Participants in the Food Economy**

The food economy includes more than food businesses. The following actors purchase from, support, regulate, and work for food economy enterprises.

**Anchor Institutions:** Anchor institutions are “anchored” in place by assets such as academic campuses or medical facilities. Anchors are major employers, economic drivers, and have high-volume demand for food-related goods and services. As owners of large and diverse real estate portfolios, many anchors own food-related retail and hospitality space and may lease to food-related businesses.

**Business Coalitions:** Business coalitions such as chambers of commerce, trade groups, and other formal business networks connect food-related firms to resources and social capital. While these coalitions provide services that extend beyond the food economy, they are important informational and networking resources for food-related firms.

**Business Support and Financial Institutions:** Business support and financial institutions provide access to capital, business support services, and community development services for businesses including food-based businesses. They include community development financial institutions (CDFIs), community development corporations (CDCs), small banks and credit unions, and traditional banks.

**Governmental and Regulatory Bodies:** Governmental and regulatory bodies establish and enforce policies and practices related to nutrition, health safety, environment, and labor. Federal, state, and local governments interact with food-related businesses through policy enforcement, administering food assistance benefits, providing grants and low-interest loans, and designing programs to support good food businesses.

**Individuals and Households:** Individuals and households are the primary input (labor) and end consumers (food purchasers) in the food economy. Some are also participants in federal food assistance and feeding programs.

**Nonprofits:** Nonprofits that support public health, community development, workforce development, and food recovery shape the food economy in ways that market forces may not. These organizations serve many populations and needs by operating farmer’s markets, administering food-related training programs, distributing surplus or donated food, and collecting food waste.
Food Economy Findings

The Majority of Food-Related Businesses are Small, and These Enterprises Support Most of the Jobs in the Food Economy

Ninety-five percent of Philadelphia food businesses have fewer than 50 employees; nearly 9 out of 10 of them have fewer than 20 employees. These small businesses experience challenges not faced by their larger counterparts such as less time for business planning or business administration, and a more limited set of resources. Survey respondents agreed, saying they did not have time to participate in programs to build their business acumen.

Low-Wage, Low-Skill Jobs Dominate Food-Related Employment

Hospitality and retail, the two largest employers in the Greater Philadelphia food economy, also have the lowest wages (See Figure 4). Low wages may be part of the reason that employees do not stay at a single job long, causing “churn,” or constant hiring due to vacancies, but opportunities still exist for living wage work.

Employers are Constantly Hiring

Employers across the food economy, especially those in retail and hospitality, report being in a constant hiring cycle. Unpredictable schedules and low wages cause workers to leave with little or no notice, particularly in retail and hospitality. Meanwhile food-related businesses report difficulty finding qualified workers with basic “soft skills,” citing ‘showing up to work,’ ‘showing up on time,’ ‘work ethic,’ ‘customer service,’ and ‘consistency,’ as top HR challenges.

While churn is an operational challenge, it means that there are entry-level opportunities for interested individuals, like returning citizens or those seeking...
entry-level work for the first time, to enter the workforce. The City of Philadelphia has recently tried to improve working conditions for entry-level retail and hospitality workers by passing legislation for earned sick leave compensation and fair work weeks, which provides for more predictable work shift scheduling.

*The Business Perspective - Bon Appetit*: “When we posted 60 part-time positions to open, we had 700 people apply. We called 400 people. We spoke to 200 people... We made 100 offers, 91 passed their background check. Seventy-one people showed up day one. And after 90 days, only 51 people still work there.”

**There are Opportunities to Advance Within and Across Food Economy Sectors**

With education and certification, workers seeking higher wages within the food economy can find opportunity in waste and recovery, distribution, processing, or even moving to higher-paying, more-stable hospitality jobs. Educational programs such as the Community College of Philadelphia’s culinary arts program provide education in retail and hospitality skills, and can provide job search and placement assistance, and apprenticeship assistance. Entry-level food economy jobs also provide transferrable skills for better paying occupations outside of the food economy. ¹³

Still, opportunities for advancement to living wage jobs are limited in some sectors. For example, the Pennsylvania Department of Labor and Industry (DLI) includes supervisor of food preparation and serving workers among its High Priority Occupations (HPOs) in Philadelphia due to the potential for workers to enter into these jobs with minimal educational attainment and advance with experience from an average entry-level salary of $25,240 to family-sustaining wages of $50,500. ¹⁴ Yet in 2014, there were only 3,330 food preparation and serving supervisor jobs in Philadelphia, and projections anticipate there to be just 150 openings for this job across the city each year, just a fraction of those working or seeking employment in food businesses. ¹⁵

**Window of Opportunity: The Unmeasurable Informal Economy**

The informal food economy includes the labor of undocumented workers, unreported income, and food-related community development activities, the economic impact of which is difficult to capture. The Pew Research Center estimates that 1 million undocumented immigrants live in Greater Philadelphia, ¹⁶ while the National Agricultural Workers Survey of the U.S. Department of Labor estimated in 2017 that roughly 46% of agricultural workers in the U.S. were undocumented, pointing to likely economic activity in the production sector. ¹⁷ Meanwhile, food production in community gardens and urban farms is a powerful community development tool that can provide fresh food to individuals, aid with job training and reintegration, educate individuals about nutrition, and unite communities. Though not measurable through traditional economic analyses, these economic activities are nonetheless part of the larger picture of the food economy and should be part of food sector-related policy development. Philadelphia Parks & Recreation is leading this effort by integrating urban agriculture into the City’s plan for land use and community development, formalizing its role in creating a good food economy.

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¹⁴ Ibid.

¹⁵ Ibid.


¹⁷ National Agricultural Workers Survey, (2018)
Typical Food-Related Businesses Operate on Tight Margins and Rely Primarily on Personal Capital for Financing

Food-related businesses operate on tight margins and have minimal capacity to absorb losses, and are challenged by fluctuation in food prices and intense competition. These challenges make it hard to turn a profit, and many food-related firms—particularly small ones—are vulnerable to macro- and micro-economic shifts.

Due in part to their precarious finances, survey findings suggest that only a small percentage of food-related businesses in the region receive credit from traditional banks, but many are actively seeking additional capital. Business support and financial experts attribute this gap to low financial literacy among business owners. For minority and immigrant-owned businesses, language and cultural barriers may mean that business owners are unsure of where to turn for financial planning, are undereducated about what it takes to secure credit, or are treated as higher risk because of lenders’ institutional or implicit bias. Though alternatives to traditional banks and personal financing do exist, including grants and micro-lending, these programs struggle to reach the small business entrepreneurs that could benefit most from their programs. These barriers are the result of and exacerbate the racial wealth gap resulting from previous disinvestment in minority and immigrant communities.

