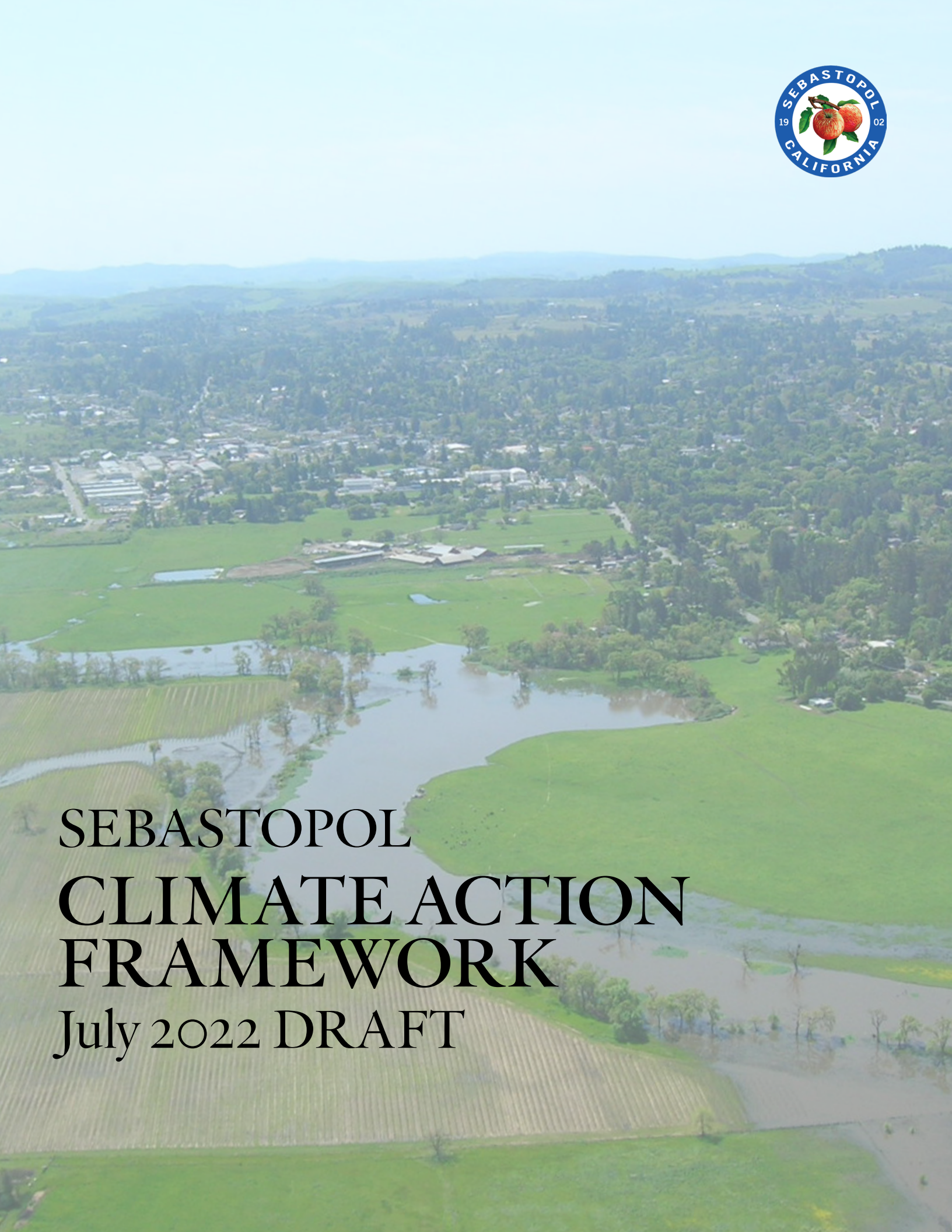

SEBASTOPOL
CLIMATE ACTION FRAMEWORK
July 2022 DRAFT

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Land Acknowledgement

We acknowledge that the City of Sebastopol rests on the ancestral territory of the Southern Pomo and Coast Miwok peoples. We recognize with gratitude the land and its traditional stewards.

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INTRODUCTION

What is the Sebastopol Climate Action Framework?

The Climate Action Framework ("the Framework") is a tool to aid the City of Sebastopol in addressing the climate emergency and reaching **net zero** emissions by 2030. It builds on many years of sustainability efforts in the City and region, including Sebastopol's 2019 Climate Emergency Resolution and longtime participation in the Sonoma County Regional Climate Protection Authority (RCPA). The Framework paints a vision of a vibrant, clean, safe, and resilient Sebastopol. Addressing the topic areas of transportation, land use, buildings and energy, consumption and waste, community, and City operations, the Framework sets community-driven goals for each area. These goals will help the City to move forward in acting on Sebastopol's commitments to:

- **Reduce citywide greenhouse gas emissions** to net zero by 2030.
- **Sequester carbon** from the atmosphere using nature-based solutions.
- **Prepare for climate impacts** that cannot be avoided.
- **Center equity and community engagement** in the City's climate actions.

The Framework does not commit the City to specific climate actions, but instead provides the process and principles by which to evaluate potential actions. An initial, living list of actions that could help Sebastopol achieve the Framework's goals are included in Appendix A. Given the urgency of the climate crisis, it is critical that City leadership prioritize the analysis, adoption, funding, and implementation of actions to mitigate and adapt to **climate change**.

Key Terms

- **Net zero**. Reaching net zero emissions or carbon neutrality means reducing greenhouse gas emissions to the level where ecosystems can absorb and store all remaining emissions in a natural process called sequestration.
- **Greenhouse gases (GHGs).** GHGs are gases that trap heat within Earth's atmosphere. GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases like hydrofluorocarbons.[1] Although many of these gases are present in Earth's atmosphere naturally, human activities, such as burning fossil fuels for transportation, raising livestock, deforestation, and industrial processes, are responsible for a large increase in the concentration of GHGs in the atmosphere since the beginning of the industrial era.[2]
- **Climate change.** Climate change is a long-term shift in the average weather pattern, driven by GHG emissions from human activities. These GHGs trap too much heat near Earth's surface, warming the planet beyond its natural temperature range and causing extreme weather events, such as droughts, heatwaves, wildfires, and heavy precipitation to occur with greater frequency and intensity.[3]

[1] https://www.epa.gov/ghgemissions/overview-greenhouse-gases
[2] https://www.epa.gov/climate-indicators/climate-change-indicators-atmospheric-concentrations-greenhouse-gases
[3] https://coveringclimatenow.org/resource/climate-science-101/

How to Use the Framework

Community Members

- For suggestions on how **to reduce your personal GHG emissions and/or prepare for climate impacts**, look for the "Take Action" boxes throughout the Framework. More information and links are available on the City website.
- **To learn about what Sebastopol has already done** to address climate change, refer to the Background section and the Past Actions subsection within each Action Area.
- **To advocate for additional action**, review Appendix A to see what additional actions you support, then let your elected representatives know by sending them an email or speaking at a City Council or other public meeting.

City Staff

- **To incorporate climate considerations into daily operations**, use the goals in each Action Area section and overall focuses of mitigation, sequestration, adaptation, and equity to help evaluate projects and decisions for consistency with climate goals.
- **To center climate issues and sustainability in the City's long-range plans**, refer to the Framework when designing policy or plan updates, such as updates to the Bicycle and Pedestrian Master Plan and General Plan.
- **To help advance climate goals**, review Appendix A and consider what additional actions your department could support or lead.

City Council, Boards, Commissions and Committees

- **To ensure climate action is prioritized throughout City government**, use the goals in each Action Area section to help set priorities and evaluate proposals.
- **To help advance climate action**, review Appendix A and consider how the body may be able to help move actions forward. For the Climate Action Committee, the process for moving actions forward is detailed in Appendix B.

How the Framework Was Developed

The Framework was developed over a 10-month period beginning in Fall 2021. The City's CivicSpark Fellow led the process with direction and assistance from the City's Climate Action Committee, Planning Department staff, and the Regional Climate Protection Authority (RCPA). To ensure community engagement was prioritized throughout the development of the Framework, a Community Engagement Strategy was created early on in the process. Approximately 400 community members actively engaged in the Framework development process through events, presentations, or an online survey, and an additional several thousand residents were informed about the process through social media posts, City newsletters, and other means.

For a more detailed picture of community engagement activities and input received, see Appendix C: Summary of Community Engagement Activities.

BACKGROUND

Why Act Now

The need for immediate, swift climate action is clear. On a global scale, the most recent reports from the United Nations Intergovernmental Panel on Climate Change (IPCC) exemplify the scientific consensus that global temperature rise must be limited to 1.5 °C. Human activities have already caused about 1.0 °C of warming above pre-industrial levels, resulting in significant harm to humans and ecosystems.[4] Urgent action is needed to prevent impacts, such as sea level rise, increased frequency and intensity of extreme weather events, increased wildfire occurrence and intensity, and spread of diseases, from worsening dramatically.

Although the challenges presented by climate change are great, it is not too late to act. The 2022 IPCC report highlights that strategies to dramatically reduce emissions in every sector already exist.[5] Action must be taken to implement these strategies at the global, federal, state, and local levels. Local governments are particularly well-situated to impact areas such as land use planning, building codes, and citizen climate education, and can tailor efforts to fit local needs and climate impacts. By taking bold action in these areas and others, cities can reduce emissions, prepare for local climate impacts, and inspire others to adopt stronger climate policies to the benefit of all.

As a community and a City, Sebastopol values sustainability, environmental protection, and community health and wellness. Both residents and the City have successfully taken steps to reduce their environmental and climate impact. The City's actions, including greening Sebastopol's electricity supply and supporting active transportation, are highlighted throughout the Framework document. The Framework aims to build on these past successes and accelerate progress towards addressing the climate challenges that Sebastopol faces today.

[4] https://report.ipcc.ch/ar6wg2/pdf/IPCC_AR6_WGII_SummaryForPolicymakers.pdf
[5] https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_PressConferenceSlides.pdf

Climate Impacts and Projections

The main climate impacts that Sebastopol faces are increased temperatures, longer and more frequent droughts, increased wildfire risk, and more frequent flooding events (Table 1). The Sebastopol community has already experienced many of these impacts, which are projected to increase as climate change intensifies (Table 2).[6]

Table 1. Major climate impacts in Sebastopol. Source: Climate Ready Sonoma County.

Climate Hazard	Observed and Expected Impacts[7]
Wildfire	• Displacement due to evacuations • Poor air quality and related health impacts • Power outages • Mental health impacts • Economic costs due to outages and disruption of daily activities
Drought	• Reduced water availability • Higher prices for water and food • Harm to water-dependent ecosystems and vegetation, including loss of habitat
Extreme Heat	• Increased heat-related illness and death • Increased electricity demand creating potential for power outages • Death of plants and wildlife, loss of habitat
Flooding	• Loss of property and damage to infrastructure • Displacement due to evacuations • Economic losses for the City and businesses impacted • Increased erosion and habitat loss

Table 2. Climate indicators and projections. Source: Cal-Adapt. [8]

Indicator		Maximum Length of a Dry Spell	Extreme Heat Days[9]	Maximum 1-day Precipitation
Observed 30-year Average (1961-1990)		113 days	4 days	2.76 inches
Projected Change from Baseline at End-Century (2070-2099)	Medium emissions	+6 days	+8 days	+0.29 inches
	High emissions	+10 days	+18 days	+0.46 inches

[6] For a record of past occurrences of these hazards, see the Sebastopol Local Hazard Mitigation Plan.
[7] https://rcpa.ca.gov/wp-content/uploads/2016/03/Climate-Ready_Hazards_Vulnerabilities-FINAL.pdf
[8] https://cal-adapt.org/tools/local-climate-change-snapshot/
[9] Days in a year with a maximum temperature above 99.4° F.

Climate Emergency Resolution and Climate Action Committee

On December 3, 2019, the Sebastopol City Council adopted a Climate Emergency Resolution (Resolution 6274-2019) that highlighted the urgency of the climate crisis and set the goal of reaching citywide net zero emissions by 2030. The Climate Emergency Resolution also emphasized the importance of community engagement and education on climate change, committed the City to continuing to collaborate regionally on climate actions, and called for the establishment of a new City body to focus on climate efforts.

Following this resolution, the City Council approved the creation of a Climate Action Committee (CAC) on January 7, 2020.[10] The CAC, composed of 11 to 14 volunteer community members, advises the City Council on climate-related topics.[11] In May 2022, the CAC merged with the City's Zero Waste Committee.[12] One of the initial duties of the CAC was to create this Climate Action Framework.

State and Regional Context

Sonoma County is leading the way on climate action in California. The state's current targets are to reduce greenhouse gas (GHG) emissions by 40 percent from 1990 levels by 2030 and reach carbon neutrality by 2045.[13] By contrast, many Sonoma County jurisdictions, including Sebastopol, have set science-backed 2030 targets for carbon neutrality. Other state policies, however, will be instrumental in helping local jurisdictions meet these zero emission goals. For example, Executive Order N-79-20 will ban the sale of new gas-powered cars and trucks in the state by 2035,[14] and Executive Order N-82-20 set the goal of protecting 30 percent of California's lands and waters by 2030.[15] The implementation of these policies will help reduce emissions and increase carbon sequestration across the state.

Sebastopol has participated in regional climate planning efforts through Sonoma County's Regional Climate Protection Authority (RCPA) since the RCPA's inception in 2009. The RCPA, governed by a Board of Directors with representatives from all ten jurisdictions, works to coordinate climate action across Sonoma County. In addition to Board of Directors meetings, the RCPA hosts regular meetings with staff from each jurisdiction and partner organization to promote information sharing and collaboration. In 2016, the RCPA led the development of a regional climate action plan, Climate Action 2020 and Beyond. Sebastopol's section of this regional plan included goals to increase solar installations, reduce water consumption, and encourage low-carbon transportation. In its Climate Emergency Resolution, Sebastopol committed to continuing to work with the RCPA to update these 2016 goals and collaborate on the RCPA's most recent climate planning effort, the Sonoma Climate Mobilization Strategy.

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[10] Due to the COVID-19 pandemic, the Committee did not begin meeting until January 2021.

[11] See the Committee's webpage for a list of current members: https://ci.sebastopol.ca.us/City-Government/Boards-Commissions-Committees/Climate-Action-Sub-committee.

[12] https://ci.sebastopol.ca.us/getattachment/Meeting-Event/City-Council/2022/City-Council-Meeting-May-3,-2022/Agenda-Item-Number-12-Zerowaste-merge-with-Climate-Action-Committee.pdf.aspx

[13] https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan

[14] https://theclimatecenter.org/wp-content/uploads/2020/09/EO-Newsom-Climate-09.23.2020-002.pdf; https://www.nytimes.com/2022/04/13/climate/california-electric-vehicles.html

[15] https://www.gov.ca.gov/wp-content/uploads/2020/10/10.07.2020-EO-N-82-20-.pdf

In 2013, Sebastopol became the third city to join Sonoma Clean Power (SCP), a local community choice electricity provider operating in Sonoma and Mendocino Counties. Like the RCPA, SCP is governed by a Board of Directors consisting of representatives from all member jurisdictions. Due to SCP's green electricity generation, which is 93 percent carbon free, participation in this customer-owned public agency has significantly reduced GHG emissions from electricity in its service area, including in Sebastopol.

Sebastopol is also a member of the Sonoma County Waste Management Agency, more commonly known as Zero Waste Sonoma. Established in 1992, Zero Waste Sonoma is the government agency responsible for planning for organics composting, recycling, and hazardous and solid waste disposal in Sonoma County. Zero Waste Sonoma is currently leading efforts to reduce landfilling of organic waste in the County, which contributes to GHG emissions.

As a small city, it is important that Sebastopol continues engaging in regional forums such as the RCPA, SCP, and Zero Waste Sonoma and coordinating with neighboring jurisdictions to expand the impact of its climate actions.

Centering Equity

Climate change is affecting everyone, but some individuals are impacted more than others. According to the California Governor's Office of Planning and Research, groups more likely to be harmed by climate impacts include children, people of color, people lacking access to life-supporting resources such as food and housing, LGBTQ communities, Indigenous people, older adults, low-income people, and people with chronic health conditions, mental illness, or physical disabilities.[16] These groups often face existing inequities that compound the negative effects of climate change. Some of the largest vulnerable groups present in Sebastopol are renters (49% of households), older adults (22.5% of residents are 65+, with this percentage expected to increase), and children (youth under 18 years of age comprise 17.6% of Sebastopol's population).[17]

Recognizing and taking steps to address disparities that these and other vulnerable groups may face is key to climate action. The Framework strives to prioritize equity, which is defined by the Sonoma County Office of Equity as "an outcome whereby you can't tell the difference in critical markers of health, well-being, and wealth by race or ethnicity, and a process whereby we explicitly value the voices of people of color, low income, and other underrepresented and underserved communities who identify solutions to achieve that outcome."[18] The Framework aims to address the disparate impacts of climate change on vulnerable communities by prioritizing community engagement in the design and implementation of actions and considering the equity implications of each recommended goal and strategy.

[16] https://opr.ca.gov/docs/20180312-Vulnerable_Communities_Descriptions.pdf
[17] https://www.ci.sebastopol.ca.us/getattachment/City-Government/Departments-Services/Fire/Local-Hazard-Mitigation-Plan/City-of-Sebastopol-LHMP-Update_Oct2021.pdf.aspx?lang=en-US
[18] https://socostrategicplan.org/racial-equity-and-social-justice/

Greenhouse Gas Emissions in Sebastopol

Sebastopol's citywide greenhouse gas (GHG) emissions in 2018 were 65,711 **metric tons of carbon dioxide equivalent (MT CO_2e)**, representing a 10 percent decrease in emissions compared to 1990 levels (Figure 1). Like Sonoma County as a whole, transportation is the largest source of emissions in Sebastopol (66.7%), followed by building energy use (24.5%) and solid waste (8.8%) (Figure 2).[19] These categories constitute the largest sources of emissions generated within Sebastopol, consistent with an **activity-based GHG inventory** approach.

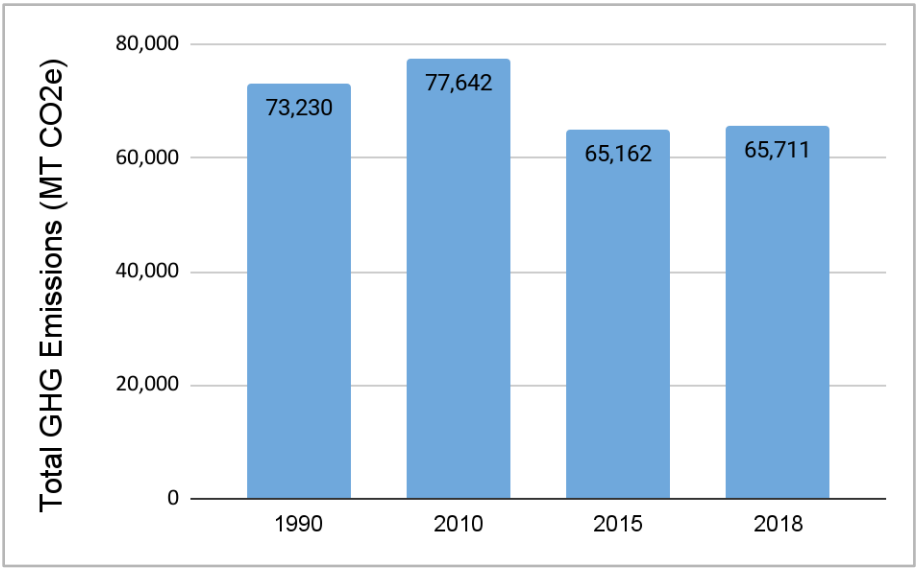


Figure 1. Sebastopol GHG emissions by year. Source: RCPA.

Key Terms

- **Metric tons of carbon dioxide equivalent (MT CO_2e).** MT CO_2e is the unit used to express a quantity of GHGs. A metric ton (MT) is about 2,205 pounds, a bit less than the weight of a small car. Human activities produce multiple kinds of GHGs, so to simplify reporting, all GHGs are converted into carbon dioxide equivalent (CO_2e) based on their global warming potential in comparison to carbon dioxide.
- **Activity-based GHG inventory**. Also called a sector-based GHG inventory, an activity-based GHG inventory focuses on the major sources of GHG emissions that are generated within a jurisdictional boundary and can be reduced through local government action. In Sonoma County, the RCPA conducts countywide activity-based GHG inventories on a regular basis that cover the emission categories of transportation, building energy, solid waste, water and wastewater, and livestock and fertilizer management.
- **Consumption-based GHG inventory.** Consumption-based GHG inventories measure the emissions created from the consumption of goods and services by residents of a jurisdiction, whether or not the emissions are actually produced within the jurisdiction. This approach captures a broader range of emissions, including those from imported goods, such as clothing and food, and from air travel.

[19] Emissions values are from RCPA's activity-based 2018 Sonoma County Greenhouse Gas Inventory, updated to include solid waste emissions allocated to Sebastopol. A 2020 inventory is anticipated to be complete in late summer 2022.

