Sustainable Oakland Report

2016 -17

City of Oakland

Greg LInhares, City of Oakland

CLIMATE CHANGE
IS A SOCIAL EQUITY ISSUE.

All Oaklanders have the right to pursue safe, happy, healthy, and fulfilling lives. The effects associated with climate change, including long-term issues like sea level rise and immediate concerns like poor air quality, present opportunities to address these complex economic and environmental issues through equitable climate action. This report summarizes Oakland's recent achievements in becoming a more sustainable city that seeks to tackle the interconnected issues of climate change and social equity.

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Climate change and social equity are inextricably linked.

Greenhouse gas emissions associated with human activities are causing global temperatures to rise and weather patterns to shift. Oakland's ecological resources, public health, and economy are at significant risk because of climate change[1]. Projected impacts include rising bay waters, increased risks of flooding, more days of extreme heat, and increased fire danger. These hazards are magnified for communities of color and low-income communities in areas that face the most risk associated with climate change.

Oakland is transforming the threat of climate change into an opportunity to build upon the city's local economy, quality of life, and resilience. High quality green jobs can benefit those with barriers to employment; jobs in repair services, solar installation, compost and recycling hauling, public transit, sustainable landscaping, and green technology manufacturing reflect the growing opportunities to address climate change while building economic prosperity for all Oaklanders. Community organizations and volunteers are actively cleaning and greening neighborhoods to improve air quality and water quality, build community, and enrich a future generation of environmental stewards. In addition, the City of Oakland is engaged with community based organizations working to improve resilience along the 19 miles of shoreline that surrounds significant infrastructure, vibrant neighborhoods, and natural resources at risk.

This Sustainable Oakland Report highlights how the City of Oakland's climate action goals are addressing challenges of equity across the city. Becoming a more livable, sustainable, and climate resilient city involves progress toward many interconnected goals. Advancements in each area enable new success in others. Through a collaborative approach emphasizing balanced, continuous improvement, we are building on Oakland's legacy of leadership in improving our city's economy, social equity, in environment.

This Sustainable Oakland Report is divided into 5 elements that define the scope of Oakland's sustainable vision:

Clean Energy & Climate 1

Transportation, Mobility & Land Use 2

Green Spaces & Community Stewardship 3

Sustainable Consumption & Production 4

Economic Prosperity & Livable Communities 5

1 "Sea Level Rise Will Flood Hundreds of Cities in the Near Future" Laura Parker - National Geographic. 2017. https://news.nationalgeographic.com/2017/07/sea-level-rise-flood-global-warming-science/

Timeline

Sustainable Oakland History

1989
Alameda County Waste Reduction and Recycling Act

1994
Recycled Content Procurement and Source Reduction Policy

1995
Recycling Space Allocation Ordinance

1997
Pest Management Policy

Creek Protection, Storm Water Management and Discharge Control Ordinance

1998
Sustainable Development Initiative

Climate Protection Resolution

1999
Dioxin and Public Health Resolution

2002
Pedestrian Master Plan

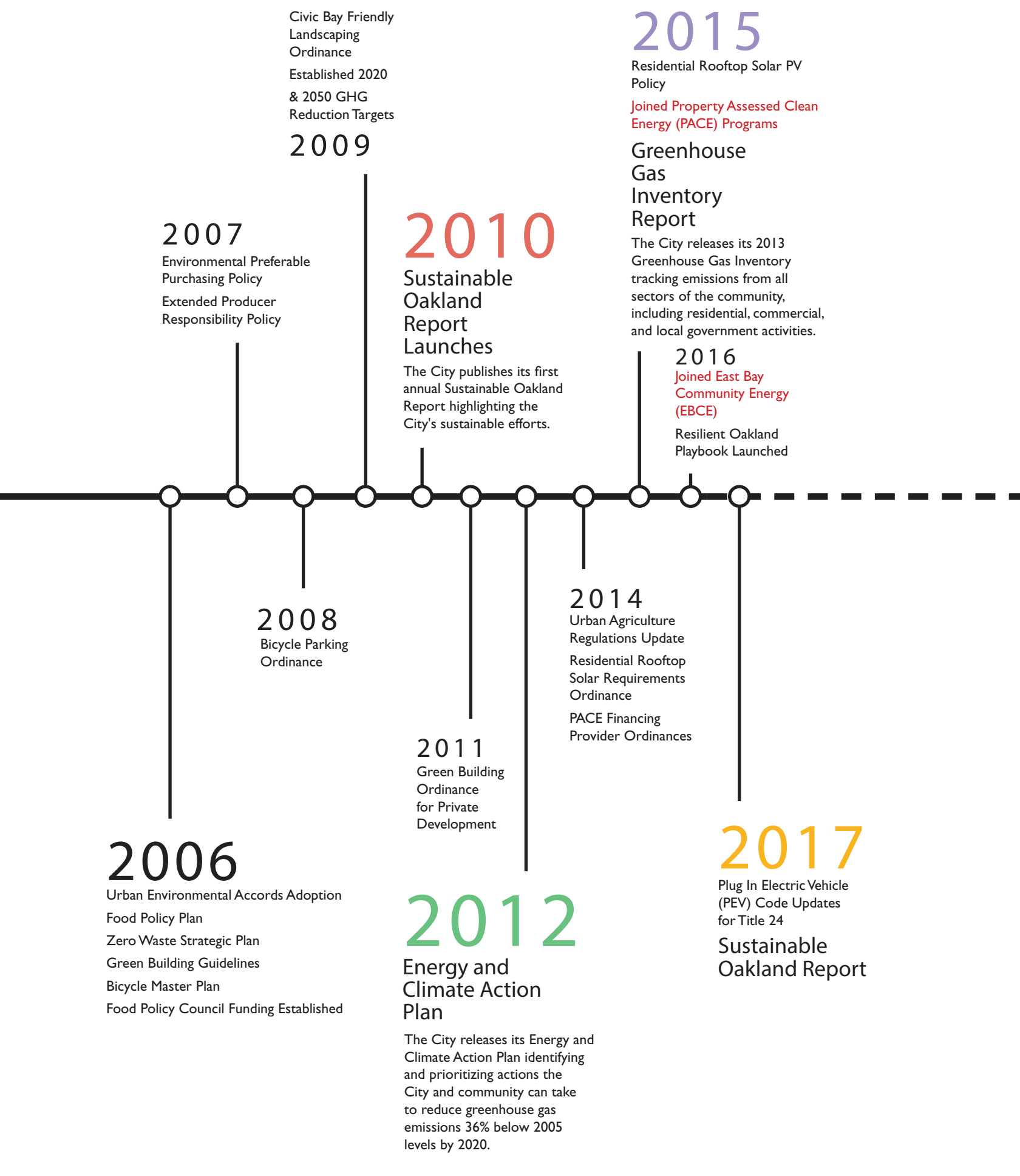
Construction and Demolition Recycling Ordinance

75% Waste Reduction Goal

2003
Green Fleet Resolution

2005
Civic Green Building Ordinance

The Sustainable Oakland program is an outgrowth of the Sustainable Community Development Initiative, established by Oakland's City Council in 1998. Housed in the Environmental Services Division of Oakland Public Works, it supports Oakland's progress in becoming a more sustainable city.