Consumers Trends Point Toward Healthy, Local, Diverse, and Sustainable Food Preferences

Survey respondents echo industry trends that show that new generations of consumers prioritize socially and environmentally responsible, healthy, local, and customizable foods—in short, good food. These shifts in preferences, driven largely by consumers with disposable income, have helped usher good food to the plates and pantries of residents across the region. It has accelerated the rise of farmers’ markets, handcrafted versions of beverages and foods, meal prep companies, and upmarket grocery stores focusing on local, and oftentimes organic, products.

Area institutions are adopting these good food trends, with universities and hospitals in the region aligning their purchasing with consumer preferences and embracing the advantages of regional food systems in curricula and other programming. For example,

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Drexel University has recently modified their culinary program curriculum to include a focus on how students preparing to enter the food economy can support local producers.19

Price is an important part of this equation; national trends point to consumer willingness to pay more for high-quality, ethically-produced ingredients.20 However, it is unclear how much more consumers are willing to pay if factors like transportation costs drive up prices. If prices do rise, large companies that can take advantage of economies of scale will be best positioned to capture the market and put even more pressure on small businesses.

The Business Perspective - Birch Run Hills Farm: “As the next generation of consumers is coming on, they’re different: they have a social attachment to how they eat, whether in their food business or their household. Economically, there’s a correlation there: how much money do they have to spend?”

Anchor Institutions Could Be Significant Drivers of Good Food Economic Development

Anchors buy food, contract companies to run their food service operations, lease real estate to food businesses, purchase catering, host farmers markets, and directly or indirectly employ hundreds or thousands of people in food-related occupations. While food may be just part of their business portfolios, quantitative and qualitative data show that patients, students, staff, and visitors increasingly see anchors’ food choices as an expression of their values. Using a good food lens in business decision-making can therefore boost the food economy and anchors’ public profiles.

There is also potential for the business community to change to meet anchors’ needs. For example, many anchors, including the City of Philadelphia and the School District of Philadelphia, purchase pre-packaged meals; city officials conservatively estimate that 25 million pre-packaged meals are served to Philadelphia youth each year. Almost all of these meals are produced outside of Philadelphia and trucked into the city daily, and use very few foods from the region. Early childhood education centers, some health care operations, and eldercare facilities also depend on these pre-plated meals that are produced elsewhere. Meeting even a portion of this demand through a variety of mechanisms could mean starting new businesses, creating jobs, and engaging a local supply chain while serving a locally-bound and steady customer base.

E-Commerce and the Platform Economy is Changing the Food Economy

E-commerce and the platform economy have redefined the food economy in just a few years. From grocery delivery via Instacart to making reservations with OpenTable, e-commerce makes the buying and selling of food-related products and services more convenient for consumers through food courier and delivery services. Companies like GrubHub, Caviar, and UberEats are changing the way people purchase food and the way food-related businesses interact with their customers.

These changes are spurring typical food businesses to adapt. For example, Sunshine Market, a small full-service grocer in West Philadelphia, began offering delivery services, and now delivers between 20 and 30 grocery orders per day in the first two weeks of every month.21 But the entrance of retail monoliths like Amazon into food e-commerce has smaller businesses competing against companies that can take advantage of economies of scale and put downward pressure on prices.

Meanwhile, more delivery services can lead consumers away from brick-and-mortar hospitality establishments, which may have fewer retail or front-of-house hospitality jobs as a result. The delivery jobs that replace jobs lost to e-commerce are not necessarily equal: most platform workers are independent contractors whose wages are typically lower-paying than their full-time counterparts, and who usually do not receive even basic protections like workers’ compensation. So while e-commerce is a boon to consumers, it may lay vulnerable both entry-level employees and small business growth.

21 The dip in deliveries at the end of the month is due to the market’s customers’ dependence on SNAP and WIC; go to page 14 to learn more.
The Business Perspective - Four Seasons: “I think for us it’s just about the retail landscape, and we sell to retailers...if everyone is going to buy from Amazon, where does that leave us?”

Nutrition Assistance Programs Support Both Retailers and Customers
The Center on Budget and Policy Priorities reports that in 2017 the federal Supplemental Nutrition Assistance Program (SNAP) generated $1.3 billion in economic activity in Philadelphia County alone, with every $1.00 of SNAP benefits spent resulting in an economic impact of roughly $1.70. Large retailers operating in Philadelphia’s low-income communities estimate that 20%-50% of store revenue is driven by benefit redemption for SNAP and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); for small retailers, SNAP and WIC redemption can be 50% or more of total sales. Nutrition benefits are an important economic driver to area food retailers, but declining SNAP and WIC enrollment and existential threats to the programs themselves may make food retailers and consumers even more vulnerable.

According to the National WIC Association, nearly two-thirds of WIC providers from 18 different states nationwide reported declines in immigrant WIC access since 2017, driven in part by immigrants’ fear that participation could put them on the radar of government agencies seeking to deport them. In Greater Philadelphia, that national trend is coupled with low local enrollment: in Strawberry Mansion and Allegheny West, two low-income Philadelphia neighborhoods, approximately 18% of eligible people are not enrolled in food assistance benefit programs, more than the state average.

Threats to these programs materialize from time to time, whether in the context of legislating Farm Bill reauthorization, government shutdown, or budget negotiations. When that happens, Philadelphia food retailers of all sizes may see further declines in benefit redemption, leading to fewer sales that could result in layoffs for food retail employees at affected stores.

The Business Perspective: Ray Mustafa of Sunshine Markets estimates that up to 50% of his business is through SNAP. “If there is a cut in peoples’ benefits, it would have a big impact.”

The City is an Actor in the Food Economy
Starting a food business

More than 1,000 new food establishments open each year in Philadelphia, and all of them have questions about licenses, permitting, and zoning. Entrepreneurs with language barriers or who are new Americans may have even more questions, but may not know how to get them answered. The City offers several services to assist in launching a food business, and continues to pilot new ways of communicating with businessowners. Business support and financial firms also provide support and fill gaps, including for immigrant business owners who may have language barriers or are unfamiliar with health and permitting regulations required in the United States.

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Minority Business Resources

Interview findings suggest that language barriers, cultural education gaps, and limited access to industry-focused social and business networks are challenges for minority- and immigrant-owned food businesses. While the City of Philadelphia offers materials and translational services in multiple languages, some non-English speaking business owners do not know that resources in their language are available. Business support and financial firms also report that many of their immigrant clients are unfamiliar with health and permitting regulations required in the United States.

Taxes and Fiscal Policy Challenges

In Philadelphia, sales tax, business income and receipts tax (BIRT), wage taxes, the Philadelphia Beverage Tax, liquor tax, dumpster fees, and cigarette licenses comprise the tax responsibility for food-based businesses. In recent years, while the beverage tax has garnered significant media attention, the City made policy adjustments and introduced resources to ease the impact of multiple taxes. One example of this is the City’s Special Committee on Regulatory Reform’s recommendation for changing second-year payment terms for the BIRT, which many food-related businesses said substantially increases their tax payment burden in their second year of operation. And yet, while businesses across all sectors indicate that taxes are a primary concern, they do not factor into choosing a location to do business: when asked about locating their businesses, ‘local taxes’ ranked as the least important decision-making factor by survey respondents.