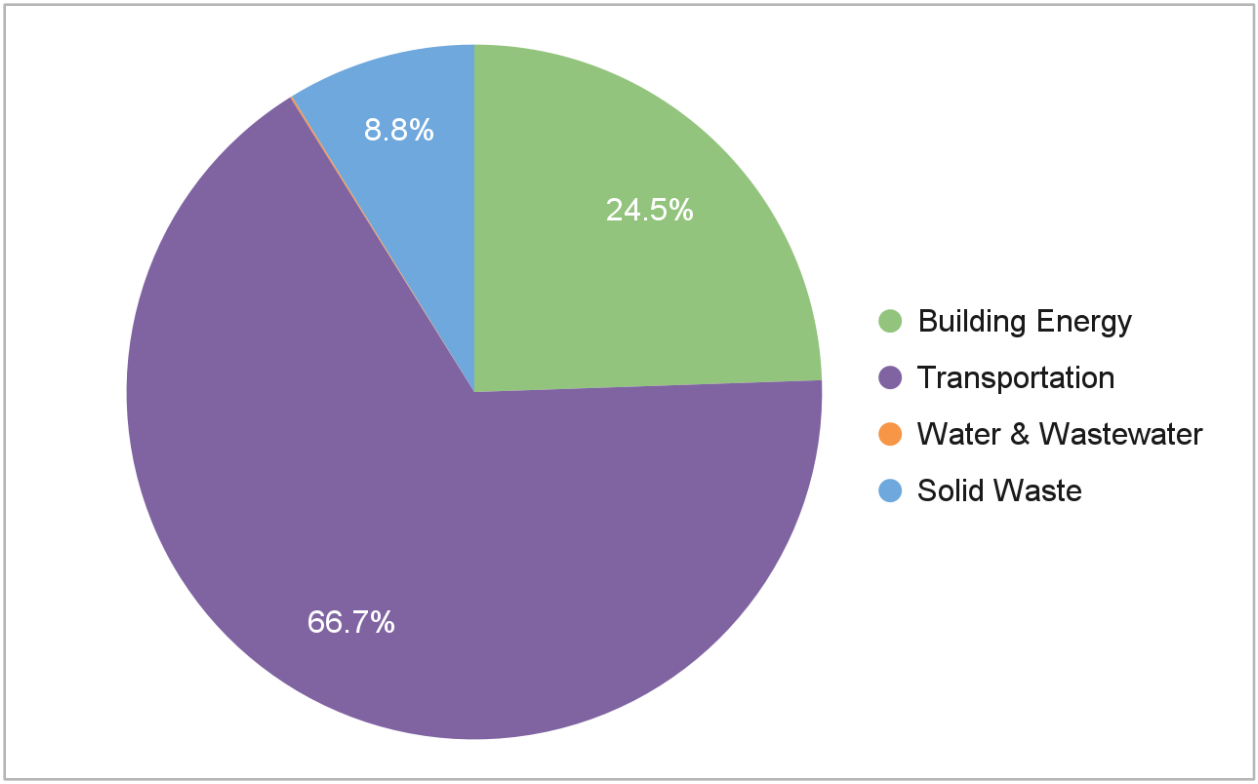


Figure 2. 2018 GHG emissions in Sebastopol by sector. Source: RCPA.

Consumption-Based Inventory

The CoolClimate Network at UC Berkeley developed **consumption-based GHG inventories** for many Bay Area jurisdictions in 2015. They found that the average carbon footprint of a Sebastopol household in 2015 was 38.5 MT $C0_2e$ (Figure 3).[20] Multiplying this value by the number of households in Sebastopol in 2015 yields a citywide GHG emissions total of 138,061 MT $C0_2e$, two times higher than the RCPA's activity-based inventory value from the same year.[21] Although these numbers are now fairly outdated, this comparison illustrates the distinction between the two types of GHG inventories, and the need for community involvement in GHG reduction efforts to affect change in areas less responsive to local government policy levers.

Both activity-based and consumption-based inventories are important tools to help us understand emissions in Sebastopol. To limit climate change impacts, emissions from all sources must be reduced to near zero.

Take Action

- Calculate your household's carbon footprint with the CoolClimate Calculator.

[20] https://coolclimate.berkeley.edu/inventory

[21] According to the United States Census Bureau, there were 3,586 households in Sebastopol in 2015. In 2020, this number had dropped to 3,269 households.

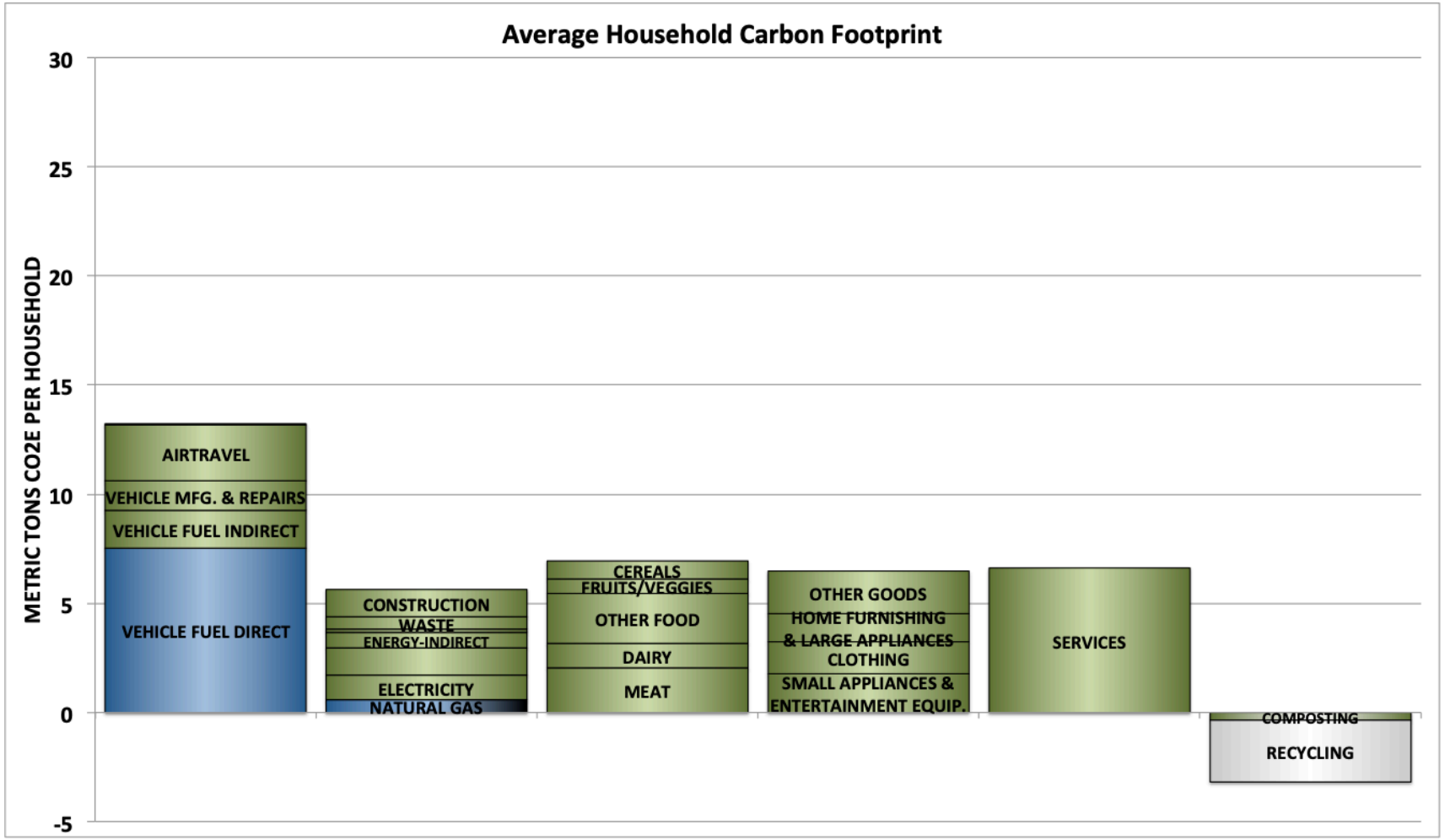


Figure 3. A consumption-based inventory for the City of Sebastopol from 2015. Source: CoolClimate Network.

ACTION AREAS

The following six subsections address specific areas where additional action is needed. Each subsection provides a set of goals for the future (Table 3), suggested metrics to evaluate progress towards these goals, a high-level overview of current status, and past actions.

Table 3. Action Area Goals.

Transportation
● Prioritize active transportation in transportation planning to make Sebastopol people-centric, rather than car-centric. ● Reduce vehicle miles traveled (VMT) by Sebastopol residents. ● Make biking, walking, and other active transportation options safer and easier by implementing a Complete Streets approach to street design. ● Improve and electrify public transportation options. ● Support a rapid, equitable transition to electric vehicles (EVs) for trips requiring a personal vehicle.
Sustainable Land Use
● Promote infill housing at appropriate densities within Sebastopol's voter-approved urban growth boundary that reduces VMT by locating housing within walking or biking distance of basic daily needs. ● Maintain and expand carbon sequestration potential and adaptation benefits through nature-based solutions. ● Manage public spaces to conserve, capture, and retain water and encourage private landowners to do the same. ● Minimize construction in areas at risk of wildfire or flooding while meeting local housing needs.
Buildings and Clean Energy
● Reduce greenhouse gas (GHG) emissions from buildings and support better community health by eliminating natural gas use in new buildings, electrifying existing structures, minimizing embodied carbon in new construction and remodels, and making all buildings more energy efficient. ● Support low-income residents, renters, and others who face barriers to electrification or energy efficiency upgrades. ● Expand the installation of solar panels and other renewable energy sources, both locally and in partnership with other entities in Sonoma County, to further decarbonize Sebastopol's electricity supply. ● Maximize water conservation and reuse. ● Make buildings more resistant to climate change impacts, such as damage from floods, wildfires, extreme weather events, and other climate hazards. ● Ensure energy sources are reliable during extreme weather conditions.
Consumption and Waste
● Reach Zero Waste by 2030 by minimizing solid waste production, increasing recycling, composting, and food recovery, and supporting community sharing, mending, and reuse. ● Reduce emissions from the consumption of goods and services through education and advocacy.
Community
● Ensure residents have the information they need to reduce their emissions and prepare for climate impacts. Work with property owners to make sure that renters also benefit. ● Actively involve all community members in decision-making, including Native American groups, youth, people of color, low-income residents, the LGBTQ+ community, renters, and other groups vulnerable to climate change impacts. ● Facilitate community discussions, connections, and collaboration. ● Collaborate with community-based organizations, neighboring jurisdictions, and regional bodies to implement actions. ● Improve community preparedness for climate-influenced hazards.
City Operations and Leadership
● Integrate climate and equity considerations into every policy and action. ● Pursue adequate funding and staffing needed to implement climate solutions, including robust community education and engagement activities. ● Reach carbon neutrality for all City-owned buildings and City operations by 2030 or sooner. ● Provide transparent and bold leadership on climate.

TRANSPORTATION

Goals

- Prioritize active transportation in transportation planning to make Sebastopol people-centric, rather than car-centric.
- Reduce vehicle miles traveled (VMT) by Sebastopol residents.
- Make biking, walking, and other active transportation options safer and easier by implementing a **Complete Streets** approach to street design.
- Improve and electrify public transportation options.
- Support a rapid, equitable transition to electric vehicles (EVs) for trips requiring a personal vehicle.

Transportation is the single largest category of GHG emissions in Sebastopol, accounting for 67 percent of emissions in 2018.[22] As such, reducing transportation emissions, which come primarily from driving gas-powered vehicles, is critical to meeting Sebastopol's 2030 carbon neutrality goal. To reduce these emissions, the City must reduce the amount of travel that occurs in fossil fuel-powered vehicles by transitioning to **active** and **public** modes of transportation for most trips and switching to **electric vehicles (EVs)** for remaining trips.

Key Terms

- **Complete Streets.** Complete Streets is a transportation planning approach that designs streets to meet the needs of users of all ages and abilities, regardless of whether they are walking, biking, taking public transportation, driving, or using another mode of transportation.[23]
- **Active transportation.** Active transportation refers primarily to human-powered transportation such as biking, walking, or rolling, and also encompasses low-speed electronic transportation modes such as motorized wheelchairs. In addition to reducing GHGs, active transportation modes provide participants the health benefits of outdoor exercise.
- **Public transportation.** Public transportation, such as buses, trains, and subways, allows groups of people to travel together instead of driving separately. Public transportation is associated with decreased traffic congestion, reduced air pollution, and fewer vehicle fatalities compared to travel in private vehicles.[24]
- **Electric vehicles (EVs).** Electric vehicles are driven by an electric motor, which is typically powered by a large, rechargeable battery. In contrast, gas-powered vehicles run using an internal combustion engine and a fuel tank. Since EVs do not burn fossil fuels, they produce no tailpipe emissions (depending on the source of electricity used to charge the vehicle, some emissions may be produced in electricity generation). EVs are typically quieter and cost less to drive and maintain than gas cars.

[22] According to the RCPA's 2018 GHG inventory, which allocates transportation emissions to jurisdictions based on the starting and ending point of each trip. This method means that trips going through Sebastopol, but not beginning or ending in Sebastopol, do not count towards the City's GHG emissions. Pass-through trips undoubtedly have an impact on the City, but are outside of the scope of this Framework.

[23] https://mtc.ca.gov/planning/transportation/complete-streets

[24] https://www.cdc.gov/policy/hst/hi5/publictransportation/index.html

Transportation in Sebastopol

Sebastopol is a semi-urban community located off and to the west of the Highway 101 and SMART train transportation corridor. Private vehicles are by far the most common mode of transportation in Sebastopol. According to the 2019 Sonoma County Travel Model, 90.5 percent of all daily trips in Sebastopol are completed in a car, with 44.3 percent of trips involving a single driver and 46.2 percent occurring in a shared ride (Figure 4).[25] Shared rides are less common for commute travel, which accounts for about 21 percent of trips on an average weekday.[26] For commute trips, 82.7 percent of Sebastopol workers use a car, truck, or van to get to work. Of these workers, 72.8 percent drive alone and 9.9 percent carpool. Only a small percentage of commuters bike, walk, or take public transportation (Figure 5).

According to a 2020 Travel Behavior Study by the Sonoma County Transportation Authority (SCTA), 26,000 car trips originate in Sebastopol each day, accounting for 2 percent of countywide trip origins. The most common trip destinations are Santa Rosa, within Sebastopol, and unincorporated county areas (Figure 6a). The average trip length is 7 miles, and 54 percent of trips are under 5 miles (Figure 6b). These shorter trips have the greatest potential for mode-shifting: using a low or zero-emission transportation method, such as walking, biking, or taking public transportation, instead of traveling in a personal vehicle.

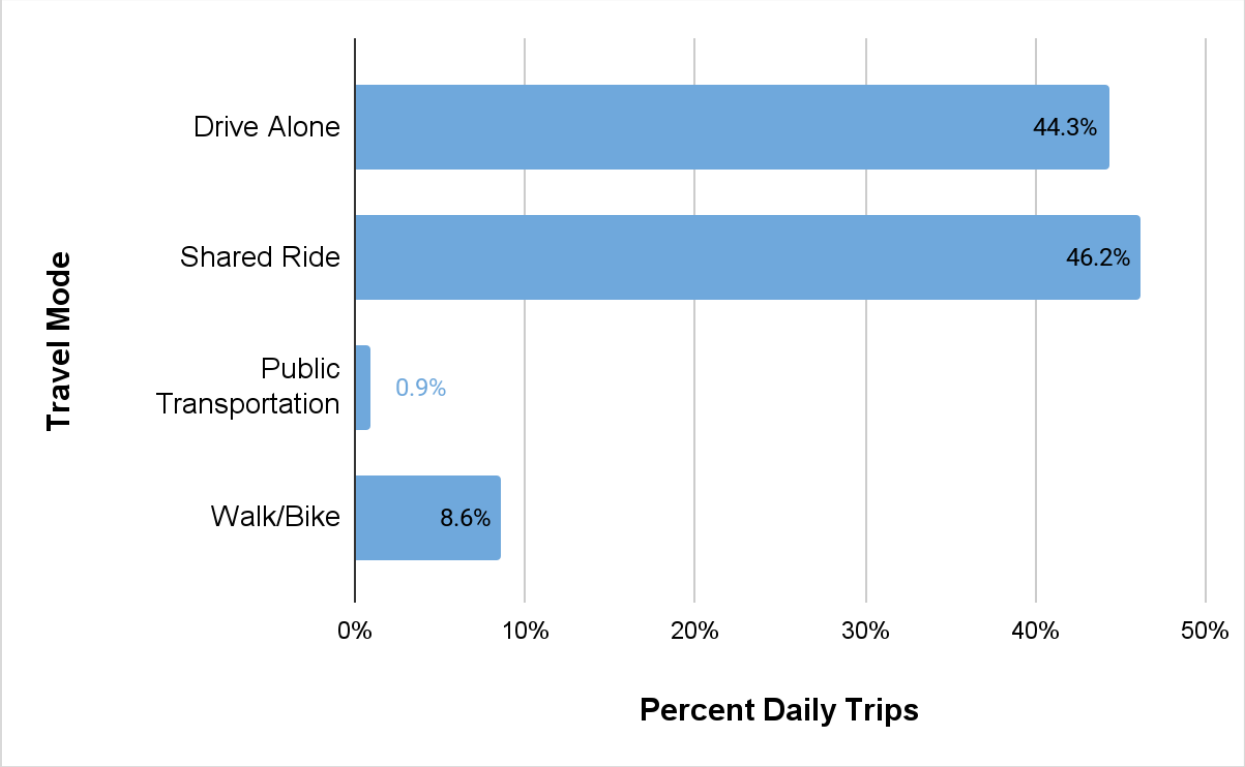


Figure 4. Travel modes for daily trips in Sebastopol. Source: SCTA Sonoma County Travel Model.

[25] https://scta.ca.gov/planning/forecasting-and-travel-data/
[26] https://scta.ca.gov/wp-content/uploads/2020/02/Sonoma_TBS_2-7-2020_web.pdf

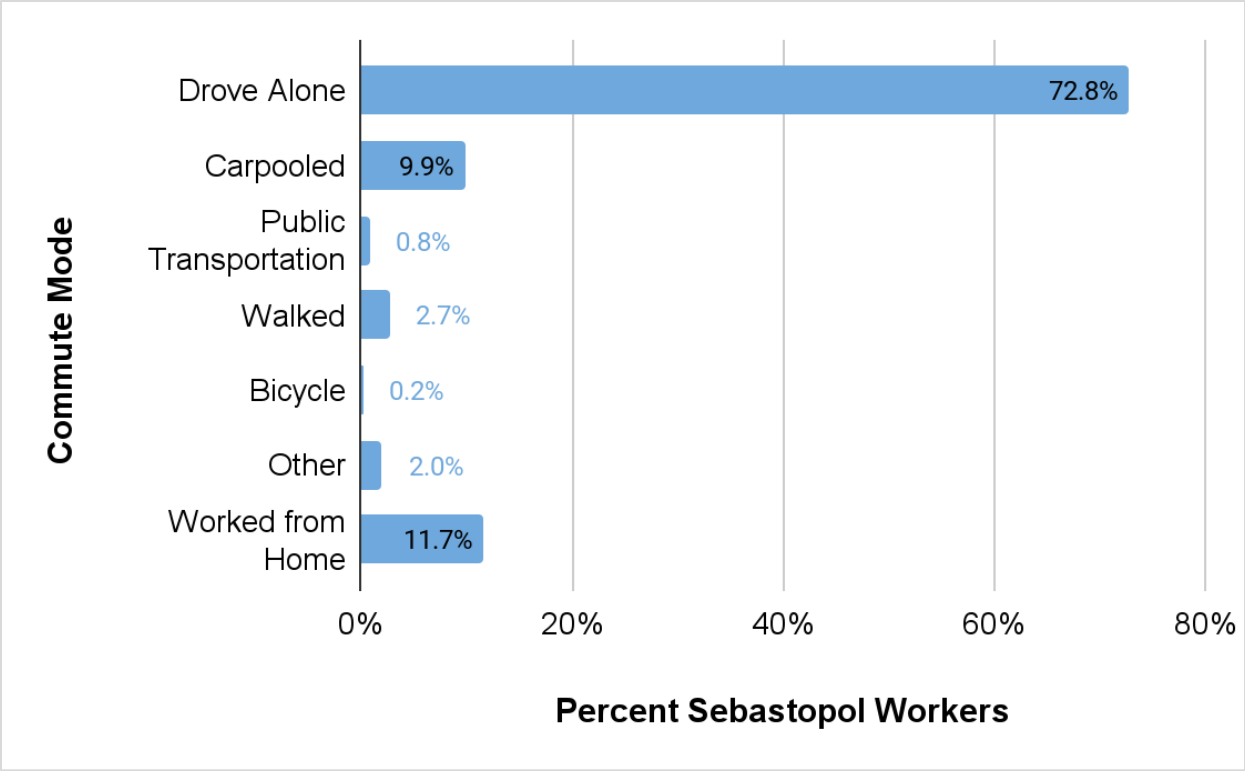


Figure 5. Commute modes in Sebastopol, 2020. Source: U.S. Census Bureau.[27]

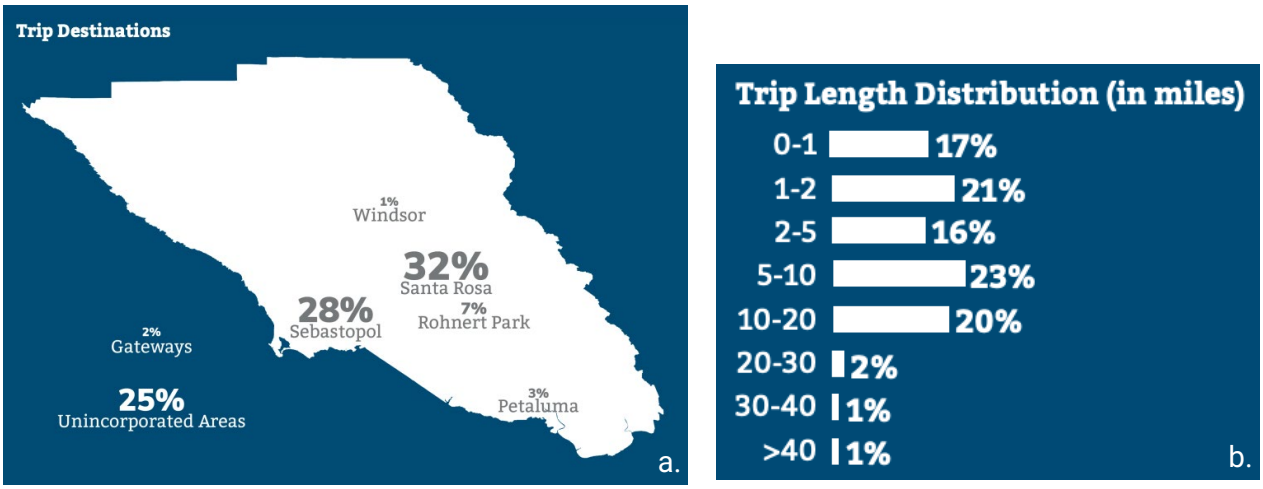


Figure 6. Trip destinations (a) and length distribution (b) for trips starting in Sebastopol. Source: SCTA.[28]

[27] https://data.census.gov/cedsci/table?q=S0801percent3Apercent20COMMUTINGpercent20CHARACTERISTICSpercent20BYpercent20SEX&g=0400000US06_0500000US06097_1600000US0670770&tid=ACSST5Y2020.S0801

[28] https://scta.ca.gov/wp-content/uploads/2020/02/Sonoma_TBS_2-7-2020_web.pdf

Electric Vehicles

Active and public transportation modes help reduce transportation emissions, however, long trips to areas without public transit service may require a personal vehicle. Using an electric vehicle (EV) for these trips eliminates tailpipe emissions. At the end of 2021, in the 95472 and 95473 zip codes, there were 1,295 zero emission light-duty vehicles on the road, compared to 25,730 non-zero emission light-duty vehicles.[29] Based on these numbers, only about 5 percent of vehicles on the road in the Sebastopol area today are EVs.[30]

To accelerate the transition to EVs, more public and workplace charging stations will be needed to meet charging needs that can't be met at home, such as those of apartment residents or others that cannot install home charging infrastructure. Currently, there are 15 public EV charging ports at 4 different locations in Sebastopol (Figure 7). Most are **Level 2** chargers, with one **DC Fast Charger** located in the Redwood Marketplace parking lot.[32]

The RCPA has set the goal of developing 10,000 public and workplace charging stations countywide by 2027 to facilitate the transition to electric vehicles. To meet this goal, an estimated 489 ports, split between public and workplace charging stations, are needed in Sebastopol.[33]

Types of EV Chargers[31]

- **Level 1**: Level 1 charging occurs through a standard 110 volt household outlet at a rate of about 4 miles per hour.
- **Level 2**: Level 2 charging requires a dedicated 240 volt power source and provides 10 to 25 miles of charge per hour, depending on the vehicle.
- **DC Fast Charger**: DC fast chargers, also called Level 3 chargers, deliver high-voltage DC power to rapidly charge vehicles at rates of 3 to 20 miles per minute.

