

Irvine's Food System: A Summary

Cities around the world are taking food systems into greater account when it comes to climate action, planning, and community well-being.

This brief report is the City of Irvine's first formal overview of its food system.

Read on to learn more about urban agriculture, food access, food's climate impact, and how you can address food waste.





What is a Food System?

There's always a story behind the food on our plates. That story can be found in our **food system, which is the web of activities that relate to food—from production to processing to consumption**, followed by transportation and disposal. Because social, political, economic, and environmental circumstances shape what we eat, our food system is always changing.

The Big Picture: What Does our Food System Affect?





Health





Culture

Environment

Labor

Thinking About Our Food System

While growing apples or packaging meat lie outside of Irvine's city food systems vary from place to place—what do you think makes Irvine's food system unique?

According to the American Planning Association

"A healthy, sustainable food system is: health-promoting, sustainable, resilient, fair, economically balanced, and transparent."

Benefits of a Local Food System²

- Supporting local farmers
- Reduce food insecurity
- Job creation and reinvestment
- Economic diversity



Irvine's History and Local Initiatives

Irvine's Indigenous History

The Tongva (Gabrielino)³ and Acjachemen (Juaneño)⁴ lived in the Orange County region prior to Spanish and Mexican colonization. The indigenous people had a very different food system: they lived off native plants and species, using specialized food preparation techniques and tools to do so. This lifestyle was disrupted in the 1700s, when Spanish colonizers arrived, seizing tribal lands and enslaving indigenous people into the Spanish Mission system. Colonization and the plight of the indigenous tribes resulted in the emergence of agricultural ranches.

Urban Agriculture in Irvine

Irvine is rich with agricultural history. Did you know the 109,000-acre Irvine Ranch was a leading producer of asparagus (displayed on our City's logo), lima beans, sugar beets, lemons, and Valencia oranges? While much of Irvine Ranch was developed into the community we know today, several pockets of urban agriculture still exist.

Farm + Food Lab

Located in the Great Park, this 1-acre urban farm grows over 300 different species of plants and serves as an interactive outdoor classroom. Visitors may walk through the Farm + Food Lab on a self-guided tour and visit the resident chickens as well.

Harvest Solutions Farm

This farm's 45 acres can produce up to 60,000 pounds of variable, fresh produce every month! All produce goes directly to Second Harvest client network in Orange County.

Native Seed Farm

Managed by the Irvine Ranch Conservancy, the 8 acres of land is home to 40-50 different species of plants. Native species' seeds are harvested, cleaned, and used for nature restoration projects. The facility conducts wildlife monitoring and partners with institutions to host research projects. Tours and events are periodically offered to the public.

Tanaka Farms

Family-owned farm growing seasonal produce in Irvine since 1998. Community supported agriculture (CSA) members can subscribe to a CSA box of fresh harvest every week!

UC Irvine Garden Project

A network of six community gardens that provide sustainability education, community engagement, student opportunities, and of course, fresh produce.

University of California South Coast Research & Extension Center (South Coast REC)

150+ acres produce citrus, cherimoya, apples, persimmons, nursery plants, and many more! Did you know South Coast REC holds several U.S. patents for strawberry and avocado varieties? Agricultural and natural resources management research is also conducted in this regional living laboratory with UC scientists.

Other Farms and Orchards in Irvine:

- Manassero Farms
- Smith Farms
- Irvine Ranch Orchards



Irvine's History and Local Initiatives (continued)

Farmers Markets

Great Park Certified Farmers Market

Sundays from 10 a.m. to 2 p.m at Great Park Parking Lot #2 A California-Certified Farmers Market with local, Southern California vendors.

Irvine Farmers Market at Mariner's Church

Saturdays from 8 a.m. to noon at 5001 Newport Coast Drive, Irvine, CA 92603.

Cooking & Culinary Classes

The City of Irvine offers a variety of cooking and culinary classes at its community centers each quarter, ranging from \$0 to \$250 in price. Participants as young as five years old can learn basic cooking skills and new cuisines! The City also offers induction cooking demonstrations, where participants can learn about electric cooking with induction stoves and sample dishes made by professional chefs! Check out the latest issue of Inside Irvine to learn more!

SB 1383: Organic Recycling & Food Recovery

Food waste is an inevitable part of the Irvine food system. Even if we are not throwing away spoiled food, we produce waste when we cook by peeling vegetables, trimming meats, and discarding eggshells.

SB 1383, a state-wide law that went into effect in 2022, began making headway in Irvine thanks to the launch of a residential organic recycling program in April 2023. Irvine residents and businesses are required to separate their food waste and cooking scraps from their regular trash. Instead of releasing methane emissions in landfills, our inedible scraps will turn into nutrient-rich compost that helps more fruits and vegetables grow!

Food-producing businesses, such as supermarkets, hotels, and restaurants, are also required to donate surplus edible food to a food recovery organization to further reduce organic waste in the landfill.