2006
Urban Environmental Accords Adoption
Food Policy Plan
Zero Waste Strategic Plan
Green Building Guidelines
Bicycle Master Plan
Food Policy Council Funding Established
2007
Environmental Preferable Purchasing Policy
Extended Producer Responsibility Policy
2008
Bicycle Parking Ordinance
2009
Civic Bay Friendly Landscaping Ordinance
Established 2020 & 2050 GHG Reduction Targets
2010
Sustainable Oakland Report Launches
The City publishes its first annual Sustainable Oakland Report highlighting the City's sustainable efforts.
2011
Green Building Ordinance for Private Development
2012
Energy and Climate Action Plan
The City releases its Energy and Climate Action Plan identifying and prioritizing actions the City and community can take to reduce greenhouse gas emissions 36% below 2005 levels by 2020.
2014
Urban Agriculture Regulations Update
Residential Rooftop Solar Requirements Ordinance
PACE Financing Provider Ordinances
2015
Residential Rooftop Solar PV Policy
Joined Property Assessed Clean Energy (PACE) Programs
Greenhouse Gas Inventory Report
The City releases its 2013 Greenhouse Gas Inventory tracking emissions from all sectors of the community, including residential, commercial, and local government activities.
2016
Joined East Bay Community Energy (EBCE)
Resilient Oakland Playbook Launched
2017
Plug In Electric Vehicle (PEV) Code Updates for Title 24
Sustainable Oakland Report

CLEAN ENERGY & CLIMATE

Photo: Grid Alternatives

1

We rely on energy to navigate our daily lives. We use energy to light and heat our homes, power our computers, and cook our meals. Energy is used by everyone in Oakland, and is a major source of greenhouse gas emissions. While cleaner energy options are expanding rapidly, these options must balance the need for cleaner air and lower costs for low income populations. Oakland is transitioning to a cleaner and more local energy supply, addressing climate change while encouraging investment, keeping money in the local economy, improving local energy security, providing clean energy jobs, and improving public health.

City Successes

BY THE NUMBERS

Oakland accomplished the following

14%
reduction in greenhouse gas emissions from 2005 to 2013

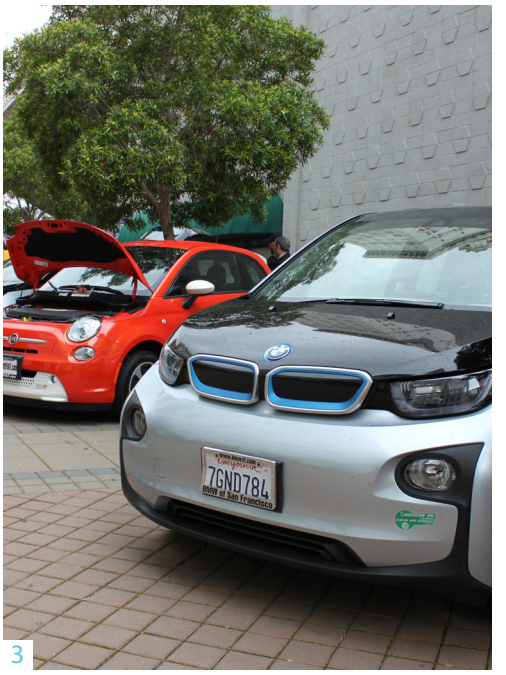
979
new solar photovoltaic (PV) systems installed in 2016

336
certified green buildings as of 2017

69%
of electricity was from carbon-free energy sources in 2016

1

2



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1. Electric vehicle charging station 2. Solar panels on top of a local business 3. Electric vehicles featured at Earth EXPO | Photo: Monaliza Noormohammadi

1. Oakland Raises the Bar for Electric Vehicle Infrastructure

Electrifying vehicles reduces carbon emissions and air pollution, benefiting public health for all. Low-income communities and communities of color in Oakland are often exposed to higher levels of air pollution associated with vehicle emissions, and tend to suffer from poorer health outcomes compared to the rest of the population. Expanding the network of public and private car chargers is a City priority, because as more people shift to clean electric vehicles, air quality will improve in neighborhoods near freeways and in heavily congested parts of Oakland. The City adopted new plug-in electric vehicle (PEV) infrastructure requirements in early 2017. All new residential and commercial developments must now include infrastructure that makes it easy to install electric vehicle chargers. This will help overcome one of the biggest barriers to electric vehicle ownership: limited access to charging stations. The new requirements will help ensure that the city is meeting electric vehicle demand and that clean technologies will be available to more Oaklanders than ever.

2. Solar Panel Installations Reach New High in Oakland

Oakland homes and businesses continue to lead the transition to a clean energy future through the installation of solar photovoltaic (PV) systems on their roofs. Building on the City's passage of a streamlined approval process for rooftop solar, in early 2017, Oakland celebrated its 4,000th solar PV installation in the past 10 years. These systems combine to create more than 42,000,000 kilowatt-hours (kWh) of clean electricity every year, eliminating more than 8,300 metric tons of CO2 emissions annually. This reduction is equivalent to taking 1,700 cars off the road.[2]

3. Discounted Solar & Clean Vehicles Come to Oakland

In 2016, the City of Oakland participated in Bay Area SunShares, a program allowing Oakland residents and City employees and retirees to purchase solar power and zero-emission vehicles at a discounted rate. SunShares pools the buying power of individual participants to get more competitive pricing from solar companies and vehicle manufacturers. The City participated in the program to help support its clean energy and climate goals, reduce pollution, and make it easier for all members of the community to save energy and money. The program will launch again in August 2017, giving more Oaklanders the opportunity to participate.

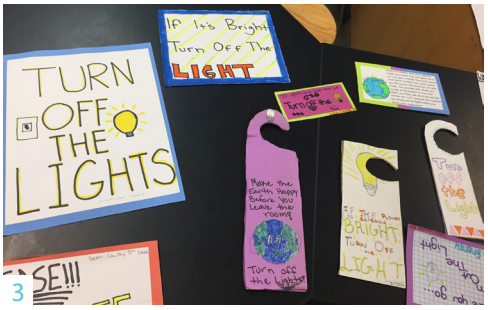
2 "What Does 'The Equivalent of Taking Cars Off The Road' Really Mean?" Peter Kelly-Detwiler - Forbes. 2014. https://www.forbes.com/sites/peterdetwiler/2014/02/25/what-does-the-equivalent-of-taking-cars-off-the-road-really-mean/#43a23cae3232

Making Renewable Energy and Job Training Accessible to All

Oakland-based non-profit GRID Alternatives has been installing no-cost solar electric systems for low-income home owners and renters since 2004. In April 2017, GRID was excited to partner with the East Bay Asian Local Development Corporation (EBALDC), a non-profit community development organization, to bring solar power to the Marcus Garvey Commons, a 22-unit multifamily affordable housing development in West Oakland. Staying true to their modern-day "barn-raising" model, GRID brought together community volunteers, job trainees, and employees from Sun Power, a solar energy equipment supplier based in Richmond, to complete the installation. The system will provide $177,000 in long-term energy cost savings for low-income tenants and prevent the emission of 364 tons of greenhouse gases over its lifetime. GRID also launched an Installation Basics Training Program this year, which provides solar job seekers valuable, hands-on experience, and certificates for industry-relevant skills under the supervision of professional solar installation staff. This program furthers GRID's mission to make renewable energy technology and job training accessible to underserved communities.

Photo: Grid Alternatives

Community Successes



1. Installation of Harbor House solar system | Photo: Re-Volv 2. LED light fixture at a multifamily building | Photo: David Fenton, BayREN 3. OUSD students created energy awareness door hangers | Photo: OUSD

1. Oakland Nonprofit Goes Solar By Crowdfunding

Harbor House has served the Oakland community since 1972, offering after-school programs and youth leadership trainings, English-as-a-Second-Language classes, job skills training, and a food pantry. In partnership with RE-volv, a nonprofit organization based in San Francisco that brings solar to underserved communities through innovative crowdfunding campaigns, Harbor House successfully raised $26,620 to install solar on their facilities in 2017. The new 11.76kW photovoltaic system will save them 39% of their electric bill in the first year and around $110,000 over the warranty of the system.