Take Action

- Walk, bike, or take public transportation to reduce your carbon footprint and increase your daily exercise.
- Purchase or lease an electric vehicle for your next car to save money with lower maintenance and fuel costs.

[29] California Energy Commission (CEC). Light-Duty Vehicle Population in California. Data last updated April 29, 2022. Retrieved June 3, 2022 from https://www.energy.ca.gov/data-reports/energy-almanac/zero-emission-vehicle-and-infrastructure-statistics/light-duty-vehicle.
[30] The CEC's definition of "zero emission vehicles" includes battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs).
[31] https://ev101.helpscoutdocs.com/article/23-what-are-the-different-kinds-of-chargers
[32] https://www.plugshare.com/
[33] https://rcpa.ca.gov/what-we-do/sonoma-climate-mobilization/

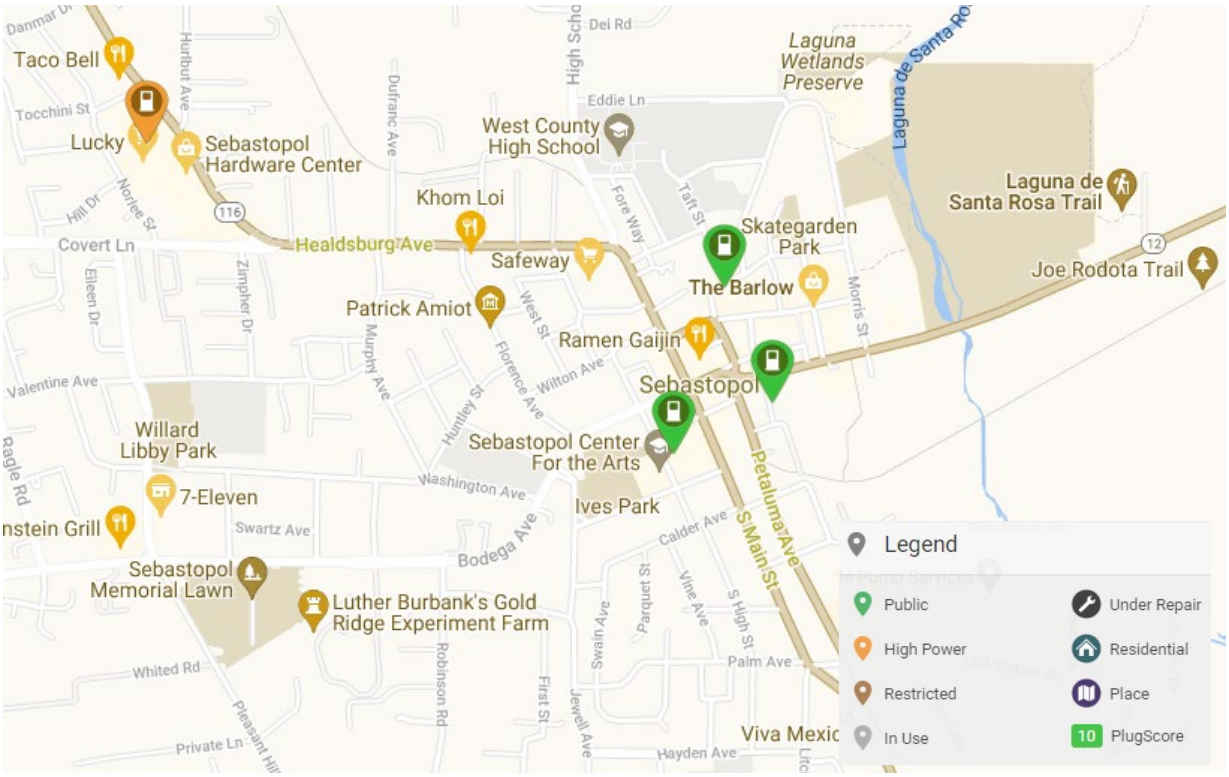


Figure 7. Electric vehicle charging stations in Sebastopol. Each station has multiple charging ports. Source: PlugShare.

Past Actions

- On April 19, 2022, the City Council adopted Ordinance Number 1140 amending the zoning ordinance to prohibit the construction of new fossil fuel service stations (e.g. gas stations), or expansion of fossil fuel infrastructure at existing gas stations, in the City.
- In 2018, Sebastopol's Local Route 24 became the first in Sonoma County to be served by an all-electric bus. The City subsidizes Route 24 to provide clean, fare-free transportation around Sebastopol.[34]
- The City has long supported active transportation through bike lane and trail development, pedestrian improvements, and education. For example, the City has:
    - Developed an updated Bicycle and Pedestrian Master Plan in 2011 and completed many of the projects outlined in the plan. The City will be developing a new Bicycle and Pedestrian Master Plan beginning in 2023 as part of the Countywide Active Transportation Plan process.
    - Worked with CalTrans to develop green on-street bike lanes through downtown in 2019,
    - Completed the Railroad Forest Bike Path in 2005, which connects the Joe Rodota and West County trails,
    - Continued development of Laguna access trails,
    - Promoted bike safety and bike education through community events and the Safe Routes to Schools program, which is active at several Sebastopol schools,

[34] https://soconews.org/sonoma_west_times_and_news/news/sebastopol-s-new-zero-emission-all-electric-bus/article_2850edd4-fe54-11e8-bae2-1b6319a53e64.html

  - Supported the Sebastopol Walks program and the development of the Pedline walking routes and wayfinding signage,
  - Continuously worked to implement pedestrian infrastructure improvements, such as the crossing lights on Bodega Avenue in 2019,[35]
  - Adopted design review guidelines for development projects that emphasize sustainability, including prioritizing pedestrian infrastructure.
  - Adopted a Complete Streets approach to design streets for all users, including approving the Metropolitan Transportation Commission's Complete Streets checklist in 2021.[36]
- The City has adopted a streamlined permitting process for installing EV chargers.[37]
- Sebastopol municipal code requires EV charging infrastructure in all new parking lots with more than 10 spaces.[38]

Measuring Progress

- Reduction in VMT
- # vehicles registered in Sebastopol
- % increase in active and public transportation modes
- % of cars on the road that are EVs
- # EV charging stations
- $ invested in areas currently lacking transit options (e.g. sidewalks, bike paths, public transit)

[35] https://www.ci.sebastopol.ca.us/getattachment/8279cf7a-78d6-4c2c-b92e-343953f507c2/4-20-21-LOS-Staff-Report-Final_Corrected-Page-Numbering-with-Clerical-Edits_FINAL.pdf.aspx?lang=en-US&ext=.pdf
[36] https://ci.sebastopol.ca.us/getattachment/Meeting-Event/Planning-Commission/2021/Planning-Commission-Meeting-of-April-27,-2021/Agenda-Item-6A_MTC-Complete-Streets-Checklist_-Staff-Report-with-Attachments_04-27-21.pdf.aspx
[37] https://sebastopol.municipal.codes/SMC/15.120
[38] https://sebastopol.municipal.codes/SMC/17.110.040

SUSTAINABLE LAND USE

Goals

- Promote infill housing at appropriate densities within Sebastopol's voter-approved urban growth boundary that reduces vehicle miles traveled (VMT) by locating housing within walking or biking distance of basic daily needs.
- Maintain and expand carbon sequestration potential and adaptation benefits through nature-based solutions.
- Manage public spaces to conserve, capture, and retain water and encourage private landowners to do the same.
- Minimize construction in areas at risk of wildfire or flooding while meeting local housing needs.

Land use planning is a major factor determining GHG emissions from transportation. When housing is located far from schools, jobs, grocery stores, and other daily destinations, residents are more likely to drive to reach these locations. In addition to an accessible public transit system and improved pedestrian and bicycle infrastructure, implementing zoning policies that promote "15-minute cities," where all residents are within a 15-minute walk or bicycle ride of daily needs, is key to an equitable, zero-emission future.[39]

Land use policies are also critical to conserving and expanding green spaces in and around cities. Healthy habitats and green spaces are essential for sequestration, the natural process through which plants remove the GHG carbon dioxide from the air. Plants and trees also provide adaptation benefits, such as improved air quality, shade, and water retention. Land use planning can protect existing park and open space land uses, promote the development of new park areas, and encourage green infrastructure and urban forest maintenance in developed areas.

Land Use in Sebastopol

Current land uses in Sebastopol are reflected in the General Plan Land Use Map (Figure 8). Medium density residential makes up much of the City's area, with commercial zones and high density housing concentrated around State Route 116. Downtown Sebastopol is extremely walkable, receiving a "walk score" of 92 out of 100 from the Walk Score website, which ranks locations based on their pedestrian friendliness and distance to grocery stores, parks, schools, and other needs.[40] However, locations further from downtown receive lower scores, with those near the City limits classified as "car dependent."

Take Action

- Plant native, drought tolerant plants to conserve water.
- Apply mulch and compost to your garden regularly to improve water retention, soil health, and carbon sequestration potential.
- Install a rain barrel to capture water for irrigation.

[39] The 15 minute city concept is attributed to Professor Carlos Moreno. Learn more: https://obelaward.org/the-15-minute-city/.
[40] https://www.walkscore.com/score/sebastopol-california

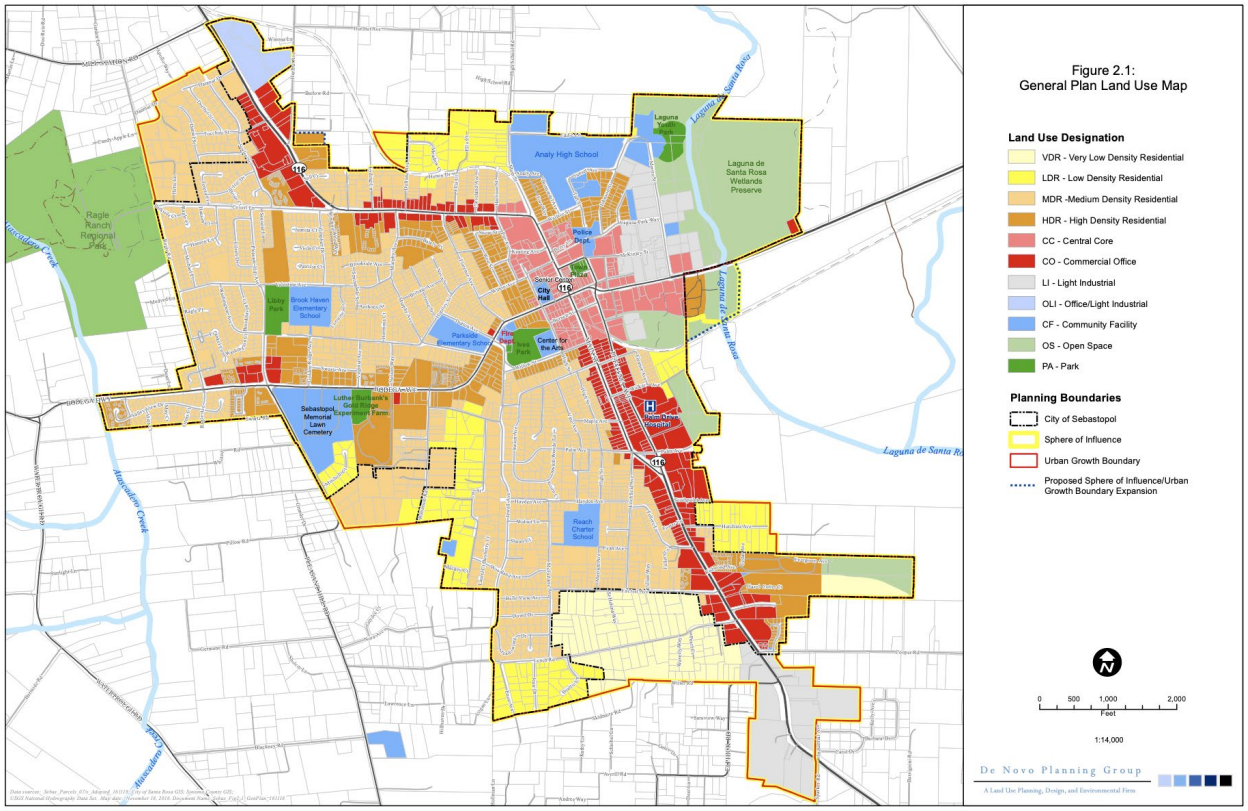


Figure 8. General Plan Land Use Map. Source: Sebastopol General Plan.

Of Sebastopol's 1,184 acres, 10 percent are publicly accessible protected areas, like parks and open spaces. Parks are fairly well-distributed throughout the city, though there are less in the southwest portion of town, which is identified as an area of high park need by the Bay Area Greenprint tool.[41] Urban heat island effects, which include higher air temperatures and greater pollution, are experienced in 33 percent of the City's area.[42]

Street trees, parks, and other vegetation in Sebastopol provide important carbon sequestration and adaptation benefits. Within City limits, urban street trees store 55,578 metric tons of carbon dioxide equivalent (MT CO_2e). Microorganisms and other living creatures in the soil provide storage for an additional 80,199 MT CO_2e. Maintaining these current carbon storage levels by not disturbing existing vegetation and soil is estimated to be equivalent to the GHG reduction benefits of removing 1,561 cars from the road for one year. In addition to storing carbon, vegetation within City limits sequesters nearly 1.2 metric tons of air pollutants like particulate matter and nitrogen dioxide each year, provides shade and cooling, and increases water retention.[43] The City is surrounded by open spaces and conservation areas, such as the Laguna de Santa Rosa, which also contribute sequestration and adaptation benefits to the area.

[41] https://www.bayareagreenprint.org/report/
[42] https://www.bayareagreenprint.org/report/
[43] https://www.bayareagreenprint.org/report/

Past Actions

- The City has established an Urban Growth Boundary (Ordinance 1090) which limits City development to a defined area.
- The City's "Sphere of Influence" (the area subject to annexation into the City and further development) was reduced in the early 2000s to reflect the City's desire to look towards infill development rather than sprawl into greenfields.
- Sebastopol's 2016 General Plan includes many sustainable land use policies, such as:
    - Maintenance of the urban growth boundary,
    - Defining a priority development area to focus investments in housing, transit, and job growth,
    - Promoting increased housing density near to jobs, services, and transit,
    - Encouraging mixed-use developments,
    - Protecting and enhancing the natural environment, including riparian habitat and native vegetation.
- The City's Tree Protection Ordinance protects native trees and large trees from damage or removal during construction projects and requires the replacement of trees that must be removed.
- Since the 1980's, the City has worked in partnership with many other entities to restore and conserve the Laguna de Santa Rosa.[44]
- In 2014, the City adopted a water shortage contingency plan that prohibits certain nonessential water uses and outlines water conservation stages that can be implemented under drought conditions. Since July 6, 2021, Sebastopol has been under a Stage 2 Water Alert (Resolution 6359), which mandates a 25 percent reduction in water use.
- The City's Low Impact Development program regulates stormwater and other runoff from developments to protect water quality and increase groundwater recharge.
- The Sebastopol Climate Action Committee began hosting giveaways of free organic compost in 2021.

Measuring Progress

- # of and area covered by green infrastructure projects
- # trees planted
- % City experiencing urban heat island effects, per the BayArea GreenPrint tool
- Amount of compost distributed to residents
- Canopy coverage citywide
- # riparian restoration projects completed

[44] https://ci.sebastopol.ca.us/Our-Community/Volunteer/Laguna-Wetlands-Preserve

BUILDINGS & CLEAN ENERGY

Goals

- Reduce greenhouse gas (GHG) emissions from buildings and support better community health by:
  - Eliminating natural gas use in new buildings,
  - Electrifying existing structures,
  - Minimizing embodied carbon in new construction and remodels,
  - Making all buildings more energy efficient.
- Support low-income residents, renters, and others who face barriers to electrification or energy efficiency upgrades.
- Expand the installation of solar panels and other renewable energy sources, both locally and in partnership with other entities in Sonoma County, to further decarbonize Sebastopol's electricity supply.
- Maximize water conservation and reuse.
- Make buildings more resistant to climate change impacts, such as damage from floods, wildfires, extreme weather events, and other climate hazards.
- Ensure energy sources are reliable during extreme weather conditions.

In 2018, about a quarter (24.5%) of Sebastopol's GHG emissions were from building energy use. These emissions are mostly from natural gas, which is commonly used to power appliances for space heating, water heating, and cooking. This fossil fuel is primarily composed of methane, a GHG about 80 times more powerful than carbon dioxide over a 100-year period.[45] Natural gas creates emissions both on its way to buildings through leaks in the distribution system as well when it is burned to fuel gas appliances. In addition to GHGs, gas-powered appliances create indoor air pollutants that contribute to respiratory illnesses such as asthma. Switching to clean energy sources to power homes, workplaces, and communities is a requirement for meeting Sebastopol's climate goals and improving community health. In this transition from fossil fuels to electricity, it is also critical to ensure that this electricity is clean, renewable, and reliable, particularly in the face of increased power outages.

Building Energy Use in Sebastopol

In terms of both overall consumption and median consumption per square foot, single family homes use the most natural gas in Sebastopol, followed by commercial buildings (Figure 9). For electricity consumption, the reverse is true: commercial buildings use the most electricity by far. Industrial buildings, however, use the most electricity per square foot (Figure 10).[46]

[45] https://www.epa.gov/ghgemissions/understanding-global-warming-potentials
[46] https://bayarea.energyatlas.ucla.edu/profiles

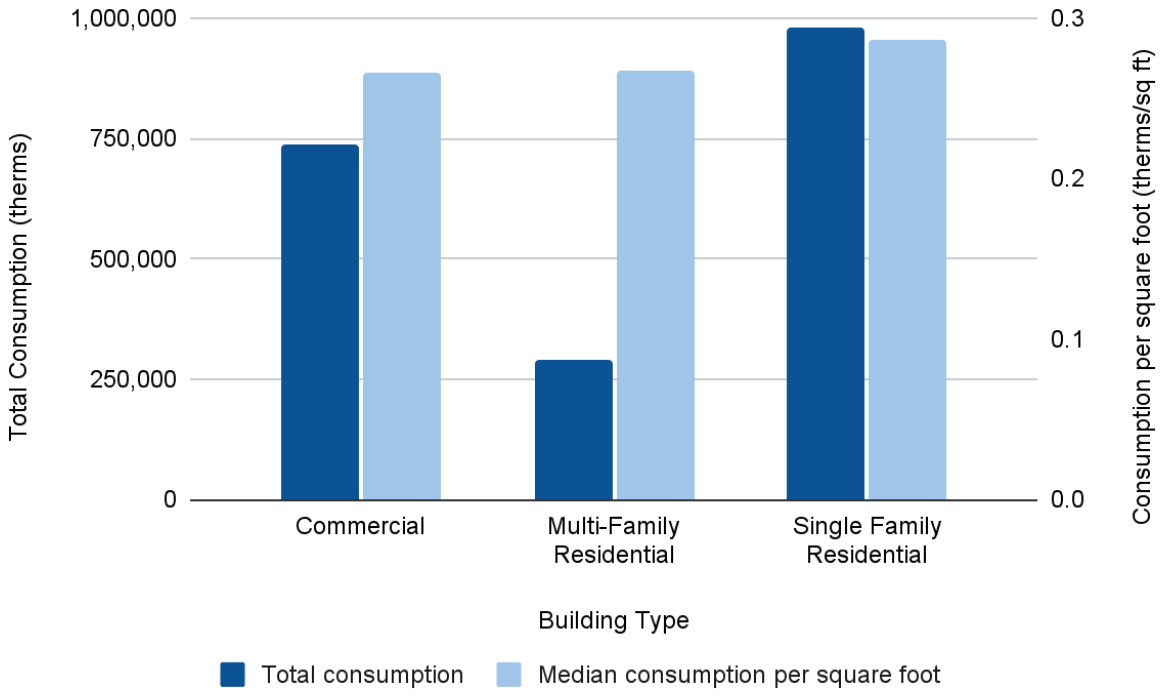


Figure 9. Natural gas consumption by building type in 2017. Source: Bay Area Energy Atlas.