Opportunities for Good Food to Grow Greater Philadelphia’s Food Economy

Good Food Policy Opportunities

Explore a Good Food Purchasing Policy for the City of Philadelphia

The City of Philadelphia spends over $25 million annually on food and food services for programs run by its departments and agencies like Prisons, Parks & Recreation, and the Office of Homeless Services. While the City purchases less food each year than the School District of Philadelphia and many area anchor institutions, the City could lead by example in purchasing nutritious food that is sustainably raised on regional farms, purchased from local businesses, and support fair labor practices across the supply chain.

The FPAC Good Food Procurement Subcommittee formed out of a group looking at local food purchasing in 2015, and advocated to Philadelphia City Council that purchase of good food be part of a citywide sustainable procurement plan. Greenworks, the plan published by the City’s Office of Sustainability, similarly prioritizes sustainably- and locally-procured food. And in 2017, with the support of FPAC and the Office of Sustainability, the Department of Public Health created a cross-departmental position to implement good food purchasing practices.

Since 2017, the City has worked with the Center for Good Food Purchasing to evaluate food purchases for four departments, and found successes and opportunities for more good food procurement including increasing supply chain transparency to make it easier to know where food comes from; reducing the amount of processed meat served in favor of plant-based proteins and smaller amounts of sustainably-produced meat; and purchasing more fresh and frozen vegetables from the region.

Philadelphia can support the health of the local economy, the health of our regional environment, and the health of the people it serves—children and youth, people experiencing homelessness or incarceration, the elderly—by committing to purchasing good food.
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Window of Opportunity: Center for Good Food Purchasing

In addition to evaluating food purchases across five “value categories” including nutrition and sustainability, the Center also helps to build local coalitions to pass good food purchasing policies. Several cities, including Chicago and Boston, have recently passed resolutions enacting good food purchasing policies for their school districts, and many others are following suit. Prison reform advocates, homeless service providers, and local and regional producers may find common ground in advocating for a similar policy in Philadelphia.

Expand institutional food purchasing policies that prioritize nutritious, locally-produced foods

Anchors purchase and serve an enormous volume of food; for example, the dormitory food operations at the University of Pennsylvania alone utilize 1.2 million pounds of food per week. For small production and processing firms that can win even a portion of an anchor’s business, that can translate to an important and constant stream of revenue. When anchors invest in small businesses, they lay a foundation for business stability and growth.

Many anchor institutions in Philadelphia, particularly hospital systems, have adopted voluntary nutrition guidelines for the food they serve. Through the Good Food, Healthy Hospitals initiative, hospitals commit to improving the nutritional quality and local impact of patient meals, food retail, catering, and vending. To date, 18 hospitals have made the pledge, representing millions in food purchases.

Window of Opportunity: Good Food Standards

Good Food, Healthy Hospitals standards include:

- Preference for fresh vegetables and fruit that are local and/or sustainable
- Local and/or sustainably produced whole grains, legumes, and meat
- Decreasing the amount of meat purchased by 20% from baseline
- Increasing servings of vegetables and fruit in patient meals, cafeterias, cafes, and catering
- Converting vending machines to serving at least 65% healthy beverages and snacks

Meanwhile, Philadelphia Anchors for Growth and Equity (PAGE), a partnership between the Economy League of Greater Philadelphia, the City of Philadelphia, and leading universities, colleges, and healthcare networks, facilitates matchmaking between processing and production firms and anchor institutions. PAGE works with anchors to set goals for local purchasing to grow businesses, strengthen the local economy, create jobs, and build wealth. While PAGE is still in the process of developing infrastructure to best reach its goals, it can help food economy firms serve anchor demand by facilitating connection between firms and contract opportunities.

Support statewide efforts to raise the minimum wage to $15 per hour

Food-based retail and hospitality, the two largest food-related employment sectors in Greater Philadelphia, also have the lowest wages; average annual wages in those sectors come out to $10-11 per hour. These sectors also have high turnover and few opportunities for benefits or paid leave. While earned sick leave and fair scheduling legislation may help, the primary way to lift low-wage workers out of poverty is to raise the minimum wage.

Raising the minimum wage for food economy workers in retail and hospitality will improve their livelihoods and get more money circulating in the regional economy. This will be of particular importance to groups for whom low-wage jobs in retail and hospitality are an entry point into the workforce, such as returning citizens, or lower-income groups across Philadelphia. For employers, employees who are paid better are less likely to leave, reducing the time and expense of hiring and training new employees.

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Though Philadelphia is preempted by the state from raising its minimum wage, there is a growing effort to pressure state lawmakers to pass legislation statewide. Pennsylvania Governor Tom Wolf signed an executive order to raise the minimum wage for State employees to $12. In December 2018, Philadelphia mayor, Jim Kenney signed the 21st Century Minimum Wage Law, which will gradually raise the minimum wage for city-paid workers from $12.20 to $15 an hour. Policies that support these efforts by preferentially supporting businesses that pay higher starting wages would have impacts far beyond the food economy.

**Window of opportunity: Guide to Fair Labor for Good Food Businesses**

The Philadelphia Food Policy Advisory Council’s subcommittees on Good Food Purchasing and Workforce and Economic Development authored the Guide to Fair Labor for Good Food Businesses after it recognized that fair labor was the most challenging good food pillar for businesses to achieve. Aimed to encourage food businesses to adopt practices that promote employee health and wellbeing, the guide lists free and low-cost resources and trainings related to wages and scheduling, benefits, and working with subcontractors.

**Window of Opportunity: Food Jobs that Pay**

Though pay can be low in food-based retail and hospitality, especially entry-level jobs, there are some positions along the supply chain that are in high demand with higher pay:

- **Commercial driving:** nearly every processor and distributor interviewed or surveyed struggles to hire and retain truck drivers. A nationwide shortage is having local consequences, as businesses compete with one another and with national carriers for drivers, whose average wages were $23 per hour in 2017 and expected to continue to rise. Education needed: depends on job, minimum of Commercial Driver’s License (CDL)
- **Electrical & mechanical trades:** analysis shows that these skilled trades account for a significant portion of the jobs in the production, processing, and distribution sectors, and earn much higher wages. Education needed: Pre-apprenticeship programs in the trades have basic educational requirements and significant flexibility to move across sectors.
- **New food technology:** while consumers use food-tech solutions daily, the entire food supply chain is becoming ‘smarter’ with new solutions that will streamline complex processes. Food safety experts who work with producers and processors expect Blockchain, a distributed database system far more tamper-proof than standard digital recordkeeping, to become the primary mechanism for maintaining supply chain transparency, and changes to manufacturing, warehousing, and quality control are reducing time and wasted product. Training tech-literate professionals to work in and develop technologies for food-based businesses could have an important economic impact on individual earnings and the larger food economy. Education needed: various, from associate’s to bachelor’s degrees.

