

Summary of Actions

The Climate Action and Resilience Plan (CARP) has outlined many strategies and actions that Antioch can use to move toward a more resilient, sustainable, and equitable community. This section lays all these strategies and actions in one place.

Clarifying the Action Summary Chart

Action summary charts are broken down into five categories: **Transportation, Energy, Waste, Hazard Preparedness, and Community Capacity Building**. Though they are all connected, they each present unique opportunities for action and are categorized separately.

The action summary chart includes four columns: **Action, Partners and Funding, Action Status, and Benefits**. These strategies and actions are used to address the broad goals laid out at the beginning of each section.

Action:

The action column describes strategies and actions to build resilience in the Antioch community. Some strategies have multiple actions that contribute to a greater strategy.

Action status:

- **In Progress** – Actions that have already begun implementation phase
- **Planned** – Actions that are being considered for implementation or have been approved for implementation but have yet to be begun.
- **Long-term Planning** – Actions that require long-term planning or will directly contribute to strategies that require long-term planning

Benefits:

Any action laid out in the document is likely to have multiple benefits for the Antioch community. A list of the broadly based benefits is shown below.

- **Mitigation (greenhouse gas emissions reduction):**
 - ❖ Reduce vehicle miles travelled (VMT)
 - ❖ Reduce the emissions impact of VMT
 - ❖ Reduce energy demand
 - ❖ Reduce the emissions of energy use
 - ❖ Reduce emissions from organics decomposition
 - ❖ Increase carbon sequestration (removal from atmosphere)

- ❖ Contribute to a clean (emission-free) local economy
- **Adaptation:**
 - ❖ Prepare community for the increased likelihood of hazard occurrence
 - ❖ Prepare the built environment for the increased likelihood of hazard occurrence
- **Community Development:** Actions which strengthen community development include those that:
 - ❖ Strengthen engagement and dialogue between the City and community
 - ❖ Strengthen Antioch's local economy
 - ❖ Build unity within the Antioch community
- **Equity:**
 - ❖ Provide increased economic opportunity for low-income communities and communities of color
 - ❖ Build trust between the City of Antioch and low-income communities and communities of color
 - ❖ Improve the health of low-income communities and communities of color
 - ❖ Improve the quality of life for unsheltered persons.
- **Public Health:**
 - ❖ Improve outdoor and indoor air quality
 - ❖ Reduce health events related to extreme heat
- **Resource Conservation:**
 - ❖ Improve sustainability by reducing use of finite resources
 - Water
 - Energy
 - Single-use plastics

Hazard Preparedness

Goals:

- Ensure that the Antioch population is prepared for the increasing likelihood of natural hazards.
- Ensure that Antioch’s built environment is prepared for the increasing likelihood of hazard occurrence.
- Expand community knowledge of effects of climate change and ensure effectiveness emergency communication systems.

Actions	Action Status	Benefits
Increase green infrastructure and reflective surfaces in the built environment. Continue tree planting efforts in areas with low tree canopy cover and high UHI effect. Encourage the use of green roofs in new construction. Encourage the use of cool roofs in new construction. Consider the use of cool pavements when repaving and paving roads in appropriate areas. Determine procurement guidelines for pavements based on Environmental Product Declaration (EPD) when available.	In progress	ghg reduction, public health, adaptation
Increase the number of cooling centers. Conduct analysis to determine the best locations for new cooling centers.	Long term planning	public health, adaptation
Create guidelines for businesses, schools, and community centers to adjust operations during extreme heat. Support switching to remote work or instruction, and follow State guidelines to ensure workers are not exposed to dangerous conditions outside during heatwaves.	Long term planning	public health, adaptation

Flooding

Take flood zones into consideration when proposing new development. Require flood management proposals when development is proposed in flood-prone areas.	Long term planning	adaptation, public health
Expand green infrastructure for stormwater management purposes. Explore inclusion of bioswales and other stormwater management infrastructure in flood-prone areas as a part of the Urban Forestry Plan. Work to restore wetlands and historic watersheds in Antioch, which can help reduce flooding and sequester carbon dioxide.	Long term planning	adaptation, ghg reduction, community development