2. A Strong Year for Local Residential Energy Efficiency

Residential energy efficiency progress continued in 2016. The Bay Area Regional Energy Network's (BayREN) multifamily program upgraded over 1,000 apartment or condo units with energy efficient appliances, lighting, and insulation. For single-family homes, the BayREN Home Upgrade and PG&E's Advanced Home Upgrade programs served 134 Oakland homes. Together, these energy upgrades saved approximately 85 thousand therms and 335 megawatt-hours of energy for the residents. The programs delivered over $1.2 million in rebates to Bay Area multifamily and single family property owners.

3. Oakland Schools Compete to Save Energy

In Fall 2016, five Oakland Unified School District schools (Skyline High, Oakland Technical High, Oakland High, Kaiser Elementary, and Hillcrest School) competed with schools throughout the Bay Area to reduce their energy use. Participating schools prepared energy conservation action plans with the help of Energize Schools, a program of Strategic Energy Innovations funded by PG&E. Student groups employed a range of conservation strategies to raise energy awareness, including an energy carnival and classroom presentations. A total of 44 schools engaged in the competition throughout the region and collectively saved over $3,800 and 20,920 kWh, equivalent to the CO_2 emissions of burning about 1,710 gallons of gasoline. Hillcrest School was recognized for Best Overall Campaign, and subsequently installed a custom energy dashboard in their entryway to continue monitoring their use school-wide.

Mosaic: A Local Solar Success Story

The solar industry, which accounted for one in 50 jobs created in 2016 nationwide, is one of Oakland's fastest-growing business sectors. Local solar star Mosaic, the charter member of Oakland's Powerhouse solar accelerator, has grown to 130 employees and is hiring more. Mosaic is the largest lender for home solar in the U.S., recently surpassing the $1 billion mark. To maintain and increase diversity as it grows, Mosaic is doubling its incentives for new hire referrals who are female, veterans, or people of color.

For more highlights and performance data, visit **www.sustainableoakland.com**

IN THE WORKS

EAST BAY COMMUNITY ENERGY

In late 2016, Alameda County and 11 of its cities, including Oakland, formed East Bay Community Energy (EBCE) to bring cleaner, greener energy to Alameda County. This community choice energy program will purchase electricity on behalf of commercial and residential customers in participating communities, with the goal of increasing renewable energy while lowering rates for all customers. The effort contains unique equity provisions – a first for a community energy program – including a community advisory committee and requirements to prioritize local job creation. EBCE is expected to begin delivering clean energy to Oakland in April 2018.

TRANSPORTATION, MOBILITY & LAND USE

Photo: Greg Linhares, City of Oakland

2

BART, AC Transit, ferry, bicycling, and walking reflect the many modes of clean and alternative transportation Oaklanders use to get around. Transportation is the largest contributor to air pollution in the city – from personal vehicles, to truck traffic, to airplanes and freight. The transportation sector is associated with almost half of the city's core greenhouse gas emissions. Our planning and infrastructure decisions today have the power to ensure that diverse mobility options are accessible to all members of the Oakland community, while also improving air quality and decreasing greenhouse gas emissions.

City Successes

BY THE NUMBERS

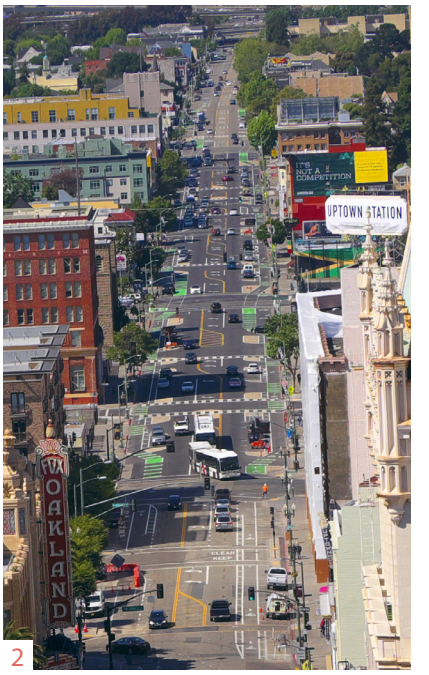
Oakland accomplished the following

4.5
miles of additional bikeway were constructed in 2016

3.3%
of all trips were made by biking as of 2016

4.9%
of all trips were made by walking in 2013

78%
of all trips to public transit were made on foot in 2015



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1. Gig Car Share on the streets of Oakland | Photo: City of Oakland 2. Aerial view of Telegraph Ave | Photo: Joe Ferrera, Bike East Bay

1. Launch of the Bay Area's First Free-Floating Car Share Pilot Program

Oakland and Berkeley have made car sharing history with the pilot launch of the Bay Area's first free-floating car sharing service, and the nation's first one-way car sharing service that crosses multiple cities. Unlike typical round-trip car share services, the new Free Floating One-Way Car Share pilot program allows drivers to pick up a car in one place and drop it off in any other location within a designated "home zone." The inaugural permit-holder under this pilot is Gig Car Share, operated by AAA Northern California, which launched services on April 30, 2017 with 250 hybrid electric vehicles. The program is intended to improve transportation choice and flexibility, decrease the need for vehicle ownership, lower transportation costs, and expand public access to shared transportation options, all while lowering greenhouse gas emissions.

2. Planning Policies Expected to Facilitate Sustainable Development

The City of Oakland approved two major sustainable development policies that will promote the reduction of greenhouse gas emissions, enhance the City's multimodal transportation networks, and encourage efficient infill development. First, the City eliminated or reduced parking requirements for Downtown developments and along major transit corridors. These changes will considerably reduce the costs of development and discourage vehicle ownership, ultimately encouraging walking, biking, and use of public transit. Second, the study of potential environmental impacts related to transportation for new developments will now be based on the amount of driving people would need to do to access services or other destinations. Transit-oriented, infill development projects would be presumed to have no impact, while auto-oriented or suburban-style development would be required to mitigate impacts by increasing access to public transit, adding bikeways, or relocating to a more transit-rich location.

Secondary Unit Regulations Address Housing Shortage

In February 2016, Oakland City Council adopted revised Secondary Unit regulations to reduce the regulatory barriers to the development of Secondary Units, an important step in addressing the city's housing shortage and rising costs. In the nine months after the revised regulations became effective, the City issued planning approvals for 111 new Secondary Units, compared with only 26 in the preceding nine months. Subsequent changes to State law, aim to provide additional housing units through infill development along transit corridors to help reduce vehicle miles traveled per housing unit through increased transit usage.

Oakland Launches Department of Transportation

OakDOT was approved as a Department by City Council in FY 15-17, and began to coalesce in July of 2016 under interim leadership. The new department consolidated transportation-related functions from Oakland Public Works, the Department of Planning and Building, and the Oakland Police Department's Traffic Enforcement Division. OakDOT now has responsibility for a broad range of activities: street design and paving, sidewalks and stairs, pedestrian safety programs, bikeway design, parking management, shared mobility services (car share and bikeshare), lighting, street maintenance, signals, signs, parking meters, and meter enforcement.

The OakDOT's Strategic Plan focuses on achieving a more equitable, safer, vibrant, and sustainable city through a responsive and trustworthy government. Oakland voters recognized the need for significant street improvements, and in November of 2016 generously approved Measure KK (known as the Infrastructure Bond). This bond provides $350 million to fund Citywide transportation projects, with a clear emphasis on meeting Oakland's paving needs. Delivery on the promise of this bond is the Department's number one objective.