**Good Food Business Opportunities**

**Centralize local produce processing and meal preparation**

Food retail and hospitality businesses that prioritize regionally-produced ingredients struggle against the Mid-Atlantic growing season. From small catering companies to national food service management companies, interviewees and survey respondents say our region’s limited growing season makes it hard to commit to regional sourcing.

A centralized facility—one that could preserve the regional harvest and produce meals from that bounty—could solve multiple problems with one good food solution. It could process regionally-grown fruits and vegetables into frozen and shelf-stable products to be used year-round by all types of food businesses; it could produce pre-plated meals that make use of those same good food ingredients; it could provide local jobs in processing, food production, and distribution; and it could commit Philadelphia anchor institutions to good food procurement. No small investment, such an operation would require partnership and investment across

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public, private, and non-profit sectors, but could manifest demonstrable benefits to producers, retailers, hospitality firms, and eaters.

Window of Opportunity: Philabundance Community Kitchen
Philabundance, a nonprofit hunger relief organization serving the Philadelphia region and beyond, has expanded from its food redistribution model to efforts to reduce food waste, utilize excess regional farm capacity, and train food service employees. Philabundance Community Kitchen (PCK) is a workforce development program that invites formerly incarcerated or chronically underemployed people into 14 weeks of culinary training to prepare them for jobs in food service. It started PCKatering, a catering operation in which catering orders are prepared by students; catering proceeds go to supporting the training program. In May 2019, Philabundance broke ground on a new facility in North Philadelphia that will train twice as many students each year with the potential to produce up to 5 million meals annually for catering, homeless shelters, and more, adding capacity to produce pre-plated meals within City limits.

Design last-mile distribution with smaller minimum orders
Survey respondents from retail and hospitality firms, particularly those that aim to support regional producers and processors, struggle to meet delivery minimums from distributors. “We order too much [to buy from] small farms, and not enough for big distributors,” says one respondent, who runs a small locally-focused retail shop.

Last-mile distribution—or transporting goods from their final distribution site to the customer—is expensive: labor, vehicle purchase and maintenance, fuel, and parking tickets must be calculated into the cost of each delivery. It is more efficient to deliver a truckload of food to one customer than to 25 customers in a dense urban area, so distributors pass along the cost of this inefficiency to the customer by having minimum order amounts or “drop sizes.” The rise of e-commerce now sees more trucks making more stops, adding to congestion and increasing inefficiency.

A business that could figure out how to circumvent these inefficiencies would be a huge boon to Philadelphia food businesses that struggle to meet distributor minimums. In Portland, OR, B-Line Sustainable Urban Delivery is tackling last-mile distribution using tricycles with refrigerator boxes and providing a suite of delivery and logistics services for good food businesses. Similar ingenuity may find strong demand from Philadelphia food businesses.

Window of Opportunity: Connect
In October 2018 the City of Philadelphia’s Office of Transportation, Infrastructure, and Sustainability released “Connect,” Philadelphia’s strategic transportation plan. The plan identifies several areas of concern for the food economy, such as built environment challenges trucking and logistics, and managing congestion caused in part by increased delivery activity from distributors and e-commerce platforms from Fresh Direct to UberEats. Changes to the built environment and transportation policy can help mitigate challenges that food-related businesses face related to last-mile delivery, including improving curbside delivery infrastructure to facilitate faster deliveries and less congestion, further speeding up food commerce. The Connect plan, if implemented, would be a boon to any food business that moves food to people.
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**Lease anchor-owned retail spaces to local good food businesses**

Anchor institutions hold significant high-traffic real estate in Philadelphia, including spaces for food-related retail and hospitality businesses. When anchors adopt policies that include a preference for local operators when searching for food-related tenants, they stimulate and support regional small business activity, and expand access to good food in the region. Franklin’s Table, a food hall at the University of Pennsylvania that opened in 2018, incorporated preferences for local and regional firms in their lease agreements, and several restaurants from Philadelphia and its environs have set up shop. Though Franklin’s Table hits the mark on local business support, its price points miss on accessibility: West Philadelphia is economically and socially diverse, but Franklin’s Table prices are a better fit for wealthy students than working class residents.

**Window of Opportunity: Cooperative Businesses**

The Enterprise Center’s Center for Culinary Enterprise in West Philadelphia estimates that $100 million is spent on food within three miles of its facility, near many of the area’s largest university and health care systems. The Center works with its entrepreneur-members to cooperatively sell baked goods and catering into nearby institutions. This is just one of many local food-based cooperatives, both formal and informal, that share resources for greater impact and ability to serve large customers. According to the Philadelphia Area Cooperative Alliance (PACA), Philadelphia will soon be home to ten total food cooperatives, including grocery stores, restaurants, community kitchen, and even a tortilla manufacturer.

**Recover and collect more organics**

Philadelphia is home to a few companies that collect organic food waste for composting, but the potential for organics collection is far from realized. Tim Bennett, owner of Bennett Compost, grew his business from his second floor apartment in 2009 to a seven-person operation collecting food scraps from over 2,000 residential customers in Philadelphia. Bennett says he started seeing record-numbers of sign-ups for his company’s services month over month in 2018, “but that’s still less than 1% of households in the City.”

Hospitality firms are eager to find companies to manage their food waste. Survey respondents are also seeking compostable food service materials, and will need a place to send them. According to the Center for EcoTechnology, which partnered with the City of Philadelphia to evaluate opportunities and barriers to diverting food waste, one of the biggest barriers for businesses seeking to keep food waste out of landfills is the lack of compost facilities within Philadelphia.

Bennett sees an opening for local small business in organics collection and management, even as his business continues to grow: “Probably at some point...a decision has to be made as to whether the solution for [organics collection in Greater Philadelphia] is to have one or two giant facilities in the region to handle all of the material, or whether you can have a bunch, a little ten to twenty -- not even small [companies], but midsize ones.” Though state regulations make commercial composting difficult in Philadelphia, small- to mid-sized businesses may be a right-fit for our population-dense region, providing good jobs and improving the environmental impact of the food economy.

**Good Food Product Opportunities**

**Meet demand for plant-based and multi-cultural foods**

Consumer demand is trending toward health-promoting and environment-conscious products and businesses, and foods from many cultures. Survey and interview respondents noted that formerly-fringe food demands, from vegan baked goods to rare imported fruits and vegetables, are now mainstream.

Sunny Phanthavong, owner of Vientiane Bistro in Philadelphia’s Kensington neighborhood, sees an overlap between health and ethnic cuisine. “Philly’s just a good, dynamic food city [and] it keeps getting better. People are wanting to try new foods, [and are] more health conscious.” Vientiane serves vegan and vegetarian items, and has seen a boon from people choosing plant-based diets for health, religious, environmental, or ethical reasons.
Trends toward plant-based, vegetarian, and vegan preferences also show continued popularity. Philadelphia hosted its first Vegan Restaurant Week in 2018, with 19 restaurants participating; in 2019, more than 40 restaurants have signed on to serve vegan fare. Though vegan restaurants in Philadelphia are not new—there have been small outposts of vegan-friendly fare in South Philly, West Philly, and Germantown for years—the new wave of options across the city suggests that plant-based dining is growing in popularity.