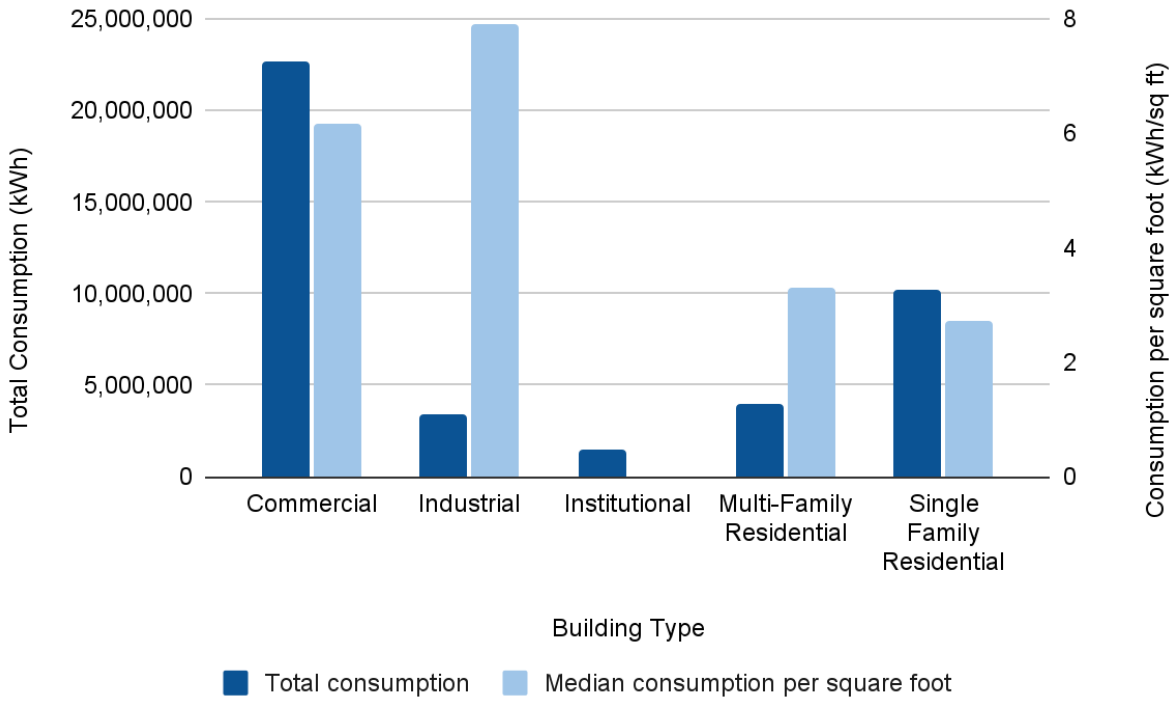


Figure 10. Electricity use by building type in 2017. Source: Bay Area Energy Atlas.

Most Sebastopol residents receive their electricity from Sonoma Clean Power (SCP). SCP's standard service, CleanStart, provides electricity that is 93 percent carbon-free, with 49 percent generated from renewable sources.[50] As of March 2022, 91 percent of eligible Sebastopol residents, or 4,022 customers, were enrolled in SCP. Of these, 4.2 percent, or 170 customers, had upgraded to Evergreen, SCP's 100% local renewable energy option. While a low percentage, this still makes Sebastopol the jurisdiction with the highest level of EverGreen enrollment in the county.[51]

By square foot, 57.7 percent of residential housing in Sebastopol was built in or before 1978, the year when residential energy efficiency codes went into effect.[52] These older buildings tend to be much less energy efficient than newer construction, which is required to follow state and local green construction standards. Retrofitting existing buildings to improve energy efficiency and eliminate natural gas use is key to reducing emissions in the building sector.

Embedded Carbon

The materials used to construct a building also have an environmental and climate impact. Globally, the manufacturing, transportation, and installation of building materials accounts for 8 to 11 percent of GHG emissions.[47] Concrete is one of the primary sources of embedded (also called embodied) carbon in buildings, as its production process is energy intensive and involves chemical reactions that release CO_2.[48] Unlike emissions from building operations, which can be reduced through electrification and energy efficiency measures, embedded carbon cannot be reduced after a building is constructed.[49] Therefore, carefully designed green building codes are important to minimizing these emissions.

Past Actions

- In 2013, Sebastopol was the third City to join Sonoma Clean Power, enabling residents to access substantially cleaner electricity for their homes and businesses.
- Also in 2013, Sebastopol became the second city in the nation to require solar on new buildings, reducing its dependence on fossil fuels. The City has also adopted a streamlined permitting process for residential solar systems.
- Construction in the City requires builders to follow CalGreen Tier 1, which goes above the state building code requirements to create more efficient and green buildings.
- Sebastopol was the first city in the Bay Area to enroll in the Water Upgrades Save program from the Bay Area Regional Energy Network (BayREN), which helps customers switch to more water efficient equipment while reducing bills.

[47] https://www.worldgbc.org/sites/default/files/2018percent20GlobalABCpercent20Globalpercent20Statuspercent20Report.pdf; https://carbonleadershipforum.org/embodied-carbon-101/
[48] https://www.stopwaste.org/concrete; https://carbonleadershipforum.org/embodied-carbon-101/
[49] Embedded carbon emissions are included in the consumption-based, not activity-based, GHG Inventory.
[50] https://www.pge.com/pge_global/common/pdfs/customer-service/other-services/alternative-energy-providers/community-choice-aggregation/SCP_ElectricPowerGenerationMix.pdf
[51] https://sonomacleanpower.org/uploads/documents/SCPA-BOD-2022.03.03-Meeting-Agenda-Packet-with-Teleconference-Instructions.pdf
[52] https://bayarea.energyatlas.ucla.edu/profiles

Take Action

- Electrify your home by switching to an electric induction stove and heat pump water heater to improve indoor air quality and save money.
- Enroll in Sonoma Clean Power's EverGreen program to support local renewable energy.
- Install a solar + battery backup system to increase your household's resiliency during power outages.
- Conserve water by eliminating leaks and installing water-efficient plumbing.
- Install a greywater system, if appropriate for your home, to reuse household water for landscaping.

Measuring Progress

- # existing units retrofitted to be all-electric, by building type
- # and type of gas appliances replaced with electric appliances
- # new all-electric affordable housing units built
- Amount of energy storage installed
- # solar installations
- % reduction in citywide natural gas use, by building type
- % electricity from renewable sources
- % Sonoma Clean Power customers enrolled in EverGreen
- # households with greywater systems installed
- # households enrolled in BayREN Water Upgrades Save program

CONSUMPTION & WASTE

Goals

- Reach **Zero Waste** by 2030 by:
  - Minimizing solid waste production,
  - Increasing recycling, composting, and food recovery,
  - Supporting community sharing, mending, and reuse.
- Reduce emissions from the consumption of goods and services through education and advocacy.

In 2018, solid waste was responsible for 8.8 percent of Sebastopol's greenhouse gas emissions. Much of these emissions are produced when organic materials are sent to the landfill instead of composted. In the landfill, organic materials like food scraps and yard clippings produce methane, the potent GHG also found in natural gas. When composted instead, either at home or though the curbside green bin, these materials turn into a nutrient rich soil amendment that increases water retention, improves soil health, and supports plant growth which can increase carbon sequestration. Thus, diverting green waste both reduces emissions and produces a climate benefit.

However, landfill emissions do not paint a complete picture of the impact of purchases. Most emissions are created in the manufacturing and transportation processes, before the product is purchased by the consumer. As described in the GHG inventory section, these upstream consumption emissions are not included in activity-based GHG inventories because they are largely outside of local government control. Reducing these emissions is complex and requires a concerted effort by producers, consumers, and governments at all levels to transition to a more **circular economy**.

Key Terms

- **Zero Waste.** In Resolution 6214, Sebastopol adopted the Zero Waste International Alliance's definition of Zero Waste as "the conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health."[53]
- **Circular economy.** According to the Oakland Equitable Climate Action Plan, the term circular economy "refers to a system in which nothing is wasted. All materials are repurposed and kept in use, instead of being disposed. Through better design and consideration of a product lifecycle, circular economies keep products in use, regenerate natural systems, and eliminate the need for disposal. Many circular solutions, like repair, reuse, sharing, or cooperative production, can build community resilience while helping everyone meet their needs with fewer overall resources."[54]

[53] https://zwia.org/zero-waste-definition/
[54] https://www.oaklandca.gov/projects/2030ecap

Past Actions

- In October 2018, Sebastopol was the first jurisdiction in Sonoma County to adopt a Zero Waste Resolution (Resolution 6214) with the goal to achieve Zero Waste by 2030.[55]
- In 2019, the City followed this resolution with Ordinance 1125, banning disposable food serviceware and other products containing polystyrene foam, and requiring food providers to use compostable or recyclable disposable food serviceware.[56]
- An updated Zero Waste Food Ware Ordinance was adopted on January 18, 2022 (Ordinance 1135) and will replace the disposable food serviceware ban when it goes into effect on August 1, 2022.
- Special events in Sebastopol with food or beverage providers must complete a zero waste plan when they apply for a permit, describing how they will comply with Sebastopol's zero waste policies.[57]
- Sebastopol is also working with Zero Waste Sonoma to reduce the amount of organic material disposed of in the landfill, pursuant to the requirements of SB 1383.[58]

Take Action

- Sort your waste: put organic matter in the green bin and clean recyclables in the blue bin.
- Take advantage of Zero Waste Sonoma events to safely dispose of hazardous and bulky items.
- Use reusables (water bottles, utensils, bulk buy & leftover containers, produce bags, and shopping bags) to cut down on single use items.
- Share or swap items with friends or family and join "buy nothing" groups to reduce your consumption.
- Choose items with less packaging when shopping.
- Keep what you have by mending and fixing items.

Measuring Progress

- # of community repair and sharing facilities and events
- % organic waste diverted from landfill
- % reduction in solid waste produced

[55] https://zerowastesonoma.gov/reduce/commercial/zero-waste-resolution
[56] https://ci.sebastopol.ca.us/getattachment/City-Government/Boards,-Commissions-and-Committees/Zero-Waste-Subcommittee/Polysty-Outreach-Info-1019-C.pdf.aspx
[57] https://ci.sebastopol.ca.us/sebastopolsite/media/documents/public_works_dept/special-event-permit-application-2021.pdf?ext=.pdf
[58] https://www.ci.sebastopol.ca.us/getattachment/Meeting-Event/City-Council/2021/City-Council-Meeting-November-16,-2021/Agenda-Item-Number-7-Approval-of-MOU-SB-1383.pdf.aspx

COMMUNITY

Goals

- Ensure residents have the information they need to reduce their emissions and prepare for climate impacts. Work with property owners to make sure that renters also benefit.
- Actively involve all community members in decision-making, including Native American groups, youth, people of color, low-income residents, the LGBTQ+ community, renters, and other groups vulnerable to climate change impacts.
- Facilitate community discussions, connections, and collaboration.
- Collaborate with community-based organizations, neighboring jurisdictions, and regional bodies to implement actions.
- Improve community preparedness for climate-influenced hazards.

Community involvement is critical to successfully and equitably addressing climate change. Everyone has a role to play in reducing emissions and preparing for climate impacts, and they must also have a seat at the table in designing and implementing the solutions that will meet their needs. Ensuring that all segments of the community are able and invited to participate is key to addressing equity challenges and valuing community knowledge and experience. Additionally, a community-based approach will help to strengthen support networks that increase resilience for the changes ahead.

Past Actions

- The City partnered with local service organizations to hold Community Needs Summits in May 2021 and June 2022 to highlight local needs and volunteer opportunities.
- The City created the Climate Action Committee in 2020, giving citizens a voice on climate action in Sebastopol and elevating the topic of climate change within the City government.
- The Climate Action Committee is currently running a community Upcycled Art Project, which aims to educate community members about climate change and inspire them to take action through art pieces made from recycled objects.
- The City recently completed an update to its Local Hazard Mitigation Plan, which includes analysis of how climate change will exacerbate hazards, such as flooding, extreme heat/weather events, drought, and wildfires, in Sebastopol.
- The Sebastopol Fire Department funds preparedness efforts, including the Map Your Neighborhood program, which fosters neighborhood connections to improve residents' ability to respond to emergencies.

Take Action

- Join the Map Your Neighborhood program, the Sebastopol Neighborhood Communications Unit (SNCU), and/or another neighborhood group to build community and increase preparedness.
- Sign up for the City newsletter "Climate Issues" list to receive updates on climate topics.
- Attend a Climate Action Committee meeting to learn about ideas the CAC is currently discussing.
- Join a CAC Working Group to get more involved in designing and evaluating solutions.
- Participate in or host climate-friendly community-building events, such as clothing swaps, plant and produce exchanges, community service days, etc.

Measuring Progress

- # residents participating in Map Your Neighborhood
- # residents engaged in implementation of climate actions
- # residents who have received information about personal climate mitigation and adaptation actions

CITY OPERATIONS & LEADERSHIP

Goals

- Integrate climate and equity considerations into every policy and action.
- Pursue adequate funding and staffing needed to implement climate solutions, including robust community education and engagement activities.
- Reach carbon neutrality for all City-owned buildings and City operations by 2030 or sooner.
- Provide transparent and bold leadership on climate.

The Sebastopol General Plan sets the goal of making "proactive, forward-thinking environmental protection and resource management the cornerstone of Sebastopol's identity" (Goal COS-1). The City of Sebastopol has embodied this goal in its past actions and can continue to lead by example by implementing additional mitigation and adaptation strategies in its own operations and incorporating climate considerations into every decision.

Municipal Energy Use

Municipal electricity use peaked in 2008 at 1,905,360 kilowatt-hours (kWh) and municipal natural gas use peaked in 2009 at 47,504 therms (thms). Since then, both electricity and natural gas use have declined, with a more pronounced reduction in natural gas use (Figure 11). In 2020, City buildings used 1,290,199 kWh of electricity and 30,869 thms of natural gas. Pandemic-related changes in building operations likely affected energy use in 2020. In 2019, energy use was higher, at 1,658,942 kWh and 34,326 thms.

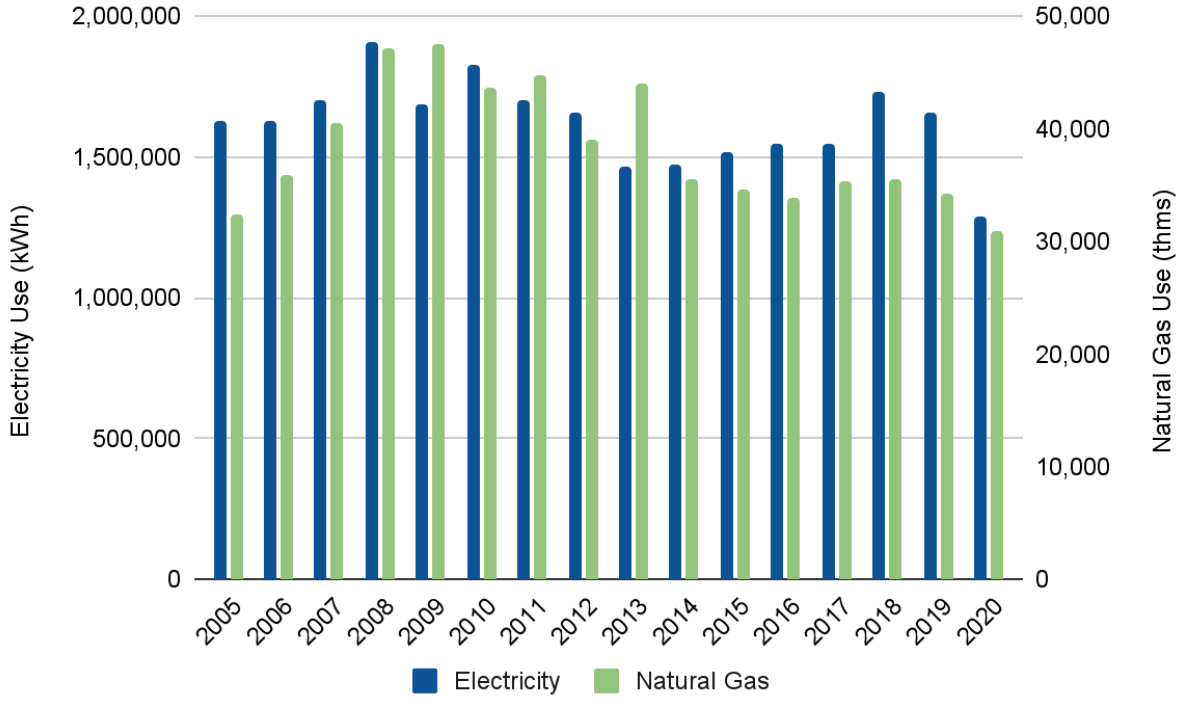


Figure 11. Energy use by City PG&E accounts, 2005 to 2020.

Past Actions

- The City's utility accounts have been enrolled in SCP's EverGreen program since 2019.[59]
- In 2002, Resolution 5246 established the City's preference for purchasing the lowest emission vehicles possible for its fleet.
- The City's Purchasing Policy includes an Environmentally Preferable Purchasing Policy (EPPP) aimed at reducing waste and minimizing environmental impacts. The Purchasing Policy was most recently amended in April 2022 to incorporate composting requirements under SB 1383.
- There are solar installations on most City buildings, including the Ives Pool Building, Police Station, City Hall, Fire Station, and Public Works Corporation Yard.[60] In 2020, the City's 10 solar installations produced 336,055 kilowatt-hours of energy in total, saving $151,225 in electricity costs.[61]
- In 2014, the City re-landscaped the City Hall and Library property to incorporate permaculture, food forest, and low-water use elements.[62]

Take Action

- Sign up to receive City Council meeting agendas by email to stay informed about City decision-making.
- Attend City Council and other public meetings when there is an agenda item of interest and speak during public comment to share your opinion.

Measuring Progress

- # City buildings retrofitted to be all-electric
- # and type of gas tools and equipment retired and replaced with electric alternatives
- # EVs in City fleet
- % City contracts requiring elimination of fossil fuels
- % reduction in natural gas use by City-owned buildings
- % reduction in water use by the City

[59] https://soconews.org/sonoma_west_times_and_news/news/sebastopol-city-council-goes-greener/article_d944f622-a8da-11e9-8334-b33615d7eecf.html
[60] https://www.ci.sebastopol.ca.us/Article/New-Solar-Panels-at-Ives-Pool-Building-and-Public
[61] https://www.ci.sebastopol.ca.us/getattachment/8279cf7a-78d6-4c2c-b92e-343953f507c2/4-20-21-LOS-Staff-Report-Final_Corrected-Page-Numbering-with-Clerical-Edits_FINAL.pdf.aspx?lang=en-US&ext=.pdf
[62] https://soconews.org/scn_sebastopol_west_county/news/time-bank-volunteers-clean-up-the-gardens-around-the-library-and-city-hall/article_593c7e82-b566-11ec-9a57-0316ed81c0a7.html

MOVING FORWARD

As the name suggests, this document is a framework for additional action. The goals provided in each section are broad, yet identify areas of focus that can move Sebastopol towards a resilient and zero-emission future. By adopting this Framework, the City does not commit to any new actions. However, potential actions that may help the City reach the goals listed in the Framework are included in Appendix A: Actions for Future Consideration. It is recommended that with the adoption of the Framework, the City move rapidly towards implementing such actions that are found to be feasible, equitable, and beneficial with further analysis.

The Climate Action Committee (CAC), with the assistance of Planning Department staff, will work to move specific actions items forward for consideration and approval by the City Council. It is recommended that the CAC set specific, achievable goals biannually that detail the strategies to be evaluated in each 6-month period. The process for moving actions forward is detailed in Appendix B: Climate Action Committee (CAC) Project Generation & Development Steps. Once approved by the City Council, implementation of actions will likely involve coordination between a wide range of City departments, including Engineering, Building and Safety, and Public Works, the CAC, as well as community and regional partners.

Progress towards carbon neutrality will be tracked by the RCPA, which conducts countywide greenhouse gas (GHG) inventories every two years. The City should also track or monitor the metrics included in each Action Area section, under the “Measuring Progress” headers. These metrics, such as reduction in vehicle miles traveled (VMT) and amount of energy storage installed, provide ways to evaluate progress towards the more specific Action Area goals.

In future City planning efforts, climate considerations must continue to be prioritized. The Framework should serve as a reference for these future plans to ensure that they contribute to the City’s climate goals. The next General Plan update will likely not be for many years, and will be an opportunity to reassess the City’s climate progress and commitments and plan accordingly. At that time, the City may consider creating a climate element in the General Plan, as cities such as Rohnert Park are doing, or otherwise ensuring that climate action is incorporated into any updates.

Achieving carbon neutrality and increasing resilience in the face of climate change will require action by every part of our society. This Framework calls for further action from both the City and the Sebastopol community, while recognizing that state, federal, and global actions also impact the feasibility of reaching net zero in Sebastopol. Continued collaboration is needed to address topics that are outside the scope of this Framework and/or outside of the jurisdiction of City of Sebastopol, including pass-through traffic, emissions from the consumption of goods and services, watershed-level issues, and more. The City must continue working with regional partners, including the RCPA and neighboring jurisdictions, to address these topics and amplify climate action across Sonoma County and beyond.

APPENDIX A: Actions for Future Consideration

The actions in this section are not adopted by the Sebastopol City Council as part of this Framework and are provided for reference only. However, it is recommended that the Council prioritize their consideration in the near future in order to make progress towards the City's climate goals. Some of the suggested actions require additional analysis under the California Environmental Quality Act (CEQA), and all have funding and staffing implications that should be carefully evaluated.

The actions listed below come from a variety of sources: community suggestions, review of other cities' climate action and adaptation plans, research papers from experts in the field, and more. Rather than a comprehensive list, Appendix A is intended to serve as a living guide for climate actions for the City of Sebastopol to consider, and evolve in response to community interest and needs, technological advances, and climate realities. This list provides a starting point for Sebastopol to take further action, while recognizing that new actions and ideas are critical to addressing climate change.