Photo: Sergio Ruiz

Community Successes

1

2

1. Scraper Bike Team at the Ford GoBike Launch | Photo: Carissa Lee 2. Mural outside the recently purchased mixed-use building on 23rd Ave

1. Making Bike Share Accessible to All

In late 2016, nonprofit TransForm and the City of Oakland partnered to develop a shared mobility community engagement strategy called Oakland Mobility 101 (OakMob 101) – a collective approach to understand Oaklanders' initial perceptions of the City's forthcoming bike share and car share programs, slated to launch in summer 2017. OakMob 101 focused on engaging residents in East and West Oakland, the city's lower-income areas, where car share vehicles are virtually non-existent. TransForm was tasked with informing Oakland residents about new shared mobility services and how the City is working with outside companies to increase transportation options. TransForm also collected critical feedback from residents on barriers to accessing bike share and car share, to help the City understand how to best respond to community needs through its shared mobility programs. TransForm published its findings to inform ongoing efforts to bring the benefits of shared mobility services to those who need them most.

2. Oakland Community Land Trust Successfully Purchase Mixed-Use Space

Four local organizations cooperatively purchased a mixed-use building on 23rd Avenue in the first commercial real estate purchase by the Oakland Community Land Trust (OakCLT). The organizations are The Bikery, a community bike shop; Sustaining Ourselves Locally, a queer and trans people of color food justice co-op; Shaolin Life, a martial arts studio; and Liberating Ourselves Locally, a people of color-led makerspace. The groups partnered with OakCLT to create a financing package, with support from the POC Sustainable Housing Network, Sustainable Economies Law Center, and the Northern California Community Loan Fund. In addition to commercial space, the building contains eight residential apartments, all of which will become permanent affordable units.

Affordable Transit-oriented Housing Being Constructed

Currently under construction, Civic Center 14 TOD (transit-oriented development) is an eight story, 40-unit, permanently-affordable apartment community in Downtown Oakland. The new development is on a 6,800 square-foot formerly vacant lot at 632 14th Street. Western Community Housing, Inc. ("WCH") will coordinate services for the community, including English-as-a-Second Language classes, afterschool programs, individual case management, employment and training programs, and health services. WCH will partner with LifeLong Medical Care to provide a robust, permanent supportive housing program to improve the quality of life for homeless and special-needs adults. The LifeLong Supportive Housing Program (SHP) brings health and social services into subsidized affordable housing, so that tenants with histories of homelessness can achieve housing stability and improve their quality of life.

For more highlights and performance data, visit **www.sustainableoakland.com**

IN THE WORKS

SAN PABLO GREEN STREETS

The San Pablo Green Streets Project will upgrade the bikeway on a portion of San Pablo Ave, installing Oakland's first bike lanes adjacent to back-in angle parking. Project features such as bioswales and other streetscape-enhancing filtration devices will clean stormwater runoff before it hits the Bay.

PEDESTRIAN MASTER PLAN

The City of Oakland has updated its Pedestrian Master Plan to reflect Oakland's changing conditions, needs, and priorities. The 2017 Pedestrian Master Plan Update was adopted by Council in June.

BIKE SHARE

The long-anticipated East Bay expansion of the regional Bike Share Program, Ford GoBike, launched in Summer 2017. A total of 850 bikes will be installed at 70 Oakland stations by the end of 2017. Bike Share is partly funded by grants from the Transportation Fund for Clean Air, a Bay Area Air Quality Management District program administered by the Alameda County Transportation Commission.

Find a station near you at bayareabikeshare.com

GREEN SPACES & COMMUNITY STEWARDSHIP

Photo: Max Bouvatte

3

Oakland's redwoods and marshlands offer glimpses of the rich diversity of parks and natural resources that residents rely on for recreation and respite, and that support our physical and mental wellbeing. Yet our resources are threatened by the impacts of urbanization and use. The City and its partners are working to protect the health of our natural environments and increase equitable access to healthy outdoor spaces by restoring habitat, developing new green spaces, and encouraging local volunteerism and stewardship.

City Successes

BY THE NUMBERS

Oakland accomplished the following

91,000
hours volunteered to clean and green Oakland in 2016

3,400
people volunteered on Earth Day in 2016

400
locations registered with Adopt a Spot as of 2016

13
Bay-Friendly Rated Landscapes were constructed in 2016

1

2

3

1. Team Oakland youth cleaning up the streets 2. Engaging the public with sustainability at EarthEXPO | Photo: Monaliza Noormohammadi 3. Volunteer picking up trash at Lake Merritt on Earth Day | Photo: Tim Daw

1. City Hosts Summer Youth Environmental Job Training

Since 1993, Oakland Public Works has offered environmental job training through Team Oakland. In collaboration with the Youth Employment Partnership, Team Oakland employed 110 youth in the summer of 2016. Youth removed over 2,800 bags of litter from streets and parks, assisted with park maintenance and ecological habitat restoration, and received training on work, life skills, and environmental topics. Youth from the program indicated an increased likelihood of reporting illegal dumping, and a stronger understanding of the role that litter plays in Oakland's creeks, parks, and the Bay.

2. City Sustainability Fair Inspires Downtown

Since 1995, Oakland Public Works has hosted EarthEXPO, a free annual environmental sustainability fair in downtown Oakland. The event highlights the many and varied organizations promoting sustainability in Oakland, and the event is an engaging way for the public to gather information and resources on local initiatives, sustainable practices, and environmentally-friendly products. Exhibits focus on all things sustainable, including water conservation, waste reduction, recycling, energy efficiency, alternative transportation and housing, volunteerism, and urban nature. In 2017, over 100 sustainable businesses, non-profits, and environmental and community leaders exhibited to about 2,000 attendees.

3. Volunteer Programs Clean and Green the Town

Volunteers contributed more than 91,000 hours in 2016 to clean and green Oakland. Volunteers have registered over 400 locations with the Oakland Adopt a Spot program, and more than 1,000 of Oakland's 7,500 storm drain inlets have been adopted. In 2017, Oakland celebrated the 21st anniversary of Oakland Creek to Bay Day and the 23rd anniversary of Oakland Earth Day. Through these events and the Adopt a Spot program, volunteer participation includes litter and illegal dumping cleanup, habitat restoration, gardening, tree planting, park maintenance, storm drain inlet cleaning, and beautification of City street litter containers and utility boxes with mosaics and murals. These efforts contribute to community well-being and environmental health across Oakland, from its most urbanized areas to its impressive network of creeks, parks, and open spaces.

EPA COALITION ASSESSMENT GRANT

In 2016, the City of Oakland, as part of a coalition with the Cities of San Leandro and Hayward, the County of Alameda, and the Association of Bay Area Governments, was awarded a United States Environmental Protection Agency (EPA) Brownfields Assessment Grant for a 15-mile section of the International Boulevard/East 14th Street/Mission Boulevard corridor. The $550,000 grant will be used to assess sites where known or potential contamination could be an impediment to development. This funding provides a valuable resource for stimulating development and protecting community health in vulnerable areas. The EPA Brownfields Coalition Assessment Grant also includes volunteer outreach activities. For example, local volunteer groups working with the EPA may be provided educational opportunities such as field trips to observe soil and groundwater sampling performed by grant consultants.

Feature Story

Elementary Schoolyard Sees Transformation

Brookfield Village Elementary School, in the heart of East Oakland's Brookfield neighborhood, began a transformation process three years ago that is finally beginning to bloom. The Brookfield Greening and Growing project is a partnership between local families and residents, Brookfield Village Elementary School, Oakland Unified School District, Higher Ground Neighborhood Development Corp, California Environmental Protection Agency, the Bay Area Air Quality Management District, Urban Releaf, and Growing Together. It was created to spearhead and support the school's transformation to a STEAM (science, technology, English, art, and math) campus. Phase 1 of the project included a major removal of asphalt in the playground and the creation of a vegetative barrier comprised of planted trees, native shrubs, and a fruit orchard to improve the air quality on the campus and act as the foundation for outdoor classroom spaces. Phase 2 will include professional development for the staff and families, and community engagement workshops to expand learning from inside the classroom to the new outdoor learning spaces. The final phase will include adding renewable energy, a working farm to support healthier eating practices for all children and their families, and makerspaces that promote critical thinking and problem solving, and actualize learning from theory to practical applications.