Also expanding is the demand for fruits and vegetables associated with the cuisine of Greater Philadelphia’s immigrant communities. The demand has grown and changed, says Emily Kohlhas, Director of Marketing for John Vena, Inc., a 100 year old fresh produce wholesaler and a cornerstone of the massive Philadelphia Wholesale Produce Market. Recently, demand has grown for tropical fruits, peppers, and other produce common in Central American cuisines as Greater Philadelphia becomes home to more people from the Dominican Republic, Mexico, and elsewhere in the Americas. While restaurants serving this food to a broader audience is part of the trend, Kohlhas says “sustained demand from people who eat this type of food every day” is what keeps things like chayote, nopal, and calabacita in stock at the massive Market.

Local Spotlight: Philadelphia Wholesale Produce Market

Located between the Philadelphia International Airport and the Port of Philadelphia, the Philadelphia Wholesale Produce Market is one of the largest wholesale centers for fresh fruits and vegetables in the mid-Atlantic region. The largest fully-enclosed refrigerated wholesale produce terminal in the world, it houses more than 20 vendors that supply local, domestic, and international products to distributors, grocery stores, mom-and-pops, and restaurant chains across the region and beyond. Market vendors surveyed for this report say the strategic location between New York City and Washington D.C., and agglomeration of like businesses are powerful benefits to the Market, while many worry that climate change could change the way they do business in the future.

Formulate healthier versions of popular foods

Consumer trends and nutrition requirements from federal food programs have businesses looking for healthier alternatives to some popular foods. Matt Luchansky, Senior Vice President of Novick Brothers, a food distributor in South Philadelphia, says it would be much easier for his business to serve early childcare centers if more of the foods that meet centers’ food program requirements were made locally. “I know there’s pasta places all throughout the City. What can they produce for me? Why do I have to go to the Bronx [where a manufacturer is] producing whole grain pasta? You’re right here. I don’t want to have to pick it up in Queens.”

Drexel Food Lab, a recipe and product development laboratory at Drexel University, works with food manufacturers to develop and test product formulations. Nutrition and sustainability are often in focus during these developments, and Drexel Food Lab has worked with food companies to make great tasting food that is better for people and the planet. In partnership with Get Healthy Philly to reduce sodium in popular foods, it recently assisted F&S Produce in Vineland, NJ in developing fresh vegetable-based deli salads to replace typical mayonnaise-based options; worked with Comcast Spectacor to develop a beef burger blended with mushrooms; and worked with New Jersey-based Amoroso’s Baking Company to develop a lower-sodium, whole grain-rich hoagie roll for schools and hospitals.

“Most of the manufacturers we speak with are perfectly happy to supply healthier food if indeed the market is there for them,” says Jon Deutsch, Founder and Director of the Drexel Food Lab and Professor of Food Studies at Drexel University. “Reducing calories, fat, salt and sugar, and increasing nutrient density while still making something delicious and craveable can be a challenge, and even changing one ingredient can be expensive for a manufacturer. Manufacturers need to know that their efforts to reformulate existing products to make them healthier or to introduce new healthy products will translate to sales. Drexel Food Lab’s expertise involves working with manufacturers to develop and reformulate good food products that contribute to more sustainable, healthier, or more accessible food while tasting great.”

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**Good Eats**

**Window of Opportunity: Meeting Specific Nutritional Needs**

According to Luchansky, Novick Brothers pivoted from being a general distributor to one tailored to meet the needs of early childhood education centers enrolled in the Child and Adult Care Food Program, or CACFP. CACFP requires that meals and snacks are balanced and include vegetables, fruit, and whole grain-rich breads and cereals. Novick recognized a service gap—the lack of a “one-stop-shop” to meet CACFP requirements—and filled it, reducing their SKUs from 5,000 to 1,800, hiring sales staff that used to work in early childcare, and developed in-house expertise in the administrative mechanics of the program. “Once we understood CACFP, it kind of opened the door for us to be able to go throughout the City and expand. Novick now serves about 800 centers throughout the mid-Atlantic and Ohio River Valley.

**Develop the supply chain for more local ingredients**

Distributors, retailers, and hospitality firms continue to demand more local ingredients, including fruits, vegetables, dairy, grains, and meat and poultry. Demand comes from consumers, and from internal policies to support regional agriculture. Bon Appétit Management Company, which manages food service at the University of Pennsylvania, requires its chefs to purchase 20% of their food from within 150 miles of Philadelphia and to prioritize purchasing from small farms and firms. The company is even hiring its own “forager,” a specialized position at UPenn that will help locate and set up agreements with local farms and firms.

Without the resources to hire a forager, however, food businesses rely on a few key distributors and word of mouth to find purveyors. Some, like The Common Market, specialize in local sourcing, while others that have sourced from the region for decades are finally labeling their local product. “We’ve always been buying local, but now we put more branding around it,” says Jason Hollinger of Four Seasons Produce. Several distributors have begun identifying local product by farm name to make it easier for restaurants and retailers to purchase locally.

That does not mean that demand has levelled off. Hospitality firms note that the growing season around Philadelphia limits their options in winter and early spring, and that they would like to purchase more types of foods locally, including manufactured foods made from local ingredients. Bakeries, breweries, ice cream companies, and pasta-makers are on the constant hunt for grain growers, mills, dairies, and egg-producers to supply raw ingredients for their products.

**Window of Opportunity: PA Preferred**

The Pennsylvania Department of Agriculture’s PA Preferred program is a marketing program meant to promote Pennsylvania agricultural producers to consumers looking for local food. Many states have similar programs, like New Jersey Fresh, Maryland’s Best, and New York State Grown & Certified in our neighboring states.

Programs like these can help anchors and agencies identify foods to purchase to meet internal purchasing policies as described above. For example, New York City passed guidelines in 2012 to encourage agencies to purchase New York State foods whenever possible, including stating local preferences, substitutions (purchasing NY apples instead of Florida oranges), or changing menus to incorporate more local products. Agencies and anchors in southeastern Pennsylvania are well-positioned to take advantage of state marketing programs to increase local purchases of fresh vegetables, dairy, poultry and more, and internal purchasing policies could support these statewide efforts.

**Good Food Partnership Opportunities**

**Expand City programs that support good food businesses**

City departments and agencies have been taking strides to develop supportive policies and programs that improve the business environment for all food businesses. Some initiatives, like the guides to opening food businesses [Link], put out jointly by the departments of Public Health, Licenses & Inspections, and Commerce, aim to clarify City processes. A new initiative by the same group is going further, surveying businesses as they apply for licenses on their needs and ways departments can better communicate with them. A focus on good food businesses was spurred by the Philadelphia Food Policy Advisory Council, which recommended that the City purchase more food, including catering, from good food businesses. It developed and released a Good Food Caterer Guide, which directs City employees and others to local restaurants and caterers that provide healthy and sustainable options, and employ fair labor practices. City procurement processes followed suit, engaging good food vendors to find ways to improve its contracting
**Good Eats**

processes, including streamlining bid templates and adding good food reporting requirements to assess the City’s progress in purchasing more good food, and in turn supporting more good food businesses.