In evaluating the actions included here and elsewhere, it is recommended that the City focus on actions in the following three categories to maximize the impact of City resources:

1. Leading by example.
    a. Incorporating climate considerations into every aspect of City decision-making.
    b. Continuing to green City operations and buildings.
2. Implementing actions that have regional support, such as projects where the RCPA and/or SCTA have developed resources for local jurisdictions to use or can provide assistance.
    a. For example, collaborating with RCPA to develop an existing buildings electrification strategy.
3. Expanding community education and engagement efforts.
    a. Connecting residents and property owners with programs that support electrification, energy efficiency, water efficiency, disaster preparedness, etc.
    b. Prioritizing community engagement in designing, evaluating, and implementing climate mitigation and adaptation strategies.

How to Read Appendix A

Appendix A is organized by the six Action Areas included in the body of the Framework:

- Transportation
- Sustainable Land Use
- Buildings and Clean Energy
- Consumption and Waste
- Community
- City Operations and Leadership

Within each Action Area, potential actions are included that could support the Action Area's goals. Each potential action includes the following information:

- **Action**: A brief description of the potential action.
- **Co-Benefits**: Many actions that reduce greenhouse gas emissions have additional community benefits, such as:
    - Increased Resilience
    - Better Air Quality
    - Improved Community Health & Safety
    - Potential Green Jobs
    - Improved Mobility
- **Lead/Partners**: The City Department(s) that would be responsible for implementing this action if approved by Council, and any regional partners that might be involved, if applicable.
- **Timeframe**: The recommended timeframe for the action to be implemented.
    - Ongoing: A City body or department is already working on this topic.
    - Near Term: The action should be initiated within the next 1-2 years.
    - Mid-Term: The action should be initiated within the next 3-7 years.
    - Long Term: The action requires additional collaboration, support, and/or legislation to begin implementation and requires a longer or unknown timeframe.
- **Related City Goal(s)**: Unless otherwise specified, goals refer to General Plan goals. Many actions suggested in Appendix A, or very similar actions, are already included in the City's 2016 General Plan. Actions in the General Plan have been reviewed for compliance with the California Environmental Quality Act (CEQA), removing one barrier to implementation.
- **RCPA Category**: To integrate Sebastopol's goals with regional efforts, symbols identify how actions relate to the RCPA's Sonoma Climate Mobilization Strategy, which is organized into the following categories:
    - 🙋 Equity and Community Engagement
    - 💡 Decarbonization
    - 🌳 Carbon Sequestration and Ecosystem Services
    - 🛠️ Resilience and Adaptation

TRANSPORTATION

1. Prioritize active transportation in transportation planning to make Sebastopol people-centric, rather than car-centric.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
T1.1	Evaluate the possibility of establishing temporary and/or permanent car-free street areas in community-determined locations.	Better Air Quality, Improved Mobility	Planning/ Engineering	Near Term	CIR 1	🙋💡
T1.2	Consider reducing or removing parking requirement minimums in transit-oriented areas such as Downtown Sebastopol.	Better Air Quality	Planning	Near Term	CIR 1, CIR 6	💡
T1.3	Consider reducing parking requirements for new developments when bike share programs are included.	Improved Community Health & Safety	Planning / SCTA	Near Term	CIR 6	💡
T1.4	Explore updates to on- and off-street parking policies that could encourage active transportation, such as demand-based pricing and improved monitoring.	Improved Community Health & Safety	Engineering /Police/ Planning	Mid-Term	CIR 6	💡
T1.5	Build no new City-owned off-street parking and consider transitioning existing lots to more beneficial uses, such as multifamily housing or parks.		Council	Near Term	CIR 6	💡
T1.6	Consider developing a park-and-ride program for visitors to reduce downtown traffic and parking challenges.	Better Air Quality		Mid-Term	CIR 2	💡

2. Reduce vehicle miles traveled (VMT) by Sebastopol residents.

ACTION	CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
T2.1 Consider altering the City's Trip Reduction Program (Municipal Code Section 8.16) to require or incentivize all employers with more than 25 employees to provide alternative commute incentives to employees.	Improved Community Health & Safety	Council	Mid-Term	CIR 5	💡
T2.2 Pilot or promote electric car sharing programs, particularly in neighborhoods with fewer transportation options and in affordable apartment complexes.	Improved Mobility, Potential Green Jobs		Mid-Term	CIR 5	💡
T2.3 Create a citywide survey to assess residents' transportation needs and barriers to alternative transit.	Improved Mobility	Engineering	Near Term	CIR 5	🙋
T2.4 Work with schools to increase student bus ridership and reduce traffic issues near schools.	Improved Mobility	Schools/ Council	Near Term		💡

3. Make biking, walking, and other active transportation options safer and easier by implementing a Complete Streets approach to street design.

ACTION	CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
T3.1 In the upcoming Countywide Action Transportation Plan/Sebastopol Bicycle and Pedestrian Master Plan update, prioritize: - Development of protected (Class IV) bike lanes. - Development of more shared use paths (Class I) that connect Sebastopol to regional destinations. - Understanding of community needs and priorities.	Improved Community Health & Safety, Improved Mobility	Engineering /Planning/ SCTA	Near Term	CIR 2	💡🙋

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
T3.2	Explore micromobility options such as bike or e-bike share programs.	Improved Community Health & Safety, Improved Mobility, Potential Green Jobs	CAC/ Engineering	Ongoing	CIR 2	💡
T3.3	Ensure all traffic signals have bicycle detectors.	Improved Mobility	Engineering /CalTrans	Ongoing	CIR 2	💡
T3.4	Improve access to bike parking in downtown Sebastopol, commercial areas, and other destinations.		Public Works/ Engineering /Planning	Ongoing	CIR 2	💡
T3.5	Develop a complete network of well-maintained sidewalks.	Improved Community Health & Safety, Improved Mobility	Engineering	Ongoing	CIR 2	💡
T3.6	Review SCTA's Vision Zero Report and adopt a Vision Zero Resolution that identifies actions Sebastopol will implement to eliminate traffic fatalities.	Improved Community Health & Safety	Engineering	Near Term	CIR 2	
T3.7	Implement traffic calming measures, such as roundabouts and reduced speeds, where appropriate.	Improved Community Health & Safety	Engineering /Police /CalTrans	Mid-Term	CIR 1	
T3.8	Reevaluate street standards for walkability and pedestrian safety and to incorporate climate resilience strategies.	Increased Resilience	Engineering /Police /Planning	Mid-Term	CIR 2	💡🌳

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
T3.9	Expand participation in Safe Routes to Schools and other bike education programs.	Improved Community Health & Safety	Engineering /Police /Planning	Ongoing	CIR 2	🙋
T3.10	Explore bypass options for CA-116.	Better Air Quality	Sonoma County/ Planning/ Engineering	Long Term	CIR 1	💡

4. Improve and electrify public transportation options.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
T4.1	Advocate for more reliable and frequent public transit, potentially including a second electric bus on Local Route 24.	Improved Mobility	Council	Mid-Term	CIR 2	💡
T4.2	Partner with Sonoma County Transit to increase bus ridership, including by evaluating and addressing barriers to ridership and education campaigns.	Improved Community Health & Safety, Improved Mobility	Sonoma County Transit/ Council	Mid-Term	CIR 2	💡
T4.3	Work with regional partners to transition to electric buses.	Better Air Quality	SCTA	Near Term	CIR 5	💡
T4.4	Work with regional partners to improve scheduling for out-of-town trips.	Improved Mobility	Council	Near Term	CIR 2	💡

5. Support a rapid, equitable transition to electric vehicles (EVs) for trips requiring a personal vehicle.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
T5.1	Consider signage requirements at the street entrances of parking lots with EV chargers to make EV charging stations more visible.	Better Air Quality	Public Works	Near Term	CIR 5	🙋💡
T5.2	Consider adopting CalGreen Tier 2 EV charging infrastructure requirements.	Better Air Quality	Building	Near Term	CIR 5	💡
T5.3	Evaluate the possibility of an on-street EV charging pilot program.	Better Air Quality	Engineering /Public Works/ Planning	Mid-Term	CIR 5	💡
T5.4	Work with low-income and other apartment complexes and condominiums to support EV charger installation.	Better Air Quality	Planning	Near-Term	CIR 5	💡
T5.5	Provide information about EVs, including available incentives and charging infrastructure, in a well-organized and clear manner on the City website.	Better Air Quality	City Admin	Near Term	CIR 5, COS 9	🙋
T5.6	Apply the Bay Area Air Quality Management District's April 2022 California Environmental Quality Act (CEQA) thresholds to all land use projects to encourage EV infrastructure installation.	Better Air Quality	Planning	Near Term	CIR 5	💡
T5.7	Consider adopting actions in the RCPA/SCTA Electric Vehicle Ready Community Resolution.	Better Air Quality	Council	Near Term	CIR 5	💡

SUSTAINABLE LAND USE

1. Promote infill housing at appropriate densities within Sebastopol's voter-approved urban growth boundary that reduces VMT by locating housing within walking or biking distance of basic daily needs.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
LU1.1	Review zoning and revise as necessary to ensure that the majority of residents can be located within a 15-minute walk or bike ride of most essential daily destinations.	Improved Mobility	Planning	Near Term	LU 2, LU 5, CIR 3	💡
LU1.2	Implement actions included in the General Plan Housing Element update (in progress).		Varies		Housing	💡

2. Maintain and expand carbon sequestration potential and adaptation benefits through nature-based solutions.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
LU2.1	Protect, and restore where needed, existing trees, green spaces/infrastructure, and wetland areas.	Increased Resilience, Better Air Quality	Planning/ Public Works	Near Term	COS 2, COS 4, COS 6	🌳🛠️
LU2.2	Develop an urban forest plan to increase canopy coverage by planting native, drought tolerant trees. The plan should identify areas in need of additional trees using tools such as theTree Equity Score and Bay Area Greenprint, set coverage goal dates, and address funding and community engagement needs.	Increased Resilience, Better Air Quality	Planning/ Public Works/ RCPA	Near Term	COS 6	🌳🛠️
LU2.3	Increase natural shading of bike paths, walkways, and bus stops to encourage alternative transportation on warm days.	Increased Resilience	Public Works	Near Term	CIR 2	🌳🛠️

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
LU2.4	Continue enforcing the Tree Protection Ordinance and consider expanding to require replacement of all trees and prevent planting of fire-prone trees.	Increased Resilience, Better Air Quality	Planning/ Fire/RCPA	Ongoing	COS 6	🌳🛠️
LU2.5	Evaluate opportunities for establishing new parks in areas with less access, such as the southwest corner of Sebastopol.	Increased Resilience	Planning	Long Term	CSF 2	🌳🛠️
LU2.6	Promoting regenerative landscaping practices, including mulching and composting, through community education and implementation on City-owned properties.	Increased Resilience	Planning/ Public Works	Near Term		🌳🛠️
LU2.7	Encourage local, sustainable agriculture and home gardening to improve food security and soil health.	Increased Resilience	CAC	Near Term	COS 12	🌳🛠️

3. Manage public spaces to conserve, capture, and retain water and encourage private landowners to do the same.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
LU3.1	Reduce impervious surface cover citywide, with a preference for replacement by green infrastructure where possible.	Increased Resilience	Planning/ Engineering /Public Works	Near Term		🛠️
LU3.2	Require and/or incentivize green infrastructure in future developments.	Increased Resilience, Potential Green Jobs	Engineering /Planning/P ublic Works	Near Term		🌳🛠️
LU3.3	Encourage native, drought tolerant landscaping in residential yards, commercial areas, and other landscaped spaces.	Increased Resilience	Planning/ CAC	Ongoing		🛠️

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
LU3.4	Consider enhancing Sebastopol's Water Efficient Landscape Program to be more stringent than the state's.	Increased Resilience	Planning/ Building	Near Term	COS 9	🛠️
LU3.5	Continue conducting compost giveaways and expand education about benefits of composting.	Increased Resilience	CAC	Ongoing		🙋🛠️
LU3.6	Implement actions identified in the LHMP Drought section, including continued participation in the Santa Rosa Plain Groundwater Sustainability Agency.	Increased Resilience	Engineering	Ongoing	LHMP	🛠️

4. Minimize construction in areas at risk of wildfire or flooding while meeting local housing needs.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
LU4.1	Use Bay Area Greenprint tool and other data sources to map potential climate hazards and incorporate these considerations into the evaluation of new developments. Discourage and/or prohibit new development in high-risk areas.	Increased Resilience, Improved Community Health & Safety	Planning	Near Term	SA 2, SA 4, LHMP Goal 1	🛠️
LU4.2	Increase density and encourage infill development rather than increasing urban footprint to limit increases in fire/flood danger.	Increased Resilience, Improved Community Health & Safety	Planning	Near Term	SA 2, SA 4, LHMP Goal 1	🛠️

BUILDINGS AND CLEAN ENERGY

1. Reduce greenhouse gas (GHG) emissions from buildings and support better community health by:
    a. Eliminating natural gas use in new buildings,
    b. Electrifying existing structures,
    c. Minimizing embodied carbon in new construction and remodels,
    d. Making all buildings more energy efficient.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
BE1.1	Apply the Bay Area Air Quality Management District's April 2022 California Environmental Quality Act (CEQA) thresholds to all land use projects to encourage electrification.	Improved Community Health & Safety, Potential Green Jobs	Planning	Near Term	COS 8	💡
BE1.2	Adopt an all-electric code for new construction and major remodels by 2026 at the latest.	Improved Community Health & Safety, Potential Green Jobs	Building	Near Term	COS 8	💡
BE1.3	Promote residential electrification and energy efficiency programs such as those from BayREN, Sonoma Clean Power, and Sonoma County's Energy and Sustainability Division.	Improved Community Health & Safety, Potential Green Jobs	Building/ Planning/ CAC	Near Term	COS 9	🙋💡
BE1.4	Develop an existing building electrification strategy, such as the one developed by the City of Berkeley, in partnership with the RCPA.	Improved Community Health & Safety,	Building/ Planning/ RCPA	Near Term	COS 8	💡

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
		Potential Green Jobs				
BE1.5	Develop a pilot program to electrify an entire block group or neighborhood.	Improved Community Health & Safety, Potential Green Jobs		Mid-Term	COS 8	💡
BE1.6	Support workforce development programs, such as those from Sonoma Clean Power, to increase the number of workers who can implement electrification and efficiency upgrades.	Potential Green Jobs		Near Term		💡
BE1.7	Re-adopt CalGreen Tier 1 each code cycle.	Improved Community Health & Safety, Potential Green Jobs	Building	Ongoing	COS 9	💡
BE1.8	Promote the use of green building materials through education efforts and supporting local suppliers.	Potential Green Jobs	Building/ Planning	Ongoing	COS 9	💡
BE1.9	Consider developing building energy efficiency standards and/or an energy assessment and disclosure policy.		Building	Mid-Term	COS 9	💡
BE1.10	Evaluate options to increase compliance with energy code requirements, including permit requirements for HVAC systems, hot water heaters, insulation, etc.		Building	Mid-Term		💡
BE1.11	Consider adopting a low-carbon concrete ordinance when it becomes cost-effective. In the meantime,	Potential Green Jobs	Building	Long Term	COS 8, COS 9	💡

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
	explore ways to attract or support the development of local low-carbon concrete suppliers.					

2. Support low-income residents, renters, and others who face barriers to electrification or energy efficiency upgrades.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
BE2.1	Focus education and outreach efforts on low-income, BIPOC, and other vulnerable households and ensure these outreach efforts are culturally sensitive.		Building	Near Term		🙋
BE2.2	Prioritize development of new, all-electric affordable housing.		Planning/ Building	Near Term		🙋💡
BE2.3	Work with regional partners to develop a funding mechanism for electrification and weatherization retrofits in low-income households and multi-family units.	Improved Community Health & Safety	Building/ Planning	Near Term		🙋💡
BE2.4	Ensure vulnerable residents are not burdened by the shift away from gas infrastructure through advocating for dedicated funding and exploring neighborhood-level electrification.		Building	Near Term		🙋💡
BE2.5	Develop a tenant protection policy to prevent displacement due to electrification.			Long Term		🙋💡

3. Expand the installation of solar panels and other renewable energy sources, both locally and in partnership with other entities in Sonoma County, to further decarbonize Sebastopol's electricity supply.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
BE3.1	Promote solar and battery storage consultations offered by the Sonoma County Energy and Sustainability Division.	Increased Resilience	Building	Near Term	COS 8, COS 9	🛠️💡
BE3.2	Continue requiring solar panel installations on new construction and remodels in the City.	Potential Green Jobs	Building	Ongoing	COS 9	💡
BE3.3	Promote participation in Sonoma Clean Power's EverGreen program.		Council/ Admin	Near Term	COS 8, COS 9	💡
BE3.4	Explore community solar options.		Building/ Planning	Long Term	COS 8, COS 9	💡

4. Maximize water conservation and reuse.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
BE4.1	Encourage the installation of residential greywater and rainwater collection systems to reduce water demand.	Increased Resilience, Potential Green Jobs	Building/ Planning	Near Term	COS 9	🛠️
BE4.2	Continue conservation efforts such as mandatory conservation requirements and voluntary water efficiency measures through the BayREN Water Upgrade Save program.	Increased Resilience	Council/ Public Works/ Engineering	Ongoing	COS 9	🛠️
BE4.3	Continue implementing and expanding the Low Impact Development (LID) program.		Engineering	Ongoing		🛠️

5. Make buildings more resistant to climate change impacts, such as damage from floods, wildfires, extreme weather events, and other climate hazards.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
BE5.1	Revise zoning and building codes to reflect climate-driven increases in risk and promote climate-aware development.	Increased Resilience, Improved Community Health & Safety	Planning/ Building/ Fire	Near Term	SA 2, SA 4	🛠️
BE5.2	Conduct public outreach to promote fire-safe landscaping practices, such as defensible space, rain gardens, etc.	Increased Resilience, Improved Community Health & Safety	Fire		SA 4	🙋
BE5.3	Evaluate the need for a vegetation management plan to reduce fire risk.	Increased Resilience, Improved Community Health & Safety	Fire		SA 4	🛠️
BE5.4	Increase public awareness of existing programs that help residents fund resilience-related housing retrofits.	Increased Resilience, Improved Community Health & Safety	Building/ Fire		COS 8	🙋
BE5.5	Implement relevant actions identified in the Local Hazard Mitigation Plan, particularly the wildfire and flooding sections (e.g., W-2 and F-7).	Increased Resilience, Improved Community Health & Safety	Building/ Fire/ Planning	Varies	SA 2, SA 4	🛠️

6. Ensure energy sources are reliable during extreme weather conditions.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
BE6.1	Develop and/or promote the development of clean energy microgrids to back up critical infrastructure such as cell towers, cooling centers, and resilience hubs.	Increased Resilience, Potential Green Jobs		Near Term	LHMP	
BE6.2	Encourage solar + battery backup systems for residents. Consider creating a streamlined permitting process for battery installations and provide information on the City webpage with links to relevant programs from Sonoma Clean Power, the Sonoma County Energy and Sustainability Division, and BayREN.	Increased Resilience, Potential Green Jobs	Building	Near Term		
BE6.3	Advocate for a more reliable grid, including undergrounding of lines and sectionalization of the grid.	Increased Resilience	Council/ CAC	Near Term		

CONSUMPTION AND WASTE

1. Reach Zero Waste by 2030 by:
    a. Minimizing solid waste production,
    b. Increasing recycling, composting, and food recovery,
    c. Supporting community sharing, mending, and reuse.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
CW1.1	Create a Zero Waste Strategy that sets measurable goals for organics diversion and waste reduction, outlines how the City will achieve these goals, and includes data gathering methods for tracking implementation.		Engineering	Near Term	COS 9	💡
CW1.2	Work with Recology and Zero Waste Sonoma to improve data collection on waste production in Sebastopol.		Engineering	Mid-Term	COS 9	
CW1.3	Increase education and enforcement of the City's Disposable Food Serviceware ordinance.		CAC/ Engineering	Ongoing	COS 9	🙋
CW1.4	Increase enforcement of Zero Waste Plans at events.		Engineering	Ongoing	COS 9	💡
CW1.5	Increase use of reusable food serviceware in Sebastopol restaurants.		Engineering		COS 9	💡
CW1.6	Support adoption and implementation of the countywide Construction and Demolition Reuse and Recycling Ordinance.	Potential Green Jobs	Building		COS 9, Resolution 6214	💡
CW1.7	Fully fund and implement the requirements of SB1383, including education of all stakeholders.		Council/ Engineering	Ongoing	COS 9	💡
CW1.8	Work with schools to implement on-campus recycling and composting programs and educate students about waste management.		CAC/ Schools	Near Term	COS 9	🙋
CW1.9	Evaluate the need to develop an edible food recovery program.			Mid-Term		💡

2. Reduce emissions from the consumption of goods and services through education and advocacy.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
CW2.1	Work with schools to educate youth about consumption emissions.		CAC			🙋
CW2.2	Encourage green business certification for local businesses.		CAC	Near Term	EV 1, COS 8	💡
CW2.3	Advocate for state legislation requiring increased transparency about climate impacts of goods.		Council	Long Term		
CW2.4	Explore methods to evaluate consumption emissions at regular intervals.		CAC	Long Term		
CW2.5	Explore ways to promote the transition to a green economy with high quality jobs.	Potential Green Jobs	CAC	Long Term	EV 1	
CW2.6	Work with regional partners to create a long term plan to incentivize local systems of production for goods and services.	Increased Resilience, Potential Green Jobs	Council	Long Term		

COMMUNITY

1. Ensure residents have the information they need to reduce their emissions and prepare for climate impacts. Work with property owners to make sure that renters also benefit.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
C1.1	Provide clear, multilingual climate resources for residents on the City website, at City Hall, and at all community events where the City is present.		City Admin	Near Term	COS 8, COS 9	🙋
C1.2	Improve the organization and content of the City website as it relates to sustainability and climate change.		City Admin	Near Term	COS 8	🙋
C1.3	Partner with schools to educate and engage youth on climate topics, including by supporting teachers in developing climate curriculum.		CAC	Mid-Term		🙋
C1.4	Expand climate and sustainability social media efforts.		CAC	Near Term	COS 8	🙋
C1.5	Develop a monthly or quarterly climate newsletter to highlight progress and share resources.		CAC	Near Term	COS 8	🙋
C1.6	Continue to promote electrification, water efficiency, solar, and other sustainability programs, such as those offered by Sonoma Clean Power, the Sonoma County Energy and Sustainability Division, and BayREN.		City Admin	Ongoing	COS 8	🙋
C1.7	In partnership with these groups, work to create and implement outreach campaigns to increase knowledge of building electrification benefits.		Building	Near Term	COS 8	🙋
C1.8	In all climate communications, strive to promote positive narratives about climate change, human agency, and the interconnectivity of all living beings.		Citywide	Near Term		🙋
C1.9	Develop a green citizen pledge to promote resident action.		CAC		COS 8	🙋