Photo: Howard Dyckoff

Community Successes

1

2

1. Youth march against trash as part of community engagement | Photo: Skeo Solutions 2. New trash can mosaic in Chinatown | Photo: Tiffany Eng

1. Walkable Watershed Concept Plan

In 2016, Friends of Sausal Creek (FOSC) and a team of partners worked with the Fruitvale community to create the Walkable Watershed Concept Plan. The Walkable Watershed Program is a long-term strategy for adding creek access and green infrastructure in the Fruitvale corridor, a two-mile section of the Sausal Creek Watershed that stretches from I-580 to the Oakland Estuary. Potential infrastructure and community-building projects include new and improved creek access, additional trees on streets, native plant gardens, rain gardens, rain barrels, park and trail improvements, and creek-based urban artwork. The Walkable Watershed concept was devised by Skeo Solutions, an environmental consulting firm that worked pro bono to create the concept plan. The National Park Service Rivers, Trails, and Conservation Assistance Program supported FOSC in the community engagement process and plan development. The Oakland Public Works Watershed Program worked with other City divisions to achieve an innovative, cross-discipline approach. Fruitvale nonprofit Unity Council participated every step of the way and helped to make community connections.

2. Trash Can Mosaics in New Neighborhoods

In 2016, Family Friendly Oakland and Keep Oakland Beautiful, in partnership with the City of Oakland, won the Play Everywhere Challenge by KaBoom, a national competitive grant. The grant award funded completion of 13 new trash can mosaics, most by a professional artist at New World Mosaics, in low-income neighborhoods that lacked the capacity or funding to implement such projects. The content of the art was intentionally playful and directed at children, who are at eye level with the trash cans, making this part of a long-term effort to build better stewards for our city. Community members have welcomed the new trash can mosaics in Chinatown, Golden Gate, West Oakland, and Ivy Hill.

For more highlights and performance data, visit **www.sustainableoakland.com**

IN THE WORKS

VEGETATION MANAGEMENT PLAN

To reduce wildfire threat, the Oakland Fire Department is preparing a Vegetation Management Plan for City-managed parcels in the Oakland hills. The Plan will cover more than 1,400 acres of City property, plus treatment areas along approximately 300 miles of roadside.

LAKESIDE GREEN STREET PROJECT

In January 2017, Oakland Public Works launched the Lakeside Green Streets Project, a 14-acre Measure DD green streets project intended to calm traffic, increase parklands, improve Snow Park, improve water quality, and facilitate walking and bicycle use.

GREEN INFRASTRUCTURE

The City is preparing a Green Infrastructure Plan that will identify opportunities to implement green infrastructure in public capital projects, such as streetscape renovations, parks projects, and parking lot retrofits to reduce pollutant discharges and runoff flow into the storm drain system.

SUSTAINABLE CONSUMPTION & PRODUCTION

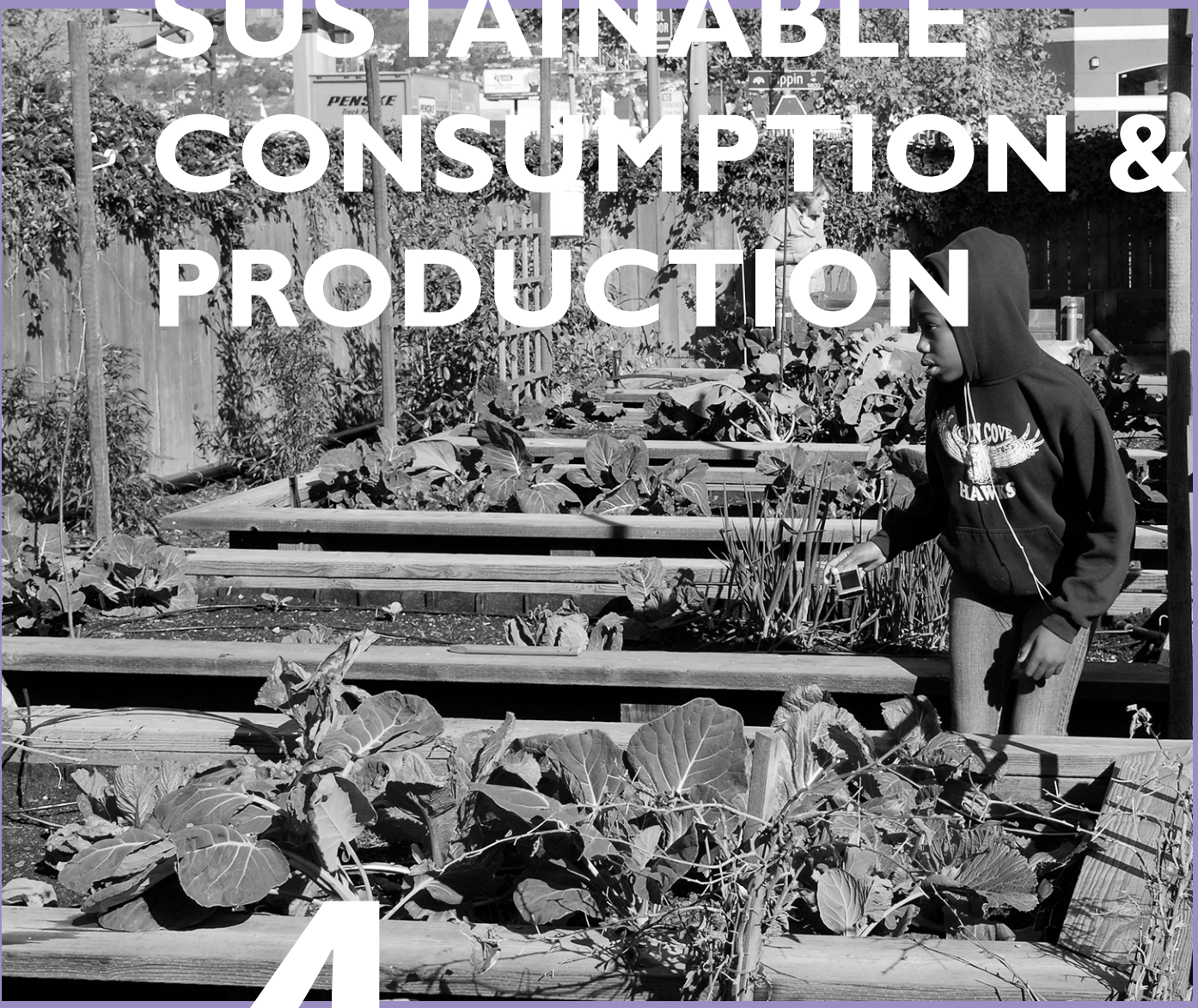

Photo: Garrett Fitzgerald

4

From purchasing your morning coffee to buying a new pair of jeans, our consumption behaviors have a big impact on our environment – particularly when you take into account the manufacture, transportation, and disposal of goods. Supporting local businesses, reducing overall consumption, and minimizing waste can help reduce environmental impacts. City policies to reduce the amount of recyclable and organic material entering the landfill, and efforts to boost the local repair and reuse economy, are building a clean and sustainable Oakland.