Coordinate with regional agencies to create readiness plans in case of emergency. Coordinate regionally with groups such as Contra Costa Transportation Authority (CCTA) and Tri Delta Transit to ensure transportation continuity in emergency situations. Coordinate regionally with housing and development agencies to prepare for potential housing stresses caused by flooding.	Long term planning	adaptation, public health
Continue participation in the Adapting to Rising Tides Initiative and in Delta Stewardship Council's Delta Adapts project, which will include comprehensive flood mapping.	In progress	adaptation

Earthquakes

Conduct analysis of the housing stock for earthquake vulnerability. Focus efforts on multifamily structures that house many people. Research retrofit programs for at-risk structures.	In progress	adaptation, equity, public health
Develop plans for post-earthquake housing and recovery with the Office of Emergency Services (OES). Determine short-term shelters and interim housing. Explore transportation options for evacuation.	Long term planning	adaptation, public health
Build earthquake resilience into development code for new upgrades and new development. Require qualifying buildings to have shelter-in-place credentials in order to build interim housing capacity in earthquake aftermath. Promote use of PACE financing to homeowners for earthquake safety retrofit.	In progress	adaptation, public health
Increase community outreach on preparation for earthquake and recovery plans.	Planned	adaptation, equity, public health
Coordinate with people in the County involved in regional transportation and housing to ensure continuity in emergency situations. Contra Costa County Office of Emergency Services. Contra Costa Transportation Agency (CCTA). Contra Costa County Housing Authority.	In progress	adaptation

Air Quality

Provide program to offer low-cost or no-cost insulation upgrades in homes.	In progress	adaptation, equity, public health
Ensure all cooling centers have ability to close off outside air and recycle interior air during poor air quality days.	In progress	adaptation, public health

Ensure that affordable housing projects use quality insulation and have ability to close off HVAC to outside air during poor air quality days.	Long term planning	adaptation, equity, public health
Develop Urban Forestry Plan to strategically and equitably expand trees and green infrastructure in the city.	Long term planning	adaptation, equity, public health, ghg reduction
Support the expansion of alternative transportation and electric vehicle infrastructure to reduce pollution from exhaust pipes.	In progress	adaptation, equity, public health, ghg reduction

Energy Insecurity

Explore the potential of alternate energy generation and storage technologies. Work regionally to conduct a Microgrid Feasibility Report that builds off initial study conducted in 2024. ADD CCA ACTION ITEM HERE	In progress	adaptation, equity, public health, ghg reduction
Explore incorporation battery energy storage technologies with solar installation.	In progress	adaptation, equity, ghg reduction
Explore ways to expand energy saving financing to low-income residents.	In progress	adaptation, equity, ghg reduction

Drought

Study the reliability of under-utilized water supplies. Explore expanding use of recycled water. Explore rainwater harvesting and storage possibilities at city facilities and at Antioch businesses.	Long term planning	adaptation, ghg reduction
Require water conservation. Develop clear communication to residents as to when drought policy is in effect. Work with Sustainable Contra Costa to promote water recycling in homes.	In progress	Adaptation, ghg reduction
Complete desalination plant construction to address the salinification of the delta as a result of sea level rise.	In progress	Adaptation, ghg reduction
Explore the potential for water-efficient agriculture to strengthen food security.	Long term planning	Adaptation, equity, public health
Increase the use of drought-tolerant landscaping, including native plants. Conduct community outreach to improve knowledge of the benefits of native plants and drought-resistant landscaping. Pass the native plant ordinance.	In progress	Adaptation, ghg reduction, community development

Mitigation

Transportation Goals:

- Reduce the Vehicle Miles Travelled in the Antioch community through encouraging transportation mode shift
- Reduce the emissions impact of Vehicle Miles Travelled through vehicle electrification