2. Actively involve all community members in decision-making, including Native American groups, youth, people of color, low-income residents, the LGBTQ+ community, renters, and other groups vulnerable to climate change impacts.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
C2.1	Develop a long-term community engagement strategy to implement climate actions in partnership with community-based organizations, vulnerable groups, and other stakeholders.		CAC/ Planning	Near Term	CSF 6	🙋
C2.2	Research, acknowledge, and address past harms to disenfranchised groups through an inclusive, community-based process.		Citywide		CHW 5	🙋
C2.3	Develop and track metrics to ensure community engagement is proactive, multilingual, and reaches all segments of the community.			Near Term	CHW 5	🙋
C2.4	Provide ample opportunities for community input in the implementation phase of each action, and actively seek input from underrepresented groups.		Citywide		CSF 6	🙋
C2.5	Schedule, format, and locate community workshops and meetings to be convenient and accessible for community members, including by offering childcare and refreshments when appropriate.		Citywide		CSF 6	🙋
C2.6	Pursue funding to provide compensation to low-income residents who provide their input on climate actions.					🙋
C2.7	Explore new and innovative outreach methods to better involve all community members in climate efforts.		Citywide		CSF 6	🙋

3. Facilitate community discussions, connections, and collaboration.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
C3.1	Continue implementing and expanding the Map Your Neighborhood program.	Increased Resilience	Fire	Ongoing		🛠️
C3.2	Continue supporting the Sebastopol Time Bank.		Council	Ongoing		
C3.3	Continue staffing the Climate Action Committee and explore ways to increase public engagement with this committee.		Planning	Ongoing	CSF 6	🙋
C3.4	Continue convening local service groups and community-based organizations to promote collaboration and support networks.	Increased Resilience	Citywide	Ongoing		🙋
C3.5	Host or co-sponsor climate-friendly community-building events, such as climate fairs, clothing swaps, plant and produce exchanges, community service days, etc.	Increased Resilience	CAC			🙋
C3.6	Create ways for residents to develop innovative climate solutions and share knowledge.		CAC			🙋
C3.7	Support storytelling as a technique for healing trauma, a method of sharing knowledge, and a way to build community.	Increased Resilience	CAC		CHW 1	🙋

4. Collaborate with community-based organizations, neighboring jurisdictions, and regional bodies to implement actions.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
C4.1	Work with RCPA and other Sonoma County jurisdictions to implement relevant recommendations from the 2021 Urban Land Institute report regarding wildfire and energy resilience.	Increased Resilience	Fire/ Building	Mid-Term	SA 4	🛠️

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
C4.2	Identify and formalize partnerships with community-based organizations and leaders in disadvantaged communities to ensure that local residents can meaningfully participate in planning processes.		Planning	Near Term		👩‍💼
C4.3	Participate in the Sonoma County Local Government EV Partnership to advance EV adoption.	Better Air Quality	Planning	Near Term		💡

5. Improve community preparedness for climate-influenced hazards.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
C5.1	Work with community partners to create a pilot community resilience hub that provides disaster preparedness and relief services.	Increased Resilience, Improved Community Health & Safety, Potential Green Jobs	Fire/Police	Near Term	SA 3	🛠️
C5.2	Increase the number and capacity of cooling center locations.	Increased Resilience, Improved Community Health & Safety	Fire	Near Term		🛠️
C5.3	Develop evacuation plans for all neighborhoods with designated evacuation points.	Improved Community Health & Safety	Fire		SA 3	🛠️

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
C5.4	Develop an education campaign, with targeted outreach to vulnerable populations, to help residents understand available disaster preparedness resources and how to access them.	Improved Community Health & Safety	Fire		SA 3	🛠️
C5.5	Continue implementing and expanding the Map Your Neighborhood program.	Increased Resilience, Improved Community Health & Safety	Fire	Ongoing	SA 3	🛠️
C5.6	Ensure communication methods are in place for disasters, and are culturally appropriate and accessible for all residents.	Improved Community Health & Safety	Fire	Ongoing	SA 3	🛠️
C5.7	Support community mental health in the face of climate change.	Increased Resilience, Improved Community Health & Safety			CHW 1	🛠️

CITY OPERATIONS AND LEADERSHIP

1. Integrate climate and equity considerations into every policy and action.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
CO1.1	Add a "climate impacts" section to every staff report. Develop a checklist or other tool to help staff evaluate potential climate impacts.		Council	Near Term	COS 1, COS 8	
CO1.2	Provide training to all staff and elected officials in how to consider climate and equity in decision-making.		Planning/ CAC	Near Term	COS 1	
CO1.3	Analyze each climate action through an equity lens, to ensure that mitigation actions (1) do not have detrimental effects on Sebastopol's vulnerable populations; (2) are targeted to serve vulnerable community members, and therefore are accessible to the larger community; and (3) distribute the benefits of climate action equitably.[1]		Citywide			🙋
CO1.4	Align permit approvals with Framework goals.		Planning/ Building	Near Term	COS 1	
CO1.5	Incorporate the Framework's goals into the next General Plan update.		Planning	Long Term	COS 1	

[1] Adapted from the Flagstaff Carbon Neutrality Plan.

2. Pursue adequate funding and staffing needed to implement climate solutions, including robust community education and engagement activities.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
CO2.1	Fund a full- or part-time sustainability staff position to implement climate actions, coordinate and engage with stakeholders, and oversee progress.		Council	Near Term	COS 8	
CO2.2	Fund a City grant writer to pursue climate funding opportunities.		Council			
CO2.3	Continue participating in the RCPA and other regional coordination efforts to benefit from knowledge sharing and collaboration opportunities.		Council/ Planning	Ongoing	COS 8	

3. Reach carbon neutrality for all City-owned buildings and City operations by 2030 or sooner.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
CO3.1	Assess opportunities for electrification and energy efficiency retrofits in City-owned buildings to achieve zero emissions, potentially through the BayREN Municipal ZNE/ZNC Assistance Program.		Public Works/ Engineering /Building	Near Term	COS 8, COS 9	💡
CO3.2	Require retrofits of City-owned buildings to be all-electric and install no new gas infrastructure or appliances in City-owned and operated buildings.		Council	Near Term	COS 8	💡
CO3.3	Purchase no new fossil fuel-powered vehicles for the City fleet unless no viable alternative exists.	Better Air Quality	Council / City Depts	Near Term	COS 8	💡
CO3.4	Develop a plan to electrify the City fleet by date certain.	Better Air Quality	Citywide	Mid-Term	COS 8	💡
CO3.5	Pursue contract language to electrify garbage trucks serving Sebastopol at the next contract renewal opportunity.	Better Air Quality	Engineering	Near Term	COS 8	💡

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
CO3.6	Replace City gas yard equipment and other tools with electric alternatives at end-of-life.	Better Air Quality	Public Works	Near Term	COS 8	💡
CO3.6	Continue implementing and strengthening the City's environmentally preferable purchasing policy, including by incorporating a climate-friendly food policy for City events and evaluating the fossil fuel consumption of all City contractors.		CAC/ Council	Ongoing	COS 8	💡
CO3.6	Assess the possibility of installing additional solar and battery backup systems at City-owned sites, including at City-owned wells.	Increased Resilience	Public Works/ Building	Near Term		🛠️

4. Provide transparent and bold leadership on climate.

ACTION		CO-BENEFITS	LEAD / PARTNERS	TIMEFRAME	RELATED CITY GOAL(S)	RCPA CATEGORY
CO4.1	Implement actions included in the Community section.		Citywide	Varies		🙋
CO4.2	Provide up-to-date information on climate progress on the City website, including data on the City's progress towards carbon neutrality for municipal operations and other metrics included in the Framework document.		Planning/ Citywide	Near Term	COS 8, COS 9	🙋
CO4.3	Fully utilize the expertise of the Climate Action Committee through continued staff support and improved communication between City staff and CAC.		Planning	Ongoing		🙋
CO4.4	Ensure no City funds are invested in industries detrimental to environmental and public health, such as the fossil fuel industry.		City Admin		COS 1	
CO4.5	Require elected officials to disclose campaign contributions from and investments in fossil fuel industries.		City Admin/ Council			

APPENDIX B: Climate Action Committee (CAC) Project Generation & Development Steps

1. Generate an idea or identify an action to be evaluated from the Climate Action Framework, community input, other research or discussions, etc.
2. Discuss the idea, and alternatives if they exist, within the relevant CAC Working Group or with other CAC colleagues in below-quorum format (i.e., fewer than 7 CAC members).
3. If there is agreement on the merit of the idea, brainstorm to clarify the goals and benefits of implementing the idea. Identify how the proposed action would support City goals or priorities, including those in the General Plan, Climate Emergency Resolution, and Climate Action Framework.
4. Identify stakeholders (Who would benefit? Who would have to do the work?) and discuss the proposal with them if possible.
    a. Complete the CAC equity matrix.
5. Formalize the proposal for an informational presentation to the CAC using the project proposal outline template and/or working group agenda item template.
6. Discuss the proposal with the CAC and any other City Departments or Committees who would have a stake in the proposal.
7. Integrate feedback to further refine the proposal.
8. Present revised proposal to the CAC to seek approval. Repeat steps 6-8 as needed.
9. Once approved by the CAC, present the proposal to the City Council for approval and appropriation of funds (if needed).
10. Launch the proposal and track implementation.

APPENDIX C: Summary of Community Engagement Materials

CONTENTS

COMMUNITY ENGAGEMENT STRATEGY

A Community Engagement Strategy was developed in late 2021, at the beginning of the Climate Action Framework's development, to outline how community members would be involved in the process. The Community Engagement Strategy identifies several phases of community engagement activities and describes potential methods of engagement, both virtual and in person.

The goals of the Community Engagement Strategy were the following:

- Increase the awareness and engagement of the Sebastopol community on climate issues, including awareness of and involvement with the Sebastopol Climate Action Committee,
- Provide the community with the resources they need to take personal actions to reduce greenhouse gas emissions,
- Create a Framework that reflects the needs and values of the Sebastopol community while addressing the global reality of climate change,
- Center the voices and experiences of groups most vulnerable to the effects of climate change,
- Build relationships for long-term engagement throughout implementation and beyond.

During the implementation of the Community Engagement Strategy, approximately 400 community members were actively engaged in the Framework development process through events, presentations, or an online survey. An additional several thousand residents were informed about the process through social media posts, City newsletters, and other means. Outreach activities focused on reaching groups most vulnerable to climate impacts, including low-income residents, older adults, youth, and people of color. Implementation of the Community Engagement Strategy is described in detail in the following section, Methods of Engagement.

As the City moves forward with the Framework document and begins to evaluate actions such as those included in Appendix A, it is recommended that community engagement remain a priority. This engagement should continue focusing on those populations most vulnerable to climate impacts to build deeper relationships with these groups and more meaningfully involve them in designing climate solutions. Actions in the Community section of Appendix A provide specific suggestions on how further equitable engagement could be pursued. Additionally, the References section of the Community Engagement Strategy includes a list of resources that may help the City to design and implement equitable community engagement activities in the implementation of the Framework.

METHODS OF ENGAGEMENT

Throughout the development of the Framework, a mix of outreach methods were used to reach community members and seek their input (Figure 1).

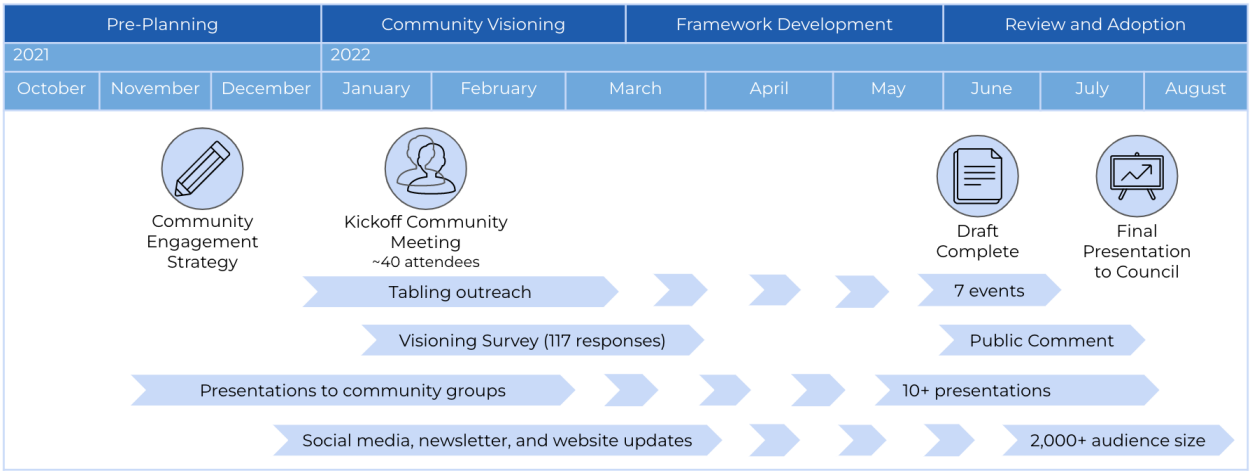


Figure 1. Framework development timeline and summary of community engagement activities.

Tabling

Information about the Climate Action Framework and other Climate Action Committee initiatives was provided at the following events and/or venues:

- Sebastopol Farmers Market (multiple weekends)
- Park Village
- Compost Giveaway
- Sebastopol Community Needs Summit
- Sebastopol Town Party

Tabling events also included flyers on electrification, energy efficiency, and other sustainability programs available to help residents reduce their emissions and save money.

Figure 2. Climate Action Committee co-chair Kenna Lee speaks to a community member at the Sebastopol Farmers Market on February 6, 2022.

Survey

The Climate Action Framework Vision survey was developed to gather residents' input on climate action in Sebastopol. The survey was available online through the Typeform platform as well as printed at in-person tabling events. Versions were available in both Spanish and English. Results of the survey are summarized in the Input Received section of this appendix.

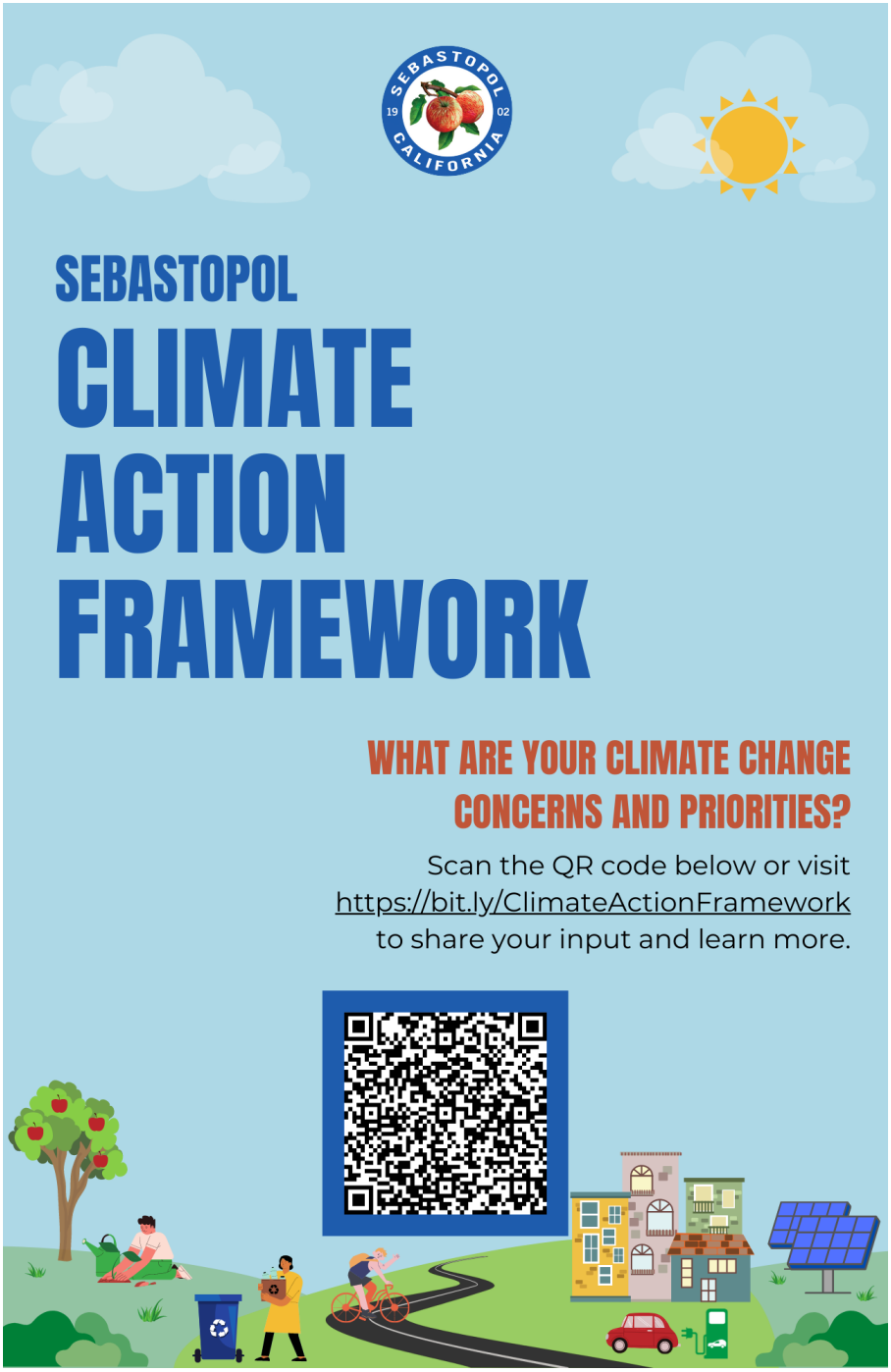


Figure 3. Flyer inviting residents to take the Climate Action Framework Vision Survey.

Presentations

Presentations on the Framework, including information about how to participate in its development and take personal climate actions, were delivered to the following groups:

- Community Benefit Organization Council*
- Map Your Neighborhood Leader Council
- Gravenstein Health Action Coalition Board Meeting
- Burbank Heights and Orchards
- Planning Commission
- Kickoff Community Meeting*
- Orchard View Green Team
- Sebastopol Carbon Conversations
- Summerfield Green Team
- West County High School Climate Action Club
- Sebastopol Sunrise Rotary Club

Presentations to groups with an asterisk (*) also included a discussion-based component, the results of which are summarized in the Input Received section of this appendix.

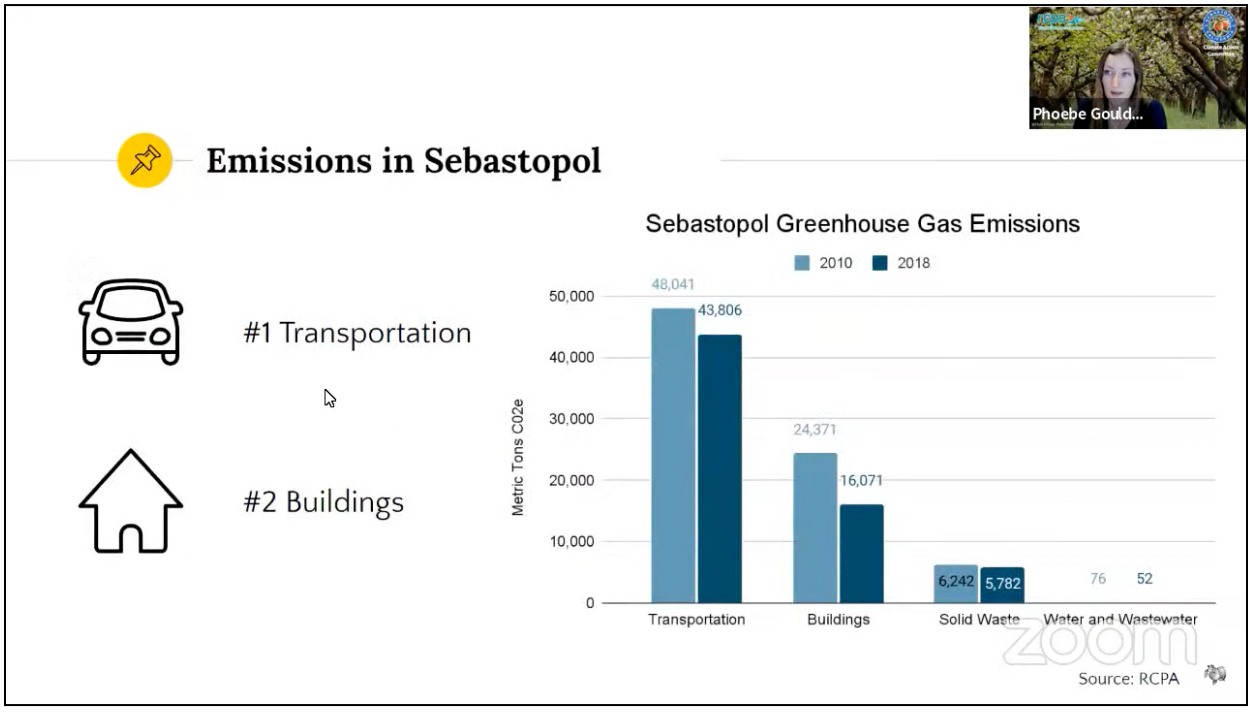


Figure 4. Screenshot of the presentation given during the kickoff community meeting on February 2, 2022.

Social Media, Newsletters, and Webpage Updates

Project updates were provided on the Climate Action Framework webpage (Figure 5), the City's Facebook and Nextdoor accounts (Figure 6), and in the City's email and print newsletters.

Figure 5. A screenshot of the Sebastopol Climate Action Framework webpage.