SB 1383 is an example of policy with multi-fold benefits for climate action, and for food waste and food insecurity reduction.

For more information, please visit *cityofirvine.org/SB1383*.



Great Park Farmers Market



Food System and Climate

Did you know?

10%

of U.S. greenhouse gas emissions came from agriculture in 2021⁵

19–29%

of global greenhouse gases can be attributed to agriculture⁶

75%

of food-based emissions come from livestock (beef, dairy, chicken, pork, etc.) production⁷

91 million tons

or 38% of the U.S. food supply is wasted, contributing to 6% of our annual greenhouse gas emissions when it goes into the landfill⁸

A stable climate is crucial to the success of feeding the world. The world's average surface air temperature has increased by 1.8 degrees Fahrenheit (1.0 degrees Celsius) since 1900 (Fourth U.S. National Climate Assessment), making it more challenging to produce crops.

But our existing agricultural practices damage the environment and make climate change worse: replacing biodiverse ecosystems with monoculture farmland, intense water usage, fertilizer runoff, pesticide exposure, shipping emissions, plastic packaging pollution, and food waste.

Changes in our agricultural system, our consumption, and our behaviors regarding food will become more and more necessary as the climate crisis worsens. Cities with deep understanding and strong food systems will be better equipped to tackle future challenges.

Food Access

Access to nutritious food is key to a healthy society. But did you know that according to Feeding America 8.4% of Orange County residents, or roughly 266,000 people, were food insecure in 2021?

• Food insecurity — limited or uncertain access to adequate, nutritious food⁹

Food access can be limited by many things: income, transportation, and even culinary skills. But food access is not just about getting our daily nutrients. Irvine is a diverse community, which means residents will also need to access culturally appropriate ingredients for the food they make at home.



Food Access (continued)

Transit Networks to Grocery Stores

- 80% of grocery stores have at least ONE weekday bus line within a 1–2 street radius
 - But only 65% of grocery stores have a weekday bus line with hourly service
- 42% of grocery stores have at least ONE weekend bus line within a 1–2 street radius
 - But only 32% of grocery stores have a weekend bus line with hourly service

Irvine is a car-dependent city, which means one "block" (distance between streetlights) can be very long compared to more urban areas. A bus stop near a grocery store does not necessarily mean it is accessible: does the bus stop near the resident's neighborhood? Do they have to change bus lines? How frequently does the bus come? These are questions we should consider when we think about the future of public transit and food access in Irvine.

Program: Meals on Wheels

Irvine provides a Meals on Wheels service to qualifying Irvine seniors who are homebound. Nutritious meals are created by a registered dietitian and delivered Monday through Friday, with three meals a day (breakfast, lunch, and dinner).

For more information, visit cityofirvine.org/senior-services/meals-on-wheels.

Program: CalFresh

CalFresh, also known as Supplemental Nutrition Assistance Program (SNAP), is a federal nutrition program that provides eligible low-income people an electronic benefit (EBT) card to purchase nutritious food. EBT may be used at most grocery stores and participating farmers markets. This resource is available to qualified immigrants, students, and Social Security Income recipients. Interested individuals may apply on getcalfresh.org.

Food Pantries

Families Forward

8 Thomas, Irvine, CA 92618, Monday through Thursday, 10 a.m. to 2 p.m.

Mariners Church

5001 Newport Coast Drive, Irvine, CA 92603, Tuesday through Friday, 9 a.m. to 1 p.m.

Saddleback Church

Locations variable, please check saddleback.com/getfood.





Looking Forward

This brochure is a very condensed summary of Irvine's food system. A full-fledged community food assessment would further examine community food security with resident and stakeholder input. In the meantime, there are several things people who live and work in Irvine can consider:

- Participating in the organic recycling program by separating food scraps and yard waste from regular trash. Residents who live in multi-family properties, such as apartments, can advocate for building managers to enroll in an organics program with their waste hauler. Learn more at cityofirvine.org/sb1383.
- Eating locally! Make use of your garden, terrace or window space to grow fruits and vegetables, and exchange surplus with neighbors. Greenhouse gases are emitted when food is transported over longs distances from farm to table.
- Supporting local farmers and reduce transportation emissions by shopping from farmer's markets or CSA boxes.
- Supporting building electrification in food-service businesses: the transition away from gas-powered to electric-powered appliances benefits food service workers, who spend long hours inhaling toxic gas and enduring hot kitchen temperatures.
- Institutions and restaurants can source more sustainably with local produce, sustainability farmed products, or offer more vegetarian options.

Sources

- ¹ cityofirvine.org/about-irvine/demographics
- ² USDA
- ³ nahc.ca.gov/cp/tribal-atlas-pages/gabrielino-tongva-nation
- ⁴ nahc.ca.gov/cp/p17acjachemen
- ⁵ Environmental Protection Agency
- ⁶ World Bank
- ⁷ C40 Cities
- ⁸ ReFED
- ⁹ USDA
- ¹⁰ City of Irvine business license registry and Google Maps