Actions	Action Status	Benefits
<p>Develop Mobility Plan. Antioch will conduct a mobility study to examine what the best ways to encourage active transportation and consider ways to better incorporate electric vehicles into the community's transportation network.</p> <p>The City will incorporate strategies that enhance the attractiveness of active transportation, such as increasing tree canopy and enhancing bicyclist and pedestrian safety.</p>	<p>Planned</p>	<p>public health, ghg mitigation, equity</p>
<p>Expand use of BART. The City of Antioch should work to increase bicycle and automobile parking at BART. Work with Contra Costa County to connect regional bike networks with the Antioch BART station. Increase bus connectivity to BART.</p>	<p>In Progress</p>	<p>ghg reduction, public health, equity</p>
<p>Invest in bicycle infrastructure. Build more bicycle networks: north-south routes & paths from Black Diamond Mines Regional Park. Increase safety of bicycle networks: reduce sharrows (lanes that are shared between motorists and bicyclists) on roads with high speed traffic, increase clearly demarcated bike lanes, and build protected bike lanes with physical barriers between riders and automobiles. Increase bicycle parking: install lockers in destinations such as shopping centers, the Antioch Community Center, and the downtown area.</p>	<p>In Progress</p>	<p>ghg reduction, public health, equity</p>
<p>Improve bicycle programming and support residents riding more often. Explore the possibility of "bike bus" programs for elementary and middle schools to foster youth ridership and health. Work with Bike East Bay or similar programs to teach residents bike skills, safety, and confidence. Work with 511 Contra Costa on programs that encourage bicycling, such as the Summer Bike Challenge and StreetSmarts. Antioch will continue outreach support for bicycle use.</p>	<p>In Progress</p>	<p>ghg reduction, equity, public health</p>

Expand & improve current bus service. Work with Tri Delta Transit to expand the scope of the Tri My Ride program. Work with CCTA to establish bus lanes on highways to connect regional transportation. Install shelters at more bus stops to protect from heat, rain, and wind. Continue to promote Youth summer bus passes.	In Progress	ghg reduction, public health, equity
Work to make downtown more accessible by active and public transportation. Expand bus service from BART to downtown Antioch. Continue L Street improvements such as the implementation of painted bike lanes, bus shelters, and signal timing.	In progress	ghg reduction, equity, community development
Work regionally to encourage tele-commuting options when appropriate. Implement tax incentives that encourage businesses to allow telework. Help businesses transition to a system in which telework is viable. Work to improve internet connectivity gaps in low-income neighborhoods.	Long term planning	ghg reduction, equity
Improve EV charging infrastructure in Antioch. Install charging stations in commercial centers, downtown, and in community centers. Support residents with financing home charger installation with information about rebates. Support the installation of EV chargers in multifamily complexes.	In Progress	ghg reduction, public health
Provide Financial Incentives for residents to switch to EV. Support outreach for programs such as Clean Cars for all. Educate residents on the benefits of electric vehicles. Implement special privileges for EV, such as designated parking spots. Provide information on how to navigate finding, qualifying for, and applying to tax rebates for EVs.	In Progress	Equity, ghg reduction
Implement the purchasing guide for switching the city fleet to EVs by 2029.	Planned	ghg reduction, public health
Continue advocating for a gas station construction moratorium or consider adding the requirement to install EV charging stations at any new gas station.	In progress	Adaptation, public health, equity, ghg reduction

Energy Goals:

- Increase fuel switching from natural gas to electricity
- Increase energy security by reducing energy demand
- Reduce the impact of electricity use on greenhouse gas emissions

Actions	Action Status	Benefits
Support energy efficiency improvements in homes. Continue outreach for BayREN home improvement rebates. Support Contra Costa County's Weatherization Program to improve indoor temperature control, energy cost control, and air quality in low-income homes.	In Progress	equity, adaptation, ghg reduction, public health
Encourage residential fuel switching from natural gas to electricity. Consider a natural gas ban in qualifying new construction. Require electric panel upgrades in major renovations or during home sales. Explore the use of battery storage in tandem with solar to increase energy resilience. Partner with organizations like SunShares and Grid Alternatives to expand solar installation in Antioch homes and businesses with increased awareness for programs with incentives to switch to solar. Expand outreach to landlords and contractors about electrification and its benefits.	Long-term planning, in progress	ghg reduction, equity, community development
Encourage fuel switching in businesses. Continue supporting initiatives such as the Bay Area Green Business program. Help with program outreach. Consider additional incentives for participation. Encourage energy audits in commercial buildings. Expand outreach to business owners and contractors about electrification and its benefits. Consider a natural gas ban in qualifying new commercial construction.	Long-term planning, in progress	ghg reduction, equity, community development