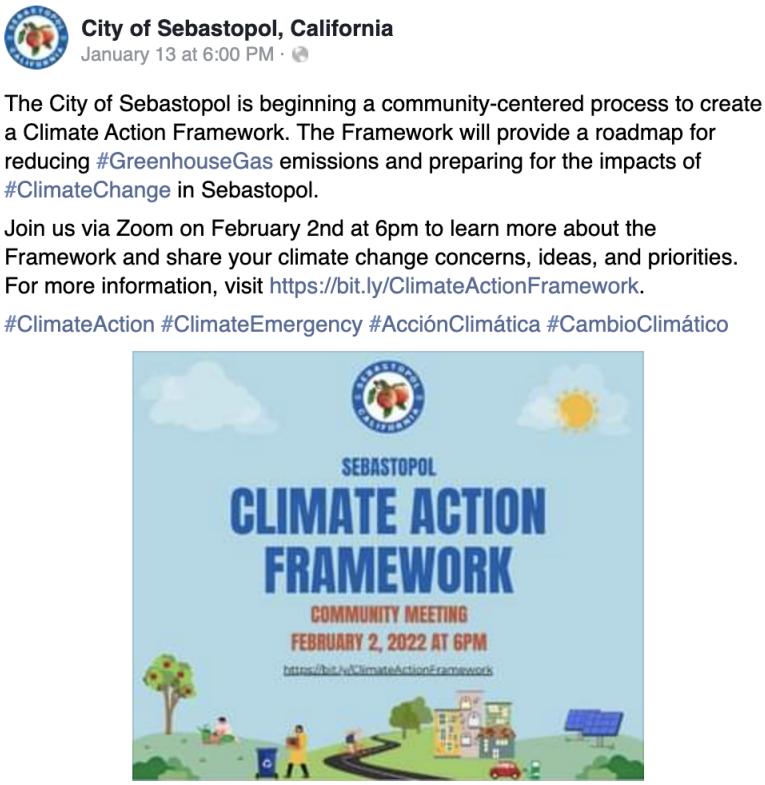


Figure 6. A Facebook post inviting community members to the kickoff meeting.

INPUT RECEIVED

During the initial outreach phase of the project, community members shared their climate concerns and priorities at outreach events and through a survey distributed both online and at in-person events. This community input was synthesized to develop the goals for each Action Area section and was used to guide the evaluation of actions included in Appendix A.

Workshop Jamboard Responses

A community kickoff meeting for the Climate Action Framework was held via Zoom on February 2, 2022. The recording and slides from this meeting are available on the project webpage. During this meeting, participants discussed five questions, covering their climate concerns, ideas, and vision for the future, in breakout rooms using Google's Jamboard tool to record responses. These same questions were piloted at the December and January Community Benefit Organization (CBO) Council meetings. Responses from both groups, totalling about 50 residents, are compiled below.

1. What climate change impacts are you facing or most concerned about?

Water shortages and drought were the most frequently mentioned climate impacts, with a similarly high level of concern about wildfires and smoke impacts (Figure 7).

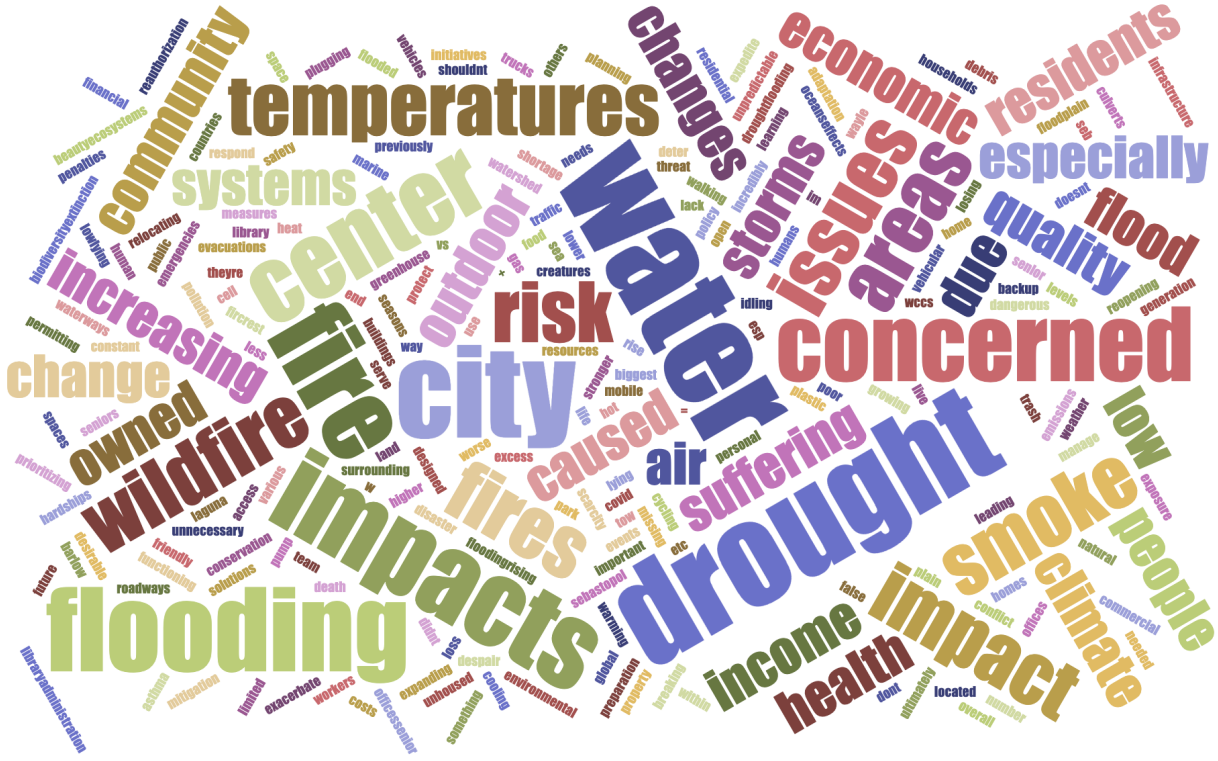


Figure 7. Word cloud of responses to Jamboard Question 1.

2. How do you think we should prepare for these climate change impacts?

The major themes that came up in response to this question were to better educate the community about climate topics, promote collaboration and community networks, and conserve more water (Figure 8).

Figure 8. Word cloud of responses to Jamboard Question 2.

3. What do you think the City and/or residents should do to reduce our emissions?

Many responses to this question related to changes in the transportation sector, with residents prioritizing more walking and biking, more electric vehicles, and fewer car trips overall. Other common responses included transitioning to efficient, electric buildings, educating residents about necessary changes and resources available, and reducing consumption, particularly of plastic (Figure 9).

Figure 9. Word cloud of responses to Jamboard Question 3.

4. How can we make sure that all Sebastopol community members are included in and benefit from these efforts?

Participants noted the need for proactive, multilingual, creative outreach to all community members, collaboration within the community, and connecting residents with financing opportunities (Figure 10).

Figure 10. Word cloud of responses to Jamboard Question 4.

5. What is your vision for a carbon neutral, resilient Sebastopol?

Responses showed a vision of Sebastopol as a thriving community that is safe for pedestrians and cyclists, prepared for climate-influenced disasters, has more clean public transit and local energy, doesn't require a personal vehicle to get around, and has increased local food production (Figure 11).

Figure 11. Word cloud of responses to Jamboard Question 5.

Survey Results

The Climate Action Framework Vision Survey was open for 10 weeks from January 23, 2022 to March 31, 2022 and received 117 responses in total. Questions focused on understanding residents' climate concerns and priorities. Results are summarized below.

1. How concerned are you about the following in Sebastopol?
1 = not concerned; 4 = very concerned
117 out of 117 answered

	1	2	3	4
Reducing greenhouse gas emissions	4.3%	3.4%	22.2%	70.1%
Preparing for climate change impacts	3.4%	2.6%	18.8%	75.2%

2. Climate change is already impacting Sebastopol with effects including increased temperatures, wildfire risk, flooding events, and drought. How concerned are you about each of the following climate change impacts?
1 = not concerned; 4 = very concerned
117 out of 117 answered

	1	2	3	4
Increased wildfire risk	3.4%	4.3%	17.2%	75%
Temperature increases and extreme heat	3.4%	8.5%	31.6%	56.4%
Increased rainfall and flooding events	7.8%	20.9%	32.2%	39.1%
Increased drought risk	3.4%	2.6%	12.1%	81.9%

3. Please briefly explain why the impacts you selected above concern you the most. If you are concerned about impacts not listed above, please describe them here as well.

In this free response question, respondents indicated that they are most concerned about climate change impacts that they have already experienced and those that they anticipate they or those they care about will experience. They relayed that their selected impacts have caused or would cause significant negative effects on their quality of life, mental and physical wellbeing, and/or livelihoods.

Respondents connected their concerns to secondary impacts, anticipating the following question. They explained their high level of concern about droughts by describing fears about groundwater levels and water availability, potential impacts to the food supply, and impacts to ecosystem health.

Drought was also described as exacerbating wildfire risk, the second most common concern. Respondents acknowledged that residents within City limits are less likely to be displaced or endangered by wildfire, but were still highly concerned about wildfire impacts, including poor air quality, mental stress, property damage, and the economic cost of home hardening.

Those who explained their concern about extreme heat were primarily concerned about the health impacts of heat that they or others had experienced.

Those who were concerned about flooding, the lowest ranked impact, seemed to have experienced flooding impacts more directly, with some stating that they live near the Laguna de Santa Rosa. A few respondents commented that they would be more concerned about flooding if they lived in a flood plain, reflecting the fact that most of the City is not in a flood plain.

The most common additional concerns mentioned were ecosystem health and biodiversity loss, excessive trash production, insufficient housing availability, residents' unwillingness to change their behavior, and electromagnetic fields (EMFs). Other concerns listed include the impact of outdoor fire pits on air quality, evacuation routes, traffic, power outages, public transportation, clean energy, and City land management to reduce GHG emissions.

4. These environmental changes can have a significant effect on our quality of life and the health of ecosystems. How concerned are you about each of the following effects?
1 = not concerned; 4 = very concerned
115 out of 117 answered

	1	2	3	4
Damage to homes or other buildings	5.3%	11.4%	29.8%	53.5%
Displacement or evacuation	4.3%	13%	32.2%	50.4%
Health impacts	4.3%	11.3%	33.9%	50.4%
Loss of recreational opportunities	13.5%	27.9%	27.9%	30.6%
Risks to agriculture and livestock	7.3%	13.6%	30%	49.1%
Loss of habitats, wildlife, and plant life	4.6%	6.4%	16.5%	72.5%
Disruption of utilities	3.7%	13%	39.8%	43.5%

5. Please briefly explain why the effects you selected above concern you the most. If you are concerned about effects not listed above, please describe them here as well.

Many respondents stated that they are concerned about all of the listed impacts due to their potential to negatively impact humans and the environment. The highest level of concern was around the loss of habitats, flora, and fauna, which respondents explained was due to the potential for ecological imbalance and related consequences for ecosystems, biodiversity, and human civilization. Several respondents also raised the idea of fairness to explain their concern about ecosystem impacts. For example, one respondent wrote, “Impact to wildlife is the most painful to me - it wasn't their actions which are exacerbating this - it is humanity’s.”

Respondents who explained their concern about other effects listed, such as damage to homes or other buildings, evacuations, and health impacts, had either experienced them firsthand or knew someone who had.
Additional concerns mentioned in response to this question were the loss of income from tourism, excessive consumption of goods and services, the cost of housing, lack of EV charging infrastructure, and misinformation.

6. What specific actions or changes do you feel are most important to help Sebastopol reduce greenhouse gas emissions and/or prepare for the impacts of climate change?
1 = not important; 4 = very important
115 out of 117 answered

	1	2	3	4
More green spaces and trees	9.7%	16.8%	27.4%	46%
Shifting to all-electric buildings	10.9%	20%	31.8%	37.3%
More pedestrian and bicycle infrastructure	13.9%	12.2%	19.1%	54.8%
Restoration of rivers and streams	5.3%	13.3%	23%	58.4%
More public transit options	8%	13.3%	26.5%	52.2%
Less waste/More recycling and composting	5.3%	13.3%	22.1%	59.3%
Incorporating equity in all policies and actions	8.1%	12.6%	27%	52.3%
Better education on climate topics	3.6%	16.4%	21.8%	58.2%
More electric vehicles and charging stations	6.5%	14.8%	26.9%	51.9%

7. What do you think the City of Sebastopol should do to reduce emissions and/or prepare for climate change impacts?

Transportation

The largest category of responses to this question related to transportation. Respondents prioritized making biking and walking safer and easier and improving public transportation. Specifically, respondents indicated their desire for more biking and walking paths that are separate from vehicle infrastructure, with several expressing that they do not feel safe in the current bike lanes. Most responses about improving public transit were nonspecific, though a few suggested that more frequent bus routes were needed, and one respondent highlighted in particular a lack of transit options from Sebastopol to Rohnert Park. For all non-car transportation types, several respondents also expressed the need to encourage residents to use these options instead of driving.

Supporting electric vehicle infrastructure and better traffic management were also frequently mentioned topics. Besides installing more EV charging stations, some respondents also suggested reducing or eliminating the price of charging, supporting residents in finding used EVs, and converting the entire City vehicle fleet to electric vehicles. Traffic in the downtown area was a concern for many respondents. Specific suggestions to address this issue included building more roundabouts, creating park and ride areas with public transit access outside of downtown, rerouting traffic from downtown, and implementing “road diets.”

A few respondents suggested that vehicle miles traveled could be reduced by providing incentives for working from home or carpooling as well as creating electric train routes.

Clean Energy

A second major response category relates to clean energy. Respondents strongly supported the expansion of solar energy as well as other renewable energy sources through incentives, education, and partnerships. Encouraging or requiring transitioning to electric appliances in new and old buildings was also mentioned by a group of respondents. There were a few respondents concerned with the reliability of electricity, with one supporting the development of microgrids.

Community Involvement

Equitable community education and engagement in climate efforts was another priority that emerged in response to this question. Respondents wanted the City to educate residents about how they can reduce their emissions and prepare for impacts, involve everyone in decision-making, including Native American groups, youth, people of color, and LGBTQ+ communities, provide outreach in multiple languages, and connect residents with financial support to make changes such as electrifying appliances.

City Operations

Respondents also commented on how they felt the City should operate under climate change conditions. Comments in this category included recommendations to green City operations, including by banning the purchase of fossil fuel powered vehicles, appliances, and tools and divesting City funds from the fossil fuel industry, incorporate climate change considerations in

all departments and bodies, advocate for climate policies at the county and state level, and collaborate with other jurisdictions and organizations to implement actions.

Other

Less common responses included maintaining the City's urban growth boundary, supporting high-density housing, planting and protecting trees, restoring waterways and wetlands, and increasing preparedness for flooding events.

8. What do you think residents should do to reduce emissions and/or prepare for climate change impacts?

The most frequent theme in response to this question was that residents should try to drive less, by biking and walking more, taking public transportation, working from home, or carpooling. Another transportation recommendation that came up often was to drive more fuel efficient or electric vehicles.

Reducing consumption and waste was another major theme. Respondents highlighted the need to buy less, use fewer single use items, and recycle and compost appropriately. Several also suggested dietary changes and shopping local.

Respondents also thought that residents should reduce their water consumption and improve water retention. Drought-resistant landscaping instead of lawns was a common suggestion, as was capturing rainwater.

Electrification and green energy use, particularly installing solar panels, was also frequently mentioned.

Less frequently mentioned ideas included getting involved in advocating for climate actions, participating in the community, preparing for disasters, growing food, self-education, planting trees, and restoring the Laguna de Santa Rosa.

9. Please describe any barriers or challenges to climate action in Sebastopol.

Barriers to change described by respondents included the following, ordered from most frequently mentioned to least frequently mentioned:

- Individuals' unwillingness to change their behaviors.
- Car-centric culture and high volume of traffic through town.
- Cost of action, for both the City and residents.
- Perceived lack of political will on the City Council.
- Lack of information and support for residents to make sustainable changes.
- Systematic factors, such as the land ownership system and political lobbying.
- False or shallow solutions.
- Equity concerns.

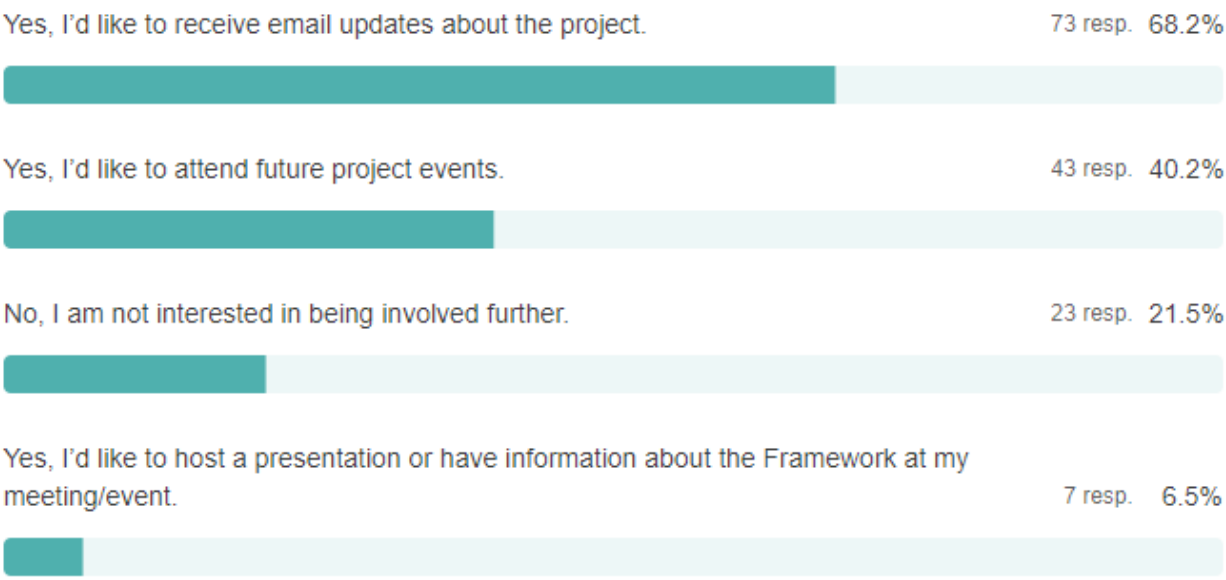
10. Is there anything else you would like us to consider in the development of Sebastopol's Climate Action Framework?

Comments on this final question included the following, ordered from most frequently mentioned to least frequently mentioned:

- Facilitate diverse and plentiful engagement with the Framework.
- Educate the community, City leaders, and youth on climate topics.
- Make Sebastopol more bicycle and pedestrian friendly, improve public transit, and increase micromobility options.
- Take action!

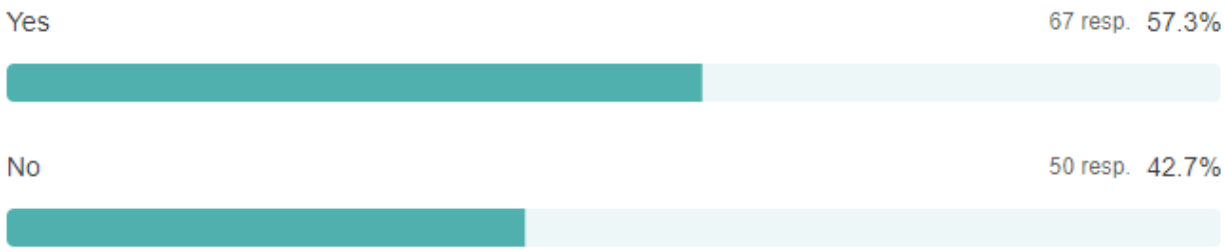
11. Would you like to be involved further in the Framework's development? Select all that apply.

107 out of 117 answered



12. Are you interested in getting more involved with the Sebastopol Climate Action Committee? For example, this could include receiving updates about future Compost Giveaways, the Upcycled Art Project, or volunteering at future Committee events.

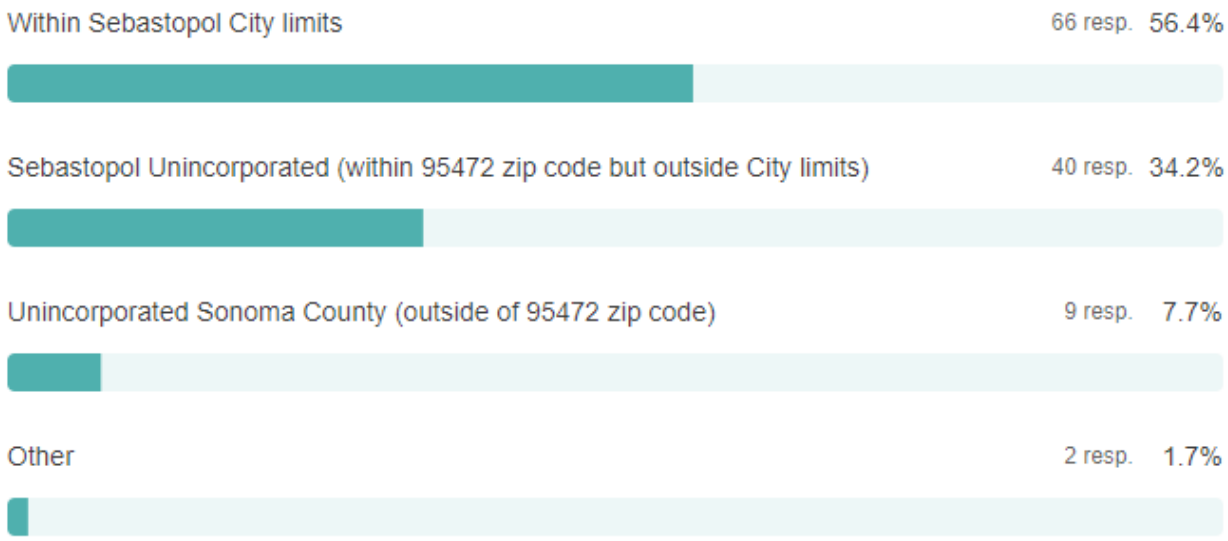
117 out of 117 answered



13. If you answered yes to either of the previous questions, what is your email address? We'll be in touch with more information.