Other supports being piloted include recent legislation that permits food retailers to have racks of fresh fruits and vegetables against their storefronts on the sidewalks, increasing the visibility and appeal of healthy foods, as well as two small grant programs for good food businesses. The first, the Healthy Food Business Program, is a partnership between the Commerce Department and the Department of Public Health to provide technical assistance and access to City grants and forgivable loans for qualified businesses that sell healthy food or otherwise promote health. The second, the Food Justice Grant, is a mini-grant program aimed at neighborhood businesses and organizations looking to increase the availability and appeal of healthy foods, particularly in areas with low access to healthy food. Both programs, in their first year in 2019, if expanded could assist even more area businesses.

**Bridge the education gap for non-traditional financing**

Personal savings, credit cards, and loans from friends and family were the three common financing mechanisms food businesses, according to survey responses. Aspiring food business owners often see no other choice but to take on the enormous personal risk of those options, as many food-based entrepreneurs cannot get sufficient financing from a traditional bank.

Several organizations and programs in Greater Philadelphia provide alternatives to personal financing. Philadelphia Department of Commerce can provide Philadelphia businesses or those looking to start businesses in the City with guidance about which programs may be right for them. In many instances, less-than-perfect credit does not necessarily mean a loan application will be denied.

In 2019, the Philadelphia Commerce Department and Get Healthy Philly explored explicitly targeting good food businesses for this type of education and funding through their Healthy Food Business Program. Three businesses were selected to receive food business-related technical assistance and access to the Commerce Department’s suite of business improvement programs. More programming and funding tailored to the needs of good food businesses could further boost their financing acumen and connectivity to other resources.

**Window of Opportunity: Alternative Financing Programs**

These Philadelphia-based organizations can support food-related businesses through grants, financing, and more:

- FINANTA’s Affinity Group Lending – network of connected individuals pool money to micro-lend to members, with loans from $1,200 to up to $25,000; more than 60% of FINANTA’s clients are food-related businesses
- Kiva City Philadelphia – business owners apply to get crowdfunded zero-interest loans
- North Philadelphia Financial Partnership – loans from $5,000 to $1.5 million for businesses opening in North Central Philadelphia
- Philadelphia Commerce Department InStore Forgivable Loan Program – forgivable loans up to $50,000 for food-based businesses in eligible corridors
- Philadelphia Commerce Department Storefront Improvement Program – reimburses up to 50% of the cost of eligible building improvements
- PIDC Working Capital and Equipment Loans – flexible term loan to finance working capital, equipment, or leasehold improvements
- Reinvestment Fund – has several financing options across an array of sectors and business development stages
- The Enterprise Center – microlending and traditional small business loans

**Conclusion**

The cumulative impact of the Greater Philadelphia food economy means that personal or individual business choices can have a much larger effect on the health of residents and our local economy. There are many opportunities to support a healthy food economy that values sustainability, fairness, and local impact, and the demand for the businesses that comprise that economy has never been stronger. Though poverty, inequity, and chronic disease are high in our region, our location, diversity, strong anchor institution demand, and support for entrepreneurs lift up the region, including its most vulnerable residents. A good food economy is better for all of us, and it is within our grasp.
**Sources Cited**


City of Philadelphia Department of Revenue, Raw Data (Philadelphia, PA: 2017)


Ginder, Joe, “The Economy League & Bon Appetit; Food Economy Assessment Interview,” interview by author, August 6, 2018.


Appendix A: Sector Dashboards

Production – Production includes firms that grow crops, produce livestock products, or support agriculture. Regional employment in this sector is experiencing modest growth, though average wages are low, and it comprises far fewer firms than other sectors of the food economy.

<table>
<thead>
<tr>
<th>Number of Jobs, % of Food Economy Jobs</th>
<th>Metro Area*</th>
</tr>
</thead>
<tbody>
<tr>
<td>8,882 Jobs, 3% of food-related jobs</td>
<td></td>
</tr>
</tbody>
</table>

| Job Growth 2007-2017, % annual change | 98.3 jobs per year, 1.2% annual change |
| Projected Job Growth 2014-2024        | N/A        |

| Number of Firms | 575 firms, 2% of food-related firms |
| 2017 Average Annual Wage | $37,491 |

*The City of Philadelphia only contains 11 production firms, as such, data is presented at the Metro level. Visit economyleague.org/foodeconomy for full analysis and methodology.

While food crops grown under cover is the largest production industry in the region, vegetable and melon farming added most of the jobs in the past five years. Average wages in both industries, however, are lower than those associated with non-citrus fruit and tree nut farming.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment</th>
<th>Jobs Added 2012-2017</th>
<th>2017 Average Metro Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Crops Grown Under Cover</td>
<td>3,949</td>
<td>219</td>
<td>$42,007</td>
</tr>
<tr>
<td>Vegetable and Melon Farming</td>
<td>1,295</td>
<td>817</td>
<td>$31,703</td>
</tr>
<tr>
<td>Non-Citrus Fruit and Tree Nut Farming</td>
<td>240</td>
<td>219</td>
<td>$53,585</td>
</tr>
</tbody>
</table>

Highest Wages = Green; Most Jobs Added = Red; Most Employees = Blue. *The City of Philadelphia only contains 11 production firms, as such data is presented at the Metro level. Visit economyleague.org/foodeconomy for full analysis and methodology.

Largely, occupations in food production require a high school diploma or equivalent. Agriculture and food science technicians receive among the highest wages in this sector.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Food-Related Jobs in the Region</th>
<th>Annual Mean Regional Wage</th>
<th>Typical Entry-Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Equipment Operators</td>
<td>207</td>
<td>$31,000</td>
<td>High School Diploma or Equivalent</td>
</tr>
<tr>
<td>Farm Equipment Mechanics and Service Technicians</td>
<td>28</td>
<td>$39,890</td>
<td>High School Diploma or Equivalent</td>
</tr>
<tr>
<td>Agriculture and Food Science Technicians</td>
<td>65*</td>
<td>$55,310*</td>
<td>Associate’s Degree</td>
</tr>
</tbody>
</table>

*Numbers with an asterisk are calculated at the State level.
Good Eats

Processing – Processing includes firms that transform raw agricultural products into food products. Employment in this sector is growing regionally, but the city has seen modest annual decline in jobs over the last decade. While it supports fewer jobs than four other food economy sectors, average wages for food processing jobs are higher than many other sectors.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment</th>
<th>Jobs Added 2012-2017</th>
<th>Average Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>City</td>
<td>Metro</td>
<td>City</td>
</tr>
<tr>
<td>Animal Slaughtering and</td>
<td>1397</td>
<td>7018</td>
<td>305</td>
</tr>
<tr>
<td>Processing</td>
<td></td>
<td></td>
<td>$51,672</td>
</tr>
<tr>
<td>Bread and Bakery Product</td>
<td>1304</td>
<td>5662</td>
<td>-313</td>
</tr>
<tr>
<td>Manufacturing</td>
<td></td>
<td></td>
<td>$39,314</td>
</tr>
<tr>
<td>Coffee and Tea Manufacturing</td>
<td>108</td>
<td>575</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$51,811</td>
</tr>
</tbody>
</table>

Highest Wages = Green; Most Jobs Added = Red; Most Employees = Blue

Processing supports large numbers of low-wage jobs with low educational requirements, such as butchers and batch makers (individuals who work in food manufacturing and prepare large quantities of food or ingredients). However, there are several better-paying occupations in this sector that are attainable with post-secondary certifications, such as industrial machinery mechanics.