Waste Goals:

- Begin building the systems to transform Antioch into a low carbon, low waste community and contribute to a circular economy
- Gather community engagement and support for a circular economy

Action	Action Status	Benefits
Provide more community outreach into how to correctly sort waste. Hire part-time staff to work primarily on outreach for the program with a focus on community events.	In progress	ghg reduction, adaptation
Examine urban farming as a way to work toward a circular economy through local use of compost generated from local organic waste. City and Waste Hauler coordinate to provide more frequent community compost giveaway offerings for residents. City encourages and funds the creation of more community gardens throughout Antioch, especially in low-income, food-insecure neighborhoods that create their own compost from food waste and/or receive free compost from the City’s Waste Hauler.	Long term planning	ghg reduction, adaptation, community development, public health
Expand food rescue programs. Assist food rescue organizations in working with restaurants to maximize donation of all edible food. Partner with homeless shelters to provide food from rescue efforts.	In progress	equity, ghg reduction, public health
Campaign to reduce single-use plastics to reduce waste, plastic, and reduce impacts of the plastic lifecycle on climate change. Increase education efforts to the public on the many ways that plastic is harmful, contributes to climate change, and how to use less of it.	In progress	equity, ghg reduction, public health

Community Development

Goals:

- Strengthen Antioch’s social and economic systems to promote resilience
- Remove barriers to economic, political, and social participation for low-income communities and communities of color
- Expand engagement between the City of Antioch and the Antioch community

Action	Action Status	Benefits
Support partnership between local industry and Antioch high schools to facilitate professional experience for students.	Long-term planning	community development
Expansion of Rising Sun Internship opportunities to increase energy efficiency in Antioch while supporting professional development for high school students.	Planned	adaptation, ghg reduction, community development
Engage the Antioch Council of Teens in the Cleaner Contra Costa Challenge.	Planned	ghg reduction, community development
Expand partnerships with other educational institutions such as Deer Valley High School and Los Medanos College.	Long-term planning	ghg reduction, community development
Encourage AUSD to incorporate climate change and resilience into elementary, middle, and high school curriculum.	Long-term planning	community development
Help residents navigate adapting to climate change. Host workshops for community members to understand how best to prepare themselves and their families for what to do in the event of a natural hazard-related emergency. Partner with trusted community organizations, such as libraries, to distribute information on hazards and emergency responses. Establish "office hours" at PSCR to assist residents with applications to weatherization and energy efficiency upgrade programs, have computers available for community members to use.	Long-term planning	adaptation, ghg reduction, community development

Increase efforts to enhance dialogue between the City of Antioch and the Antioch community. Increase presence at community events to directly interact more often with the Antioch community. Keep the public informed about city goals and projects. Consider development of an open data platform available to the public to increase transparency.	In progress	community development , equity
Establish local hire practices in procurement guidelines.	Long-term planning	community development
Work with the Northern Waterfront Economic Development Initiative (NWEDI) on strengthening an equitable local green economy with local hire support and effective workforce development programs	In progress	ghg reduction, community development
Partner with educational institutions to promote environmental initiatives and provide professional experiences to students in building, planning and conservation	In progress	ghg reduction, community development
Hire low-income community representative to better understand the needs of low-income communities and more effectively conduct engagement efforts.	In progress	community development, equity
Develop guidelines to encourage urban farming and home gardening in the Antioch community.	Long-term planning	community development, ghg reduction, equity, adaptation

Thanks for reviewing our proposed actions, to provide input on these actions visit

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