City Successes

BY THE NUMBERS

Oakland accomplished the following

600
restaurants and businesses signed up for new compost services in one year in 2016

250,000
pounds of nutritious food saved by FoodShift in 2016

198 certified green businesses as of June 2017

43%
of greenhouse gas emissions came from materials use and waste in 2013

1

2

3

1. Composting food scraps at Calavera 2. Fixit Clinic volunteer at work | Photo: Fixit Clinic 3. Council Member Annie Campbell Washington speaking at the BAUMI inaugural summit | Photo: SFMade, 2016

1. Commercial Composting Increases

In 2016, over 600 Oakland restaurants and other businesses signed up for compost collection service with service provider Waste Management of Alameda County, Inc. (WMAC), bringing the total number of businesses using the service to nearly 1,500 by July 2017. WMAC and regional agency StopWaste provided technical assistance through more than 500 site visits to help businesses compost correctly. Community organizations including Asian Immigrant Women Advocates, Vietnamese American Community Center of the East Bay, Jack London Business Improvement District, and Downtown Business Improvement District stepped up to help spread the word about business composting.

2. Fixit Clinics Keep Broken Items out of Landfills

A dozen Fixit Clinics were held in six different Alameda County cities this past year including at the Oakland Public Library, Temescal Branch. At these "pop-up" clinics, Fixit Coach volunteers helped over 275 people dissemble, troubleshoot, and repair their broken electronic items in the hopes of keeping them out of the landfill. Fixit Clinic is supported by local jurisdictions and mini-grant funds disbursed by StopWaste, a regional agency.

3. Local Manufacturing on the Rise

The Bay Area has an international reputation for top quality manufacturing. The Cities of San Francisco, San Jose, and Fremont, and Oakland are co-anchoring the Bay Area Urban Manufacturing Initiative (BAUMI), a three-year project to grow the manufacturing sector and tackle regional challenges facing companies, such as access to land and talent. Staffed by SF Made, BAUMI released a State of Urban Manufacturing Report and video at its inaugural summit November 2017. One week earlier, Oakland celebrated Manufacturing Day with over 100 students from six Oakland high schools touring local companies and Laney College's state-of-the-art trade skills facilities.

The Food Shift Kitchen Tackles Food Waste and Employment

Oakland-grown Food Shift is a multi-pronged social enterprise that rescues "imperfect" produce destined for disposal, and transforms it into nutritious food and job opportunities at The Food Shift Kitchen (TFSK). Their innovative approach simultaneously tackles food waste, workforce development, food access, and sustainability. The Kitchen's production facility and training venture is staffed by formerly homeless apprentices who receive a wage as employees during their hands-on training. Each week, the kitchen's part-time team of apprentices and volunteers save, sort, and process over 1,000 pounds of produce that would otherwise be wasted. TFSK donates nourishing meals to City Team Ministries, hosts educational corporate meals on site, provides catering in Alameda, and sells their meals online through the Josephine platform. Food Shift's longer-term goals include expanding production to full time, training and employing more people, acquiring a vehicle and additional refrigeration, and generating revenue to support operations. Food Shift hopes to serve as a model for improving food recovery infrastructure and impacts—retrieval, processing and distribution—to build a healthier, more economically and environmentally sustainable community.

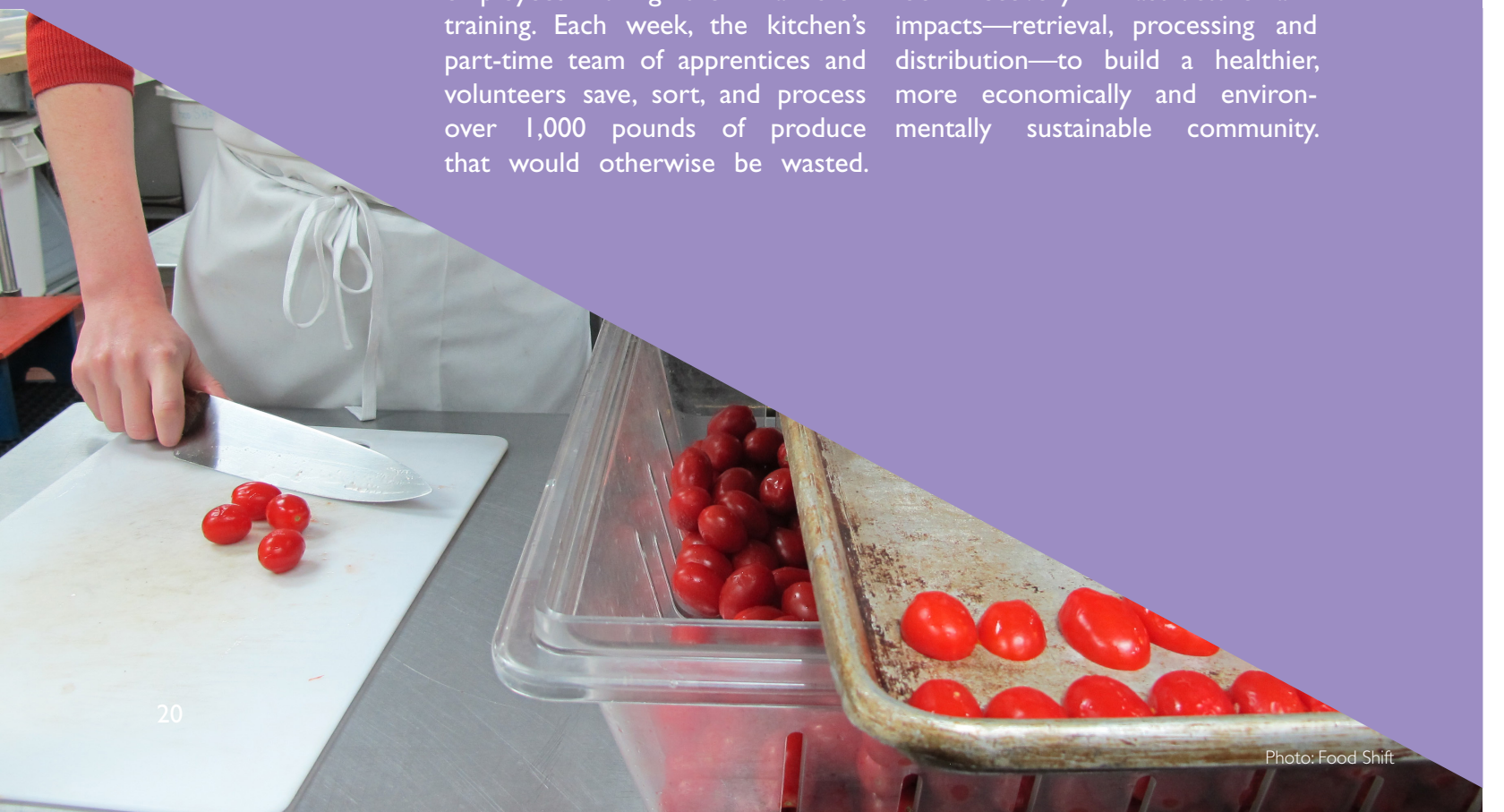

Photo: Food Shift

Community Successes

1. Made in Oakland EXPO hosted by Oakland SPUR | Photo: Hiroko Kurihara, Oakland Makers 2. Sorting out food waste at OUSD school Photo: OUSD 3. Ready Set Recyle training with Mujeres Unidas Y Activas | Photo: StopWaste

1. Made in Oakland Event Connects Makers, Architects, and Developers

The first ever MIO: Made in Oakland EXPO, convened in January 2017, was a success with 14 diverse, local makers and fabricators presenting their services and wares to more than 125 architects, developers, and construction industry members. The goal was to increase makers' visibility among Oakland developers and architects so that local buildings will reflect products sourced and made locally, ultimately to help mitigate real estate pressure experienced by these small businesses. The event was hosted by Oakland SPUR and organized by Oakland Makers. Founding sponsors were Lowney Architecture and Westlake Urban. Oakland Makers will track how EXPO 2017 was able to assist local designers and fabricators to capture income from local development over the next two years.