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of Food-Related Jobs in the Region</th>
<th>Regional Mean Wage</th>
<th>Typical Entry-Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butchers and Other Meat, Poultry, and Fish</td>
<td>1,114</td>
<td>$34,680</td>
<td>High School Diploma or Equivalent</td>
</tr>
<tr>
<td>Processing Workers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food Batch Makers</td>
<td>1,382</td>
<td>$32,730</td>
<td>High School Diploma or Equivalent</td>
</tr>
<tr>
<td>Industrial Machinery Mechanics</td>
<td>624</td>
<td>$55,370</td>
<td>Post-Secondary Certificate</td>
</tr>
</tbody>
</table>
**Good Eats**

**Distribution** - Distribution encompasses transportation, logistics, warehousing, and wholesale of food-related goods. Distribution is the third-largest sector in the food economy with respect to employment, and pays the second-highest average wages. While distribution employment in the city dipped in recent years, growth is projected locally and statewide. The 5,502 distribution firms in the region account for nearly ¼ of all firms in the food economy.

<table>
<thead>
<tr>
<th>Number of Jobs, % of Food Economy Jobs</th>
<th>Philadelphia</th>
<th>City: 5,636 jobs, 7% of food economy jobs</th>
<th>Philadelphia Metro Area</th>
<th>Metro: 26,008 jobs, 8% of food economy jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Growth 2007-2017</td>
<td>-12 jobs per year, -0.2% annual change</td>
<td>-12 jobs per year, -0.2% annual change</td>
<td>351 jobs per year, 1.6% annual change</td>
<td></td>
</tr>
<tr>
<td>Projected Job Growth 2014-2024</td>
<td>13 jobs per year 0.3% annual change</td>
<td>(PA): 259 jobs per year, 0.7% annual change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Firms, % of Food Economy Firms</td>
<td>757 firms, 11% of food economy firms</td>
<td>5,502 firms, 22% of food economy firms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017 Average Annual Wage</td>
<td>$60,308</td>
<td>$56,602</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Projected job growth for the metro area is calculated at the state level. A factor of 15% is applied to job projections for distribution. Visit economyleague.org/foodeconomy for full analysis and methodology.*

At the industry level, wholesale trade agents and brokers lead employment and wages within the distribution sector, though this industry lost jobs at the city and regional levels between 2012 and 2017. General line grocery merchants have added the most jobs regionally, and fish and seafood merchants have added the most jobs in the city.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment</th>
<th>Jobs Added 2012-2017</th>
<th>Average Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholesale Trade Agents and Brokers</td>
<td>855</td>
<td>-27</td>
<td>$78,935</td>
</tr>
<tr>
<td>General Line Grocery Merchant Wholesalers</td>
<td>971</td>
<td>18</td>
<td>$59,873</td>
</tr>
<tr>
<td>Fish and Seafood Merchant Wholesale</td>
<td>534</td>
<td>156</td>
<td>$54,030</td>
</tr>
</tbody>
</table>

Highest Wages = Green; Most Jobs Added = Red; Most Employees = Blue

Distribution occupations are dominated by heavy tractor trailer driving, which has an entry-level education requirement of a high school diploma and a modest mean wage. A variety of trade-related occupations in this sector pay higher wages and are attainable through certification and education.

<table>
<thead>
<tr>
<th>Job</th>
<th>Jobs in the State</th>
<th>State Mean Wage</th>
<th>Typical Entry-Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy and Tractor Trailer Truck Drivers</td>
<td>84,610*</td>
<td>$44,800*</td>
<td>High School Diploma or Equivalent</td>
</tr>
<tr>
<td>Electrical and electronic installers and repairers, transportation equipment</td>
<td>220*</td>
<td>$55,640*</td>
<td>Post-Secondary Certificate</td>
</tr>
<tr>
<td>Rail Car Repairers</td>
<td>780*</td>
<td>$57,460**</td>
<td>High School Diploma or Equivalent</td>
</tr>
</tbody>
</table>

*All Distribution occupations are calculated at the state level due to data availability, **numbers with two asterisks are calculated at the national level. All distribution numbers do not contain the 15% distribution factor. Visit economyleague.org/foodeconomy for full analysis and methodology.*
Good Eats

Retail – Retail involves the direct sale of goods to consumers within food and beverage outlets, including online e-commerce platforms. Constituting 21% of city food economy jobs and 25% of regional food economy jobs, retail is one of the largest sources food-related employment in the Philadelphia area. It is also a driver of growth in the city and region, adding over a thousand jobs annually over the past decade. However, regionally it is projected to lose jobs in the next five years, and this sector sees some of the lowest wages across the food economy.

<table>
<thead>
<tr>
<th>Number of Jobs, % of Food Economy Jobs</th>
<th>Philadelphia</th>
<th>Philadelphia Metro Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>16,379 jobs, 21% of food-related jobs</td>
<td>83,290 jobs, 25% of food-related jobs</td>
<td></td>
</tr>
</tbody>
</table>

| Job Growth 2007-2017 | 189 jobs per year, 1.5% annual change | 1119 jobs per year, 1.6% annual change |
| Projected Job Growth 2014-2024 | 31 jobs per year0.2% annual change | (PA) -63 jobs per year 0.0% annual change |

<table>
<thead>
<tr>
<th>Number of Firms, % of Food Economy Firms</th>
<th>Philadelphia</th>
<th>Philadelphia Metro Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,716 firms, 27% of food economy firms</td>
<td>5,302 firms, 21% of food economy firms</td>
<td></td>
</tr>
</tbody>
</table>

| 2017 Average Annual Wage | $22,252 | $24,210 |

*Projected job growth for the metro area is calculated at the state level. Visit [economyleague.org/foodeconomy](http://economyleague.org/foodeconomy) for full analysis and methodology.