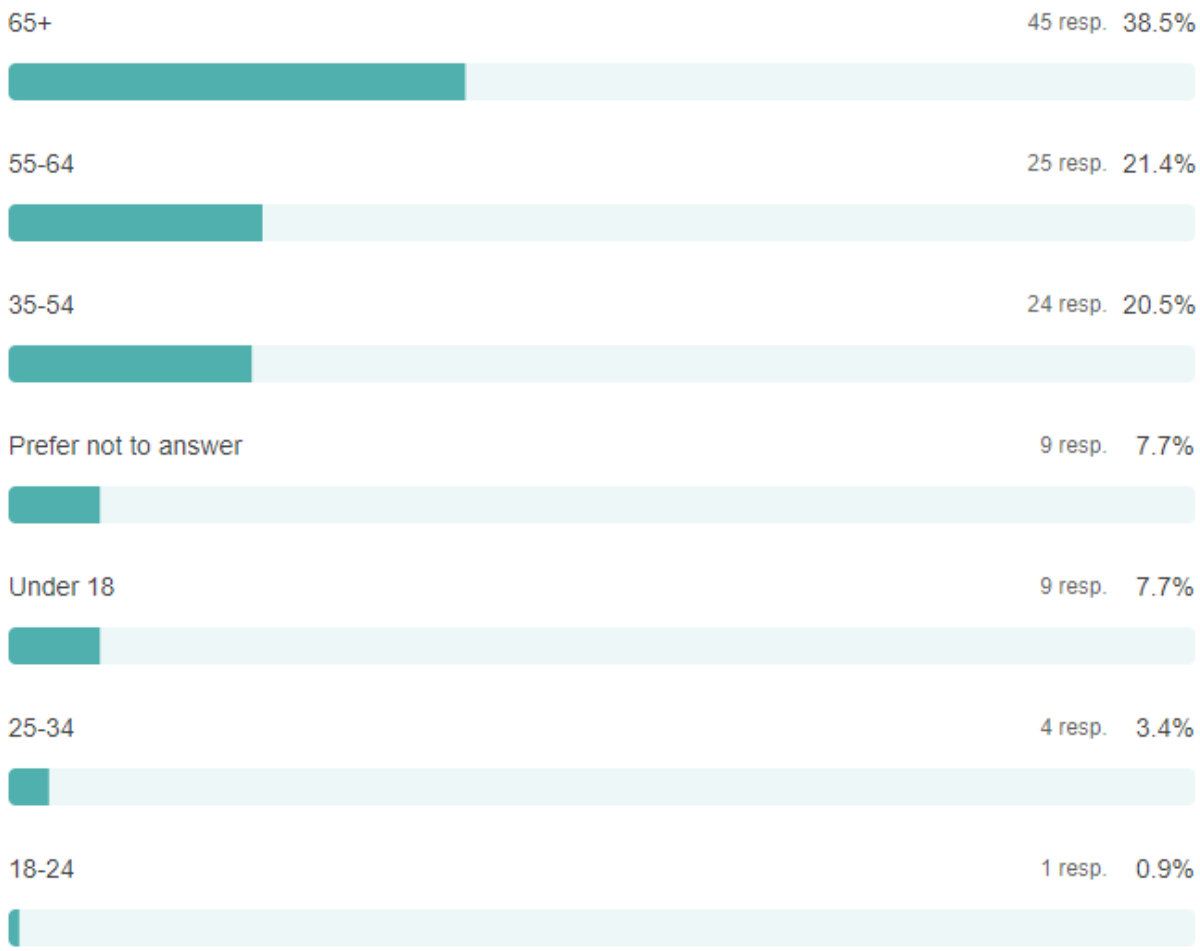
14. Where do you live?

117 out of 117 answered



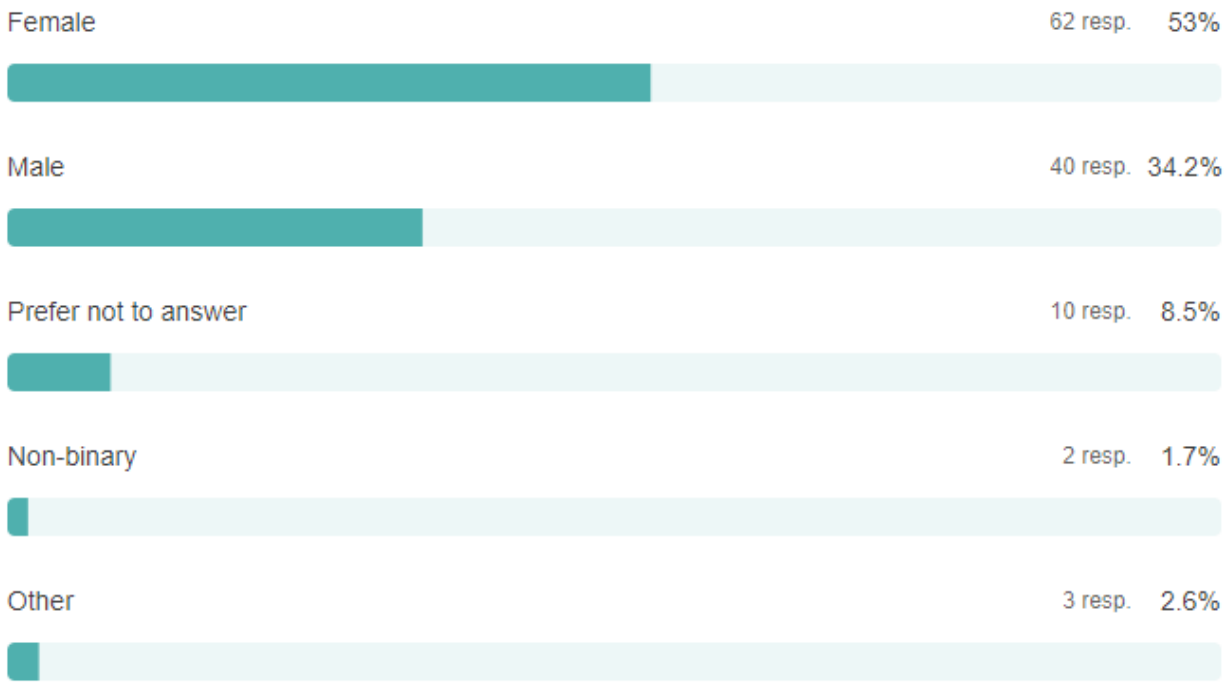
15. What is your age?

117 out of 117 answered



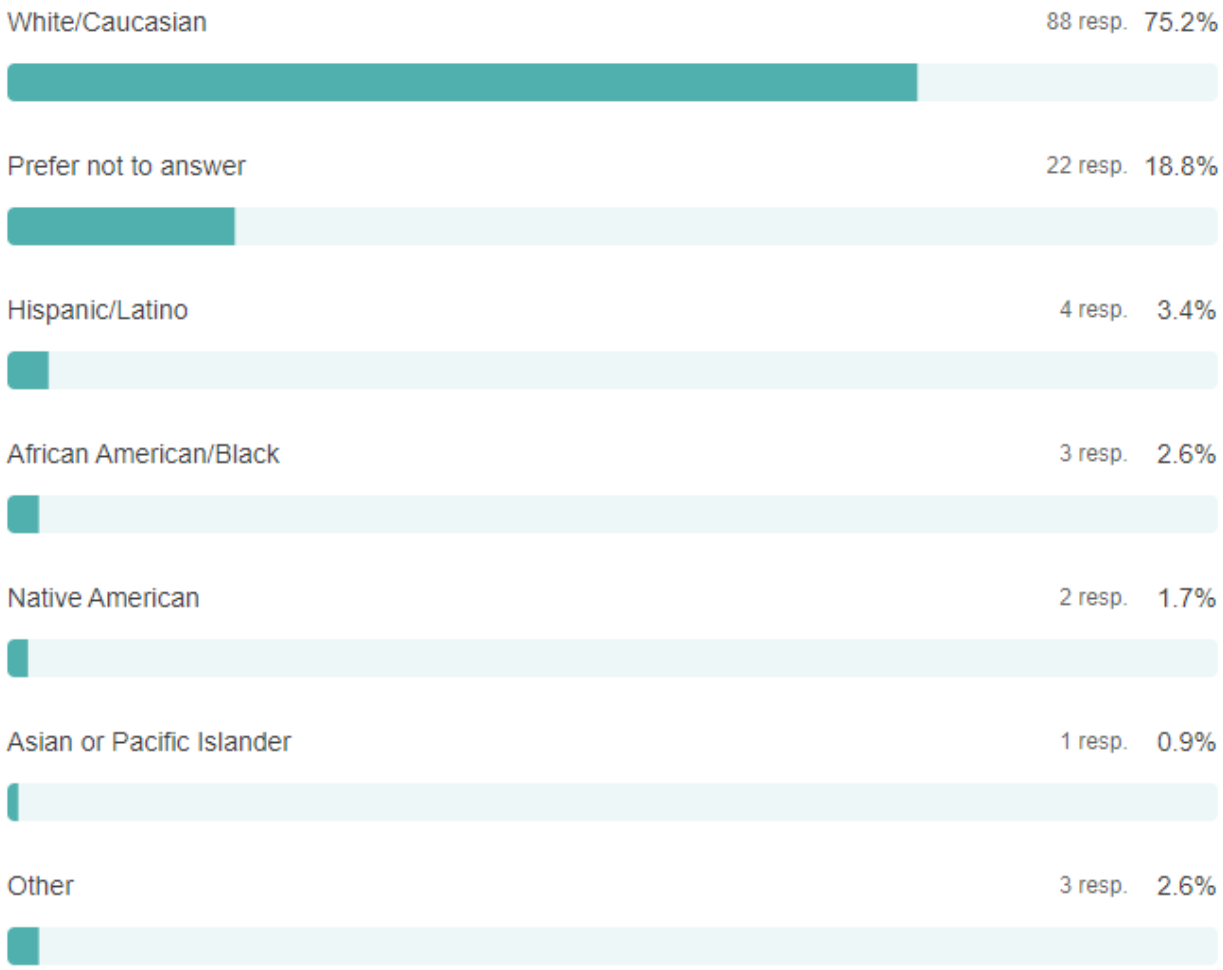
16. What gender do you identify as?

117 out of 117 answered



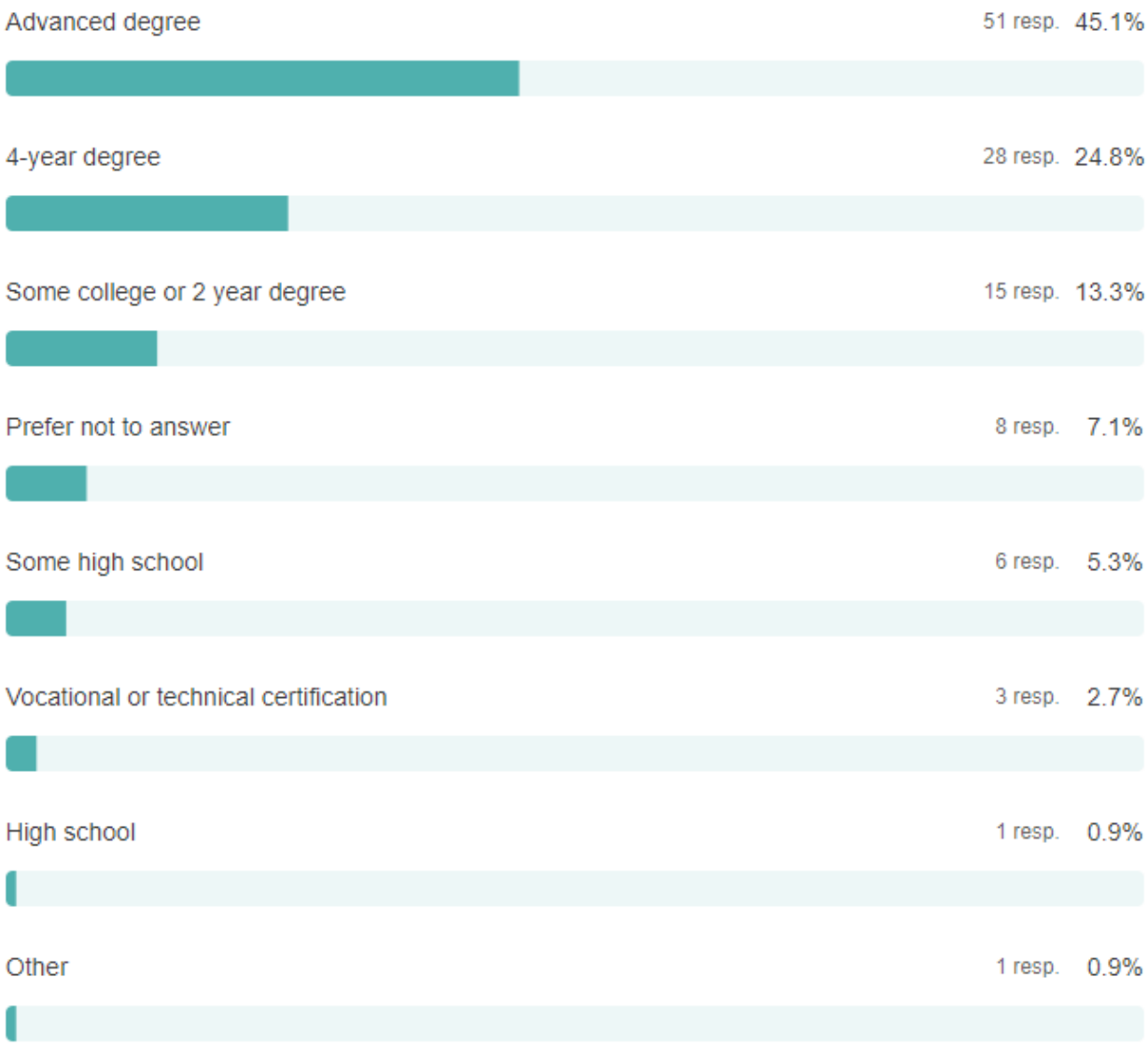
17. What is your racial or ethnic heritage? Select all that apply.

117 out of 117 answered



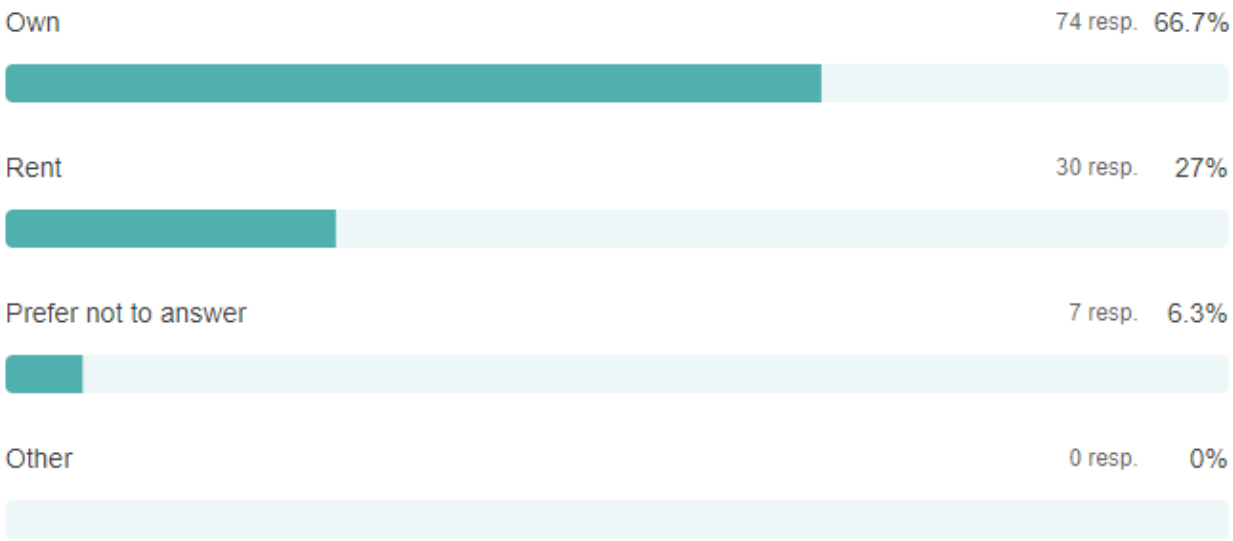
18. What is the highest level of education you have completed?

113 out of 117 answered



19. Do you rent or own your home?

111 out of 117 answered



COMMUNITY FEEDBACK

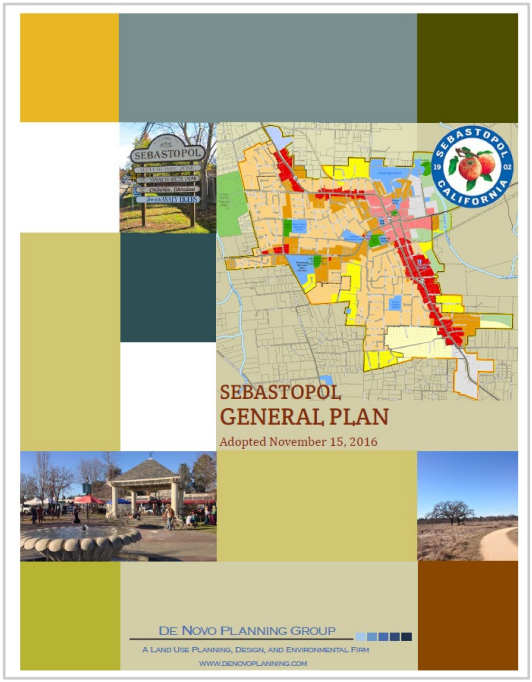
The draft Framework is currently being reviewed by community members, City staff, regional partners, and other stakeholders. Feedback will be summarized here in the final draft.

As of July 7, 2022, three public comments have been received on the Framework draft, in addition to multiple comments from CAC members. All three public commenters were generally supportive of the goals of the Framework and provided suggestions of content to add.

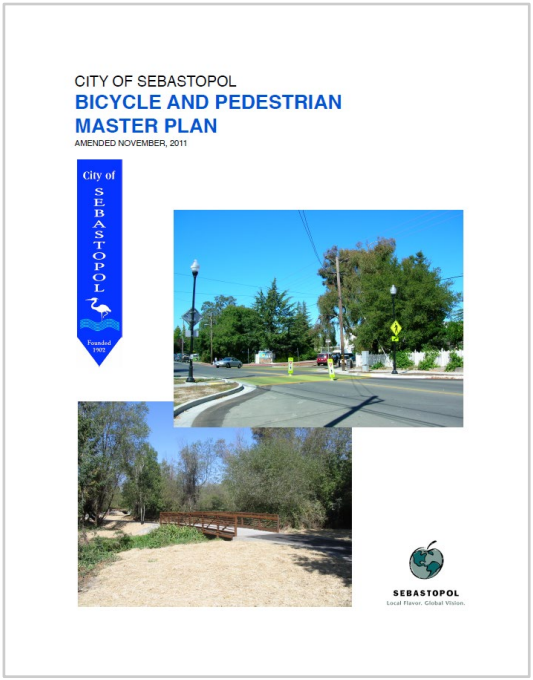
These suggestions included:

- Adding an action to provide rainwater catchment instruction classes to residents.
- Expressing support for a compost facility located within Sonoma County.
- Increasing the emphasis on transitioning away from personal vehicles, including by increasing the safety and connectivity of bicycle and pedestrian infrastructure.
- Adding a priority for a rail connection between Sebastopol and Santa Rosa.
- Adding an action to survey residents about their attitudes and behaviors related to climate change, such as their willingness to adopt EVs or heat pumps, to better predict GHG emission reductions and understand barriers to personal actions.

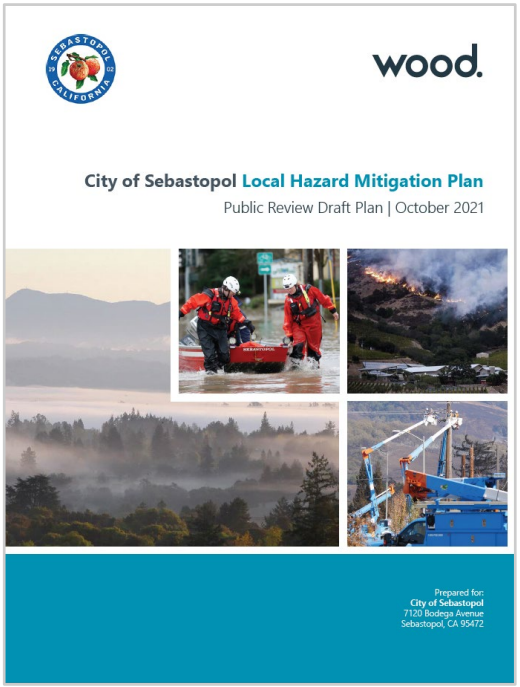
APPENDIX D: Related City Plans



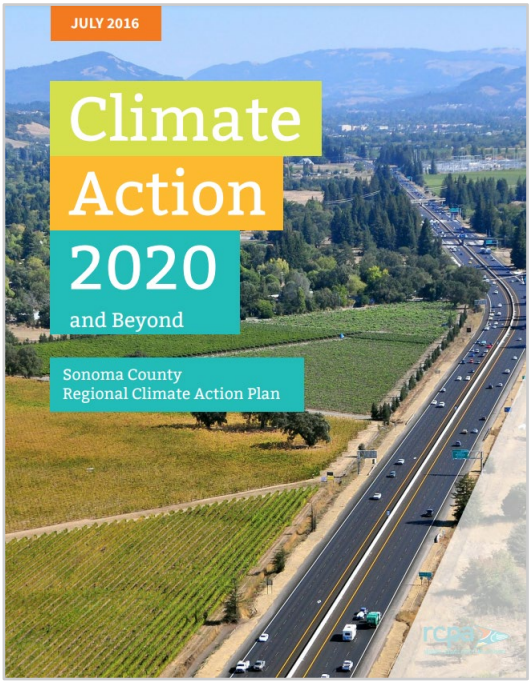
General Plan (2016)



Bicycle and Pedestrian Master Plan (2011)



Local Hazard Mitigation Plan (2021)



Climate Action 2020 Sebastopol Section (2016)