2. Food Donation Guide Helps Rescue Surplus Edible Food

Oakland Unified School District (OUSD) is playing an influential role in addressing hunger and food waste through their School Food Donation Program Guide (ousd.org/greengloves), which details their Program for schools, districts, nutrition departments, and those interested in recovering surplus edible school food that would otherwise go to waste. OUSD also implemented food share stations in all cafeterias district wide, allowing students to share their unwanted, sealed or unbitten food items with other students during mealtime. Grant funding and technical assistance, as well as support in preparing the guide, was provided by Alameda County public agency StopWaste.

3. "Ready Set Recycle" Reaches Communities Across Oakland

Over the last year, StopWaste, through its Ready Set Recycle Project, worked with 21 Oakland organizations to engage 1,103 people at 14 workshops and nine tabling events on "what goes where" and the positive impacts of composting and recycling. In addition to workshops, StopWaste awarded community outreach grants to seven Oakland-based non-profits to promote compost and recycling: Planting Justice, The Sobrante Park Resident Action Committee, Memorial Tabernacle Church, San Pablo Avenue-Golden Gate Improvement Association, Attitudinal Healing Connection, Mujeres Unidas Y Activas, and the Vietnamese American Community Center of the East Bay. Each of these groups received outreach training to engage at least 100 members of their community in direct one-on-one outreach.

For more highlights and performance data, visit **www.sustainableoakland.com**

IN THE WORKS

COMPOST FACILITY

Waste Management of Alameda County (WMAC), Oakland's franchised hauler, broke ground in June on the first compost facility in Alameda County. The facility, located at Altamont Landfill in Livermore, is scheduled to be operational by early 2018. It will process all the compostable material collected by WMAC from single- and multi-family Oakland residences, apartments, and condos. For the first time, compost collected in Alameda County will be processed here instead of being hauled to facilities outside the county.

IMPOSSIBLE FOODS

Impossible Foods is opening its first commercial scale "animal free meat" manufacturing plant in East Oakland. They plan to pump out one million pounds of plant-based meat every month and change the U.S. diet.

Photo: Impossible Foods

ECONOMIC PROSPERITY & LIVABLE COMMUNITIES

Photo: Becky Lai, Youth Employment Partnership

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The City and its partners are working to ensure that Oakland has a healthy, safe, and resilient environment and a thriving economy with business and employment opportunities for all. Local efforts include addressing inequities in access to healthful opportunities, and developing community-based climate adaptation strategies, healthcare services, and workforce development networks. All members of the Oakland community have a role to play in creating a vibrant and resilient community that will adapt to a changing climate.

City Successes

BY THE NUMBERS

Oaklnad accomplished the following

7572 jobs added between 2015 and 2016

5.3% unemployment rate in 2017

$12.86 is the new minimum wage as of 2017

1. OFCY programs clockwise: Building Green Futures, West Oakland Legacy & Leadership Project, and Cultivating Schoolyards | Photos clockwise: Becky Lai, West Oakland Legacy Project, and Oakland Leaf

1. Oakland Fund for Children and Youth

In 2016-2017 the Oakland Fund for Children and Youth (OFCY) provided grants to 149 programs working with children, youth, and families, awarding over $14.8M to programming reflecting OFCY's key values of social and economic equity, child and youth development, and community and collaboration. Funded programs provide youth leadership opportunities through community engagement; cultivate high quality academic, enrichment, social, and recreational activities for low-income children and youth; and focus on serving children living in high stress neighborhoods. Grants leverage and match additional local, state, federal and foundation funding sources, bringing additional resources to Oakland. This year, OFCY-funded programs reached over 28,000 children and youth and over 2,000 parents and caregivers. Recipients included Oakland Leaf's Love Cultivating Schoolyards, Attitudinal Healing Connection's West Oakland Legacy & Leadership Project, and Youth Employment Partnership's Building Green Futures program.

FEMA Hazard Mitigation Grant Program

In 2017, the City was awarded an unprecedented $6 million dollars from FEMA to develop and deliver two seismic retrofit grant programs: "Earthquake Safe Homes Program" for 1-4 unit owner-occupied properties, and "Safer Housing for Oakland" for 5+ unit rental properties with vulnerable "soft-story" conditions. These programs will help homeowners and tenants stay in their homes after a major Earthquake, increasing Oakland's disaster resiliency while reducing the carbon footprint of demolishing and rebuilding damaged properties.

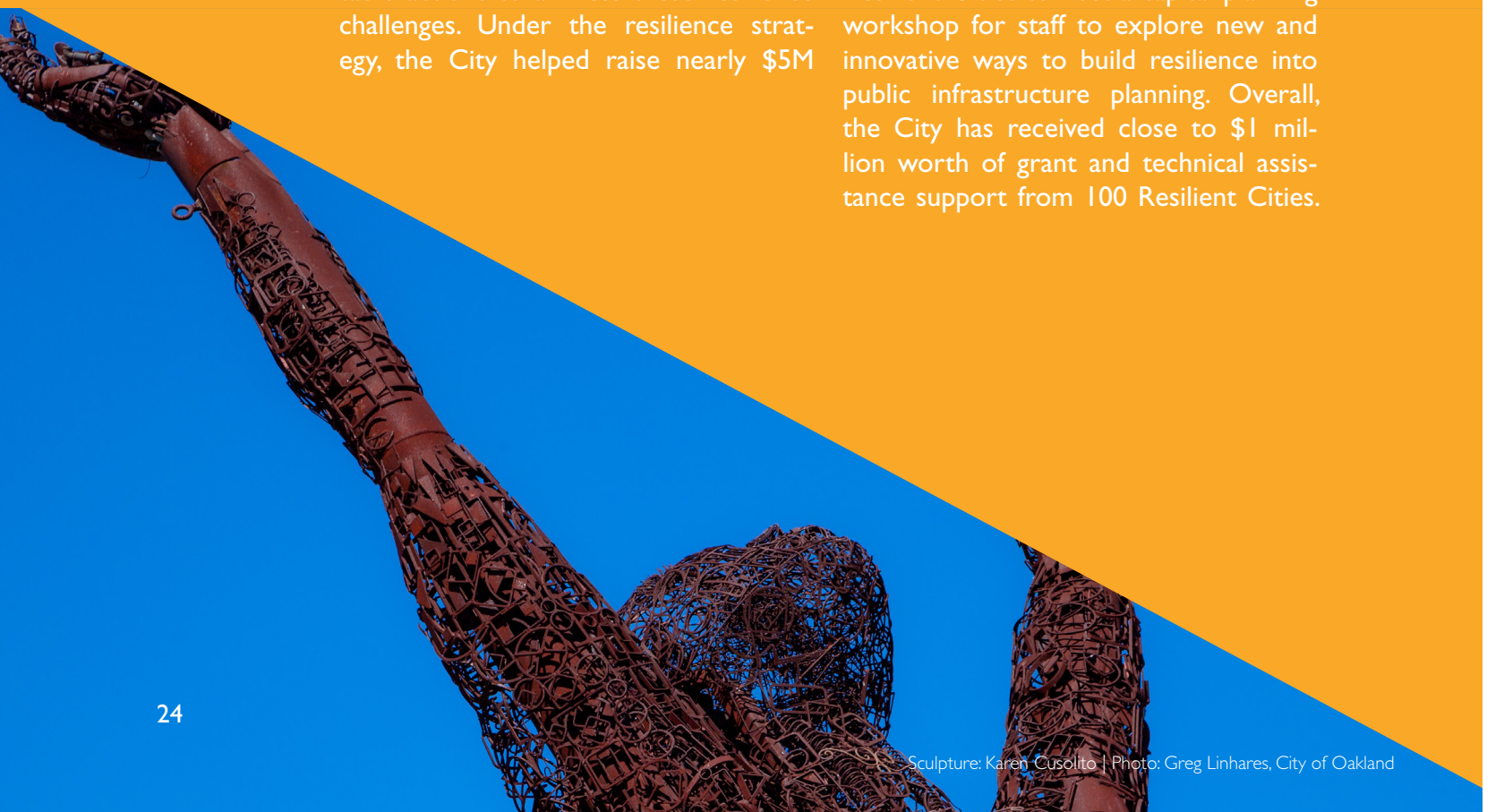
As Construction Booms, Training Opportunities Keep Up