Retail – Employment in the food retail sector is dominated by supermarkets, though this industry has lost jobs between 2012 and 2017. Convenience stores have added the most jobs during this period, particularly at the regional level. Fruit and vegetable markets pay marginally higher wages than their retail counterparts.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment</th>
<th>Jobs Added 2012-2017</th>
<th>Average Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>Metro</td>
<td>City</td>
<td>Metro</td>
</tr>
<tr>
<td>Supermarkets and Other Grocery Stores</td>
<td>10,353</td>
<td>51,738</td>
<td>-21</td>
</tr>
<tr>
<td>Convenience Stores</td>
<td>1,876</td>
<td>9,858</td>
<td>294</td>
</tr>
<tr>
<td>Fruit and Vegetable Markets</td>
<td>162</td>
<td>2,209</td>
<td>-37</td>
</tr>
</tbody>
</table>

Highest Wages = Green; Most Jobs Added = Red; Most Employees = Blue

Retail – Retail occupations typically pay lower mean wages than jobs in other food economy sectors and has lower entry-level educational requirements. Retail also supports occupations that may not be immediately thought of as food-related, such as floral designers.

<table>
<thead>
<tr>
<th>Job</th>
<th>Number of Food-Related Jobs in the Region</th>
<th>Regional Mean Wage</th>
<th>Typical Entry-Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butchers and Meat Cutters</td>
<td>1,114</td>
<td>$34,680</td>
<td>High School Diploma or Equivalent</td>
</tr>
<tr>
<td>Packers and Packagers</td>
<td>3,516</td>
<td>$25,990</td>
<td>High School Diploma or Equivalent</td>
</tr>
<tr>
<td>Floral Designers</td>
<td>110</td>
<td>$27,760</td>
<td>High School Diploma or Equivalent</td>
</tr>
</tbody>
</table>
Hospitality — Hospitality includes restaurants, hotels, food service contractors, and caterers. It dominates local food-related employment—supporting 68% of all jobs in the food economy within Philadelphia and 59% of all food-related jobs in the region. The hospitality sector is also one of the primary drivers of food-related job growth at both the city and regional levels, though it pays the lowest average wages of all food economy sectors. It is projected to grow faster than all other food economy sectors over the next five years.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment</th>
<th>Jobs Added 2012-2017</th>
<th>Average Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>City</td>
<td>Metro City</td>
<td>Metro City</td>
</tr>
<tr>
<td>Food Service Contractors</td>
<td>5,843</td>
<td>16,033</td>
<td>2,847</td>
</tr>
<tr>
<td>Restaurants and Eating Places</td>
<td>41,855</td>
<td>166,437</td>
<td>6,153</td>
</tr>
<tr>
<td>Drinking Places, Alcoholic Beverages</td>
<td>3,191</td>
<td>7,331</td>
<td>486</td>
</tr>
</tbody>
</table>

Highest Wages = Green; Most Jobs Added = Red; Most Employees = Blue

Hospitality — Hospitality occupations typically require a high school diploma or equivalent. The food economy also supports hospitality sector occupations that may not be immediately thought of as food-related, such as drivers and sales workers. Higher wages within retail occupations are attainable with additional degrees and certifications.

<table>
<thead>
<tr>
<th>Job</th>
<th>Number of Food-Related Jobs in the Region</th>
<th>Regional Mean Wage</th>
<th>Typical Entry-Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakers</td>
<td>940</td>
<td>$29,030</td>
<td>High-School Diploma or Equivalent</td>
</tr>
<tr>
<td>Chefs and Head Cooks</td>
<td>1498</td>
<td>$58,890</td>
<td>Associate’s Degree</td>
</tr>
<tr>
<td>Drivers/Sales Workers</td>
<td>3,202</td>
<td>$29,700</td>
<td>High School Diploma or Equivalent</td>
</tr>
</tbody>
</table>
Waste and Recovery – Waste and recovery includes firms engaged in waste collection, treatment, remediation, and food recovery. While it supports the smallest number of food economy jobs, waste and recovery jobs have grown faster than other sectors and projections anticipate continued growth. Waste and recovery also pays the highest average wages in the food economy.29

<table>
<thead>
<tr>
<th>Number of Jobs, % of Food Economy Jobs</th>
<th>Philadelphia</th>
<th>Philadelphia Metro Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>135 jobs, 0.0% of food-related jobs</td>
<td>1,071 jobs, 0% of food-related jobs</td>
<td></td>
</tr>
<tr>
<td>Job Growth 2007-2017**</td>
<td>7 jobs per year 9.3% annual change</td>
<td></td>
</tr>
<tr>
<td>Projected Job Growth 2014-2024**</td>
<td>4 jobs per year, 2.8% annual change</td>
<td></td>
</tr>
<tr>
<td>Number of Firms, % of Food Economy Firms</td>
<td>60 firms, 2% of food economy firms</td>
<td></td>
</tr>
<tr>
<td>2017 Average Annual Wage</td>
<td>$62,941</td>
<td>$63,201</td>
</tr>
</tbody>
</table>

*Projected job growth for the metro area is calculated at the state level. **A factor of 14.5% is applied to waste and recovery employment data. Visit economyleague.org/foodeconomy for full analysis and methodology.

Waste and Recovery – Waste collection leads employment in the city and region. Regionally, the most jobs added are in waste and recovery, which also pays the highest wages.

<table>
<thead>
<tr>
<th>Industry</th>
<th>Employment</th>
<th>Jobs Added 2012-2017</th>
<th>Average Annual Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>City</td>
<td>Metro</td>
<td>City</td>
</tr>
<tr>
<td>Waste Collection</td>
<td>88</td>
<td>592</td>
<td>17</td>
</tr>
<tr>
<td>Remediation Services</td>
<td>31</td>
<td>303</td>
<td>6</td>
</tr>
<tr>
<td>Waste Treatment and Disposal</td>
<td>6</td>
<td>166</td>
<td>2</td>
</tr>
</tbody>
</table>

Highest Wages = Green; Most Jobs Added = Red; Most Employees = Blue

Waste and recovery – The food economy employs higher wage occupations in waste and recovery, such as hazardous materials removal workers. Many occupations have high school diploma educational attainment. However, waste and recovery in the food economy also supports highly-skilled occupations such as environmental engineers, which have a typical entry level education at the master’s level.

<table>
<thead>
<tr>
<th>Job</th>
<th>Number of Food-Related Jobs in the Region</th>
<th>Regional Mean Wage</th>
<th>Typical Entry-Level Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Materials Removal Workers</td>
<td>384</td>
<td>$48,410</td>
<td>Less than High School Diploma</td>
</tr>
<tr>
<td>Bus and Truck Mechanic diesel engine specialists</td>
<td>147</td>
<td>$52,430</td>
<td>High School Diploma or Equivalent</td>
</tr>
<tr>
<td>Environmental Engineers</td>
<td>3280*</td>
<td>$82,780*</td>
<td>Master’s Degree</td>
</tr>
</tbody>
</table>

*Numbers with an asterisk are calculated at the state level

29 These numbers do not include public sanitation workers or related occupations in the public sector. The City of Philadelphia posts employee salaries publically, however, and a Laborer in the Streets Department, had a starting salary of $32,688 in 2018, while Waste Collection District Supervisors can earn a base pay between $52,000 and $69,000, depending on years of experience.