Thanks to a recent building boom, there are now more than 69,500 construction jobs across the Bay Area. This demand for construction workers has led to rising wages; the median annual pay for construction workers in Alameda County is now $65,000, slightly higher than the overall annual median pay ($62,947). In response to construction job demand, the City is offering construction training through the West Oakland Job Resource Center, Youth Employment Partnership, and Civicorps. The City's Housing Rehab program is working to expand a long-established construction job training program with Laney College's Carpentry department to other certified job training programs in Oakland. Trainees will learn construction for the transformation of abandoned lots into affordable housing, including green construction techniques.

Feature Story

Resilient Oakland Playbook

Oakland was one of the first cities to be selected as part of Rockefeller's 100 Resilient Cities global network to design a strategy of action for resilience. In October 2016, the City launched the Resilient Oakland Playbook, a strategy document outlining the ways Oaklanders work together to help our community stay rooted, ensure equitable access to quality education, develop good jobs, stable housing, public safety, and vibrant streets. The playbook sets forth nearly 40 collaborative, data-driven, and equitable actions to address these resilience challenges. Under the resilience strategy, the City helped raise nearly $5M for a regional Resilient by Design: Bay Area challenge, a year-long collaborative research & design project that brings together residents, public officials, and local, national, and international experts to develop innovative solutions to the issues brought on by climate change, such as sea level rise, housing displacement, and public health challenges. In housing, the City received $140K from the Rockefeller Foundation to measure equity impacts of housing policies and current trends. The City also worked with 100 Resilient Cities to host a capital planning workshop for staff to explore new and innovative ways to build resilience into public infrastructure planning. Overall, the City has received close to $1 million worth of grant and technical assistance support from 100 Resilient Cities.



Sculpture: Karen Cusolito | Photo: Greg Linhares, City of Oakland

Community Successes

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1. Speakers at the Green Jobs Summit | Photo: Daniel Naftel 2. Vertical dance performance by BandaLoop | Photo: Greg Linhares, City of Oakland 3. Kapor Center's new space on Broadway

1. Interfaith Coalition Spearheads Green Job Fair

In late 2016, the Interfaith Power and Light coalition organized a full-day Green Jobs Summit, which convened religious, environmental, workforce development, and political leaders to focus on the expansion of green job opportunities for youth and communities most affected by fossil fuel pollution. The event spurred a community-based green jobs fair at Mt. Zion Missionary Baptist Church in West Oakland in April 2017, where companies and non-profits including AC Transit, East Bay Regional Parks District, GRID Alternatives, Rising Sun Energy Center, Tesla/Solar City, and many other organizations offered employment and resource information to job seekers.

2. New Anti-Displacement Program Helps Arts Organizations

Keeping Space – Oakland is a new pilot grant program dedicated to preserving real estate for arts and culture organizations that are facing displacement due to rising rents. Operated by the Community Arts Stabilization Trust (CAST) in partnership with the Northern California Community Loan Fund, the program uses direct financial grants, one-on-one technical assistance, and real estate training to help local arts groups secure affordable, long-term, and safe spaces. Keeping Space – Oakland is supported with funding from the Kenneth Rainin and William and Flora Hewlett Foundations.

3. Downtown Welcomes New Non-profit Anchors

Three major equity-based non-profit organizations are developing space in Downtown Oakland. In July 2016, the Kapor Center for Technology and Social Impact opened at 2148 Broadway, providing a home for the Kapor Center for Social Impact, Kapor Capital, and the Level Playing Field Institute. California Rural Legal Assistance (CRLA), celebrating its 50th year of providing free legal aid to low income workers, joined the non-profit migration from San Francisco to Oakland when it purchased 1430 Franklin Street. In January 2017, the Greenlining Institute opened its new headquarters at 360 14th Street, a former bank building. Their move transformed the building into a flourishing, energy-efficient nonprofit center, creating an ecosystem that fosters collaboration among those working to build equitable economic models to fight displacement. Each organization also provides space for other non-profits; CRLA's tenants include the NAACP and Homeless Action Center, while Greenlining hosts Post News Group, the Insight Center for Community Economic Development, OCCUR, EBASE, and AnewAmerica Community Corporation.

For more highlights and performance data, visit **www.sustainableoakland.com**

IN THE WORKS

RESTORE OAKLAND

The Ella Baker Center for Human Rights and Restaurant Opportunities Centers United (ROC) are launching Restore Oakland, a restorative economics and restorative justice hub in East Oakland. It will include worker training programs, a cooperative food-enterprise incubator, restorative justice programs, tenant housing services provided by Causa Justa :: Just Cause, and child care programs.

OAKLAND STARTUP

The Kapor Center for Social Impact, DevLabs, and the City of Oakland announced in early 2017 the launch of a new initiative, Oakland Startup, to reduce barriers to entrepreneurship for under-served and under-represented tech demographics.

REBOOTING REHAB

The City is updating the its Housing Rehabilitation programs to adapt to current market needs and funding streams. The revised programs will aim to serve more Homeowners. Eligible repairs will include installation of high efficiency heating systems, windows, roofs, and solar power.

Get Involved

We all have a role to play in helping Oakland become a more livable, sustainable, resilient and equitable city.

Volunteer

Adopt a Spot and participate in community clean-up and beautification events on Earth Day (April), Creek-to-Bay Day (September), and every month in neighborhoods throughout the city.
www.oaklandadoptaspot.org

Attend Events

Get connected with sustainability events in the city such as Earth Expo (April), Bike-to-Work Day (May), Art & Soul Festival (August), National Night Out (August), Creek to Bay Day (September), and community events in your neighborhood.
www2.oaklandnet.com/Events/

Lead the Way

Make green choices every day such as driving less, recycling and composting more, and improving the energy efficiency of your home. Support local businesses, jobs, and reduce environmental impacts. Encourage friends and neighbors to help make Oakland a more livable and sustainable city every day.
www.sustainableoakland.com

Photos top to bottom: Chelsea Feldman, Greg Linhares, City of Oakland, and David Fenton, BayREN

Acknowledgments

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Stories are contributed by numerous City staff from more than half a dozen City Departments, as well as from a host of community partners including several affiliated with the Oakland Climate Action Coalition. Specific contributors to this report included FixIt Clinic, Food Shift, Friends of Sausal Creek, the Greenlining Institute, GRID Alternatives, Oakland Makers, TransForm, Re-Volv, California Interfaith Power & Light, Meta Housing Corporation, SF Made, Skeo Solutions, Family Friendly Oakland, Keep Oakland Beautiful, Impossible Foods, Oakland Leaf, Higher Ground Neighborhood Development Corp., Attitudinal Healing Connection, Youth Employment Partnership, Oakland Unified School District, Bay Area Regional Energy Network, StopWaste, as well as numerous individual City staff members.

Photo: Greg Linhares, City of Oakland

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Cover: Photo of Lawrence Jackson by Grid Alternatives